ORAL HISTORY TRANSCRIPT

Lieutenant General William H. Fitch U.S. Marine Corps (Retired)



Dr. Fred H. Allison Interviewer

HISTORY DIVISION U.S Marine Corps Quantico, Va. 2008



FOREWORD

This volume is the transcribed oral history of Lieutenant General William H. Fitch, U.S. Marine Corps (Retired). It is the result of a ten-session interview with General Fitch and one with his wife, Margaret Marie, conducted by Dr. Fred H. Allison on behalf of the Marine Corps Oral History Program. This transcript is the work of many individuals, most importantly General Fitch, who committed many hours of his personal time to complete the project. Others who assisted were Stephen Hill and intern Emily Funderburke of the History Division's Editing and Design branch, who laid out the photos and graphics. Kirsten Arnold indexed the transcript.

The Oral History Program is one facet of the Marine Corps historical collection effort. Oral history provides primary source material to augment the official documentary records. Oral history is essentially spoken history, the oral recall of eyewitness impressions, observations, opinions and perspectives of the interviewee recorded in the course of an interview conducted by a historian employing historical methodology. The final product is a bound transcript containing historically valuable personal narrative relating to noteworthy professional experiences and observations of distinguished Marines. While Lieutenant General Fitch has reviewed and made amendments to the transcript, the reader is asked to bear in mind that they are reading a transcript of the spoken word, rather than the written word.

Copies of this transcript are archived in the Marine Corps Oral History Collection and distributed to other offices and libraries around the Marine Corps and the other Services. Additional copies are provided to General Fitch's alma mater, the University of Florida, and other appropriate civilian research institutions.

CP. Nhineyer

Dr. Charles P. Neimeyer Director of Marine Corps History USMC History Division



LIEUTENANT GENERAL WILLIAM H. FITCH, USMC (RETIRED)

Lieutenant General William H. Fitch was born in Chattanooga, Tennessee on November 6, 1929, grew up in Fort Meade, Florida, graduated from Bartow High School in June 1947, graduated from the University of Florida in June 1950, and holds a M.S. in International Affairs from George Washington University.

He began flight training as a Naval Aviation Cadet at NAS Pensacola in November 1950 and was designated a Naval Aviator and second lieutenant USMCR on April 1, 1952. General Fitch then joined VMF-114 at MCAS Cherry Point and throughout the following year flew the F4U-5N "Corsair" from the aircraft carriers, USS *Wright* and USS *Tarawa*. He logged over 100 carrier landings in the F4U-5N. He joined VMF-324 at MCAS Miami in July 1953. In October 1953 he deployed with VMA-324 aboard the USS *Saipan* to fly AD-4 "Skyraider" aircraft on a Far East and "Around-the-World" cruise. He logged over 100 carrier landings in the AD-4. He was promoted to captain in December 1954 and received a regular commission in February 1955. He then completed Photo Reconnaissance School and joined VMCJ-3 at MCAS El Toro where he flew F9F-5P aircraft. At El Toro he also served 15 months as Operations Officer for the Tactical Air Command Center of 3d Marine Aircraft Wing.

In February 1958 General Fitch graduated from the U.S. Naval Test Pilot School at Patuxent River, Maryland. For the next two years he served as a project test pilot in VX-5 at China Lake, California. During May 1959 he conceived the idea for a multiple carriage of high explosives bombs on the bomb rack-limited A-4C "Skyhawk" aircraft. After fabricating three proto-type multiple carriage racks and conducting buildup test flights, on November 19, 1959, General Fitch flew the first test flight with the A-4 aircraft carrying a load of 16 MK-81 (250 pound) inert bombs. For his inventive effort in developing the multiple carriage bomb rack (MCBR), and for flying the first 13 test flights with the MCBR on A-4 aircraft, he was awarded the Navy Commendation Medal.

In early 1960 the Douglas Aircraft Company followed up the MCBR development with a production version of the MCBR that was designated the multiple bomb rack (MBR). In June 1960 General Fitch conducted the first two test flights with the MBR where high explosive bombs (18 MK-81 HE) were released. The multiple ejector rack (MER) and triple ejector rack (TER) widely used by tactical jet aircraft of all services throughout the Vietnam War and after evolved from the MCBR and MBR. For development of the MCBR General Fitch received United States patent number 3,122,056 issued February 25, 1964.

In May 1960 he joined VMA-311 at MCAS El Toro and deployed with the squadron to Japan in March 1961. During this overseas tour he made his 300th carrier arrested landing while flying from the USS *Bon Homme Richard*. In May 1962 he assumed duties as A-4 Project Officer at the Bureau of Naval Weapons in Washington,

D.C. In 1962 he was promoted to major and was one of four Marine Corps test pilots who were among 30 finalists in the NASA Gemini Astronaut selection. In April 1963 he assumed duties of Marine Corps Aide and Special Assistant to the Assistant Secretary of the Navy for Research and Development, where he served for 30 months. After completing Marine Corps Command and Staff College General Fitch served as Logistics Officer of MAG-14, then assumed command of VMA(AW)-225, an A-6A all-weather attack squadron. He was promoted to lieutenant colonel on July 1, 1967 and reported to Chu Lai, Republic of Vietnam, where he assumed command of his second A-6A squadron, VMA(AW)-533. During this combat tour he also served as group operations officer and as group executive officer. General Fitch flew 310 combat missions in A-6A and A-4 aircraft, of which 127 missions were against targets in North Vietnam. He was awarded the Silver Star Medal for a single plane A-6A night strike against a Hanoi, NVN target.

From September 1968 to August 1970 he served in the Air Weapons Systems Branch of the Office of Deputy Chief of Staff, Aviation, HQMC, with duties as weapons systems coordinator for the A-6, A-4M and AV-8A "Harrier" aircraft. He graduated from the National War College in June 1971 and was transferred to the staff of the 2d Marine Aircraft Wing at MCAS Cherry Point where he served as AV-8A Project Officer. General Fitch assumed command of MAG-14 on April 18, 1972. He commanded the group for 17 months, during which time he flew F-4B, F-4J, A-6A, RF-4B, EA-6A and TA-4F aircraft. He was promoted to the rank of colonel on August 1, 1972. He assumed command of the 32d Marine Amphibious Unit at Camp Lejeune in September 1973. The 32d MAU conducted amphibious operations in the Mediterranean Sea from October 1973 to May 1974. As MAU commander he flew the CH-53D, AH-1J, UH-1N and CH-46F helicopters while operating from the LPH, USS *Iwo Jima*. General Fitch relinquished command of 32d MAU in July 1974 and for the following year served as Assistant Chief of Staff G-3, 2d Marine Aircraft Wing.

In August 1975 he assumed the duties of Executive Officer to the Deputy Chief of Staff, Aviation, HQMC. He was advanced to brigadier general on April 1, 1976, and then transferred to the 1st Marine Aircraft Wing on Okinawa where he served as Assistant Wing Commander for one year. From December 1976 to May 1977 he commanded 9th Amphibious Brigade. He then was assigned duty as Deputy Chief of Staff, Research, Development and Studies at Headquarters Marine Corps. On June 2, 1980 he assumed duty as Commanding General, 1st Marine Aircraft Wing; he relinquished command on June 2, 1982. During this tour he flew jet, turbo prop and helicopter aircraft assigned 1st MAW. General Fitch was promoted to lieutenant general on July 1, 1982 when he assumed duty as Deputy Chief of Staff for Aviation. He served in this capacity until his retirement on September 1, 1984.

General Fitch flew over 6,000 hours in tactical aircraft during the course of his Marine Corps career. His carrier experience includes over 300 carrier landings while operating from 10 aircraft carriers: *Monterey, Wright, Coral Sea, Tarawa, Saipan, Bennington, Hancock, Oriskany, Midway* and *Bon Homme Richard*. His command assignments include command of two squadrons, an aircraft group, a Marine Amphibious Unit, a Marine Amphibious Brigade, and a Marine Aircraft Wing. In addition to the Silver Star Medal, he wears the Legion of Merit with Combat "V", the Distinguished Flying Cross, four single mission Air Medals, 25 strike/flight Air Medals, and two awards of the Navy Commendation Medal.

Lieutenant General Fitch is married to the former Margaret Marie Williams of Bartow, Florida.

TABLE OF CONTENTS

Session I 1

Personal background; Naval Aviation Cadet and flight training; choosing the Marine Corps; first squadron- VMF(N)-114; flying the F4U "Corsair"; carrier operations and cruises on the USS <u>Wright</u>, <u>Coral Sea</u> and <u>Tarawa</u>; Marine tactical aviation operations, training and mishaps mid-1950s; VMA-324, AD-4B "Skyraider" flying, Around-the-World cruise aboard the <u>Saipan</u>

One-wheel landing aboard the <u>Tarawa</u>; VMA-324 carrier operations and tactical training; delivering Corsairs to French in Vietnam; air photography school, transition to jets, F-9F, VMJ-3; The Basic School-Special Indoctrination Course, getting married, flight pay, Navy-Marine Corps relations, Marine aviation social history, changes in aviation and aircraft procurement

Aerial photography, perspectives on operational training, aviation training changes, T&R manual; VMCJ-3; 3rd Marine Aircraft Wing TACC; Test Pilot School (TPS); aviation safety perspectives; aviation leaders and leadership; VX-5, China Lake, nuclear weapons delivery, developing and testing the multiple carriage bomb rack (MCBR); VMA-311, WestPac on the <u>Coral Sea</u>, perspectives on Navy aviation and Marine aviation

VX-5, conventional weapons program, MERs and TERs from MCBR and implementation; Navy and Marine Corps views on tactical aviation, A-6 and precision weapons; consideration for Gemini program; Bureau of Weapons, Attack Design Office, COIN aircraft development (OV-10); Aide and Special Assistant to Assistant Secretary of the Navy James Wakelin, EA-6A, Navy/Marine Corps aircraft acquisitions, perspectives on OV-10; perspectives on F-111B; F-14s; Navy and Marine Corps budgeting and acquisitions

Session V	r	219)

Vietnam and squadron mates, Charlie Carr, medals; BuWeps and Asst SecNav work continued; Marine fighter aircraft perspectives; F/A-18s, close air support, tactical aviation forward basing, Joint Strike Fighter, Navy/Marine Corps aircraft differences; General Lou Wilson; Command and Staff College; Cherry Point, H&MS-14, command of VMA(AW)-225, A-6 aircraft maintenance, training, T&R Manual; Vietnam, MAG-12 Operations Officer, operations, command and control, command of VMA(AW)-533, squadron Marines, combat flying, A-4s and A-6s, missions "up north", Tet attack, memorable flights, attack on Hanoi radio station

Vietnam close air support (CAS), background and future of CAS; VMA(AW)-533 in Vietnam continued, combat flying, U.S. Air Force and command and control, aircraft maintenance, leadership perspectives, squadron aviators shot down, Chu Lai set up; Department of Aviation HQMC, Keith McCutcheon and Thomas Miller, AV-8 "Harriers", A-4M, Aviation Requirements Branch, Homer Dan Hill

Department of Aviation HQMC continued, Harrier concept of operations, VSTOL technology and other services, aircraft acquisitions, MV-22 tilt rotor beginnings, Senator Symington confrontation, Harrier command and control and modern day use; National War College; selection for colonel, MAG-32 Harrier Project Officer, sortie rate validation test (SRVT), command of MAG-14, aircraft maintenance efforts, Operation Alkali Canyon, quality Marines; command of 32d MAU

32d MAU continued, amphibious landings, flying helicopters, night operations; Assistant Chief of Staff, G-3 for 2d MAW, Andy O'Donnell and Jay Hubbard, aviation safety, WTIs, Harrier operations, pilot training and safety issues, aviation in the MAGTF, MAWTS, CAXs, creation of HMLA, Hueys and Cobras, F-14s cancelled, aircraft procurement issues, VMCJs and VMAQs; HQMC, executive assistant for General Thomas Miller, genesis of UDPs, General Lou Wilson, LVA cancellation, Marine aircraft issues

The Golden Eagles; DC/S for Research, Development and Studies, tactice integration (TAI) past, present and future, CG 1st MAW, training, operat aircraft maintenance, personalities, three stars for Marine aviation, Navy Corps budgeting issues, squadron leadership, VIPs, flying	ions,
Session X	507
CG 1st MAW continued, women in the Marines, Deputy Chief of Staff for Navy/Marine Corps budgeting issues, issue of the A-6F and F/A-18D, Tor MV-22, night attack system, aircraft purchasing changes; future of Marin aviation, command and control, UAVs; Iranian Hostage Crisis, Grenada, Vietnam War, war in Iraq, Goldwater/Nichols, F/A-18s, John Lehman; ca highlights and final thoughts	ıy Zinni, e end of
Session XI (Interview with Mrs. Fitch)	551
Personal background, meeting Bill Fitch and getting married, military lig days, memorable social events, living in Quarters #2, the Wilson's and B duties of a commanding officers' wife, concerns and fears, travels in Eur wives clubs, mutual support, settling in McLean, Virginia	arrows',
Index	569
Appendices	585
 A. Navy Commendation Medal Citation B. Official Patent Schematic of Multiple Carriage Bomb Rack C. Letter from LtGen Fitch to General P.X. Kelley, February 1984 D. Letter from General Louis H. Wilson to LtGen Fitch, March 1984 E. Different Kinds of Aircraft Flown by LtGen W.H. Fitch 	

MARINE CORPS ORAL HISTORY PROGRAM

Interviewee:	Lieutenant General William Fitch, USMC (Ret)
Interviewer:	Dr. Fred Allison, U.S. Marine Corps History Division
Date:	13 March 2006
Place:	Lieutenant General Fitch's Home in McLean, Virginia

SESSION I

Dr. Allison: This is the first session of an oral history interview with General William Fitch. Emily Mushen, one of our oral history interns is sitting in on this interview also.

Today is the 13th of March, 2006 and we're in General Fitch's home in McLean, Virginia. Good afternoon sir. Thank you for having us come over to your beautiful home.

General Fitch: Thank you for being here, Fred.

Dr. Allison: Sir, to start, could you provide some information on your personal background, your childhood, and something about your family?

General Fitch: I was born on November 6, 1929 in a hospital on Lookout Mountain in Chattanooga, Tennessee. My father grew up in LaSalle, Illinois and my mother in Fort Meade, Florida. They had married when he came to Florida shortly before she graduated from what was then Florida State Teachers' College for Women in Tallahassee, Florida, and today it is Florida State University.

My father was in the business of setting up civic clubs, so they did a lot of traveling in those days. When I was born they had two children, since I had a sister, Beverly who was 16 months older than I.

With the Depression settling into the 1930s and with two children at that point, my parents decided to settle their family in central Florida where my mother had grown up. This was in Fort Meade in Polk County – about half way between Tampa and Orlando.

My mother's family lived in Fort Meade and my maternal grandfather had lived there since the turn of the century. He planted and bought orange and grapefruit groves over a period of many years and was a prominent citrus grower in Central Florida. He still owned several hundred acres of citrus groves when he died at age 96. During the years that I was growing up he was a great inspiration to me. After college it had always been my intention that I would go into the citrus business with him.

By 1942 our family had grown to six with the addition of a younger sister, Sharon, and a younger brother, Blaine. Fort Meade was a very small town but a wonderful place to raise a family, so we continued to live right there. And like I said, we had a large number of relatives in the Fort Meade area.

Dr. Allison: You mentioned your dad set up civic clubs?

General Fitch: Yes, but my parents also owned some orange groves and my dad migrated into the insurance business. Also for a time he was head of adult education at Florida Southern College in Lakeland.

Dr. Allison: I noticed that you graduated from a different school than Fort Meade.

General Fitch: As the time approached for me to think about college, I had been a student in the Fort Meade Schools since I was six years old. My mother had taught school through the years, but she had taught in Bartow, about 10 miles north of Fort Meade. The town of Fort Meade was a very small town with perhaps a population of 3,000, and downtown was about three city blocks long. It was she who brought it to my attention that it might increase my options for college if I graduated from an accredited high school. Fort Meade High School was not accredited in those days. So for the last semester of my senior year I went to Bartow so that I could graduate from an accredited high school.

Dr. Allison: What did you do after graduation?

General Fitch: Vernon Clyatt was a good friend that I'd grown up with in Fort Meade. He and I spent the summer after graduation making money for college by working for the state road department. We worked on the same survey crew and roomed together in a boarding house 'til it was time to enter the University of Florida in early September 1947. As I said earlier, I had made plans early on to enter the citrus industry when I finished college, so when I started the University of Florida I already had decided to major in Agricultural Engineering and Agricultural Economics.

In my haste to get on with my chosen career, little did I know this would be a far departure from what I would do after I graduated. In the summer of 1949, no one at the university ever thought that by the following summer we would be in a war!

Dr. Allison: What sort of extra-curricular activities did you participate in there at the university?

General Fitch: I enjoyed the various activities at the university, was initiated into the Alpha Tau Omega fraternity at the beginning of my second semester of my freshman year. A few months later I moved into the ATO house. It was a large, beautiful home that was built shortly after the university was started in 1905. But at the end of my freshman year I had a grand total of only 30 semester hours – and like I said, I was a young man in a hurry!

I had taken ROTC my first two years which was required, but then I dropped ROTC and figured out how to graduate in less than three years. As it turned out, in late 1950 I would be in flight school at Pensacola in the time period that normally would have been my senior year at the university.

Dr. Allison: So you must have gone to summer school.

General Fitch: I went to summer school the summer of 1949, which was the only summer school that I did. My guess is that I got about 15 semester hours that summer. I looked at what I needed to graduate the following June and it would require 47 more semester hours. So I signed up for 24 hours my first semester of what should have been my junior year. That would be September of 1949. I took those 24 hours and made the best grades I'd ever made, with quite a few "A's" and the rest "B's". The pace for study was rather hectic those last two semesters at Florida. With that 24 hours and good grades behind me, I had no trouble signing up for the 23 semester hours needed to graduate.

So that led me up to June the 5th, 1950 when I graduated from the University of Florida. The speaker at our graduation was Alban Barkley, vice president of the United States It would be 20 years later that I would get a masters degree in international affairs from the George Washington University, in conjunction with my attending the National War College in Washington D.C.

Dr. Allison: So you did graduate a year early then?

General Fitch: It was about 33 months from my start as a freshman in September 1947 to my graduation on June 5th, 1950. At graduation I was 20 years old, I was in good health, and unattached. The Korean War started three weeks after my graduation at Florida – 20 days to be precise. They had the draft back then so I knew if I didn't decide what it was that I was going to do regarding the military, then there was a draft board that would decide for me. This, in a sense meant that I had rushed through college just in time to be in a war. I immediately started figuring out how to go to flight school. On September 2nd, 1950, I was in the Navy as a Naval Aviation Cadet [NavCad] with a four-year enlistment.

I should mention that from the beginning of flight training, I planned to go into the Marine Corps. However I didn't apply for the Marine Corps commission until I was in advanced flight training at Cabiness Field in Texas. You were supposed to make that application about three months before completing flight school.

Dr. Allison: Can you elaborate on why the Marine Corps?

General Fitch: From pretty much the outset of flight school, I planned to go Marine Corps. At the time I became a NavCad, I didn't know that as a college graduate you could get a commission and then go to flight school. No one ever mentioned that. In retrospect that was fortunate since had I become a Marine infantry lieutenant, I might not have survived.

Dr. Allison: You didn't have an interest in Army or the Air Force?

General Fitch: No, I had no interest in the Army or the Air Force. So I decided that I would be a Naval Aviation Cadet – there had to be a decision that summer. That took me to the Naval Air Station at Miami.

Dr. Allison: I wanted to ask you where you got your interest in flying.

General Fitch: I'd read a lot about all the World War II battles like the Battle of Britain, Guadalcanal, the Battle of Midway, along with reading in newspapers about the various battles in Europe, Russia and the Pacific. *Life magazine* covered a lot of detail on the war; all that was presented daily with what you read in the newspaper and what you heard on the radio - because we didn't have TV then. I knew about people like Joe Foss as a Marine fighter ace. Dr. Allison: So, you were twenty years old when you started flight school?

General Fitch: Yes. And when I was sworn in at NAS Miami the lieutenant commander said, "When would you like to report to active duty?" I said, "Well how about the 1st of November." which was only a couple of months away. He said fine to that. So at the end of October I received orders in the mail to report to Pensacola on the 1st of November 1950, which was again, like six days before my 21st birthday. I was in NavCad Class 24-50 and I started pre-flight immediately.

Dr. Allison: This is up in Pensacola?

General Fitch: Pensacola at the old naval air station. Preflight was all done at the old NAS Pensacola and it lasted for 16 weeks. A NavCad was paid \$94.00 a month.

Dr. Allison: What did your family think about you're getting into flying and all?

General Fitch: Well my father thought I ought to be doing something else but I didn't have the stomach for any delays in that process and so that was no problem. Then again, like I said, I had never flown and my parents had never flown. It was fully my decision and a war was on.

Dr. Allison: No uncles or anybody?

General Fitch: I had no role models as such. I figured that when there was a war, you went to war. Patriotism was high in those years. It had been less than five years since the end of World War II. No, but I will say, and this sounds a little bit juvenile perhaps, but one of the things that kind of caught my eye – and I've probably seen it two or three times – was John Wayne in the *Flying Leathernecks*, which was in theaters in 1949. I liked that movie. Flying looked great.

Dr. Allison: That's when that came out, huh?

General Fitch: Yes, 1949 or perhaps 1950. It was the kind of movie that would impress a 20 year old, and especially so after a war has broken out. And the *Flying Leathernecks* movie had all the right scenes in it to motivate you for flying.

Dr. Allison: You're pretty close to home there in Pensacola.

General Fitch: Pensacola was about 500 miles from my home.

Dr. Allison: Out at Sherman Field [at Pensacola]?

General Fitch: No, Sherman Field was not there in 1950. Sherman would come years later. The old naval air station had been there for, at that point in time about 40 years.

Dr. Allison: What was pre-flight like?

General Fitch: In my pre-flight class, and bear in mind now I had taken two years of Army ROTC back at the University of Florida because that was required back then.

Dr. Allison: Was it required?

General Fitch: Well that was because it was a land-grant college so you had to take the two years of ROTC.

Dr. Allison: I see.

General Fitch: They put us in temporary barracks when we first got to the Naval Air Station, one of the old brick buildings. A week or so later they moved us to wooden barracks with our preflight class. And so I knew how to march, handle an M-1 rifle, and whatever. But we had a couple of Marine sergeants that were in charge of our pre-flight class as far as the military aspects of it were concerned. We had 16 weeks of pre-flight, which was mostly ground school in a host of aviation subjects, like theory of flight, aircraft engines, navigation, etc. along with a lot of marching with a number of parades. Then when preflight was over you would start learning how to fly. The first base you went to fly was Whiting Field, about 40 miles northeast of Pensacola, which as you know is still a vital part of aviation training in the Pensacola area.. You're probably familiar with Whiting Field. And the only airplane we had to fly was the SNJ. We had the SNJ-4 along with the SNJ-5 and of course those were World War II trainers. They gave us a few rides in a Link Trainer before we went up in the SNJ.

Dr. Allison: The SNJ was the advanced trainer in World War II.

General Fitch: I guess maybe the SNJ was, I don't know.

Dr. Allison: It was.

General Fitch: But the first time I was ever off the ground in an aircraft was in an SNJ on my first flight at Whiting Field and I thought it was great.

Dr. Allison: Did you?

General Fitch: For A-stage of flying I had an instructor named Stan Bugbee. He was Lieutenant (jg) Bugbee and I can tell you something about him later on too because he gets killed right after I ran into him in the Philippines, when I was flying the AD-4B Skyraider from the carrier, *Saipan*, and Bugbee was flying F9F photo planes off another carrier. Bugbee and I went through roughly 18 flights together. He was an excellent instructor.

Dr. Allison: On the first flight were you in the front cockpit?

General Fitch: Yes. Lieutenant Bugbee was flying it from the rear cockpit and then he'd let you steer a little bit or something and then on the second hop he'd try to start teaching you how to do some of those things, like stalls and spin recovery, and how to land. And of course they had places like Pace Field, which was a huge grass field, perfectly level, and you could come in from all directions as long as there wasn't much of a crosswind and just land in any direction you wanted to depending on the windsock. You'd just come up on the radio and say, "I'm landing at Pace Field." But you went through – I don't recall - something like 18 or 19 flights and I remember my check for solo flight very well because you had a different instructor pilot with you on your check for solo.

Dr. Allison: Otherwise you stayed with Bugbee?

General Fitch: Yes, all the others were with Lieutenant Bugbee. And I remember on my check flight I had done everything that the instructor had asked me to do; steep bank angles, landings, stalls and so forth, and he asked me to do a spin to the left and I did a spin to the left and I recovered after the right number of turns in the spin, and then he said, as I recall, "Do a spin to the right." I'd gotten in the habit – if you call it a habit after about 18 flights – of taking the stick with both hands and popping the stick forward when I started the recovery. And when I did that with the control stick the cuff of my flight suit hit the buckle on the lap belt and opened the lap belt so I have negative G's on the airplane with no lap belt hooked up. This is when you had soft canvas helmets with goggles, circa World War I and World War II, you know just cloth – canvas to be exact, and my head hits the top of the canopy. And so the airplane is spinning, and I get back down to the seat, with my parachute strapped to my shoulders and rear, get the airplane out of the spin, and then I hook up my seat belt. I tell the instructor, I said, "Well that wasn't too good." I said, "My lap belt came loose." He said, "I saw your head hit the canopy. You got out of that one. That's all we need." [Chuckle] So he figured if I could get back in the seat and get it out of the spin or whatever, that everything was fine, so that was that.

Dr. Allison: That was the check flight then?

General Fitch: That was the check flight. I believe it was called you're A-19 check flight, which then meant that you were through with A stage and would move to B stage. We did stages A, B and C at Whiting Field. Stage C was aerobatics.

And then I went to instruments at Corry Field As I recall Corry Field was just a few miles north of the Naval Air Station in Pensacola itself. I started what would be D stage of flight school in April 1951.

Dr. Allison: Did you pick up a different instructor then?

General Fitch: At Corry Field my instructor for basic instruments, where you flew under a hood, was a Navy third class AP, with AP standing for aviation pilot. That's like a corporal in the Marine Corps and this guy was a maniac in the cockpit. I attributed people being successful going through flight school being dependent on the instructors they had. Like Lieutenant JG Bugbee was great and if you made a mistake you did it again kind of thing with Bugbee until you got it right and you learned how to fly in that process. Then some instructors were screamers, and they felt that they had to be pretty rough to teach you to fly. I preferred the Bugbee type, since they were success oriented.

Dr. Allison: Bugbee wasn't but the other instructor....

General Fitch: Not at all. But this guy at Corry Field had kind of a Napoleon complex. He was kind of short in stature, he was a third class AP, and on the first hop he would tell you in a very matter of fact manner that if there were a war going on he'd be a lieutenant or a lieutenant commander. Now I guess he thought maybe we didn't read the newspapers or listen to the radio because they had a thing going on called the Korean War. Based on looking through my first flight logbook, I believe that his name was Brammeier. I flew a few flights with him, with my flying under the instrument-training hood. The hood in the rear seat of the SNJ completely enclosed the rear cockpit so that you could not see out of the airplane.

After four or five hops, Brammeier came down with a cold. That was very fortunate for me that he was grounded, since he and I were not getting along very well. He was the kind of instructor who would beat your knees with the control stick if you made a mistake. As a flight instructor he probably rated a two on a scale of one to ten, with a one being the worst.

As a flight instructor he was bad news. You'd be sitting in the back of this SNJ with a hood over your head so you couldn't see out, intently flying those instruments and about that time the stick would go like a thrashing machine as he banged your knees. That thrashing of the stick was the instructor in the front seat shaking the stick as hard as he could and yelling. After several weeks at Corry I got a different instructor, who was Lieutenant Schultz, and everything went smoothly from there on. Getting rid of Brammeier was a real blessing. After instrument flying in the SNJ was completed, we moved into night flying, with that night flying at Corry Field. My parents, sister Sharon, and brother Blaine visited Pensacola while I was doing the night flying.

And then after night flying is completed you go out to Saufley Field. As I recall the process, at Saufley Field you do formation and gunnery in the SNJ.

Dr. Allison: Now this is not part of primary. You're just moving up through the stages here, right?

General Fitch: I guess you could call the whole thing primary. I was never a flight instructor so I didn't pay much attention to definitions within the flight school system. But advanced was in Texas. At Saufley, you'd do formation flying and this was regular formation flight and there would be tail chases with your propeller maybe 15 or 20 feet from the tail of the aircraft ahead of you. And after the formation phase at Saufley Field then you'd get into the aerial gunnery. They had a little 30-caliber machine gun that shot through the prop just like World War I, and you'd shoot a towed sleeve. And then when you finished that you were ready for basic carrier qualification, or car qual as it is called.

Dr. Allison: Carrier qual, still in the SNJ?

General Fitch: Still in the SNJ. I have looked in my logbook to get the time and it was November 1951 when I started doing FCLP [field carrier landing practice], to get ready to fly aboard the training aircraft carrier based in Pensacola. This was exactly a year after starting pre-flight. You would come back to Corry Field and do FCLPs at outlying fields. The FCLP was flown in the SNJ. After the LSO [landing signal officer] said you were ready for the ship, then you would go out to the carrier at sea in the Gulf, and the process required that you do six arrested landings and six takeoffs from the aircraft carrier. The *Monterey* was the carrier for the training command. And I didn't have any trouble with carrier landings. I enjoyed flying off the boat.

Dr. Allison: You didn't?

General Fitch: I liked flying off the carrier. My logbook shows that I did my six arrested landings on the *Monterey*, on November 20, 1951. It all went very smoothly as I recall. This of course was about 56 years ago.

Dr. Allison: No extra anticipation or anything like that?

General Fitch: No. When you're a NavCad you are so regimented you don't anticipate problems [chuckle]. You don't worry about a thing. You're told what to do and you do it. That carrier qualification in the SNJ finished up the basic part of flying and now it's time to go to Corpus Christi, Texas for advanced flight training.

Dr. Allison: How did you get to Texas?

General Fitch: I had a car, which was about five or six years old, I believe that it was a Pontiac, and which meant in those days, it was not very reliable. I think it was something like a '46 or '47 Pontiac, which was probably a five hundred dollar car, maybe six hundred. So I drove out to Corpus Christi to a training airfield named Cabiness Field, where we lived in the barracks. One of my roommates at Cabiness was a NavCad who had been in my pre-flight class, named Jim Service. Jim Service retired as a vice admiral in the Navy. His last job was Commander Naval Air Forces, Pacific; so two of us would make it to three stars. Cabiness was a little bit to the north of Corpus, probably 50 miles, and as I remember they had four types of aircraft there. One was the AD Skyraider, the early version, like an AD-1. They had the F4U Corsair there, which I think was an F4U-4, they had the F8F Bearcat, and they had the F6F-5 Hellcat. I wound up in the F6F-5 and everything went great.

Dr. Allison: That was probably a good thing, wasn't it? I've always heard the F6s were really a good airplane.

General Fitch: They were a great fighter in World War II and of course the F6F was a pleasure to fly. Remember this is 1951 so the F6F is less than a 10 year old design. The F6F probably got to the fleet in early 1943. It was much more powerful; than the SNJ, much faster, and of course you were flying a fighter that was still in use in the fleet....

Dr. Allison: Right, a lot easier to fly though. What about jets, were you seeing any of those?

General Fitch: The only jet aircraft around Corpus Christi with Navy markings on it was the Lockheed T-33, which I remember we called the TV-2. And you had to be kind of the prime student in your class to get what was called "jet transition training." It also helped if you were staying Navy instead of going Marine. Jet transition would happen after getting your wings, for those who would fly jets in the fleet. So anyway, Cabiness had the F6F-5, the F8F, the AD, and F4U Corsairs as I remember it, and all that was a very, very simple process. We had a Marine captain for an instructor named Lanigan. I haven't seen anything of him since I guess early 1952, but a nice guy, a really nice guy.

Dr. Allison: That's when you were there though, '52?

General Fitch: I got to Cabiness Field in early December 1951, went immediately into ground school for flying the F6F-5, which was just a few days of school, and flew my first flight in the F6F on December 17, 1951.

It was about that point in time, soon after arriving at Cabiness, that I had signed up to go in the Marine Corps instead of staying in the Navy and so I would become a second lieutenant when I got my wings.

Dr. Allison: What kind of flying did you do at Cabiness Field?

11

General Fitch: I did all the things you were supposed to do in the F6F like fly formation and aerial gunnery, tail chases, night flying and so forth. They would also lead us out over the Gulf where they would have us fly about 20 feet off the water for miles and miles. That was legalized buzzing in flight school. One of the instructors would fly so low that his prop would kick up a wake of water – a spray.

Dr. Allison: How long did it take to go through the training syllabus at Cabiness Field?

General Fitch. About three months all together. I was back at Corry Field by early March to begin advanced carrier qualifications in the F6F.

Dr. Allison: Is that because that's what you'd be flying in the Marine Corps?

General Fitch: No, it wasn't what you were going to be going to in a tactical squadron. No one in the training command knew where you were going when you finished. It was what aircraft that they had in the training command and what you had flown at Cabiness. And whatever you'd flown in advanced training out in Texas, you were going to fly that same aircraft in advanced carrier qualification. In my case it would be the F6F-5. The requirement was to do the FCLP, get field qualified, then go to the carrier and get 12 arrested landings and takeoffs from the carrier.

So then my flight does the FCLP out at the outlying fields. We were flying the F6F and if I remember right, you did something like a dozen or 15 flights doing FCLP, and then you went to the carrier. We went out to the aircraft carrier, the USS *Monterrey* which was a straight deck. Flying the F6F I thought it was a pretty simple routine doing the carrier qualification. It was twelve landings; traps, that you had to get on the carrier and I had eleven arrested landings with no wave offs. I do remember that. And I'm coming around on what would be the 12th pass where there's a requirement for 12 traps; arrested landings, and I kind of said to myself, "Well, you've got those wings and a commission, and"

Dr. Allison: One more.

General Fitch: "... one more landing." Well I had flown a fine pass, which was 12 for 12 on landing approaches to the carrier. In that airplane as with all propeller driven aircraft on the carrier landing, when the LSO gave you the cut, you chop the throttle, and like any prop, you drop the

nose briefly, then you bring the nose back up. We called that a high dip. I touched down on the flight deck between the number two and three wires, which is what you are shooting for. But unfortunately I had a hook skip where the hook bounced over several arresting cables. That's a mechanical thing for hook bounce and with props that is just bad luck – not landing technique. It had nothing to do with the landing or the pass in that case. And then the hook caught something like the seventh or eighth wire and they wouldn't drop a barrier for a cadet. So, my prop just got the steel barrier, which is a steel cable about an inch thick, and they were about five feet high like a fence.

Dr. Allison: The carrier was a straight deck.

General Fitch: The *Monterey* was a straight deck carrier, since angled decks would not come in for several years. So then I get out of the airplane - and I've made twelve landings at that point – and people are saying, "Oh, that's too bad, too bad. Now you'll have to go back to the beach and do a couple more periods of FCLP and then you'll have to come out and do two or three more landings."

Dr. Allison: So what did the LSO say?

General Fitch: Well the LSO was Marine Captain Stuckey. He showed up down in the ready room and he said, "Fitch, it wasn't your fault you had a hook skip and. I'm recommending to the captain that you be qualified." So I thanked him. He was a good LSO, highly experienced, and he knew that there was no percentage in my going back to the beach and doing two or three more FCLP periods and then back to the ship for a couple more landings. Stuckey had been adamant that it had been a hook skip, which was a mechanical type situation. He told me, and he told the captain, that I had 12 good approaches in the landing pattern along with 12 arrested landings with no wave offs—all good passes by the LSO standards. So the captain of the *Monterey* finally agreed with Captain Stuckey.

Then it was, go buy my second lieutenant bars for my Marine uniform, and be ready for the commissioning and winging ceremony. That ceremony would take place on April 9th, 1952. My parents, my older sister, Beverly, my younger sister Sharon, my younger brother Blaine, and my grandfather, W. H. Underhill, came up from Fort Meade for the April 9th ceremony.

Dr. Allison: That must have been special to have the family there, and your grandfather.

13

General Fitch: My mother pinned on my wings.

Dr. Allison: You were going in the Marine Corps, new uniforms.

General Fitch: As a NavCad, I wore a Navy uniform and was in the Navy. Now I was in the Marine Corps. You had to let your request for a Marine Corps commission be processed at Headquarters, Marine Corps. I was probably halfway through advanced in Texas when I put in for a Marine commission, as opposed to staying in the Navy. The day I got my wings and commission in the Marine Corps, I was six feet tall and weighed about 135 pounds. And so I've got all these carrier landings behind me, that's all finished; everything's done now, and I'm sitting over at a desk at the Marine detachment talking to somebody who's doing some paperwork, and this lieutenant colonel walks by that desk. He is the CO of the Marine Aviation Detachment there. And he looked at me at six feet tall and thin as a rail, and he said, "God, I hope we're not taking you in the Marine Corps!"

Dr. Allison: [Laughter].

General Fitch: I said something like, "Oh yes sir, yes sir." [Laughter] I would later run into that lieutenant colonel when I was a captain. By then I had been married a year or so and I weighed about 165 pounds. I remembered him but he didn't remember me.

Dr. Allison: Welcome to the Marine Corps.

General Fitch: There's a picture downstairs of my mother pinning on my wings and I was a brand new second lieutenant. She had pinned those gold second lieutenant bars on a minute or so earlier. My date of rank for second lieutenant was April 1, 1952.

Dr. Allison: Where did they do that-the ceremonies-- in those days?

General Fitch: At the old naval air station at Pensacola, at the pre-flight training building. It was part of that large pre-flight training building there, and they had a rear admiral that conducted the ceremony.

Dr. Allison: Not down by the seaplane hangers or anything like that?

General Fitch: No, it was all inside a conference room arrangement or a little auditorium, something like that. So that made me both a second lieutenant and a naval aviator at that point in time, which as I mentioned was April 9th, 1952. My date of rank for second lieutenant was ahead of all the upcoming graduates of the Naval Academy and NROTC. Al Gray and I would have the same date of rank for second lieutenant – April 1, 1952. He was a product of Quantico and the Platoon Leader Course where as I had been a NavCad up to my commissioning day.

Dr. Allison: I want to ask you why you wanted to go in the Marine Corps though; was it just the movie; the *Flying Leathernecks*?

General Fitch: No it was not just a movie. There were several things. One you and I mentioned was the movie, *Flying Leathernecks*, and when you're 20 or 21 years old a movie like that with some great flying scenes, it's a factor There were other things like the Marines being the world premier war fighting force. Then following the battles in the Pacific where the Marines were the dominant force-- that was a factor. Of course there were also newspaper accounts of the war in Korea and the Marine's role in that. Also in flight school, Captain Lanigan was a good role model.

Dr. Allison: It's amazing the influence of movies for recruiting. What were your plans for the future, make a career of the Marine Corps?

General Fitch: In my case I felt that I'd probably enjoy the Marines more than the Navy. In 1951-52 my plan was for a four-year tour in the military, then get out and grow citrus in Florida. Had I stayed on that track I would have been just turning 25 when my four years were up. I believe that I mentioned that I started flight school as I was turning 21 years old, and I looked 17. Four years would add to my maturity. That four year obligation included flight school and flight school was about 17 months from start in 1950 to commissioning in early '52. The norm for flight school was 18 months if you didn't run into delays.

I should mention that for flight school back in the 1951 and early '52 timeframe, you could go through flight school with no dead time in between the various phases of training. In my case I never had a delay. When I finished at Cabiness Field in Texas, I immediately checked out at Corpus Christi, and drove straight through to Pensacola. A day or two delay could put you in a later training flight, and I was anxious to get through flight school and be commissioned.

15

Dr. Allison: Were there any other driving forces in your hurry? I remember that you were in a hurry to get through college.

General Fitch: Of course your goal was to be an officer instead of a cadet. That first salute was a big deal for a NavCad. That being a commissioned officer was a driving force in your thinking. Part of it was a matter of economics, which was logical. A NavCad made ninety-four dollars a month and a second lieutenant with flight pay made about four hundred a month. Flight pay in those days was a hundred dollars a month, and there were no bonuses. As for flight pay, I thought it was a nice feature, where they let you fly their airplanes and they gave you extra money for doing it.

You had to fly at least four hours to get it. There was no carry over from month to month – at least four hours every month to get the \$100. You probably remember when John Glenn was doing the first American orbit in space, and he sent a message to General Shoup the CMC, and said, "General I have my four hours and I have earned my flight pay." In those days you received a pay increase when you got promoted, and I don't recall any cost of living increases in those years during the decade of the '50s. As best I remember, when I was promoted to captain, my total pay went to \$500 a month including flight pay.

In my case I was a second lieutenant for 18 months, then a first lieutenant for 14 months before being selected and promoted to captain. I would be a captain for eight years before being deep selected for promotion to major.

Dr. Allison: Your record shows you went back to Corpus Christi after getting your wings.

General Fitch: After getting my wings and commission at Pensacola, I had to go back to Corpus Christi and go through more instrument training to get my instrument card. Back at Corpus we flew the C-45 Beechcraft, a small twin engine aircraft, and getting that instrument card probably took a month or six weeks at Corpus Christi.

Dr. Allison: Twin-engine.

General Fitch: Twin-engine called the SNB-5. And in that airplane you had a couple of instruments instructors, and they'd take up a couple of students and the students would take turns flying the airplane and doing instrument approaches. After about five or six weeks of that then you got your

standard instrument card and when you completed All Weather Flight School, that's when you went to your first tactical squadron.

Dr. Allison: That would be out at Cherry Point, I believe.

General Fitch: I flew my last flight at Corpus Christi on June 5, 1952. Then I headed for my hometown, Fort Meade for a couple of weeks of leave. I reported into 2d MAW at MCAS Cherry Point about July 1, 1952.

Dr. Allison: Did you get any say in your assignment there, how did that work out?

General Fitch: At the 2d Marine Aircraft Wing personnel office they told me that they needed my carrier experience in VMF(N)-114, which was a F4U-5N squadron. Second lieutenants are like NavCads, they do what they are told. However, I suggested an alternative that they paid no attention to. I suggested that I go to an F9F Panther squadron and then on to Korea.

Dr. Allison: That's interesting, seems that they would need pilots for the war.

General Fitch: No, they had that all planned out since the wing was short on second lieutenants. Five of us were checking in that day and we were all going to the Corsair squadron--114, because the Marines had a commitment to the Navy for carrier operations. At that moment in time, the Korean War was not the only priority.

Dr. Allison: [Chuckle] . . . they just told you what you were going. . .

General Fitch: Well having flown the F6F-5 fighter, obviously I was going to go into propeller driven fighters or attack aircraft of some kind. So my orders were to 2d Marine Aircraft Wing at Cherry Point, North Carolina, and at that point in time there hadn't been a whole lot of second lieutenants check into Second Wing since the end of World War II in 1945. We were all sitting in Wing Personnel. I don't know who we were talking to – but the "who" said, "We need for you to go down to this F4U squadron, which is going on a short cruise to Northern Europe, then they are coming back and getting the F2H-3,"which was called the Banshee.

Dr. Allison: Jet.

General Fitch: Jet. The Banshee was a twin engine jet and the F2H-3 was the third model of that fighter, so it sounded good to be going to the F2H-3 in just a few months, after a short tour with the F4U Corsair aboard an aircraft carrier. And so in spite of that promise of better things to come with the F2H-3, I said, as I recall, "Why don't you just send me down to an F9 squadron and I'll go to Korea." I was thinking that it was time to get to combat since at this point I had been in the military service about a year and a half, and the war was still on. Again this was July 1952, a year before the so-called armistice in Korea. It turned out the Marine Corps had their priorities, and at wing personnel they said, "No, you've got 18 carrier landings. We need your carrier experience now."

For a brand new second lieutenant to have 18 carrier landings and be a priority going to a squadron, that meant that they didn't have a whole lot of Marine captains and first lieutenants around that had flown off aircraft carriers. This was true because back in World War II the Marines did not operate that much from aircraft carriers. They did some but not a whole lot of carrier operations.

Dr. Allison: You were not necessarily looking forward to flying the Corsair, an older aircraft.

General Fitch: Looking back some 54 years later, I'm glad they made that decision because, again, of that whole list of airplanes that I have flown, which is over 120 models, if I had to pick only one that I was most pleased to have flown, that would have to be the F4U Corsair. So in the strict sense, I didn't know what I was talking about when I said, "Just send me down to a F-9 squadron and I will go to Korea." The way the Marine Corps played it turned out a lot better than the way I was trying to play it.

Dr. Allison: Was it that enjoyable to fly or was it just the historical significance of it?

General Fitch: Well it wasn't so much that. The Corsair as a carrier aircraft was much harder to bring aboard the aircraft carrier than either the SNJ or the F6F. Later when I would fly the AD Skyraider aboard carriers for over a year, the Skyraider was a piece of cake compared to the Corsair for a carrier landing. The F4U-5 Corsair had about 18 feet of nose in front of the pilot, between his cockpit seat and the spinner on the propeller. The Corsair had cowl flaps that both increased the size of the nose area of the airplane and when the cowl flaps were open, that cooled the engine. The open cowl flaps reduced the errors that could be made in a carrier approach to a

straight deck aircraft carrier. That meant that when you were coming through the groove (about a 30 degree angle off the flight deck) during an approach on a turn to landing aboard, say from the 30 degree position to the deck, you had to play it just right or you would overshoot the landing zone on the carrier deck. You had to open the cowl flaps to keep the engine cooled, and at about the 30 degree angle point of a carrier approach, you had to "lay" the cowl flap up right against the LSO. If you didn't do that, you would overshoot and get waved-off. The translation of that is you had to do a better job in the carrier approach with a Corsair than with other aircraft, since the Corsair was much less forgiving in errors made in the last 30 degrees of that carrier approach.

Dr. Allison: You had quite a bit of carrier work in the Corsair too, right?

General Fitch: Looking back I am very pleased that I had over a hundred carrier landings in the Corsair. I flew the Corsair from USS *Wright*, a small carrier, the USS *Coral Sea*, at the time the largest carrier in any of the fleets, Pacific and Atlantic, and from the *Tarawa*, a large carrier, but not the largest at the time. It was the nature of the F4U in World War II, the degree of finesse required in the landing approach, the spin characteristics of the Corsair, and many other reasons, that put it at the top of the list for aircraft that I have flown. You could have said much of the same things about the F6F, but the F6F was a piece of cake to bring aboard the axial deck carrier. By the way the F6F had cowl flaps, but the prop was not so far from the pilot. That made a big difference in flying aboard a carrier.

Dr. Allison: So you went to VMF(N)-114.

General Fitch: With VMF-114 it is fair to say that I went to that squadron around the 1st of July, 1952. And I remember – and I also checked in my logbook – that I flew the F4U roughly 10 days after I joined the squadron. So as a brand new second lieutenant, I checked in, read the handbook, which was not very thick, talked to some of the experienced pilots, and did my FAM hop in the F4U, a little over a week after joining 114.

Major Paul Fuss was the squadron commander for 114 and I would fly as his wingman. He used to say, "He wanted to keep his eye on me." Paul Fuss was a very nice man, easy going and I never saw him excited. During my last tour at 2d Marine Aircraft Wing he was a colonel and the chief of staff for the air station at Cherry Point. It was a bit ironic that I was also a colonel at the time. He is now deceased, a fine Marine leader. Dr. Allison: Do you recall any early flying experiences in the Corsair, memorable flights?

General Fitch: I'll tell you a story [chuckle]. Around Cherry Point you had a five-mile circle and the procedure was when you took off you cleared the five-mile circle quickly, then when you were coming back to the airfield you got in the five-mile circle and flew around that circle until you got to the duty runway and came in for the break and landed. Well I had a chase pilot in – let's see, this is a handbook for the F4U-5 and you compare that to NATOPS [Naval aviation training and operating procedures standards] of today and now they're about four to six times as thick. The handbook for the F4U was very simple and I have kept a copy of that old handbook to this day, which is now over 54 years old, with Second Lieutenant Fitch written on the front.

Dr. Allison: Right.

General Fitch: This F4U handbook weighs as much as the handbook for the F6F-5. On the day I flew the Corsair for the first time in early July 1952, I would find myself in a dog fight about five miles from the airfield, just a couple of minutes after takeoff. My chase pilot and I had gone over the preflight procedures, the starting of the aircraft, and taxiing aircraft at Cherry Point since you took off from the middle of the field. The nose on the F4U was so long that you had to keep turning the nose back and forth to see where you were taxiing. After we get the two planes started, we then taxied out the taxi way to the center of the field, talked with the tower, and we take off from Cherry Point. At this point about all that I've done is go through that handbook and probably answered about 10 questions on how you start the airplane, put the flaps down spread the wings and lock them, and so forth, and you go fly with this guy chasing you. Well we takeoff with him chasing me, and right after takeoff, which probably took us two minutes to get to the five-mile circle if that, as soon as we passed the five-mile circle we were jumped by a division of Navy F6F's out of the naval air station, I assume, up at Norfolk. I don't know who they were, but it was a sporty situation when you are flying an aircraft that you are in for the first time.

Dr. Allison: Was this your first flight?

General Fitch: This was my first flight. And so we're doing this routine of a dogfight in sight of the airfield, and it is two Corsairs against four F6Fs. When you think about this, it is relevant to understand why we had so many aircraft accidents back in the early 1950s. The rules were very weak.

20

Dr. Allison: But outside the five-mile circle?

General Fitch: We were barely outside the five-mile circle but we were doing –doing what today you call, air combat maneuvering [ACM], and this is a FAM hop for me, in sight of the airfield. But again, in those days the rules weren't overly stringent.

Dr. Allison: We'd never do that today.

General Fitch: And then whenever that broke off, and that probably lasted five minutes at the most, well then we went and flew and I'm sure I came back and made a few landings or so. My first landing in the Corsair was memorable, and 54 years later I remember it well—even down to the runway that I was landing on. I do remember vividly in that F4U - and I hadn't seen this in the handbook - there was a little button up on the instrument panel that said "Windshield Degrease" and so I thought, on that first flight, since there was oil on the windshield, "You know there's some oil on that windshield. Let's see if this thing works." So I pushed that button. Well that was a mistake because it had a preservative fluid in it, which no one had told me about. All this fluid started creeping up on the front of the windscreen of that Corsair and the only way I could see when landing was that I had to have the canopy open and lean my head out the side for my first landing in the Corsair that day. In spite of the fact that I couldn't see out the front of the airplane because of all this preservative on the windscreen, according to my logbook I made five landings with my head hanging out the side, so that I could see the runway; I never pushed that button again.

Dr. Allison: So, it ended well. [Chuckle].

General Fitch: But that familiarization hop went fine, in spite of the four Hellcats jumping us at the five mile circle and the windshield and oil incident. I had quickly learned not to push buttons if I hadn't read about them in the pilot's handbook. But landing the Corsair on a big runway was not any trouble at all. It was the carrier operations that you had to do it exactly right.

Dr. Allison: I've always heard the stories of the long nose and this and that.

General Fitch: You had to pay a lot of attention to the airplane during landing and during takeoff. When you were flying that particular version of the Corsair it had a blower system in it for high altitude flying. It had two blowers, and what you had to do on takeoff was run the manifold pressure up enough so you would switch in the blower system to high blower, but not so much that you'd tip over the airplane onto its nose because with the brakes on, if you weren't careful you could tip the nose of the aircraft up and drop the prop into asphalt taxiway or runway. But the airfield landing itself was not difficult at all.

Dr. Allison: [Chuckle] Memorable flight. So, that was your first flight in 114. What was the routine after that, getting ready for the deployment, I guess?

General Fitch: VMF(N)-114 and that was the first flight and I don't recall who the chase pilot was. But then the name of the game after one fam hop was to get 50 hours in the airplane as quickly as you could before you started field carrier landing practice. The squadron was committed to go aboard the USS *Wright* about five or six weeks after I joined the squadron. So time was short before we would be out carrier qualifying. In my log book it shows that I made my first aircraft carrier landing in the F4U-5 Corsair on August 15, 1952, six weeks after I had joined the squadron, and five weeks after I first flew the Corsair. My log book shows that before the end of August 1952, less than two months after joining 114, I had 29 arrested carrier landings in the F4U-5, along with a bunch of deck launches and catapult shots. At this point the flying was from the USS *Wright*, a small straight deck aircraft carrier.

Dr. Allison: When did you deploy on the *Wright* and did you think you were adequately prepared for the deployment? You had joined 114 in July and the deployment starts in September, not a lot of time to get ready.

General Fitch: In early September 1952 we started heading across the Atlantic Ocean as part of the task force for Operation Main Brace. The Marine Corps had committed us as a day fighter squadron only because there hadn't been time to train for night operations. At the time we sailed across the Atlantic I'd never flown the airplane at night, I had never fired a gun, and never dropped a bomb from the F4U. All I knew how to do was land on the aircraft carrier and takeoff. At this point in time I had been in VMF(N)-114 for all of two months—maybe nine weeks.

In late September, we operated from the air station at Port Lyautey in French Morocco. We were at Port Lyautey a few weeks during September and October 1952. It was while we were there that I spun a Corsair, in an inverted spin, which the rulebook said that you do not do-more of that later. Dr. Allison: But you'd never flown at night?

General Fitch: At that time I hadn't flown that airplane at night, still had never dropped a bomb from the F4U, and it would be several more months before I did. But you have to remember that this was a late tasking the Marines had agreed to with the Navy – with essentially minimal time to get a squadron ready to deploy. The Korean War was still going strong in the summer of 1952.

Dr. Allison: Yes, but at flight school you had.

General Fitch: Oh yes. I had flown at night in both the SNJ and the F6F. But that was flight school and not an operational deployment.

Dr. Allison: Did you do any night carrier quals in flight school?

General Fitch: No, not in flight school. It was all day carrier operations in flight school.

Dr. Allison: So, how did the deployment go aboard the Wright?

General Fitch: In early September we started heading across the Atlantic with our squadron aboard the *Wright*, which was steaming with three other aircraft carriers and a huge task force. My guess is that there must have been upwards of a hundred or more ships in our task force going across the Atlantic. And then about half way across the Atlantic we had two Marine pilots have a mid-air collision. One was a captain, Ralph Sayer, who was a World War II retread who had been called back to active duty and the other one was a 1st lieutenant, Joe Stringy, who was well experienced in the Corsair, he'd had a year flying combat in Korea so he wasn't brand new. Anyway, they had a mid-air.

The captain, Ralph Sayer, was killed. The lieutenant got out of his airplane alright and was picked up by the ship's helo. Well when that happened this admiral, whose name was Pride, came over to the *Wright*, to our ready room, and he talked to all the 114 pilots. He said, "Well gentlemen, you just didn't have time to get ready for this cruise, so we're going to put you off in Port Lyautey, French Morocco while we go up to Norway and do this exercise."

Dr. Allison: You're talking about the whole Marine squadron?

General Fitch: The whole squadron would go ashore at Port Lyautey in French Morocco.

Dr. Allison: Not good.

General Fitch: We left about four or five of our airplanes aboard the *Wright*, which the Navy then flew with VC pilots. They kind of tore up several of those Marine airplanes while flying in rough seas up in the Norway area, which is interesting. About two weeks after we arrive at Port Lyautey, the Marine Corps sends out a brigadier general to interview all the pilots. Headquarters Marine Corps wants to know why VMF-114 has been kicked off the Navy's USS *Wright*. HQMC had committed 114 as a day squadron due to the shortage of time to the deployment.

Dr. Allison: Not a small thing, to get booted off a carrier, gets people's attention, doesn't it?

General Fitch: Well I think that was the first time I had ever met a brigadier general [chuckle]. The Marine Corps was rather unhappy about 114 being kicked off the carrier. As I recall the brigadier general's name was [John N.] Hart. He interviewed every pilot in 114. He asked me if I thought the squadron was poorly trained for the commitment, and I just told him that everything looked fine to me-- you know, an unfortunate accident at sea. I told him that I didn't think any pilot was really having any problem to speak of other than that mid air collision.

So Brigadier General Hart goes back to Headquarters Marine Corps and the next thing we know there's a message coming to the squadron that says, "You will return to the states aboard USS *Coral Sea*," which happened to be the largest carrier in the fleet in those days. In 1952 the *Coral Sea* was still an axial deck carrier. Later the *Coral Sea* would be an angle deck carrier, and I would fly the A4D Skyhawk from that angle-decked *Coral Sea*.

Dr. Allison: Interesting. Axial means straight deck right?

General Fitch: A straight deck in 1952. The message added that upon arrival back in the states you'll start night flying and do night FCLP, and get ready to go aboard the USS *Tarawa* for day and night flight operations." The *Tarawa* was a CV that's a little bit smaller than the *Coral Sea* was. So in early October 1952 we flew from the airfield at Port Lyautey and went aboard the USS *Coral Sea* with no problem. Part of the deal in going to the *Coral Sea* was to get a few days in

Lisbon. I remember looking at the flight deck of *Coral Sea* from the air, which was large, and my thinking was that they could have separate runways on the big deck.

I'll go back to when we were coming across the Atlantic in early September, before we went ashore at Port Lyautey. It was a fleet of ships like you would like to see today—four aircraft carriers cruising in the flight ops formation, numerous cruisers, and a large flock of destroyers. What it was, when you were at 5,000 feet over the carriers, as far as you could see in all directions, which was probably 30 or 40 miles at least, there were ships; destroyers and cruisers and all these various type ships, including four aircraft carriers. There were probably at least a hundred ships in that task force, going across the Atlantic Ocean, and maybe more. Today that task force would have as many ships as about half the US Navy. When you were landing on your carrier you had to be careful that you didn't fly into the landing pattern of the carrier ahead of you or astern.

Dr. Allison: Wow! That was when you were first going out on the Wright.

General Fitch: We were going to Norway for Operation Main Brace, but after that mid-air in the middle of the Atlantic, they were going to swing by North Africa and drop us off at Port Lyautey and we were going to fly in and land at the airfield there.

Dr. Allison: So you get back to Cherry Point and what?

General Fitch: We get back to Cherry Point. For the first time now I fly the airplane at night and you had to get ten hours of nighttime, before you could start night FCLP. I recall that. We then flew the squadron up to Edenton, North Carolina. The barracks there were real ramshackle – falling apart. There was no such thing as a BOQ at Edenton. We started FCLP up at Edenton, an old air station, which was essentially abandoned except for it being a field where you could go in and shoot field carrier landing practice without disturbing people in the area.

Dr. Allison: Yes, they flew SBD's out of there in the war.

General Fitch: I didn't know that. We got to Edenton and did our thing getting our night hops done. We also did the night and day FCLP. There was one interesting incident there during the FCLP. The Corsair engine had a manifold pressure regulator and on my first flight I had done – six or eight landings. You would come around flying the carrier-landing pattern, get cuts or waveoffs as the LSO dictated, and do whatever number of FCLP landings that the LSO wanted you to do.

The LSO would either give you a cut or give you a wave off as the case may be. But you'd get about six or eight landings each period or sortie, and then we were hot turning. The hot turning was where you would taxi in, leave the engine running, and they'd chock the airplane, you'd get out one side of the cockpit onto the wing and another pilot would get in the other side. In the meantime they'd be putting a little bit of fuel in the airplane, and checking the brakes and tires. It was kind of a daisy-chain operation with pilots jumping into and out of airplanes in the chocks.

And so I got out of that airplane and another pilot took it. A few minutes later I got into another airplane to fly another period of FCLP. As I'm taxiing out in a different airplane and I'm at the end of the runway and the pilot that had my previous airplane had made a couple of FCLP approaches and landings. I see him taking off and he is turning downwind and all of sudden all this black smoke is belching out of the engine. And he winds up ditching the airplane in a bunch of trees. He gets out without a scratch!

But what had happened was the manifold pressure regulator had run away with him and the manifold pressure had gone to something like twice the maximum pressure limits for the engine, and at that point the engine just kind of came apart. So I was pleased I hadn't been flying that airplane when that happened.

Dr. Allison: Wow, close call. Did you ever have a major accident?

General Fitch: It is relevant to say that in my 34 years of flying military aircraft, along with nearly 7,000 flight hours (6,895 flight hours to be precise), along with my flying 121 different models of military aircraft in those 34 years, I had an equal number of takeoffs and landings. In military flying that is the objective, having the same number of takeoffs and landings.

Dr. Allison: So when did you go aboard the Tarawa?

General Fitch: Soon after arriving at Edenton we were told that in a few weeks we would be doing our day carrier qualifications on *Tarawa* off of Jacksonville, Florida. *Tarawa*, a CV, was larger than the *Wright*. When we got to Jacksonville, we went out and did our carrier qualification aboard *Tarawa* without any incidents. After that we would sail for a Caribbean cruise with some operations at Guantanamo Bay [Gitmo]. We would do some more night FCLP at Gitmo, then we'd do the night carrier qualification with the carrier in the Caribbean. The long range plan was to sail from Quonset Point for the Mediterranean the first week in January (1953). They planned to give us a few days off for Christmas after we finished our Gitmo and Caribbean operations with *Tarawa*.

Dr. Allison: I guess Guantanamo in those days was different than after Castro took over.

General Fitch: I have to say that the work pace at Guantanamo was very relaxed. We spent a lot of time at the officer's swimming pool and at the Officer's Club. When we went to sea from Gitmo, we didn't fly a great deal, but we did get in the night carrier qualifications that we needed. We stayed at Gitmo when the carrier was in Puerto Rico for a port call at Roosevelt Roads.

Dr. Allison: So, you got your first night carrier quals.

General Fitch: My logbook shows my first night carrier landings in the F4U Corsair aboard *Tarawa* took place on the night of December 3rd, 1952, in the Caribbean Sea off of GTMO.

Dr. Allison: Pretty incredible how you're moving around so much in 114.

General Fitch: I think that it is interesting to look at a time line that shows the pace of operations between the first of October 1952 and the first week in January 1953. The first week in October we are in Port Lyautey, French Morocco, flying FCLP and other training flights. On October 6th we are aboard USS *Coral Sea* enroute west across the Atlantic. October 16th we are back at Cherry Point doing night flying, where we have to get ten hours of night time before we can start night FCLP. On October 28th we are down off of Jacksonville, Florida, day qualifying aboard USS Tarawa. November 10th we have sailed aboard Tarawa to Gitmo on the south side of Cuba and go ashore for some flight operations out of Gitmo. During the time from 10 November to 3 December we are doing day flight operations both from Tarawa and Gitmo, with the Gitmo flying including night FCLP. On the night of December 3d we night carrier qualify aboard Tarawa in the Caribbean Sea. By 20 December we are back at Cherry Point and the squadron goes on Christmas leave. On January 2d we are back flying at Cherry Point. On January 4th we fly from MCAS Cherry Point to NAS Quonset Point, Rhode Island, and back aboard Tarawa. On January 8, 1953 VMF(N)-114 is aboard the USS Tarawa and is sailing across the Atlantic enroute to the Mediterranean Sea. For nine months I have been commissioned and have had my wings, I have been through instrument school at Corpus Christi, I have been in VMF(N)-114 for six months, I have flown the F4U Corsair from three different aircraft carriers, I have spent about six weeks in

27

Morocco flying over the desert, I have over 50 carrier landings in the F4U-5, and now I am in 114 and we are sailing across the Atlantic for my third crossing of the Atlantic Ocean in the past six months. I also still have about 10 more months to go before being promoted to first lieutenant.

Dr. Allison: On the Tarawa cruise, where did you go?

General Fitch: We'll fly our Corsairs up to Quonset Point, and go aboard *Tarawa* again from the Naval Air Station. And we go across the Atlantic, flying while crossing the ocean, and *Tarawa* goes through the Straits of Gibraltar, between Gibraltar and French Morocco, around January 12th, 1953. Once we are in the Mediterranean, my recall is that flying will not be that much of a priority during the cruise. Liberty port calls will be the big thing.

Looking at my log book, when we left the Mediterranean in late June 1953, and passed through the Straits of Gibraltar, I had 119 carrier landings total, of which 102 were in the F4U-5N Corsair. When we entered the Mediterranean in early January 1953, I had already made 69 carrier landings including those in flight school. Since I made 50 carrier landings in the six months 114 was in the Med aboard *Tarawa*, I had flown an average of about eight hops a month while aboard the *Tarawa*. I flew a total of 140 hours in the six months while in the Mediterranean Sea, which tracks well, because each sortie from the *Tarawa* for the Corsairs was an average 3.5 hour hop. The Navy AD Skyraiders did the 3.5 hour hops too, while jets did about 1.5 hour hops. You could say that is not a bad rate of flying for being on an aircraft carrier. In early July 1953 when I checked out of VMF(N)-114, I was still a second lieutenant, with about four months to go before I would be promoted to first lieutenant. Leaving VMF(N)-114, I had a total of 681 flight hours, of which 302 hours were in the F4U-5 Corsair. Overall that was a pretty good rate of flying for one year in VMF(N)-114, with about half the flight time ashore and about half afloat on the carriers, *Wright, Coral Sea* and *Tarawa*.

Dr. Allison: So overall a good learning experience in 114, sounds like. Anything else on that cruise—you had mentioned the port calls being a priority.

General Fitch: My first year in a tactical squadron gave me a lot of experience, very valuable experience. This was especially so when in the Med when the priority is more liberty port calls than it is flying. Sometimes we would come out of one liberty port in the morning and into another port by nightfall.

I remember some liberty port calls where we went into North Africa quite a bit – such as Algiers – and this is back when we were friendly with the people in Algiers. And then we did things like over in the eastern part of the Mediterranean and up in Italy, where the rules weren't that severe when it came to safety. I would guess that 114 lost at least six or seven F4U Corsairs while I was in it, for exactly one year. We lost four or five pilots. I believe that in the year 1954, Naval Aviation as a whole lost 2,400 aircraft to major accidents.

Dr. Allison: You say, 2,400?

General Fitch: I believe that was the number for major crash damage. I wouldn't bet the ranch on that number, but I believe it is correct. Back to 114 when we were first doing field carrier landing practice in the daytime, we lost one guy killed doing that day FCLP, and he was an experienced pilot from World War II. We probably, after we got to the Med I think we lost two more out in the Med with things like engine failures and so forth. Another second lieutenant, Joe Neds, lost two aircraft in the Med that cruise.

Dr. Allison: Any tactics; did you do any kind of tactics or anything like that?

General Fitch: Yes we did lots of strikes against airfield targets. It is fair to say, we did some very big strikes against airfields, with the air group commander in his AD leading them. He was a commander and his name was Rip Kline. They'd put up say 30 airplanes for a simulated air strike against a European airfield, such as Naples. It would be Navy AD's and Marine Corsairs. The ship had a squadron of the F9F Panther in the *Tarawa* air group. I remember Naples Airport. With this gaggle of all these airplanes, you have those 30 or 40 airplanes making high speed passes right over the airfield at two or three hundred feet. You would watch P-38s with Italian pilots making head on passes at your aircraft. In the air over the airfield there were Italian P-38s and P-51s and they're all doing this routine for fighter intercepts, like head on passes at two or three hundred feet off the runway at Naples airport. I have to assume that the strike was all coordinated with the Italians. It was a melee with accidents looking for a place to happen. My log book shows we flew about 18 strikes during the six months in the Med, against targets such as Naples, Crete, Athens, and then we also made some dummy strikes against simulated targets.

Dr. Allison: Did you do ACM?

General Fitch: The Corsairs were escorting the AD Skyraiders, and the F9F Panthers were escorting everyone. The problem was that after the F9Fs were catapulted, you seldom ever saw them again. I believe they were the F9F-2 which was a very early Panther jet. For all those low passes over commercial airfields in places like Italy, France, Greece, etc., it was just dumb luck that we didn't have some mid-air collisions. And I guess of course there weren't many commercial airliners in those days, but if there were they'd probably said, "Go away" [chuckle]. "Don't land at this airport." Commander Kline was not the best of aviators. He had some terrible approaches in the landing pattern, I have seen him get a cut when he was in a 30 degree bank angle at the fantail. He had told the LSOs to give him a cut every approach. As mentioned Commander Rip Kline was the CAG. I have a photo downstairs where we are cutting the cake for the 38,000th landing on *Tarawa*, which I made. Kline is in the photo as well as the commander who was operations officer for Tarawa.

We would drop practice bombs at targets in North Africa. At that time there was a presence of the U.S. Air Force at those bombing targets in Libya. We bombed those numerous times. Then there were bombing flights, like dropping bombs on a sled towed behind a carrier or destroyer, but not a great deal of what you might call productive flying. I probably flew half a dozen bombing hops while in the Med – total. I did fly a lot of combat air patrol, CAP, which gets a lot of emphasis aboard the carrier. As a second lieutenant I was new to all of this, but I have to say the emphasis was on getting into the liberty ports. Flying was pretty much secondary. There was a lot of emphasis on the air group (Navy air group as opposed to air wing now) looking good around the ship.

Dr. Allison: Can you comment on the Corsair as a bomber, an important role for Marine pilots.

General Fitch: Well it was good as it could be from the standpoint of it was all manual. If you knew how to correct for wind you could do okay. In most bombing runs you had to figure out the wind direction and velocity, and take it into account. If you saw a windsock on the ground, you might find that the wind at 3,000 feet was from the opposite direction or 90 degrees different. You have to convert the wind velocity to feet per second, then know the time of fall of your ordnance. If you can figure out all the variables with the wind direction and velocity, you can correct for the wind.

That meant that normally the first bombs that you dropped weren't very good in hit distance from the target, unless it was a no-wind day. The impact of the wind depended on the wind direction and the velocity. A 15 mile an hour wind could make a big difference in bomb hits.

30

If you happened to be bombing on a manned bombing range, then they might be able to give you the winds at 3,000 feet over the target.

The Corsair had a simple bombsight, where you cranked in the mil depression for the angle of bombing that you would do. The Corsair and the Skyraider would be about the same in bombing capability from the airplane standpoint. The skill of the pilot was another matter, which factored directly into bombing accuracy. In 1952, computer and sensor aided bombing systems were about 20 years away from development. The F4U didn't go that fast. It was about a 400 mile an hour airplane if you got the airplane up to 30,000 feet. We normally flew at altitudes below 10,000 feet. Most of our bomb runs were 30-degree dive angles. But the bombing system was just a simple gun sight and if you didn't know what the wind was, and a lot of times some of the ranges where you dropped bombs, they would be unmanned and you'd just go drop bombs on them and then you'd pull up and see where you saw the puff of smoke.

Dr. Allison: How were your hits generally?

General Fitch: Sometimes they would be good and sometimes they would be bad, but there was an awful lot of luck into it. But if you could see something like a windsock blowing and you could tell which way the surface wind was going, that might give you a clue to the wind at release altitude, but the wind could do some pretty bad things to a bomb depending on the time of fall. Of course combat targets don't have windsocks around them. But there wasn't a whole lot of ordnance work in the Med, the best I can remember for that cruise. My logbook shows about eight ordnance hops during the six months in the Med. Simulated close air support [CAS] was non-existent.

Dr. Allison: Any air-to-air stuff?

General Fitch: Not really. The only time that we encountered any air-to-air was when it would be happen-stance during a CAP flight. Of course neither the F4U nor the AD were any kind of a match for the jets such as the F9F. Strikes against targets might have the local air force defending. But it is relevant to those days, now some 54 years ago, that there weren't many rules, and you could get a mix master of airplanes over a French or Italian airfield, doing a mix master of things with their aircraft.

Dr. Allison: Nothing really organized or set up?

General Fitch: Most of it was strike flights when you were going in to hit a target and ACM when you were doing combat air patrol. You were doing a fair amount of ACM when it was part of a group gaggle kind of thing, with simulated strikes. In the strict sense, it was just a bunch of airplanes in the air. The CAG for the *Tarawa* air group usually led the strikes, with his flying an AD Skyraider.

Dr. Allison: Where the fighters would be escorting some bombers.

General Fitch: Well yes, the F9s would be up there somewhere but you seldom could see them and of course you wouldn't go very high altitude. I doubt if we ever flew over 15,000 feet with the AD and Corsair. The Corsairs were normally tied to the Skyraiders since the CAG was leading the strike, and the AD Skyraider had only a single blower. That meant the AD was slow to climb above about 15,000 feet altitude. Later in the 1958 timeframe, when I was in VX-5 at China Lake doing some nuke weapon work, I had a project where I took the AD to over 35,000 feet, but it was a slow process, and that was for nuclear weapon delivery. The F4U was a pretty good airplane at the higher altitudes because it had the two blowers in it that I mentioned. I don't remember this but you'd probably cut in the first blower about 10,000 feet and the second one probably 15 or 18,000, something like that. But we didn't fly much high altitude stuff because that meant wearing an oxygen mask, and I don't recall using oxygen very much in the Mediterranean. Anything over 15,000 feet was high to us. Anything over 10,000 feet required the oxygen mask.

Dr. Allison: You mentioned spinning the Corsair, can you describe that?

General Fitch: Going back to that earlier deployment of 114 on USS *Wright* in French Morocco and the Port Lyautey operations. I did have an interesting Corsair spin experience when I was flying out of Port Lyautey. This happened back in the October 1952.

Second Lieutenant, John (Shorty) Wall, and I, were flying out of Port Lyautey - and you were talking about air combat maneuvering. He and I decided that we would do some ACM. We were doing this ACM out over the desert probably at six thousand feet I guess –doing a dog fight or two. I had mentioned that the Corsair, the F4U-5, had a pretty long nose on it, like 18 feet from your eyeballs in the cockpit to the prop spinner.

Shorty and I were doing a classic second lieutenant dogfight, with each of us having minimal experience at dog fighting, and with both aircraft at about five or six thousand feet off the ground (desert). I had pulled the F4U nose up real high in a turn with full power on, trying to get

on Shorty's tail. The sun hit me in the eyes. Blinded by the sun with the nose of the airplane up about 60 degrees, I couldn't tell whether the nose was vertical or over the top, since I was blinded by the sun. I don't remember exactly what I did at that point, but I do know that I pushed the nose over and in the process stalled the aircraft, and the next thing I knew I was in an inverted spin in the F4U. Spinning the Corsair was a no-no. You were not supposed to spin the F4U. Here I was, a second lieutenant with minimal flight experience, in an inverted spin at about six or seven thousand feet over the Moroccan desert floor.

Dr. Allison: Which is not good.

General Fitch: We had been told by the CO of the squadron, Major Fuss, "Never, ever spin a Corsair." And not really knowing what I was doing I got it out of the inverted spin rather quickly and got it into an upright spin, and then I got it out of the upright spin after a few turns. I probably recovered about a thousand feet off the deck. And of course the thing that was going through my mind most was after you took off from Port Lyautey you weren't supposed to ever fly below 2,000 feet, because you'd make the Arabs unhappy. You only flew 2,000 feet or lower when you were right around the airfield at Port Lyautey.

Dr. Allison: [Chuckle].

General Fitch: And so the thing that I was most worried about was the fact that I had gone below 2,000 feet [laughter].

Dr. Allison: You were going to make the Arabs unhappy. Did you ever think about jumping?

General Fitch: No, not at all. The guy in the other airplane, Shorty Wall, told me later that he was yelling on UHF radio all the way down for me to bail out, but again, I wasn't hearing him since it was early day UHF, which didn't work well in a steep dive, and I couldn't hear what he was saying. He was yelling, "Bail out, bail out!" But I got it out of the inverted spin into an upright spin and, and in spite of what had been said about don't spin the Corsair, it was pretty easy to get it out of the upright spin. Chances are good I was the only pilot in that squadron that had ever spun the Corsair, especially in an inverted spin. When Lieutenant Wall and I got back on the ground at Port Lyautey, we didn't talk about the spin. At least I didn't talk about it, and no one ever mentioned it.

Dr. Allison: What altitude did you say that kicked off at?

General Fitch: Well probably six thousand feet above the desert floor (AGL), at the most, and that is a maybe.

Dr. Allison: What is the first thing you did, look at your attitude indicator?

General Fitch: Well the first thing you start doing in a spin, is you start playing with rudders and that stick, pushing the rudder in the opposite direction of the spin and getting the control stick forward. The big thing was trying to, in this case, get it into a normal spin because in an inverted spin you're upside down going in horizontal circles while upside down. You're hanging in your lap belt, so you are hoping that the lap belt is pulled tight.

Dr. Allison: But you're just trying to get some feeling of

General Fitch: I don't remember exactly how I did it but apparently I did it right because I got it out of the inverted spin into an upright spin. I found that upright spins in the F4U-5 are fairly straight forward and you use the same technique as with other aircraft in an upright spin. Using the rudders and the control stick properly, is the key to getting out of any upright spin. But the thing that worried me the most was the fact I'd gone below 2,000 feet on pullout. In spite of that worry about 2,000 feet, I was also happy to have recovered from those two spins. I might add that I could remember only one time, early in flight training, when I ever had to do an inverted spin in flight school. It was not in the training syllabus.

Dr. Allison: Yes. Somebody's going to get your side number or something.

General Fitch: Well as far as the Arabs were concerned, I did not believe that the people down on the ground could read or write Where we were over remote desert, it would have been very difficult for anyone to see the aircraft or to complain.

I would add to this inverted spin in the Corsair in 1952 at Port Lyautey, that about 1959, some seven years later, when I was in VX-5 at China Lake, flying a FJ-4B Fury, doing roll-ahead loft maneuvers at very low altitude, like starting the pull-up from a hundred feet off the deck at 500 knots, I was doing 65 degree roll-ahead loft deliveries where at release you rolled 180 degrees and

did an escape maneuver (nuke weapon). I had a LABS [Low Altitude Bombing System] failure going through the 50 or 60 degree point, while doing 65 degree roll-ahead loft. As I rolled the aircraft, I wound up going straight up at about 3,000 feet above ground level, fast running out of airspeed – I topped out at about 6,000 feet above the desert floor, I saw the airspeed go to zero while straight up. Because of the great flying characteristics of the FJ Fury, and some judicious use of rudder and the control stick, I was able to fly the FJ-4 out of the zero speed vertical, and pull out about a thousand to fifteen hundred feet over the bombing range. The bombing range had optical trackers on me when I did that, and it was a loft profile that you would not believe. It look like a knife blade.

Dr. Allison: [Chuckle]. Ok, anything else on that Med cruise?

General Fitch: But anyhow, back in the Med it was mostly port calls and the important thing to the ship was not so much what you did out of sight of the ship, it was when you were around the ship they wanted you to look good. And that was just about the most important thing in the air group. You always had to get back to the ship at the right time, then get in a big circle around the ship with all the other squadrons, then go round and round in a big gaggle of airplanes, and then when the ship gave the "Charlie signal" over the radio, aircraft would break away from the circle in the right sequence and commence the landing process. The F9F jets always took off last and landed first. We also had a few Banshee photo planes aboard, Navy photo planes. It was important to look good around the ship.

Dr. Allison: That was coming from the squadron or the Navy?

General Fitch: No, the ship captain and the CAG. In other words, when you come back to the ship and if you've got a four-plane division, you come in and all the group's airplanes are in real tight circle, and your flight leader then joins that circle over the ship. I never had to worry about that process, since as a second lieutenant, I was always flying as wingman. Usually I flew the wing of Major Fuss.

Everything looks real good and when you're making approaches everything's looking real good. But the primary criteria was looking good around the ship. You can look pretty bad away from the ship and no one would be very concerned about that, which is not the way it's supposed to work.

Dr. Allison: Plus you had to land at a close interval too, didn't you, to get everybody aboard as quickly as possible?

General Fitch: Well they were always looking at a time interval like 28 seconds between airplanes taking the arresting gear, and again, in the case of *Tarawa*, which I mentioned was an axial deck carrier; straight deck, they had on the order -- I think there were like nine arresting wires, cross deck pendants they call them today, and then they had like three barriers that were located just aft of the bridge. The barriers were designed to stop an aircraft if it didn't catch an early arresting wire. And what they would do when an airplane's making an approach is they stick the three barriers up so that if he crashes into the deck, then the barriers will stop the airplane, and keep it from running into either the aircraft parked forward of the barriers or the ship's island (the bridge). This was if he just has a bad landing and slides into them or whatever. The barrier was only needed on a straight deck (axial) carrier and is not needed on an angled deck carrier.

This is totally different when flying from an angle deck carrier, which was yet to come. The British hadn't invented the angle deck yet. With the angle deck, if you don't catch an arrested wire with your tail hook, you simply do a bolter, which is simply a touch and go landing on the angled deck. But no, on the axial deck Tarawa, it was roughly a 28-second interval that they looked for between the time one airplane touched down on the deck until the next airplane touched down on the deck, and the things that had to happen in that 28 seconds was, first, the arresting gear had to pull the airplane to a stop, then pull it back a little bit to get slack into the arresting cable, and the pilot would then raise the tailhook, and normally you were looking at landing between the second and third wire on the deck.

Dr. Allison: Which is what the LSO would want, right?

General Fitch: From the landing signal officer's standpoint that was kind of desirable somewhere around between the second and third wire because if you were aiming for the first wire you're apt to hit the fantail of the ship, which is not good. But in that time after touchdown, immediately they'd pull the airplane back a little bit to put slack in the arresting wire. You've got flight deck crewmen running out there, you're raising your hook, getting your flaps up and starting the wing fold, and they're getting the cable out of the way and rewinding it back into its normal position, and of course you've got a flight deck man standing out in front of you too and he's telling you with hand signals to hold the brakes or come ahead, and then he starts pulling you forward with a waving forward motion of his hands.

36

You had to get the flaps up before you could fold the wings on a Corsair. As soon as you had gotten a good arrestment, they drop the barriers down flat on the flight deck so that you can taxi over them. You taxi forward of the barrier and as soon as you're forward of the barrier, then they raise the barrier up for the next airplane that's coming. All of this happens in 28 seconds if it is done right, and if it isn't done right, the aircraft right behind the one on the deck had to take a wave off. And in one instance that we had there, which I'll repeat again because when – I think I told you this – but we had a second lieutenant named Joe Neds..

Dr. Allison: Yes, you mentioned him, a fellow second lieutenant.

General Fitch: Joe had graduated from flight school the same time that I did - and he and I had been in 114, this Corsair squadron since we got to Cherry Point in early July. In this instance Joe came in, had a good landing, caught the right wire; two, three, four, something like that, and he had gotten his flaps up and gotten the wing fold going, got the airplane moving forward and taxied over the barriers, and he was now in front of the barriers, had cut the engine off, and he's un-strapping, getting out of his parachute. Then he sees the flight deck crewmen go flat, prone on the deck. So Joe sits back down in the seat. It had been a little rainy that day and the deck was a little wet, and again, with the emphasis on intervals between arresting landings; 28 seconds, this kind of thing like 28 seconds was what they wanted. Thirty seconds was slow. So, you know, tick, tick, [chuckle] and that's kind of the difference. But anyway, Joe sits back down in his cockpit, and the flight deck crew has chocked the airplane. I believe I had earlier said that there was 18 feet of nose on the Corsair, in front of the cockpit.

Dr. Allison: Yes.

General Fitch: This recalled reserve captain, Tom Streeter, had landed behind Neds. His landing was fine and the flight deck crew came out for the arrested airplane. Streeter was given the signal to raise his flaps and fold his wings, so he puts the flaps up with the flap handle which is on the left console near the throttle, and he had reached over for this wing fold handle at the rear of the right console. With the wing fold you pressed a button on top, pulled it in and pulled it forward to fold the wings. And you had to have flaps up before you started folding the wings. So what this Captain Streeter did, he got the flaps up. He fumbled around a little bit and got the wing fold going. In the meantime after he'd gotten the flaps up he put a little bit of power on the engine by pushing the throttle forward, and the flight deck handler was pulling him forward on the flight deck, so that part

was okay. But the wings are coming up and he goes for the throttle to pull the throttle aft and he misses the throttle the first time and by the time he gets his hand on the throttle to pull it back the airplane's going a little bit faster than what it should, so then he puts on the brakes, with a wet flight deck. He starts skidding. So as Joe Neds is sitting in his airplane like this all the flight deck people are prone beside the airplane, and Streeter's prop starts chewing up the tail of Ned's airplane. Streeter's prop stops about a foot behind Joe Neds' head.

Dr. Allison: Just walking up there.

General Fitch: Now his airplane is sitting like this [chuckle] with the nose angled up in the air.

Dr. Allison: Because he doesn't have a tail.

General Fitch: He had no tail on the airplane. That incident was one of the reasons that they gave aviators flight pay. It could get dangerous from time to time.

Dr. Allison: Wow!

General Fitch: Joe got out of that without a scratch though. And then I guess it was a month or so later I happened to be up in the bridge with the LSO watching the launch Sometimes they'd catapult us but more frequently we'd just do a deck run with the F4U and you'd have an airplane angle to the left point of the bow, maybe 20 degrees angle off, or 15, and another one taking off would do a clearing turn to the right. And of course when you say the bow, see the bow of that ship was just a little bit wider than this room. Anyway, this F4U with Neds flying it was making his turn to clear to the right, with a 15 to 20 degree turn, and Neds had an engine failure. The airplane hits the water, big explosion, fireball.

Dr. Allison: Was that one of the 114 birds?

General Fitch: That was one of the 114 airplanes with Joe Neds flying, the same guy that had his tail cut off a month or so earlier.

Dr. Allison: I bet he didn't survive that.

General Fitch: Yes. He got out of it without a scratch.

Dr. Allison: He did?

General Fitch: Oh yes. What had happened was we carried a 50-gallon drop tank; centerline drop tank, and that tank, when he hit the water--well first he had an engine failure, which made him hit the water, but the airplane skidded on past the drop tank, which sheared off. The drop tank exploded and caused a fireball and then the airplane just kind of settled into the water and sank. A helicopter, the helo plane-guard that we normally had, flew over and picked up Joe and brought him back to the ship. So that was the second event for Joe where an airplane was wiped out, and then Joe had a similar event that happened in the AD-4 Skyraider, in 1953, when he was night flying with VMA-324 off the aircraft carrier, *Saipan*.

Dr. Allison: A third event? Did he survive that?

General Fitch: Yes [chuckle], but Joe didn't put in for a flying career with the Marines. I would add that Joe was a good pilot, but he had some bad luck along the way. In the incident just mentioned, when you have an engine failure in a single engine aircraft, you are going down.

Dr. Allison: [Laughter]. He got out of the Marine Corps and flying?

General Fitch: He decided not to make it a career but someone told me that for many years Joe was the chief pilot for some big company in Ohio. I don't know. He went into civil aviation, but the fact he was chief pilot for a company would verify that Joe was a good pilot.

Dr. Allison: I wanted to ask you one thing about the squadron, was there any desire on the part of the pilots to get into the Korean War?

General Fitch: Well yes, that's what I thought back when I first joined the squadron. I'd said, "Just send me down to one of these F9 squadrons and I will go to Korea." The Marine Corps had their priorities at the time, which in this case was committing a F4U Corsair squadron, 114, to the carrier for the Main Brace operation in the Norway area. Earlier in this interview I talked about the Wing Personnel office telling us when we arrived at Cherry Point in early July 1952, that we would go on a short cruise to Norway for the exercise, Main Brace, then we would return to Cherry Point and

trade our Corsairs for the F2H-3 Banshee. That trade never happened because we went to *Tarawa* instead. I had mentioned that second lieutenant aviators were in short supply. So in my case, as a new 2nd lieutenant and aviator arriving at MCAS Cherry Point, NC, I thought that I should get trained for combat and go to Korea, but the Marine Corps had other plans for me and my second lieutenant cohorts that were in VMF-114. I would add, and you will see the details later. We returned from the Med in July 1953, and about three months later we, that is three of those second lieutenants, Joe Neds, Shorty Wall, and I had moved to Miami, checked out in another aircraft, the AD-4B Skyraider, carrier qualified day and night aboard the *Saipan*, and were flying into Korean air space while *Saipan* was operating from the Yellow Sea and the Sea of Japan. I spent my entire first two years out of flight school flying off of aircraft carriers, and by the time that two years had passed, I had about 250 arrested carrier landings.

Dr. Allison: And that was partly because you wanted to get to combat

General Fitch: Sure we had wanted to get to combat the year before when instead they sent us across the Atlantic on the *Wright*. It is fair to say that second lieutenants don't get a vote in where they will be assigned. The Marine Corps was looking at the Marine Corps' needs, and in July 1952 that need was to send us to VMF(N)-114 for the USS *Wright* cruise to Norway. A year later, in July 1953 they wanted experienced carrier pilots for VMA-324 in Miami, to go aboard *Saipan* and go to Korea. Neds, Wall and Fitch were carrier experienced. Instead of VMA-324 and the *Saipan*, the Marine Corps could have sent us direct to Korea as individual replacements, but doing that did not fit with Marine Corps priorities. But no, the idea was . . . but what you had happen at that point in time, see this is the summer of '53 and in the summer of '53 you've got a so called truce between the United Nations forces and North Korea. My recall is that truce occurred just about the time *Tarawa* got back to the states from the Med.

Dr. Allison: Thinking the Korean War had wound down.

General Fitch: The Marine Corps thinking was that there's not the rush to get pilots over to Korea with the truce. In fact if you back up, it was about April or early May 1953, before the Korean truce, that 114 received a message from Headquarters, Marine Corps, or perhaps it was Second Marine Aircraft Wing, naming the second lieutenants on *Tarawa* to go to Miami, join 324, and go aboard *Saipan*.

Dr. Allison: Right.

General Fitch: Looking back to July 1952, none of us really wanted to go to that Corsair squadron. But I must say looking back on it, I'm glad I did from the standpoint of flying the Corsair.

Dr. Allison: It was sort of the old airplane on the block in those days.

General Fitch: No, not at all, think about the F/A-18A Hornet having been operational now for 25 years, going from 1981 to present day. The Corsair was not anywhere near that old. In 1952 the F4U-5 design and configuration was about seven, maybe eight years old.

In the summer of 1952, most of the squadrons at Cherry Point were flying props. As for the Corsair, it had become operational in the Marine Corps in about 1943, so when I started flying the airplane, it had been operational less than ten years. Jets were just coming in to flight operations in both the Marine Corps and the Navy, they would not carry a very heavy load of bombs, they had a short range, and so propeller driven aircraft were very much in vogue during the Korean War. It was partly the John Wayne mentality, our wanting to fly jets. Jets looked more glamorous, and when you were dating girls it seemed better to be able to say that you were a jet fighter pilot. I also might add that when we got back to Miami from the *Saipan* cruise, in the summer of 1954, that *Saipan* cruise included about six or seven months operations in Korean airspace. It also included a fly-in of AU-1 Corsairs to give to the French fighting in Vietnam at Dien Bien Phu, where we landed at the airfield (Tourane) that was later built into a huge air base and called Da Nang.

The *Saipan* deployment to Korea included transiting both the Panama Canal and the Suez Canal. Soon after getting back to Miami in July of 1954, after two years at sea since completing flight school, I then checked out in the F9F-5P jet in the photo-reconnaissance squadron at Masters Field in Miami. That was VMJ-3. VMJ-3 was the only jet squadron at Miami, and the F9F-5P was a single cockpit airplane. It was easier to fly the F9F-5P than either the Corsair or the Skyraider. There was no ground school to fly this little jet. It was a simple matter of reading the handbook for the aircraft, taking a simple test, having someone show you how to preflight the airplane and start the single engine, and then flying your fam hops. I can go through this later since we are still in early 1953 with *Tarawa* returning to the states.

Dr. Allison: True.

General Fitch: When 114 got back to the states aboard *Coral Sea*, what the Marine Corps had done, after the brigadier general had visited us at Port Lyautey and interviewed all the pilots, was to arrange for the *Tarawa* cruise to the Mediterranean Sea. You may recall that the Norway operation on USS *Wright* was the original plan, and then the squadron, VMF-114, would transition to the F2H-3 Phantom 1. After the Port Lyautey sidetrack of the squadron by Admiral Pride, it became a matter of, "Okay, 114 come back on the *Coral Sea*. As soon as you get back, night fly, get the night field carrier landing practice done, get night field qualified with FCLP, go do the night carrier qualification aboard *Tarawa*, get a little more experience operating from that carrier, and in January 1953 go for that next cruise to the Mediterranean." So we were locked in. We weren't going anywhere. I would suspect that they could have been having great difficulties in Korea at that point in time, which would have been probably about September/October of 1952 and we would still have gone to the Med.

Dr. Allison: You had that commitment the Navy needed you to pick up probably.

General Fitch: Well it was, like I say, our going aboard *Tarawa*, it was a save face operation.

Dr. Allison: For the Marine Corps.

General Fitch: Yes.

Dr. Allison: What about the pilots in the squadron; were they all World War II hands?

General Fitch: Well you had a mixture. You had some that, like the CO and the XO had been in World War II and a few of the more senior captains had been in World War II. There were some first lieutenants who had been commissioned and winged a couple of years earlier, and had done a combat tour in Korea, and there were the four second lieutenants that were right out of flight school, including myself.

Dr. Allison: Were they pretty salty guys?

General Fitch: Well yes, some were like the lieutenants back from Korea, but as for the recalled Reserves, they were pretty routine and not the salty type. Most of the pilots in 114 were nice guys and the ones that were perhaps a little bit shaky were the recalled Reserves for the most part.

Dr. Allison: Were they?

General Fitch: Recalled reserves. Some of them had not flown a military aircraft since they were discharged after World War II, and their recall to active duty. Some had a five year gap in flying. Some were pretty unhappy to be back on active duty, and they were not particularly enthused about the carrier ops. It is worthwhile to mention that Louie Johnson was Secretary of Defense when the Korean War broke out June 25, 1950. Johnson had cut the U.S. military to the bone with his save money defense budgets. As I recall it was the 1948-49 timeframe that there was only enough money for Marine and Navy aviators to fly four hours a month. Well a lot of these reserve pilots – and I don't know what their Reserve components were – but I don't think a lot of these World War II pilots, who had been recalled, had flown an airplane in about five years when Korea started. For most of them, I think that they were unhappy about being recalled. And on a scale of one to ten as far as pilot skills were concerned I'd probably give them about a five or a six, maybe.

Dr. Allison: And then plus being not that motivated in the first place.

General Fitch: Well they didn't want to be there, a lot of them because, you know, they'd started a business after World War II or they'd gotten a job, gone to college, or whatever it was, but even Captain Lanigan back in advanced flight school, he was not overly enthused about being back in a Marine uniform. But it's also fair to say in the case of a lot of new pilots at that point in time, it was not uncommon for them to be plowed back in the training command. In other words a guy would become newly commissioned and get his wings and then they would send him to instructor school and he would become a flight instructor for a couple of years. That happened more with the Navy than the Marine Corps.

Dr. Allison: And you were still a second lieutenant at the time.

General Fitch: But no, there was no pressure from the Marine Corps relative to us going to Korea. It was just the opposite. VMA-324 was going to Korea aboard USS *Saipan*, and 324 would be there in about five months from the time Fitch, Wall and Neds flew off of *Tarawa* in Corsairs after returning from the Med. As mentioned the Marines had other priorities for us, and like all good second lieutenants, "we executed those Marine Corps priorities flawlessly."

Dr. Allison: So you go the VMA-324 in Miami. Did you take leave enroute?

General Fitch: I had left my car in Florida with my parents, so I talked the air group (MAG-24) into giving me a F4U that needed to be delivered to Jacksonville to the NARF [Naval Air Rework Facility]. I flew that Corsair down to Navy Jax, turned it over to the NARF, and my parents met me there. After a week of leave in my hometown, Fort Meade, I was then on the way to Miami to check in with VMA-324. I might have had a week of leave, but it wasn't much.

Dr. Allison: So what was the routine in VMA-324, I suppose you're getting ready for another deployment and learning to fly another aircraft.

General Fitch: My log book shows that I flew off *Tarawa* on July 3rd, 1953 and on July 20th, less than three weeks later, I flew my first flight in the AD Skyraider at Miami. But anyway, I went down to Miami and got a handbook on the AD, a handbook that was about as thick as those I just showed you for the Corsair and Hellcat My logbook shows that 17 days after I flew off of USS *Tarawa* in a Corsair I was flying the AD-4B for the first time. On August 24th, seven weeks after flying off *Tarawa* in a Corsair, I was carrier qualifying aboard *Saipan* in an AD-4B Skyraider. I logged eight carrier landings in the Skyraider on *Saipan* on 24 August, and by the end of the month I had made 17 more arrested landings on *Saipan*. That was a fairly fast transition to another aircraft. In the AD-4B Skyraider I would make a total of 25 arrested landings on the carrier *Saipan* before September 1, 1953, less than two months after leaving *Tarawa*; a completely different aircraft at a different air base in a different state, and flying a different aircraft off a different aircraft carrier. Second lieutenants in those days were very flexible. But the thing is, in late August '53 we were aboard the *Saipan* and we did day carrier qualification, which was very easy for Neds, Wall and me, since the AD-4B was much easier to bring aboard the carrier than the F4U-5 Corsair had been. The AD did not have a long nose.

Dr. Allison: Wow! Interesting. How did the cruise go aboard the Saipan?

General Fitch: On October 3d, exactly three months to the day after flying a Corsair off the *Tarawa*, we moved aboard *Saipan* off of Jacksonville, Florida, and commenced more flight operations. We did carrier operations off of Jacksonville for about a week, then on October 13th we were enroute aboard *Saipan* to the Panama Canal. While enroute to Panama we would do more carrier operations. In the month of October 1953 I had 22 total carrier landings on *Saipan*, three

were at night, and I had six catapult shots. After going through the Panama Canal we stopped briefly in San Diego before going on to Hawaii and then to Japan and Korean waters. With our departure from the Jacksonville, Florida waters on 13 October, 1953, it would be July 18th, 1954 before we would get back to Jacksonville, and then fly on to Miami. It would be a nine-month cruise, which would take us around the world.

Now I'll take you back to Joe Neds and another story. This is number three crash for Joe Neds in one year. As I truly believe, Joe was a good pilot but Joe had a lot of bad luck.

Dr. Allison: Was it luck or skill?

General Fitch: Well actually he was a pretty good pilot. He just [chuckle] had some things happen that were kind of disastrous for the airplane. But the Saipan had kind of a crazy break system for getting in the nighttime landing pattern at the ship, and Joe was in a division, where in the division I don't know. He wasn't leading the division, I know that. Anyway, what they'd do is they'd come down along the starboard side of the ship at 1,000 feet altitude in a division of four, and then as they got upwind of the bow of the ship the leader would break and when he broke he would descend down to 500 feet, going downwind of the beam of the portside of the ship. But in the case of Joe – and I'd already finished my night landings for that day, when this happened. Joe's in this division, a thousand feet, in an AD-4B. The lead, he breaks following whatever airplane happened to be going downwind at the time. The number two guy, he takes interval, he breaks, three and so forth. Well the routine was to break from a thousand feet down to 500 feet – and I don't know why they did it this way – then you would come around the fantail of the ship and you would turn and go upwind again at 500 feet letting down to 200 feet, going upwind ahead of the ship, and then when the airplane went by on your left; your left beam position, 90 degrees, then you would turn like this. Well that's at 200 feet off the water, and you monitored your altitude with both the barometric altimeter and the radar altimeter. Your aircraft was supposed to be 200 feet off the water. Well Joe is just plowing along at 200 feet, dark night, with very little horizon, since it was a very dark night. We did have radar altimeters, which told you precisely what you were off the water, and while he is at 200 feet going upwind, he was waiting for the lights of another airplane to go by on his left abeam position, to port. About that time he was looking to his left, then back into the cockpit, and his altimeter said essentially zero. He hit the water landing gear and flaps down at this point. Well as it turned out he didn't get a scratch [chuckle]. The helicopter that was plane guard came over and picked him up and brought him back to the ship.

45

Dr. Allison: But he just flew in the water?

General Fitch: Yes, he just flat flew in the water on a dark night, but it's not unique in his case. During carrier operations, lots of people flew into the water. The chances of flying into the water around the carrier were greater on a night catapult shot, especially if it was a dark night. Remember that in 1953 there were no night vision goggles nor any forward looking infrared [FLIR].

But anyway, that AD squadron; VMA-324, it had a pretty good experience level because of the large number of lieutenants who had been in the squadron for many months, along with highly experienced captains, plus the field grade who were highly experienced. Neds, Wall and Fitch were the new second lieutenants to 324, and we had more carrier experience than just about anyone in the squadron, probably only except for the landing signal officers in the squadron. Major Ralph "Smoke" Spanjer was the XO, and he would retire as a major general. Major O. W. "Curt" Curtis, was the squadron operations officer, and Curt was one of the best pilots I saw in my 34 years of flying. Lieutenant Colonel J. W. Ireland was the squadron CO, and as I recall, he was a fighter ace from World War II. Joe Neds, Shorty Wall and I were all still second lieutenants, and we would get promoted to first lieutenant in October 1953. This fellow in 114 with us, Second Lieutenant Fred Ward, who had a flying problem out in the Med off of *Tarawa*, he didn't go to Miami and VMA-324 with us.

Dr. Allison: He was ready to throw in the towel, huh?

General Fitch: No Fred Ward went back to flying when the squadron got back to Cherry Point. Out in the Med. I don't remember what happened to Fred, but he just became unhappy with flying out in the Med so he quit flying for the last two months we were out there.

Dr. Allison: What else on the VMA-324 experience on the Saipan?

General Fitch: We finished the VMA-324 night qualification on the night of October 6th with each of us getting three night traps aboard the *Saipan*. We had already gotten the day carrier qualification aboard *Saipan* back in August. *Saipan* was a small carrier like the *Wright*, a CVL, straight deck, much smaller than the *Coral Sea* which at the time was the largest carrier in the Navy, smaller than *Tarawa*, and we go aboard with 24 airplanes, which with *Saipan* is probably about the right size for a 24 plane Marine attack squadron. We would be the only squadron on the

Saipan. While enroute to the Panama Canal, one of the experienced pilots, he was a first lieutenant, who had a tour in Korea, and who had done a lot of carrier work after that, had an accident on the *Saipan*, he hit the barriers, and the aircraft flipped over. So with his severe injuries from that accident, once we got to Panama the squadron sent him back to CONUS (Continental U.S.) and we proceeded on through the Panama Canal to the Pacific Ocean.

At this point in time, October 1953, it has been just 15 months since Neds, Wall and Fitch had finished flight school with the all-weather flight school at Corpus Christi. My log book shows at that time that I've got 800 flight hours of experience collectively in the SNJ, F6F, F4U, and AD, and 166 carrier landings, with carrier landings in all four models of aircraft.

Dr. Allison: That's amazing.

No delays as you head to the Pacific?

General Fitch: No.

In late October we were in San Diego. We'd already gone through the Panama Canal, and all that was left was to cross the Pacific.

Dr. Allison: Did you fly on the way; do any flight ops?

General Fitch: Oh yes, we flew all the way. We didn't fly through the Panama Canal; no flying there, but we went through the Panama Canal, all the locks and so forth, and then from the Pacific side of the Panama Canal up to San Diego, we flew.

You wouldn't want to fly going through the Panama Canal, even for a CVL, they had to take the rounded portion of the gun tubs off, since the ship was so wide, the sides were nearly scraping the sides of the locks.

This, by the way, is the beauty of having a logbook. It a good check on dates for when you did various things.

Dr. Allison: Well that is an accurate historical record there.

General Fitch: Well it is and it shows that I flew from *Saipan* into NAS North Island on the 28th of October, which is three months after I joined the AD squadron at Miami, and I joined the AD squadron in Miami about two weeks after I left the carrier coming back from the Med.

Dr. Allison: A fast transition, wow!

General Fitch: It was a pretty fast turnaround – but my first two years out of flight school when we get through talking about the Far East and Korea and all those things, and there were some good port visits during the Far East cruise, such as Singapore; Yokosuka; Hong Kong; Manila Bay; Colombo, Ceylon; and on across the Indian Ocean to what is now South Yemen, where we stopped in Aden, through the Suez Canal into the Mediterranean. I would say that flying the AU-1 Corsairs into South Vietnam on Easter Sunday 1954, giving them to the French at Tourane, who were fighting at Dien Bien Phu, was one of the highlights of the cruise. I had been at sea for over two years and I thought that was what you were supposed to do [chuckle].

Dr. Allison: [Chuckle].

General Fitch: It was good training for a young first lieutenant. I say first lieutenant since I had been promoted while at sea in the Western Pacific.

Dr. Allison: Right.

And you had mentioned how much easier the AD was to fly.

General Fitch: Well sure it was much easier, because just look at this airplane model. See, you had all that nose on the front of the Corsair and not much nose at all on the AD; twice or three times as easy to land aboard a carrier than a Corsair. Because the Corsair, when you're coming through about the 30-degree position you lay that left cowl flap right up next to the LSO standing on the LSO platform, and if you see too much of the carrier deck as you are coming through the 15 degree position; if you start seeing a lot of the flight deck you're going to overshoot. There was very little straight-away in a prop carrier approach to the flight deck. The pilot was turning nearly all the way to throttle chop and the high dip to a landing. Its just the geometry of the approach, where if you see too much flight deck you vision on the LSO, then you're going to have to do a wave off because you're not supposed to lose sight of the LSO during your approach. I should add that the LSO in 1952, 53 and 54 just used paddles to wave you aboard the carrier, since the mirror for carrier landings had not been invented at that time. But just look at the distance between the pilot and the propeller in the AD and the pilot and the prop in the Corsair, and an AD is twice as easy to land aboard a carrier as a Corsair was, and then a jet is even easier.

Dr. Allison: I wouldn't think the jet would be easier.

General Fitch: Oh sure. And then you start getting into angled decks later on. Flying aboard an angle deck carrier with a mirror landing system is much easier than flying aboard an axial deck carrier. In the timeframe of 1958 to 1960, I flew the FJ-4B Fury from several carriers with angled decks, and they were the *Bennington* and *Hancock*, and I flew the A-4D Skyhawk from the angled deck carriers, *Oriskany, Coral Sea* the *Midway*, and the *Bon Homme Richard*.

You talk to a lot of naval aviators and they say, "Boy, there's not many of us that can do these aircraft carrier operations." I'd say that guys and gals that can drive a car can pretty well land on an aircraft carrier if they're taught how to do it.

Dr. Allison: At night on a pitching deck?

General Fitch: Yes. Well the night carrier operations are actually, in many instances, especially in a jet, easier than the day operations, because they light the ship up. Now if they turned off all the flight deck lights on a ship you'd have a problem, unless for those carrier operations you are looking through night vision goggles, NVGs, and using forward looking infra red, FLIR, displays...

Dr. Allison: Interesting.

END OF SESSION I

PAGE INTENTIONALLY LEFT BLANK

SESSION II

Interviewee:	Lieutenant General William H. Fitch, USMC (Ret)
Interviewer:	Dr. Fred Allison; U.S. Marine Corps History Division
Date:	23 March 2006
Place:	Lieutenant General Fitch's Home in McLean, Virginia

Dr. Allison: This is the second session of the oral history interview with General William H. Fitch by Dr. Fred Allison and today's date is the 23rd of March, 2006 and we're at his home again in McLean, Virginia. You were telling me about an exciting landing you made while on that Med cruise, can you re-tell that for the record?

General Fitch: Yes. Checking my log book, it was 19 May 1953 and I had been on a strafing hop. I had been flying the F4U-5 for nine or ten months. When I came into the break to land aboard the carrier (*Tarawa*), as was the norm I put down the landing gear and flaps as I slowed in the break. The right landing gear came down and the left landing gear remained up. The F4U had an air bottle in the wheel well for emergency extension of the landing gear. I remember that the normal charge was 900 pounds of compressed air for blowing the gear down. During preflight before the launch from Tarawa, the air bottle showed the required 900 psi. The air bottle would still show 900 psi for the air bottle after landing back aboard the carrier. The gauge was stuck on 900 and not working. When I looked at my landing gear indicators and found the left gear still up, I actuated the air bottle and blew the gear down. The left landing gear remained up. Then I had a dialog with the bridge of the ship to get some maintenance help on getting that landing gear down. They got the maintenance officer up to the bridge, along with Major Fuss, the squadron CO. We talked back and forth and they said, "Try pulling g's," and so I tried pulling g's. There were airspeed limits with the one landing gear down so you weren't going very fast, which meant that I could only get about two "g" on the airplane. That didn't do anything. The left landing gear remained up. After my CO talked with the ship's captain, Major Fuss said go ahead and land aboard. In those days you didn't divert to an airfield because when you came back to the ship at the end of a flight, you'd already been airborne for about three hours, and you had only a small amount of fuel left. I probably had 50 to 60 gallons of fuel left, which was probably good for on the order of 20 or 30 minutes of flight. So it's a matter of just coming aboard. The squadron's two LSO's were on the LSO platform and would wave me aboard. Captain Stanton and Captain Coffman were the LSOs. It will be a normal carrier approach. Flying the approach I had pretty much an OK pass. The arrestment was fine and I caught the number three wire which was a good one to catch. There were nine arresting wires on the flight deck. As soon as I caught the #3 wire, then the left wing went down because there was no landing gear holding the left wing up. The damage to the airplane was simply a matter of the left wingtip which was banged up a bit when it hit the flight deck, the left tip of the left flap hit the flight deck and was bent up, the prop hit the deck due to the tilt of the aircraft as it came to a stop, and that prop hitting the deck caused sudden engine stoppage. So in essence you had four things that were wrong with the airplane at that point; the left wingtip, the left flap, the propeller and the engine.

Dr. Allison: It would probably screw the engine up pretty good.

General Fitch: Yes. Sudden stoppage of the engine, which meant the engine would have to be overhauled by a repair facility later on. The 114 maintenance men got the airplane up with a crane, got the left landing gear down, and found that the air bottle still had 900 pounds pressure showing on the gauge. The gauge was stuck at 900 pounds, so as a guess, I probably had about three or four hundred pounds of compressed air in that bottle when I pre-flighted the aircraft, and not the 900 pounds the gauge showed. The air pressure was not enough to blow the left landing gear down.

Dr. Allison: What happened to the aircraft?

General Fitch: They took the airplane down to the hangar deck and 114 maintenance men took the propeller off, took the engine out, they took the left flap off and they took the left wingtip off. Those parts of the aircraft would be replaced by spares aboard the carrier. It was on the order of about two weeks after doing that one-wheel landing, when the 114 maintenance crew had finished repairing the aircraft. That same day I launched off *Tarawa* in that F4U for a test hop. The one wheel landing took place on 19 May and I flew the test hop off of *Tarawa* on 5 June 1953. Everything was fine on the test hop and I came back and landed with both landing gear down and locked. That was the end of the one-wheel landing episode. During the next 32 years, while I flew about 6,000 more hours in nearly 120 different models of aircraft, I would not dent an airplane.

About 1980 or 1985 the Air and Space Museum in Washington had an IMAX movie that centered around a one wheel landing with a Corsair on a carrier. In that movie they didn't do a very good job of flying the F4U aboard with one landing gear down. They demolished the aircraft.

Dr. Allison: Amazing story. Did you have assigned aircraft, one you always flew?

General Fitch: No. You flew different aircraft in the squadron you just flew whatever airplane you happened to be assigned for a flight. For those who had their name on an airplane, and there were only 24 airplanes in 114, with a stencil they'd paint the name at the left side of the cockpit of the aircraft, either Major "this" or Captain "that." It was just a matter of how many pilots were in the squadron and where you were in the pecking order, so to speak. If you were a captain or 1st lieutenant, you might have your name on the side of an airplane, however, second lieutenants were not high enough in the pecking order to get their name on a F4U-5. If you had your name on an aircraft, it was underneath the cockpit canopy on the left side of the aircraft and the plane captain's name was on the other side of the fuselage. I don't recall having my name painted on a 114 Corsair because there were probably 30 pilots in that squadron. I was one of the most junior in the squadron.

Dr. Allison: But the landing in the IMAX film didn't turn out so well?

General Fitch: As I mentioned, many years later the Air and Space Museum had a film for the IMAX Theater about a Navy Corsair doing a one-wheeled landing on an aircraft carrier The way they flew the F4U aboard, in that case, was essentially to crash it on the flight deck. I liked my way better. And so they just absolutely tore that airplane up in the movie. The damage appeared to be such that they probably tossed that airplane over the side.

Dr. Allison: Was your one wheel landing the worst emergency you had had up to that point?

General Fitch: Probably the worst - it wasn't an emergency as much as it was a challenge to get the airplane aboard the ship and hope for minimum damage. Probably the worst thing that got my attention was that inverted spin out in the Moroccan desert. I was much more concerned about the inverted spin over French Morocco than I was the one wheel landing on the carrier. Again, I mentioned this the other day that you were so regimented going through flight school as a NavCad, that you just did things you were supposed to do, and you'd been more or less taught how to do them and the fear aspect never entered into it. You just said, "Okay, I've got to make a landing," so you go make a landing. Of course the good part was that, like I said, the 114 maintenance crew fixed the airplane promptly and about two weeks after the one wheeler I flew that F4U again on that test hop. I had 650 hours of flight time and a hundred carrier landings when I did that one

wheeler. It is quite probable that I am the only Marine who ever made a one wheel landing in a F4U aboard an aircraft carrier. I doubt that many pilots in the Navy ever did.

Dr. Allison: You'd probably gotten pretty comfortable in the Corsair by then.

General Fitch: I was comfortable in the airplane. Of course you were comfortable in the airplane when you had 30 to 40 hours in it, because by the time you had 30 or 40 hours in a VMF-114 Corsair, you were getting ready for field carrier landing practice, and getting ready to go out to the carrier. At the beginning of my tour in 114 it was just get ready to go aboard the carrier. I had never fired the guns or dropped a bomb from the airplane when we were aboard the *Wright*, so all I knew how to do was land and takeoff from the carrier when we deployed. *Tarawa* was different since the bombing and strafing came a number of times during that six months in the Med. When I got to VMA-324, it was totally different, in that I had about 700 flight hours total, had about 120 carrier landings, and had seen a lot of Europe and North Africa.

Dr. Allison: And that was kind of a rush job too, wasn't it?

General Fitch: Well it was. For VMA-324, I think from the time Neds, Wall and I arrived in Miami until we deployed was something like three months. We got back from the Med in early July, flying into Cherry Point off of the *Tarawa*, and I checked out of 114. My first squadron tour was over and I was still a second lieutenant. I flew an F4U-5 to Jacksonville for rework, got my car at Fort Meade, then I drove down to Miami and checked into VMA-324. It was now the start of my second squadron tour. And I note from my logbook, from the time I flew off *Tarawa* in a Corsair, which was the 2nd of July, 18 days later I was living in Miami and I was out flying an AD-4 Baker; a Skyraider. VMA-324 was located at the old Opa Locka Marine Corps Air Station.

Dr. Allison: You had mentioned last time too that the AD was a real comfortable airplane to fly too. I thought that was interesting.

General Fitch: The AD was very easy to fly. It was essentially a new aircraft, having been developed after the war had ended. I am sure that a lot the AD development had been started during the war, but it became operational around 1948 to 1950.

Dr. Allison: So it had been a little better technology.

General Fitch: It benefited from technology gains after 1945, and it was a heavy hauler when it came to bomb load. It didn't have so much nose as the Corsair because, as I had mentioned, in the Corsair, the F4U-5, from where the pilot sat in the cockpit to the propeller-spinner was like 18 feet, which is a pretty long nose on an airplane. The AD probably had 10 or 12 feet of nose. But the F4U was a good airplane. It's just that the AD was lot easier to fly, much easier to fly. The CO of 324 was a lieutenant colonel named [Julius W.] "Bucky" Ireland, and he had an extremely fine record in World War II. As I recall he had five or six Japanese planes to his credit.

Dr. Allison: And the XO, "Smoke" Spanjer moved on up the ranks in Marine aviation.

General Fitch: I got to know Smoke quite well. Smoke was married to Barbara and we still see her from time to time. We interfaced several times in subsequent years. Smoke was commanding officer of VMJ-3 in the late summer of 1954 when I checked out in the F9F-5P. He was a major general in 1974-75 and commanding general of the 2nd Marine Aircraft Wing, and I was his G-3 running flight operations for the wing. I was a colonel at the time. But Smoke and I knew each other for, I would guess 45 plus years, 1953 to about 1999, before he passed away. About the time he became a colonel he also became a health nut. When he was CG 2d MAW [Marine Aircraft Wing] he would run from his quarters to work – about five miles – then he would run home in the evening. Back to 324, the operations officer of VMA-324 was one of the best Marine pilots I ever saw. His name was O.W. (Curt) Curtis. He was a superb pilot and great guy. Curt was probably more respected than any other pilot in 324.

Dr. Allison: What was the environment around the squadron, the social life, morale?

General Fitch: Things were pretty casual in that squadron. We were still second lieutenants and when you addressed the commanding officer it was always, Colonel Ireland. But in the case of Major Spanjer you called him Smoke, Major Curtis you called Curt, and so forth. It took time to get used to that casual air in VMA-324. It would be similar to what you have in Marine aviation today, where all pilots and NFOs have call signs, and lower ranked officers call them by their call sign. I note that they do that right up through the general officer ranks. When I retired the Marines didn't have permanent or personal call signs. Those personal call signs came along in the mid to late 1980s. It was a new world for Joe Neds, Shorty Wall and myself, calling majors by their nickname. It was pretty casual.

Dr. Allison: Had you got a call sign yet sir?

General Fitch: No, we didn't use permanent call signs in those days. Flying in those days, you had a new call sign for every flight.

Dr. Allison: I thought that was something that had been going on for a long time; they were just kind of nicknames?

General Fitch: Somewhat that way. They would give you mission call sign that might be something like Pistol 2 or Pistol 3, depending on where you were in the flight, As for the nicknames, it would be Curt for Major Curtis and so forth. And Smoke, at the time -- he smoked a lot of cigarettes back when he was a major. I guess that is where his nickname originated. The permanent or personal call signs that you hear today were never thought of back in the 50s or 60s. I don't recall any personal call signs in the early 1980s. But Curt was one of the best pilots that I ever saw, especially at that point in time.

Dr. Allison: Anything you remember about his flying that can serve as an example?

General Fitch: I remember one night when we were doing night ops off *Saipan*, it was a pitchblack night, and when the carrier turned into the wind you couldn't see any horizon. It was so dark that there was no way to discern where the water and horizon ended and the sky began. It was truly pitch black, and you need to remember that the carrier deck is about 80 feet off the water. Major Curtis was launching ahead of me that night. I remember it very vividly. The *Saipan* was down off Jacksonville when we were out initially carrier qualifying at night – the night Curt launched. We had an attitude-gyro in the AD-4B cockpit, which you caged when you were on the flight deck, when the deck was not rolling, caging it momentarily, and then un-caged when the deck was reasonably level. When Major Curtis went off the deck that night of course he was only 80 feet off the water and his attitude-gyro tumbled as he went off the bow. Now he is 80 feet in the air and he has no good instruments for nose position of the airplane. He is on partial-panel flying 80 feet above the water. He did a super job of controlling his airplane, and making a safe climb out. Once he could get a horizon reference, he corrected the attitude gyro problem. A less experienced pilot probably would have crashed into the water that night – it was very black when Curt went off the bow of *Saipan*. Over the rest of the cruise, I cannot recall another case of an attitude gyro tumbling on takeoff from the *Saipan*.

Dr. Allison: I didn't realize that a carrier could go through the Panama Canal, but you said the *Saipan* went through it. You had to make changes to it though.

General Fitch: There's several interesting aspects of going through the Canal. One is that this was a relatively small aircraft carrier; a CVL. I mentioned earlier it was a straight deck, a World War II carrier, and it had gun tubs for the AAA guns. They were on each side of the deck just below the flight deck. Prior to going through the locks, they had to take the round-down off of the gun tubs in order to get through the locks. When we went through the locks there was maybe six inches or a foot on either side of that ship and of course they were cabling it through the lock --- there wasn't much room. The point being, anything larger than that ship couldn't go through the Panama Canal, which means of course that now you've got to go all the way around South America if you're going from the Atlantic to the Pacific. Or if you're going from the Pacific to Atlantic you've got a heck of long trip to go. And so you wouldn't want to try to get some Atlantic Fleet ships to the Pacific too quickly because it's just not going to work out for you.

Dr. Allison: I guess that's why they have an Atlantic Fleet and a Pacific Fleet.

General Fitch: Well it could be but it's not uncommon to go from one fleet to another, it's just that you've got to transit a long distance.

Dr. Allison: Anymore on the squadron's character?

General Fitch: I would say on the character of the squadron, I think I had mentioned that in the case of 114 when we were down in the Caribbean before we went to the Med, the pilots were mostly recalled Reserves and they were somewhat unhappy about having been recalled to active duty. So the atmosphere, per say, in 114 was not as, shall we say, esprit de corps, as it was in 324, because 324 was mostly Regular officers and relatively new lieutenants. But they were reserve officers like myself at that time, that is they had a reserve commission.. But I don't know, just the atmosphere of 324 was, shall we say, much more pleasant than it was in 114 because there was a element of resentment from the individuals in 114 about being there in the first place.

Dr. Allison: That's interesting. I wonder if that would affect safety.

General Fitch: We had more crashes in 114 than we did in 324.

Dr. Allison: Could that be partially because of the aircraft you were flying too?

General Fitch: Well that would have been part of it and the other would have been the overall quality of the pilots.

Dr. Allison: On the *Saipan* you eventually went to Korea, but the war was over. When did you get there and what type of operations did you do there?

General Fitch: We left San Diego on November 6th, 1953, which would have been my 24th birthday, and we arrived at Pearl Harbor on the 12th. We would stay in Hawaiian waters for eight days, with considerable time at sea doing flight operations, which included both day and night sorties flown from *Saipan*. We would be underway on November 20th for Japan, stopping in Yokosuka on the 30th, and then Sasebo on December 4th. We commenced operations on December 10th in the Yellow Sea to the west of Korea. It was very comfortable flying. I had about 160 carrier landings when I got to Korea, and eight hundred hours of flight time, so I was a reasonably well experienced pilot when I was flying over Korea.

As far as the flying relative to Korea; first we got there in late November 1953, in that timeframe, and the truce was in being with what they called the United Nations Forces and the North Koreans. It was an agreement to stop combat operations. That had been negotiated somewhere during the summer months, just before we arrived in the Yellow Sea. After we got there they had very, very strict rules about aircraft, and I think all other kinds of forces too. In other words, if for any reason an airplane landed in South Korea that had not taken off from South Korea then they had to take off an airplane that was on the deck in South Korea and get it in the air because they never could change the numbers of the United Nations airplanes that were in South Korea at the time. Theoretically I'm sure, from the UN perspective, the same thing happened in North Korea but I doubt seriously that the North Koreans worried too much about that.

But in that entire cruise during 1953-54 we never set foot in South Korea. We did a lot of flying over Korea, but our base was at sea aboard the *Saipan*, either in the Yellow Sea or the Sea of Japan. I cannot remember carrying any live ordnance during the *Saipan* cruise.

58

Dr. Allison: So it was just practice ordnance?

General Fitch: It was practice ordnance and most of it was dummy runs during simulated close air support. One interesting flight that we had and I don't recall the name of the island, but the South Koreans well north of the 38th parallel; probably 20/30 miles north of the 38th parallel, they held an island that was probably two to three miles off the coast of North Korea, and well above the DMZ. Looking at my logbook, I suspect that island was named Paengnyang Do. My flight logbook has a patrol flight for me to a name similar to that.

Dr. Allison: On the west coast?

General Fitch: On the west coast. This is in the Yellow Sea, and without a map I would guess it was probably 25 miles north of the DMZ. It was manned then by South Korean military, I don't know whether army or Marine, and it may be occupied by South Koreans to this day. When I was last in Korea, in 1980-82, I never asked. So I don't recall how frequently we did it but it was kind of a routine event, where every few days a couple of Marine airplanes from the Saipan would go up above the DMZ and circle this small island a few times. It was just to show, I guess, our independence or whatever. At the time you were circling this island you were probably about a mile or two away from North Korea, which kind of made an interesting aspect to it. If you're in a left turn you didn't want to turn right, that's for sure, because within a turn radius you'd over-fly North Korea. I think this happened about January of '54, so roughly a month or two after we had gotten over there, we had all these prisoners or war; Chinese and North Koreans, who had decided not to go back to North Korea. There were thousands of them. The US Navy had primarily the LSTs that they were going to use to transport these POWs to Taiwan. So, you can imagine an LST going the distance from South Korea all the way down to Taiwan. We escorted those LSTs well out of Korean waters. Looking at my logbook, it shows we did those POW escort flights in late January 1954, so we had been over there for a couple of months.

Also because it was cold and the Yellow Sea was cold and the Sea of Japan was awfully cold, we flew in, I guess you'd call them survival flight suits. We called them poopy suits, and they were all rubberized, waterproof if they weren't any holes in them, and in theory they'd keep you alive in the water for 30 minutes or so until they could pick you up with a plane guard destroyer or helicopter. The water was pretty cold. Every month or so we would test our poopy suit by immersing it in a tank of water to see if it leaked.

59

Dr. Allison: Kind of a sponge-rubber thing?

General Fitch: More like hard rubber. The poopy suit had an opening in the waist to chest area that you put your legs and body through, then it had a flap that was rather lengthy, and you rolled that flap up so as to make it water tight. They had countless varieties of those things. Every two or three years they'd come out with a new one and of course you flew with the same thing here in the states if in cold weather you were going to be out over the water for any amount of time. Wearing that rubber flight suit made you rather bulky sitting in that small cockpit of the AD. But we did the escorting for the POWs that were going to Taiwan and then occasionally we'd break off from the Korea flight routine because, again, they had the truce going. We would go to Okinawa for an exercise or we would go to Iwo Jima for an exercise. Marine infantry units would have some practice amphibious landings say on Iwo Jima, as an exercise to train the ground units with an air component in support. And of course it was interesting to fly around Suribachi, with all the history of Iwo Jima. Also there were the Okinawa amphibious landing exercises. At this point in time, World War II had been over about eight years.

Dr. Allison: I guess back then there was still a lot of battle damage to those places, not like today.

General Fitch: Oh yes. Iwo Jima, you saw hulks all along the beaches and in the water. There were sunken ships around. Iwo Jima looked pretty much as it had in 1945. And they just left them there. And then I think I had gotten into these Corsairs that we took to Vietnam.

Dr. Allison: When you worked with the division though, did you do actual CAS?

General Fitch: Oh yes, but it was all simulated. We never dropped ordnance. I mean the whole thing was simulated for the most part like you do here in the states. Except here we've got some areas where you can drop live ordnance. But our carrier operations, just about everything was simulated ordnance runs. You didn't drop anything.

Dr. Allison: Because you're talking to a FAC and he's directing you.

General Fitch: Oh yes, we exercised all the components of air control, from the FAC on up. We did the whole routine.

Dr. Allison: Did you do time-on-target kind of stuff?

General Fitch: We did all that. But time-on-target was associated with preplanned missions.

Dr. Allison: You did the low-level ingress to a pop?

General Fitch: Well most of it was just low-level because, again, in this timeframe there are no things like surface-to-air missiles, they're just not around.

Dr. Allison: I see. So you'd come in low and attack a mark or something?

General Fitch: Yes. The troops used colored panels to mark their positions. The rules weren't very strict. I mean, heck, you'd be flying 300 feet off the deck with troops below you. And we also did that up in the northeastern side of South Korea too just below the demilitarized zone. In fact that's where we lost one of our pilots. He went up a blind canyon, low-level, and couldn't get out and wound up crashing; a second lieutenant named Steve Hensler, a nice young man. He grew up in Florida, about 30 miles from my home. In fact they didn't find the wreckage for weeks.

Dr. Allison: Your squadron, VMA-324, delivered some Corsairs to the French then fighting in Vietnam right? I thought that was interesting. How did that come about?

General Fitch: Along in what would be early April 1954, we were in Tokyo Bay for a port call. Yokosuka is about thirty miles south of Tokyo. When we came back from liberty one night, the 324 squadron duty officer told me to go out to Atsugi Naval Air Station, and fly an AU-1 Corsair. The next day we went out to Atsugi and flew the AU-1. Of course I had 300-plus hours in the Corsair, but I had never flown an AU-1.

Dr. Allison: What was the difference with a regular Corsair?

General Fitch: The AU-1 Corsair, was similar to the F4U-5, but the AU-1 did not have blowers for high altitude flight. The AU-1 was designed just for close air support.

Dr. Allison: A ground attack version, wasn't it?

General Fitch: Yes, a ground attack version of the Corsair. And so again, that was pretty straightforward to get a flight in an aircraft ashore before flying it from the carrier. Interestingly enough at Atsugi, while walking into the Officers Club there, I ran into a fraternity brother of mine from the University of Florida who happened to be a (jg) in the Navy at the time. In those days, nine years after the Japanese surrendered in Tokyo Bay, you could fly low level over downtown Tokyo at 300 feet, because there were no tall buildings and there were no rules on altitude over Japanese cities. The tallest building was about two stories high, maybe three. And so 200 or 300 feet above downtown Tokyo was just routine. But that was just one hop. The next day they craned about 24 of those AU-1s aboard the Saipan. They had brought them out of the bone yard at Kizarazu, which was the name of the bone yard for old aircraft. The AU-1 airplanes had been in Korea for combat operations, and when no longer needed in Korea, they'd been brought to Japan and put in the bone yard for storage. The day they brought these AU-1 aircraft aboard, we were told that we were going to take them to the French down in Vietnam, where the siege of Dien Bien Phu was ongoing, and going poorly for the French. So we got the airplanes aboard and they were in terrible condition. With 24 of these AUs aboard, along with 24 AD-4B, the maintenance men in 324 didn't have the time to fix the airplanes like they should have. The French were losing and they needed the aircraft. The decks, both flight deck and hangar deck were so crowded with aircraft there was no space for deck-run takeoffs. Saipan had to catapult the AUs off the carrier. It was Easter Sunday of '54 and we had steamed down off the coast of what would be South Vietnam. The airfield we were going to fly into was named Tourane, a very, very small airfield. There was no concrete at Tourane. The landing strip was what was referred to as Marston matting, which was perforated steel planking, which was put together just like SATS [short airfield for tactical support] is put together. But if I had to guess we probably had a three, maybe a four thousand foot landing strip at Tourane. All the taxiways and aircraft parking areas were Marston matting. We flew those 24 AU-1 airplanes in and landed. Several of the French pilots there had gone through flight school with us. They were French Navy and at the time they were flying missions up to Dien Bien Phu. One of the things that was impressive, which will translate forward to when I went back to Vietnam in 1967, was that here you are at this little airfield, maybe a 3,000 to 4,000 landing strip. It had barbed wire all the way around it. You can see from one end to the other very easily. About every 50 yards there's a machine gun set up. They have Vietnamese POWs there, the Viet Minh, out on the ramp getting ready to transport them somewhere by helo, hands bound, blindfolded and squatting for hours on end. Of course the Viet Minh were the precursors to the Viet Cong. And while we were waiting for the helo to take us back to the Saipan, we watched a mission flown. We only stayed there part of the day, but while we are waiting a

French pilot came out and pre flighted an F8F Bearcat sitting out by itself on the ramp. It had a couple of napalm hanging on it. This pilot got in the airplane, and you never lost sight of the F8F as he flew his mission. It was very similar to what was going to happen years later. You watched the airplane the whole time and I remember he went over to an area to the east of Tourane, a few miles, maybe four or five from Tourane Airfield, and we watched him drop his napalm. It was kind of a hilly, mountainous area where he did his drop. And looking back on it I think that would have been Marble Mountain about 13 years later.

Dr. Allison: Where was this base?

General Fitch: Tourane as it was called in 1954, would later during the Vietnam War be named Da Nang.

Dr. Allison: [Chuckle] That was Da Nang.

General Fitch: So Tourane later became Da Nang. And that airplane; that F8F going out with nape, he never got over five or six miles from the airfield. He was back in ten minutes.

Dr. Allison: An eerie story, full of forboding for the U.S.

General Fitch: But then they took us back out to the carrier in a French helicopter. The *Saipan* was probably 20 miles off the coast. The French pilots – and this was the French Navy – what they had was just a few days to try to get these AU-1 aircraft into good shape and they'd be flying at Dien Bien Phu. Chances are good that the French lost some of those AU-1s at that battle. As it would turn out, the siege at Dien Bien Phu was well underway, and in a month after we were there, the French capitulated.

Dr. Allison: You said those airplanes were in bad shape; instruments were hanging out of the panel?

General Fitch: Well, if you can imagine, you've got an airplane in Korea and you fly it over to the bone yard, there at Kisarazu, on the north end of Tokyo Bay. They hadn't had any maintenance on those aircraft in months, and all of a sudden they decide to give them to the French. They probably didn't even have preservative of any kind on them. And it's just, "put them on a barge and get them

over to the carrier, crane them aboard the ship," and those airplanes probably had not flown at that point in at least a year.

Dr. Allison: Since the Korean War.

General Fitch: Or at least for probably six months they hadn't flown. I remember the airplane that I flew into Tourane off the ship. It had wires and instruments hanging out of the instrument panel. About the only thing I had was an airspeed indicator that I thought would work. While I was never up tight about flying an aircraft, I have to admit that I wondered if my AU-1 that day would hold together long enough in the catapult shot. Once off the ship I wondered if it would hold together long enough to land at Tourane. It was only about a five minute flight from the ship to the airfield. And I do remember those poor French pilots. They'd walk around those airplanes and they'd just shake their heads because they were pretty junky airplanes. But they were the only airplanes available to give them. We weren't going to give them our ADs. I would say that the flight operations into Tourane was an interesting experience. Little did I think that 13 years later I would be back in Vietnam.

Dr. Allison: What kind of attitude did the French pilots have?

General Fitch: Well they were pretty much, you know pilots are pilots, and they had probably been there for a year. They knew that it was really a maintenance job for the maintenance crews. And as I recall we had an AU-1 maintenance crew of some kind that had been sent down with the *Saipan*. I don't know where they came from, but it was probably an AU-1 maintenance crew out of NAS Atsugi. We left that maintenance crew there to help the French get those airplanes in shape. I guess, a month later Dien Bien Phu fell, so they didn't fly them very long.

Dr. Allison: Those were at the peak of the action probably.

General Fitch: Yes, well it was under siege and the North Vietnamese probably had Dien Bien Phu pretty well surrounded by the time we flew into Tourane that Easter Sunday. In fact at that point in time – and we were told this later – of course President Eisenhower had debated whether to go in because he's right in the middle of his term as President. In fact he was in the early part. He'd come in what would be January of '53 and so he's probably about a year into his term at this point when Dien Bien Phu is in deep trouble. In Washington at that time there was a big debate ongoing

as to whether to commit U.S. forces to help the French. Eisenhower decided, "No, I'm not going to do it." But moving that out to the mid to late sixties, in 1967 during one of my first flights out of Chu Lai, which happened to be in an A-4, we were dropping bombs not much further away from Da Nang than that F8F had dropped [chuckle] his napalm against a target back in 1954.

When you think about it, the siege of Dien Bien Phu in 1954 when you compare that to what went on in South Vietnam in 1975, it was not much different. You will remember that in 1975 the North Vietnamese tanks and the Viet Cong were within blocks of the U.S. Embassy in Saigon when the last helicopter lifted off from the embassy roof. Eisenhower made a wise decision in 1954.

Dr. Allison: Isn't that amazing?

General Fitch: Which tells you something about insurgencies.

Dr. Allison: Did the ship continue on around to the west; sailing west from Vietnam then?

General Fitch: No, what we did, we went north, back to Korea. We were there for probably another six weeks; two months. Part of that time would be spent in the Yellow Sea on the west side of Korea, and part of it would be spent in the Sea of Japan. We also continued doing exercises; on Okinawa and other landing beaches, except that with the Korean truce in place we could not do an exercise in South Korea itself. During that timeframe we had a new skipper on the ship, Captain Donaho. Soon after he took over, Captain Donaho had requested to go back through the Mediterranean Sea on the way back to the states. The distance to Jacksonville and Norfolk was a wash, regardless of whether you crossed the Atlantic or the Pacific. It was just about as far one way as it was to go another way. So Captain Donaho got permission to go back across the Atlantic and go through the Mediterranean in the process. I guess in the middle of May 1954 timeframe we left the Korea and Japan operating areas, and the Saipan went down to Singapore. From there we sailed to what used to be Ceylon, and which I believe they now call Sri Lanka. Enroute to Singapore we would cross the equator, between Borneo and Sumatra. Those who had not previously crossed the equator, would be initiated to become a "shellback." The criteria for initiation would hinge on whether you were a "shellback" or you were not. Rank had no place in that initiation. If they were not a "shellback," the most senior and most junior were initiated. It was a rather humbling process at the equator.

Dr. Allison: The shellback initiation is a memorable event.

General Fitch: *Saipan* had been to South America shortly before VMA-324 came aboard, so most of the ship's crew had crossed the equator on that South American cruise. The initiation included crawling through a tow sleeve about 30 feet long, that had been filled with garbage the day before, had cooked in the sun, and similar events. The crew did it up well, and when you finished, you walked to the fantail of the carrier, took off all your clothes, and threw them overboard. You went straight for the showers. Now in the 21st century where we are coed aboard ships, I guess you can't throw away your clothes as we did back on May 31, 1954. The shellback initiation was such that you never wanted to have to do it again. We had the squadron make an entry on Shellback initiation in our service record and our flight logbook, signed by the squadron CO, LtCol Ireland. After that equator crossing and the day of initiation, we continued on to Singapore. We were flying very little at the time.

Dr. Allison: What was Singapore like in those days?

General Fitch: We were in Singapore for four or five days. Singapore as a city in 1954 was pretty much like Tokyo was, but smaller. There were no tall buildings – everything was two stories high. The primary hotel there was a hotel named the Raffles Hotel, built in the British style during the colonial days. It was a white meandering hotel with tailor shops, dining rooms, bars, gift shops, and so forth. You could get a suit made in two days. I remember I bought a hand tailored, white tropical weight linen suit, which included three fittings in the process, and it cost about fifteen dollars – maybe only twelve. The US dollar went a long way in those days. With the Japanese yen it was 360 to the dollar, where today it is about 115.

Dr. Allison: Wow!

General Fitch: The transportation was very basic with old cars and rickshaws. It was the colonial type of atmosphere that you might think of 100 years ago. Of course Singapore had been occupied by the Japanese during World War II, which at the time had ended nine years earlier.

Dr. Allison: Were the British in charge?

General Fitch: As I recall the British were still in charge in 1954. When you're dealing with people, the local population, the British, knew how to get along in that environment. The British ruled with an iron hand. The Americans were pretty much neophytes.

Dr. Allison: The cruise continued on into the Middle East, I guess?

General Fitch: From Singapore we sailed on to Ceylon and Colombo. I remember the, I think the name of the movie with Elizabeth Taylor was "The Elephant's Walk." It had just been filmed there. They had pictures of Elizabeth Taylor all over Colombo. From Ceylon (Sri Lanka) we then crossed the Indian Ocean, and made port in Aden, which now is part of South Yemen. Again, there was a colonial atmosphere in Aden with the British in charge. While in Aden I got tagged to do shore patrol. After a few days in Aden, we went into the Red Sea and then north into the Suez Canal. The canal is nothing but a long ditch, with no locks, and the *Saipan* steamed all the way through the canal to Alexandria, Egypt. We stopped briefly in Alexandria when we were entering the Mediterranean Sea.

Dr. Allison: It's quite a bit wider than the Panama Canal is.

General Fitch: Oh yes. If my memory is right it was probably two or three hundred feet wide. And of course the area is all desert. When we got to the north end of the canal, we stopped in Alexandria, and then we were in the Med. I was looking at my logbook and I see that I flew only one hop in the Med before we went into Naples for our first Mediterranean port call. Everything from then on was liberty ports with no flying at all.

Dr. Allison: One hop, huh?

General Fitch: One hop in the Med. The *Saipan* could say that it had conducted flight operations in the Mediterranean. Of course I had six months in the Med during the prior year when I was flying Corsairs. We went into Naples initially and we were there about three days. As I recall I made a quick trip to Rome while there. Then we went to Ville Franche on the French Riviera, near Cannes. The year before as a 2nd lieutenant I had been into Cannes numerous times, as well as Naples.

Dr. Allison: This is in France and Italy?

General Fitch: This is in France; southern France. This is just before going to Barcelona. In the south of France this is now nine years after the war is over, but you'd see buildings that had been shot up quite a bit during the landings in the south of France in 1944. They hadn't gotten around to repairing them. There were bullet holes all over the area. We then did a few days in Barcelona, before leaving there in early July, and heading through the Straits of Gibraltar, then north to Lisbon. Then after Barcelona and Lisbon for several days, we then crossed the Atlantic. This was my fifth crossing of the Atlantic Ocean, and at this point in time I had been a Naval Aviator and a Marine officer for two years. After 1954 it would be 19 years before I would be back to the Mediterranean Sea. My log book shows no flights crossing the Atlantic. On July 18th when we arrived off the east coast of Florida near Jacksonville, we launched from *Saipan* and flew to Miami, landing at MCAS Opa Locka. Another cruise was now over. I had 950 hours of flight time, and 229 arrested carrier landings. I would next fly from an aircraft carrier in 1959 when I was in VX-5 at China Lake. In 1959 I would be flying a jet fighter, the FJ-4B Fury, when I went to the carrier again.

Dr. Allison: So home again, back to Florida. I guess the squadron changed considerably then.

General Fitch: We flew direct from the carrier to MCAS Opa Locka in Miami. At that point in time when we arrived back at Opa Locka, a lieutenant colonel named Ken Reusser was there and he immediately relieved Colonel Ireland as the CO.

Dr. Allison: What about yourself, what were your plans, or what plans did the Marine Corps have for you?

General Fitch: After we arrived at Opa Locka, I decided that I would extend my time in the Marine Corps by two years, since at that point I was technically supposed to leave the Marines in November '54. My four year obligation (contract) would be finished on November 1, 1954. At the same time that I put in for a two year extension, I applied for a regular commission. While at Opa Locka I would fly with VMA-324 until November '54. For part of that time, 324 would send me to the station to do tower duty, but I still would be attached to 324. VMA-324 under the command of LtCol Reusser immediately went into the training mode, with new personnel for another aircraft carrier cruise. I remember I went to tower duty for probably September and October.

Dr. Allison: Your time was up because your time started when you started NavCad.

General Fitch: Yes, day one on the four year contract was November 1st at Pensacola, in 1950.

Dr. Allison: Not when you got your wings sir?

General Fitch: That's right. The total obligation was four years after reporting to Pensacola for flight school on November 1, 1950. All of my NavCad time, those 17 months in flight school counted in the four years active duty. But at the same time that was going on Major Smoke Spanjer had now moved up to the group and they had a quota for the photo-reconnaissance school at Pensacola. Smoke knew that I was working on getting an extension and was in for a regular commission, and so he said, "How would you like to go to photo school?" I didn't know anything about photo school. He said that it would be flying jets while in the school and then I would come back to VMJ-3 at Masters Field. So, I said, "Okay, sir."

Looking at the timing of this thing, they went ahead and got me all set and committed to go to photo school. So they actually had me committed to go to photo recon school at Pensacola before I ever had an extension. I guess they made a phone call or something and knew the extension was going to come through. So I agreed that I would go to photo school and then I reminded Major Spanjer that I'd never flown a jet airplane at that point in time. Smoke said, "Well, we can take care of that," because it turned out that he was going to become the CO of what would be the photo recon squadron, VMJ-3. At Masters Field, VMJ-3 had the F9F-5P photo aircraft – a single engine jet with a single cockpit, and a maximum speed of about 500 knots. By then, in our conversation, he had told me that I would be flying the F9F-2P, an earlier version of the Panther jet, up at the photo school in Pensacola. So I said that I needed to check out in a jet before I go. Smoke said, "Fine." Things were pretty casual in those days as I previously mentioned. So I go over to what's called Masters Field, and do a quick handbook exam reading the F9F-5P handbook. In fact it was probably an open-book test where you just looked up the answers. I don't remember that. In addition to the handbook and the test on procedures, they showed me how to pre-flight the airplane, and it was now a case of, "Start the airplane's engine." They gave me a chase pilot and we took off from Masters Field and I flew my first hop in a jet airplane. The F9F-5P was a single-seat airplane and very easy to fly. I don't recall who the chase pilot was. The F9F just went faster than a propeller aircraft. VMJ-3 gave me five familiarization hops in the F9F-5P while flying out of Masters Field.

Dr. Allison: The jet was easier to fly than a prop?

General Fitch: The F9F was very easy to fly. It turns out when they say, "Photo Reconnaissance School" it's somewhat a misnomer, because in the process I find that it was a six-month school of which about four months is ground photography about one month is aerial photography, and the final month is color photography.

Dr. Allison: Ground photography; you mean taking pictures on the ground?

General Fitch. The school would be mostly ground photography with some photo reconnaissance at the end. I needed the jet time the school offered, so I stayed on track to attend the Pensacola school. I figured that it would not hurt me to study the ground photography. Plus, a nice feature was that my future wife was a freshman at Wesleyan College, a girl's school in Macon, Georgia, which was about a 45-minute flight from Pensacola. Around the middle of October my extension came through approved. I talked to the new personnel officer of 324 and he had the papers for me to sign. HQMC did not give me the two year extension that I had requested. Instead it was an extension for five years and eight months [chuckle]. I told the 324 personnel officer, "I just wanted a couple of years because if I don't go regular in that period of time I don't want to be 30 years old getting out of the Marine Corps." The personnel officer was a very affable guy, and he said, "Go ahead and sign and then after two years if you want to get out, you can get out." Well I was a gullible 1st lieutenant [chuckle] so I signed the five year and eight month extension. Fortunately I didn't have to face that issue. In early November I would be detached from 324 and head for Pensacola, where I would attend the six months of photo school. Soon after I arrived at NAS Pensacola, my regular commission came through. But I do think that had the regular commission not come through and after two years I'd say, "Hey, I only asked for two, you gave me five years and eight months." They would have said, "Nasty break fella, you signed for five years and eight months." [Chuckle]

Dr. Allison: Whose name is on the dotted line there?

General Fitch: Yes. My signature and my name.

Dr. Allison: Just photography or did you get a chance to fly?

General Fitch: At that time as soon as I got to the school I started flying the FPF-2P, since I wanted to increase my jet experience. I was flying the F9F-2P on late afternoons and at night during the week, as classes permitted. I was taking cross countries on the weekends.

Dr. Allison: In Pensacola?

General Fitch: In Pensacola and this F9F-2P flying is at Saufley Field, where I had flown formation and gunnery in the SNJ back in 1951. Now I was flying the F9F-2P, which was a nice little airplane, and pretty good in bad weather. And I would be flying in all kinds of weather, since at that time they had radar tracking and reasonably good navigation gear.

Dr. Allison: What do you mean by "reasonably good?"

General Fitch: The F9F-2P had automatic direction finding (ADF) for homing on a beacon or radio station, and you used the ADF for jet penetrations. This was before TACAN. I had flown a little weather in the Corsair and a lot of weather in the AD-4B, so I knew how to fly weather. I always flew instrument flight plans and I always asked for radar vectors around bad weather. But in spite of requesting vectors, from time to time I got in thunderstorms and some rather bad weather. My learning curve for flying a jet on instruments was rather accelerated. But again, it was good experience. If you are going into a thunderstorm, you want to make sure it has dissipated. Sometimes they have cells that are rather severe. Get in an active thunderstorm and it is quite a ride.

Dr. Allison: Something tells me you had such a flight....

General Fitch: One of the more interesting flights I had there – and this really impressed the officer that was in charge of the F9F-2P flying there – I was in the middle of a big buildup when I arrived over Pensacola, and I started a jet penetration into Saufley Field - and this is before there ever was a Sherman Airfield. My attitude gyro tumbled in a high altitude descending turn, so I had to do a partial panel jet penetration down to a relatively low ceiling, where I was picked up by ground controlled approach (GCA) and directed by GCA to a final landing. But the problem was getting from 20 thousand feet down to about two thousand feet, since it was all in the clouds, with no reliable attitude indicator, just partial panel with a turn needle and altimeter. So anyway, I had the experience there with probably 30 or 40 hours of jet time doing a partial panel jet penetration.

71

Dr. Allison: When you're talking about a partial panel, what instruments do you have?

General Fitch: All you have is the needle ball and your barometric altimeter. That and your directional gyro would have been working, but not attitude reference. As long as you kept the ball in the center, then the needle would give you a reasonably good reference for your wing position, i.e. left wing down, or right wing down, how much, etc. The attitude indicator wasn't working but the directional gyro and ADF would have been working. Once GCA picked me up, they gave me headings and altitudes to maintain, and when to start a glide slope. Fortunately the ceiling was not down on the deck. But an attitude gyro you didn't have because you're doing this whole thing in a descending turn and so you couldn't go caging the attitude gyro, which at that point in the jet penetration is floating upside down. Paying any attention to the attitude gyro would have really screwed you up so you had to fly that needle and that ball in that case, in a descending turn. There was never any question about my taking a cross-country after that because the guy running the flight ops there, he figured if I could do that penetration actual weather using partial panel, then he didn't have to worry about me on a cross-country. Remember this flight took place about 52 years ago. Some of those flights I made in the F9F-2P were to Warner Robbins Air Force Base in Georgia, which happened to be about 20 miles from Wesleyan College.

Dr. Allison: So you had met Margaret, where and how, sir?

General Fitch: My mother taught her in high school.

Dr. Allison: Oh really, so she was from your hometown?

General Fitch: Well she was from the town of Bartow, which was ten miles north of my hometown, and also where I'd graduated from high school seven years ahead of her. I had met Margaret Marie in the summer of '54 when I came back from that around-the-world cruise. My mother had been one of her teachers and it was she who arranged our first date.

Dr. Allison: Just when you'd gone home or something?

General Fitch: Yes, when I was home on leave. Then she went to Wesleyan that fall when I went to Pensacola, so I got to see her quite a bit. And then of course when flying the F9F-5P, I'd go

other places all over the East Coast such as Washington, D.C., St. Louis, occasionally back to Miami, etc. There was nothing to do in Pensacola, so I gained a lot of flight time and jet experience just by flying over the weekends. It was all highly valuable experience and I averaged flying about 25 hours a month. In the five months that I was in photo school, I flew about 120 hours of jet time. In 1954-55, jet fuel cost nine or maybe ten cents a gallon.

Dr. Allison: Well what was your impression of flying the jet the first few times?

General Fitch: A lot easier – more stable, no torque. It was much easier to fly jet aircraft than props.

Dr. Allison: Yes, you had mentioned that. Things were changing.

General Fitch: That of course does not apply to the complexity of systems in later aircraft, because in the Corsair and the Skyraider, there were no electronic systems to be concerned with. TACAN came in about 1958, and greatly simplified instrument flying. ADF gave you headings but no distance to an ADF station. TACAN gave you distance and heading to fly. I was in VX-5 when TACAN was introduced.

Dr. Allison: I would think jets would be more difficult as things are moving faster and all.

General Fitch: It didn't move that much faster at higher altitudes when you were flying a jet. At altitude there was no discernable difference regarding speed. At altitude 300 knots looks about the same as Mach 2. At low altitude, like with sand blower flights at 200 or 300 feet, that we flew a lot in the A-6 and A-4, then the speed of a jet relative to a prop was very apparent.

Dr. Allison: What else on photo school?

General Fitch: I was nearing the end and they did have a month of color photography. Everything had been black and white and they had a little aerial photography mixed in there, where you flew strip maps and mosaics in the F9F-2P.

Dr. Allison: Your record indicates you went to The Basic School about this time too, what was that all about?

General Fitch: About a month before I was due to finish up photo recon school the Marine Corps decided that they would have a course at Basic School, for former Naval Aviation Cadets that had gone regular. It would be called the Special Indoctrination Course. There were about 50 of us, former NavCads, that had gone into the Marine Corps and then received a regular commission. We reported to Quantico for a six week Basic School, called as I said, the Special Indoctrination Course. The Marine Corps cut me a month short at photo recon school, which was fine with me. With orders in hand, I got in my car and drove up to Quantico. I had also just been selected for captain and the timeline in those days was 18 months from second lieutenant to first lieutenant, then my total time as a first lieutenant was 14 months, before I was promoted to captain. So that's pretty rapid. However it was not unique for it was happening to everybody that had been commissioned since 1950. There had been something like a five year void after 1945 where the Marine Corps didn't bring in many second lieutenant aviators. In the case of many pilots who were flying between 1945 and 1950, they weren't getting much flight time. I was told that they were limited to about four hours a month. That was due to a mandate from the Secretary of Defense, who was trying to save money. His name was Louis Johnson, and he is generally regarded as a very poor Secretary of Defense.

Dr. Allison: I have definitely heard that about Louis Johnson.

General Fitch: Louis Johnson, that's the guy. He had mandated that four hours a month. I was in the cut down Basic School at Quantico for most of May and June of 1955 – about six weeks, maybe seven. At Quantico they put us at Camp Upshur, with us living in Quonset huts, except for the married Marines in the class. They could live with their family in the Quantico area. At Upshur they really did not know how to handle us. A major who happened to be an aviator, was in overall charge of our class. Then we had a couple of infantry captains who were directly in charge of us. They had us living in Quonset huts, double racks. Make up your rack in the morning about six, and the two captains would inspect our racks. I guess they were trying to teach us how to be brand new second lieutenants. At first they tried marching us to class, in formation. After about three days they knocked off the marching, and decided we could walk to class. We were all first lieutenants. In my case, *Saipan* had arrived in the seas off Korea (Yellow Sea and Sea of Japan) just as the truce took effect. I had flown a lot in Korea but the truce was on. I had been all over the world, so to speak. I think I counted something like 40 foreign countries and possessions (such

as Gibraltar, Hong Kong and Singapore) that I had been in. I had 1,200 hours of flight time and two years flying from aircraft carriers. As with most in Marine aviation, I had seen a lot of my friends die. In spite of all that, the two infantry captains who were our company officers continued to treat us just as if we were new second lieutenants, right out of the Naval Academy, OCS or PLC. As mentioned they would inspect our racks every day and leave notes to do a better job. We were not amused. Bottom line, the school had not been thought through very well, and after two tries, once in late 1954 and again in 1955, they never did the Special Indoctrination Course again. As Marine officers with several years experience, and I would guess that at the time 100% of us had served overseas as Marine officers, we found the whole thing rather absurd. Two weeks after arrival at Camp Upshur, I was promoted to captain. However that made no difference. The two captains still left notes on my rack – do a better job.

Dr. Allison: Get in formation and march.

General Fitch: In formation. They were going to teach us how to march but we had already learned how to march when we were NavCads. And it wasn't but about three days of marching when they decided, "This is a loser." As I said before, the school was not well thought out. Especially the major in charge should have known better. Our Quonset huts were about 200 feet from the classroom [chuckle]. So, as mentioned, they decided that after just a few days we could just walk that 200 feet to class. So it turned out that I'm the senior guy amongst 50. I do remember that my overall grade for The Basic School event was something like 95 and I was probably in the middle of the class because we didn't really study. Most of the things they'd talked about just came automatically to us. If they said it we understood it, because again, we had flown a lot of close air support and so forth.

Dr. Allison: Was the school something on-going?

General Fitch: They only did this school twice. For us the Basic School SIC was too basic.

Dr. Allison: Were they trying to teach you ground tactics and infantry operations and that kind of thing?

General Fitch: That was the theory. They weren't really teaching us much of anything that was new to us, but that's what they were trying to do, yes. They weren't overly successful at it

but we went along with the program.

Dr. Allison: So, did you go back to photo school from there?

General Fitch: That lasted about six weeks in May and June, and then I had orders back to VMJ-3 at Miami. So I go down and I check into VMJ-3 and at that point in time, I had over 100 hours in jets at that point, all of which were flown with those F9F-2Ps on the weekend and a little bit of flying during the week, plus about eight hours flown in the F9F-5P before I started photo school. So now I've completed the Special Indoctrination Course, returned to Miami and I'm in VMJ-3 again. I start flying some of the photo missions. The squadron operations officer, Major Burneal Smith, decided that I needed a section lead [two plane flight] check for being a section leader in the squadron. He assigned an experienced VMJ-3 pilot, a Captain McCauley, to fly chase for a flight to Pensacola. The operations officer wanted me to fly up to Pensacola and pick up a logbook, which someone had left. And so we file a flight plan and we fly out from Masters Field up to Pensacola to get the logbook. As I mentioned earlier, I had flown in a lot of weather in the F9F-2P when I was at photo school. I had quite a lot of experience flying inside of big buildups, which were dissipated thunderstorms. My chase pilot and I were flying back from Pensacola enroute to Masters Field, and we're at 36,000 feet (Flight Level 360). The F9F-5P was a very clean airplane. There were no wing racks on it since it was a photo airplane. It would cruise very nicely at 36,000, right at limit Mach number. The limiting Mach number on the airplane was about 0.9 and at 36,000 feet to be flying properly with a comfortable airspeed of 250 knots, you were indicating about 0.88 Mach, something like that. So we're at 36,000 feet.

There was no TACAN in those days. We're probably 50 to 75 miles north of Tampa and I'm talking to Tampa Center and this huge buildup was in front of us, about 40 miles to our front. The captain who is my chase pilot said, "I'm running a little low on oxygen now. We better go through", and I said, "Well I don't think we can go through that very well." I said, "I don't think you can stay with me." Captain McCauley said, "Oh, I'll stay with you." I thought, he's been in this squadron for quite a while. I guess he knows whether he can stay with me or not. And so I called the center and I asked them for 40,000 feet, which would be called Flight Level 400, and which would be 4,000 feet higher than where we were at that time.

Dr. Allison: Maybe get over it.

General Fitch: Perhaps get over it. I told Tampa Center that I would do a climbing turn to get to Flight Level 400, which they approved. I started doing a turn, got to FL400, and I roll out on heading. At this point it is obvious we're not going to get over the buildup. Now I'm at 40,000 feet, he's on my wing, he had said we will go through it, and we go in the clouds. It is pretty much a dissipated storm and turbulence is essentially at zero. My indicated airspeed is about 250 knots, I am level at 40,000 feet or FL400, and the indicated Mach number is about 0.88, which is just below the Mach limit for the F9F-5P. And to backtrack, in that squadron, and again, I don't know whether it was inexperience or what, but I had flown the F9F-2P in the clouds at high altitudes like 36,000 feet or maybe a little higher, indicating just a couple hundred knots or so and the airplane flew fine. At VMJ-3 a lot of the pilots were frequently talking about duct stalls, which meant that the airplane would get too slow and stall out the flow of air into the intake ducts for the engine. The F9F-2P wouldn't get as high as the 5P would since the 2P engine had less thrust. This day we are both flying the 5P and we go in the clouds. There is no turbulence. After 20 seconds or so I look back and McCauley is sitting fine on my left wing. Then I'm back on the instruments, 40,000 feet at 250 knots and about 0.88 Mach. After maybe a minute or two, and we're on Tampa Center frequency at this time, my wingman says, "I can't stay with you. I'm dropping down and filing separately." So I said, "Okay." I looked back at my left wing and he was gone. There is no turbulence – very smooth. Back on instruments I found it to be a fairly easy ride, which surprised me since I had expected to encounter some turbulence. I waited perhaps a minute to hear my wingman say something to the Tampa Center, and he doesn't say anything. Perhaps a minute after McCauley said he was detaching, I called Tampa Center and I said, "My wingman was detaching and he said he was going to file separately at Flight Level 360, and I haven't heard from him for about a minute." They said, "Well we haven't heard from him--call Tampa Radio." When I called Tampa Radio, they said, "No, we haven't heard from him." and I said, "Well here's what he said he was going to do." So I filed a flight plan for him at Flight Level 360, with him going direct to Miami for landing at Masters Field. Then I call back to Tampa Center again they said, "No, we haven't heard from him." I said, "Well he's supposed to be at 36,000 feet and I told them about our destination, Miami, to land at Masters." And so they had just assumed that was the case, but they didn't have him on radar at the time. I flew on towards Miami – still in the buildup at FL400 and with a smooth ride. I guess I broke out of that weather probably 50 miles before I got to Miami. When I landed the squadron operations officer was waiting on me at the flight line and he said, "You lost your wingman." He was rather upset and was looking at me like I had dusted McCauley off somewhere. I didn't know I'd lost my wingman up to that point until the Ops Officer told me, and I said, "Well what happened was, he said he was going to drop down to FL360 and file

separately." He said, "Well he ejected and he landed near MacDill Air Force Base. So I had flown my aircraft the way I was supposed to, but now I was not well received by the squadron operations officer. Later when they listened to the Tampa Center and Tampa Radio tapes, they would change their mind. McCauley had made the mistakes. Well it turned out the next day that my wingman, if there was anything else he could have done wrong I don't think he could have figured out what else he could do to make a mistake. He had made just about every mistake he could have made.

But what had happened was, we were just below limit mach on the airplane at 40,000 feet, 250 knots indicated. I mentioned that squadron had a fixation on duct stalls. I previously mentioned this as getting too slow – around 200 knots or less, maybe 180 knots, and they thought you'd fall out of the sky with a duct stall. If McCauley had bothered to ask my airspeed before he detached, I would have told him 250 knots. Apparently he was looking at something like 180 knots and assumed that I was in a duct stall. Well what happened, McCauley had looked down at his airspeed indicator shortly after he went into the clouds on my left wing, and he saw 180 knots or so. He didn't say anything to me about seeing 180 knots because I could have told him I was doing 250.

Dr. Allison: So his airspeed indicator was screwed up.

General Fitch: His pitot tube had iced up. Anytime you are in weather flying, you have the pitot heat on. Either he had not turned on his pitot heat after takeoff or his pitot heat was not working. And what had happened is he had iced up and apparently hadn't turned on his pitot tube heat. So what he did, when he saw that 180 knots he immediately thought that Fitch was in a duct stall, and he was too, so he said, "I'm detaching." and he pushed over. And of course his power setting was probably at 93 or 94 percent. As soon as he pushed over he hit buffet, so now the airplane is shaking because he's exceeded the limit Mach. He then pushes over harder [chuckle] and adds power. That was a big mistake. He is making his situation worse, rapidly, with everything that he is doing. Now he's really buffeting. He is not stalling the aircraft because it is going too fast. So then he decides he's spinning. Of course he could solve this whole problem if he would have retarded the throttle and pulled the nose of the airplane up instead of pushing it forward. He would have solved the whole problem immediately, but he kept doing the wrong thing. He had all his attitude instruments and the only thing missing was the airspeed which had iced up, due to his neglect in not turning on the pitot heat switch. He did not recognize that his pitot tube was iced up. He thought he was spinning when he was not. He was simply in Mach limit buffet. Where he was

supposed to be an experienced F9F-5P pilot, it is apparent that he was not. My guess is that most of his flight time had been on nice clear days.

Dr. Allison: So he had duct stall on his mind?

General Fitch: So then he decides to eject. In the F-9 you had a pre-ejection lever above the left console in the cockpit, which you had to pull inboard and push down, and then you had to pull the face curtain. Well he did the pre-ejection lever and he pulled the face curtain and nothing happened. Then he moved some more levers and he got rid of the canopy manually. Still in the cloud buildup, he then decides he'll climb out of the airplane, in the clouds [chuckle] – he is probably going straight down, still at limit Mach number.

Dr. Allison: [Laughter].

General Fitch: And so he tries to climb out and he more or less gets wedged on the back of the headrest and he's flailing around. While he's doing this he goes through a hailstorm. And he finally decides he's not going to get out that way so he puts his feet back under the instrument panel, pulls himself back down in the cockpit – didn't strap in or anything. Of course he had other things on his mind as opposed to strapping back in – he plays with the pre-ejection lever a little bit more, pulls the face curtain a few more times, and he finally ejects from the airplane.

Dr. Allison: But he wasn't strapped in.

General Fitch: No, but the seat went with him. In other words he doesn't have the shoulder harness buckled or the lap belt buckled, but he was still attached to his parachute. Everything works properly at that point. He estimates he probably got out of the airplane at about 15,000 feet. He comes down on the fuel farm at MacDill Air Force Base. I saw him the next day in the hospital, and he looked like he had a bad case of the measles where he'd gone through this hailstorm. He face and arms were full of red pock marks. The funny thing about McCauley is, to this day he doesn't think that he did anything wrong.

Dr. Allison: What happened to the plane?

General Fitch: And what happened to the airplane was, adjacent to the MacDill AFB fuel farm there's a Port Tampa channel, and on the far side of the Port Tampa channel they unload aviation fuel. The pipeline goes under the channel over to the fuel farm; into the huge fuel tanks. When the aircraft is diving vertically, there are two tankers in Port Tampa Channel, and there is probably 300 hundred yards between the bow of one tanker and the stern of another one. This deckhand on one tanker happens to look up and here's this airplane coming straight down [laughter].

Dr. Allison: Right at him?

General Fitch: He faints [laughter] and the airplane hit right about halfway between the bow of one tanker and the stern of the other. It impacts in the bank of the channel, the embankment of the channel there, and there was a big hole in the ground when we saw it the next day. And so then of course they did the accident investigation and it turns out he's made all the mistakes that he could possibly have made. He should have turned on his pitot heat long before he went into the clouds. That is normally done right after takeoff. And then the whole process, you know, not asking me by the way, "What's your airspeed?" That would have helped him immensely to have heard from me that I was flying at 250 knots indicated airspeed. If he had just said, "What is your airspeed?" But he didn't ask. The whole thing could have been avoided. McCauley tried to fly jets for a few more years, then he transferred to helicopters, and did quite well there. He retired from the Marine Corps as a lieutenant colonel.

Dr. Allison: So he moved on to helicopters after a few years.

General Fitch: Yes, he did. So shortly after that, Margaret Marie Williams, my future wife and I decided that we were going to get married before the squadron left for California and El Toro. We were married on August 7, 1955 in the Episcopal Church in Bartow, Florida. We then drove across the country in our 1953 Oldsmobile convertible.

Dr. Allison: Where did you settle?

General Fitch: Our first eight months were spent in Corona del Mar on the California coast before we moved into our brand new home in Santa Ana the spring of 1956. We recently celebrated our 51^{st} anniversary in August of 2006. Since Margaret Marie and I are in reasonably good health we are hoping to celebrate our 60^{th} in a few years.

Dr. Allison: Congratulations. Sir, it occurred to me when you were talking about TBS. Would you say there was antagonism between air and ground Marines in those days?

General Fitch: Well there wasn't any antagonism as such. At Camp Upshur the new second lieutenants didn't know what we were or where we came from. They probably thought that we were recalled reserves. As I mentioned, I was promoted to captain about two weeks after starting the shortened Basic School.

Dr. Allison: Yes [chuckle], but I mean out in the fleet when you were in 114, did you hear talk of this or . . . ?

General Fitch: Well not really. We were aboard aircraft carriers for the most part of my first two years out of flight school. That was all with the Navy. You know there's always been the issue of flight pay. What infantry officers sometimes don't realize is that flying can be a very dangerous thing. In aviation, when doing your job, aviation Marines die in peacetime and war. The best way to quiet a heckler on flight pay is to strap that heckler into a second seat in an aircraft and catapult him off a carrier on a dark night. Or you can strap him in an aircraft and take him on a low level flight in mountainous terrain on a dark night. In my 34 years active duty I heard very few comments about flight pay. In fact as recently--at a funeral I attended I ran into a friend of mine who is a ground officer, lieutenant general retired, and he was commenting about how rich he thought I was. He said, "And God, you've been on flight pay for over 30 years" or something [chuckle]. What some ground officers don't appreciate is the risk factor, which is real. Like in my first squadron I would hazard a guess - and I don't remember precisely - but there probably were at least seven, eight, or nine crashes and probably four or five dead in a one-year period in that squadron, VMF(N)-114. I can remember like three of them being fatal - and maybe there were only three - but anyway there were three dead pilots in a routine environment, with no one shooting at them, because that was out in the Med. And then in 324 we lost a pilot just as I was getting there. I guess we lost about three in 324. The memory fades after over 50 years go by. As I recall flight pay, stopped when you have been a designated aviator for 25 years. I hit that 25 years mark in 1977 and I retired in 1984. I flew for 34 years. As I mentioned, as a NavCad there was no flight pay – just \$94 a months for 17 months in my case. As a general officer I flew for about eight years, and during those eight years as a Marine general, I flew 35 different models of aircraft. In those eight years I flew about a thousand hours in aircraft such as the A-6E, F-4 Phantom, CH-53,

A-4, UH-1N, AH-1J, OV-10A, and on and on for those 35 different models of aircraft. I flew my last two flights the day before my retirement parade. The key point in all of that is that I loved to fly airplanes, and flight pay made no difference to me. Those last two flights were now nearly 23 years ago.

You know of course a lot of times a pilot winds up killing himself through errors he has made. The pilot in the clag I just talked about, McCauley, thinking that he was in a duct stall and he figured he would get away from me. Instead he nearly killed himself. In most aircraft accidents, it is pilot error when they get killed. All through my career there has been a certain amount of resentment by some ground officers in the Marine Corps relative to the so-called flight pay. That's about the only resentment I've ever seen, you know, "Why does he make more than I do?" But if you look at his exposure to harm's way, the infantry officer might go 20 years and never see a shot fired in anger, but then on the other hand he may see many shots. But in peacetime he doesn't have to give much thought to dying. The first week I was at Cabiness for advanced flight training in the F6F, there were four NavCads killed in crashes while flying single seat aircraft in routine training hops. And by the way, NavCads did not get flight pay. NavCads earned \$94 a month, whether they were flying or not. But as I had mentioned earlier, I had an equal number of takeoffs and landings, which was pretty good for a 34-year period of time and to wind up with 7,000 hours. There were a few times flying combat missions at night, low-level kind of thing, around Hanoi and those garden spots, that you see all those tracers coming up and you knew that for each tracer there was about two or three others that weren't tracers. Have a SAM go over your cockpit and clear it by a hundred feet, when you are three or four hundred feet off the ground, and that gets your attention

Dr. Allison: Right.

General Fitch: You'd kind of wonder from time to time whether you were going to get back or not. But I would say for the experienced ground officer there was never any animosity. A little bit relative to income and that would be the flight pay thing. I didn't stop flying when I became a senior officer. In my view, that is what aviation commanders are supposed to do – fly their aircraft and know what kind of aircraft the younger pilots are flying. I thought that was what it was all about, to fly and to be a Marine officer.

Dr. Allison: Yes. Any comments on relations with the Navy, you had been spending lots of time with them.

82

General Fitch: I was with the Navy a lot. The first two years out of flight school was all aboard aircraft carriers. Then there was VX-5. Then there was BuWeps [Bureau of Weapons] and then SecNav [Secretary of the Navy]. When I had First Marine Aircraft Wing, I operationally came under the Commander Seventh Fleet. I flew from ships for a total of about three years, maybe a little longer. I had the carrier experience for over a hundred traps in 114 as a new second lieutenant. Then I immediately had the Korea and around-the-world cruise on Saipan, with over a hundred carrier traps in the Skyraider. I flew from carriers while in VX-5, doing nuclear weapons test flights. That was in the FJ-4B Fury. In VMA-311, I flew about three months on carriers, the Coral Sea and Midway, and had about 80 more carrier traps. Then when I had 32d Marine Amphibious Unit (now called an expeditionary unit), I flew the CH-46, UH-1N, AH-1J, and CH-53 from the ship. Bottom line, there was basically no problem there between the Marines and the Navy. Everybody got along well together, because it was all naval aviation aboard the ship. Normally the only time that there is friction between the Navy and Marines is when it is a programming issue. The uniformed Navy feels that all funds going to the Department of the Navy, belong to the uniformed Navy. They keep forgetting that the Secretary of the Navy has two military services under his (or her) control, Marines and Navy, and he (or she), the SecNav is responsible for funding both. For relations between the Marines and the Navy, the only conflict that we have is in the programming world, where the N-8 invariably is not fair with the Marine Corps. Again, the Congress provides the funds to the Secretary of the Navy, not the CNO.

Dr. Allison: You would have Navy squadrons aboard though too, is that correct?

General Fitch: Well we did on *Tarawa*, yes, in the 1953-54 period. Then there was *Coral Sea* and *Midway* in the 1961-62 period when VMA-311 was a squadron in those air wings. The only conflict on *Coral Sea* or *Midway* was generated by Major Baker the 311 XO.

Dr. Allison: Okay, but not Saipan?

General Fitch: *Saipan* loved the Marines. We were the only squadron aboard with the ADs because; we maxed out that ship pretty well with 24 airplanes. Then there was the time in Tokyo Bay when we put an additional 24 AU-1 Corsairs aboard and locked the deck. The only way you got off the ship was to be catapulted off. There weren't any deck runs with all those airplanes

aboard. But no, I would say it was all in the professional sense. He's a professional. I'm a professional, whatever.

Dr. Allison: Any comments on how Marine squadrons aboard Navy carriers compared or stacked up compared to Navy squadrons?

General Fitch: Invariably when you look at Marine squadrons deployed on aircraft carriers, it's not infrequent that a CAG will say the Marine squadron is the best squadron he's got. That's often the case when the senior officers within the air wing or aboard the ship are looking at how well people fly airplanes. Invariably you'll find the Marine squadron's rate higher than, or certainly equal to, the Navy squadrons within the air wing.

Dr. Allison: I've also heard there's prejudice in the Navy against Marines too and I've heard people tell me that they just flat out don't like Marines.

General Fitch: Yes, that's true in some instances. There is and that can go to some very senior ranks, very senior ranks. The Navy recently had a four star admiral retire, and he had the reputation of hating all Marines. And I don't know, it's kind of a matter of their thinking they're a superior being. I have seen some admirals that absolutely despise Marines, even Marines they have never met. Usually those guys have played in the programming world for the "Department of the Navy" funds, where they think the Marines steal money from the Navy. Bear in mind that the most expensive way in the world to put ordnance on target is with an aircraft that flies off an aircraft carrier. The next aircraft carrier to be built will cost about 12 billion dollars, before they buy the air wing. Carrier aviation is not cheap.

That animosity between Navy and Marines however is rare. Some of my best friends are Navy officers. One of those is Rear Admiral Whitey Feightner, a World War II ace who was credited with shooting down nine Japanese fighters. Whitey got his wings in late 1941 or early '42. He just missed the Battle of Midway because he was on a slow ship going there. Whitey was on carriers flying combat in the Pacific for the rest of the war. Whitey is now in his late 80s and he is a class act. A truly great guy!

Dr. Allison: But some in Navy think that the Marines are the red-headed stepchildren.

General Fitch: True. I could name some names but I won't. For example when I came in the Golden Eagles some 20 years ago, which as I think I mentioned has a limit of 200 naval aviators. The idea behind the Golden Eagles is that you supposedly have an extremely noteworthy record flying airplanes and you made major contributions to Naval Aviation. That's the criteria for being a Golden Eagle, to have performed above the norm in combat and in the cockpit. And if you happen to be a naval aviator and you're a program manager that doesn't help you a bit as far as being a Golden Eagle is concerned, because it's how you were regarded flying airplanes that is important. But when I first went in there were several members that is Navy members, who looked down their nose at Marines. There will always be a few who have an air of superiority. I draw the parallel, which I think kind of explains how I view it and why I view it the way that I do. In my pre-flight class there were something like 35 or 40 students who were all NavCads. We were all equal regardless of background or education. Some would get their wings and commissions, and others would not. Some would wash out with the flying. Some would get killed in the process of learning to fly. Dick Augrain, was a great guy, and he was one of those killed in an aircraft accident.

The criteria for NavCads was to have two years of college, but they brought some NavCads direct from the fleet who did equivalency or something – I don't know just what they did – but probably 25 percent or more of my NavCad class at Pensacola was former enlisted, either Marine or Navy. Some of them did quite well in their careers. In my case I had graduated from college, the University of Florida, which was not the norm for a NavCad. But in my pre-flight class there was a NavCad named Jim Service. We started out the same day together in preflight at Pensacola. In advanced flight training we roomed together at Cabiness Field. He stayed in the Navy and I went in the Marine Corps. When we were commissioned and received our wings he stayed in the Navy and I went USMC. Jim Service retired as a vice admiral. He was ComNavAirPac when he retired. I retired as a lieutenant general heading up Marine aviation. We had the same origins, one just happened to go to the Marines and one stayed in the Navy. Jim would have made a fine Marine. He also happens to be a Golden Eagle – one of the 200. Our NavCad days were over 55 years ago and we are still good friends.

There are some people still in the Navy and especially there were 40 years ago, who just look down their noses at Marines. In all fairness, there are some senior Marines who look down their noses at Navy officers. And so I draw that analogy with Jim Service. We just wore a different uniform. Bottom line, the norm is that the Navy and Marines get along beautifully together. In the case of flying airplanes, that is why we call it Naval Aviation. Marine Aviation gives a lot to Navy Aviation.

85

Dr. Allison: I thought it was interesting too, you said that you didn't use call signs. It's such a big part of naval aviation today.

General Fitch: Well they had call signs the entire time I flew, but they were random call signs, you used a call sign for a single mission, and you didn't have a personal call sign. Every combat mission that I flew, I had a call sign, but that call sign changed with every mission. My view is that if you use the same call sign, over and over when you are flying, then the enemy soon knows pretty well who you are.

Dr. Allison: Oh yes, you'd have it when you were flying.

General Fitch: I would hope that they don't use personal call signs routinely in combat today. If you keep calling the same pilot, for example a call sign, like "Shark," then the enemy does a lot of listening to radio transmissions, and soon they will know exactly who "Shark" is and where he is based. I see personal call signs as a social thing. I notice in many instances that in MCAA [Marine Corps Aviation Association] gatherings, junior officers call colonels and generals by their call sign, which is really akin to calling them by their first name. Everyone thinks that is sporty, so I don't worry about it. I will let that sleeping dog lie.

Dr. Allison: When did that come in I wonder?

General Fitch: Well my guess is that it came in about the time I was retiring from the Marine Corps.

Dr. Allison: Did you have a personal call sign?

General Fitch: No. In combat it is a healthy thing to change your call sign every mission. You do not want to link call signs to specific targets. Again the enemy listens to your radio chatter.

Dr. Allison: Yes, it's your squadron call sign buts it's a number, right?

General Fitch: In other words in combat say your call sign is "Prince" as an example. Well the bad guys, they listen in to your radio communications. Well if its "Prince" tonight and they can track where Prince is communicating from and where Prince is going, and two nights later the guy is

calling himself "Prince" and three nights later the guy is calling himself "Prince", they pretty soon know who "Prince" is. And he might as well say, "My name is John Smith" and I fly from USS *Lincoln*. So there's a negative aspect to all of this. To me the call sign thing is kind of for the happy hour routine.

Dr. Allison: Was that a big part of squadron life in those days, the happy hour stuff?

General Fitch: Well yes and no. It varied from time-to-time, base-to- base, and squadron-tosquadron. And it varied with who was the leadership of the Marine Corps and who might be the leadership of an air wing or air group, who might be the leadership of a squadron, whatever. In some instances it was encouraged that you go to happy hour every Friday evening and with others it's "Don't go to happy hour."

Dr. Allison: In the 50s though, how was it in those days?

General Fitch: Well we didn't have happy hour for example when I was a second lieutenant and a first lieutenant, because that was all aboard ship [chuckle].

Dr. Allison: Yes, no booze there [chuckle]. What about when you went into port though?

General Fitch: In 114 and 324 there was no happy hour because just about the whole time I was in those squadrons we were aboard ship. Alcohol was expensive on the economies of Europe and the Far East. In VMJ-3 and VMCJ-3 at El Toro in 1955-56, I cannot recall any happy hours. At TPS [U.S. Navy Test Pilot School] there was a happy hour every Friday about 1630. The director of TPS wanted all the students and staff to relax. In VX-5 there were parties from time-to-time at the O Club, but I don't recall any emphasis on happy hours. In VX-5 we entertained other VX-5 officers and their wives in our quarters. For 311 during the year we were at El Toro before deploying to Japan, there was no happy hour that I recall. However 311 at Iwakuni did the happy hour bit.

Dr. Allison: And when you were on the ships?

General Fitch: Well when we were in port, again it wasn't happy hour because it was everybody in all directions. In Hong Kong for example in port, the Peninsula Hotel was a big watering hole and

some of the people who could afford it had rooms in the Peninsula there. Even back in the '53 and '54 timeframe as a rough guess it was probably \$50 a night in the Peninsula Hotel. I think my total pay including flight pay, which was \$100 a month as I recall, was like 400 bucks a month. So you didn't go rent \$50 hotel rooms when you're making \$400 a month. But sometime they would go together, like at the Peninsula Hotel, and get a suite where everyone congregated. But in any regard, and in some instances like in the case of Hong Kong, there would be a lot of partying at the Peninsula but then people were spending a lot of time getting clothes made. In those days you could get a very nice tweed or cashmere sport jacket made for \$15. So it was a great place to buy clothes. Then you were always buying things to take home.

Dr. Allison: Did they sing the fighter songs? Did you have a repertoire of songs and stuff?

General Fitch: Not really. If you had a singer in the squadron they might sing. Some places would, like Cherry Point or El Toro.

Dr. Allison: Did you put on any acts or anything?

General Fitch: No, nothing like that. Well I mean there were songs all along, most of them ribald. Back in Korea for the land based pilots, there were all kinds of songs at the bar, although I was not land based there. Woody Woodbury, a Marine pilot from Fort Lauderdale was both a night club entertainer and a recalled to active duty pilot. I understand that Woody did a lot of entertaining in Korea while he was there flying. Tom Miller can elaborate on that.

For Vietnam in the late sixties, at Chu Lai, where I was in 1967-68, I don't think I ever heard anybody sing a note at the Chu Lai "O" Club bar. They used to have the sucker games they played, like the two man lift, and a few sucker games like that. The "O" Club was a big grass hut that had a thatched roof and all. I am told that later it burned down, about a year or so after I left Chu Lai. The officer's mess for MAG-12 was in one end of the officer's club. But no, I can't remember anybody ever singing there. It probably is much like it is in college. If you have a singer or two in the group, then there are a lot of songs to be sung. No singers, then no songs. In my case at Chu Lai, I was usually flying missions at night, and that kept me out of the bar. VMA(AW)-533 flew about 90+ percent of its combat missions at night. In 533 we seldom flew in the daytime, and when we did, it usually was to let an aircrew see Vietnam in the daylight. Those daylight flights were usually within South Vietnam or Laos. I flew a few daylight flights into North Vietnam. When I was not CO of 533, I was S-3 of MAG-12, and also XO, and then I saw the bar a fair amount since we flew very little at night in the A-4. But I also flew the A-6 while I was group S-3.

Dr. Allison: I'm just trying to get a flavor for what Marine aviation was like in the 50s coming out of World War II. That was kind of a time of change, wasn't it? One big thing is helicopters coming in.

General Fitch: Yes, there was considerable change evolving from props to jets, and you had helicopters coming in. The helos were pretty big in the fifties, and really big in the sixties. I didn't get too involved in helicopters until I was a colonel, when I became CO of 32d Marine Amphibious Unit, then called a MAU. For many years, the term expeditionary was a no-no, since it was linked with the French in North Africa and Southeast Asia. When Al Gray was CMC, the term, expeditionary, came into vogue again. In the 1950s and 60s, getting new models of aircraft was just routine and they wouldn't last long in service before they would be replaced. In the 1950s and 60s, aircraft were relatively cheap. The F4U probably cost \$50,000 per aircraft, and the AD Skyraider in the 1953 timeframe probably cost less than \$200,000 an aircraft. Early jets like the F9F Panther cost probably about \$200,000, maybe \$300,000 each. I believe the first F-4 Phantoms were probably on the order of two million each. I was told the early A-6A Intruders went for less the three million each. But think about the inflation since 1955 and think about the complexity of aircraft today. If they are lucky, in 2004 dollars it is probable that the F-35A will cost about \$50 million each. They say the F-22 goes for about \$170 million per aircraft. When they develop an airplane now they're planning on it being around for at least 25 years, and more likely 30 or 35 years. As an example, the EA-6B program was started in the 1964 timeframe. When I had MAG-14 in 1972-73 the EA-6B was getting close to being introduced into the fleet. The EA-6B will probably be operational for at least another 10 years, so it will be a 40+ year old aircraft when it is retired. In MAG-14, I had the EA-6A, the EA-6B's predecessor. I first checked out in the A-6 Intruder down at Patuxent River in August, 1964. I flew my last flight in the A-6E in February 1982. The A-6E was fully retired from Naval Aviation in the 1990s. In the case of the F-18, which has a 7,000-hour life for the airframe, as I recall, and has some other problems like a center-barrel problem due to wear out, because of too many carrier traps and other arrested landings. The F-18 is limited normally to 2,100 arrestments. In the case of the F-18D – and that's all arrestments by the way whether it's a field arrestment or whether it's a shipboard arrestment it's 2,100 as the limit. They could do a change to the airplane called a center-barrel replacement. They are slow starting the center barrel replacement, in fact I don't believe that in 2006 they have started yet. But when

89

the center barrel mod is done, that mod adds about 600 traps to the life of the Hornet. Simple math say that gets you to 2,700 total traps on the airplane. With an average of a hundred traps a year on a F/A-18, and then after an additional six years it has to be either replaced or it cannot do arrested landings. Then it becomes a question of how many F/A-18E/F does the Navy buy for Navy squadrons. The Navy has been buying the F/A-18E/F at a rapid rate on a multiyear procurement program. In the programming world there is an overriding characteristic of the Navy. That is the Navy always has the money or funds to procure what they want to procure, and it is only when the Marines need funds that the Navy runs short. In the Marine Corps the issue is how fast does the Marine Corps get the F-35B STOVL, to replace the F/A-18A/C/D and the AV-8B. That gets you back to the programming issues. When they are near the end of the 18E/F buy in the Navy, then the Navy switches to buying the F-35C, which is the Navy carrier variant of the JSF. One of the big issues facing the Marine Corps in 2006 and out to 2020 and beyond, is how much the Marines will help man the Navy's carrier air wings. Marine aircraft on the carriers are not readily available for CAS to Marine infantry units. The Marines are going for the all-STOVL force for their tactical aviation, which means buying only the F-35B variant of JSF. The logic for the Marines is simple, the STOVL provides the highest combat capability and most operational flexibility for Marine aviation in supporting our ground forces.

The Marines require the capability in their TacAir to operate from forward basing close to ground combat units, they must operate from the expeditionary strike group [ESG] ships such as LHA and LHD, to provide a strike fighter capability aboard those ESG ships. On a not to interfere basis, Marine tactical squadrons are expected to operate from aircraft carriers.

Dr. Allison: Did you have role models, for you personally? I would think the greats of World War II would be around.

General Fitch: Yes. I've seen role models all along. Many of the fighter aces of World War II had gotten out of the Marine Corps right after 1945. Marion Carl was one who stayed on, and he was truly a great pilot. And I saw some real spastics too [laughter].

Dr. Allison: What about Joe Foss or even Pappy Boyington; I mean what do you think about people like that?

General Fitch: They were all great aviators and each was the kind of aviator that you want to have in a war. Marion Carl should have gotten the Medal of Honor for his exploits at Guadalcanal. During those early days of the war he had over 18 Japanese planes to his credit, he had been in the Battle for Midway and done a superb job over Guadalcanal. Joe Foss of course received the Medal of Honor, since for one thing he was the first pilot in WWII to shoot down 26 aircraft, thus equaling Eddie Rickenbaker's feat in WWI.

Boyington, was a role model for those who liked to fly airplanes and those who like to fly combat. He was the kind of guy that the Marine Corps loved to have when there was a war going, but when there wasn't a war they did not want to have Pappy Boyington around. Some Marines say that it is quite probable that Boyington would not have received the Medal of Honor, if they had not thought that he was dead. I remember that on the day he was shot down and captured, he got credit for two air-to-air kills. He was a POW of the Japanese for a couple of years. If I remember correctly, about six of his air-to-air kills were shoot downs when he was with the Flying Tigers in China.

Dr. Allison: Did you ever encounter him?

General Fitch: Boyington was a member of Golden Eagles. I never knew him to attend a reunion before he died in 1988. About 1964 he came to Washington to visit with Major General Louis Robertshaw, who had Marine Aviation at HQMC over 40 years ago (1963-64 timeframe). General Robertshaw was a good friend of Boyington and they had flown together in WWII. General Robertshaw, had a luncheon and Boyington came to the luncheon and spoke a little bit. He didn't talk a whole lot. He didn't give a speech as such – just a few comments. One of the things that he said though that you'd never forget was, "He was sure glad the Marine Corps didn't have a chance to name an airfield after him (because you had to be dead to get an airfield named after you)." But no, there were a lot of great aviators like that, Joe Foss, Marion Carl, Pappy Boyington, Jack Maas, Paul Fontana, and many more. Foss was in the Air National Guard after World War II. When Joe Foss was doing his thing at Guadalcanal I was 12 or 13 years old. Joe Foss was a member of Golden Eagles, and he attended numerous reunions. Foss died new years day 2003, which was the same day that Brigadier General Jay Hubbard died. Jay was a great Marine! He was also a Golden Eagle. The aviation museum at Miramar is named after Jay Hubbard. Marion Carl was also a Golden Eagle. But on following the war, there was a lot of war news 1942 to 1945. As a minimum you always heard the news on the radio.

Dr. Allison: Right. Were you aware of that?

General Fitch: Why sure. You'd see it in a lot of magazines and newspaper articles about the war in the Pacific. Of course there was no TV in those days. At the movie theaters they had the newsreels, which had a lot of the war on them. It was about 1943 that *Life* magazine ran a story on Joe Foss, and had his picture on the magazine cover. I used to have that copy of *Life* magazine, until the cleaning lady threw it out.

Dr. Allison: Do you think that could have influenced you subconsciously or something in the Marine Corps?

General Fitch: No. When the war ended in the summer of 1945, I was a sophomore in high school, and that kind of ended the motivation for anything relative to the military. That motivation would not return until June 1950. There was a great deal of tranquility in the 1946-1949 period. My sole goal in those years right after the war was to finish college and go to work.

And it was of course the Korean War that energized me because, again, having just graduated from the University of Florida in June 1950 – the war starting the same month – with my being only 20 years old and in good health, I preferred to define my own destiny instead of letting somebody else define it for me. Once the Korean War was going I immediately chose to go to flight school at Pensacola. I had passed the physical exams and the other tests, and was all signed up for flight school within five weeks after the start of the Korean War. As you know the war started June 25th and on September 2d I was sworn in for the Navy and flight school.

Dr. Allison: Those were the days of the draft, did that influence you?

General Fitch: I should mention that I am a believer in having the draft in effect. The all-volunteer force is a nice idea if you never have a war, but the recent war in Iraq has shown that the all-volunteer force needs more participation. A draft would bring some of the Yale and Harvard graduates into the military. I recently heard that the Army has to give \$40,000 bonuses to get each recruit to sign up. It sounds good if they say the Army is meeting its quotas, but they don't mention the bonus it takes to get the enlistments. You have to wonder what ever happened to patriotism.

But back to the role model thing, you saw people all the way along that you admired tremendously and then you saw some that you wondered how they ever got to where they were. But that happened to be in the 1950s.

92

Dr. Allison: Yes, as we go through it I'd like to hear about those kinds of people.

General Fitch: Well one of the amusing things that my wife every once in a while reminds me of is that for some reason I got into an R-4D to go somewhere and there was a colonel flying it, and I don't know what his name was or anything else. When I got back home I was telling Margaret about this shaky old colonel flying the airplane – and he was, he was pretty shaky – but then when I got to be a colonel she said, "Now they look at you and they say, "Shaky old colonel." [laughter].

Dr. Allison: So you got married, when was that? Margaret, I believe you said she was going to college, did she finish up after getting married?

General Fitch: 1955. This past August we reached the 51-year mark. My wife, Margaret, had one year of college when we were married in Bartow, Florida, on August 7, 1955. She had just completed her freshman year at Wesleyan College in Macon, Georgia in June, then we were married in August. By the time seven years had gone by she had gone to school at various colleges in California, and she had graduated June 1962 from the University of Florida. She was within six hours of completing her Masters when she opted to go to Europe in late 1973. That was when I had the 32d MAU in the Mediterranean.

That's where it started. In Santa Ana, in Orange County they had several junior colleges there and my wife could take the courses free, a few miles away from our home in most cases. And when we went to China Lake they had college courses and instructors that were brought in from the University of California. And by the time when I went back overseas in 1961 with that A-4 squadron, VMA-311, she needed 60 hours to graduate. She did those at the University of Florida and she took post-graduate courses after that in Northern Virginia, while she was teaching school there. She taught for ten years.

Dr. Allison: A teacher. Very good; OK sir that will do it for today.

END OF SESSION II

PAGE INTENTIONAL LEFT BLANK

SESSION III

Interviewee:	Lieutenant General William H. Fitch, USMC (Ret)
Interviewer:	Dr. Fred Allison, U.S. Marine Corps History Division
Date:	28 March 2006
Place:	Lieutenant General Fitch's Home in McLean, Virginia

Dr. Allison: This is the third session of the interview with Lieutenant General William H. Fitch. Today is 28 March, 2006, and again at his home in McLean, Virginia.

Sir, in the last session you discussed flying in VMJ-3, a photo reconnaissance squadron, can you tell me what you thought about that particular mission?

General Fitch: Flying photoreconnaissance was easier after going to photo recon school. But there were challenges such as flying the mosaics. At the school they taught you how to fly the different types of photo missions in the F9F-2P, and they had about four or five different kinds of photoreconnaissance flights that you flew.

Dr. Allison: How did that photo system work in the F-9?

General Fitch: First you had a viewfinder in the cockpit of the F9F-5P and F9F-2P aircraft, which was something akin to an inverted periscope. Through the viewfinder you could look out the bottom of the aircraft vertically, horizontally and forward. They had varying tilt angles for shooting the oblique photos. The viewfinder was synchronized with the cameras. The hardest part of flying photo was flying in a straight line at high altitudes. In 1954-55 you had to be concerned about gaps in your photo coverage, since the high winds at altitude would blow you sideways. Those crosswinds would cause the aircraft to drift as the pilot tried to fly a straight path. In those days there were no inertial navigation systems. In 1954-55 there were no global positioning system [GPS], and there were no satellites in orbit. For example, if at the prescribed altitude you had a 90-degree crosswind with a velocity of 150 knots, then maintaining a correct heading and flight path was a real challenge.

With navigation systems available in the 21st century, or even 30 years ago, the task of flying photo reconnaissance would be much easier. On the other hand, if you were going to shoot a photo of a pinpoint target, such as a bridge or tall building, with a vertical shot it was fairly easy

95

even half a century ago. Oblique photography flown at low altitudes was a relatively easy task, unless you had a long strip to shoot.

Dr. Allison: So you always keep your nose pointed at it but your nose is just sort of cranking around.

General Fitch: The airplane would be drifting sideways because of the wind, and while you kept the end point on a land point maybe six miles ahead of the aircraft, you would actually be flying an arc. Flying photo recce had a real truth teller as to how well you did, when they processed your film.

Dr. Allison: It was obvious if you had flown the mission correctly or not. What did you mean, mosaics?

General Fitch: But we would do those strips, and the lower the altitude and the less the wind, the easier the job. Wind velocity at the lower altitudes was usually lower but you had to allow for it. Much harder to fly was to try to do mosaics, which might require 10 strips eight to ten miles long to complete the mosaic, and that would mean ten different runs over an area maybe eight to ten miles long and eight miles wide. You would be looking for overlap on the sides as well as flying a straight path, and what you'd invariably find – and of course the photos didn't lie – you'd find big gaps in your imagery where you thought you were overlapping but you weren't. And then there were things like pinpoints, which were pretty easy, again, looking through this viewfinder. And then of course there were others that were relatively easy like flying oblique strips, where you might have 20 or 30 shots in an oblique strip. They were easier because you could use the horizon for a reference. You did those oblique shots while flying relatively close to the ground, maybe 10,000 feet, and it was easier to maintain a proper heading and altitude. In the photo squadron we had pilots who would frequently fly photo missions in the airplane and you would find others who would frequently just go fly the airplane. The latter didn't know how to take a picture.

Dr. Allison: They hadn't been to the school or what?

General Fitch: Well in most cases they hadn't been to the school plus some of them weren't interested in doing aerial photography. Compared to training in a tactical squadron 50 years ago, the training that is achieved today and in recent years with the Training and Readiness Manuals

[T&R], it is fair to say that the training in Marine squadrons in the 1950s by comparison was dismal. The Marine Corps retired the RF-4B photo aircraft about 15 years ago, and now they rely on satellite imagery.

Dr. Allison: Training was pretty haphazard then or non-standard?

General Fitch: During the 1950s I was in four Marine squadrons. Two of those squadrons, VMF-114 and VMA-324, were for operations that were mainly aboard aircraft carriers. VMJ-3 and VMCJ-3 were the other two squadrons. There was a training syllabus in each of the four Marine squadrons during the 50s, but in comparison to training from about 1960 on, it was hard to detect measurable progress in a training syllabus in the 1950s timeframe. In the squadron operations office they would put an X on the board by your name when you supposedly were qualified in an area of training. But it was rather superficial. During the 1950s I never worked in the operations office of a squadron. When I joined VMA-311 in 1960 after my tour in VX-5, I was assistant operations officer of 311 for a couple of months then I became the aircraft maintenance officer for the rest of my tour in that A-4 squadron.

In my next squadron, VMA (AW)-225, it was 1966-67 and we rewrote the A-6A T&R manual since it was not a good training syllabus. Up to that point the T&R manual was a very poor product. As a major I was the commanding officer, so I skipped being a squadron ops officer or a squadron executive officer along the way. The quality of squadron training many years ago, especially in the 1950s went hand in hand with the high accident rates of the 1950s. With that said, I highly treasure the flying the I did in the 1950s, and it was a bonus to survive it.

Dr. Allison: Would you say this characterized all Marine tactical squadrons?

General Fitch: Well regarding quality of training I can only talk about ones I was in [chuckle]. I didn't know about the other squadrons.

Dr. Allison: Right [chuckle], the only ones you know about.

General Fitch: That's all I can speak to. But like I told you, back when I was in Corsairs in 1952 and 1953 right out of flight school we deployed on a carrier less than two months after I joined the squadron. For example you had to get 25 hours in the airplane before you could start field carrier landing practice [FCLP]. My logbook shows that I had 25 hours in the Corsair within ten days of

my first hop, and I started FCLP 12 days after that first flight. When I deployed on a carrier with that squadron for the first time, which was about six or seven weeks after I'd joined VMF-114, something like that, I'd never flown the airplane at night. I had been out of flight school about four months and I was on an aircraft carrier heading across the Atlantic towards Europe and Africa.

Dr. Allison: All you'd done is learned how to land on a carrier.

General Fitch: With the F4U-5 Corsair, that's all I knew how to do which was land on a carrier and takeoff. I flew my first hop in the F4U on July 10th, 1952 and two months later I had operated from USS *Wright* (CVL) while crossing the Atlantic and I was flying over North Africa.

Training in VMA- 324, which followed that tour in 114, was much better from the training syllabus standpoint, because VMA-324 had a more senior and experienced ops officer. His name was Major O. W. Curtis. Curt was a real pro and highly admired by all the other pilots in 324. When I joined 324, I was still a second lieutenant, but I also had a lot of experience flying from aircraft carriers. When I went out to the Saipan for my first carrier landing in the AD-4B Skyraider, I had already logged over 140 arrested carrier landings in other aircraft. In the case of second lieutenants Fitch, Neds and Wall, we didn't need much training in the AD to deploy, since the AD was much easier to fly than the F4U. But again, there wasn't a lot of time for training even in the VMA- 324 Skyraiders. We were going to deploy so quickly. Three months after joining VMA-324 at MCAS Opa Locka in Miami, Florida, and after flying my first hop in the AD on July 20, 1953, I was flying the AD Skyraider off USS Saipan in the Pacific Ocean, while heading to Japan and Korea. With all that said, I was very comfortable flying the AD-4B Skyraider, both day and night, along with operating shipboard or shore based. From the training standpoint after a year in 114, you have to consider the Joe Neds, John Wall and I were pretty experienced at carrier operations, so we didn't need the training that lesser experienced pilots would need. I say that even though we were still second lieutenants.

Dr. Allison: Yes, and you mentioned the pilots were more motivated too.

General Fitch: Well they were more motivated and they weren't recalled reserves such as had been the case for a majority of pilots in VMF-114. In 324 a lot of them were young; 2^{nd} lieutenants and 1^{st} lieutenants, but nearly all of them except for Neds, Wall and Fitch had been in the squadron for quite a long period of time. And so in 324 we had a lot of company with numerous second lieutenants. In 114 there weren't many 2^{nd} lieutenants. I think there were like maybe five of us.

But then when I got to VMJ-3, the training, per say, was not structured like it should have been and of course that's the beauty now of having a training syllabus like we've had for the last roughly 40 years or so.

Dr. Allison: Which probably helps in tactical proficiency and no doubt safety.

General Fitch: NATOPS has done wonders with reducing the accident rates, Marine squadrons don't have hurry-up carrier deployments like they had in the 1950s, and the training syllabus, in the form of a training and readiness manual, is closely followed, with re-flys when an X on the board is out of date. Marine aviation over the last 40 years is vastly different than it was in the 1950s. In the year 2006, it is vastly different than it was even in the 1980s. The catch phrase, "A work in progress," is very appropriate for Marine Aviation. It is constantly improving.

Dr. Allison: What is the background on the T&R Manual?

General Fitch: The T&R Manual, the Training and Readiness Manual, is a Marine Corps document for aviation training, and it is that special training a pilot or NFO goes through for his particular aircraft. You have to achieve certain levels in the training cycle and then you go to the next level and the next level and the next level. A few years later, in 1966 when I took command of VMA(AW)-225 at MAG-14, we rewrote the T&R Manual for the A-6 Intruder. We had worked out a syllabus that had much longer flights. When I took 225 the T&R called for flights about an hour and a half in duration. We changed that to about a three hour flight, where the pilot or bombardier/navigator would do multiple training tasks in one flight, and thus reduce the number of flights to train. In the case of the A-6 in the mid to late 60s, the most difficult task was readiness of aircraft, so our view was that once you got the aircraft in the air, you used its capability for long duration flights to maximize training. Headquarters, Marine Corps accepted our changed T&R Manual for the A-6A.

Dr. Allison: So a lot of training was left up to individual squadrons, the Ops O, or whoever.

General Fitch: That was certainly the case in the 1950s and I would assume in the 1940s. In those times it especially was what squadron operations officers wanted to do. Curt Curtis in 324 was hands down the best operations officer that I saw in the 1950s. Curt was a real professional. You might say that he set the tone in the squadron, even though he was not the senior officer. In the

1950s and early 1960s, it depended on who the operations officer was and who the flight officer was, and who wrote the flight schedule. In VMA-311, the operations officer who was there when I arrived was a klutz. He had no idea what he was doing. When he found out that we would probably spend our entire overseas tour of 13 months aboard aircraft carriers, he suddenly came down with tunnel vision and was transferred. That was good riddance.

I mentioned that the CO of VMJ-3 never flew photo missions, and that was the case for the XO also. Great guys. They flew the aircraft, the F9F-5P, but they really didn't know how to use it tactically. And good pilots, but to my knowledge they never flew a photo mission. They left that to somebody else.

Dr. Allison: Now that wasn't Ralph Spanjer though was it?

General Fitch: Yes, that was Smoke Spanjer as the CO of VMJ-3. He had a different approach to a whole lot of things, a great guy, and I was with him when he was a general later on. But to my knowledge I don't think Smoke ever flew a photo hop while he was CO of VMJ-3. He may have but if he did I didn't know it. It is relevant that his progress was not dependent on how he flew or what he flew. I personally am a strong believer in squadron commanders leading both in the air and on the ground. In combat, a squadron commander should fly more combat missions than anyone in his squadron. I also am a strong believer in air group commanders leading in the air and on the ground.

Dr. Allison: Can you tell me about getting situated with your new squadron, VMJ-3 at El Toro?

General Fitch: Soon after I joined VMJ-3, we moved from Miami to El Toro. Margaret and I were married in early August 1955 and we drove from Florida to California that month. Like most cars in 1955, our 1953 Oldsmobile convertible was not air conditioned, so the August drive was rather warm. Soon after arriving El Toro, perhaps four months, we combined with the VMC squadron to form VMCJ-3. The VMC part of the squadron had the F-3D Sky Knight and they had the AD-5. Both were early day electronic warfare (EW) aircraft.

Dr. Allison: What aircraft did VMC bring with it and where were you hangared?

General Fitch: VMJ –3 moved to the VMC squadron area when they combined. They just had an amalgamation of the two squadrons. VMCJ-3 had three different aircraft in the AD-5W, the EF-

3D and the F9F-5P, and with the combined assets it became a much larger squadron than the norm. The lieutenant colonel who was the CO of VMC became CO of VMCJ-3. I forget what his name was but he was not memorable. I cannot recall ever seeing him in an aircraft. But while in both VMJ-3 and VMCJ-3, the XO was a great guy named Ed Reed. He was a major. Ed had been the executive officer (XO) of VMJ-3 in Miami and at El Toro while Smoke Spanjer was the CO.

Ed was a truly fine gentleman and a superb leader of Marines. A few years later Ed Reed did a lot of the flight testing of the early KC-130 aircraft at the Naval Air Test Center, Patuxent River, Maryland. He also went into helicopters and was a great leader in the Marine helicopter squadrons and groups. When I was in Vietnam in the 1967 to 1968 timeframe, Ed was a colonel and the commanding officer of MAG-16 at Marble Mountain. When he left VMJ-3 in the fall of 1955, LtCol Smoke Spanjer moved up to the 3d Marine Aircraft Wing staff, to be the Wing Safety Officer. It was at that point in time when the 3d MAW was introducing the F4D Skyray fighter. After the F4D squadrons had a series of accidents, a few months later Smoke became the CO of a F4D squadron. Ed Reed was still XO of VMCJ-3 when I left to go to the 3d MAW staff in the spring of 1956.

Dr. Allison: Your record shows you moving up to the Wing [3rd MAW] and working out of the TACC [tactical air command center]. What was behind that move and how did you like working there?

General Fitch: I guess that I was in VMCJ-3 for probably four or five months after they amalgamated and then I moved up to the Wing headquarters. As a captain with about one year in grade, I would be the operations officer for the TACC of the 3rd Marine Aircraft Wing. I suppose since I had been in three squadrons, four if you count VMCJ-3 as well as VMJ-3, they decided that it was time for me to do some staff duty. At that point it was 1956 and as a Marine aviator I had been flying in squadrons straight for four years. In those four years I had never been away from flying aircraft. As it would turn out, I would never be away from flying military aircraft for another 30 years. By the spring of 1956 Margaret Marie and I were living in Santa Ana and we had bought our first home.

Dr. Allison: The real estate market was much different I suppose.

General Fitch: I wish I had kept it. We bought that house in Santa Ana for about \$15,000.00. It was a three-bedroom in a development about eight miles north of El Toro, and in addition to the

three bedrooms it had two full baths, hardwood floors throughout, a fireplace in the living room and a patio. It had tile on every countertop in the bathrooms and in the kitchen. I had a 20-year mortgage, on the GI-Bill, I had paid nothing down, and there was a monthly mortgage payment of \$109 which included taxes.

Dr. Allison: Of course that's \$109 in those days.

General Fitch: Well \$109 was a lot considering that was 25 percent of your pay when you're a captain at that point in time, including counting the flight pay.

Dr. Allison: I suppose you made a pretty penny on that house?

General Fitch: An important economics lesson. When I did go to Test Pilot School in the summer of 1957, I was very naïve about owning property. My wife and I discussed it, and concluded, "We're not going to have this house sitting out here in California and us on the East Coast, so we're going to sell it." That was a stupid thing to do. And we sold it for about what we paid for it. Looking back I could easily have rented that house for probably at the point time, as a guess, for probably \$120 to \$130 a month. It would have been very easy to rent because it was close to El Toro and downtown Santa Ana. And the house would have been paid for in 20 years. With that house sale now 50 years ago, the house that cost about \$15,000 then is today probably worth on the order of \$500,000 or more. With that GI Bill and those \$109.00 a month payments, it would have been paid for over 35 years ago.

As it would turn out, after Test Pilot School and a two year tour in VX-5 at China Lake, we were reassigned to the wing at El Toro, where I joined VMA-311. We were going to be at El Toro for only a year, since in early 1961, VMA-311 would go to Japan for a 13 month tour. We rented a house that was behind the one we had sold three years earlier – a house that was perhaps two hundred yards from our former home.

Dr. Allison: How did the TACC operate at that time?

General Fitch: The TACC was headed up by Major Elwin. "Red" Jones, a great Marine, and a great friend. Early on I told Red that I hoped to go to Test Pilot School, that I was trying to build up my flight time to get close to 2,000 hours in the air, and he commented that I could fly all that I wanted to. In addition to Red being a tremendous person, he provided a superb work environment where he

didn't mind my flying a lot. The TACC more or less ran itself. We had a lot of lieutenants, mostly ground officers, who worked the stations in the TacCenter. It was a very casual life, and the TACC did not require a lot of supervision. The TACC shelter was located about 100 feet from my desk in the 3d MAW headquarters. Regarding the casual pace, one day for a lunch break, Red and I took sandwiches along, while he checked me out in the F3D Skyknight. After that one hop checkout, I would occasionally fly the F3D – but not much.

Simply put, while in a garrison status for the TACC, we were not very busy. We had a master sergeant to supervise the enlisted personnel, and the job of those enlisted Marines was to make plots on glass screens for all wing aircraft airborne, along with status of aircraft in the wing, plus to help maintain the equipment. The master sergeant took care of supervising all of those functions by the enlisted Marines. The young air control lieutenants manned the radios in the TACC and maintained all of the communications with the Marine air control squadrons (MACS) that operated the ground radars. They maintained radar plots on airborne aircraft.

We had a direct air support center, the DASC, which operationally came under the TACC, and the DASC would coordinate assignment of aircraft to target areas and forward air controllers-FACs. When aircraft would take off from El Toro, 3rd Wing aircraft – then they would check in with the TAC Center routinely and these lieutenants would keep written logs and status boards on who was airborne. When the aircraft were returning for landing, they'd check back out with the TAC Center. The only time that you really got busy was when we were going to have an exercise like say down at Camp Pendleton, and in that case then we would move what we call the "Bubble", an expeditionary shelter, which could be taken down or put together in a period of maybe four hours. Then they would install all the electronics, the radios, status boards and so forth. So the only real significant activity for the TACC was when you were having an exercise for a week or ten days. The norm most of the time was in garrison right at the Wing headquarters. Those lieutenants took care of everything in the TAC Center, when it was routine operations. I flew about three or four times a week, often at night, and frequently on weekends. Supporting the wing headquarters for flying, we had a great stable of aircraft at MARS-37.

Dr. Allison: MARS-37?

General Fitch: The squadron supporting the wing aviators with aircraft was called MARS-37, with the MARS standing for Marine Aircraft Repair Squadron. MARS-37 probably had on the order of 15 airplanes, and the only people that flew them were those on the Wing staff or the aviators that were in MARS-37. When I was on TACC staff duty I was averaging about 35 hours a month. The

flight officer for MARS-37 was a first lieutenant, Henry "Hank" Steadman, and anytime that I wanted to fly, Hank would schedule me for an aircraft.

Dr. Allison: That sounds like a great deal.

General Fitch: People today would say, "Well you know that costs a lot of money to do all of that flying." At the time jet fuel was 9 cents or 10 cents a gallon. The aircraft of that time did not burn a great amount of fuel, so it was pretty inexpensive. In 2006 jet fuel probably runs \$3.00 a gallon or more

Dr. Allison: Which did you consider the best aircraft they had there?

General Fitch: I'd fly in the FJ-4 if one was available. The FJ-4 Fury was the best fighter in the stable of aircraft that MARS-37 had on its flight line. I liked them all. Any aircraft that I was flying at a moment in time was my favorite of the moment. During those months of staff duty with the TACC, I became accustomed to flying a wide variety of aircraft. I flew with MARS-37 and I also arranged two months of fighter refresher training with Marine Fighter Training Squadron 10 (VMFT-10), where I flew the F9F-6 and the F9F-8. These were swept wing versions of the Panther jet. During my two months doing fighter refresher with VMFT-10, I also flew with MARS-37. So I have the list of aircraft that I flew during that 15 months, which were: (1) F9F-5; (2) F9F-5P; (3) SNB-5; (4) AD-4B; (5) F3D-2; (6) FJ-4; (7) F9F-6; (8) F9F-8; (9) T-28B; (10) R4D-8; (11) TV-2; (12) AD-5; (12) T-33A; and (13) the AD-6. During those 15 months of TACC staff duty, including my two months at VMFT-10 for fighter tactics refresher, I flew over 500 hours in that total of 13 different models of aircraft.

Dr. Allison: Wow! That would seem a bit difficult to keep up with the characteristics and procedures for each.

General Fitch: Flying those different aircraft was not a big challenge. I was very much aware that if I went to Test Pilot School, I would be flying a lot of different aircraft. Many of the aircraft models were very similar. For example I flew four different versions of the Panther and Cougar jet, but they were all very similar in the cockpit. The F9F-6 and the F9F-8 were very similar, nearly a carbon copy. The F9F-5 and F9F-5P were straight wing aircraft and the F9F-6 and F9F-8 were swept wing aircraft. The AD-4B and AD-6 were essentially the same as single seat aircraft, and

the AD-5 was a side-by-side seating arrangement of the same aircraft. The TV-2 was a Navy/Marine variant of the T-33A. The FJ-4 was a superb aircraft, a fine fighter, relatively simple to fly, and at high altitude in the 40,000 to 50,000 foot range, it would go supersonic at idle power when you simply pushed the nose down. The F3D-2 was unique and it was not a very good airplane. The F3D was very much under powered, with two small jet engines- -- J-33 engines as I recall. One of my "attention getter" takeoffs in the F3D-2 was a night time takeoff at an airfield in Wyoming with a 7,000 foot elevation – in Casper, Wyoming as I recall. I had flown up to Casper to take a mechanic and a F9F wheel and tire, so that we could rescue Hank Steadman who was flying an F9F. Hank had blown a tire or had a tire failure of some kind. After the Marine mechanic changed the tire and wheel on Hank's aircraft. Hank took off first and I was going to fly his wing back to El Toro. That night which was cool, the F3D staggered into the air while coming off a long runway. The F3D did not want to fly, and it took me about 10 or 15 miles from the field at Casper to get enough airspeed to climb. Fortunately it was a moonlight night with good visibility of the mountains around Casper. The F3D had been used as an early night fighter in Korea and as a electronic countermeasures aircraft. The F3D did not have an ejection seat. It had a trap door between the two seats that you would have to drop out of with your parachute. I was glad that I never had to use it. In a couple of words, the F3D was a dog.

Dr. Allison: That was called 'Willy the Whale' I believe.

General Fitch: Yes. Of all the aircraft that I flew while on TACC staff duty, the FJ-4 was clearly the finest of the bunch and the F3D was the worst. The AD-4B and AD-6 were fine propeller driven attack aircraft.

When I would get to Test Pilot School I would fly the FJ-3 there, and at China Lake I would fly the FJ-4B.

Dr. Allison: What was the process for getting scheduled to fly at MARS-37?

General Fitch: When I wanted to fly, which was three or four times a week, I would call up – and again, this is the way it was in the mid-50s; the 1956 - 1957 timeframe. Usually on Friday I'd call up the flight officer in MARS-37, Hank Steadman, and I'd say, "What can I fly next week?" He'd say, "Well how about an FJ on Monday around 1600." I'd say, "That's fine." And he said, "Do you want to fly Tuesday?" and I'd say, "Sure, I'll fly Tuesday. How about a night hop?" He said, "Okay, how about an AD?" and I'd say "Fine." And you just worked your way through the stable

of aircraft, whatever was available, each week and of course it was great because I was trying to build up flight time to go to Test Pilot School. And if the airplane happened to have a jet engine that was great. If it happened to be a prop then that was okay too.

It is relevant that from the fighter standpoint, anytime you flew over Big Bear Mountain at 30,000 feet, about 40 miles north of Palm Springs, there were Air Force fighters, usually F-86s looking for a fight. Those USAF fighters were coming out of George Air Force Base. So if you wanted to do air combat maneuvering, it was there every day of the week at 30,000 feet above Big Bear.

Dr. Allison: When did you decide and why to go to Test Pilot School?

General Fitch: It had been my objective for a couple of years for me to attend the Test Pilot School [TPS]. I wanted to be selected to attend the TPS. I hoped to show up at the TPS with at least 2,000 hours of flight time. Flight time is experience and experience is a big factor in staying alive. I wanted more jet time, and again, it's always been my theory that the more flight experience you have, the more likely it is that it you're going to live to a ripe old age. That proved pretty well to be true in my case, since I am now 77 years old.

It's not necessarily true in some instances but generally--.there is the old axiom that, "There are old pilots and bold pilots but there are no old, bold pilots." There is also the axiom that flying is hours and hours of boredom, intermixed with moments of stark raving terror."

Dr. Allison: Yes. So you tended to go by the rules when you're flying? I mean you see some young guys do some crazy stuff. You didn't do anything like that?

General Fitch: I always tried to think ahead of my aircraft. And in spite of trying to think ahead, I got into a few situations while flying those thousands of flights, which I can talk about later on – and I'll get to this in a moment – like in an F9F-8 Cougar and I might be in the middle of a thunderstorm, where ground radar with a flight center had said they would keep me clear of heavy buildups. They would always say, "We'll keep you clear of the thunder bumpers," then I would frequently find myself in the middle of a thunderstorm. It would get pretty sporty in there bouncing all over the place.

Dr. Allison: Can you describe the navigation you might use in those days, you were using mainly ADF [automatic direction finder] at this time?

General Fitch: In the F4U aboard the carrier we didn't have ADF. As I recall one of our 24 Corsairs had an ADF, and usually the skipper flew that one. Flying from both the aircraft carriers *Wright* and the *Tarawa*, we had a very crude system of navigation that was strictly World War II vintage. It was like flying in separate quadrants of a pie, where there were different Morse code signals in the different quadrants. When we got to the AD-4B in VMA-324, we had ADF, and that was all we had up until about 1959 when TACAN came in. Back when I was flying the F4U aboard the carriers, it was an interesting process of figuring out where the carrier would be when you returned. Fortunately at that stage of flying I was a second lieutenant and strictly a wingman, so it usually fell to the flight leader to get us back to the ship. Sometimes in the 1952 to 1954 timeframe, it was an interesting event to find the carrier. That was especially true since on the *Tarawa* we usually flew a three hour flight, and we usually got back to the carrier with about 50 gallons of fuel.

Dr. Allison: So experience is the key to safety.

General Fitch: Yes. You'd get into some situations and the important part was that when you got into an awkward situation, you would be able to get out of the situation in a graceful manner. The more experience that you had, the more likely you were to get out of an awkward situation. With a high experience level you probably would have seen that situation before. It was also true that with more experience, you were less likely to get into an awkward situations.

Dr. Allison: Anymore on the TACC?

General Fitch: Being the TACC operations officer was a great job to have for flying. I'm sure I took a handbook exam for every aircraft that I flew in those days, but in those days it was mostly an open book exam that you took. When NATOPS came along it tightened up that process.

Dr. Allison: Yes, and it wasn't NATOPS yet.

General Fitch: No, there wasn't anything even thought of like NATOPS at that point in time. But it was a great experience in those mid-fifties at El Toro. We probably had exercises every four or five months where the TACC and other air control units would deploy to the field, usually Camp Pendleton or 29 Palms, and then you would function as a true tactical air command center.

Dr. Allison: How much was the TACC really used to command aviation tactically at that time?

General Fitch: At MCAS El Toro the wing commanding general never spent any time in the TACC. In later years the wing CG would spend quite a bit of time in his TACC, since it was exactly that, a command center. When I was a lieutenant colonel and fresh caught full colonel, General Tom Miller went to his TACC every morning, regardless of whether it was deployed. As the CG he wanted to know the status of all of his aircraft and also the status of his air control systems. But in the 1956 to 1957 timeframe when I worked at the TACC, I can never recall seeing a general in the bubble. He should have been there but he never came by to see what was happening in the TACC. The same can be said for the air group commanders in 1956-57, I never saw them in the TACC. In later years, some of the general officers would take an increasing interest in the TACC, but in the mid 1950s, they weren't very interested.

Dr. Allison: It sounds like from your description that it worked then like it does now, as far as handling aircraft.

General Fitch: Yes, it's exactly the same, where you would hand them off to either the DASC or the tactical air operations center [TAOC]. As mentioned, the TAOC had the ground radars and the fighter direction capability. Strike aircraft normally go to the direct air support center, the DASC, and air defense aircraft are handed off to the TAOC. As I said earlier, the DASC in turn hands aircraft off to forward air controllers and the TAOC uses their ground radars for vectoring fighters for intercepts in the fighter world.

It's exactly the same today as it was 50 years ago, except today the equipment is much better and the fighter attack aircraft are much better. We didn't always have a DASC at that point in time, and especially if we weren't playing the air-to-ground support role. Sometimes we had a DASC operating with us and sometimes we didn't. We always had a tactical air operations center doing the radar control, vectoring aircraft and providing tracking for flights.

Dr. Allison: Which would be the air-to-air stuff, right?

General Fitch: Well it could be that or they could be on a navigation flight and they just follow them to the limits of the radar. But again, radars weren't that great in the 1950s, because the world is round and if you were very low they'd lose you on radar very quickly once you got beyond the radar horizon. Ground radar horizons come into play at about 17 miles from the radar. The real challenge for a radar site is to pick up low flying aircraft at a hundred feet off the deck and a hundred miles away.

That is one of the many reasons why cruise missiles are so effective. Often when air defenses detect a cruise missile, the missile is only two minutes from its target. The TAOC will usually try to locate itself on high ground so that it can see further out and detect low flying targets. In more recent years we have deployed gap filler radars at a considerable distance from the TAOC itself, to extend the low level radar coverage. Of course in combat, you have to defend those gap filler radars, or the enemy will take them out. In the 21st century we also have the option of using satellite tracking of aircraft, friendly and hostile. Satellite tracking needs to be expanded.

Dr. Allison: Getting to TPS, how did that get initiated?

General Fitch: I don't remember exactly. It is unlikely that I gave it any thought prior to about the fall of 1954 when I was finishing up the photo reconnaissance school. As you know I had been deployed on aircraft carriers since I was a brand new second lieutenant in the summer of 1952 through the summer of 1954 when I got back from the Korean deployment on *Saipan*. It could have happened in the fall of 1954 when I was briefly at Quantico and was promoted to captain, or it could have been when I first got to El Toro around September 1955. In fact, prior to getting to El Toro, I probably didn't know that there was a Test Pilot School.

Fact of life is that young captains are looking for better career opportunities. I am sure that I thought that attending the Test Pilot School at Patuxent River was a good way to separate you from the crowd. There was, I'm sure, the aspect of getting into developmental test flying, the chance to fly new aircraft, and possibly the glamour that would go with being a test pilot. That for me would be a whole new world in flying. Looking back on the TPS, I am sure that I had no idea that going through the school would be the hardest that I would ever have to work in my military career.

Dr. Allison: Did you run into somebody that might have been a test pilot . . .

General Fitch: I may have. Lieutenant Colonel Marion Carl was in the wing safety office at El Toro when I was in the TACC. He was working with Smoke Spanjer and I met him a time or two. But Marion Carl didn't talk much. We probably never exchanged more than saying hello. I don't remember the details but it seemed like a good idea. And of course we'll get to that in a minute. But again, I was trying to build up experience, with the firm idea of going to TPS. El Toro was a great place to build up flying experience, with the fine stable of aircraft that I had access to. It was very easy to get on a flight schedule at El Toro in the mid-fifties.

.Dr. Allison: How much flight time did you have on getting to TPS?

General Fitch: I think shortly after I'd arrived at Test Pilot School in the summer of 1957, I had nearly 2,000 hours of flight time, of which about 500 hours were in jets. In my case that 500 hours or so in jets was not bad, when you consider that when I got back to the states in the summer of '54 from the around-the-world cruise in the on *Saipan*. So in those three years I racked up over 300 hours each year, which was pretty good. Some fifty years later, young pilots don't get to do that much flying.

Dr. Allison: No, they'd be lucky to get a hundred hours here now. Do you have any final comments on the TACC?

General Fitch: I think, pretty well takes care of the TACC. For a captain, it was a great tour where I learned quite a bit about air control, it was a golden opportunity to fly, aviation fuel was cheap, and there were many airplanes available to fly.

Dr. Allison: When did you find out you had been selected?

General Fitch: By about March 1957 I had learned that I had been selected to go to Patuxent River in August that year for Test Pilot training. I would be in Class 19 at the Naval Air Test Center. With that news I was more motivated than ever to fly as much as possible before August.

I talked with Major Jones and told him that I thought I should go through fighter refresher, since I had never had any formal training in jet fighter tactics. They had a fighter training squadron at El Toro, VMFT-10, and that training squadron was nearly across the street from my TACC office. Red told me, "That would be a good thing to do." VMFT-10 had the F9F-6 and the F9F-8 Cougars, both swept wing. The F9F-6 was essentially an F9F-5 with swept wings. Not the greatest airplanes in the world but at that point in time both the F9F-6 and F9F-8 were pretty good airplanes.

The Commanding Officer of VMFT-10 was LtCol Ed Hartsok and the Executive Officer was Major Ralph Mawyer. Of course at VMFT-10 they had their syllabus for fighter refresher so you went through that and you might be flying an F9F-6 one day and an F9F-8 the next day. But because I was on temporary duty away from the TACC, then I would just drop by the TACC office to see how things were going and to talk with Major Jones and the officers in the TAC Center. I probably wouldn't spend an hour a day there because I was TAD to fighter tactics refresher training. But I didn't break my relationship with MARS-37. So when I wasn't flying an airplane as part of the syllabus at VFMT-10, I would touch base with the TACC and Major Jones, then I would go to MARS-37 and say, "What do you have around that I can fly?"

I looked that up, and in April 1957 while on temporary duty to VMFT-10, I flew 60 hours total with the fighter tactics refresher squadron and MARS-37, with most of those flights in the F9F-6, F9F-8, F9F-5 and the FJ-4. In May, I flew 72 hours, with most of those flights again in the F9F-8, F9F-6, F9F-5 and the FJ-4, with a few flights in the AD-6 and the SNB-5 Beechcraft. In June and July I racked up 68 total hours of flight time and it included flights in the AD-5 and AD-6, TV-2, T-28, SNB-5, and R4D-8, plus the FJ-4 and F9F-5.

So after I knew in March that I was going to TPS in August, in those four months of April through July, before leaving El Toro, I flew 200 hour in eleven different models of aircraft. I even managed to do a flight in an Air Force T-33A at Castle Air Force Base. The T-33A was very similar to a Marine TV-2 which I was flying in MARS-37.

By the last week in July 1957 my wife and I had sold our home in Santa Ana, shipped what little furniture we had, and we left the El Toro area and headed for the Naval Air Test Center at Patuxent River, Maryland. By the first week of August we were living in a modest apartment on the base and I had checked into TPS. That month I flew eight different models of aircraft in TPS, and they were all syllabus test flights.

Dr. Allison: You really enjoyed flying.

General Fitch: Well I only enjoyed it for 34 years [chuckle]. I always thought that it was nice that the Marine Corps also paid you to fly their airplanes. Moving forward to 1984 when I retired, I flew my last two flights the day before my retirement parade. Those two flights happened to be in a helicopter. The day before my retirement ceremony; I flew a UH-1N from the Pentagon helo pad to Patuxent River where I was supposed to fly a F-18. The F-18 that I was to fly was down, so after waiting around a couple of hours, I flew the Huey back to the helicopter pad at the Pentagon, and that was the last flight of my career.

Dr. Allison: Did you have any desire to fly helicopters at that time? I mean they were around.

General Fitch: It depends on what time period you are talking about. When I retired in 1984 I had been flying helicopters for about eleven years, starting when I became CO of 32 MEU, and I had about 600 or more hours in helicopters. At the time I retired I had well over 6,000 hours in fixed wing. Looking at my log books shows that, between 1973 and 1984 I flew the UH-1E, CH-46D, UH-1N, AH-1J, CH-46F, CH-53D, CH-53E, XV-15, NCH-53A, H-506D, UH-60A, XH-59A, CH-47D, AH-1T, UH-1H, YAH-64, TH-1L, Bell 206L, Bell 222, Bell 412, SH-3D and the SH-60B. As I mentioned earlier, my last two hops in the Marine Corps, I flew the UH-1N down to NATC [Naval Air Test Center] Patuxent River and back to the Pentagon pad. During those same years I flew a host of fixed wing aircraft, like the F-4, A-6, A-4, OV-10, and numerous others like the F-15 and F-16.

If you go back to before 1973, then helicopters were never a factor in my assignments by the Marine Corps. When I was being the CO of 225, 533 and MAG-14, and flying the A-6 Intruder and other strike aircraft, I never had a desire to say that I will get out of fixed wing because I want to switch to flying helicopters. I never did that. During the 50s, 60s, and early 1970s, up to 1973, helicopters were never mentioned to me in that time period. It is fair to say that my first 20 years as a Marine aviator found me pretty busy in fighter and attack squadrons, plus test pilot training, my tour in VX-5, and then in VMA-311, 225, 533, and MAG-14. After 311 and my 13 months in Japan, there was the need for me to do staff duty which turned out to be in Washington from 1962 to 1965. I was in Command and Staff College at Quantico for about nine months, and by then the war in Vietnam was going strong.

The Marine Corps sent me to Cherry Point and the second wing where as a major I had command of an A-6A squadron, 225, then it was Viet Nam from the summer of '67 to summer 1968, with command of another A-6 squadron, 533, and some interesting combat flying in Vietnam. Then it was back to Washington in the summer of 1968 for more staff duty at HQMC. I believe that I mentioned somewhere that I did five tours of duty in Washington, and served in Washington in every rank from captain through three stars.

I didn't have any desire or opportunity to fly helicopters until I was a colonel. At that point in time I'd had already had my air group for about 18 months, which was MAG-14 at Cherry Point, and then General George Axtell and General Tom Miller had me take over command of the 32d Marine Amphibious Unit at Camp Lejeune. In 32d MAU (or MEU) my composite helicopter squadron had four kinds of helicopters; CH 53Ds, CH-46Fs, the AH-1J Cobra and the UH-1N Huey. During my tour as CO of 32d MAU I would fly them all, many times. I would note that my CO for the composite squadron, Jim Harrison, flew only the CH-46.

Dr. Allison: Was there a sense that helicopters were maybe not good for your career?

General Fitch: No, not at all, because helicopters had gained their momentum during the Korean War. When I went through flight school, helicopters were never mentioned by anyone in the training command, because in 1950 and 1951, helicopters were in their infancy. The use and concept of operations for helicopters had been refined during the mid to late 1950s and the 60s with heavy use in Vietnam. To me, a helicopter was just another airplane. My friend Ed Reed that I mentioned back in VMCJ-3, he had gone into helicopters during the 1960s. Ed Reed was a tremendous leader of Marines, and in Vietnam he was commanding officer of MAG-36. Ed Reed was CO of MAG-36 at Marble Mountain. My young brother, Blaine, showed up in Vietnam to fly Huey gunships, and we were both in country for a few months before I finished my tour at Chu Lai.

If you look around the senior officers in the Marine Corps today, you find that in aviation, many of them are helicopter pilots. General Bob Magnus is a CH-46 pilot. Lieutenant General John Castellaw is a 46 pilot. Lieutenant General George Trautman is a Cobra pilot. If you look at the MV-22 Osprey, it is a combination of a fixed wing aircraft and a helicopter, and except for takeoff and landing, it flies like a fixed wing aircraft.

It was the kind of thing that you went into helicopters if the Marine Corps said that it needed you there. Most of the assignment moves to helicopters occurred in the mid 1950s. General Keith McCutcheon, as a colonel, was a great leader in bringing helicopters and their tactics into the main stream of Marine Aviation. Many superb Marine pilots went on to tremendously successful careers flying helicopters. I just mentioned a couple of generals. Ed Reed who I mentioned as the XO of VMJ-3 in 1955, was one of the great ones. Another was O. W. Curtis who was operations officer, the S-3, in VMA-324 when I was in it aboard Saipan. Curt commanded the first helicopter squadron in Vietnam, which was in 1964. I believe that they called those helo operations, "Shu Fly." Then I mentioned that in 324 Curt was one of the absolutely best pilots I ever knew. In my personal case it was happenstance that I did not fly a helicopter until I was a colonel. Remember that I went from being the CO of MAG-14 to being the CO of 32d MEU. When you add up all the fixed wing aircraft and rotary wing aircraft that I have flown (121), I doubt that there are many Marine aviators that can exceed the numbers of models that I have flown.

Dr. Allison: Getting back to flying in the 1950s, do you recall anything about the aviation safety program starting around that time? It supposedly started in '54.

General Fitch: I'm sure that we had a safety office in VMF-114 in 1952-53 and also VMA-324 in 1953-54, but I don't recall who they were. Starting sometime in the mid-1950s we had safety officers in every squadron and they went to Monterey for the safety school, but we still had an awful lot of accidents. And I think I mentioned, I recall seeing the number of 2,400 major accidents in naval aviation in 1954. As for myself, I never was a safety officer and never had a desire to be one.

It was not uncommon for a squadron to have four, five or six major accidents a year, like in the first couple of squadrons I was in, there were four or five pilots, maybe six or seven total, that managed to get themselves killed in the years of 1952 to1954. Then there would be other accidents where they didn't get killed but they'd wipe out the airplane. But they came a long way in the 50s and I would say things started to get much better early in the 1960s.

Dr. Allison: You mean an organized program developed.

General Fitch: Yes, NATOPS came into being, there was emphasis on standardization, the T&R manuals became much better, and command responsibility was emphasized more and more. About 1960 everybody had a sense of direction in safe flying and were given much more supervision in both their model and type aircraft. We all had the same sense of direction so it was a very good thing to have happen and of course our lower accident rates today show the result of all those efforts. Those efforts got their start 40 to 45 years ago. The structure really started about the time that JFK became president, although that reference to JFK had nothing to do with it. Airplanes were becoming much more expensive, and that was a factor.

It was kind of an individual thing. And again, we had a lot of people who drew flight pay that didn't care that much about flying. In fact, back to 1961 and the 311 period in Japan and aboard the carriers, there was a guy that was finally accused – I don't know what happened to him – of doing what we called Parker-51 flight time -- where he would just make his own entries in his logbook and they were fabricated. He was not a junior officer. I heard about that one after the squadron he was in returned to the states.

Dr. Allison: That is kind of illegal, Parker-51 [chuckle].

General Fitch: Yes, as I recall he was in the squadron that we relieved. We relieved VMA-223 on the *Coral Sea*. Some of the people that I knew in 223, this guy was a major and they talked about his Parker-51 flight time. And another thing he would do – again I was told and of course he's anonymous – but he wouldn't fly off the ship. And again, this is the 1961 timeframe we're talking about. But when the carrier would go into port, if there was a naval air station nearby he'd go fly something like an R4D; a twin-engine prop, which by his doing that, doesn't create a lot of admiration for the major by the younger people in the squadron. It is my view that the CO of that squadron should have gotten rid of him, and sent him to another job ashore—along with a fitness report that would guarantee he would never be promoted.

Dr. Allison: Right, and that's something I'm interested in, leadership in aviation.

General Fitch: I'll give you a point, which a lot of people don't believe is true but it is. In my entire Marine Corps career I gave one order; one order that I can think of in my entire career in the Marine Corps and that was when I was at Chu Lai, about 50 miles south of Da Nang. I became the executive officer of MAG-12 towards the end of my tour in the group, and I was a lieutenant colonel. We had a major who shall go unnamed but he was on the MAG-12 staff and he seldom, if ever, flew a combat mission in the A-4, or anything else. Anytime that there was an investigation to be done, he would manage to get himself appointed to do the investigation, and that investigation would usually take him up to Iwakuni or Okinawa or perhaps Tokyo, and he'd be gone for weeks at a time. This major was the joke of the group. In the O Club in the evening the pilots would sing out, "Oh where is "Major Blank?"

When I became the executive officer of the group I called in that major along with a lieutenant colonel who was CO of an A-4 squadron. I ordered him to fly two combat missions every day, and I told the CO of VMA-311 to schedule him to do that. The reluctant major started flying combat that day.

The people I admired in Vietnam were those senior Marine aviators that were up at the Wing headquarters in Da Nang, who would be colonels, and they would try to get down to Chu Lai maybe two or three times a month to fly combat missions. And so those kind of Marine pilots, you talk about leadership, those people had your admiration because up at Da Nang they could have gone out in an R4D or whatever and gotten their four hours a month. But for a limited numbers of senior officers in the wing staff, those pilots would seek out opportunities to fly combat, they would come down to Chu Lai, they'd go out in an A-4 and fly combat, they would get shot at, and they never hesitated to fly the more difficult missions. You admired those kind of people.

115

It should be pretty clear, that my view is, when there's a war going on, the aviators up through colonel should be flying combat. The brigadiers, major generals, or whatever, should fly some combat missions. Of course you don't want generals getting shot down, so you clearly would not have them fly the more difficult missions with the high threats. To that end, when Major General Robertshaw was CG of 1st MAW in Vietnam, he flew some combat missions. Major General Royal Moore during the first Iraq war, Desert Storm, when he had 3d MAW at the time, the largest Marine aircraft wing in history, Royal Moore flew combat missions in several models of aircraft in his wing, to include the EA-6B and the CH-46. I think he might also have flown the F/A-18 in combat. You admire that kind of leadership. But we are now about ten years ahead of schedule, and need to get back on track.

Dr. Allison: Yes. So, you get to Test Pilot School, what was the set up there?

General Fitch: I had been told about March '57 that I had been selected to start the school at Patuxent River in August 1957. My class had about 18 to 20 students in it, mostly Navy lieutenants and a few lieutenant commanders, with a few students doing just the academic course and no test flying. Those few doing just academics were normally aircraft company engineers. There were two other Marines in my class, Major Donald Segner and Captain Pete Paraskos. Now I think it's worthwhile to present a whole picture of TPS.

Dr. Allison: Sure.

General Fitch: First when I put in for the school, I thought Test Pilot School would be nothing but test flying and writing flight test reports, with some academics on how you should fly the flights. I thought that you'd fly test hops, write the reports of each flight, and they'd teach you how to do that. My oversight was that I didn't know that they had a half day academic program, every morning of the week, that went on for about six months. That academic program was a short course in aeronautical engineering, and as it turned out, most of my Navy classmates were graduates of the Post Graduate School at Monterey. Most of them had master's degrees in aero engineering. My impression of what Test Pilot School would be, up to the first day of the school, was that it was nothing but flying test hops and writing test reports, and minimal academics. The first day of school I would find it was a much different program than I thought. There was half a day of academics as mentioned, and then there was half a day of flying the syllabus of test hops, and writing the flight test reports. So in a sense I was half right on what I though TPS would be.

Fortunately I was pretty good at the test flying portion and writing the flight test reports, which was half your grade at TPS.

For the academic portion, Pete Paraskos was very instrumental in getting me through the first three weeks of the school, when we reviewed the college algebra, calculus and physics. At the University of Florida I had never taken college algebra, calculus and physics. Pete also happened to be my next door neighbor at Pax River. He was my tutor for the first three weeks of the school. Later another member of our class would become the tutor, Tom Moore, who was a former Marine aviator and would do both the flying and the academics at the school.

After graduation, Tom went on the TPS faculty and taught at the school for many years. Tom could explain complex subjects in simple terms. He was a great help in getting many of us through TPS, including some who had degrees from the PG School. John Tierney also went on the TPS faculty after graduation. Both Don Segner and Pete Paraskos were great guys and fine aviators. And Pete had, as I recall, studied aero-engineering. Pete had a superb mathematics background. Academically, Don Segner was kind of in the same position I was, where in college he had not studied mathematics or physics. It is probable that at the end of that first three weeks, Don and I along with Po Harwell were at the bottom of the class. None of us had the math or physics background. I should add that Don Segner became a premier test pilot in the Flight Test Division at Patuxent River, heading up the testing of rotary wing aircraft, and he wrote much of the rotary wing testing procedures that were used back in the 1960s and beyond. Don left the Marine Corps after his Patuxent River tour, and became an industry test pilot at Lockheed for the rigid rotor helicopter. After his tour at the NATC Patuxent River, Po Harwell had a great career with Rockwell.

Dr. Allison: So your academic background was not math heavy?

General Fitch: My rapid progression through the University of Florida explains it. I went through the University of Florida in 32 months from start to finish, with the start in September 1947 and graduation in June 1950. I studied agriculture because my family was in the citrus business, and I intended to go into the citrus business after college. It was peacetime and WWII had ended in 1945. My graduation day was June 5, 1950 with a BS in Agriculture. The war in Korea broke out June 25, 1950, just three weeks after my college graduation. I was 20 years old, they still had the draft, so I promptly enlisted for four years active duty starting as a NavCad, and went to flight school at Pensacola. I retired from the Marine Corps 34 years later.

Dr. Allison: Who was in charge of TPS?

General Fitch: Commander Butch Satterfield, was the director of the school, and a nice guy. Butch had never been through TPS but he was an excellent director for the school. Commander Tiny Graning was his assistant director at TPS, and he had gone through TPS in Class 5. That first day of school, Butch stood up and said, "In the next three weeks we will review college algebra, calculus and physics." That was an attention getter. After Butch said that, I turned to the Navy lieutenant seated next me, his name was Jim Gammill, and I said, "That's great. I've never had any of those courses in college." [Laughter] Jim a few years later was the director of TPS. He was killed in a glider accident during an air show, at Patuxent River. There was a lieutenant commander who didn't have anymore engineering or mathematics background then Don Segner and I did. His name was Po Harwell. Po struggled through the academic portion as I did, and as Don Segner did. Po Harwell as with Don Segner went on to do some real good things in flight testing Earlier I mentioned one other member of the class who was a former Marine, an aviator, Tom Moore. Tom had been at the University of Mississippi doing graduate work when he was selected as a civilian to come to the TPS. Tom Moore went through everything that we did; flying, academics, the whole works, so he would have been the fourth Marine there. Tom did not have to work hard at all, and he breezed through both the academics and the flight testing. Tom came out number two in the class at the end of the school, and he could easily have been number 1 if he had worked at it. The school only ranked the number one and two graduates. He had done a lot of post-graduate work at the University of Mississippi and had done some teaching there. Had Tom exerted himself even the slightest bit more, he would have been the distinguished class graduate – number one in the class. He spent many a night at the school, explaining what it was that the instructors had tried to get across during the morning. He was also a whiz at writing the flight test reports, which meant that he also was a whiz at flying the test flights.

Dr. Allison: Who was top man in the class?

General Fitch: The number one man in the class was Lieutenant Commander John Tierney, and John was recognized as such when we graduated. In my case, I breathed a sigh of relief when I graduated. That six months at TPS was the hardest that I had ever worked up to that point in time, and in retrospect it would be the hardest work I did during my entire military career.

Dr. Allison: Tierney, I've heard the name somewhere.

General Fitch: John was a graduate of the PG [post graduate] school at Monterey, and he had written his Master's thesis on stability and control. As turned out, stability and control was half the academic portion of the school, so it was no surprise that John wound up number 1 in the class. John Tierney, became an instructor in the TPS after graduation, and many years later he retired from the Navy as a rear admiral. As far as I know, John and I were the only ones in the class to make flag rank.

Dr. Allison: How was grading done, academics a big part?

General Fitch: It was an overall grade that included the flight test portion of the school. It is an overall grade for both flying, writing and academics. Most of us were not concerned with it. Flying and writing the test reports was half the grade for the school. It is relevant that at that time, and I assume later, they don't do any rankings beyond the number 1 and 2 students in the class. As I mentioned, John Tierney had a master's degree in Aeronautical Engineering, and he had written his thesis on stability and control. Half the school year academics was on stability and control. There should be a message there.

Dr. Allison: But you did ok, I guess the flying part helped you.

Dr. Allison: Fortunately, only half the school was based on academics. The other half, thank God, was based on flying test flights and writing flight test reports. I am sure that was a key factor in my case. It is germane that when I got to VX-5, about a month after finishing TPS, there was nothing in the TPS academic curriculum that was useful to me when doing test work in VX-5. On the other hand, the flying of TPS test flights and the writing of TPS flight test reports was of exceptional value to me.

Dr. Allison: What was the significance of TPS for you professionally and personally?

General Fitch: In the overall sense, my attendance at TPS and completing the school was a very key factor in my career. Had I not gone through the TPS, my career would have been much different. It is fair to say that TPS set the tone for all of my Marine Corps career after 1957. It is also fair to say that my invention of the multiple bomb rack also set the tone for the rest of my career.

Dr. Allison: The flight test reports were graded, how many of them were there?

General Fitch: I don't remember how many of those flight tests and reports that we had to do. Somewhere in our basement is a box that has those reports stored away, even though they are 50 years old. In my case, just about without exception, I'd get an A on my flight test reports and that was the equalizer for me in the school. Some of my classmates in the school, those with extensive education in aero engineering, often had difficulty flying the test flights as they should be flown, and they often lacked in their ability to write the flight test reports. Of course, that was no problem for either Tierney or Moore.

Dr. Allison: Tom Moore, the Marine, was very helpful you said.

General Fitch: As I mentioned at the start, Commander Satterfield got up the first day, where twothirds of the class has been to PG School at Monterey and he says, "In the next three weeks we will review college algebra, calculus and physics." Throughout the six months of the school, there would be numerous times when it would be like 9 o'clock at night and half a dozen of us would be down at the school, and Tom Moore would be going through the academics of that morning, explaining some of the complex topics that had been presented that morning. It was not uncommon for Tom Moore to say, "Hey, I've got a flight test report I've got to write." He would stop- his tutoring, and go over and write the report in an hour or so, whether it was performance testing or stability and control, whatever it might be. Tom would probably put in an hour or two on a test report, hand written, where I might put in five, six or more hours writing essentially the same thing, on a typewriter, and he'd get an A on everything. I usually got an A on my flight test reports, but I had to work much harder at it than Tom. It was with just the minimal level of effort on his part because he was an extremely sharp individual.

Dr. Allison: Can you describe the routine?

General Fitch: Yes. The school was a great school. And it was very hard work. The norm for me was, up by 6 o'clock every morning, including weekends, where I would be studying for the academics we were going to do, and I would study until midnight, seven days a week. And the only time there was ever any letup was on Friday afternoon about 1630 or 1700, when it was mandatory that we went to Happy Hour.

Dr. Allison: That was mandatory?

General Fitch: Yes, otherwise we'd have probably gone nuts if we hadn't done that.

Dr. Allison: What happened to Segner and Paraskos, the other Marines?

General Fitch: Don Segner and Pete Paraskos left the Marine Corps when they completed their tours at the test center. After about three years at the Naval Air Test Center, Lockheed hired Don Segner and he became one of the best rotary wing test pilots in the world. He later became head of the Society of Experimental Test Pilots, which is normally referred to as, SETP; he used to give lectures on rotary wing testing. So the true measure in the test pilot world was not the school per say. That was kind of a launching point. In the case of Pete Paraskos, he became president of several companies in the defense business. In my case I was the only member of the class to have a U.S. Patent, and I was the only one to reach three stars.

Dr. Allison: So TPS was significant in your work at VX-5.

General Fitch: Had I not completed TPS, then I wouldn't have gone to VX-5, I wouldn't have done the multiple bomb rack, would not have received the patent, and my career would have been very different. I'm sure a multiple bomb rack would have come along at some point in time but it wouldn't have come along at the time that it did, and in time for Vietnam.

Dr. Allison: That's a very significant invention, considering the nature of the Vietnam War and the part tactical bombing played.

General Fitch: Yes. The multiple bomb rack after the design was cleaned up by the Douglas Aircraft Company, went into production in early 1960. The bomb rack was used on just about every airplane that dropped bombs in Vietnam, and for about 35 years after I left VX-5. All the Marine attack aircraft used it, the same for the Navy, and the Air Force. In any regard it was a great experience going through TPS, but I would never want to repeat it.

Dr. Allison: I noticed you've got an outstanding FitRep [fitness report] coming out of there despite, as it noted, you were behind academically or whatever.

General Fitch: Oh yes, and like I said, fortunately academics was only half the entire school. I think that Butch Satterfield had a practical perspective on the school, since a lot of the engineering type instruction would be applicable only in the school itself. In the branches of the test center, that engineering work would be done be engineers at the branches. The test pilots would be busy flying the test flights and writing the reports, and the engineers would work from the reports.

Dr. Allison: And did it say something about not having enough flight time or something like that?

General Fitch: No. I had plenty of flight time. I had over 1,900 hours when I started Test Pilot School, when I had set a goal of 2,000 hours for when I would get to the Naval Air Test Center. When I left VX-5 three years after I started TPS, I had nearly 3,000 hours. I don't recall ever seeing a flight hour requirement for going to TPS, but there probably was a minimum. It is relevant that we had some multiengine aviators in the class, like P2V pilots, and they had to learn how to fly jets in a hurry. I would clearly attribute my ease in flying different models of aircraft to my having done so at El Toro. But no flight time limits were ever talked about.

Dr. Allison: What type of aircraft were they flying at TPS?

General Fitch: TPS in 1957-58 had eleven (11) different aircraft on their flight line. My notes say they were the: AD-4, F9F-6, FJ-3, T-28B AD-5, TV-2, SNB-5, T2V-1, S2F-1, UF-1, and the F4D-1. I had flown all of them before, except for the S2F-1, the UF-1 and the F4D-1. That was an advantage for me since I had a lot of experience with all but those three aircraft. For the school, it didn't make a difference what you had flown. You were going to fly all the airplanes at the TPS. The check out procedure for your flying a new airplane, would be very casual. It was up to you to read the handbook for the airplane, as much as you thought you needed, and to know the emergency procedures, how to get it in the air, how to fly the test flight for that day, and how to get the airplane safely back on the deck.

My preparation for my first test flight in the F4D-1 was an example. The night before my first flight test in the F4D-1, I had finished studying for the academics, at about 2200, and then I read the F4D handbook for about an hour, where I reviewed the start procedures and emergency procedures. The next afternoon I got a classmate who had flown the F4D to show me how to preflight the aircraft, which took about five minutes, and then I strapped in, started the engine, taxied out and took off for the test flight that lasted about an hour and a half. The test flight was for

high mach maneuvering stability. The F4D was an afterburner aircraft, and those P2V pilots were going to be flying it.

There were some equalizers in the school. So it was, like I said, the thing balanced out in the end. If I had to make a guess, and it would be strictly a guess, I would guess I probably wound up somewhere in the middle of the class as far as the overall school was concerned. That's just a guess.

Dr. Allison: You were in Class 19, I believe?

General Fitch: It was Class 19. How you stood in the class did not have a lot to do with how you would perform in test flying. I don't believe that John Tierney ever went to a test branch such as Fight Test or Service Test. I believe John was an instructor at TPS for three years after he graduated. Tom Moore was an instructor at TPS for 20 years after he graduated. It was class 19 at Test Pilot School. Now they're up to something, I don't know, 125 or so. They went past Class 85 while I was still on active duty in 1984 and I believe that they still do two classes a year. After I finished TPS, perhaps a few years later, they lengthened the school to nine months instead of six.

A bit of irony, when I was an active duty lieutenant general, when I was head of Marine Aviation, the Test Pilot School invited me down to speak at the graduation of Class 85. That was kind of interesting to go back and talk at their graduation after my having to work so hard some 27 years earlier to get through the academics of their school. But going through TPS was a great experience, and as I say it was a pivotal point in my career in the Marines.

Dr. Allison: Can you describe what you were testing, and some of the basic workings, duties and activities as a test pilot at TPS?

General Fitch: Well all the airplanes in the school were old airplanes. The test divisions had the newer aircraft and they also had old aircraft. Had I stayed on at the Test Center instead of going to VX-5 at China Lake, I would have been flying aircraft such as the F-8 Crusader, the A-4D Skyhawk, the FJ-4 Fury, later the F4H-1 Phantom II. As it would turn out, I did fly the F-8 Crusader, the A-4D, the FJ-4, and the F4H-1. I flew the Skyhawk and Fury at VX-5 and when I was on staff duty as a major in SecNav, I flew the Crusader and Phantom II. In fact I nearly stayed on at Patuxent River to be in the Flight Test Division. The reason for that was that a Marine aviator, Tim Keen, was killed in an F-8U a few weeks before my TPS graduation. The Marine

Corps decided that I would go to VX-5 as planned since there was more work to be done at VX-5 than there was at Patuxent River.

It is worth mentioning that the Naval Air Test Center does not do experimental flight testing as such. That is done at the aircraft contractors by company test pilots. The Test Center at Patuxent River does developmental flight testing, which is normally referred to as DT. The norm is that the company test pilots do various testing first, then the Patuxent River test pilots do similar testing. Fifty years ago new aircraft frequently came to the Naval Air Test Center. In the latter part of the 20th century and the early years of the 21st century, new aircraft do not come along frequently. The F/A-18E and F/A-18F Super Hornets would probably be the most recent aircraft to go through DT at Patuxent River. Those two aircraft have been in the fleet for about six or seven years, perhaps longer.

The Marines do not use the F/A-18E/F. The Marines are moving toward the all-STOVL force with the F-35B Lightening II, and skipping the generation that is the F/A-18E/F. The next aircraft that will be new to the Naval Air Test Center at Patuxent River will be the F-35B Lightning. The F-35 B, which is the Marine variant of the Joint Strike Fighter, won't start development test--DT until about May 2008. Lockheed test pilots will be flying the F-35B in 2008. Aircraft stay at the test center for many years, since there are constant changes to aircraft during an aircraft's operational life, and those changes have to be evaluated in flight test. Aircraft such as the F-35B will probably have a life of 30 years or more, and for 30 years or more, from time to time, there will be F-35 aircraft at the Naval Air Test Center.

Also at the test divisions such as Flight Test, Service Test and Ordnance Test, they were flying old airplanes. They were then and they will continue to do so.

Dr. Allison: Were they more standardized and procedural than a regular squadron?

General Fitch: There was no structured process. To go fly an airplane you just took the handbook, you read what you wanted to read and then you went out and got in the airplane, and if you were lucky to get somebody that had flown it before to show you a few things. Like I flew the F11 one day at Flight Test, shortly before I was to leave Patuxent River for China Lake. It was the same kind of routine where you would get the handbook, you read as much of the handbook as you could, and then you would fly the aircraft. The F11F-1 was nothing but an F9 that was prettier so to speak. It also had a better engine than the old Panther and Cougar jets.

Don Engen, a lieutenant commander, was on his way to fly and I asked him if he would give me a quick checkout in pre-flighting the F11F, so in maybe 10 minutes he showed me how both to

preflight the aircraft and to start the engine. The key thing in the process was to make sure that the wingtips were up in the horizontal position instead of in the down position. And that was probably a 10-minute checkout as Don was walking towards his airplane.

But that's the way they did it in the 1957 to 1958 timeframe and of course we were very fortunate that things like NATOPS came along later on.

Dr. Allison: Do you recall specific things you were testing at this time, 1957-1958, it wasn't new aircraft was it?

General Fitch: There were some new aircraft at Patuxent River and there were some old aircraft. In fact there were some very old aircraft at Patuxent. An aircraft gets tested for various things during its entire operational life. Each division at Patuxent River had both the new and the old. You had to be down in Flight Test or in one of the other test divisions, such as Service Test, in order to fly the newer aircraft When a new airplane would come out, then there would be a team that would do most of the flight test work, say at Flight Test, and another team at Service Test would do testing such as reliability. At Ordnance Test they would test the weapons systems. They had testing events like Navy Preliminary Evaluations (NPE). Back in those days, they would have a NPE team go out to the contractor or possibly to Edwards Air Force Base, and do high tempo testing for a short period of time. Thus the term, "preliminary evaluation." The preliminary evaluations were kind of the quick look testing. By the time that a new airplane got to Pax River, the company test pilots had been flying it for quite a while and there probably had been two or three NPEs on the aircraft.

But the hot shot test pilot with the white scarf blowing in the breeze is only in the movies. If you wanted to be an experimental test pilot, then you had to be a contractor's test pilot, such as at Lockheed, General Dynamics, or McDonnell Douglas. The contractor test pilots do every test point the aircraft is capable of before the government pilots at Patuxent River ever get to do the same thing. For example spinning an aircraft. The company test pilots do every kind of spin there is, and document the spin recovery procedures, before the Naval Air Test Center gets to do those spins. But then there were things like; George Watkins was a lieutenant commander at Flight Test and I remember in early 1958 when he flew a souped-up version of the F11 to an altitude record. The Douglas test pilots had made sure that the F11 with a souped-up engine was capable of doing that altitude record, before Watkins was allowed to do it. In October 1957, Major John Glenn flew a F8U-1P, the photo version, to a speed record of three hours 23 minutes for coast-to-coast flight.

He had taken off from Los Alamos and flown to Floyd Bennett Field in New York City. Again, the Vought Company test pilots made sure that the F8U could do the record, before Glenn flew it.

Dr. Allison: With your own invention the bomb racks, who tested them?

General Fitch: One of the exceptions where company test pilots never got into the testing routine first was with the multiple carriage bomb rack (MCBR). Not only did I get the patent on the MCBR, but I flew all the first test flights, 15 of them, before a company test pilot ever flew it. I flew the first 13 test flights on the original hand made MCBR, and then I flew the first two flights where high explosive bombs were dropped with the prototype production MBR, that Douglas produced. The day-to-day flying at VX-5 was developing tactics for delivery of nuclear weapons. As I have mentioned, VX-5 was nuclear weapons only in 1958.

But regarding aircraft at Patuxent River, those were aircraft that probably had been in the test division for a year or two or an aircraft may have been there for 20 years. Testing at Patuxent River could be repeating previous testing, such as testing a new spin recovery procedure. It might be testing a new component to an old aircraft engine. There were F-4 Phantom II aircraft at NATC Patuxent River up until the last F-4 squadron stood down. Ditto for the A-4 Skyhawk, and ditto for the F-8 Crusader, and on and on. Testing is a variety of things related to aircraft. Much of it is so routine that it is very boring. A lot of test flying does not require any particular skill, and a lot of it is very mundane.

In my case there were numerous times when I was on staff duty at the Pentagon, 1963-65, where I would fly test hops at Patuxent River. I used to go down to Patuxent River and fly a host of different test hops. A lot of testing is devoted to flights that are repeated again and again, to determine reliability of aircraft components. The test divisions were happy to have you come down and fly their airplanes, and especially in my case, since I was Marine aide to the Assistant Secretary of the Navy for Research and Development.

The first time I ever flew the A-6A Intruder was at Patuxent River while I was on Pentagon staff duty. The same was true for the F8U Crusader. In the case of the F8U I looked over the pilot's handbook one evening, and the next day I got a cockpit checkout and a preflight check out. Then I started the aircraft, went through the post start checks with the plane captain, taxied out, took off, and flew for an hour or so, with no one with me. With the A-6 the flight might be something as simple as a buddy-store on centerline where they'd done some modifications to the buddy-store or it might be a rain removal system blowing the water off the wind screen. In that case you had one fixture that was spraying water because you can't always find rain on the day

126

you're going to fly these things. So they'd have a container of water somewhere in the nose of the airplane and that would be feeding water up onto the windscreen and you'd have another blower trying to blow it off or a windshield wiper or whatever. Some testing was very dull. A great deal of it was not the Buck Rogers flying that you see in the movies or on television.

Remember that we are talking 50 years ago. You might be doing a take off in an airplane, say like an FJ-3, and you've got a strain gauge with a hook on it and the hook is holding onto the stick, you are measuring stick forces as you roll, and you are determining the kind of pressures on the stick during the takeoff of the airplane. And of course you had to write all that down at about the same time. With today's testing, there is a tremendous amount of instrumentation to measure the various data points for a flight. But 50 years ago a lot of it was manual. In Test Pilot School it was all part of the curriculum in the school because they would specify what they expected you to do on a given test hop and then you'd go out and fly the test hop, and get all the data. And then of course we would have some basic recorders in the airplane to record some of the information. The TPS had an edge, in that they knew what the data for that flight was supposed to be, and if you wound up close to their numbers, and your write-up was good, then you got a good grade on the flight. The testing systems and instrumentation of the 21st century is light years ahead of what it was in the late 1950s. Now with telemetry they can data link the flight data real time to an engineer. If they are set up for it, they can track your flight path with satellite based flight following. A lot has happened in the last 50 years.

Dr. Allison: And that was the whole school.

General Fitch: Well that was it for six months. Academics in the morning and test flying in the afternoon, and then there was the studying and writing at night. It pretty well filled an 18 hour day. Shortly after I graduated they changed it to a nine-month school because they had decided that the six-month school was too strenuous. So, they changed it to a nine-month school, and then they added a whole lot more into the curriculum and the flight testing which made it just as bad as the six-month school had been, but instead of six months it was now nine months.

It was about that time that Tim Keen was killed in the takeoff of an F8U. They gave thought then to keeping me at Patuxent River, and I am eternally grateful that they did not.

Dr. Allison: What happened in that case?

General Fitch: A F8U Crusader. He was doing 500 knots when he punched out, and the seat probably hit him in the head.

Dr. Allison: The F8 was a new aircraft in those days.

General Fitch: It was a relatively new airplane then. But he had taken off and he accelerated out, to about 500 knots, and he then ejected.

Dr. Allison: Did you want to go to China Lake, to VX-5?

General Fitch: I had never heard of VX-5 until a few months prior to TPS graduation I was told that I was going to VX-5.

Dr. Allison: Did you have any choice in the matter?

General Fitch: They didn't ask me if I wanted to go. I didn't know much about VX-5 when I went there. Margaret and I were pretty flexible. Whatever the Marine Corps wanted us to do, then we would do it. Like many military assignments, I found out about VX-5 after I got there. China Lake was about 120 miles north of Los Angeles, and about 150 miles from Santa Ana where our home had been while I was at El Toro.

Dr. Allison: [Chuckle]. So did you buy a place in China Lake then?

General Fitch: No, you lived in base housing. However, my friend, Major K. P. Rice built a home in Ridgecrest, which is the town outside the China Lake gate. K. P. had a great house and he threw some superb parties and dinners.

Dr. Allison: Just because you went to China Lake doesn't mean you were going to be in VX-5, right?

General Fitch: No, my orders were to VX-5. The other command there was the Naval Ordnance Test Station [NOTS]. In 1958 the NOTS was primarily involved in testing the Sidewinder missile. This is when Sidewinder was coming along at a fast pace. A neighbor of mine named Bob Howard - also a Marine captain - was flying the Sidewinder flights and he was doing that in an F-8U. This was before the F-4.

Howard was doing that Sidewinder testing in a F-8U and about half way through his tour, NOTS got the F-104. NOTS wanted the 104 to do some of the supersonic work. Bob Howard and his wife Peg have been our friends for about 50 years.

Dr. Allison: Where does VX-5 fit into overall naval aviation and what was their mission generally?

General Fitch: VX-5 was under the operational control of Commander Operational Test and Evaluation Force. OpTEvFor is the abbreviation for Operational Test and Evaluation Force. ComOpTEvFor would issue projects to VX-5 and in 1958 it was all nuclear weapons projects. VX-5 did not have a single project that was not related to nuclear weapons. All the flying in VX-5 was connected with nuclear weapons delivery whether it was low-level navigation, aerial refueling, loft bombing, or dive bombing. When I joined VX-5 we did every kind of nuclear weapons delivery that there was.

Dr. Allison: So you lived on base, can you describe that base?

General Fitch: My wife, Margaret, and I probably arrived at VX-5 about late March of 1958. We obtained base housing rather quickly, and we moved into a nice house on the base, it was a duplex, about 200 yards from the Officer's Club. Right on the base and right across the street from the Officer's Club. Our quarters were probably a quarter mile from the Navy Exchange, the movie theater and the commissary. The air field where VX-5 was located was about three or four miles to the north of our base housing. Being remote, China Lake had a hospital. Well it was my wife's and my first experience living in the desert. Not only was living in the desert a great experience, doing a tour with VX-5 was one of the best tours in my Marine Corps career.

Dr. Allison: Who was commanding VX-5 at that time?

General Fitch: VX-5 had good commanders. Captain Dick Beverage, was the VX-5 commanding officer when I first got there, and he retired out of VX-5. He was relieved by Captain Carl Van Meter. Van Meter was probably about six foot four and he would go out and fly an A-4. I don't think he could have gotten the face curtain over his helmet. He was so tall sitting in the cockpit

that his helmet nearly bumped the top of the canopy. But again, he would go fly and fortunately he never had a need to eject from an A-4. An F-4 Phantom would have been different, but again, we didn't have F-4s in VX-5 at that point in time.

Dr. Allison: Would you consider them good leaders?

General Fitch: Well I think so. Commander Dale Cox was the squadron executive officer the entire time that I was in VX-5, and he supported me in anything that I wanted to do in the weapons delivery world. Beverage was a pretty quiet guy and I don't think he ever flew any test flights. But he was a good commander and he seemed to like Marines.

Dr. Allison: What sort of assignment were you given, what type of flying?

General Fitch: I've told you that when I got to VX-5 it was all nuclear weapons delivery. I started out doing the navigation flights where we would develop cruise control profiles, usually with aerial refueling from a buddy store on another aircraft. Aerial refueling would enable you to maximize the mission radius for different configurations of the aircraft.

The four delivery aircraft in the squadron were the A4D-2 Skyhawk, the FJ-4B Fury, the AD-4 Skyraider, and the A3D heavy attack aircraft. Commander Dale Cox, executive officer of VX-5, flew the A3D. We called the A3D, "The Whale." Most of my flying the first few months was non project, and it was mostly in the AD-4B, the TV-2 and the SNB-5 Beechcraft. My first project was completing the Special Weapons Delivery Handbook for the AD-6, which is a Skyraider; a prop airplane. This was high-dive for one of the dam buster nuclear weapons that was a penetrator.

Dr. Allison: Can you describe what you mean by a project? How you approached it and what your requirements were?

General Fitch: What you had to do when you had a project like that was to write the flight test plan of what you were going to do and how long it was going to take you to do it. In VX-5 projects they had another officer, named Harry Sellers, a lieutenant commander, who did nuclear weapons effects. Harry's job was to do a careful measure of whether the delivery aircraft would survive the nuclear blast. For survivability estimates, he did this for multiple projects, including high dive, low angle loft, high angle loft, or roll ahead loft. For my AD high dive project, he would look at the dive bombing profiles because the bombing range had tracking stations to follow every aspect of weapons delivery. Our primary target range for this was called Charlie Range, and a prince of a gentleman, Duane Mack, ran the Charlie Range. This range was tracking your delivery profile every time you flew on Charlie Range, when you were doing either these loft-maneuvers or divemaneuvers, or whatever it was you were doing. They'd be tracking you through the entire delivery process. When the day was over, the Charlie Range folks would come by VX-5 to provide the profiles for the day to the squadron.

Dr. Allison: Did they have a telemetry readout to help with that information?

General Fitch: There was no telemetry. The range had different tracking stations, and the tracking station could track an aircraft within a few feet. This would provide a paper trace of the profile, which would be compared to the optimum profile for the maneuver. They would mark the release point for the weapon, which in many instances was a MK-76 practice bomb. The key was, where was the airplane at the time the weapon would have gone off and did you get obliterated in this process or did you escape the weapons effects of the nuclear blast?

Dr. Allison: And that's what you're working on is survivability and loft-bombing.

General Fitch: Yes, but it was Lieutenant Commander Harry Sellers at VX-5 who was working on the survivability. He determined you did or you didn't. From the tracking of the aircraft relative to the blast he determined if you survived or not. The name of the game was to be able to deliver a nuclear weapon and survive the blast and the radiation. It is where you're going to come in at 500 knots and do what we termed an idiot-loop, where you're a hundred feet off the deck when you start the maneuver, you do an over-the-shoulder loft maneuver where the bomb goes straight up after release. There were all kinds of loft-maneuvers that you could do. Some weapons were retarded. There was a low-angle loft maneuver, which was probably something less than a 50-degree angle from the horizontal when you'd release the bomb. There were high angle releases that were nearly straight up. You could also do what we later would call conventional loft bombing, which with a salvo from the MCBR in a low angle loft maneuver, you could avoid over flying a target. But you had to have a reference for distance to the target. About the highest angle that we did roll ahead loft, where with a retarded weapons you would roll inverted after release and continue in the same direction, was on the order of 65 degrees. I had an interesting one of those one day.

131

Dr. Allison: How many flights did it take to get the information you were looking for in your project?

General Fitch: This AD high dive that probably took 20 flights to get all the information that was needed to finish the high-dive portion of what would be called the Special Weapons Delivery Handbook.

Dr. Allison: So that was a high-dive for a nuclear weapon?

General Fitch: A nuclear weapon, yes. Stay high for separation from nuclear weapons effects. And again, the weapons I was developing dive tactics for was a penetrator and it was designed primarily for targets like hitting hydro-electric dams and those kinds of hard targets.

Dr. Allison: What would be your release altitude on a dive? You start at 35,000 and drop it....

General Fitch: Oh probably 25,000. Maybe 28,000 feet AGL. But I had various altitudes for rolling in on the target. I believe that the lowest roll-in that I used was around 15,000 feet which probably had me pulling out at nine or ten thousand feet above ground level (AGL). So roll-in altitudes were within a 20,000 foot band, from about 15,000 feet up to about 35,000 feet. The AD-6 had to labor hard to climb to 35,000 feet. Well actually rolling in at 35,000. I probably didn't get much below 30,000 feet when I pulled out of the dive. After pullout you'd start climbing back up.

Dr. Allison: To get out of that mushroom cloud coming up I guess.

General Fitch: Yes, but then, I had done them all the way down to about 14,000 feet for my roll inverted going into the dive attack, and it was up to the weapons effects officer to look at this profile track and say, "Hey, you can't do this at 14 or 15,000 feet because you're going to be within the radiation effects of the nuclear weapon cloud." So they sorted all that out with analysis prior to preparing the handbook. That analysis would determine the lowest roll-in altitude that met all of the criteria considering radiation and nuclear blast effect.

Dr. Allison: That's interesting, it's all nuclear though.

General Fitch: It was 100 percent nuclear. During those dive bombing runs I was releasing the MK-76 practice bomb on each run. The key was the aircraft profile during the dive bombing maneuver, along with the minimum safe altitude for weapons effects. Each dive-bombing run was being tracked by ground observers at the bombing range, and they followed the track of the profile within a few feet.

Dr. Allison: What else were you working on there besides nuclear delivery?

General Fitch: In September 1958, while I was still doing the high dive project with the AD-6, I was given a project in an F9F-8 for a moving map system. The F9F-8 had a centrifugal-flow engine and it had a terrible time operating in hot weather and higher altitudes. China Lake airfield had an elevation of about 2,200 feet above sea level. This F9F-8 had a low-altitude bombing system in it along with the moving map display. The moving map display was supposed to determine a loft bombing pull-up point, based on airspeed and directional headings transferred to the map display. It was supposed to give you an automatic pull-up to deliver a nuclear weapon. We had two technicians that came to China Lake from the Naval Avionics Facility Indianapolis. They were the technicians who knew the system, and who would help me evaluate their moving map system. In testing it was a terrible system. After 15 or 20 flights we abandoned that project.

Dr. Allison: Never got anywhere.

General Fitch: It never was approved for any kind of use at all. But you need to bear in mind that in those days, 1958, there was no inertial navigation system and there was no global positioning system. I would correct that comment to say that NASA had inertial navigation systems in 1958, but the Navy and Marine strike aircraft did not. So with the demise of that F9F-8B project, and the end of the AD-6 high dive project for the dam buster nuke weapon, I then was assigned to have the FJ-4B projects. Those FJ-4B projects included loft bombing, dive bombing, aerial refueling, and cruise control. The FJ-4B had a refueling probe on the left wing, about four feet out from the fuselage, that made aerial refueling with the FJ-4B to be a little more demanding than with the A4D-2. That assignment for the FJ-4B projects was a real plus for a Marine captain, since there were lots of lieutenant commanders in VX-5 projects who would liked to have had all the FJ-4B projects.

Dr. Allison: You mentioned earlier how much you like the FJ.

General Fitch: I mentioned the FJ back when I flew it at El Toro and again at Test Pilot School. The FJ was a variant of the USAF F-86, and it was a great airplane—extremely clean—and with great handling properties. It was the kind of airplane that fighter pilots and attack pilots love to fly. It was an extremely honest aircraft, very user friendly. It wouldn't kill you unless you worked at getting killed. At VX-5, I had started flying the FJ-4B and the A4B (A4D-2) in June 1958.

At 50,000 feet you could be cruising at 0.9 indicated mach number, you could pull the throttle back to idle, push the nose over and go supersonic. It was just a tremendously clean airplane. I had all the FJ-4B projects and I was in the same office space at the squadron with a lieutenant commander – his name was Bud Nance, and I was a captain. Bud Nance had the A-4D projects. A few days after I took over the FJ-4, and with Bud's blessing, in June 1958 I also started flying the A-4 Skyhawk.

Dr. Allison: Along this time is when they changed the naming convention of aircraft, right?

General Fitch: There was a lot of confusion on aircraft designations in those years around 1961, with Secretary of Defense McNamara doing all kinds of strange things. Now it is 2006 and McNamara's changes still cause a little confusion when you are writing about two periods of time. He even changed the color of the shoes that Marines wore. In the early 1960s the A4D-2 would become the A-4B and then the A4D-2N would become the A-4C. A few years later you got into other versions of the Skyhawk, the A4D-5 which would be called the A-4E. The last A-4 Skyhawk was the A-4M. In 1968 to 1970 I would be a lieutenant colonel and the action officer for the A-4M at Headquarters, Marine Corps.

Dr. Allison: Can you provide some background on how you developed the multiple bomb rack system?

General Fitch: During my first year in VX-5, which would be from April 1958 to April 1959, I flew hundreds of loft bombing profiles in the A-4 and the FJ-4B, along with hundreds of dive bombing runs in both aircraft. In addition I flew a large number of cruise control flights in both the A-4 and FJ, with many of those with aerial refueling. Cruise control flights had your aircraft configured with a shape (for a nuclear weapon), plus external fuel tanks. You had to fly precise airspeeds and altitudes, and factor in the high winds aloft.

The loft and dive bombing runs were to develop tactics for nuclear weapon delivery, and the cruise control flights were to develop flight profiles that would provide the maximum mission radius. Again this was all for nuclear weapons delivery, but a year later that would change. In April 1959, in addition to flying project flights, I started flying the FJ-4B in field carrier landing practice [FCLP]. We had a carrier landing mirror set up at China Lake and we had a landing signal officer [LSO]. On April 27, 28, 29 and 30th, I was flying the FJ-4B off the USS *Bennington* (CVA-20) in preparation for flying a nuclear weapon Operational Suitability Test [OST] from a carrier during May of '59. In April I had 14 arrested landings on *Bennington* while flying the FJ-4B. On May 19th I flew the OST from USS *Hancock* (CVA-19) where I flew a mission profile in the FJ-4B, ending at the China Lake bombing range where I released the weapon at the target, and then flew a mission profile back to the *Hancock*. On May 20th my FJ-4B was catapulted off *Hancock* and I landed at China Lake.

After doing these hundreds of flights, all of this flying in VX-5 with loft maneuvers, high dive, cruise control and aerial refueling, I was convinced that we knew how to do the nuclear weapon delivery mission, and to do it well. I was equally convinced that we could go to that nuclear war and do a great job of defeating the enemy with nuclear weapons. At the same time, even though President Eisenhower had said that the United States would use massive retaliation if a country started a war with the United States, most of us felt that use of nukes was improbable. We felt that conventional warfare was what we needed to be concerned with. However when I looked at the A-4B (formerly the A4D-2), it was not much of an aircraft when it came to thinking about conventional weapons delivery. The A-4B in 1958 had three bomb stations, which were a centerline Aero 7A pylon, and an Aero 20 pylon on each wing. A pilot had his choice, where he could carry a high explosive bomb on each of the three pylons on the A-4B, or he could carry a centerline 300 gallon external fuel tank along with one bomb on each wing station, or he could carry two 300 gallon drop tanks, one on each wing station, and he could carry one bomb on the centerline. In the latter case that single bomb could be a 250 pound MK-81, or a 500 pound MK-82, or a 1,000 pound MK-83, or a 2,000 pound MK-84. It is relevant that the MK-81 and MK-82 were more suitable for close air support [CAS].

The practice bomb rack for MK-76 and MK-105 practice bombs was a simple steel plate attached to a wing or centerline pylon. We used it on both the A-4 Skyhawk and the FJ Fury. We called the rack, "The Banger Board." The steel plate of the practice rack had the attachments for the six small practice bombs (MK-76 or MK-105), each weighing 25 pounds, that were attached to that small bomb rack. There was a stepper switch in the back of the Banger Board, with six

positions, that would release one bomb for each depression of the bomb button on the pilot's control stick.

Looking at this rack that carried six MK-76 practice bombs, with each MK-76 with a smoke charge in the nose of the MK-76, I got to thinking, "Why not design a larger bomb rack to carry high explosive aviation bombs such as the 500 pound MK-82, and you could simply attach that larger bomb rack (which I called the Multiple Carriage Bomb Rack – MCBR) to the existing Aero 7 (one pylon) and Aero 20 pylons (two pylons) on the A-4B. It would simply be a rack on a rack (pylon), larger in size, and be capable of carrying the 250 pound MK-81 or 500 pound MK-82.

Dr. Allison: Explain what you mean, a pylon is actually integral to the aircraft, right?

General Fitch: Each pylon on the A-4B was part of the airplane. The Aero 20 pylon on each wing and the Aero 7 centerline pylon of the A-4B were part of the basic aircraft and were installed at the factory. The MCBR for the A-4B would attach to each of those pylons. The wiring system for the MCBR would be set up so that if the need arose during an emergency, you could jettison the MCBR with its bombs attached. That jettison was simple. Within the Aero 7 and the Aero 20 pylons, there was a primary cartridge and a secondary (jettison) cartridge.

Where those pylons had lugs for carrying only one bomb, with my concept I would attach the MCBR to each pylon where in the past that pylon would have had only a single bomb attached. That multiple carriage bomb rack would have six high explosive or inert bombs attached to it. Each bomb on the MCBR was suspended independent of the other bombs on the rack. It was all very simple, but no one had ever thought of doing it—until I thought of it. Although I should point out that in the years after the MCBR was such a success, I had several Marine aviators tell me that they had thought of doing the same thing, long before I did, but they never got around to doing it. You find sour grapes in all walks of life.

Dr. Allison: How did you envision the MCBR would work?

General Fitch: As a concept of operations [ConOps] for the multiple carriage bomb rack that I wanted to build, I envisioned a pilot having the option of dropping one bomb at a time from the MCBR, or he could drop two, four or six bombs from each rack. The weapons effects of four bombs dropped against a combat target in a salvo is more effective than four individual drops of a single bomb; the same holds true for six, eight or 18 bombs. A salvo is more effective. Those options for bomb drops from the MCBR would be controlled by the cockpit stepper switch, plus

the other ordnance switches that would be needed to affect the release of the proper number of bombs. We would take a stepper switch from a wrecked AD Skyraider, and install it in the cockpit. That made that A-4B unique, with the capability to drop any bomb from any MCBR on the aircraft. With a fully loaded A-4B, that would provide for dropping from one bomb to 18 bombs, assuming three MCBR with six 250 or 500 pound bombs on each MCBR. I concluded at the outset, before we had started anything that the MCBR would work.

Dr. Allison: How did you get the ball rolling on actually building it?

General Fitch: First, in the May or early June 1959 timeframe I talked with Major K.P. Rice, and told him what I had in mind for conventional bombing and making a MCBR. He agreed that there was no reason why it would not work. As a Marine, K.P. had a strong appreciation for CAS and he agreed that the A-4B as it was in the summer of 1959 would not be much of a CAS aircraft. Major Rice shared my enthusiasm for doing the MCBR racks and enhancing conventional air attack. A key point, as an aero engineer, K. P. knew how to layout the MCBR so that the weight of the rack would be as low as possible. In my case, I understood the ConOps that I had worked on, and which the MCBR should be capable of doing.

K. P. Rice and I began planning how we would lay out the design for the MCBR. With that effort underway, as a second step, I started getting interested in being able to salvo six MK-76 practice bombs in one release from a practice bomb rack. What the small 25 pound bombs did on salvo, I figured that I could plan that the larger MK-81 and MK-82 bombs would release and fly in a similar manner to the MK-76. For a few flights, I simply asked the ordnance chief to put tin foil in the stepper switch in the aft end of the practice bomb rack, which would short out the six contact points in the stepper switch and allow a salvo of six (6) MK-76 practice bombs. I wanted to see what a salvo would do, and to document it on the bombing range. The crew on the "Charlie" bombing range would be able to track both the aircraft and the bombs. My pilot's logbook shows that on July 21, 1959 I was flying the FJ-4B and skip bombing a salvo of MK-76 practice bombs. In August I was doing low angle loft in the A-4B while doing a salvo of the practice bombs

After a few flights doing these salvo drops of the MK-76, the VX-5 projects director told me that I was flying flights that were not a part of an approved project. He said that I couldn't do that. I then decided that I had better talk about what I had in mind for the multiple carriage of high explosive bombs for conventional warfare. In that talking I figured that it was best to skip the projects director in that talk, since the Navy does not normally have much interest in close air

support. So skipping the projects director, Major Rice and I talked to the executive officer of the squadron, Commander Dale Cox. I told the commander about my thoughts for enhancing conventional bombing with the A-4 Skyhawk, and gave him a verbal ConOps on how it would work. K. P. and I told Commander Cox, "We are confident that we can build a bomb rack here in VX-5 that will work, and we talked about putting a bomb rack on a bomb rack (pylon). K.P., who had more clout with Commander Cox than I did, emphasized that there was no reason why it would not work. We talked with Dale Cox about the current limitations of the three pylons on the A-4B, the limited capabilities of the aircraft for conventional warfare in 1959, and how this concept would provide a six fold increase in combat capability for the aircraft. Commander Cox agreed that the concept for the rack would be great for conventional warfare." I told him that. I wanted to continue doing some salvoing of MK-76 practice bombs where I would pull up in a loft maneuver or in a dive maneuver and I would release six MK-76s. He said, "Fine, go ahead."

Dr. Allison: How important was it to get his buy-in?

General Fitch: If Dale Cox had not been the XO of VX-5, K. P. Rice and I probably never would have gotten this done. That is why Dale Cox's name is on the patent with ours. Commander Cox ran interference for K. P. and me. He also came up with the funding, which was minimal, for us to do what needed to be done to develop and prove the concept. As I recall, after 47 years, the centerline MCBR cost about \$500.00 for the channel iron. Everything else was from the junkyard dump. The two wing MCBR that we would later build during November 1959 would cost about \$2,000.00 for the two of them, since we had to get tubular steel from the Naval Ordnance Test Station [NOTS].

Dr. Allison: Did you continue with your salvoing experiments then?

General Fitch: With Commander Cox's blessing, I continued to fly with the practice rack, with the stepper switch on the Banger Board shorted out, and to salvo the MK-76. An interesting thing about those salvo drops is that I never had any bomb-to-bomb collisions. As a bomb would get close to another bomb, the aerodynamic interference would cause the bombs to move away from each other and not collide. I also never had a MK-76 tumble. While I was doing those salvo

flights, I continued to fly assigned project flights in the FJ-4B and the A-4B, including all the nuclear weapon loft and dive bombing. But the salvos were my high interest at that point in time, along with getting the first MCBR built.

Dr. Allison: Can you describe getting those first MCBRs built, how you did that?

General Fitch: So then I told Commander Cox that we needed to get the materials to build the first multiple rack. Major K.P. Rice was a PG School graduate, with a Masters Degree in Aeronautical Engineering. K.P., worked on the stress analysis, and he also worked on how some of the attachments might work for the channel iron, along with the Aero 15 racks we had decided to use.

During July 1959, I was pretty busy, flying project flights as well as working on salvo releases for conventional weapons, and talking with K. P. about how the first MCBR would go together. One FJ-4B project that I was busy on during July was doing roll-ahead loft bombing with single releases of the MK-105 practice bomb during each roll-ahead maneuver. It was during one of those roll-ahead loft hops that I had one of my most interesting flights in the FJ Fury. In the FJ cockpit we had a low altitude bombing system (call LABS), which would allow the pilot to do loft maneuvers both low angle and high angle. A complete "idiot loop" would have you release the bomb straight up and recover from the maneuver by escaping in the opposite direction that you had approached the target on run-in.

There was also low angle loft in the 45-degree angle area, and there was roll-ahead loft in the 45 degree and 65 degree release angle. One day I was doing 65-degree loft, roll-ahead, where after release of the MK-105 at the 65-degree angle, I would roll the aircraft inverted, dive for the deck, and do the weapons effects escape in the same direction as the run-in had been. If you run-in to the target was to the south, then you recovered to the south. I had done four or five roll-ahead loft maneuvers at 65 degrees and everything was working fine, including the LABS gear for automatic release at 65 degrees. However on this particular run I did the standard four "g" pullups, but as it turned out the LABS gear had failed on the run. When you do this maneuver both eyes are in the cockpit, watching the instruments. Thinking that I was passed the 65 degree point, which it turned out I was, I rolled the aircraft180 degrees to the inverted, and pulled back on the stick. I was still on the gauges. It turned out that I was going straight up at that point, about 4,000 or 5,000 feet off the deck. Airspeed was unwinding fast. To recover, as I watched the airspeed going below a hundred (100) knots with the FJ nose straight up, I retarded the throttle, and carefully walked the rudder pedals to keep the aircraft from going into a spin. The FJ-4B cooperated fully even though it was in a tail slide about 6,000 feet above the desert floor. There

139

was no tendency for the FJ-4B Fury to spin, even with airspeed at the zero, and the nose straight up. Easing the nose over, while in the tail slide, while delicately moving the rudder pedals the nose fell through at probably 6,000 above ground level. Ground level was about 2,200 feet above sea level. Then it was a matter of bringing the throttle slowly forward and increasing airspeed. I probably pulled out at about 1,500 feet above the deck.

Back at VX-5 projects after my landing, and after the "Charlie Range" crew brought the tracking profile by the projects office, everyone had a hard time believing that the aircraft had not spun. It is worth mentioning again that during my 34-year career flying military aircraft, with 7,000 flight hours and thousands of sorties, I had an equal number of takeoffs and landings.

Dr. Allison: Interesting flight. What else on the MCBR building?

General Fitch: Okay. It is now probably early August 1959. So, at VX-5 we received delivery on some channel iron that Commander Cox arranged for us to get through the NOTS, pretty heavy channel iron, because we didn't know how heavy it needed to be. It also was probably a matter of what channel iron that the NOTS had available to give us. K.P. Rice was at the time, working on the stress analysis. I'm out salvoing MK-76s either with the A-4 or the FJ-4, or flying a project flight, and we start talking to the people up at the Ordnance Test Station about the FJ-4B. We wanted to enhance the conventional weapons delivery capability of both the A-4B Skyhawk and the FJ-4B Fury. We knew that we would need some help from NOTS for the FJ-4B, because of its low wing clearance when the aircraft was on the deck. And so I got talking to them about what I was going to do with the A-4B and what we needed to do for the FJ-4B, and they said, "Well why don't you try banding bombs" for the FJ-4B, and I said, "Okay, we can try that."

Dr. Allison: What do you mean by banding bombs, like the snake-eye retarded bomb?

General Fitch: No, this wasn't a snake-eye. It was where you band three bombs together with two metal straps and attach those straps to the pylon with the pylon lugs.

Dr. Allison: Ok, you mean just to make one bigger bomb?

General Fitch: Well so you could carry three bombs on each pylon instead of one [laughter]. Where the FJ-4B could carry a maximum of four bombs without the strap arrangement, with the metal strap concept we would increase that total to twelve (12). I flew it and it worked. Three 250 pound bombs (MK-81) have about the same explosive power as one 1,000 pound bomb (MK-83). But as mentioned the FJ-4 did not have the ground clearance to put a rack on a rack or pylon. The NOTS ordnance folks would come up with the solution for the FJ-4B. With the banded MK-81 bombs—three MK-81banded bombs on each of the four wing bomb station of the FJ-4B. That banded bomb solution was accomplished by the NOTS ordnance shop, them alone, but I did the test flying to prove that it worked. The NOTS folks were fabricating the steel bands, banding the bombs, putting three banded bombs on each pylon of the FJ-4B. That solved the FJ problem.

Dr. Allison: But that didn't mean you didn't need a MCBR, I suppose, so you kept working on that?

General Fitch: In the meantime, K P and I were working on the MCBR, while I started flying some flights and dropping the banded MK-81 bombs on the FJ. During early September I flew numerous test hops with both the A-4B and the FJ-4B, dropping three MK-81 bombs strapped together, using the strap arrangement that NOTS has proposed, and who had fabricated the steel straps. On 18 September 1959, I did an air show with the FJ-4B using four Banger Boards with six MK-76 on each, where I lofted 24 MK-76 practice bombs. It was kind of impressive, so the observers said. And these were just practice bombs. But then with the steel strap arrangement, the FJ-4B could only carry a maximum of 12 MK-81 bombs. To my knowledge the FJ-4B was never used in the Vietnam War. Of course the A-4B and A-4C used the production version of the MCBR in Vietnam, as did the F-4, A-6, all Air Force fighters, and even the B-52.

While a lot was going on with K. P. and me in September 1959, with projects and my salvo bombing, some of our ordnance men went to the scrap dump where they had the wrecked airplanes. We got six Aero-15 bomb racks that had been on an AD Skyraider, and we may have gotten ten. Eventually we would use 21 Aero 15 racks from wrecked AD Skyraiders. Each AD Skyraider had a total of ten Aero 15 racks attached to its wings, with five under the left wing and five under the right wing. Those wrecked aircraft were those that over the years had crashed or it was in the dump for some reason. None of the aircraft in the dump could be restored to flyable condition.

So by mid-September we had the channel iron and the six Aero 15s that we needed to attached to the cross bars of the first MCBR. The squadron metal-smiths then got busy, assembling the first MCBR which would go on the centerline of the A-4B. We had sketches and measurements all laid out for them. With torches they would cut the channel iron and then they would weld the pieces in the right place, according to the scheme we had given them. One of my

jobs was to supervise the building of the MCBR, so I spent a couple of hours each day in the metal shop.

A little earlier, K.P. started having some trouble with the stress analysis, so he and I flew down to Douglas Aircraft Company in El Segundo, next to the Los Angeles Airport. We talked to them about the stress analysis, with a fellow named Whiff Caldwell who had been at Douglas for many, many years – he was a former Navy pilot He said, "Yes, we'll help you with the stress analysis", so they did that, with a visit to China Lake to look at our channel iron and how we planned to put the rack together. We never did really use the stress analysis since at that point in time, VX-5 metal-smiths were cutting metal with their torches and welding. The first MCBR was so heavy, about 500 pounds, that there was no way it could have a stress failure. So for the record, we had a stress analysis but that was all you could say for it. The metal-smiths did their job, to perfection, and I supervised the building of the rack. K. P. came by the metal shop from time to time to check on the progress.

Dr. Allison: Who were the metal smiths? Did they have any special training or skills?

General Fitch: For this fabrication of the MCBR we used two metal smiths, just plain squadron metal smiths like you'd find in any squadron; bend iron, do a little welding and so forth, and they put together the first rack. It could carry six MK-81s or it could have carried six MK-82s, but we did it only for MK-81s to test the concept, the 250 pound bomb. And so at the same time that we were fabricating this first rack, I talked to the squadron avionics officer, Lieutenant Frank McCoy, and told him the order that I wanted to sequence bombs coming off the rack. At that point in time I'd seen where MK-76s didn't collide when they were released in a salvo, but I wanted to see what was going to happen both individually and with multiple bomb drops off the same rack. Several weeks before the welding was finished, I told Frank McCoy that I needed a wiring harness to go in the rack, once we got the rack finished. Frank said he'd take care of that, and he would be true to his word. I don't remember how long it took to build that first rack. It was probably two weeks or something like that, but I do know the completion date from my aviator's logbook.

We finished the centerline MCBR on September 30, 1959, and the wiring harness remained to be installed in the rack. The time was about five or six o'clock in the afternoon. We had expected to finish that day, and I had told both ordnance and avionics that I intended to fly the rack as soon as it was finished. The range personnel at Charlie Range, Duane Mack's crew, was waiting for me to telephone them when I was ready to takeoff with the rack on the A-4B. Simply put, we had a fine team going at China Lake on this MCBR. I called up Ordnance, told them to come get the rack and to hang it on the centerline of an A-4. This was a special A-4 just for the MCBR, since we had added a stepper switch in the cockpit. With the stepper switch I could select which bomb I wanted to drop off a multiple rack – left rear, right rear, centerline rear, or drop in pairs are drop three, or four or six bombs in a salvo.

Dr. Allison: Now to clarify, they made a switch to do that, right?

General Fitch: Well yes, but we didn't make that switch, it was already an old switch. The switch was in the wrecked AD and Douglas Aircraft Company had installed that switch many years earlier when the AD Skyraider was on the production line. The ordnance men simply removed it from the wrecked aircraft and installed it in the A-4B cockpit. By the way, about seven years later when I would be flying combat in Vietnam, I wished that the A-4B and A-4C that I was flying in Vietnam had been equipped with that same stepper switch that I had a VX-5. It worked fine in the AD and again in my test A-4B at VX-5. But in 1967 there was no reliable stepper switch for the cockpit of the A-4 Skyhawks when we were in combat in Vietnam.

Dr. Allison: Wow that's interesting.

General Fitch: Yes. Before I got the wiring harness installed, I had a centerline rack that weighed about 500 pounds, which is pretty heavy for a rack. When the welding was finished and the rack was ready for its first test flight, the ordnance men hung the rack on the test A-4B aircraft, which did not take them long to do. During my preflight of the aircraft, I had ordnance open up the access door in the Aero 7A pylon, to which the MCBR was attached. I had to check that the primary ejection cartridge was disconnected and stowed out of the way. The cartridge was disconnected as it had to be, otherwise if I tried to drop a bomb, I would have jettisoned the entire MCBR if the cartridge had been hooked up. After preflight, I got in the airplane, cranked it up and took off. I had people waiting out at the bomb range. Of course I had told them we figured to fly that afternoon, and they were waiting for me.

Dr. Allison: You had bombs on it?

General Fitch: No, no bombs. This flight was strictly to take the aircraft up to high speed, well over 500 knots, and see if anything fell off the rack. No bombs, just the rack with six Aero-15s, with the rack attached to the centerline of the test A-4B. I didn't do any buildup flights at all. I just

took off, wheels in the well, picked up the flaps and turned onto the run-in line of the Charlie bombing range. I was probably doing over 400 knots when I turned onto the run-in line, and I took the airplane up to about 550 knots as I approached the Charlie Range target area. I was talking on UHF radio to the guys in the tower at the bombing range. When asked it they saw any debris coming off the aircraft, they said, "Nothing coming off, everything's hanging up fine and it looks good." I probably did that high speed run twice, at about 550 knots each time and 200 feet off the deck, and then I flew back and landed at China Lake. I believe that flight lasted 12 minutes.

Dr. Allison: You just made a low pass by the tower there?

General Fitch: Yes, at about 550 knots, yes [chuckle]. These guys at Charlie Range were tremendous and they had observed aircraft on the range thousands of times. It was so many times that they could have an airplane come in over the target and say he was going to do an over-the-shoulder loft, where you were essentially going to throw the bomb straight up in the air and that bomb was probably going to go up to about 10,000 feet or something like that, and then the bomb would reach apogee and turn around and come back down again. The guys could pick out that little 25-pound bomb; MK-76, while it was 2,000 feet in the air, and the guy that was doing the observing from the tower – in addition to the other spotters around the target -- the guy at the tower would say his estimate for the bomb impact in the target area, such as, "220 feet at 5 o'clock." Then the bomb – and this is when the bomb was up in the air at 2,000 feet at 5 o'clock." [chuckle]. I mean it was so accurate with the estimates while the small bomb was several thousand feet up. The spotter in the tower had called the impact point when the MK-76 was high in the air.

But anyhow, I went back and landed. Frank McCoy, the VX-5 avionics officer met me and I said, "Okay, it's great. Put the wiring harness in and I'll be back in the morning to fly it." After talking with the avionics officer, I got the ordnance chief – he was one of the first E-9s – and I said, "I want six MK-81 inert hanging on the airplane tomorrow morning at 7 o'clock." The next morning I got there about 6:30, ready to fly the first bombing hop with the MCBR. The A-4B was on the flight line, the wiring harness was installed, the stepper switch was in the cockpit, and there were six (6) MK-81 inert 250 pound bombs hanging on the centerline MCBR. After preflight, where I carefully inspected each pylon to ensure the ejection cartridges were in the right place, with the primary disconnected and the secondary connected. The secondary would be used to jettison the rack if there were an emergency that required jettison. I took off with six MK-81s and I started dropping them individually in low-angle loft maneuvers.

Dr. Allison: Selecting them?

General Fitch: Yes. I selected the bombs as I wanted them to come off the MCBR. Then I dropped them one at a time at about 450 knots airspeed. That first flight of the MCBR on the A-4B where I dropped six inert MK-81 bombs, was done on the morning of October 1, 1959.

Dr. Allison: And how did you feel about it, it was working?

General Fitch: Everything worked great! So I came back from that and of course I was going to do some more flights with that rack. I then told Commander Cox that, "We need materials for two wing racks." And so he went to the Ordnance Test Station and arranged for the materials that K. P. Rice and I would need. It was nice to have a commander doing what you requested when you were a Marine captain [chuckle], but Dale Cox knew this would be a giant step forward in bombing capability.

But Dale Cox was a great guy and he could see that this had tremendous potential. I am convinced that Commander Cox immediately saw that K. P. and I had a big thing going here, and the potential to alter conventional air support and also fly deep strike missions was going to be a hallmark in aviation. The commander had arranged for some channel iron for the first MCBR and then for the wing racks, he arranged for some tubular steel. The tubular steel was the only thing that we could get from the NOTS that we could use to build the wing racks. And then for the wing racks we got more Aero-15s from the trash dump of wrecked aircraft. We built two wing racks so that at each wing station we could carry two MK-81 bombs forward and three aft. We were restricted in space forward because the wheel well doors interfered with having a third bomb forward. Building the two wing racks would be much quicker than the centerline MCBR.

Dr. Allison: On this wing rack it was five bombs forward and two ...?

General Fitch: No, it was two forward and three aft, for a total of five MK-81 bombs per wing station, for a total of five on each wing rack plus six on the centerline, for a total of 16. When they did the production rack at Douglas Aircraft Company, in the January to May timeframe of 1960, they were able to do three bombs forward on the wing rack, due to their placement. Of course when we did the original MCBR for the centerline and wings, we were working mostly with scrap components. At Douglas they were designing new bomb racks that would be based on our original

MCBR design. So that gave you, when we got it finished that gave you 16 bombs on the A-4 where before it would only carry three maximum. Now you could carry 16.

Dr. Allison: The A-4 had sufficient power to cover that many, I mean that had been considered of course.

General Fitch: Oh yes, the A-4 had a great thrust-to-weight ratio. At this point I should add that early on in the MCBR process, probably back in July or August 1959, I had told Commander Cox that we did not want to let the Bureau of Naval Weapons [BuWeps] know about the racks that we were doing, until we had the fleet sold on the concept. I wanted to see the momentum of fleet support, both Marine and Navy aviation, so that BuWeps, couldn't turn it over to some bureaucrats and keep it on the shelf for years. I told him how I would get the senior aviators at MCAS El Toro behind the concept, and we could get the senior Navy officers at Lemoore Naval Air Station to support the concept. We could put on demonstrations for them that would sell the concept. Command Cox agreed with my point on BuWeps, and we were able to keep them out of the loop until after I had fully demonstrated the capabilities of the MCBR. As a follow-up, we invited senior Marine aviators from the wing at El Toro to come to VX-5 to see the three MCBR on the aircraft, and watch a firepower demonstration at Charlie Range. Those Marines included Major General [Samuel] Jack, who was head of Marine aviation in the Pacific. We did the same for senior Navy officers coming from Lemoore. But then what would follow would be the capstone, and that would be the firepower demonstration at Yuma on December 3d.

Dr. Allison: That would be the big demo.

General Fitch: It is germane to this story that Douglas Aircraft Company had a tech rep at China Lake who during the summer months of 1959 and into the fall months was observing everything that we did with the MCBR, including watching all the bomb drops at Charlie Range. When success for the MCBR appeared to be guaranteed, Douglas went to work on designing a follow-on bomb rack that would later be called the multiple bomb rack (MBR). When Douglas Aircraft Company would get to making a prototype of their design, we could plan that they would maintain the basic concept of our MCBR, while redesigning the racks to take out weight and streamline the design. A few years after Douglas did the MBR, the powers that be in BuWeps or Naval Air Systems Command, decided that the MBR needed ejection cartridges to ensure bomb separation from the rack. Douglas Aircraft Company would then include the ejection cartridges, and the multiple rack for six bombs would then be called the multiple ejection rack or MER. It was all part of an evolutionary process, but it was the MCBR that led the way.

Dr. Allison: So Douglas built the production bomb racks?

General Fitch: Well yes, they built their prototype multiple bomb rack (MBR) after K. P. Rice and I developed and tested the multiple carriage bomb rack in 1959. Douglas had copied everything that we did in VX-5, and with their depth of engineers, they took about half the weight out of the rack. For the wing rack they were able to add another bomb forward, giving the A-4 a load of six bombs on each wing.

Dr. Allison: How did you go about getting a patent on the MCBR?

General Fitch: After I had been in VMA-311 at El Toro for about five or six months, which was the fall of 1960, VX-5 had me come back to China Lake and sit down with the NOTS patent attorneys. I gave them the information that they needed to apply for a patent, with me as the primary inventor, and with K. P. Rice and Dale Cox as co-inventors. As I recall we received that patent in 1964.

The Navy wanted me to get the patent. That was at the instigation of VX-5 and NOTS at China Lake. This all happened in late summer of 1960 or that fall.

Dr. Allison: Was it your idea to get the patent?

General Fitch: VX-5 had called me at El Toro about the time I was doing the demo for General Shoup, and told me they wanted me to patent the MCBR so that Douglas wouldn't make a lot of extra money for the concept and the flight testing that I had done. I mentioned earlier, Douglas Aircraft Company had not developed the concept for multiple carriage of bombs and they had not tested the concept. I had done that. I flew up to China Lake from El Toro and talked to the patent attorneys and we had sketches and photographs that they could use in the patent application. Out at VX-5 they had the original three MCBR that the patent attorneys could look at. But anyway, it was at the instigation of VX-5 and China Lake that I got the patent, so that Douglas could not make unwarranted claims. And so that's why I got it. About the only people that know I've got a patent are those who happen to read my biographical sketch from HQMC. The patent number was 3,122,056.

Dr. Allison: Based on your principle?

General Fitch: Yes. K. P. Rice and I proved that the multiple carriage bomb rack worked and that was the reason VX-5 wanted me to get a patent, so that Douglas couldn't charge the government a lot of money for flight test and other things that I had already done. Douglas built their prototype MBR in the spring of 1960.

Dr. Allison: Good idea [chuckle].

General Fitch: Yes, it was a good idea. In this photograph you can see the centerline rack with six MK-81 bombs and there are the two wing racks each with five MK-81 bombs. At this point in time with this configuration, on, about two or three weeks later, I flew down to Yuma to put on that firepower demo.

Dr. Allison: There were never any aerodynamic issues?

General Fitch: It just flew like any high performance airplane. I had no doubts. If a company had been doing this development, like say Douglas Aircraft Company, and if it had been their original idea, which it wasn't, but had it been, they would have had a whole bevy of engineers working on this instead of a Marine captain out supervising a couple of Navy metal-smiths welding in a squadron metal smith shop.

In our effort for the MCBR at VX-5, it was strictly a "pop's garage" type of operation, and like a pop's garage, the costs were very low. With a company test pilot, they would probably have spent six months working up to where I flew 12 minutes on September 30th. As an example, when the company test pilot took off the first time he'd probably take the airplane up to 200 knots and he'd have all kind of instrumentation to look at everything; cameras, wherever they could put cameras. Then the second flight he'd probably take it up to 250 knots. Well in my case, on the 30 September flight I just took it up to 550 knots in about two minutes. [laughter]. Because if parts were going to fall off I wanted to know it right then [chuckle] or if they were not going to fall off, I wanted to know it right then. As it turn out, when I flew with the dead weight MCBR on September 30, 1959 and again on October 1, 1959 with bombs aboard, nothing fell off the aircraft or the MCBR. I started dropping bombs from the MCBR on October first. So I did it all in that day

on 30 September when I flew the first test hop on the MCBR, and again the next day when I released the six bombs that I was carrying on the MCBR.

Dr. Allison: Did you continue tests with it or demonstrations?

General Fitch: On October 2, 1959, I flew a firepower demo with the MCBR, where I had six MK-81 inert bombs on the MCBR. I also carried banded bombs on that October 2d demonstration. The NOTS had fabricated a rack that they had attached six MK-81 bombs to, with the rack on the left wing pylon, and they had put three banded MK-81 inert bombs on the right wing pylon. In the demo I decided to drop the bombs from the wings on the first loft maneuver. When I pressed the bomb pickle to release those wing bombs, the rack that NOTS had fabricated came apart and fell off the aircraft. There was no aircraft damage from that. The three banded bombs released in the same loft maneuver from the right wing flew fine. When I dropped the six MK-81 inert bombs from the centerline MCBR, in a skip bombing delivery from about 100 feet above ground level, the MCBR worked great! In three days I had done what a company test pilot would have probably taken six months or longer to do. And that's why in the aviation industry they charge so much. Testing in industry is very expensive. That is also why VX-5 wanted me to patent the MCBR.

Dr. Allison: One 1/1000th of the cost, minimal.

General Fitch: Oh yes. Well it didn't cost anything really. Our development and testing of the MCBR cost the government, perhaps \$4,500.00 at the most, plus the use and fuel for the A-4B that I used in testing everything out. An aircraft company would have charged millions for the same thing.

Dr. Allison: The wing racks, you mentioned were easier to build, when did you start flying with them?

General Fitch: We built those two wing racks in about two weeks time, once we had the tubular steel. On November 19, 1959 I flew the first test flight of the A-4B carrying sixteen MK-81 bombs, and I dropped them all at Charlie Range. For a second time, on November 19th, I again flew the A-4B with 16 MK-81 inert bombs and dropped them at Charlie Range. So in one day I delivered thirty two (32) MK-81 inert bombs in two flights on Charlie Range. From my log book, on November 20th I flew the three MCBR again, but on this flight I only dropped fourteen MK-81.

China Lake was starting to run short of the inert MK-81. On the 23d of November I flew the three MCBR again, and this time due to a bomb shortage, I only dropped twelve MK-81s.

Dr. Allison: Can you describe the Yuma demonstration that occurred December 3, 1959 that you had mentioned being very important.

General Fitch: On November 24th, with three MCBR and a load of twelve (12) MK-81 inert low drag bombs, I flew to Yuma to look at the target area. I also wanted to show the Yuma Marines the MCBR, and to talk with the coordinators for the firepower demonstration that would go on December 3d. I told them that for the firepower demonstration that I wanted to fly by the stands, turn the belly of the airplane up so everybody could see the A-4B with all the bombs hanging on the three MCBR. Many had seen that in the static display on the Yuma flight line. I wanted the crowd in the stands to see it was the same airplane, and then I would fly out so that the people in the stands could see it was the same aircraft, and then come in low for a low angle loft-bomb of the ten bombs off the wing. I wanted them to see these ten (10) bombs flying through the air. Then so they could see it was still the same airplane I would pull up from the low angle loft maneuver and I would do high-dive with the other six bombs. The weapons meet coordinators agreed to my plan for the firepower demo.

That same day, November 24th I flew back to China Lake with the 12 bombs aboard. On November 30th at China Lake, I flew two flights with the MCBR, dropping sixteen MK-81 inert each flight, in the same maneuvers as I would do at the Yuma weapons meet. Then on December 2nd I flew from China Lake to Yuma, with three MCBR and 16 MK-81 inert bombs. When I arrived I handed the plane captain on the line 22 red flags with pins for pining the landing gear, the MCBRs and the bombs.

On December 3d I flew the firepower demonstration as I had planned. When I flew by the stands and turned the belly up to the crowd, Vice Admiral [Robert] Pirie was reported to have said (by the weapons meet coordinator) words to the effect, "We are going to buy that." After the flyby the stands, I did the low angle loft maneuver as planned, with ten bombs in the air, and then I delivered a salvo of six MK-81s off the centerline MCBR in a dive bombing run. Everything worked to perfection.

About February 1960 we were told at VX-5 that the Douglas Aircraft Company had submitted an unsolicited proposal to BuWeps, for a multiple bomb rack, patterned after the MCBR. Douglas was quickly given a contract for 2,000 multiple bomb racks that Douglas would call for short, the MBR. They had taken out the "C" for carriage that I had used with the MCBR. Where our MCBR at VX-5 would carry only two bombs forward and three aft, the MBR would carry three forward and three aft. The Douglas engineers had figured out how to get the three MK-81 or MK-82 forward on the wing and avoid the wheel well door. As I have mentioned, Douglas Aircraft Company had a tech-rep at China Lake, and from the time we did the centerline rack he was looking at everything we were doing. He was even going to the range every time that I would take off with the MCBR to drop bombs at Charlie Range. The tech rep for Douglas even watched the metal-smiths do their welding. In seeking some help with K. P. Rice's stress analysis, Whiff Caldwell at Douglas had also had the Douglas engineers closely examine every aspect of our work. So they were following it all very closely, which was fine with us. We were looking for a rapid fleet introduction of the improved capability for conventional war. So, for Douglas Aircraft Company to have that contract was fine with us at VX-5. We were anxious to see the multiple bomb rack in production.

Dr. Allison: So altogether this project took about....

General Fitch: About eight or nine months since the May /June 1959 original idea for multiple carriage of high explosive bombs, from May or June 1959 to about February or March of 1960, where Douglas is putting in a proposal to BuWeps for what would become the MBR. The Douglas MBR would be the first operational multiple bomb rack, because it would be the first one properly engineered for production.

Dr. Allison: I suppose you continue demonstrations with it though? You remained in VX-5 until about May 1960.

General Fitch: About November 1959 I had told Commander Cox we needed a conventional weapons project for VX-5. For the rest of my time in VX-5, I flew project flights, and worked on the project plan for the first conventional weapons project that VX-5 would do. When I was relieved in May by Captain Hal Vincent, I gave him a conventional weapons project with about 250 project flights planned.

So in May 1960 I'm transferred from VX-5 to VMA-311; an A-4 squadron at El Toro. When I get toVMA-311, the group, MAG-15, calls me one day and wants me to come up and see the group commander. And so I go up to the CO MAG-15's office, and he said, "Fitch, can you get those MCBR racks up at VX-5 and put on a demonstration for General Shoup, the Commandant?" I said, "Yes sir, I can get those racks." He said, "Well the Commandant is going to be coming to Pendleton and then he's coming up to El Toro, so we want you to put on a firepower demo for him at Pendleton and then a static display here the next day." So I said, "Colonel, that would be fine." but I added, "If I put on a demo at Pendleton, I would put on a much better show if I could drop high explosive bombs for the demo." I told him that "High explosive [HE] bombs had not been dropped in our MCBR work at VX-5, and that those HE drops needed to be done." I said, "I would like to do those HE drops and they could be combined with the demo for General Shoup." The colonel said, "Fine."

And with that I said, "By the way colonel, China Lake has just gotten three prototype multiple bomb racks that Douglas Aircraft has just completed; three of them, which would be their prototype racks," and I said, "I can get those prototype racks for the CMC demo," and he said, "Hey, that would be great." So then they told me the dates they were interested in and I told him, "Colonel, I need one practice day and then the demo day, plus there will be the static display." I said, "I will need 36 HE MK-81 low drag bombs for the practice and the demo, and I will need 18 more for the static display at the end." That comes to a total of 54 HE MK-81. The colonel said, "The group will take care of getting you the high explosive bombs."

And so a day or two before I was supposed to do the practice flight at Camp Pendleton, I checked with the group, MAG-15, and they said, "We can't get you the high explosive MK-81 bombs." I said, "Okay, I can get those at China Lake." So I called up VX-5 and I said, "Not only do I need the three Douglas MBR racks but I need 18 MK-81 HE." They said, "Okay."

My log book shows on June 24, 1960, I flew to China Lake and VX-5 put the three prototype Douglas racks on my A-4, and they loaded 18 MK-81 HE on those MBRs. I then flew the MBRs and MK-81 HE bombs back to El Toro. Once again, carrying all of those bombs and landing with them gave me a good reason in later years (1968) for putting a drag chute on the A-4M Skyhawk – that would not happen for eight more years when I would be at HQMC as the A-4M project officer.

At El Toro the VMA-311 squadron ordnance-men met my plane and fused the MK-81 HE bombs. On June 27th I flew to Camp Pendleton, with a tanker along in case I needed to aerial refuel, and I practiced skip-bomb with a salvo of 12 MK-81 HE bombs. I'd done a lot of skip-bombing up at China Lake on Charlie Range, but with inert MK-81. This time it was be high explosive bombs. What I would do, as soon as I released the bombs in the skip bombing, I would snap on four or five G's to escape any bomb fragments. These are MK-81 low drag un-retarded bombs now - this is long before there was a snake-eye. When I had done this skip bombing at Charlie Range with the inert MK-81s, I would snap on about four or five g's immediately after release, and with the range personnel I had all the tracking going on at the bombing range. Based

on that tracking at the Charlie range, the range folks were confident that I would be outside of the frag pattern of the bombs. But this was all with inert bombs which don't have a frag pattern. So down at Pendleton on my practice day, June 27, 1960, I had 18 MK-81 HE on the aircraft. I'm going to skip-bomb with the twelve bombs on the wing MBR and I'm going to pull up and high-dive with the remaining six MK-81 HE. Well I come in skip-bombing, this is the real thing at about 150 to 200 feet AGL [chuckle] and I salvo those 12 low drag bombs off the wings and I snap on four to five g's. The crowd watching said it was all beautiful. Then I climb up and I dive bomb with the other six MK-81 HE on the centerline MBR. I was told that the dive bombing was also impressive. One little A-4B aircraft had just delivered 12 MK-81s high explosive bombs and then dropped six more MK-81 HE in a second run.

Dr. Allison: Now on a skip-bombing, how long do they skip before they blow up?

General Fitch: Oh they fly quite a ways which is the important part, before they hit the ground, probably close to 1,500 feet in distance, and then they detonate on impact. During the skip bombing I was going about 500 knots.

Dr. Allison: So you've got a vertical target you want to hit.

General Fitch: No vertical target. I was just planning to hit the peak of the mountain, which was the target, I hit the peak on both bombing runs. Now I've dropped 18 high explosive bombs. That was the first time it's ever been done on a multiple bomb rack. It also was the first time it had been done on a A-4 Skyhawk. I rendezvoused with my A-4 chase plane that has a buddy-store for aerial refueling if need be. The chase plane pilot's name was Murphy, and he said, "You're streaming a little fuel there." I fly back to El Toro and land. A frag has hit the bottom of the airplane. There was only one small hole from a frag. And so the theory on the skip bombing worked, but I just needed to be maybe 100 feet higher and I wouldn't have had that frag hit me [chuckle].

Seven years later when I am in Vietnam, stationed at Chu Lai and commanding an A-6A squadron, I go back to level bombing during all those night attack missions against North Vietnamese targets deep north. Flying the Rolling Thunder missions, in Route Packages Six and Five, in the middle of the night while flying at 500 feet](AGL), using the radar altimeter to maintain proper AGL altitude, sometimes at 400 feet AGL, while carrying 18 MK-82 low drag bombs, when we left the approximate 10 miles IP with the computer working the release solution for a bomb salvo, we would stay at 500 feet until the bombs automatically released. That release

would provide an 18 bomb salvo. Right after bomb drop the A-4 would balloon upward and the pilot had to press forward on the control stick to keep the aircraft from going too high. The objective was to stay below a thousand feet AGL. The purpose of keeping the aircraft as low as possible was to avoid inviting the North Vietnamese SAM sites to shoot at you. At that time with a salvo of 18 MK-82 HE low drag bombs (not retarded), even with forward stick pressure the aircraft would quickly balloon up to about a thousand feet AGL at bomb impact. Once we were at 1,000 feet we immediately pushed over and got back down to 400 to 500 feet AGL. It is noteworthy that we never got a frag by releasing this way, straight and level at bomb release with 500 feet AGL, or level and turning away from the target at 500 feet AGL. If you look at frag patterns as designed by engineers, you will find frags from MK-82 bombs going up to 2,500 or 3,000 feet. That was not our experience with frags.

Dr. Allison: What happened with the frag holes in you're A-4 after that flight?

General Fitch: There was only one hole from a frag. I said, "Fine, please get the metal-smiths to fix it." [Laughter]. I was the maintenance officer for the squadron. And the CO of VMA-311, whose name was LtCol Ray Rushlow, wasn't perturbed. The damage to the A-4B was very minor and could be fixed in the squadron.

Dr. Allison: So, how did the demo for the Commandant go?

General Fitch: So two days later, on June 29, 1960, I would fly the demonstration for General Shoup. It goes the same as I had done in the practice two days earlier, except that I decide that I will dive bomb the 12 bombs off the wings and then do a second dive bombing run to drop the six bomb off the centerline MBR.

The demo for General Shoup worked out beautifully because it kind of blew the top off the mountain so to speak with those 18 bombs. When I got back on the deck at El Toro, I asked the ordnance men to hang 18 more bombs on the airplane. The next day General Shoup will be coming by for a static display for him. The next day when the Commandant comes by my A-4B in the static display, the first thing that General Shoup says to me [chuckle] after we shake hands is, "Captain, that was very, very impressive down at Camp Pendleton, but" he said, "I understand you can drop those bombs from a lot lower than what you did for me." [Chuckle] He said this because General Jack, who was the two-star at El Toro at the time, had already told General Shoup that I had gotten a frag in my airplane when I skip bombed the target a couple of days earlier.

Dr. Allison: Oh, he had?

General Fitch: Yes. General Shoup thought that was funny. But again, nobody really cared about the frag, since this multiple bomb rack effort was going to be a quantum leap in being able to do air support in conventional wars. I was breaking a lot of new ground. Everyone who had seen it was enthused.

Dr. Allison: Before this time you couldn't salvo bombs off an airplane, is that correct?

General Fitch: Well you could salvo them off of something like an AD. But you did not have multiple carriage like we had done at VX-5.

Dr. Allison: But each station would only hold one bomb.

General Fitch: Each station on the AD-4 and AD-6 held only one bomb and in the case of the A-4 that I was flying at the time that I did the demo with HE for the Commandant, it only had three pylons or three racks on the wings, which are built as part of the airplane. To each of those pylons, a prototype (Douglas Aircraft) multiple bomb rack was attached, with each MBR carrying six MK-82 HE.

Dr. Allison: But you could drop banded bombs, which would give you nine bombs off.

General Fitch: Well yes, but we had abandoned banded bombs for the A-4 Skyhawk. With the MCBR you could pick the number of bombs to drop. We needed to preserve the idea of banded bombs only for the FJ-4B, but not the A4B.

Dr. Allison: I see. Ok, you are part of VMA-311 now though, how did you like getting back to a tactical squadron?

General Fitch: When I first joined 311 - and this is a situation that a young officer needs to think about - because my going to 311, as it turned out, could have been the end of my career. I had gained an awful lot of notoriety with the MCBR. An awful lot of people knew who Captain Bill Fitch was. I knew or had met all the pilots in VMA-311 with the exception of the executive officer, who was Major J. W. Baker. So this is before I put on the demo by the way for General Shoup. I'd been in 311 about two days and I'm thinking, "I ought to go by and meet the executive officer." And so I stopped by his office and knocked on the door. I said, "Major Baker, my name is Bill Fitch. I just checked in the squadron and I wanted to come by and meet you." His response was, "Fitch, I've heard about you and I want to tell you one thing right now. You'll never see that bomb rack in this squadron." At that moment in time I knew that the Bureau of Naval Weapons had just let a contract with Douglas to do 2,000 bomb racks.

I didn't say that to Major Baker but I did say, "Well Major, everybody to his own opinions, but I do think you'll see multiple bomb racks in 311." He said, "Fitch, I'll bet you any damned amount of money you want to bet you never will." Needless to say this was an awkward situation. I knew about the 2,000 multiple bomb racks that the Bureau of Naval Weapons had under a procurement contract with Douglas Aircraft, and Douglas was building those racks as I spoke. I said, "Well Major, if you really want to bet I'll bet you five dollars that you do." He said, "Fitch, you're on for five dollars." and I said, "Yes Sir. Nice to meet you, Major." And as I walked away I thought, "What have I gotten myself in to? This guy is the executive officer of the squadron and he is mad about something – apparently me."

Dr. Allison: He was sort of gunning for you.

General Fitch: And so then I inquired with someone, I don't recall who, and I found out Baker had been passed over a couple times for lieutenant colonel, with the most recent pass over being a few months prior to that day. Apparently at one time he had been senior to Ray Rushlow who was a lieutenant colonel but Rushlow had been selected and Baker had been passed over. So Baker was pretty bitter, and apparently he had decided to take out his bitterness on me. At the moment my career was kind of on a crest and everything was roses for everybody except Major Baker. I would be in 311 for about two years, with 13 months of that overseas. Baker's view of me never changed.

As I look back, being in VMA-311 was the worst experience of my 34 years active duty. The flying was good, and I learned a lot about being the maintenance officer for the squadron, but having Major Baker as the XO of the squadron was the pits. During those two years he would again be twice passed over, making him a four time loser.

Dr. Allison: Did you ever speak to Rushlow about Major Baker?

General Fitch: No I never spoke to Rushlow, but I am confident he knew all about his executive officer. I would suspect that Baker hated Rushlow more than he did me.

Dr. Allison: What happened on the bet?

General Fitch: After I had been in 311 about six weeks, I flew the firepower demonstration for General Shoup. While I twice flew a 311 A-4B doing the demo for the Commandant, with the high explosive bombs, Major Baker never mentioned the bet again, even though 311 had now twice seen those multiple bomb racks on a VMA-311 aircraft in June 1960. He never paid the \$5.00, even though VMA-311 received 40 new production multiple bomb racks when the squadron arrived in Japan a year later.

Dr. Allison: Did your wife remain in California when you transferred to VMA-311?

General Fitch: My wife, Margaret Marie, planned to finish her last year and a half of college while I was in Japan for the 13-month tour overseas. In early February 1961 we drove cross country from Santa Ana, California to Gainesville, Florida, where she would enter the University of Florida for her last three semesters. We arrived in Gainesville just in time for her to register for the semester that would be beginning in February 1961. She graduated in June of 1962. Right after that leave to move my wife to Florida, I flew back to California, and then 311 headed for Japan on commercial airplanes.

Dr. Allison: What did VMA-311 do on that 13 month WestPac?

General Fitch: We relieved VMA- 223 aboard the carrier, *Coral Sea* which had an angle deck. I had flown the F4U-5 Corsair from *Coral Sea* when it had an axial flight deck. When we relieved VMA-223 on *Coral Sea*, 223 had been aboard carriers for 13 months. In 311 we expected to do the same 13 month tour on the WestPac aircraft carriers. However, that would change.

After about a month or six weeks on Coral Sea, the Coral Sea was relieved by the USS *Midway*. We would be aboard *Midway* for a month or so.

Dr. Allison: So we're getting up into '61.

General Fitch: We are at about in May 1961 when we move aboard the *Midway*. We'd been aboard the two carriers about six weeks, and the CO of the squadron, Lieutenant Colonel Rushlow gets a message that says his wife is going to have a serious operation. The message says that he needs to come home to the El Toro area on emergency leave, while his wife is in the hospital. So Lieutenant Colonel Rushlow goes on emergency leave back to California. As soon as LtCol Rushlow is off the ship Major Baker calls me in and he says, "Fitch, I don't know if Rushlow is coming back or not." He goes on to say, "I don't like the way you're running aircraft maintenance with that section system." What we had in 311 aircraft maintenance was a section system where they're doing aircraft preventive maintenance checks and other maintenance, which was the system that LtCol Rushlow liked to have. Rushlow liked it where the maintenance crews worked as a team or a section. Major Baker wanted to decentralize maintenance, and get rid of the team or section approach. As an acting CO he could do that change. He had already implied that he doubted that Rushlow would come back. I was looking at the unfortunate prospect that Baker would become the commanding officer of VMA-311.

As a captain I am caught in the middle, since we don't know if Ray Rushlow will be coming back, or whether Major J. W. Baker will become the commanding officer. Since Baker is now the acting commanding officer, I said, "Well Major, do you want me to change it?" He said, "Change it." So I said, "Yes sir, I'll change it." With that I told my engineering officers and the maintenance chief that we are changing the maintenance system. And I got to thinking, "If this major ever writes a fitness report on me, I'm dead." I had worked with some odd balls in the past, both Navy and Marine, but they were rare. Baker was absolutely unique -- a real loser. It was not hard to figure out how he failed to be selected for lieutenant colonel. He would fail selection a few more times, which did not help his disposition.

After about a month aboard *Midway*, VMA-311 moved ashore to MCAS Iwakuni in Southern Japan. Iwakuni was about 30 miles south of Hiroshima. Baker was still the acting CO when we get to Iwakuni, which was around the first week in June. LtCol Rushlow at that point in time has been on emergency leave for maybe two weeks.

Dr. Allison: You didn't say anything to anyone about Major Baker.

General Fitch: No. I said nothing at all. That would not have been helpful.

Dr. Allison: Why did you [the squadron] move off the Midway to Iwakuni?

General Fitch: The reason for 311 moving ashore was simple. There were two Marine A-4 squadrons aboard the *Midway*, and both were there for the nuclear weapons commitment of the aircraft carrier. Congressional pressure on the Navy forced the Navy to make the change. In late May 1961 the Navy was having a congressional hearing in Washington and the Navy was testifying on the Navy's request to buy more F-8U Crusaders. In the process of the hearing, one of the Congressmen or Senators said, "Well Admiral, we don't understand this. You say you need more Crusaders, but out in the Western Pacific there are two Marine squadrons aboard the aircraft carrier, *Midway*, and the Crusaders are all operating ashore. So, why do you need more F8U Crusaders? The Crusaders you have now are not aboard the carrier in the Western Pacific."

Well all of a sudden, "Wham!"the Marines went ashore [chuckle] and the Crusaders came back aboard the *Midway*, so that the Navy could procure the Crusaders that they wanted. From Iwakuni, VMA-311 would still have its nuclear weapon contingencies to be prepared to participate in.

By the grace of God, Lieutenant Colonel Rushlow comes back after about a three week emergency leave. This obviously was very fortunate for me. An observed fitness report period had to be over 30 days, unless there was strong justification for a shorter period of time. In my case Baker would never have a chance to write a fitness report on me. It is very probable that had Baker written a bad fitness report on me they would have thrown it out at Headquarters, Marine Corps, because it would have been an aberration. Fortunately, Rushlow was back and now we are at Iwakuni.

Dr. Allison: What sort of flying did you do from Iwakuni then?

General Fitch: Our SIOP [single integrated operation plan] missions switched to Iwakuni basing instead of from the *Midway*. We do a total of 10 or 11 more months at Iwakuni. We were ambivalent about leaving the carrier. Carriers make a lot of port calls, such as Hong Kong, Singapore, and Manila, which is one advantage of being on the aircraft carrier. On the other hand, from Iwakuni you could take a few days on an American Express tour, and see places like Hong Kong, Manila and Singapore.

Dr. Allison: Can you describe a SIOP mission, how realistic did you make it?

General Fitch: They were for real, but it was only a contingency. You have to plan your contingency missions and have all the necessary maps ready to go. Every few months you have to

brief the MAG-12 operations office on your targets and how you would fly the missions. Having to execute those missions was very, very remote. I'll never forget one time I asked up at the group, MAG-12, I said, "Now I'm going into such and such a target," when I briefed it. I said, "Can you tell me, am I the first airplane into that target?" Whether true or not, they said, "You're number three behind the B-52." [Laughter] The fact is, at the group they had no idea which aircraft would be going to that target, except for me.

Dr. Allison: [Laughter].

General Fitch: So that would have made it kind of sporty if you would have been too close to that target about the time that B-52 was releasing a nuke weapon from 30 or 40 thousand feet. That could have been hazardous to your health.

Dr. Allison: Were you able to go back to section maintenance when Rushlow returned?

General Fitch: When Lieutenant Colonel Rushlow got back, a few days later he and I were talking casually one day. I mentioned to him that we had switched out of the section system of maintenance and I would like to switch back. Rushlow said, "I never could understand why you had changed it." I simply replied, "Major Baker told me to do it." Rushlow simply said, "I had figured that was the case." So I switch back to section maintenance. Major Baker never says a word about it.

Dr. Allison: Anything else on that WestPac with VMA-311?

General Fitch: In November 1961 we do field carrier landing practice with our landing signal officer, and in late November we fly aboard the carrier, *Bon Homme Richard*. We renew our carrier qualification and while on the "*Bonnie Dick*" I log my 300th arrested carrier landing. That would be the last time that I would fly on and off an aircraft carrier. At the time I was a captain.

Dr. Allison: So your carrier days are over.

General Fitch: Yes. The remainder of our Pacific tour is routine. At the end of over 12 months in the Pacific, we're down in the Philippines at the Naval Air Station Cubi Point – doing a training deployment. The squadron is going to return from Cubi Point direct back to El Toro, with most of

the squadron flying back to MCAS El Toro in KC-130 aircraft. The aircraft will be returned to ConUS on a ship. Because Margaret was going to finish the university in early June 1962 and graduate, I was going to stay on in Japan for about a month. My wife and I had talked about whether I should come back and execute my orders or should I extend a month in Japan.

Dr. Allison: So you only needed a one month delay.

General Fitch: About a month would do it. We only had one car and Margaret needed that car to get back and forth to her student teaching. At that time I had orders to the Advanced Training Command in Beeville, Texas, where I was supposed to go to an F11 advanced training squadron. At Beeville I was supposed to relieve Major J. K. Davis as the operations officer for the squadron. So, we had decided that it would work best if I stayed over at Iwakuni for an extra month. That way I would get back about the time she was to graduate from the University of Florida. And so I bid goodbye to 311 at Cubi Point and I fly up to Iwakuni. MAG-12 had agreed that I would join the squadron, VMA-211, that had relieved 311. As fate would have it, Baker, was also going back to Iwakuni, where he would bring the rear echelon of VMA-311 back to California.

So I get to Iwakuni, MAG-12, and I check into the group and I've got MAG-12 orders to 211. So the next day, I go check with the group and they say, "Major Baker talked to the CO of 211 and Baker told that CO that he wouldn't want Fitch in his squadron." To that I said, "That's interesting." [Chuckle] So I checked a little bit more and that was true. Baker had talked to whomever this lieutenant colonel was that was the CO at 211 and said, "You don't want Fitch." And with that situation established, I tell the S-1 (personnel) of MAG-12, "Fine. If I'm going to wait I'll wait in Texas, not here." So I then told the S-1, "I'm not going to continue this extension." I said, "I'll get the first plane out." And they said, "We'll take care of that."

Dr. Allison: You fly commercial back.

General Fitch: Yes. Two days later I'm on a commercial flight to California. From there I fly to Jacksonville, Florida, where Margaret meets me. She is in her last semester at the university. She is ready to do her student teaching, I take only a brief leave. Since I will have to go on to the training command, I head for Beeville, Texas. I will wait in Texas while she finishes school. She needs the one car we have for her student teaching. I figure I can get a car in Beeville.

Dr. Allison: Well this is just all interesting.

General Fitch: That was an interesting time.

Dr. Allison: You told me one time that you had lost a bomb rack though, during one of the test flights or something, what happened there?

General Fitch: Well that happened with the two MCBRs for wing carriage that we built in the VX-5 metal smith shop. The building of those two wing MCBR took place in November 1959. When we had built the first two wing racks, the wing MCBR, we had finished the fabrication (welding and assembly), we had the wiring harness installed in the wing racks, and the date was November 19, 1959. As a first step that day, I flew a stability and control flight with 16 MK-81 inert bombs on the aircraft. Initially I did a couple of high speed low altitude runs at about 500 knots, pulled about four "g", then I let the tower at Charlie Range look at the racks as I flew by at about 100 feet AGL and very slow.

I had wanted to see how the three MCBR with bombs aboard would fly. It was a simple flight and everything was fine with all the MCBR and the bombs. Nothing fell off the aircraft or the three MCBR. After probably a 40 minute flight I then landed at China Lake with 16 MK-81 bombs on the aircraft. After the landing, VX-5 ordnance checked out everything on the three MCBR, and the plane captain pre-flighted and refueled the aircraft for a second flight.

I previously mentioned that when flying the centerline MCBR, the primary cartridge in the Aero 7A pylon had to be disconnected. The same was true for the wing MCBR and the primary cartridge within the Aero 20A wing pylon. If the primary cartridge were hooked up, when you pressed the bomb button on the control stick, and you had selected an MCBR, you would jettison the entire MCBR from the aircraft, with bombs attached. The E-9 chief petty officer that ran ordnance knew that, and both he and I had been very careful with that primary cartridge— we had it always disconnected (the primary cartridge) when there would be a MCBR on a station. We would carefully check it prior to every flight with a MCBR.

Now it is time for the second flight in the middle of November. This flight will be with 16 MK-81 bombs aboard. For the second flight, with 16 MK-81 inert bombs on the aircraft for the second flight of the day, I pre-flighted the aircraft plus giving special attention to the wing and centerline pylons to ensure that the primary cartridge was disconnected in each and wrapped around another wire within the pylon. This was a critical check every flight, to keep the primary cartridge out of the way, and thus avoid an inadvertent jettison. As I checked each primary cartridge, I told the chief petty officer, the E-9, to button up the pylon while I continued the

preflight and got into the cockpit. On this flight I'm going to drop the MK-81 as singles, pairs and a salvo, using each rack as appropriate. When I decide to drop the first bomb off the wing rack – I select the left wing MCBR and I select one bomb which will be on the aft Aero 15 and outboard. At Charlie Range, on the run-in line from south to north, I do a low angle loft maneuver at four "g" and the single MK-81 bomb flies toward the target. So, the left wing MCBR works fine and I turn off that selector switch. Now it is time to drop the second bomb. I select the right wing MCBR and I elect to drop one MK-81 bomb from the right wing MCBR, with the outboard bomb on the aft Aero 15 to be released. I do another low angle loft maneuver. When I reached the selected loft angle, "Kabluey!" Charlie Range called me and said that the right wing MCBR came off the aircraft with all bombs intact on the rack. Well I immediately went back and landed at China Lake, with a somewhat asymmetrical load with six bombs on the centerline MCBR and five on the left wing MCBR, and nothing on the right wing except the empty pylon.

I taxi in to the flight line and I shut the airplane down. I opened the canopy and told the ordnance CPO, "No one touches anything." I got out of the airplane and I went around and opened up that right wing Aero 20A access door. I looked inside at the primary ejection cartridge, and it was hooked up. So then I take the ordnance chief aside, and as I have mentioned he is an E-9. I said, "Who hooked up that primary and closed that access door on the right wing?" I don't recall what he said the name was which is not important. It turned out that the E-9 CPO simply told a sailor to close the access door on that pylon. The CPO had never told this sailor that the primary had to be disconnected. The sailor hooked it up. He had done what he thought he was supposed to do, and he had not told anyone what he was doing. There was no need for me to say anything to him. [Chuckle] So that error by that E-9, which was due to his not properly supervising his sailors, cost us about ten days while we built another wing MCBR [chuckle]. After that, I always stood next to the MCBR and watched ordnance close the access doors with none of their hands going inside the Aero 20 pylon or the Aero 7 pylon. Those ordnance men knew to leave those primary cartridges disconnected, and I watched them to make sure they knew.

But anyway, we quickly recovered. On November 30th I would fly two test flights with 16 MK-81 bombs on each flight. On December 2d I would fly to Yuma with 16 MK-81 inert bombs aboard, and land at the MCAS. The firepower demo would go on 3 December 1959. Remembering that December 2d flight would be another reason that seven years later I would put a drag chute on the A4M Skyhawk. The A-4 did not stop too readily with 16 bombs on it.

That CPO thought that he was at the executive level. I was not a very pleasant pilot around him.

163

But again, the whole process, it worked out very well and the third wing rack was operational before the first day of December. You know how things went when I was at Yuma. I told you all that.

Dr. Allison: VX-5 was important in those days, historically speaking, with the Cold War on, and then on the eve of the Vietnam War, which was a low-intensity counterinsurgencies in many senses--any other significant aspects of VX-5 in that sense?

General Fitch: Well let's see. We did a lot of aerial refueling. We had to do it for all kinds of nuclear weapons mission profiles and of course in the nuke weapons business you would have like high/low low/high profiles where you'd go very high and then when you penetrated the defended areas, you'd be flying at about 100 feet AGL. Then you'd go into the target, and assuming you'd live through the bomb drop along with the blast and the radiation, then you'd come back out low and when clear of enemy defenses, you would climb back to high altitude. Well we had to fly those profiles with and without aerial refueling. The only airplanes we had available to us as tankers were the buddy-stores on either the A-4 or the FJ-4B. That is the only aerial refueling capability we had.

To test realistic altitudes for aerial refueling from the buddy store, we would do things like aerial refuel at 100 to150 feet off the deck, just enough room to get an airplane under an airplane with a buddy store. Then we would do aerial refueling up to altitudes such as 32,000 feet or higher, and we would do that refueling both day and night. Tanking at night at 35,000 feet, lights out, is sporty.

Dr. Allison: An A-4 refueling another one?

General Fitch: Yes. Or you might have a FJ-4B refueling an A-4. But anyway, you'd do that right in the summer months, where turbulence was bad, and then you would refuel at various altitudes right on up to 35,000 feet. And then you'd do that at night where you're right on the deck at about 100 feet AGL, and then at night you would do the same refueling at higher altitudes as you had done in the daytime. This is before there is any kind of terrain clearance radar. But you do have radar altimeters for lower altitudes. So you'd normally pick a good night that you'd go out and do this, and you're right down on the deck with one airplane right underneath another one and plugging in and so forth, and then you'd go right on up to say 35,000 feet at night and it's lights out because that's the way you would do it in combat. It gets kind of interesting. Then you can hark back to those who criticize aviators for drawing flight pay.

Dr. Allison: You would do it that way in combat then? How could you ever find another airplane with lights out?

General Fitch: Well you just take off together. There was no rendezvous with the buddy store tanker. The tanker went with you and gave you fuel at the prescribed time that you would need it to complete the mission Then as I said, we tried all the various altitudes, to ensure aerial refueling could be done in all kinds of conditions. But no, we did those kinds of things and then the profiles themselves. In other words it was all worked out where if you flew a certain profile like maybe you could get the airplane only up to 28,000 feet initially and then you'd cruise climb up to say 35,000 as you burn fuel. And then you'd have a descent to get down low but you'd stretch the descent as far as you could and then you'd have the low-level portion and then into the target. And we dropped real bombs with everything except the nuke in them. We'd go out to the carrier to do this, as I mentioned when I was out on the carriers with the FJ-4B

Dr. Allison: The bomb.

General Fitch: Yes, you only had to worry about one bomb [laughter]. It was what we called a proof flight. Then when you got to squadrons like 311, you had special weapons loading officers who were specially trained for loading nuclear weapons on the airplane. That loading process was highly classified. It was done with screens around the aircraft being loaded.

Dr. Allison: Always a contingency, but realistic.....

General Fitch: You never flew real missions, but you were prepared to fly them if you were told to do it. You knew what your target was and where it was and you would lay the whole thing out, but you never did it over foreign terrain that you weren't cleared to fly over. You would plan the mission just hoping you'd never have to fly it.

Dr. Allison: A lot of people don't realize the Marine Corps was really big in the nuclear business there for a while.

General Fitch: Well like I said, when I got to China Lake it was all nuclear weapons and the only people that thought anything about missions like close air support and conventional bombs was the Marine Corps.

Dr. Allison: That's something, and its Marines going back to their roots.

General Fitch: If you look at priorities in Navy Aviation, the first priority is to protect the task force, which means protect the aircraft carrier, and then the second priority would be to do deep strikes. The Navy is always talking about hitting targets that are 600 or more miles away. Those are what you might call strategic strikes; and that's why the Navy always emphasizes that they've got to go six or seven hundred miles mission radius in order to be effective. Now it turns out they've had an awful lot of airplanes that wouldn't do that. But that's some of the controversy right now where in the case of the F-35C, which is the Navy JSF variant. The F-35C has additional fuel in a larger wing and in the fuselage area where the Marines have the lift engine.

If you look at priorities in Marine aviation, they are different than the Navy's. The Marines first priority is to support Marine infantry units in ground combat. That is what Title 10, which is US law, says Marine aviation is supposed to do. The Marines believe strongly that you should forward base and put Marine tactical aviation, the STOVL [short take off vertical landing] aircraft and the helicopters, as close to the ground combat as you can, with due regard to enemy capabilities. Navy studies done in 1996 show that if you cut the distance to the target in half, then you double the sortie rate capability. I repeat, that is a Navy study, and it supports the Marine intention to forward base the all STOVL force.

In the sortie rate validation test [SRVT] that the Marines conducted in 1972 when the AV-8A was our STOVL aircraft, with six aircraft and forward basing we demonstrated over a ten day period that we could fly six combat sorties a day for each STOVL aircraft. In those 10 days, in a SRVT supervised by the OSD Weapons Systems Evaluation Group (WSEG), the Marines flew six sorties a day, per aircraft, on a sustained basis, and flew ten plus sorties a day, per aircraft, on the surge day. In 1972 with a first generation STOVL aircraft, the AV-8A, those six Harriers flew 376 sorties in ten days using forward basing and dropping ordnance under a FAC's control. The Navy doesn't do that kind of flying. They like deep strike.

The Marines have a different primary mission and a different concept of operations. For the Marines their primary mission in the Marine air wing is to support the Marine infantry units in combat on the ground. The support of ground troops is about fourth or fifth in the Navy air priorities. You've got to have the lift engine in order to do the STOVL capability. STOVL capability is critical to Marine aviation being able to support Marine ground combat units in a timely manner. A bridge such as would be a Navy deep strike target, will be there today, tomorrow and next week, until it is bombed. Close air support targets are fleeting. They only last a few minutes and then they are gone, to pop up somewhere else. And this is where the Marine Corps and the Navy diverge. Forward basing with expeditionary sites and STOVL is critical for the Marines and the air-ground concept of the MAGTF. The Navy puts close air support at a priority of four or five, and they are reluctant to do CAS. Ask a Navy F/A-18E pilot how much CAS he has done in the last year, and he might say, "One hop."

We also do deep strike in the Marine Corps, but it's not our primary mission. We look at deep strike as hitting targets that can impact the ground battle within 24 hours. Our primary mission is close air support. And so we have attached a great deal of importance to STOVL, and have done so for over 35 years, ever since we started the original Harrier program back in 1968. It was 1968 when I happened to become the first Harrier project officer at Headquarters Marine Corps (APW). But we have emphasized the capability of forward basing, along with the capability to rapidly construct expeditionary airfields. We teach our young aviators that it's our view that the Marines in the expeditionary mode should be capable of forward basing very near the ground battle, perhaps 20 to 30 miles – and this is why we have short airfields for tactical support [SATS]. This is why we started SATS long before we ever got into the AV-8 Harrier.

Dr. Allison: Were you seeing that when you were in 311?

General Fitch: No, we didn't have any of that in 311. We were first aboard the *Coral Sea* and *Midway*, due to the priority for the SIOP, and then we were at Iwakuni with the SIOP priority. In those days the emphasis was on the nuclear missions. The creation of the MCBR in 1959 was just starting to change all that. But in the early 1960s the Marine aircraft wing had the capability to put in SATS fields, but in Japan real estate was hard to get. We used JATO [jet assisted take off] to get aircraft like the A-4 airborne in a short distance, but we were flying off a long runway when we used that JATO. The purpose was JATO training and not SATS at that time. Then we would do arrested landings when we returned to the air base. But fact of life, conventional war was not a popular topic for the military in 1961-62. The philosophy that prevailed at the time was a, "Nuke 'em philosophy."

No SATs operations at all in WestPac in 1961-62, because the emphasis was on nuclear retaliation. But the capability was there. Remember this is 1961-62 there is no war. Vietnam is yet to come. The Soviet Union was big in the Cold War, as was the United States. In 1961 the 2d

Marine Aircraft Wing had SATs operations ongoing down at Bogue Field. In the 2d MAW the tactical squadrons would periodically deploy to Bogue Field and do SATS operations. We did some of that when I had [VMA] 225.

Dr. Allison: Did they?

General Fitch: Sure. SATS has been around a long time. Well this is the SATs matting, which replaced the old Marston matting. The French had simply bought the matting from the United States.

Dr. Allison: Did it have arresting gear?

General Fitch: There was no arresting gear at Tourane in Vietnam. They didn't need arresting gear. The French were flying prop aircraft at Tourane and those props didn't need much runway for takeoff and landing. It was all Marston matting. However in 1960 there was field arresting gear at Bogue Field. Bogue is where the Marine Corps tested the SATS. Bogue Field, now we had catapults and arresting gear at Bogue. MABS-14 ran that airfield. I was CO of MAG-14 in 1972-73, and at that time the catapults and arresting gear at Bogue had been there many years.

Dr. Allison: Okay, even as early as the late 50s then?

General Fitch: Well the first time I saw it was in the 60s timeframe when I was CO of VMA (AW) –225 in 1966-67. They had it there for a number of years, but as to the 1950s I can't say. I can't tell you when Bogue was first built up with the SATS capability. I never asked. They can probably tell you the answer to that at Cherry Point or Headquarters, Marine Corps.

It is important to remember that in Marine Aviation with our STOVL ConOps, we like to loiter on the ground instead of in the air. Since 1971 when we gained our first STOVL capability with the Harrier, we have had a very rapid response capability for CAS. This capability will be vastly improved with the STOVL variant of the Joint Strike Fighter. We look at forward basing as being nearly anywhere near the ground combat, as long as the forward base can be defended. We proved our ConOps was valid when we did the SRVT about 35 years ago. Our ConOps was valid then, it is valid today, and it will be valid tomorrow. Many years ago the Marine Corps gave up a lot of ground combat power in tanks and artillery, with Marine strike fighters filling the gap in fire power, in order to lighten up the Marine Corps. The Navy forgets that.

The Marine Corps and the Navy have different priorities, and it is difficult to get the politicians and the political appointees to understand that. It is also difficult to get the Navy to understand that. Now the Navy wants the Marines to pickup some of the strike fighter commitments on their aircraft carriers, but the Navy is paranoid on letting STOVL aircraft operate from the carriers. STOVL on the carriers would enhance the combat power of the Navy carrier air wing, but the Navy fears that STOVL on the carriers would lead to smaller aircraft carriers. Fact of life, with each aircraft carrier now costing 12 billion dollars just to build and launch, before the Navy pays the additional cost for the carrier air wing, the day of the super carriers is limited. CVN-21 at a cost of \$12 billion will probably be the last super carrier. With that said, those big carriers now in existence will be around for many years, probably out to 2040, and perhaps beyond. But you need to remember, the most expensive way to put a piece of ordnance on an enemy target is to do it with a strike fighter flying from an aircraft carrier. The cost for that one piece of ordnance on target is huge!

It is germane to the Marine argument that in the last 20 years, commitments to aircraft carriers and other external priorities has reduced the close air support that Marine strike fighters can give to Marine ground forces. While the Navy would argue otherwise, CAS conducted from aircraft carriers is not timely. The carriers operate too far from the ground battles. When CAS is not timely, then CAS is not effective. The result is increased Marine casualties.

Dr. Allison: More on this later, we better call it quits for today.

General Fitch: Okay.

END OF SESSION III

PAGE INTENTIONALLY LEFT BLANK

SESSION IV

Interviewee:	Lieutenant General William H. Fitch, USMC (Ret)
Interviewer:	Dr. Fred Allison, U.S. Marine Corps History Division
Date:	10 April 2006
Place:	Lieutenant General Fitch's Home in McLean, Virginia

Dr. Allison: This is the fourth session of an interview with Lieutenant General William Fitch. Today's date is the 10th of April, 2006 and we're in McLean, Virginia at his beautiful home.

General Fitch: High taxes too.

Dr. Allison: Yes, I bet. In the last session we covered your tour of duty in VMA-311, 1960-1962. I thought it interesting that the Navy had two Marine A-4 squadrons aboard the *Midway* and this for their ability to drop nuclear weapons, but that changed.

General Fitch: I think I've told you why we came off of the carrier, which was tied to a Navy procurement of F8U Crusaders. The F8U squadrons were ashore at NAS Atsugi with the Marine attack squadrons replacing them aboard the carriers, and at the same time the Navy was trying to buy more F8U Crusaders. The reason they had two Marine A-4 squadrons aboard was for the nuclear weapon commitment. The Navy had gotten the Marines to commit two Marine A4D-2 (A4B) squadrons aboard the carrier, in this case *Midway*. The only reason that the Marine squadrons were there was for the nuclear weapons contingencies. The budget for the next year came into play, where the Navy was trying to buy more F-8 Crusaders.

We were aboard for the SIOP, the Integrated Operations Plan for special weapons delivery, which meant that the Marines were fulfilling Navy commitments for nuclear targets. That was when I said that there had been a congressional hearing back in Washington by whatever committee it was; the House Armed Services or the Senate Armed Services, which ever it was. The committee had questioned the Navy's procurement of the F-8 Crusader, in that particular budget, which should have been the fiscal year 1962 budget that was then before the Congress. When questioned about the F8U buy, the Navy had kind of danced around the question and said, "We need them." The Congress didn't like that answer. Then somebody on the committee, a congressman or senator said, "Well why do you have all the F8 Crusaders ashore in the Western

Pacific" and two squadrons of Marine A-4 Skyhawks aboard the Midway?" With that question, immediately the Navy adjusted priorities and the F-8 Crusaders came back aboard the *Midway* and the Marines were moved off the carrier. It was how the game was played.

Dr. Allison: Okay sir. I had one question on VX-5, that if you could elaborate on your proposal to Commander Cox to get a conventional weapons delivery project going there. Was this tied to the bomb rack you developed?

General Fitch: When you consider the relative ranks where I'm a Marine captain and Dale Cox is a commander, and the projects director is a commander, in spite of that I did carry quite a bit of influence due to my work on the MCBR. It was a lot of my effort that had produced, tested and proven the MCBRs. When I recommended that to Commander Cox that we needed OPTEVFOR to assign a conventional weapons project to capitalize on the multiple bomb rack capability, it was an obvious thing to do. I don't recall how long it took the XO to get that project, but it was most probably days instead of weeks. In December 1959, the MCBR had tremendous momentum. And for Commander Cox, he was a very pragmatic individual.

Dr. Allison: And he supported you all along, hadn't he?

General Fitch: All along. He supported me and he supported K.P. Rice, and he carried the rank at China Lake to get funding and cooperation. It is fair to say that I was getting most of the attaboys, but that was due to my doing all the static displays, flight demonstrations and firepower demonstrations. As I have said, Dale Cox and K. P. Rice were critical to the success of the MCBR effort.

Dr. Allison: He was running interference for you.

General Fitch: In my view there would not have been a multiple bomb rack without Commander Cox. There would not have been one without K. P. Rice because the three of us played an important role. With the first flight on October 1, 1959 of the centerline MCBR with those six inert MK-81 bombs, and the release of those bombs on that day, the need for a formal project for conventional weapons tactics and weapons delivery was patently obvious. After the Yuma weapons meet on December 3, 1959, with delivery of 16 MK-81 bombs in the firepower demo, and with Admiral Pirie's comment, "We are going to buy that." It was obvious to all that we had to get VX-5 moving on a properly designated project for conventional weapons. So that was when I talked to Commander Cox and told him I thought we needed a project – and this is long ago, nearly 50 years – I probably told him generally what should happen in that project and the Commander said he'd take care of it. He was always good for his word. He spoke, I'm sure, to Captain Van Meter, and between the two – and I don't know which did what – but they talked with the Commander Operational Test and Evaluation Force in Norfolk, OPTEVFOR, they quickly assigned a project for conventional weapons tactics. My guess is that VX-5 probably received the project directive in January 1960, and I started writing the project plan for the conventional weapons delivery project about early February 1960, which would have been nine months after I came up with the idea for the MCBR in May 1959, and just two months after the Yuma firepower demo on December 3d.

I might mention that in 1960, ComOpTEvFor had development squadrons in three locations. There of course was VX-5 at China Lake, VX-4 at Point Mugu doing fighter work, and VX-3 at Atlantic City doing fighter work.

Dr. Allison: They gave you the plan to write since you came up with the idea.

General Fitch: Well it was an obvious thing to do because no one else had been working on conventional ordnance delivery and the MCBR, except K P and me, and I had done all the flying up to that point. In fact as I recall, K P flew the 14th flight with the MCBRs after I had flown the first 13. Then I flew all the rest of the MCBR flights up until about June 1960, when I flew the Douglas prototype MBR for the demo for General Shoup at Camp Pendleton. That was where I delivered the first high explosive bombs off the multiple bomb racks.

For the project plan, before I left VX-5 in May 1960, I had written up all the various project flights and what would be accomplished, along with the overall plan for development of conventional bombing tactics, etc. All this was for the different kinds of conventional weapons delivery that would be needed for VX-5 to do. I had about 250 sorties in that original plan, which I had written up and processed, which would be at this point the late spring of 1960. And as I'd mentioned earlier, at this point in time Douglas Aircraft was also doing their cleaned up version of a multiple bomb rack, which I would borrow from VX-5 to fly that June demo for the Commandant, General Shoup. About April or May, my relief showed up. That was Captain Hal Vincent.

Dr. Allison: He became a general, right?

General Fitch: Yes, later on he was a two-star. Hal and I were selected for brigadier general by the same selection board. Hal would retire in 1981 as a major general, after being the deputy commander for Marine Forces Atlantic.

Captain Vincent was designated to relieve me in VX-5 and he probably arrived at China Lake about a month before I left. So that would be April 1960 for his arrival at VX-5. I left China Lake and VX-5 in May of 1960 and we moved to Santa Ana, where I joined VMA-311 at MCAS El Toro. Hal Vincent took over my projects in late May 1960, which gave him a running start in VX-5. When I arrived at VX-5 in early 1958, I had to create my opportunities – Hal was fortunate.

The big project for him would be the conventional weapons project that would build on the development of the multiple bomb rack. As I mentioned earlier, Douglas Aircraft came out with their multiple bomb rack, which cut the weight of the rack in half for what K. P. Rice and I had done with the old hand-built multiple bomb racks. They had been able to add one bomb to the forward wing stations so that you could carry six bombs on each wing of the A-4 instead of the five the MCBR could carry on each wing. Of course at that point in time the only thing we'd ever done for the FJ-4B was the banded bombs, which worked fine, but never were pursued after I left China Lake. But then it's important to have the rest of the evolution of the multiple bomb rack, where Douglas delivered their prototype multiple bomb racks to VX-5, three of them, in early June 1960. I had mentioned earlier about the demo I did with those racks for General Shoup.

Dr. Allison: What enhancements did Douglas make to the racks?

General Fitch: The racks that K P and I had done and which Douglas Aircraft Company did initially were gravity-drop. You would release a bomb or bombs and gravity would take over. The only thing that separated the bombs away from the multiple bomb rack and the aircraft was gravity, and that depended on the number of "g's" on the aircraft at bomb release. Probably about a year, maybe two years later the Bureau of Naval Weapons decided that they needed to eject the bombs to be sure of bomb and aircraft separation. So they put ejection cartridges into what was then the multiple bomb rack (MBR) and this became the multiple ejector rack; the MER.

Dr. Allison: Evolved right out of your invention.

General Fitch: And also it's just all-logical progression here. Putting in ejection cartridges and an ejector foot was a simple step to take. I had mentioned earlier, that in 1967-68 when I was flying

combat in the A-6A in Vietnam, on our deep north missions into North Vietnam, we would release a salvo of 18 MK-82 (500 pound) bombs from a release altitude of about 500-600 feet above ground level [AGL], and we'd have the aircraft at about 1,000 feet AGL at bomb detonation. We never got a bomb fragment in our aircraft, which tells you that most of the frags went laterally from the blast instead of vertically.

In the evolutionary process of the multiple rack at VX-5 and Douglas Aircraft Company, VX-5 received the F4H-1(F-4A) Phantom aircraft about two years after I left China Lake. You couldn't carry the six bombs per station on all the pylons of the F-4 and that's when they, in essence, cut the MER into two pieces, redid some of the wiring harness, and you wound up with a triple ejection rack (TER). And then as I pointed out in that e-mail, if you go back to the FJ-4B when we used the banded bombs, the banded bombs were kind of the precursor of what would later be called the TER. But as a summary, what's important is that this all started in about May of 1959. By the following November/December, some six or seven months later, everybody thought that the multiple bomb rack was a great thing to do. It had been demonstrated and the senior leadership of the Marine Corps and Navy had said, "Hey, we're going to do this."

Dr. Allison: The A-4 didn't use TERs?

General Fitch: The MER and the TER did not go into production at Douglas Aircraft Company until about 1962 or 1963. You could use the TER on the A-4 but there was no need to do that with the A4D-2, since it could carry the MER on its three bomb stations. The MER of course gave you the capability to carry six bombs instead of the TER, which carried just three on each station

Dr. Allison: What about the A-6?

General Fitch: The A-6 had five pylons, which meant that The A-6 could give you several options. You could carry the MER with six bombs on each station, except for the outboard MERS. That gave you maximum bomb load of 28 MK-82, which we carried frequently on the A-6 in Vietnam when you would be operating just in South Vietnam. Going into North Vietnam and some Laos targets, you had to carry external fuel along with the bombs. We never used the TER on the A-6. But in the Marine Corps, the Navy and the Air Force you had all their F-4s using the TER on outboard stations and then you even had the B-52 using the MER. I've seen pictures of B-52s flying with MERs on external bomb stations. But that was kind of the end of the evolutionary process for the MBR/MER/TER. Tens of thousands of multiple racks were produced. The key

point in all this is that for roughly 30 years, from 1960 to about 1990, all fighter/attack aircraft used the multiple rack that evolved from that idea back in May 1959. Some countries still fly the F-4 Phantom, and those multiple racks would be used on those F-4s.

Dr. Allison: Modern aircraft are not using these type racks are they?

General Fitch: In the 1980s, fighter attack aircraft such as the F/A-18 started using more sophisticated weapons delivery systems, along with much better radars, infrared systems and computers to bring their CEP [circular error probable] down to a few meters. The F/A-18 and AV-8B are products of that weapons systems evolution, where after many years the computers and sensors took over, along with precision guided munitions and it became highly probable that with the precision strike capability the release of one weapon would kill one target. Such was not the case during the 1960s, 70s, and 80s.

Dr. Allison: That's amazing how quick that rolled out though.

General Fitch: Well it was a rapid process from the initial idea in May 1959 to when the Vietnam War started, where in Vietnam all attack aircraft had the MER or the TER, or a combination of both. But it is my view that the rapid progress of multiple carriage of bombs was in spite of the system and that's why we never told the Bureau of Naval Weapons what was going on until it was sold to the fleet – both Marine and Navy. It is somewhat amusing when you think about what action today earns you a Navy Commendation Medal (NCM), which isn't much action to earn a NCM. Dale Cox, K P Rice and I were each given the Navy Commendation Medal for development of the MCBR. The MCBR concept revolutionized conventional weapons delivery and the MER and TER were used by every strike aircraft in the United States for 30 years or more. Today you get a Navy Commendation Medal for coming to work on time.

Dr. Allison: Now on the tactics in this project plan for conventional weapons delivery, what do you mean by, you said you included in the plan; tactics, weapons delivery, cruise control and mission profiles? Are you actually developing strike procedures or is it for testing?

General Fitch: It's the same kind of thing VX-5 had been doing for special weapons tactics and weapons delivery. For conventional weapons there would be mission profiles for deep strike for maximum range, and then the tactics for delivering the weapons. So, in a real sense, just the

weapons have changed, so that drives the other elements of the projects. You have to worry much more about the weapons effects of nuclear weapons than you do conventional weapons. But then for conventional weapons you have many more strikes in a given area than you do with nuclear weapons. Because in the 1960s and 1970s, when you're going to do a special weapons attack, then of course the special weapon for naval aviation would be carried externally and you would have external fuel tanks to give you the mission radius that you need. You have to come up with profiles which will enable you to do various distances from launch point to target, escape the weapons effects, and then get back to the proper landing point, be it a carrier or an airfield.

Dr. Allison: What special considerations do you make for close air support?

General Fitch: We are talking tactics now, not testing. Close air support targets generally are targets for only about 20 to 30 minutes after detection, then they disappear only to reappear somewhere else. If you don't strike them quickly, within that 20 to 30 minute timeframe, then the target disappears to reappear some other place in the area. Eighty percent of combat targets are mobile.

With the Marines the primary mission is support of Marine infantry units. The more weapons you carry for CAS, the better. Enemy troops move on the battlefield. About 50 or 60 years ago the Marines decided to lighten up and reduce the number of tanks and artillery that they employed on the battlefield. In the process of lightening up, the Marine Corps opted for reliance on increased close air support to make up for the loss of firepower resulting from reduced numbers of tanks and artillery. So, the dependence of Marine ground combat units on responsive close air support goes back many years. The dependence is real – that is why the Marine concept for combat is the MAGTF.

The orientation of the Navy is to deep strike, which is very different that the Marine priority for CAS. The Navy likes to place their aviation assets in strikes against targets 400 to 600 miles distance from the aircraft carrier's position. The Navy says that they require a 700 nautical mile (NM) strike capability un-refueled. In the tactical sense where there are enemy air defenses such as AAA and SAMs, the Navy has never had an aircraft capable of 700 NM mission radius unless it used aerial refueling. The primary targets of Navy aviation are very different than targets for Marine aviation, and the two services train differently. The F/A-18E/F that the Navy is buying today has a large radar cross section, and it will not fly a 700 NM radius mission without aerial

refueling. The Navy does not get a stealth capability until they procure the F-35C Joint Strike fighter.

Marine squadrons routinely operate from aircraft carriers, and it is fair to say that Marine squadrons can do the Navy mission quite well, where the opposite is not true for Navy squadrons. Navy squadrons do not give much priority to practicing CAS. Vietnam would be an excellent example, where Marine A-6 Intruders routinely flew deep strike into North Vietnams to hit fixed targets, in support of Navy and Air Force missions, yet you seldom heard of any Navy squadrons flying CAS for Marine or Army units in ground combat.

Dr. Allison: Right. So if you're going to hang more bombs on an airplane you've got to come up with all sorts of new profiles.

General Fitch: That's correct. You have got to figure out how you're going to get to the target, do you fly some of the mission radius at high altitudes where upper winds are strong, sometimes 200 knots, do you fly low level in the target area where the threat is high, how far do you fly low level and at what airspeeds, how do you egress from the target area, and where do you fly to after releasing the aviation ordnance. For example, in the case of Vietnam, which again comes at a later point in time, while flying the A-6 it was very important to have your mission radius figured out for worst case in regard to avoiding enemy defenses, because you were doing this at night, you were doing it in a high-threat environment, you were doing it as a single aircraft, you had to run in low level for about 75 miles at about 400 or 500 feet AGL with no terrain clearance radar, and there was no place to divert to in North Vietnam Even though the A-6 was touted as a deep strike aircraft, for the deep north mission around Hanoi you did not have the fuel to get back to Da Nang or Chu Lai. So in the Rolling Thunder case for Vietnam, your available fuel dictated that you usually had go to Thailand, either Udorn Air Base or Ubon Air Base.

You have to adjust for the threat, for example if an enemy fighter or fighters enter the situation. You may have to fly low level longer than planned. If you flew a mission to a target to the west or north of Hanoi, you would fly what we called the western track over Laos and enter North Vietnamese airspace at the northern border of Laos. Coming back you had to land at Udorn. If you were going up the eastern track over the Tonkin Gulf, you could probably make it back to Da Nang or Chu Lai, but that depended on how far inland your target was. But then in some instances you would go up the eastern track and fly back the western track. Doing a Rolling

Thunder once or twice a week, in addition to flying other missions the other nights, you knew pretty well how to fly Rolling Thunder missions without a whole lot of thought.

Back to China Lake and the mission profiles for the VX-5 conventional weapons delivery project, it depended on many factors that VX-5 had to evaluate. The delivery tactics were a key element, since that along with the threat would decide many of the altitudes that would be flown. The higher that you can fly, the greater the range of the aircraft. Whether you were dive-bombing or skip bombing, and in rare instances loft bombing, weapons delivery was very important. But in any regard, everything that the airplane could do with those multiple bomb racks with conventional ordnance was what was going to be in the conventional weapons delivery project. One key element was drag, since the multiple bomb racks dramatically increased drag and reduced mission radius when there was no aerial refueling available.

Dr. Allison: The fact that the Navy had no conventional weapons testing at China Lake in the late 1950s, suggests their differing orientation from the Marine Corps, and you a Marine captain, take the bull by the horns to get it started.

General Fitch: I was the one who convinced the leadership of VX-5, Captain Van Meter and Commander Cox, that we needed to get a conventional weapons delivery handbook started, and that meant a conventional weapons delivery project. That started out at 250 sorties with my project plan, then it grew and grew over the years. The last I heard of it, several years later, the conventional weapons project was up to like 750 sorties and it probably went on for another ten years, maybe longer.

Dr. Allison: Yes. You have to develop sorties for each new type of bomb that comes out, right?

General Fitch: Well it depends on what the configuration would be because again, the MER would carry the 750-pound primary Air Force bomb. It would also carry the MK-82 or the MK-81. So each configuration presented a different drag problem. A TER would have a different drag count than a MER, and a 300-gallon external fuel tank would have a different drag count than a MER or TER. Drag counts have a big effect on range of an aircraft.

But that's what the project would do, is work out the drag counts for the various configurations and the resultant mission radii, and also in this process, we had to do the delivery tactics. In the period 1960 to 1985 or 1990, we didn't have a large number of aircraft with a weapons delivery system that dramatically reduced the CEP. In the 1980s and early 1990s GPS

was just coming into significant operational use. GPS and all these other capabilities such as laser designators were becoming wide spread in the 1980s and 1990s, with aircraft such as the F/A-18. And so in the 1960s and 1970s the project flights at VX-5 had to work out a host of different parameters for bombing, firing rockets, mission radii, using precision guided munitions such as Maverick, etc.

Dr. Allison: You were working with a different generation of aircraft, the aircraft that fought the Vietnam War and the Cold War, as opposed to today's aircraft.

General Fitch: For those aviators and other crewmembers that grew up with GPS, high-resolution radars, FLIR systems, etc., it was much different when you had simple gun sights and low reliability in the early day weapons delivery systems. The translation of that is, in the 1960s, 70s, and even the 80s, VX-5 had a much heavier workload than they would have in the prior 15 years. The capabilities of a weapons system, such as the A-6 Intruder had during the Vietnam War and the 20 years afterward, was a far cry from what aircrews enjoy today.

Dr. Allison: But the A-6 was a premier bombing aircraft for its day.

General Fitch: The A-6 Intruder was "generaleration #1" for precision strike in both good and bad weather. In Vietnam, the only Marine or Navy airplane that had even an early version of a weapons delivery system was the A-6. The A-6 did not become operational until late 1964 or early 1965. I flew the A-6 at Patuxent River in the 1963 – '64 timeframe. I think the first Navy deployment was in late '65, and as I recall Commander Swoose Snead was CO of the squadron. In 1966 - 1967, I was CO of an A-6 squadron at Cherry Point. In 1967 – 1968, I was CO of an A-6 squadron in Vietnam.

Dr. Allison: I guess with those sophisticated systems though, you might have maintenance issues.

General Fitch: In the 1967 - 1968 timeframe, reliability was low for components of the A-6A weapons delivery system, such as the radar, the weapons delivery computer, and the inertial navigation system. It was a common occurrence for several of the weapons system to go out during a night combat mission, leaving the aircrew with a marginal radar with a marginal moving target capability, and frequently with a manual delivery, all the while the aircraft was at low altitude, at night over Indian country. But the key point is that in essence the weapons delivery, as

far as how the pilot did it, was not a whole lot different in 1960/1961 then it had been in 1941. As I said, the A-6 Intruder was generaleration #1 for precision strike.

Then improvements started to materialize, slowly as we moved into the 1970s and 1980s, and especially in the 1990s. One of the first good radars to come along was the APG-65 that was developed in the late 1960s and early 70s, and which would be the first radar on the F/A18 Hornet. Because in earlier days, which included the A-4 Skyhawk and the F-4 Phantom, there was only a gun sight that you had, much like in 1941 to 1945, and you used a mil depression to correspond with the dive angle that you planned. Or if skip bombing, it was still a mil depression of the gun sight to match the delivery airspeed and altitude AGL for the bomb release. But all those things had to be addressed in that VX-5 conventional weapons project back in 1960. Then there were the continuously changing developments that provided great improvements. That's why it went on so long.

Dr. Allison: Yes, I remember the F-4 had just a basic gun sight for bombing.

General Fitch: That's right. Air to ground weapon delivery with the F-4 Phantom was not significantly different than with the F4U Corsair in 1943, except that the weapons coming along in the 1960s and 1970s were very much changed. Of course the F-4 was initially designed as an air-to-air fighter aircraft and the conventional weapons delivery came along as an "Oh by the way" kind of thing.

Dr. Allison: Did you do testing for guns, strafing?

General Fitch: No, I never worried about a gun. I was not a great admirer of strafing. Strafing can get you killed and cause the loss of an expensive aircraft. For one thing we had an internal gun in the A-4 wing root, and then there was the Mark-4 gun-pod, which in my view, the reliability was absolutely horrible. In Vietnam while flying the A4D-2, I had several missions where I carried a Mark-4 gun-pod -- a few times strictly by chance. Where it was supposed to be a rapid fire weapon it was a single shooter every time. It is stupid to be doing strafing where they are shooting back at you, and it is especially stupid when you pop off just one round. After a couple of missions like that, I refused to use the Mark-4 gun-pod. It was a lousy weapon. That could be hazardous to your health, because the bad guys could shoot you while you are firing that single shot gun.

Dr. Allison: That's the one on the F-4.

General Fitch: The MK-4 gun-pod was used on the A-4 and the F-4. I never flew a gun-pod on the F-4 and I might add, I never flew a combat mission in the F-4. But the Mark 4 gun-pod in the period I was in Vietnam, 1967-68, was very unreliable. As I have mentioned, I had a little over 200 combat missions in the A-6, nearly all at night and with most against North Vietnam targets. In the A-4 I had a little over 100 missions, which were 99% day and 98% in South Vietnam or Laos. Simply put the MK-4 gun pod was a disaster. Where it can be effective today with later gun systems, it is again very dumb to risk a 50 or 70 million dollar aircraft and aircrew to strafe a 20 thousand dollar target. That is not a good trade.

Dr. Allison: Well this stuff that was carried on by Hal Vincent is interesting. He picked it up . . .

General Fitch: Yes, he picked it up in what would be about late May of 1960 because that's when I left VX-5 and went to VMA-311 at MCAS El Toro.

Dr. Allison: We talked about VMA-311, so from there you went up to BuWeps in Washington, D.C. Did your activities at VX-5 have any influence on your getting that assignment? General Fitch: Well, I think that my tour at VX-5 had a lot to do with my going to Washington duty as a young captain. That China Lake tour also had a lot to do with my later career.

Dr. Allison: Your whole career?

General Fitch: I'm sure it did. Nobody ever told me it did but I'm sure it did. It was pretty well set up with the commanding officer of VMA-311 for me to go to 311 after my tour in VX-5. At that point I felt that I was due for overseas duty since in the fall of 1960 I would have been back for about six years from the VMA-324 Korean cruise aboard the Saipan. I was surprised in 1962, as I was leaving 311, that I had orders to the advanced training command in Texas. It was a prevailing view in Marine personnel assignments that you had to pay the Navy back for teaching you how to fly an airplane. That was ridiculous.

The Naval Air Training Command is really the Navy-Marine Naval Air Training Command, but usually they call it Navy Flight School. I never agreed with that viewpoint that every Marine aviator owed the Navy for teaching him how to fly. I never considered that I owed the Navy anything. When they issued me orders to the training command, I had served over two years flying off aircraft carriers, I had gone through Test Pilot School, and I had done a two-year tour in VX-5. I figured that every day I flew airplanes I was paying back the Navy for having been taught how to fly. I was under the impression that the taxpayers had paid for me to learn to fly, since they had told me that there was a war going on in Korea.

Dr. Allison: Plus you had already been on three carrier cruises.

General Fitch: Yes, counting carrier qualifications and cruises, I had flown off of ten carriers by the time I left VMA-311 in 1962. With carrier cruises where we were assigned to the carrier as a Marine squadron, the total for those cruises was five. In flight school I flew the SNJ and F6F aboard the USS *Monterrey* for a total of 18 carrier landings. In the Fleet Marine Forces I had flown the F4U-5 from the USS *Wright* and USS *Coral Sea* with two Atlantic crossings, flew the F4U-5 from the USS *Tarawa* with two Atlantic crossings and a six month Mediterranean Cruise, flown the AD-4B from the USS *Saipan* with a Korean cruise which was also an "around-theworld" cruise, I had done a two year tour in VX-5 where I had been the primary inventor of the multiple bomb rack, I had flown the FJ-4B aboard the USS *Bennington* and USS *Hancock* while in VX-5. In VMA-311 in 1961- 62, I flew the A4B from the USS *Bon Homme Richard* in the Western Pacific. On the Bonnie Dick we just did carrier refresher landings and catapult shots. When I left VMA-311, I had logged over 300 carrier-arrested landings.

Dr. Allison: But coming out of VMA-311 you had orders to Beeville.

General Fitch: I had orders to Beeville to be an instructor in the advanced training command. When I walked into the operations office at Beeville, as I recall, and after we all said hello, J. K. Davis said to me, "Your orders have been changed and you're going to Washington." About that time the CO of the squadron came in. The CO said that they had to call Colonel Ralph Mawyer, the senior Marine in Corpus Christi, who was in charge of all the Marines in the advanced training command. With that phone call they verified with Mawyer that my orders had been changed. So I probably spent another hour or two at NAS Beeville, and then I headed back to the University of Florida in Gainesville to see my wife, Margaret, and to talk about the move to Washington instead of Texas.

Dr. Allison: Had you known J.K. Davis before?

General Fitch: No, I did not know him before I met him at Beeville. Our paths would cross frequently in subsequent years.

Dr. Allison: Obviously you knew him later on though.

General Fitch: Yes. J. K. was commanding general of Fleet Marine Forces, Pacific when I had the First Marine Aircraft Wing. He was Assistant Commandant when P. X. Kelley was the Commandant, when I had Marine aviation. J. K. and General Kelley were in Basic School class together in 1950.

Dr. Allison: How would you characterize him?

General Fitch: Well J.K. still is a real character and he was an excellent selection to be the ACMC under P. X. Kelley. Unfortunately he now has a problem with eyesight, and that is a very severe problem. Legally he is blind now--macular degeneration. He can still see some things to his right and left, but not head on.

Dr. Allison: What do you mean a real character?

General Fitch: Well yes, J.K. was philosophical and very laid back, and he's a relatively humble guy. He doesn't talk about himself a whole lot. But let me break off from that and go back to my going to Washington and the Gemini program, so we don't forget it. That was another interesting experience.

Dr. Allison: Okay, yes.

General Fitch: I left Beeville to go back to Gainesville where Margaret was finishing up her last semester. When I got to Gainesville there was a telegram from Headquarters Marine Corps and it was from a lieutenant colonel, Al Dellamano, in the aviation branch at Headquarters. The telegram said that there was going to be a selection for the Gemini astronaut program, which would be the follow-on to the Mercury program (when seven astronauts had been selected). Of course John Glenn was one of those seven.

Dr. Allison: John Glenn was at Mercury, wasn't he?

General Fitch: That's' right. He had done his earth orbit back in about February of 1962, as I recall. John Glenn was in Mercury, and Wally Schirra and Alan Shepard were too. Slayton developed a heart problem, which I think they called an inverted T-wave. He would later fly in Apollo. Grissom would die in a fire. So they're going to have the Gemini selection, and the question in the telegram for me was, "Would you be interested?" Now this is the old Western Union telegram. Somewhere in a box in our basement I probably still have that telegram.

Dr. Allison: So you hadn't really approached them, they approached you?

General Fitch: Up until I read that telegram, I didn't know what Gemini was because I had been in Japan up to that point for the prior 13 months or so. So I thought, "Well I won't send them a telegram. I'm going to Washington so I'll go see them." So at that point, Margaret was able to change the location for her student teaching, so that she could ride a city bus to and from the school. This was necessary because we only had one car and I had to take the one car we had to go to Washington. Captains didn't make a lot in those days. I didn't know where I was going to be in Washington and how I was going to get back and forth to work. I figured that there was probably a BOQ at Quantico where I could live until Margaret Marie graduated from college, arrived in Washington, and we found a house.

Dr. Allison: And they didn't have Metro in those days.

General Fitch: This is 45 years ago, and there is no Metro in Washington. So after staying a couple days in Gainesville while Margaret is changing her student teaching school, and with her going to classes all day, there's no time for anything but for me to head for Washington. So I drive to Washington, and again, at this time I'm still a captain but selected for major. Arriving in Washington, I found out that Headquarters Marine Corps was in the Navy Annex over near what would be Henderson Hall and Arlington Cemetery. I found out where the Navy Annex was. I get checked in at Headquarters Marine Corps and this was when I found out I was going to BuWeps. Then I see Lieutenant Colonel Al Dellamono. Colonel Dellamano told me what Gemini was and he gave me a few hints on what was going to happen that summer in Gemini. There would be a long physical examination, which he thought would be at Brooke Army Medical Center in Texas, and then there would be certain types of exams and interviews and whatever. He didn't have any real details and

so I said, "What should I be studying for this Gemini selection?" and Dellamano said, "Everything." Well everything is a lot of things.

Dr. Allison: Yes. Did you realize that was an astronaut deal at that time?

General Fitch: Oh yes, I knew it was. He had told me it was an astronaut selection but I hadn't paid any attention to the space program prior to that. When I was at Iwakuni in Japan, of course John Glenn had done his four orbits and we had listened to all of that on the radio. In 1962 we didn't have any TV at Iwakuni.

Dr. Allison: So you get to Washington then at the Naval Bureau of Weapons.

General Fitch: Bureau of Naval Weapons, which was then in the old weapons building where a Navy lieutenant named Richard M. Nixon had served during World War II.

Dr. Allison: Is that downtown DC?

General Fitch: Yes, that was in downtown Washington and I think it's either Independence Avenue or Constitution, I forget which it is. The old building for the Bureau of Naval Weapons was just slightly east of where the Vietnam Memorial is now, perhaps a quarter of a mile. I believe it was across from the American Red Cross building. It was there from about 1918 to about 1975.

Dr. Allison: Oh, it's not there anymore?

General Fitch: No, it was torn down about 35 years ago. What actually happened to the building was that when Nixon became Vice President — he would drive by that building from time to time and remind himself that he had worked there as a Navy lieutenant in World War II. He remembered that it was a temporary building from World War I. When he became President, he told the Secretary of Defense to tear it down. BuWeps was succeeded by what is now the Naval Air Systems Command, often referred to as NavAir. NavAir was set up in Crystal City, where it was for many years. About 10 or 15 years ago they moved NavAir to Patuxent River, which was an apparent effort to populate Patuxent River so that Patuxent River would not be shut down by BRAC. Over the past 10 or 15 years the Navy has done a good job of populating Patuxent River with various offices, so it probably doesn't have to worry about BRAC.

Dr. Allison: What was your job at BuWeps and who was running it, this was 1962?

General Fitch: At BuWeps I was in the Attack Design office. Captain Al Morton was in charge of the Attack Design Office, where all attack aircraft had their class desk officers. In my case I was on what was called the A-4 Skyhawk class desk. Next door to the Attack Design Office was the Fighter Design Office.

Morton had a civilian who was a GS-15, and this was in the days when the highest government employee was a GS-18. His name was Bob Francis and Bob Francis was the corporate memory for the attack design office. He had probably worked in that office for 20 or 25 years and he worked in it probably for at least another ten after I left. But in that office, I was on the A-4 Class Desk. Of course I'd flown the A-4 both in VX-5 and in 311. And they had the EA-6A, which was more or less in its infancy at that point in time. It was Lieutenant Colonel Howie Wolfe who was the project officer on the Class Desk for the EA-6A. They had the A-3D, which was a twin engine Navy owned airplane. At China Lake we had the A-3D at VX-5. Morton's office also had the A-5 Vigilante and the A-6A Intruder.

It was early '58, that they were having the competition for what would become the A-6. So the A-6 had been in progress for maybe three years by the time I went to that BuWeps office. A commander had that A-6 project. Then I'm working with a lieutenant commander who is really the Class Desk and I'm the number two guy. I had replaced a Marine major – and I'm still a captain.

Dr. Allison: What was the office routine, and what were you doing with the A-4?

General Fitch: The routine in the attack design office was pretty much on the order of get it from the left desk basket and move it to the right desk basket. Mostly we were involved in engineering change proposals [ECP] where an engineering change proposal would be worked up within the Bureau of Naval Weapons. An ECP was a change that had been initiated either by the Fleet or by the contractor, which in this case for the A-4 Skyhawk was the Douglas Aircraft Company. On the class desk we would more or less shepherd the ECP through the review process to the point where it was either an approved change proposal or disapproved as the case may be. The ECP was anything that the contractor needed to change in the A-4 Skyhawk, and which was going to be a change from the original contract. You had all these ECPs that were processed routinely, unless they were an urgent safety of flight change, which moved faster than the norm.

Dr. Allison: Where did the proposals come from?

General Fitch: They came from the contractor, and had been initiated either by the fleet or by the contractor himself. It was the contractor saying, "Okay, we need to do an ECP for whatever purpose." It might be to change to the design of a fuel pump in the airplane or the tailpipe, a wing slat, a landing gear, wheel, cockpit instrument, or whatever it might be.

But any change to the original contract required an engineering change proposal. Well the job in those days – and again, this is the 1962 timeframe – was processing those ECPs, interfacing with the program manager for your aircraft, in this case the A-4 Skyhawk, plus dealing with the fleets and Marine Corps aviation commands on how the aircraft were doing in operational units.

Dr. Allison: Sounds like lots of paperwork.

General Fitch: A large part of the day-to-day work was paper work. And there was really nothing creative, so to speak, about the job. I was the number two guy on the job, so the lieutenant commander was calling the shots for our work. But now I need to talk about the Gemini process.

Dr. Allison: Okay, back to Gemini.

General Fitch: Essentially all I knew about the Mercury program was that Shepard and Grissom had done their sub-orbital flights and John Glenn had done his four orbits. Most of the preliminary orbital shots had taken place while 311 was either on a carrier in WestPac or at Iwakuni. I had never had a desire to be an astronaut. And so I told Colonel Dellamano, "Okay colonel, I'll give it a try."

About June I received a letter from Dr. Gilruth, Director of NASA, telling me that I was selected for the next step in the selection. That would be for me to go to Brook Army Medical Center for physical exams and other testing. And so the way it turned out, NASA would funnel so-called "candidates" into the Brooke Army Medical Center out in Texas.

Dr. Allison: In San Antonio.

General Fitch: Yes, I believe that it was San Antonio. And there was about a five-day process when you got to Brooke, and as I recall two candidates would show up each day and they'd do about five or six days there. But that was the most thorough physical examination I ever had in my

life because you started probably at 8 o'clock in the morning and you finished like at five or six in the afternoon and there'd be just one thing after another, and it was on tilt-tables with you all wired up and on treadmills and whatever. Well it turned out there were 32 finalists that were going through this process; with them going to Brooke Army Medical Center over a period of about a month. That would have been, I guess, sometime in the timeframe of July '62 because I remember I got promoted to major like a day before I went to Brooke. I had brought Margaret up to Springfield, Virginia where I had rented a house in North Springfield. And of course I was working at BuWeps.

As I recall I got a Marine clerk to hand me a piece of paper that said I was a major, then I went to the PX where I bought some major's leaves, and then I got a new ID card. I had become a Marine Corps major and I never bothered with a promotion ceremony for becoming a major. My wife was not at Henderson Hall when the clerk handed me the papers for major. Since I was flying to Texas the next day, I was skipping the promotion formalities since I wanted to go into this Gemini process as a major as opposed to being a captain.

So I arrive at Brooke Medical Center in San Antonio, and I start the five days of physical exams. Well we did a host of different tests, all at a rapid pace. I remember the hearing test was in a large room with all these baffles all over the room and you'd do the earphone thing and they'd send different sounds into your earphones and then they'd have interference within the room; a special kind of interference to see how well you were going to hear in all this process. And then, there were all kinds of eye exams; you might do four or five hours of different kinds of eye exams. And when you finished the five-day process and they said, "Hey, you're in good shape." You knew that you were in good shape. Most physicals take two or three hours and this was like five days of physical exam after exam, plus some mental tests. So I go back to Washington and to the Bureau of Naval Weapons, and back to work.

Dr. Allison: You are finished with the physical part.

General Fitch: Yes the physical exams are finished. A few weeks later I get another letter from, Dr. Gilruth at NASA, and it says, "Major Fitch, we're pleased to inform you that you've been selected for the final process of our Gemini selection." I guess I still have that letter hidden away in a box somewhere in the basement of our house. Well it turned out, of the 32, there were 30 left in the finals, of which four are Marines. So a few weeks later we go to Ellington Air Force Base near Houston where we're staying and we're sitting in briefings at what would later be the Johnson Space Center. They give us various kinds of briefings and they'd give us some mental tests, and then there are interviews. I remember in my interview that there were three people doing the interview. One was Alan Shepard, another was Deke Slayton, and another was a civilian who was going to be in charge of astronaut training. I don't remember a whole lot about the interview but I remember Alan Shepard made the comment, he said, "You don't like afterburning airplanes, do you?" I said something in effect that, "Well I've never been where I would be flying an afterburning airplane." It was interesting that they never mentioned the bomb racks that I had developed and for which I would receive the patent in 1964. We were probably there at NASA about three days; three or four, something like that.

At the time I was rooming at Ellington with an Air Force officer, Captain Mike Collins, and later he was the pilot that flew the module that orbited the moon while Neil Armstrong did the landing and the first moon walk. As I recall it was Buzz Aldrin with Armstrong. Collins was not selected in 1962 but he tried again in '63 and was selected as a Gemini astronaut. Neil Armstrong was selected that summer of '62. And so Collins was the third person in that Apollo crew. But it gave me an insight into preparation. I mentioned that I had asked Colonel Dellamano what we should be looking at and studying, and Dellamano had said, everything. So what I had done was carry some of the books from Test Pilot School with me to Ellington, and this was probably the second night of this process. This is not a sour grapes thing, this is just telling you how some prep systems were. And so I'm sitting up in bed, it's probably 10 o'clock at night, and I'm going through performance testing or stability and control or whatever, just reviewing the stuff because you don't know what they're going to ask you the next day. My roommate walks in. Mike Collins said, "What are you doing?" I said, "Well I was just reviewing some of this stability and control." He said, "Oh, it's too late for that." He then said, "If they ask us to describe the principle of the inertial navigation system I can handle that and if they ask us to describe the process for midcourse correction en route to the moon, I can handle that."

Dr. Allison: Enroute to the moon?

General Fitch: Yes, and then there was one other question that he mentioned, which I forget. The next day we go in and they say, "We're going to give you a test on some things here." Question one: Describe how an inertial navigation system works. Question two: Describe the process for mid-course correction en route to the moon. Then question three was the same question three that Collins had given me the night before.

Dr. Allison: So he had the gouge.

General Fitch: He had the gouge. It turned out the USAF candidates had the gouge for a long time prior to their going to Houston.

Dr. Allison: How did he get the gouge and you didn't get the gouge?

General Fitch: Well I'll tell you later on. Anyhow, we do that test and a lot of that's Greek to me I admit.

Dr. Allison: Yes, inertial navigation was something that was still

General Fitch: Oh, it was in its infancy. But in any regard, we go through all that and I never had any quarrel with those selected. They picked nine out of the 30 finalists and those were Neil Armstrong, Frank Borman, Elliot See, Tom Stafford, John Young, Pete Conrad, Jim Lovell, and several more. Stafford wound up an Air Force three-star later on.

Dr. Allison: Any regrets?

General Fitch: My wife called me the reluctant astronaut, since I wasn't that interested in the space program. HQMC had asked me to participate and I had done that. It is germane that none of the four Marines were selected that year. Later I was told that Alan Shepard had said, "One Marine in this program is enough." It turned out that Shepard was on the three-man selection board for Gemini in 1962. He had 33 percent of the vote.

Dr. Allison: Casual interest in space.

General Fitch: Yes it was fairly casual. So I go back to work at BuWeps. The work pace at BuWeps was not overly demanding. The lieutenant commander I worked with always took a leisurely lunch, usually at the State Department which was about three blocks from our building.

Dr. Allison: I saw from your record that you were involved with the development of the OV-10.

General Fitch: I had been at BuWeps maybe four or five months, when one day I see this body standing in front of my desk, while I am reading something. It was Captain Morton, and he said,

"Fitch, we've got to go see the admiral." He said, "You're going to be the COIN Project Officer." I said, "Captain, what is a COIN Project Officer?" He said, "That's the Counter-Insurgency Airplane." I forget the admiral's name but it was a rear admiral and he was in charge of the Attack Design office and the Fighter Design office, and he probably had a couple of other offices that came under his cognizance at BuWeps. Captain Morton said, "I'll do the talking, you just listen." So that was fine with me because I had no idea what was going to be talked about with the admiral. However, I suspected that it had something to do with K.P. Rice. K. P. Rice and I had kept in touch, and K.P. was now working in DDR&E [Director, Defense Research and Engineering] in OSD [Office of Secretary of Defense]. As I mentioned earlier, K.P. Rice and I had been together in VX-5, we had worked together on bringing the Multiple Carriage Bomb Rack into being, and all during his tour at China Lake, K. P. had been working on his idea for a counterinsurgency aircraft. K. P. was an absolutely brilliant man, and he had told me that he had gotten the attention of Harold Brown, head of DDR&E, with his counterinsurgency aircraft.

Colonel Rice had a fine tour in VX-5 as a major, and a few years later he would go back to China Lake as a colonel. K. P. had been very key in the development of the multiple carriage bomb rack. Back in VX-5, K.P. had this idea for an inexpensive counter-insurgency aircraft, that might cost \$100,000.00, and which would be sold to primarily developing nations to give them the capability to fight insurgencies. It would carry bombs and rockets and it would do the combat reconnaissance and surveillance mode, and it could evacuate people because it was going to have a fuselage area where you could carry people.

K.P. worked on that aircraft design back in the roughly '57 to 1960 timeframe and when he left VX-5 he had gone to El Toro to the Marine Aviation Weapons Training Unit. They called it MAWTU [Marine Aviation Weapons and Tactics Unit]. The 3d Marine Aircraft Wing at El Toro and the 2d Marine Aircraft Wing at Cherry Point had such a MAWTU. The MAWTU provided training for both conventional and nuclear weapons.

Later I should note that the Marines combined the two MAWTU and located them at MCAS Yuma, where they taught tactics in addition to the aviation weapons. They called the new weapons training unit, Marine Air Weapons Training Squadron. During the period when I was out in WestPac with 311, K.P. had continued to study this counter-insurgency airplane, what it would look like and what it would do. He wanted it to be an inexpensive, affordable aircraft for poor countries, and possibly used by U.S. aviation forces. Well in roughly this late 1962 timeframe K.P. had briefed DDR&E and Harold Brown, who headed up DDR&E. Brown had K. P. transferred to DDR&E.

Dr. Allison: Is this the Harold Brown that later worked for Jimmy Carter?

General Fitch: It's the Harold Brown who became Secretary of Defense later on. You are correct. Carter defeated Gerald Ford. Brown was DDR&E in the 1962 to 1965 timeframe, when Kennedy and later Johnson was the president.

So, K. P. has convinced Harold Brown on this little airplane; that will be cheap, highly effective in low intensity warfare, and how it would be employed. Harold Brown said, "That's a great idea." And so they produce some paperwork, which went to the Navy to develop this COIN [counter-insurgency] airplane and execute a competition, and that was when Captain Morton shows up in front of my desk and says, "You're now the COIN Project Officer."

So Captain Morton and I go see the admiral, the admiral listens and he says, "Yes, fine, go ahead because we have no choice because DDR&E said do it." Naturally the Navy is wondering who will put up the money for the COIN. So that does not progress very far at all. Essentially nothing happens on it while BuWeps is studying the aircraft and thinking about a COIN competition.

During those months K.P. Rice and I are having a constant dialog because K.P. is now in Washington, I'm in Washington, and he and his wife were building a home, which probably was two or three miles from where our home was in Springfield. So he and I have a lot of interface. It is late spring or early summer 1963, I'm still in BuWeps, and the senior Marine at BuWeps calls me and said, "Fitch, you're supposed to go see General [Bruno] Hochmuth." At the time I didn't know who General Hochmuth was. I soon found out. At the appointed time I go over to General Hochmuth's office at HQMC and they introduce me to the General. He's a two-star, an infantry officer, and he is in charge of Marine R&D at Headquarters, Marine Corps. Later General Hochmuth would be killed in Vietnam, probably in 1966 or1967 when a helicopter he was in was either shot down or crashed. I think it was shot down by the Viet Cong. He was commanding general of a division at the time.

Dr. Allison: This would be over in the Navy Annex I would assume.

General Fitch: Yes, his office is in the Navy Annex at Headquarters Marine Corps. The interview with him was very brief. General Hochmuth was a very nice man. He was a tiger in outward appearance and verbally, but in the truth he was a pussy cat. And he was a real nice gentleman. But he could sound tough. After they introduced me to him he said, "Fitch, Secretary [James H.] Wakelin needs a new Marine aide." He went on, "Would you like to have the job?" I said, "No Sir,

I wouldn't." And he said, "Fitch, can you do the job?" I said, "Yes sir, I can do it but I don't want it." He said, "Let's go see the Secretary." It was that simple—perhaps a 90 second interview.

Dr. Allison: [Laughter].

General Fitch: [Chuckle]. So we go to see Dr. Wakelin and he was just an absolute prince of a gentleman. At that point in time he had been in the job about three years. He was a PhD in physics, and after three years as an Assistant Secretary of the Navy for Research and Development, he was extremely knowledgeable in the development of all kinds of military weapons systems.

We have a very pleasant conversation with Dr. Wakelin and I don't remember what we talked about. I'm sure we talked about my background a little bit, and of course I'm sure Wakelin had a briefing paper on what to expect relative to me. And General Hochmuth and I leave and I don't know if it was immediately thereafter or whether it was the next day, but I get another telephone call telling me that now I'm going to be the aide to Secretary Wakelin. That turns out to be one of the best jobs I ever had in my military life.

Now I am working for Secretary Wakelin, but I need to go back to the Gemini selection for a moment. This will be interesting.

In the immediate office of Dr. Wakelin there is a commander named Paul Havenstein. Paul is a Naval Aviator and he had worked in Mercury Control back in the 1960 to 1962 time frame. Paul and I were flying to the Cape for the launch of what would be Mercury Nine, and the astronaut in Mercury Nine was Cooper. Paul and I are flying in a U-11; a little twin-engine airplane, prop. It's kind of a long flight in a U-11 and Paul and I got to talking about this astronaut business, including Mercury and other aspects, and we also got to talking about Gemini and the selection. Paul told me, "You know, Chuck Yeager had Air Force Test Pilot School at Edwards and they ran a school for the Air Force astronaut candidates there. They had pretty much a formal schooling of astronaut candidates. I told him the Marine Corps didn't do a damn thing [laughter]."

The way Paul described it, because he had been working in Mercury control when this Gemini selection was going on, and he said that Deke Slayton was feeding Chuck Yeager all of the questions they would ask, how the interviews would go, and what the Air Force candidates ought to be studying. It just tells you the different approach. The Marine Corps says, "Study everything." The Air Force had a defined program, with their candidates TDY to Edwards AFB, with details including what the questions in Houston would be [chuckle].

Dr. Allison: The exact questions.

General Fitch: The exact questions. Now that's not a sour grapes thing, that's just a fact according to what Paul Havenstein said when we flew to Cape Canaveral. As I understood Paul, the USAF candidates could study specific questions for weeks before going to the NASA interviews and tests.

Dr. Allison: Well the Air Force wanted to get control of that program and make sure it was their baby, didn't they?

General Fitch: I'm sure that might have been part of the thinking but the point was, to my knowledge there was no prep per say for Navy candidates and there was zero prep for the Marine Corps candidates. We took care of that for the next NASA selection of astronauts which would go in 1963. After I went to Dr. Wakelin's office in the spring of 1963, and they were going to have another selection in the summer of '63, I went over and I talked to the people in Marine aviation. I said, "We've got to do this thing right. We need to hold school for the Marine nominees." And of course I wasn't telling, I was just suggesting. I said, "If we want to get somebody selected, here's what we've got to do." And so I gathered together – or I helped them gather together – the guys like Kenny Weir who had been one of the four Marines in '62 in the finals that year, and who later wound up a reserve Marine two-star. Kenny would later fly the U-2 a helluva lot as a test pilot for Lockheed. The other two candidates in 1962 had been Bill Geiger and Bob Solliday.

Dr. Allison: I didn't know that.

General Fitch: Yes, Kenny probably has more flight time above 80,000 feet than just about any Air Force SR-71 pilot. But Kenny was in that '62 selection and he had kept a lot of notes. They had four Marines in that selection, and they were Fitch, Geiger, Weir and Solliday. None were selected. I was told, as I said earlier, when Paul Havenstein told me that Alan Shepard had said, "One Marine in this program is enough." Well the one Marine was John Glenn, and Glenn was very much in the limelight nationally. Also, we never saw John Glenn during the Gemini selection process of 1962. We only saw Shepard, Slayton and Grissom. I should also mention a thing that Paul Havenstein told me when we flew for the Mercury Nine launch of Cooper. Paul told me that in the 1959 Mercury selection, there were no Air Force pilots selected. That is zero USAF selectees – repeat that was zero USAF selectees in 1959. He said they were all Navy plus Glenn, and that when the list got to Dr. Gilruth who was head of NASA, and who was in charge of the Mercury program, Gilruth said that there will be proportional representation of the services in Mercury. Paul said the board reconvened, and that is when Gus Grissom, Deke Slayton, and Cooper were selected to balance it out. In 1962 Dr. Gilruth apparently was not interested in balancing it out.

Dr. Allison: Yes, and they were kind of taken aback, weren't they?

General Fitch: Well they were unhappy. What all those guys wanted in the Mercury program was to be the first to orbit of earth. Glenn got the nod. And of course Shepard wound up with the first sub-orbital flight and then Grissom did the second one. But then of course Glenn did the first earth orbits.

Dr. Allison: So they were taken aback, from what I understand, that he even got in that program because the way Tom Miller tells it, it was sort of a fluke.

General Fitch: Well Tom Miller can describe all that. It was kind of happenstance where he came in on a bootleg approach and then he really became the number one guy for them. What is important there is that the Air Force, it was their school prior to the 1962 selection and Chuck Yeager at Edwards AFB had the gouge for their USAF candidates to study. According to Paul Havenstein, it was Deke Slayton who passed to Chuck Yeager the gouge on the questions that would be asked at NASA Houston. And of course Deke Slayton was one of three who sat on the selection board for Gemini. So I convinced Marine aviation at HQMC, primarily Lieutenant Colonel Dellamano, that we should hold school for the Marine nominees. Al Dellamano was going to again handle this second Gemini selection in what would be 1963. I said to him, "If we are interested in Marine astronauts, then we've got to hold school and give our guys a chance to do this thing." and he agreed. And so we got the Marines who had done Gemini in 1962 and planned to hold school at Point Mugu in California The four teachers would be, Kenny Weir, Bill Geiger, Bob Solliday and myself.

My pilot's logbook shows that on August 17 and 18, 1963 I flew a T-28 from Andrews AFB to Point Mugu. What we (Solliday, Weir, Geiger, Fitch) did was take all the things we could think of from what we had done relative to Brooke and what transpired there in both the physical and mental tests, and then what had transpired later at NASA in Houston. We had our Gemini candidates congregate at Point Mugu and we held school August 19 and 20 on what we thought they should be studying, and what they should expect in the selection process. After the schooling was completed, I flew the T-28 back to Andrews AFB, this was 1963. So we wound up at Point Mugu and we hold school for the Marine candidates that year.

Dr. Allison: Was there any success from your doing that, were any Marines selected?

General Fitch: Captain C.C. Williams was selected in '63 for Gemini. C.C. was killed in a NASA plane crash, and I don't recall if there was another Marine or not in that '63 selection. I think C.C. Williams was the only Marine picked in '63. But anyway, that would have been the second selection for Gemini at that point in time, the late summer of '63. Where we had no schooling in 1962, in 1963 we did hold school out at Point Mugu because we now knew from Paul Havenstein that the Air Force was holding school. Of course we did not have any gouge like Slayton was passing to Yeager.

Dr. Allison: Yes. What about the Navy, were they doing anything?

General Fitch: I don't know. I don't know what they did. I would suspect that they had their own school. Paul Havenstein probably told the Navy in 1962 that they needed to hold a school for the 1962 selection process. If so, that left the Marines out of the loop.

Dr. Allison: Did you have any regrets from not making the astronaut program?

General Fitch: Looking back to how my career turned out in the Marine Corps. I'm much more pleased that I was not selected and I wound up a Marine lieutenant general and head of Marine aviation. If you look at the astronaut program 40 years ago, except for people like John Glenn who was selected in '59, Jim Lovell and Neil Armstrong, who were selected in '62, except for a few people like those three, nobody knows anything about the astronauts of those days. Of course you see all the astronaut's pictures if you go to the Air and Space Museum. So I'm much more pleased that I did not, it fits into the nice-to-do category had you been in the space program but long-term careers for astronauts were not that great a deal. So that was pretty much it for Gemini.

Dr. Allison: So you become the Marine aide for Dr. Wakelin, what were your duties there as his Marine aide?

General Fitch: I go to work for Dr. Wakelin. I worked with Captain Bill Moran who is the Naval aide and Captain Buddy Yates. Moran wound up a three-star in the Navy and Yates wound up a two-star. I, of course was a new major. Dr. [Robert W.] Morse replaced Dr. Wakelin in summer of

1964 as the assistant secretary. Both of these gentlemen were absolutely great to work for. Bill Moran was just a charming gentleman. And Buddy Yates, he was an interesting guy too [chuckle] and I can tell you some stories about my interface as a major with Captain Yates. He and I had some interesting conversations.

Dr. Allison: So your day-to-day routine was . . . or you were going to say what your job entailed.

General Fitch: When I got to the office, and of course General Hochmuth had told me this, first you have to understand that there was a total of probably eight or nine, what you might call professionals in that office. The same office today probably has between 100 and 120.

Dr. Allison: Now you're talking about professional, like government workers; engineers?

General Fitch: I'm talking about military officers and all the civilians such as GS-17, GS-18, and SES. In the early 1960s, GS-18 was as high as a civilian could go. Like Milt Shaw was the technical assistant to Dr. Wakelin. Milt Shaw was an absolute genius when it came to anything in the nuclear world, and he cut a wide swath in all areas of R&D, such as ships, aircraft, weapons systems, and so forth. Milt had worked for Rickover and he was able to get along with Rickover -which was not easy. Milt Shaw had been one of the key people working for Rickover. Milt handled the technical aspect. Then we had a few other civilians that handled things like basic research, which would interface with the Navy labs and the Office of Naval Research. We had an officer who dealt with aviation. He looked at all aspects of aviation, but primarily his interest was Navy Aviation. I had all Marine aviation as a major. For example Secretary Wakelin became chairman of the COIN steering committee, with his counterparts in the Army and Air Force serving with him. But it was up to me to set the agenda for their meetings and to help my boss lead the discussions. I in turn interfaced with aircraft experts in BuWeps, such as George Spangenberg, another giant in the R&D world. Then I had all Marine ground R&D as a major. General Hochmuth knew that I was the last voice on Marine ground R&D issues, along with aviation command and control, before the secretary took his action. The routine in the office was that admirals and generals would come in for meetings with the secretary, but when ever there was a Marine Corps issue, the last person he would ask for a recommendation before signing was me. I had to make sure that I was telling the secretary what the leadership of the Marine Corps wanted him to be told.

So I had both aviation and ground R&D, and I had to know what I was talking about. Thirteen years later, in 1977, I would be a brigadier general and have the same job General Hochmuth had when I was a major in SecNav R&D.

Dr. Allison: So you did ground too.

General Fitch: Everything Marine. I was responsible for the interface with the Marine Corps and anybody else relative to the Marine ground R&D programs or Marine aircraft. So I had both the Marine aide function where I planned trips and schedules, and I had that advisor to the secretary function for all programs that were Marine.

Dr. Allison: Any one program stand out as being on the front burner?

General Fitch: One program that I spent a lot of time on in Dr. Wakelin's office and later Dr. Morse's office was the EA-6A electronic warfare [EW] aircraft. There was a period of several months when I would get telephone calls daily from General [Wallace] Greene, who was Chief of Staff at HQMC. General Greene, a future Marine Corps Commandant, had a deep interest in the EA-6A program.

Lieutenant Colonel Phil Shutler was the class desk at BuWeps for the EA-6A. He had replaced Howie Wolf. From time to time Phil would telephone me, and tell me about a problem that he was having in BuWeps relative to the EA-6A. I would ask him what he would like to have said by letter to the Chief of BuWeps. He would tell me. Then I would tell him to write it up and give it to me, and I would have it put on Secretary Wakelin's stationary, and get the secretary to sign it out to the Chief of BuWeps. That process helped Phil Shutler solve some big problems for the EA-6A.

Dr. Allison: The EA-6 was an important program.

General Fitch: The EA-6A would play a key role in EW support of deep strikes into North Vietnam during the period 1967-71. The EA-6A supported most of my deep North Vietnam strikes in 1967-68 when I was commanding officer of VMA (AW)-533, flying the A-6A Intruder on deep night strikes deep into North Vietnam. Then there would be the Counter Insurgency Aircraft program that Harold Brown was pushing, along with K. P. Rice. I would play a key role in COIN since Dr. Wakelin was chairing the steering committee on COIN.

The Navy commander who was primarily there for Navy aviation, he was also what you might call a comptroller. He handled all the R&D budget aspects for our office, which of course meant many billions of dollars. Then we had another commander and later a captain who handled all the oceanographic aspects of the office. So the total of what you would call professional staff was about eight or nine people.

Then when Dave Mann became Assistant Secretary of the Navy for R&D about 1975 or 1976, for what would then be called Research, Development and Acquisition, which is what it's called today, then Dave decided he would expand that office to match what they had in DDR&E so that he would have direct counterparts in his office to address particular counterparts in DDR&E.

Dr. Allison: Now when did Dave Mann come in?

General Fitch: Dave Mann came in probably in about the 1976 timeframe. I took Marine R&D in 1977 and Dave Mann was already there, so about '76 he became the assistant secretary, maybe '75 would be correct. And as I said earlier, I had Marine R&D in this case as a one-star and then as a two-star from '77 through '80 when I go out to Okinawa in the summer of 1980 to take 1st Marine Aircraft Wing. Dave Mann was there during that whole period of time. But here I am getting ahead of myself, since Dave Mann came in to SecNav R&D about ten years behind Dr. Morse, who had relieved Dr. Wakelin. I need to get back to where I am a major.

Dr. Allison: I see. Oh, okay. You're within the Secretary of the Navy office there.

General Fitch: Okay I'm back in the Secretary of the Navy's Office, and I am back to being a major. Our office in the Pentagon was about three times the size of this room, and it was right next to the Under Secretary of the Navy's Office. The next office was the SecNav, who was Paul Nitze, and the next office down in the E-Ring was the Chief of Naval Operations. The CNO when I went to work for Dr. Wakelin was Admiral George Anderson, who retired early due to his opposition to the F-111B. His successor was Admiral David McDonald.

General Hochmuth as the head of Marine R&D would come over to see the Secretary once a week or whenever else he wanted to. As a routine he would come over once a week. I always sat in with General Hochmuth and the Secretary for those discussions. At that time, General [Louis] Robertshaw was head of Marine Aviation as a two-star, and later on when General [Louis H.] Wilson became the Commandant that would become a three-star job. Tom Miller was the first three star head of Marine aviation. But General Robertshaw has aviation in the 1963-65 time frame, and he would come over from time to time to see the Secretary about different aircraft programs relative to the Marine Corps.

Dr. Allison: What programs?

General Fitch: At that point in time, for example, the Navy was developing the A-7 attack aircraft, which they called Corsair-II, which sometimes gets confused with the F4U. But anyway, they were doing the A-7, which the Marines were not interested in. The Navy was trying to convince Robertshaw and later on other heads of Marine aviation like General [Keith B.] McCutcheon that they should go into the A-7. The Marines kept saying no, they won't do that. General Robertshaw would come over from time to time to discuss an aviation R&D issue with the Secretary. It was up to me to make sure that I understood what General Robertshaw was saying and what his position was for every issue, because the Secretary would later ask my opinion.

Dr. Allison: Big issues for a new major, wow!

General Fitch: Well I had to know what I was talking about and know what the generals were talking about to make sure that when I said, "Yes sir, sign it." [chuckle], that I knew exactly what the Marine Corps thinking was. So there was that interface where I had the interface with General Hochmuth and his office and I had the interface with General Robertshaw and his office. So in essence it was kind of like being Super Major even though I was a brand new major. But that was the way the office functioned.

Dr. Allison: They put a lot of esteem in your judgment evidently.

General Fitch: Well it just made you feel like you were a key part of the office. But again, there were only about eight or nine so-called professionals there and the way that the office worked in those days from the technical aspect, there was an OP-07, which was Navy R&D and later it changed to be OP-98, because they're always changing the numbers for the CNO's staff, and the designations and the acronyms are in constant change. OP-07 would do a lot of the legwork in the technical sense for the Secretary's office and of course later on, about ten years later, what Dave Mann wanted to do was get that kind of expertise directly in his office and that's why it increased by a factor of ten or eleven. In addition to the technical side of it and knowing the Marine programs and knowing what the Marine Corps wanted, then I did the true aide function. If the

secretary was going to travel then I was the one that set up the travel, sent the necessary naval messages, arranged for the airplane, which were always Navy airplanes, to take us where the Secretary thought he should go. Of course the other staff had a big input into who the Secretary should see. I also had to work out between myself and the naval aide as to who he would see when we would go to these different places, along with getting the blessing of the naval aide and the Secretary on the plan.

Dr. Allison: You were talking about being the real aide, what did that entail?

General Fitch: Yes, when we were in Washington I was in a staff position for Marine R&D and when we traveled I was doing the aide function. When we would go on trips a lot of times I'd be invited to fly airplanes wherever we went. For example we made a visit to Edwards Air Force Base and I was invited to fly the T-38. And then when we'd go to China Lake I'd wind up talking to VX-5 again and VX-5 would invite me to fly their airplanes. Well of course there was a method to their madness. They thought that being nice to me in that instance was also going to get some favorable response relative to the Secretary.

I just made some notes here going through my logbook about how much I as a major was able to fly on staff duty in Washington, DC. And of course in 1962 about half the year I was in 311 and then I reported to Washington. A lot of my 1962 flight time was in the A-4. At the Marine flight line at Andrews Air Force base I was flying what was, a variant of the T-33. The Marine flight line also had the T-28 and the U-11A which was a twin engine prop aircraft. That was in '62. But in 1963, I had an entire year to fly what was considered proficiency flying, where you were supposed to get only 100 hours. That year I had 293 flight hours. I flew eight models of aircraft; the A-4E, A-4B, A-4C; all of that was flown down at Patuxent River; the U-11, the T-1A and the T-28, all of which was out at the Andrews flight line. I flew the T-38 that year that I mentioned when we made a trip to Edwards, and the C-45. My excess of 100 hours was justified by my job in SecNav, where I flew Secretary Wakelin on frequent occasions, especially in the summer months.

Then in 1964, bearing in mind I'm only halfway through my tour at that point in Washington, I only had 140 hours but I flew seven models of airplanes. I checked out in the A-6A down at Patuxent River. I arranged to go down to Cherry Point for a week of ground school on the F-4 Phantom, and I checked out in the F-4 while at Cherry Point. And I was flying the T-1A, the T-28, the U-11 at Andrews, plus the A-4E and the A-4C down at Patuxent River. And when I wind up leaving SecNav and am going to go to Command and Staff College at Quantico I flew 150 hours in 1965. And again, you weren't supposed to fly over 100 hours, something like that when you're on staff duty. But General Robertshaw did not care how much I flew, as long as Secretary Wakelin and then Secretary Morse were happy with my work. Flying the Secretary provided a large share of my flight time.

Dr. Allison: They had a policy against it?

General Fitch: Well yes and no. I was working in an office in the Navy secretariat where it was the desire of the Secretary that I fly him to various destinations. General Robertshaw knew how much I was flying. For example, on Friday night each week during the summertime, I was flying Secretary Wakelin up to Bar Harbor, Maine in a T-28 or a U-11 or a C-45 and then I would fly back to Andrews that night. Sunday afternoon I would fly back to Bangor, pickup the Secretary, and fly him back to Washington National. That was when we could use Washington National for VIPs.

Back in those days of course Secretaries could do a lot of things I guess they can't do now. The Secretary had a summer place up near Bangor and he would spend the weekend with his family up there. A round trip on Friday evening and another round trip on Sunday evening made for a lot of flight time in an aircraft such as the T-28 or U-11A. As General Robertshaw would say to me, if the Secretary likes it, then he General Robertshaw likes it.

Dr. Allison: He was flying the T-28 still with you.

General Fitch: That's correct, he liked to fly the airplane and while he never had a flight lesson in his life, he could maintain altitude and heading. He knew how to do that and he was very precise at maintaining heading, airspeed and altitude.

Dr. Allison: Did you get back to work on the COIN program?

General Fitch: Yes. COIN was ongoing from the time I joined Secretary Wakelin's staff. I was still the COIN Project Officer except I was working for a different man. Captain Morton was still at BuWeps in the Attack Design Office. Harold Brown had decided that it would put a little momentum into the COIN program and he set up a COIN steering committee, with Dr. Wakelin as the chairman. With the creation of that COIN steering committee, Dr. Wakelin said to me, "Bill, you've got to tell me what I need to do." [Chuckle] So this created a key spot for me to interface on all details on the COIN program, including my reviewing the specification. K.P. Rice is in

DDR&E and so the Bureau of Naval Weapons is directed by Secretary Wakelin to come up with an RFP [request for proposal] and a specification for the COIN airplane.

Dr. Allison: For all the services?

General Fitch: Yes, it would be the Army, the Marines and the Navy, along with the Air Force, because those were the services who would best be suited to employ the aircraft. Membership on the COIN steering committee, in addition to Secretary Wakelin was the assistant secretaries of the Army and Air Force for research and development, plus a DDR&E representative. It fell to me to write the agenda for each meeting of the committee, then I had to help lead the discussions when the committee met. The Air Force, the Navy and the Marine Corps wound up with what would be the OV-10 later on, which was produced by North American Aircraft as I recall. Harold Brown told Dr. Wakelin that he was going to be running the COIN program and so that meant that the Bureau of Naval Weapons had to get the blessing from Dr. Wakelin on the specification and the RFP. And you had a Marine major working for Wakelin and a Marine lieutenant colonel working for Brown, and they were deciding how that was going to turn out, [chuckle] which was kind of interesting because Captain Morton – a nice man, he's now deceased. Captain Morton would bring the specification over to me. Then I would call K. P. Rice and he would come up to my office.

K.P. and I would sit in my tiny office and we'd go through the specifications for the COIN aircraft. Most of it we agreed with but one of the things in there was that the airplane would have like a 38-foot wingspan. K.P. and I were talking about that and back in his original concept when he was in VX-5, and even later on, was that this aircraft would be able to operate from roads and unprepared surfaces. And so K.P said, "We've got to get that wing span down." And as I remembered it he said, "No more than 28 feet."

There was an aircraft evaluation office in BUWEPS and it was headed by an aeronautical engineer named George Spangenberg. His deputy was Gill Weise. George was an absolute genius when it came to all the technical aspects of aircraft and what should be in specifications. Gill Weise was close to being as good as George. After we had talked with George, and insisted on the 28 foot wing span, then I told the secretary, "Here's what we need to do and here's the changes we need to make to the specification." So BuWeps, which meant George Spangenberg said, "Okay, 28 feet on the wing span." But George Spangenberg told me, "I can guarantee you're going to put at least ten more feet of wing on that airplane," and I said we'll have to wait and see. And so they do the competition. This is going back about 45 years, something like that. We had four or five

different proposals coming in for doing this counter-insurgency airplane and they picked, as I recall, North American to do it.

Dr. Allison: Now who would do the picking?

General Fitch: Well they would have a selection committee at the Bureau of Naval Weapons who would evaluate the proposals for categories like technical, management, past performance, etc. From this evaluation they would, and they'd have representatives in this case from the Army and the Air Force along with the Marines and the Navy. It was a joint program; it was an original joint program.

Dr. Allison: But the Navy had the lead on it, is that correct?

General Fitch: The Navy had the lead through the Assistant Secretary of the Navy for Research and Development. Wakelin or Morse in turn tasked BuWeps to do the detailed work. The COIN aircraft would be called the OV-10A.

So, as I said, they did a down selection and as I recall it was North American Aviation wins. North American became the developer for the COIN airplane. They initially did a 28-foot wingspan. Well they started flight testing and when they get to that stage at Pax River for stability and control, and other test factors, everybody concludes, "You need more wing on that airplane." [Chuckle] So as I recall, and this is a guess because I flew the OV-10 quite a bit later on, but as I recall we went to something like a 40-foot wingspan. Spangenberg was absolutely correct and he had concluded what that wing span needed to be simply by looking at a piece of paper in the basic design and the specifications. Long before Patuxent River got to flight testing the OV-10 aircraft, George said, "You're going to put more wing on it." Sure enough we put more wing on it later on [chuckle]. By the way, George Spangenberg was an honorary member of Golden Eagles, and I sat on the selection board that nominated and approved him. We are now phasing out honorary membership.

Dr. Allison: Is he still around?

General Fitch: George never missed a Golden Eagle reunion. He was killed in a tragic automobile accident down around Route 236, near Annandale. He had a daughter who lived there and he had taken his daughter to lunch. He took her back home and as he was driving home a car hit him broad

side, and he was killed. But George Spangenberg could just read things and tell you whether it was going to work or not in an airplane. And airplane designs; the A-6, the F-4B, the F/A-18, and all of those fine aircraft, they were all generated through the office of George Spangenberg. George was a genius for aircraft design, and he knew how to play all of the flight test factors, on a large piece of paper, before an aircraft ever flew.

Dr. Allison: That whole Vietnam generation of airplanes.

General Fitch: Yes. Before and after Vietnam. But back to K.P. He and I had a constant interface on what would later become the OV-10A. The way the meetings would go between the Assistant Secretary of the Army for R&D, the Assistant Secretary of the Air Force and my boss, the Assistant Secretary of the Navy, is they would meet periodically and Major Fitch had to come up with the agenda and kind of lead them through the various aspects that we were going to discuss. And it was interesting looking back on that time period. Some of the young majors and lieutenant colonels that I was dealing with in the Army and the Air Force later became general officers.

Dr. Allison: Your counterparts in those R&D offices.

General Fitch: You might say that. And that tells you that a staff tour like that is very, very beneficial. One of the key things that I learned out of it in addition to working with some great people - and some of those by the way were at the Office of Naval Research – but one of the key things I learned was how decisions are made at the Secretary of the Navy level. Decisions at the Secretary of the Navy level are sometimes quite arbitrary, and sometimes they're kind of a kneejerk type of decision and sometimes they're very well thought out, and you always hope they're going to be the latter. But it was interesting to see the whole process as it takes place within the Navy Secretariat. And then of course we had a rather constant interface with the CNO's office and to a lesser degree with the CMC's office but as I have said, I had the interface with General Robertshaw and General Hochmuth. The job that I had in Assistant SecNav as a major, now has a full colonel doing it.

Dr. Allison: Were you aware of any sort of adversarial relationship at that point between the Navy and the Marine Corps when it came to aviation?

General Fitch: Well the adversarial relationship between the Navy and the Marine Corps has been there ever since they came up with programmatics, where there's an allocation of funding that goes to the Department of the Navy, which really means that it should be the Secretary of the Navy who allocates. Unfortunately in the year 2007 the Secretary of the Navy does not allocate the funds.

For many years the Secretary of the Navy had a staff office, called the Office of Program Appraisals or OPA. It was the job of OPA to do the staffing for the split of funds, blue for the Navy and for Marine aviation, and green for the Marine Corps on the ground side. It was intended for the Secretary of the Navy (who is also the Secretary of the Marine Corps) to allocate funds, for the Navy, and separately allocate funds for the Marine Corps—both ground and aviation. A few years ago a Secretary of the Navy decided that he would do away with OPA as a money saving process, and rely on the Navy N-8 to fairly allocate the funds. Aviation is a particularly tough area. Routinely the Navy N-8 screws the Marine Corps when it comes to funding Marine aviation. The POM process, the procurement objective memorandum provides the review of funding allocations. It is like having the fox in the hen house, because it is the N-8 of the Navy, a three star admiral on the CNO's staff, who does the final reviews. The unfortunate part of this funding game — and this is an absolutely accurate statement – that the uniformed Navy feels that when that money arrives from OSD it's their money; the uniformed Navy's money, not the Marine Corp's money, and not the Secretary of the Navy's money.

Sometimes you have personalities with the CMC and the CNO, where this doesn't happen but unfortunately most of the time it does – but where the Marine Corps has a program for funding of various and sundry things the uniformed Navy says, "Hey, those damn Marines are taking this money away from us." Well that's not what the Congress has in mind when they authorize and appropriate. They're authorizing and appropriating for two services that come under one service secretary. This flim-flam by the uniformed Navy has gone on for years in their relationship with the Marine Corps, and it continues on and on, as long as Secretaries of the Navy are weak kneed.

Dr. Allison: But were you picking up on it at that time, when you were a major?

General Fitch: Well yes, but it is worse now because they did away with OPA. When I was a major working in SecNav R&D, we had OPA. But the animosity was not that clear to me back in those days because I was sitting at a different level then in the Secretariat and the people who were finding those problems were the people like General Hochmuth and General Robertshaw in being able to get the funding for the things that they felt that they needed to provide war fighting capabilities for the Marine Corps.

But it's been there for a long, long time, probably at least ever since we've had a Secretary of Defense. The Secretary of the Navy needs to remind himself, or herself, that they are also the Secretary of the Marine Corps. The Navy secretaries that serve invariably have a habit of forgetting that.

Dr. Allison: That's good background information on it.

General Fitch: It's very unfortunate and it continues to this day and many times its personality dependent. It depends on who's in charge with whatever office within say the OPNAV. Today the king pin who allocates the Department of the Navy funds is the N-8, and he wears a vice admiral's uniform.

Dr. Allison: How far along did you get on the COIN aircraft during your time there?

General Fitch: Well we got through probably about the down-selecting, maybe not quite that far, because once it had the momentum and they were going to do the competition we more or less quit worrying about it.

Dr. Allison: How would you evaluate the OV-10's performance?

General Fitch: The OV-10A performed well in Vietnam in the 1966 to early 1970s timeframe. OV-10 aircraft now sit in the desert. They ought to activate those aircraft and give them to the Iraqis. They would be an ideal aircraft for the war against terror, and the debacle that is now Iraq. By the way, Fred Smith who started FedEx is a former Marine OV-10A pilot. The OV-10 was a very good airplane, and as I have emphasized, it could be used today in Iraq. Put a good forward looking infrared system and a weapons delivery system on the OV-10, and it could be gang busters in Iraq in 2008. The OV-10 was designed for a country like Iraq. It is easy to fly and it has a lot of capabilities that range from dropping bombs and shooting rockets, to doing the surveillance, reconnaissance, and intelligence.

Dr. Allison: That's right, that's what I was thinking.

General Fitch: It was a turbo-prop and it could be used today, but like all those things they had a tendency to fade away. The OV-10 faded away about 20 years ago.

Dr. Allison: You attended Marine Corps Command and Staff in 1965, how did that come about?

General Fitch: After 30 months as Marine aide in the Assistant Secretary of the Navy R&D office, it was time for me to move on. The Secretary asked me to do another year, but the Chief of Staff at HQMC, General Greene, said he thought that I should go to a Marine Corps school. He said he thought that I should go to the Command and Staff College at Quantico, and that was where I went about August 1965.

Dr. Allison: And what was your perspective on the course?

General Fitch: It was a relaxed nine months and overall it was a good school for a major to attend. They got into the basics of being a field grade officer. I don't recall any significant details of the school, since that is now about 42 years ago. We had a few lieutenant colonels and commanders in the class. We had the normal discussion groups and the guest speakers.

I car pooled from Springfield, Virginia to Quantico each weekday, which was about a 60 mile round trip. We did our proficiency flying at both Quantico airfield and at Andrews. While in Command and Staff I flew about equally at Andrews as I did at Quantico, and that was about 10 hours a month on average. I don't recall aviation being discussed much during the nine months of school. I am confident that 40+ years later there is a more balanced approach to the MAGTF and jointness.

I mentioned the proficiency flying that I did while in Command and Staff. Proficiency flying was stopped about 25 to 30 years ago. You have to bear in mind that I got out of flight school about 55 years ago, and I think there should be a return to proficiency flying for those aviators doing staff tours. First as a point, proficiency flying is not expensive because it was done with older aircraft. I think proficiency flying was very, very important, as a way to keep a pilot interested in aircraft and flying. When an aviator gets away from flying for a long period of time, such as is the case is now where they can have multiple tours of staff duty, then they should be able to do proficiency flying. The taxpayer pays a very high price to train an aviator, and it is expensive to lose that skill early. People can argue that going to a training group after a period of not flying makes up for no flying for several years. The bean counters claim that going through a training group motivates a pilot to get back to flying. I disagree. Those people advocating breaks in flying aren't aviators in the true sense. But where pilots and NFOs are majors, lieutenant colonels and colonels, if they are on staff duty, then they should fly proficiency flights. The bean counters say, "You quit flying and if you're going to fly again we'll send you through a training squadron." Those bean counters are not aviators.

Dr. Allison: Why do you think its important? Leadership?

General Fitch: I think aviators lost something in that process because it creates a sedentary type of being, you know, "Hey, my wife doesn't really like for me to fly anyway, so I get paid the same thing and it's no big deal." They kind of lose their zest and interest in flying. Then when they are a lieutenant colonel they are supposed to be a squadron commander. When they are a colonel they are expected to be an air group commander. So my personal view is, I think they ought to reestablish proficiency flying because it doesn't cost that much. On the personal side I had a big advantage, in that I was never away from flying at any time in my career.

Dr. Allison: Intangibles.

General Fitch: It is very much an intangible, but it depends a lot on personal motivation to fly. I have seen a lot of people as they got a little more senior lose their interest in flying airplanes and we need to remind ourselves that there is a certain hazard associated with flying military airplanes.

Dr. Allison: I noticed you also worked on the F-111B, which is a very controversial thing. Did you do much with that, any thoughts on that aircraft?

General Fitch: Well I didn't. The Marines weren't that interested in the F-111B and the Navy was not interested in it either. The way that happened, [Robert] McNamara had mandated that there would be a joint program between the Navy, the Marine Corps and the Air Force. The uniformed Navy fought the F-111B program all the way, and they eventually won. McNamara even decided the color of shoes that the military wore. Cordovan shoes were part of the uniform for Marines and had been for many years. McNamara concluded that – and I don't know how he came up with this – but he and his staff concluded it would be cheaper if everybody wore black shoes. Well to the Navy's credit they refused to do away with their brown shoes and to this day the Navy wears brown shoes with the appropriate uniform. The Marines as good soldiers did away with cordovan shoes. And then McNamara said, "We've got to redesignate all the aircraft." So we complied with new designations.

And then another thing that SecDef McNamara did – and this still has an impact to this day. We all had military ID numbers. It was a five digit number when I was commissioned. When I was a NavCad it was a seven digit number. I remember those numbers to this day. Well McNamara said they were going to do away with the military ID numbers and we were all going to go to Social Security numbers. So we've gone to all Social Security numbers, starting about 40 years ago, and you probably read two years ago where there was identity theft of the senior officers in the Pentagon because of the Social Security numbers. Some hacker had gotten into the records and found out what these Social Security numbers were. So they were stealing identities of all these very, very senior people. Well doing away with the military ID number, as far as I'm concerned, was one of the dumbest things that's ever happened. When we go to Bethesda Hospital now, active duty or retired, everything has your Social Security number on it. Whatever medical department you're dealing with, you say, "I sure hope you're shredding all this paper." "Oh, absolutely, we shred everything." Well I seriously doubt that. You frequently read in the newspaper or see on the news, where hundreds of thousands of personal data like Social Security numbers are compromised. That is another dumb move. I recently got a letter from SAIC [Science Applications International Corporation] telling me that my personal data, including my Social Security number, place of birth, date of birth, etc. was compromised due to carelessness with hundreds of thousands of medical records at SAIC.

Dr. Allison: Which is your whole life.

General Fitch: That's right. It seems in a sense that the government is in league with the thieves that steal identities. And to this day I worry about identify theft as do a whole host of other people. McNamara imposed that on the military. And then of course this is a topic of a later discussion but its only been in the last four or five years, and I guess McNamara wrote another book, but he said he had concluded, I think it was 1966 that he had concluded that the war in Vietnam was not winnable, but we went on and lost all of those Marines and all of those sailors and all those Army soldiers and all the Air Force, after the Secretary of Defense had concluded seven years before the evacuation of Saigon, that the war was not winnable. McNamara would not tell President Johnson that the war in Vietnam was not winnable, and how to do a graceful exit. We are in somewhat a similar situation today in Iraq.

Regarding the F-111 aircraft, Paul Nitze was the Secretary of the Navy in the 1963 to 65 timeframe. It was primarily George Spangenberg that felt that the F-111B would not work on the aircraft carrier, and I think he was right because we hadn't really done joint programs up to that

point in time. We were going to do the COIN airplane, which would be joint but we hadn't done anything with a great deal of complexity like the F-111B would be. And so the Navy was giving lip service support to the F-111. I forget what the Grumman role was but at about the same time – so this would be '63/'64 timeframe – the Grumman company starts interfacing with OP-05 about an airplane that would have tandem seating, a swing wing, like the F-111, and which later would be named the F-14 Tomcat. The leading proponent of the F-14 Tomcat was Vice Admiral "Tom" Connolly. And so there you have the relationship of names—the "Tomcat."

Dr. Allison: [Chuckle]. Named after "Tom" Connolly.

General Fitch: But while the F-111B was still in high gear and the Navy had not bowed out of it, Grumman was going around the Pentagon laying out what they were expecting would later become the F-14 Tomcat. As it turned out, that's what happened later on.

Dr. Allison: But they weren't competing with the F-111, were they?

General Fitch: No they weren't. The F-111B had gone through a competition. I think that the Navy was right to get out of the F-111B program. Grumman was sitting in the wings, ready to offer the F-14 when the F-111B was killed.

The F-14 filled the gap left by the demise of the F-111B. I guess you're familiar with the professional judgment process in Congressional hearings. When a flag officer is at a congressional hearing and testifying, the committee members will ask him or her their professional judgment. This is a method to get around the flag officer always having to support the President's budget. We have always had to say we supported the President's budget, up to the point where they ask our professional opinion. If a congressional committee has a key concern they will say "Admiral" or "General" as the case may be, or "Mr. Secretary", "I want you to give me your personal professional judgment on this issue." At that point, if you don't tell the truth you're in deep trouble with the Congress. So what they would do back in this timeframe with the F-111B [chuckle] is – they'd get into these hearings and here would be say the OP-05; the head of Navy aviation. He'd be testifying and he'd be supporting the F-111B program because the Secretary of Defense supports it and that means the President supports it. But then they'd say, "Well Admiral, what do you really think as a professional naval officer—what is your professional judgment on this F-111 program?" And he'd then say, "I don't think the damn thing will ever get off the carrier deck." [Laughter] That was a response giving at a hearing by Vice Admiral Tom Connolly.

And as I recall several admirals said that. In fact I think it was Tom Connolly, who at the time was a three-star, had said that. "I don't think there is enough engine power in Christendom to get it off the carrier deck and if they do they won't be able to get it back aboard." For Admiral Connolly it was words to that effect. And it's not happenstance that the F-14 was named the "Tomcat" after Admiral Tom Connolly.

Dr. Allison: You didn't have a lot to do with the F-14, but the Marines almost brought it into the Marine Corps.

General Fitch: I didn't have anything to do with the F-14 at that point which is in the mid 1960s. The Marines had absolutely zero interest in that airplane at that time. Then a few years later the Marines got into the F-14 a little bit and they were actually doing training in the F-14 at Miramar. This was around 1974 or 1975. It's probably about the '74 or '75 timeframe that Marine training had started and there were both pilots and NFOs in F-14 training, like [Nellis] "Nelly" Dye was one NFO. Chuck Zangas was a Marine pilot in F-14 training at that time. Zangas, Dye and a few other Marines were at Miramar undergoing F-14 training. Then General Lou Wilson came in as Commandant in the summer of '75 and for the F-14, General Wilson said, "We are not going to use that F-14. Not only no but hell no. So you get all those people out of that F-14 training." That was the end of the F-14s for the Marine Corps. Now if you talk to Tom Miller, he liked the F-14 [laughter].

Dr. Allison: But who was telling General Wilson not to go with that I wonder.

General Fitch: That was General Wilson telling Phil Shutler, who was heading up Marine aviation when General Wilson became the Commandant. Phil Shutler was in that job for several months, while they awaited the arrival of Tom Miller. By the time that Tom arrived, the F-14 was dead in the Marine Corps.

Dr. Allison: Any thoughts on why General Wilson killed it?

General Fitch: General Wilson had made up his mind. I have always thought that he made the right decision, because I never thought the Marines should fly the F-14. It was a fleet interceptor. General Wilson as the CMC just saw no need for the F-14 in the Marine Corps. General Wilson had it right!

Dr. Allison: Why?

General Fitch: Well for one thing it was an air-to-air airplane, and at that time the air-to-ground capability was an after-thought—a nice to have by Navy standards. The F-14 would not get serious about air support of ground forces or striking ground targets until the LANTIRN [low altitude navigation targeting infrared for night] weapons delivery system came along. LANTIRN came along at least ten years after Lou Wilson retired. We were well into the F/A-18 program when LANTIRN became operational on the F-14. You should note that that last F-14 squadron stood down a couple of years ago.

Dr. Allison: Yes.

General Fitch: You know the F-14 only got an air-to-ground capability when it needed to participate in a later war. In the early 1970s the Tomcat was a fighter, period, and that fighter capability was all built around fleet defense The F-14 was designed to shoot the Phoenix missile a great distance while many miles from the target aircraft. It is a given in naval aviation that the first priority for the carrier battle group is to protect the carriers. Everything else is secondary. It is also a given that the carrier will standoff at least a hundred miles from a threat area—usually two hundred miles. That last comment is why carrier aviation is not responsive to ground Marines calling for close air support. If it is not already airborne and in a stack somewhere wasting fuel, the carrier attack aircraft cannot respond to CAS requests in a timely manner. That is why the Marine aviation TacAir is structured toward STOVL aircraft such as the Harrier and the F-35B, and why there is a high priority for forward basing close to the ground battle areas. The Tomcat never fit the bill for rapid response in support of ground troops. As an aside, the Tomcat was a large radar target when airborne – in fact a huge radar target.

A few months after General Wilson came in as the new CMC, Tom Miller arrived and I was his EA [executive assistant]. General Miller had arrived on the scene, selected by General Wilson to run aviation, but the F-14 was dead in the Marine Corps before General Miller walked in the door. General Wilson did the right thing in my view. General Miller and General Shutler do not agree with me on that one nor I with them. That is now history since all of the F-14 aircraft are parked in the desert.

Dr. Allison: Of course we can cover that later sir.

General Fitch: You are right, we are getting well ahead of ourselves. We jumped from when I was a major working in SecNav R&D to when I was a colonel. For the Marine Corps the F-14 died about the summer of 1975, when General Wilson said, "No way!" and when General Wilson said no way, that meant, "No way." [chuckle].

Dr. Allison: Its interesting you were only a junior major when you were working as aide to Secretary Wakelin and Morse.

General Fitch: When I was in the office of the Assistant SecNav R&D, I was going to say that the migration of rank has been significant. For example I was a major and I relieved a lieutenant colonel as the aide to Dr. Wakelin. I was relieved by a lieutenant colonel. However today, the job as aide to the Assistant SecNav RD&A is a full colonel's job.

Dr. Allison: Who was that lieutenant colonel?

General Fitch: His name was Herc Roland. I was relieved by Lieutenant Colonel Stan Carpenter. But as that office continued to expand now there's a bird colonel who has the job that I used to have except he doesn't have what I used to have in span of control. Now it's all fragmented responsibility. The Marine aide does not do technical work. He is just the Marine aide. When I headed up Marine aviation in the 1982-84 timeframe, I found the colonel who was there to be useless. He was only good for getting people a cup of coffee. I was not his sponsor.

Dr. Allison: How had things changed in your relationship with the Navy?

General Fitch: Well I had the responsibility, but again, things weren't that complex back in 1963-65. You know we've had the growth of the programmatics of how things are approved and the high levels of approval that are required. Then there are all the reviews. Development of a weapon system takes much longer than it used to take. Some 40 years ago it did not take long to develop a new weapons system. Now it takes years and years. There are an awful lot of things that did not go beyond the Navy Secretariat's office for decisions, as far as the Marine Corps and the Navy were concerned, and now in many instances it takes approval all the way up to the Secretary of Defense's office. For example in the year 2007, the Deputy Secretary of Defense says that he will make the decision on whether there will be the STOVL, the F-35B on the aircraft carriers. That should be a decision for the CMC to make, and not the Deputy Secretary of Defense. The Deputy Secretary is getting into operational turf. If he forces the Marines into the JSF Navy variant, the F-35C, then Marine casualties in combat will increase – and it will be young 20 year old Marines in infantry battalions that will be those casualties.

Dr. Allison: You didn't have a systems command back in those days; where today we have Marine Corps Systems Command.

General Fitch: Well we had the Bureau of Naval Weapons for aircraft and that became the Naval Air Systems Command. In 1963 when I moved to SecNav R&D, it was General Hochmuth's office that made the decisions, and we relied on the Army to do a lot of our R&D. The R&D unique to the Marine Corps was at an extremely low level.

Dr. Allison: Was there a Marine Corps equivalent?

General Fitch: No equivalent for Marine aviation. Naval Air Systems Command is responsible to both the CNO and the CMC. There was no Marine Corps Combat Development Command at all [MCCDC]. You had the basic Quantico but Quantico has been built up a tremendous amount in the last 25 years. The MARCOR Systems Command, there was no such thing 40 years ago. Of course it was like the Marine Corps decided 10 or 15 years ago, "They've all got a systems command so we need a systems command," kind of approach. So we've got a systems command now. Bureaucracies have a tendency to grow.

Dr. Allison: Didn't that come in under General Gray?

General Fitch: Yes. Al Gray thought Quantico should be an empire within the Marine Corps. There is some good and some bad in that. It used to be that the Marine Corps gave the country a dollars worth of defense for a dime. Now it is my guess that we give a dollars worth of defense for 70 cents.

Dr. Allison: So the push forward. We had MCRDAC [Marine Corps Research, Development and Acquisitions Command]. General [John] Dailey stood that up.

General Fitch: Yes, it probably was Jack Dailey. But no, the complexity now for the approval process and having to get everything joint and get everybody to agree in the other services. This makes for a very complex process. It also makes for a very expensive process.

But in fairness, in the process we have had some good things happening like the Joint Strike Fighter, the F-35 and the MV-22. If the JSF gets built the way it's supposed to be done, then that's going to turn out to be a very good airplane. Of course the Marines have led the way for the V-22. But in turn, the V-22 has taken 25 years from the original requirement for a tilt rotor, which I signed about the fall of 1982, to reach its IOC [initial operational capability] in late 2007. The MV-22 will be a great aircraft, but it has taken far too long to get to the IOC.

On the issue of the Navy and Marine Corps having common aircraft, we have had only a few unique airplanes where the Marines and Navy don't agree, like the A-7. When it came along, which was in the time frame when I was working for Dr. Wakelin and Dr. Morse, the Marine Corps just did not see a need for that A-7. When we get to a later tour I can tell you how the A-4M evolved because I was the project officer on it. That was when I was in APW [Department of Aviation Weapons Requirements Branch] as a lieutenant colonel, circa 1968-70, and we did the A-4M.

And on the A-7, we can talk about when General McCutheon was sitting in the SecNav's office, when Admiral Connolly was there, and Admiral Connolly was OP-05. Connolly said something to McCutheon about going into the A-7 and McCutheon more or less telling him if it was the last airplane on earth we don't want it. But the A-4M was one of the few unique departures from the Navy. Then a second departure was when we went into VSTOL or STOVL with the AV-8A and the Navy – and I don't understand to this day – but the Navy just has a phobia against anything VSTOL, anything STOVL relative to flight operations from an aircraft carrier. And what they refuse to recognize is there was a very successful cruise of the AV-8A on the *Franklin Delano Roosevelt*, gosh, 25/30 years ago, which proved the suitability of STOVL on the carrier. The Navy won't let that FDR report surface at all and they're just afraid to death that if you ever get STOVL on a carrier then the Navy is going to lose the big carrier.

It is relevant that when the Navy was confronted with an aircraft that they did not want, specifically the F-111B, then the Navy pushed back. The Marines do the same thing when the Navy tries to force the Marine Corps into an aircraft that the Marines do not want.

But on programming within the Department of the Navy, and I should say that some of my best friends are Navy admirals or retired Navy admirals, now for the most part, these are great guys. But when you go to programming money, the money that is allocated to the Secretary of the Navy, everybody just turns into a different beast so to speak and its like, "What do you mean you're going to take my money!" And then on the other hand it's the Marine Corps saying, "Well what do you mean you're not going to allocate us the money to meet our requirements."

Unfortunately there are some admirals who do not understand what it is that the Marine Corps does. But a fact of life in Washington is that the admirals see the entire funding that goes to the Secretary of the Navy as really belonging to the uniformed Navy, to do with as they please, and anything that the Marines get, is stolen money. They see the Navy as the victim. So we can talk about that later.

Dr. Allison: That's a big story.

END OF SESSION IV

SESSION V

Interviewee:	Lieutenant General William H. Fitch, USMC (Ret.)
Interviewer:	Dr. Fred Allison, U.S. Marine Corps History Division
Date:	19 April 2006
Place:	Lieutenant General Fitch's Home in McLean, Virginia

Session begins with discussion of photographs:

General Fitch: Looking at this photo of VMA (AW)-533 at Chu Lai, when I went back to the S-3 job in MAG-12, Ron Iverson who had been my executive officer took over the squadron--533. Ron and I had gone through flight school together as NavCads. When Ron came to Chu Lai he had never flown the A-6 Intruder, so I arranged with the CO of MAG-12, Colonel Charlie Armstrong, for Ron to do an in-country check out in the A-6, and then come to 533 as my executive officer. The intent from the outset was for Ron to take over the squadron when I left it. At that time it was relevant that we had checked Charlie Armstrong out in the A-6, in country. This photo shows the best combat pilot I ever saw. His name was Terry Baker. Terry and I had been together in VMA-311 during the 1960-62 timeframe. In 311 we were both captains. Terry Baker was an absolute master at flying combat in the middle of the night in the A-6, and no target was too tough for him to hit.

And Terry was my maintenance officer in 533, an absolutely outstanding pilot.

Dr. Allison: No relation to the XO of 311?

General Fitch: None whatsoever [chuckle]. In the squadron photo this is Jerry Marvel. He got shot down, and that should have been in late February 1968. Jerry was a captain at the time and he was in 225 when I had it at Cherry Point. The bombardier navigator that flew with Jerry was Larry Frieze. Jerry and Larry were going against a target that Charlie and I had bombed one night perhaps a week earlier. The night they were shot down, about 15 miles southwest of Hanoi, Jerry was captured pretty quickly, but Larry managed to evade for two or three days. About a month later I was at an Air Force base in Thailand for a Red River Rats reunion, and I ran into an Air Force pilot at the bar who said that they had a tape on one of my aircrew. He gave me a copy of the tape and it was Larry Frieze talking on guard channel to a USAF flight of either F-4s or the F-105s, when the USAF was hitting a target north of where Larry was hiding in the mountains. Larry said words to the effect, "Good show guys, and he gave them his call sign for the mission when he

went down." The USAF flight arranged for a rescue aircraft to go back into the area where they thought that Frieze might be, but by then Frieze had been captured.

Dr. Allison: So a couple of your guys were POWs.

General Fitch: Both Marvel and Frieze were POWs for about five or six years. A few years ago, Jerry died after a heart attack while he was returning from a trip to Pensacola.

Bob Gondek, who was a major, came to me in probably about October or November of 1967, and he said words to the affect, "Colonel, I'm just getting a little bit antsy about flying, I think I better not do it for a while." And so I said, "Fine," because you didn't want anybody flying that didn't think they were up to flying the missions. The crew of the A-6 was the pilot and the B/N, and the B/N always depended on the pilot to do the right thing at the right time. Up to that point in time, Bob Gondek had done a fine job of flying night combat in the A-6.

And that went on for probably a month, and not a single soul in the squadron criticized him at all. He just didn't fly, and as the CO of 533 that was my option. And then after that time went by, he said, "Okay, Colonel, I'm ready to go back and fly." I said, "Fine." Bob Gondek didn't miss a beat after that and I rate him as a fine combat pilot.

General Fitch: This is my brother, Blaine, standing with me. This is at Marble Mountain. He was a Huey gunship pilot and he and I had an overlap of about three months in Vietnam. And then this is my brother here again. I'm a lieutenant colonel, he's a 1st lieutenant, and this is at Marble Mountain.

Here's Charlie Carr as a 1st lieutenant.

Dr. Allison: And you were crewed up with Charlie?

General Fitch: Charlie and I flew together on all deep north missions, and we'll just hit a little bit of Vietnam while we're talking about it. The first 80 miles of North Vietnam was what we called the "Tally Ho" area and that's where you went up at night looking for trucks with moving target indicators in the A-6A radar system, and when you would detect movement which appeared to be trucks – of course the radars in those days, see we're talking nearly 40 years ago, weren't all that great - but the bombardier/navigator [B/N] could pick out the trucks as long as they were moving say ten miles an hour or something like that. If they were stopped he'd have a hard time seeing them.

Dr. Allison: They had to have some movement.

General Fitch: Yes. But, the Tally Ho area, which was the first 80 miles to the north of the demilitarized zone; the first 80 miles of North Vietnam, and the A-6 squadron I had; 533, you just flew with anybody. They were a relatively easy mission, but we did lose a few planes in that first 80 miles of North Vietnam. You might fly with one B/N tonight and a different B/N tomorrow night and a different B/N the next night. But then if you were going deep north, which was everything from 80 miles north of the DMZ up to the Hanoi/Haiphong area, with some rolling thunder targets to the west of Hanoi, then we always tried to team up with the same crew every time. So Charlie and I, we flew all our deep north missions together.

Dr. Allison: He's a legend.

General Fitch: Oh yes. Charlie Carr came up with nearly 700 combat missions in the A-6. You ought to do a book on Charlie's career as a Marine. I can tell you how Charlie got his second tour in, well actually it was his third tour; how he got his third tour in Vietnam. He hadn't planned on that happening. In fact while I'm thinking about it, a little later I'll go ahead and tell you how Charlie's third combat tour happened.

This is the Southeast Asia hut that I lived in for about 11 months of my 12 month tour at Chu Lai. It doesn't look like much but it was a very nice Southeast Asia hut. My friend, K. P. Rice had lived in that end of the hooch, he had fixed up the interior nicely, and when he left Chu Lai he had it arranged for me to take it. I had this end nearest the water and another Marine officer, LtCol John Miller, had the far end. We had a shower, no head in there, and the toilets were all the barrel arrangements out towards the beach. They burned the barrels daily. But from this door to the water; the South China Sea, was about a hundred, maybe a hundred and fifty yards. The sand was clear white, much like the gulf coast of Florida; an absolutely beautiful beach.

Dr. Allison: Beautiful.

General Fitch: So this was beachfront property [chuckle].

Dr. Allison: [Chuckle] Is that your rack there, that cot?

General Fitch: Oh no, that's one that just leaned up against the side of my part of that hut. To my knowledge that cot didn't move the entire year I was there. See what we had was, we'd have a foxhole that would hold a couple of Marines, right outside our rack. The walls folded out if pushed, and those holes in the ground would be about three feet deep. If you had a rocket attack, which we had from time to time at Chu Lai, you could get up and walk out the door and crawl into your hole, or if you really wanted to be quick about it, you could just push on the wall which was hinged only at the top, and roll over and right into the hole [chuckle]. It was about a four or five foot drop from lying in your rack to the bottom of the hole. Of course with that second option you might break something when you hit the bottom of the hole.

Dr. Allison: Those look like pine trees outside. It's not pine trees though, is it?

General Fitch: I guess they were something related to a pine tree. But I'll tell you how – because otherwise I'll forget it – I'll tell you how Charlie got what would be his third tour in Vietnam. Obviously you have to do two before you get the third one. But he was a student at Quantico in the Amphibious Warfare School. He was a captain at the time, and he heard that the aircraft carrier, *Coral Sea* was going to the Mediterranean for a Med cruise. Charlie, at the time, was divorced and he said, "That's for me." And so he started trying to make arrangements to get into the squadron that was going to go to the Med on the *Coral Sea*. Well when he got himself all committed to the squadron at Cherry Point, that was scheduled for *Coral Sea*, it turned out the carrier wasn't going to the Med, it was going to the Tonkin Gulf [chuckle].

Dr. Allison: [Laughter].

General Fitch: So that's how Charlie wound up getting his third tour. On *Coral Sea* the air wing commander, the CAG, liked to fly the A-6. Since Charlie was the most experienced bombardier/navigator [B/N] in 224, the CAG would always fly with Charlie. On *Coral Sea* the squadron, VMA(AW)-224 came under Navy rules for combat awards. As I recall Charlie had three DFCs [Distinguished Flying Cross] total from his first two tours in Vietnam, with two from 533 the first tour and one from 242 the second tour, and on the third tour aboard *Coral Sea* he earned seven DFCs.

The Navy awards the DFC for a strike lead, and Navy CAGs [carrier air group commander] wind up with a lot of DFCs. Charlie was getting about his ninth or tenth distinguished flying cross back at Cherry Point after this cruise, and Margaret Marie; my wife, and I were going through the line congratulating those getting awards. Charlie was receiving about his ninth or tenth DFC, (he flew with the CAG), and when we shook hands after the awards ceremony at Cherry Point, he said, "This sure is getting tacky, isn't it?" Unfortunately the CAG on *Coral Sea*, when he had his deep draft later on, he was unfortunate to be the deep draft skipper when the deep draft went aground. Going aground is bad news for the skipper of a Navy ship.

Dr. Allison: Did you hear that he's in the hospital?

General Fitch: Yes, I know all about that. I talked to him the other day. He was in pretty good spirits, especially considering that he had lost a leg. He is doing fine now.

Dr. Allison: You had remarked off-tape about medals.

General Fitch: Now I'll tell you how medals worked. And we can improve our Marine Corps system. When an A-6 crew was deep north, they were by themselves with no one looking over their shoulder. Most medals for A-6 flight crews came as a result of the debrief of the mission with the intelligence types at Udorn or Ubon, after landing from a mission. We frequently landed in Thailand since we usually did not have the fuel to get back to Chu Lai or Da Nang. Shortly after Gondek went back to flying he drew a deep "Rolling Thunder" which was the deep north missions at night, single plane, with Gondek and his B/N, and I forget just who flew with him. I should mention that when you are flying these night missions, low level, you wanted it to be just as dark as possible. The last thing in the world you wanted to be was up over North Vietnam, flying in what we called Route Package 5 and 6 in the vicinity of Haiphong, Hai Duong or Hanoi, on a moonlit night [chuckle], flying 400 or 500 feet off the deck. You just didn't want to do that because they could look up and see you. But anyway, on this particular mission, with Hai Duong the target, with Hai Duong probably the toughest target we had in North Vietnam from the standpoint of air defenses, because they shot so much when you went there.

Dr. Allison: Hai Duong?

General Fitch: Hai Duong, half way between Haiphong and Hanoi. I would say that of my deep north Rolling Thunders, Hai Duong was easily the toughest. Charlie Carr and I went to Hai Duong numerous times. It was always a colorful reception when you got within 10 miles of Hai Duong.

Anyway, what Gondek did on the mission, he used his head because we would normally go into Hai Duong from what would be the east or the southeast, or the south or the northwest. Well what Gondek did was do a let down from high altitude out over the Tonkin Gulf, which was the norm, but instead of turning west toward a point south of Haiphong where there were no shooters, he stayed out to sea, and continued low level up towards the Chinese border; the Chinese border to North Vietnam. He flew west just south of the boarder, so that all those mountains were masking him from NVN radars to the south, which was the built up area of North Vietnam. When he was north of Hai Duong he turned south, used the mountains behind him to mask his radar return, hit the target in Hai Duong, and then turned north again toward the mountains; towards China, and came out the same way they'd gone in, over the Gulf of Tonkin. He didn't get a single shot fired at him. So after he told me about the mission and how he had flown it, I told Gondek, "Well that's a Distinguished Flying Cross flight you did, but, I'm not even going to bother to put you in for it because the wing wouldn't understand it because you didn't get shot at and worst of all you didn't get hit so they wouldn't understand why you should get a Distinguished Flying Cross." I went on to tell Gondek that it was absolutely distinguished flying that he had done, because he had gone into an extremely tough target where they usually shot the hell out of you when you were coming in and going out" And he completely fooled their command and control system and didn't get a shot fired at him.

Dr. Allison: But you don't get rewarded for that.

General Fitch: We didn't give him a thing. That was a two-pointer toward the 20 points required for an Air Medal. If you did that ten times you got yourself an Air Medal [chuckle]. But anyway, that was one of the deficiencies of the awards system is that if you hadn't been there you didn't know what it was like. And that is where the volume of fire encountered comes into play. Different aircrews would call the same volume of fire as light by some, moderate by others, and heavy by yet others. Then pilot's skill came into the system. If a pilot knew how to evade getting hit, by using good tactics, he probably would not get any kind of medal. But if he used poor tactics, or for whatever reason his airplane got shot up, then he would get a medal as a rule. The point is the number and kind of medals an aircrew wears is not necessarily an indicator of their skill in flying combat. Like Pete Bonner, a great guy.

Dr. Allison: What was the story on him?

General Fitch: Pete, at the time, of course he had been CO of MAG-14 in the 1966 timeframe, and then he went to South Vietnam where he was the G-3 of the wing.

Dr. Allison: That's the same Pete that was in the picture there.

General Fitch: Yes, the same Pete Bonner. With Pete, I used to tell him about some of the targets up deep in North Vietnam, the Rolling Thunders, and how much they'd shoot at you, bearing in mind that the tracers were usually one in four, and I would tell Pete that if you could imagine being in a 4th of July celebration where all this stuff is going up in the air and you're a single plane going through it and Pete said, "I just don't believe there's that many guns up there." And I said, "Well you ought to go try it sometime and you'll find out" (Laughter). But anyway, that was kind of the problem with awards because you would see people who would get awards who did not deserve awards and then you'd see a lot of other people who deserved awards but they did not get the awards.

Another bad aspect for aircraft like the A-6, which had a crew of two. It was my view that the bombardier navigator was more important for mission success than the pilot. Many times when you put a crew in for say a DFC, the wing awards board would give the pilot the DFC but they would downgrade the B/N to a single mission air medal. That was an injustice. We had that happen with the Navy Cross [NC], where the pilot would get the NC and the B/N would get the Silver Star. The awards board at the wing was trying to visualize what had happened on a mission, when they didn't have a clue about the threats from AAA fire and SAMs in North Vietnam. The point being, the aviation awards system in Vietnam had a lot of flaws, and the worst flaw was that many on the awards board did not know or believe the number of AAA/SAM air defenses in the North Vietnam. We never had a awards board member offer to learn how to do the B/N tasks running the radar and the weapons system, and then fly a mission in the Haiphong, Hai Duong or Hanoi area. There was never a single awards board member who offered to go up to Hanoi at night and see for themselves. There were just zero volunteers. Gondek and his bombardier navigator were a perfect example. They should both have been awarded the DFC for that Hai Duong mission. But with that I guess we should get back to about 1965 when I had just left the office of the Assistant SecNav for R&D. At that point I attended the command and staff college at Quantico.

Dr. Allison: Very interesting though. Last time we had finished up with your tour of duty in Washington. But one comment about that time, on your tour at SecNav, on one of your fitness

reports a comment was made that, just to quote: "His future assignments should be made with the thought of further broadening and enhancing his professional background in anticipation of days when he will assume the duties of general officer," and you were a captain at that time.

General Fitch: I was a major.

Dr. Allison: Well anyway, that's a long way from being a general, what did you think when you saw that and did you know that you had impressed your boss?

General Fitch: I probably didn't see it for several years [chuckle] because you'd go look at your fitness reports maybe every two or three years. I thought it was a very nice remark. I don't recall whether it was Secretary Wakelin or Secretary Morse that made that remark. But it was nice of them to say that.

Dr. Allison: Did you feel that you had been "discovered"; is that the feeling?

General Fitch: Well not necessarily that. Of course I had a pretty good reputation as a result of my tour at China Lake and the bomb racks. The Assistant Secretary, and of course the Secretary of the Navy, they dealt with an awful lot of flag officers and it wasn't too hard to see who might stand a good chance of becoming a flag officer or general downstream. I would comment though, after sitting on a few selection boards for brigadier generals, I would say that out of 100 colonels that might be looked at for promotion to brigadier general, probably 80 or more would have made fine generals. Selecting generals is not a science.

Dr. Allison: But you got somebody's stamp of approval there.

General Fitch: Well yes, it's always nice, say before you get to colonel, that people start writing about your potential for being a general and it was nice of Dr. Wakelin or Dr. Morse to do that. They were both fine men. I enjoyed working for them. But I'll give you a little "for instance", because my function, even though I was a major there, was pretty broad. And I mentioned before that I was responsible for all Marine aviation relative to R&D, as far as the Assistant Secretary was concerned. . Now they had officers over, of course, in Headquarters Marine Corps, colonels and generals, that took care of these things, but as far as the Secretariat was concerned I was the guy responsible for the interface. And they had generals, like I mentioned the other day; General

Robertshaw, who'd come over from time to time, maybe every week or two, to talk with the Secretary about various and sundry things. And of course the admirals were in all the time to talk about various and sundry programs. But I was the guy that was there everyday and if the Secretary had a question about Marine aviation or a Marine program or whatever, he didn't necessarily call up General Robertshaw. He'd just turn to me and say, "What do you think?" As I believe I have mentioned before, I had better know what the Marine Corps position was on every issue. So one of the interesting things that we had, and this is how, if an aide gets beyond just doing the aide function, which is what I had to do, he can be a big help to Marine programs. As an example, in SecNav I could be very helpful to Lieutenant Colonel Phil Shutler who later would be Lieutenant General Phil Shutler and the J-3 of the Joint Staff. At the time I was in SecNav R&D, Phil was the EA-6A project officer in BuWeps.

I was on the A-4 desk in BuWeps, and he relieved another lieutenant colonel on the EA-6A desk. He had followed me in the office. A guy named Howie Wolf initially had the EA-6A, then Phil.Shutler had taken it from him.

But anyway, from time to time Phil Shutler would call me and he'd say, "You know, I'm just really having a hard time here in BuWeps getting 'such and such' approved." Then I would say, "Colonel", or "Phil" – I don't remember what I called him – I'd say, "Why don't you send me the text of a memo that you would like to have the Assistant Secretary for Research and Development send to the Chief of BuWeps?" So Shutler would write out what he needed to be done relative to the EA-6A, he'd come over to see me and hand it to me. I'd have it put on SecNav stationary for our office. I'd get the Secretary to sign it. It would go over to the Chief of BuWeps and things would happen. And so that was very, very helpful for Phil with his having a direct shot with the Secretary's office--just because I happened to be there. It is fair to say that things flow faster down hill.

Now had there been somebody there that didn't have a technical or a detailed interest and only performed the Marine aide function, then that wouldn't have happened.

Dr. Allison: That's interesting; how that works on personalities and informal kind of things go on like that there.

General Fitch: But to this day Shutler and I, we still talk about what we did 40-odd years ago.

Dr. Allison: [Laughter] Had you known him before?

General Fitch: No, only after he got to that job with the EA-6A. I might add that in the 1967-68 timeframe when I was flying the A-6A deep north, the Marine EA-6As would frequently provide the jamming for my strike. Sometimes it would be an electronic warfare version of the old F3D, but we always hoped for the EA-6A.

When I had MAG-14 at Cherry Point, Phil Shutler had MAG-31 down at Beaufort, South Carolina. I checked out in the EA-6A when I had MAG-14, since I had the electronic warfare aircraft in my air group.

Dr. Allison: I noticed on a couple of your fitness reports that you were requesting to get into fighter squadrons at that time, what sparked that desire?

General Fitch: While I was on staff duty there in the SecNav office in R&D I had arranged to check out in the F-4 Phantom down at Cherry Point which was about – I don't remember – a day or two of ground school and a simulator hop or two, such as simulators were in those days which wasn't much, and then I guess maybe two hops in the airplane. And so I had flown the F-4, I guess, in early 1964 timeframe. And then I would go down to Patuxent River and fly the F-4 down there because Patuxent River was an awful lot closer than Cherry Point. I also flew the A-6, the A-4 and the F-8 at Patuxent during the tour in SecNav. When I went to Patuxent, I never knew what I would be flying until I got there.

I had also managed to check out in both the A-6 and the F-8 down at Patuxent River. So I'd go down to Pax River and fly project flights in the F-8 or whatever happened to be available. Looking at my pilot's logbook when I was a major, it shows my first flights in the F-4 Phantom were in February 1964, the first flights in the A-6A Intruder in August 1964, and the first F-8D Crusader flights in February 1965—all while on staff duty in the Pentagon.

But to answer your question on requesting fighters for my duty preference in fitness reports, it is probable that I just thought about going back to fighters because I had been in fighters in my first squadron. Believe I mentioned that I had gone through fighter refresher at El Toro, just before I went to Test Pilot School.

So the way it turned out of course was that I go to Cherry Point after I finish Command and Staff College in 1966, and I wind up getting my first A-6 squadron as a major. I get the second A-6 squadron at MAG-12. I know you're an F-4 RIO [radar intercept officer]. But on reflection, I am glad that I went the A-6 route for squadron command instead of the F-4. The Rolling Thunder missions were very interesting. When I had MAG-14 I had one F-4 fighter squadron (VMFA-312) in addition to three A-6 squadrons. My VMCJ-2 squadron had the RF-4B and the EA-6A. So I

228

managed to fly the F-4 and the RF-4 over a 20 year period of time, including when I was a two star and the CG of 1st Marine Aircraft Wing.

Dr. Allison: Right. I've got to admit the A-6 is certainly a better bomber.

General Fitch: In the mid 1960s, the A-6 was the only all-weather bomber that the Marines had. For the purpose that we were using it, it was a whole lot better than the F-4 for the air to ground mission, because radars were pretty basic in the F-4 back then.

Dr. Allison: They were pretty basic, right.

General Fitch: In fact they used to deliver new F-4s out of the McDonnell Aircraft Company that didn't even have a radar in them. They'd call them a "lead nose" or whatever. They'd just put a little ballast in there. And then they'd deliver the radar later on.

Dr. Allison: I remember the radars weren't too good.

General Fitch: But back at that point in time as a major, working in the Assistant SecNav R&D, my thinking was, "Yes, now that I've flown both the F-4 and the F-8 and the A-6 while I was there, that maybe fighters would be best," but looking at it career-wise and the way everything turned out it was a whole lot better that I went to A-6s. But as a "by the way" I flew both the F-4s for about 20 years after that and I also flew A-6s for about 20 years after that. So there weren't too many times that I wasn't flying both the F-4 and the A-6, you know, maybe one day one airplane and the next day another airplane.

Dr. Allison: As long as we're talking about fighters and attack aircraft - and maybe this is ahead of the time that it could be talked about – but there's always voices inside the Marine Corps and especially outside the Marine Corps that says the Marine Corps doesn't have any business with sophisticated fighters. What is your perspective on that?

General Fitch: The people don't know what they're talking about. The "A" in MAGTF is a vital part of the Marine concept for going to war. If you look at it today, the AV-8B gives us the STOVL forward basing capability and the F/A-18A/C/D give us both the fighter capability against air-to-air targets and the precision strike capability against ground targets. Starting just a few years

from now, with the F-35B STOVL, all our TacAir will be capable of forward basing on short expeditionary runways, that are maybe fifteen hundred feet in length. The USAF variant of the joint strike fighter, the F-35 needs about 7,000 feet of runway to takeoff with a typical ordnance load. The F-35B STOVL will need less than 800 feet to takeoff, which is 10% of what the USAF JSF variant will need. When the President calls for the Marines to go into combat, with the MAGTF one phone call gets it all with TacAir and rotary wing. General Carl Mundy as commandant used to frequently say that —one phone call gets it all.

Dr. Allison: There does not seem to be an air threat on the horizon.

General Fitch: Part of this is the last time that an enemy dropped bombs from the air using strike aircraft or whatever kind was in Korea; with "Washing Machine Charlie", and that wasn't too much. You know then it was almost like throwing hand grenades over the side of the airplane. But probably about 20 or so years ago, a strike fighter from Iraq fired an Exocet missile and severely damaged a U. S. destroyer. That was back when Iraq was supposedly a friendly country. But you can never tell what a potential enemy might come up with. I dare say that six years ago no one had ever heard of an IED. Now everyone hears about IEDs, and they hear about the destruction and deaths caused by the IED--daily.

But on your point about some being critical of the Marines having strike/fighter aircraft, most probably the critic that spreads that comment wears a dark blue suit and has gold stripes on his sleeve. It is germane that the most expensive way to put a bomb or missile on an enemy target is to do it while flying from an carrier aircraft. The only way that carrier aircraft can meet the requirements for timely close air support is to stack aircraft at various altitudes, waiting for a CAS target to develop. If no target develops, then those carrier aircraft dump their ordnance or expend it against a secondary target, and then they return to the carrier.

Dr. Allison: So you're saying carrier based TacAir might not be best.

General Fitch: Aircraft carriers use cycle times for aircraft launch and recovery, and the first priority for Navy TacAir is to first defend the carrier, and second to do deep strike. In contrast the Marines use forward basing close to the ground combat area, and they scramble TacAir from those forward bases that are normally within 10 to 15 minutes of the ground combat. That is why the Marines have gone the way of V/STOL and STOVL over the past roughly 39 years. Marines are

dedicated to doing CAS and doing it right and doing it timely. It is not a second or tertiary mission for the Marines. Air support of ground forces is the primary mission of Marine TacAir.

But the last time that ground troops have really been threatened by aircraft; Marine ground troops, was about Okinawa. However in another 10 to 15 years that may not be the case. In the meantime, our strike/fighters are the most efficient close air support aircraft in the world. The Marine ground combat element [GCE] knows that well, and they rely heavily on Marine TacAir support. The GCE knows that air support for the GCE by Navy aircraft is way down the list of Navy priorities.

And if you looked when I made brigadier; in the group that I was selected, was a colonel and of course we became brigadiers at the same time, his name was Jim Day. Jim, to the best of my knowledge, was one of the last Marines to ever come under enemy air attack, and that was when he was on Okinawa. And the Japanese of course, you had the Kamikazes and they were doing all kinds of crazy things there. But Jim, to the best of my knowledge, he was the last Marine actually to be under air attack; real air attack, you know where heavy bombs are coming down. Now a quick word about Jim Day; as I remember for his service in combat on Okinawa he got the Silver Star and he wore that Silver Star for 35 years probably. And Bill Keys, after Keys came to Washington

Dr. Allison: General Keyes.

General Fitch: General Bill Keys. And this is hearsay I'm giving you but it's generally how it happened and I talked to Jim Day because he and I were good friends from when we were both brigadier generals. He knew what Jim Day had done when he was on Okinawa. Essentially what it was, Jim Day, as best I recall, had several machine gun positions and it was on one of those bad, bad hills in Okinawa. As I recall he was a sergeant at the time. They came under a heavy enemy attack where the Japanese were trying to overrun them—all through one night. And as I understand it when it was all over there was something like two hundred dead Japanese out in front of Jim Day. He had just a few Marines manning those machine guns, and so Bill Keys undertook the task of getting that Silver Star changed to a Medal of Honor. About 10 or 15 years ago Jim Day received the Medal of Honor, for combat on Okinawa in 1945. He received it through the dedicated efforts of Lieutenant General Bill Keys.

Because Korea, you know again, things like the "Washing Machine Charlie", that was about the most of it because all the MIGs, they were up flying around up near the Yalu River, which was the North Korean border with China. That doesn't say that another conflict with North Korea will not have an air threat. The Russians or the Chinese might decide that it is in their best interest to provide tactical air power to North Korea. As General Wilson was prone to say, "War is come as you are."

Dr. Allison: So why do we need fighters?

General Fitch: It is simple. I will give you an answer from the perspective of Marine tactical aviation, that is Marine aviation support of Marine Ground forces is spelled out in law and that law went on the books of the Congress and was signed into law by President Truman. Marine Corps combat effectiveness in combat is based on a balanced Marine Air Ground Task Force [MAGTF]. This balance is spelled out in Title 10 of Public Law wherein it provides "land combat, aviation, and other services as may be organic therein." The synergistic effect of a balanced team in the MAGTF is today unique among military organizations in the world. The primary mission of Marine aviation is to support Marine ground forces. Although it may be directed to support additional duties, "These additional duties may not detract from or interfere with operations for which the Marine Corps is primarily organized."

Dr. Allison: That is Title 10.

General Fitch: That is Title 10 which was enacted in 1947. You need to know that when you look at Marine aviation in 2006, that Marine aviation has long been under-funded to meet requirements. The Navy dominates the procurement process for naval aviation, and the Marines have second priority for funding. In 2006 the Marine Corps is flying near 40 year-old rotary wing aircraft. The initial operating capability for the MV-22 is 2007 and the MV-22 program has to be kept on schedule to replace two aged CH-46 helicopter squadrons per year. Over the past 15 years, AV-8B aircraft assigned to each Harrier squadron have been reduced from 20 to 16 and now in the year 2006, you find the number of Harriers in a squadron at 14. Unfortunately, naval aviation in 2006 is running out of legacy F/A-18A/C/D and there are not enough AV-8B to provide 14 aircraft for each Harrier squadron.

In our primary mission, support of Marine ground forces, in 1990 the USMC had 14 TacAir (high performance fixed wing) aircraft to support each Marine battalion. Since you ask the question in 2006 it is important that you know that by 2006 this Marine TacAir support has dropped down to 10 aircraft per battalion and is forecast to drop to six aircraft by 2023.

232

Dr. Allison: An example of Marines backing away from the air superiority mission was when they decided to get out of the F-14 program in....?

General Fitch: Going back to 1975 the Marine Corps opted out of the F-14 program in an effort to procure a more effective close air support aircraft—the Harrier – the AV-8B. However, in 1975 the Marine Corps failed to receive credit for the funds saved by this cancellation of the Marine F-14 program. In 1998 the Marine Corps opted out of the Navy's new F/A-18E/F procurement in favor of improving it's AV-8B V/STOL. The Marines opted to wait for the STOVL version of the F-35B aircraft. The F/A-18 is a strike fighter and does both ground attack and fighter missions. The same will be true for the F-35B STOVL.

These actions by the Corps were predicated upon many years of combat experience which has proven that close air support to be effective, it must arrive within 30 minutes of the ground force request. Therefore, in the 21st century, TacAir aircraft without a STOVL capability have very little opportunity to provide timely close air support for ground forces due to the need for long runways and large aircraft carrier locations (standoff from beach). Neither the Navy nor the Air Force is focused on close support of ground forces.

Neither have close air support as a high priority. Again looking at this from the perspective of the year 2006, you need to understand how the Navy handles programming dollars between Navy priorities and Marine priorities. When the Marines opted out of the F-14 and F/A-18E/F, the Navy kept all the funds that were programmed for the Marine Corps F-14 and the Marine Corps F/A-18E/F. Navy has been able to procure about 40 F/A-18E/F or more per year for the past 8-10 years---some years 48 F/A-18E/F were procured and all of that is in the period of 1996 to 2006.

Dr. Allison: What has caused the delays in Marine modernization?

General Fitch: Marine aviation modernization has been delayed in order to support Navy procurements. The Secretary of the Navy added to the problem several years ago, when he essentially did away with his Office of Program Appraisal (OPA). The OPA had the job of dividing up the SecNav's Funds for naval aviation between the Navy aviation and the Marine aviation. The SecNav now relies on the CNO's N8 to apportion the funding. Naturally the N8's priorities start with the Navy aviation and not with Marine aviation. This is akin to the fox being in the hen house each evening with the task of counting the chickens for the farmer.

Dr. Allison: The Marine Corps has always had to go with fighters that had an attack capability too.

General Fitch: For the Marines the Hornet would be a strike fighter from the outset in 1975. The Navy at first wanted a fighter, then they switched to a strike/fighter.

Again from the 2006 perspective, for the past 40 years the Marines have had strike/fighters that can do the air-to-air mission when it is required and the same strike/fighters can do the close air support and close-in interdiction for the GCE. The last pure fighter that the United States built, as best I can recall, was the Air Force F-104. All that the F-104 would do was the air-to-air mission. The F-4A (F4H-1 until McNamara changed the aircraft designations) Phantom would fit the bill as being one of the early jet strike fighters, where it could do fighter sweeps and kill enemy aircraft with an air-to-air missile, and it could do close-in interdiction and close air support. Fred, I would assume that as an F-4 RIO you flew both fighter intercepts and air-to ground. The FJ-4B Fury would be another early strike fighter with a jet engine. Since jets weren't operational during World War II, except for the Germans toward the end in Europe, I would guess late 1944 or early 1945 for their use of jet aircraft. As I am sure you are aware, Hitler directed that the early German jets be used as ground attack aircraft.

You could say that the F4U Corsair was also a strike/fighter. F4U Corsairs shot down many a Zero and other Japanese fighters and bombers, and those same Corsairs did a lot of close air support and interdiction. As we all know the F-4 Phantom was followed by the F/A-18 Hornet. The Hornet was the first strike fighter that had an air-to-ground weapons delivery system that enabled it to hit the ground target with precision, and the same radar for ground attack did the fighter mission.

Dr. Allison: When did the Hornet program get going?

General Fitch: About 1974. Back when the Hornet program first started the Marines and Navy had different requirements. The Navy wanted a Hornet that would be nothing but a fighter—that was in the 1974-75 timeframe. The Marines wanted a strike-fighter that could do both the fighter mission and the interdiction mission, along with being a superb CAS aircraft. At nearly the same time the Marines were moving into the AV-8A Harrier. As I recall the first Marine Harrier squadron stood up in 1971, shortly before we did the sortie rate validation test with it in early 1972. As proven by the British in the Falklands, the Harrier was a good fighter and a good ground attack aircraft.

About 1976 the Navy agreed that the Marine requirement for the Hornet was the way to go. Then when the Hornet (F/A-18A) was going to meet IOC in operational squadrons, about 1981, it was the Marines at El Toro that received the first operational Hornets. All that the Navy had at that time for the F/A-18A was the training squadron at Lemoore.

Earlier we were talking about Charlie Carr. When Charlie had MAG-14, they arranged with the Navy to do a strike against some carriers and ships that were well out to sea in the Atlantic. The ships were probably 200 to 300 miles off the North Carolina coast. The ships knew within a time-band, probably a two-hour window, when the strike would happen. Charlie led his MAG-14 strike group well to the south or north of where the ships were thought to be, and approached that fleet of ships from low level, from the east. The Navy was expecting the strike to come from landward, from the west. Charlie's strike group was making runs on those ships before they knew what was happening. The fleet was scanning radars to the west when the strike was coming from the east. Charlie and his group had taken the long way around.

Dr. Allison: When you talk about close in close air support, what are we talking about?

General Fitch: Marines always look at close air support as being within a few hundred meters of friendly troops, sometimes as close as 100 meters, and when things go desperate on the ground, it can get closer than 100 meters. Flying the A-4 Skyhawk out of Chu Lai, I frequently dropped napalm, MK-81 and MK-82 bombs, within 100 meters of Marines on the ground--in close combat.

Dr. Allison: Where does interdiction start and close air support end?

General Fitch: Close-in-interdiction is normally based on whether an enemy unit can arrive within 24 hours and inflict casualties or damage to friendly units. So a group of enemy tanks that can close and cause casualties within 24 hours would fit the close-in interdiction. A truck convoy would also fit. Close in interdiction would probably be defined as threats within 300 miles of Marine ground combat, since 300 miles in 24 hours is reasonable overland movement. Deep interdiction, which is the Navy's highest priority after the defense of the aircraft carrier, can reach out 600 or 700 miles. The Navy likes to use the 700 mile figure, but they have never had an aircraft that would do a 700 mile mission radius without aerial refueling, except in fleet exercises where there is no enemy to kill you. Flown tactically instead of cruising at high altitudes for minimum fuel consumption, with a real threat, as opposed to a hypothetical threat such as they

235

have in fleet exercises, and without aerial refueling, the Navy cannot fly a mission radius of 700 nautical miles from the aircraft carrier with the F/A-18E/F.

Bear in mind, as I have said, that the CAS for ground troops is a tertiary mission for the Navy and the aircraft carriers, and at best it is a secondary mission for the Air Force. Marines fight with the MAGTF, and the "A" in MAGTF is the same size and same importance as the "G" in MAGTF. All Marines know that!

Dr. Allison: You say the Navy is not responsive for close air support.

General Fitch: When you look at the aircraft carrier standoff distances, which are anywhere from 100 miles to 200 miles from any ground based threat and from most air threats, the simple process of responding quickly to CAS requests is a loser with the Navy. The carriers deal in cycle times. They do their launches and their recoveries in accord with those cycle times. Carrier operation is very structured, and the cycle times rule. I mentioned earlier that for CAS all that the Navy can do is stack up aircraft like was done in the Iraq war over the past several years. That is very inefficient—wastes a lot of fuel with aircraft going in circles—and if no target appears the ordnance is frequently dumped since it could cause the aircraft to exceed trap limits on the flight deck. Combat experience shows that close air support targets normally have a life of less than 30 minutes. If the CAS target isn't struck within that 30 minutes, it disappears and shows up somewhere else on the battlefield. I know I keep repeating that, but it is very important to remember. You might want to talk with some of your Army friends. The U.S. Army would love to have the CAS that Marine TacAir provides to the Marine GCE. Marine TacAir also provides that CAS to Army units in contact, when requested.

Dr. Allison: When did the Marine Corps start forward basing?

General Fitch: About 35 years ago with the introduction of the Harrier, the Marines started work to perfect their concept of forward basing. The concept was simple, where they would try to position their STOVL capable AV-8A (at the time—1971) aircraft within a reasonable distance of the ground combat area. The norm at that time considering all aspects of enemy defenses, was to put those forward bases about 40 to 50 miles from where the ground combat would be taking place, with due regard for defense of the forward bases.

Dr. Allison: You've mentioned the Navy requirement for 700 mile mission radius, can you elaborate?

General Fitch: If you look at Navy deep interdiction, there are some problems there that are not normally discussed in Navy circles. I mentioned the 100 to 200 miles from the beach (land based threats) that the carrier groups operate. At this point in time (2006) the Navy variant of the Joint Strike Fighter, the Navy's F-35C, will not fly a 700 NM mission radius without aerial refueling. I am told that at this time, the maximum un-refueled mission radius of the F-35C is about 600 nautical miles at best—and perhaps it will be less. That raises an issue for Navy targeting. They say that they have a 700 mile mission radius requirement. The F/A-18E/F will not fly an unrefueled 700 NM mission radius, so the Navy has a credibility problem. Unless the F-35C improves its mission radius, it will require tanking for fuel to reach that magical 700 NM.

The F/A-18E/F that the Navy is so proud of, has a mission radius that the Navy touts as 600 NM, but the F/A-18E/F cannot fly a direct route from the carrier to a target. The 18E/F has a significant radar signature when it is loaded with external ordnance and external fuel tanks. So that F/A-18E/F in combat, with its wings loaded with bombs and fuel tanks, with realistic air defenses such as enemy surface-to-air-missiles, the 18E/F has to fly a circuitous route to the target. If the 18E/F flies a direct route from the carrier to a target that is say, 400 nautical miles inland, it will probably get shot down. Any model of the F-18 Hornet has the same problem—high radar signature is a boon to the enemy. On the other hand, with the JSF aircraft, any variant, there is essentially no radar signature, and the Joint Strike Fighter can fly direct routes from takeoff to the target and back to base. When you consider that the Marines use expeditionary forward basing, short air strips for STOVL and rotary wing, the F-35B STOVL can takeoff in about 700 feet of ground roll. The Marine strike fighters with their JSF variant (F-35B) and forward basing can fly further overland than the Navy's JSF (F-35C), because of the distance from the takeoff point to the target. Remember as a norm for carrier group standoff from the beach, those carriers are 100 to 200 miles at sea.

If you go back probably close to 60 years the Marines gave up a lot of artillery; a lot of heavy mortars, tanks and those kinds of weapons, with the idea that the Marine battalions and regiments would lighten up. The intent was that Marine TacAir would provide the support that earlier would have come from the Marine divisions artillery, heavy mortars, tanks, etc., that those units gave up after WWII. And of course now you hear about the Army lightening up and getting more mobile. Well the Marines did the same thing over half a century ago, about the late 1940s, after World War II had ended.

Dr. Allison: Can you discuss the new TacAir aircraft the Marine Corps acquired in this era?

General Fitch: Few people remember that the requirement in the 1956-57 time frame for an AX aircraft, was in fact a Marine requirement. In the spring of 1958 the down-select was made, Grumman Aircraft won the program, and the result was that the AX became the A-6A aircraft. The A-6 wasn't a fighter by any stretch of the imagination, it was strictly all-weather attack, and for many years a very basic capability, all-weather. The A-6 was a very difficult aircraft to maintain. The reliability of its weapons system was very low. But with multiple bomb racks (MBR) it could carry a heavy load of bombs—28 MK-82 if mission radius was low and external fuel wasn't needed. And then we did the A-4 in the 1950s which was primarily a nuclear strike aircraft. The fighters that we had in those days were a result of worrying about the Soviet Union and the Cold War. We now need to be thinking about when China becomes a Super Power. China has lots of fighters, and on the world market they are getting better fighters with precision strike capability. China is a friendly country now, but that may not always be the case.

Dr. Allison: Yes and the Russians.

General Fitch: The Soviets, they had an awful lot of fighter aircraft. That Russian threat has been dwindling a bit over the past 15 years, since about 1989, but they could give it priority again. They still build some impressive fighters, and they could peddle them around the world—like to the Chinese. I believe it is correct that the Chinese are now producing their own strike fighters. So you had to play that game. Plus, if you look at the Navy, in most instances until we went into VSTOL and STOVL, the Marines flew pretty much the same airplanes the Navy did.

The Marines got the F-4U Corsair probably about 1943 because the Navy thought it was a little too tricky for the carrier. The F4U had a long nose in front of the pilot, which made the Corsair more difficult to bring aboard the carrier than the F6F Hellcat or the F4F. I never flew the F4F but I did fly the F6F aboard the carrier. The F6F was a piece of cake coming aboard a carrier compared to the F4U.

I think it's worthwhile to know how it came about. But then the AD Skyraider; the Navy had the Skyraider and we had the Skyraider, primarily an attack airplane. The FJ-4; the Navy had the FJ-4 and the Marines had the FJ-4. The FJ-4B, which was both a fighter and a ground attack airplane; close air support and so forth, so you can do both fighter and attack with the FJ-4B. The

A-4 was not a fighter. It had a gun in it but it very seldom ever carried a missile of any kind. I flew the A-4 off and on for 25 years and never had an air-to-air missile on it.

Dr. Allison: Yes, we used to use it as a MIG-21 type adversary.

General Fitch: Right. But then as we progressed into about the 1975 timeframe – well actually a little bit before that – we got into the strike fighter mentality where we took the YF-17, which was a basic airplane done by Northrop as a fighter, and then the Marine Corps had their requirements for what would be a derivative of the F-17 which would turn into the F-18. And so the Marine Corps' requirements were that, "Yes, it would be a fighter but it would also be a ground attack, close air support airplane with precision strike capability." The Navy initially said, "Fighter only."

Dr. Allison: A pure fighter. That's interesting.

General Fitch: Then as the program progressed in the mid 70s the Navy said, "Oh, hey, that'd be a good idea. Ours will be just like the Marine Corps. We'll do the fighter and the attack too."

Dr. Allison: So we led them into a really good thing.

General Fitch: Correct. We led them to a strike fighter aircraft. And then when it comes time to start delivering the first F-18s the Navy sets up the training squadron up at Lemoore. The first training squadron of course is at Lemoore but the first tactical squadrons are down at El Toro. The Marines got the first F/A-18As to operate as a tactical squadron, so now you've got a strike fighter that does both the air-to-air mission and the air-to-ground mission, just as the F-4 Phantom did before it. The big difference between the F-4 and the F/A-18 was, that the F/A-18 had a terrific weapons deliver system for air-to-ground and it had a highly reliable radar system for air-to-air. So when people say, "Hey, the Marines don't need fighters," to an extent that is true at this point in time, but only at this point in time. For the war on terror there is no threat from enemy aircraft. However tomorrow and next month are another day, and ditto for a year from now, and it is fair to say that the air-to-air threat could be different at any point of time in the future.

General Lou Wilson, the Marine 26th Commandant, who I greatly admire, one of our greatest Commandants; he and Bob Barrow our 27th CMC, another CMC that I greatly admire, were absolutely tremendous leaders during their tours as the commandant. Both fully understood the importance of the air-ground team.

General Wilson used to have a saying and I quote it to these people; sailors and whatever in my consulting work. That is, "War is come as you are." And say in the year 2007, if you've got a war going, I don't care what you've got coming down the pike in 2009 and 2010 and 2011, those capabilities in 2008 or 09, don't give you combat capability in 2007. Marines get the Joint Strike Fighter, F-35B STOVL, with an IOC in 2012. That F-35B won't help you a bit for the war in 2010. Frequently planners count aircraft that are within a few years of IOC as being a factor in a war. Aircraft don't count until they are parked on the flight line or the carrier deck, with combat trained air crews, ready to fly combat. It goes with the old axiom, "Don't count your chickens before they are hatched."

But for the war today, the War on Terror, the Joint Strike Fighter is not going to help you one iota prior to about 2015. The current war is projected to be a long one, and the JSF will most likely see a lot of combat in the War on Terror starting about 2014 or 2015, and beyond.

Dr. Allison: Any comments on the JSF?

General Fitch: The JSF STOVL Strike Fighter, by the way, is going to be a very, very capable aircraft, but for today and the next seven years or so, it is the Harriers that are the Marines STOVL aircraft, and the Marines are short on Harriers. For our Harriers and other aircraft, rotary wing and fixed wing, combat usage during the past five years has far exceeded the plan. The Marines look forward to the day when the F-35B is operational and ready to go to war, but at the same time as they will have to wait for F-35B IOC, they have to keep their Harriers and Hornets combat relevant. That last point is no small task.

Dr. Allison: Come as you are.

Okay Sir, we've used a lot of time here and we haven't really started down the pike.

General Fitch: [Laughter].

Dr. Allison: But we're getting some good information.

General Fitch: The solution to that is don't ask the question [chuckle]. When you asked, why does the Marine Corps need fighters, you touched a nerve.

Dr. Allison: [Chuckle] Well it's all good information though.

You were detached a year early to go to Command and Staff.

General Fitch: That was an interesting situation. It wasn't really a year early, but it was the case that I would not end up doing an extra year in SecNav R&D.

Dr. Allison: Okay, why was that?

General Fitch: Well the naval aide comes out of Dr. Morse's office one day – my office was right outside the Secretary's – the naval aide's office was next to mine or mine was next to his depending on your perspective, but the naval aide comes out and says, "The Secretary wants to see you." So I go in and it's Dr. Morse with an important question for me. He and the naval aide had been talking up to that point regarding the length of time that I had been in that job, I guess, about 30 months, something like that. And the Secretary said, "Bill, I'd like for you to stay on an extra year," and like a good major I said, "Yes sir." And I said, "Why don't I tell General Hochmuth?" who was my sponsor in SecNav R&D. General Greene was Chief of Staff, at that time and later he was the Commandant.

Dr. Allison: General Shoup at the time was the Commandant.

General Fitch: And so the Secretary said, "No, I'll call General Greene." So Dr. Morse tells me, "Please see if General Greene's in." and he winds up talking to General Greene. General Greene was non-committal and he tells the Secretary, "Let me look into it." About two or three days later the phone rings and they tell me its General Greene's office. I get on the phone and General Greene gets on the phone and he says, "Major, the Secretary wants you to stay on an extra year as his Marine aide, and I understand that you like that idea, but", he said, "Major, you never have been to a Marine Corps school and I think you should go to Command and Staff." So I said, "General, that's fine with me. Why don't I tell the Secretary?" and he said, "No, why don't I tell the Secretary." So the Chief of Staff, General Greene talks with Dr. Morse, and that's the how and the why that I went to Command and Staff College.

Dr. Allison: TBS didn't count as a Marine Corps school; your little abbreviated course?

General Fitch: No. The particular school for former NavCads, which did the abbreviated Basic School of about six weeks, only lasted about three years. That would be from 1954 when it started and about 1957 when then they terminated it.

I was a captain when I finished it. I started out at this six week TBS as a 1st lieutenant selected for captain, and a week or two after I got to Camp Upshur, where we lived like new second lieutenants, I was a captain. It was relevant that when I went to the cut down Basic School, I had been flying in the Fleet Marine Forces and off several aircraft carriers for over two years, I had about 250 carrier landings, had done a tour in Korea flying the AD Skyraider from the small carrier (CVL) *Saipan*, and I had seen a lot of the world when you couple the *Saipan* deployment for nine months with the *Tarawa* deployments for about the same amount of time. At that point in time when I arrived at Camp Upshur, I had been aboard *Saipan* for nearly a year and done an around-the-world cruise (going through both the Panama Canal and the Suez Canal), and had been in about 40 foreign countries. My classmates at that six week basic school had similar experience. Some had a lot of combat missions from Korea. In my case I had been at sea in tactical squadrons for a couple of years and had a tour at VX-5 when otherwise I might as a captain have attended Amphibious Warfare School (AWS) at Quantico.

Dr. Allison: Command and Staff?

General Fitch: I had been a major for about two years when I went to Command and Staff. General Greene was right, I would have been spinning my wheels if I had stayed another year in SecNav. But I should add that in my 30+ months in SecNav R&D, I learned a lot about how the secretariat worked.

Dr. Allison: What were your perspectives on Command and Staff?

General Fitch: Command and Staff was a good school but it was not very demanding from the complexity of the course work. Another nice part of it was, we could fly while we were there for that nine months. I sometimes flew out of the Marine side of Andrews AFB in the T-33, the same as I had been doing for the three years prior. Then we also flew the T-28 out of the airfield at Quantico.

It was reasonably enjoyable. Command and staff overall was a good school. The primary complaint I had about the school was that most of the curriculum for Command and Staff was focused at about the colonel level. And so when I went to be a commanding officer of aircraft squadrons, which I was going to do as both a major and lieutenant colonel, long before I made colonel, there really wasn't much in the Command and Staff curriculum that was very helpful to me as a squadron commander. That was my primary complaint. Command and Staff was about one rank above where it should have been. I would get promoted to colonel about seven years after I had gone through Command and Staff, and during that seven years I would have commanded two squadrons, one of which was in combat, and the first five or six months that I had MAG-14, I was a lieutenant colonel. But a school is a school and from every aspect it serves a purpose. So, my complaint about the colonel level of study was no big deal and not really important.

Dr. Allison: What specifically could they have done to improve its utility for you?

General Fitch: For example, in the case of aviation they should have been talking about logistics and command and control and these kind of things, and that would have been helpful at the major and lieutenant colonel level, both aviation and ground. In the 1965-66 timeframe, aviation did not merit a lot of attention at Command and Staff. A similar thing would happen at National War College.

Dr. Allison: Why did you consider it would have been a waste of time if you had remained that extra year with SecNav?

General Fitch: While it was a nine month school, and the pace was moderate, it was overall a worthwhile school to attend as a major.

Dr. Allison: Were there any of your classmates who stand out?

General Fitch: Yes. I think I told you Al Gray and I were within a couple of numbers of each other for our entire career—that is up until I retired in 1984. We were commissioned second lieutenants on the same date.

Dr. Allison: But you hadn't really encountered him up to that point, had you?

General Fitch: No, we had never met up to that point.

Dr. Allison: How did he impress you or come across at that time? He was a major I guess.

General Fitch: We were both majors at the time. But, everybody got along fine in the school. There was none of the demanding academics like we had in Test Pilot School. The pace was not a pressure pace, the course work was relatively easy except for our trying to learn French, and you learned how to work with other officers in some of the environments that you would be in during later years. Tom Morgan was in the class and he later became Assistant Commandant.

Dr. Allison: Aviator.

General Fitch: Well he was up until a point and then he quit flying.

Dr. Allison: He had an eyesight problem, didn't he, or something like that?

General Fitch: I think it was a dizziness problem. I'm not sure what it was. It happened when he was CO of a squadron in Vietnam.

Dr. Allison: What kind of airplane did he fly?

General Fitch: F-4. Yes, as a lieutenant colonel he had been CO of a Phantom squadron before going to Vietnam. Then in Vietnam he had some kind of health problem, I think that it was dizziness that caused him to turn in his wings.

Dr. Allison: Well you don't have any special memories of Al Gray though?

General Fitch: I mean we were just a bunch of guys. With about 95 percent of the class being Marines, plus a few Navy and a few Air Force, and I believe a Canadian or two. We had one Korean Marine officer in the class. He was a great guy, and he spoke English much better than I. There were probably 125 of us in the class. That's a guess.

Dr. Allison: But he wasn't talking maneuver warfare or anything like that?

General Fitch: No, not in those days. Al Gray was not into maneuver warfare in 1966 or '67.

Dr. Allison: Was that Breckenridge Hall in those days?

General Fitch: I guess it was. That is 40 years ago and my memory is not great for Quantico buildings. I believe Command and Staff may still be in the same building, but I don't know. I never went back after finishing up Command and Staff College. A few weeks ago I went to Major General Gordon Nash's retirement down at Quantico and it had been about 40 years since I had been at Quantico near the academic buildings. I retired over 20 years ago and except for brief trips down there for a retirement or to visit the CG of MCCDC, I had not been at Quantico really since I was a major going through Command and Staff College.

Gordon Nash's retirement was at Harry Lee Hall nd I had a hard time remembering just where Harry Lee Hall was. The problem was compounded by all the new construction that had gone up at Quantico. The old colonels and general officer's quarters were gone. Al Gray as CMC and starting in 1987 or 1988 did some great things for expanding Quantico's role in the Marine Corps. That took place after I retired in September 1984. But I did find Harry Lee Hall on the first try—I just kept going after passing where the colonels and generals used to have quarters.

But in summary Command and Staff College was a good school. It was good from the standpoint of interfacing with people you'd deal with later; the ground officers and the aviation officers. I just wish that they had told me more about direct involvement with battalions and regiments. As a point, I cannot recall ever having the preparation of fitness reports come up while I was at Command and Staff, but in those later years I would prepare a tremendous number of fitness reports. They also never talked about the promotion system within the Marine Corps. They never got into the play of logistics support, either ground or aviation, and squadrons and air groups. And what you need to do to make those things work together. This is long before they got into emphasizing the Marine air-ground task force, the MAGTF. That came much, much later. But you did wind up giving some thought to which members of the class would still be in the Marine Corps a few years later.

Dr. Allison: I see, so you'd make that personality connection.

General Fitch: Oh yes, that was all good. But I should add that with the students at the school being just short of 20 years service, I had about 15, we weren't accurate on who would be around for the long haul.

Dr. Allison: But doctrine was basic, what, World War II?

General Fitch: That and Korea. This of course being 1965 and early 1966, our attendance at the school was right at the early days of Vietnam. Things like command and control of aviation I knew that pretty well from my first tour at El Toro in 1956-57.

Dr. Allison: I guess the MAGTF really came out of Vietnam after that.

General Fitch: Yes, about that time I'd say. You know you've got to think about it; 1965 and early 1966, it's now 40 years ago. My recollection of school details gets a little hazy.

Dr. Allison: Anything else on Command and Staff?

General Fitch: No, not really. But I would say that Al Gray did a tremendous job of bringing Quantico along, and expanding the Marine Corps' school system. I would suppose that Al established the Marine Corps University.

Dr. Allison: You go back to Cherry Point from there, to H&MS-14.

General Fitch: Well H&MS-14 was just the administrative side. H&MS-14 was the administrative office for the MAG-14 staff. Initially Colonel Pete Bonner assigned me as the MAG-14 S-4 logistics officer. I was the S-4, doing group logistics, for, oh, probably about two or three months after I got there.

Dr. Allison: Then you took command of VMA-225, how did that come about?

General Fitch: I had been the S-4 of MAG-14 for a couple of months, when Colonel Bonner asked me if I'd like to be the CO of 225, an A-6A Intruder squadron. I told him, "Yes sir, it sounds great to me." I was a major at the time that I joined MAG-14 and I would be a major the entire time that I had VMA(AW)-225. My tour in the MAG-14 staff and as CO of 225 was a total of about one year. Of course I'd flown the A-6 before when I was on staff duty in Washington working at SecNav. And so he said, "Fine, you'll take it over at such and such a time this next Saturday." Lieutenant Colonel Ed Guell had been CO of 225 about two weeks when I relieved him, and he would then take command of VMCJ-2. In 225 he had been a place holder while Colonel Bonner decided to make me the CO. Dr. Allison: Do recall the change of command?

General Fitch: In October 1966 we did a change of command in LtCol Guell's office. It was a Saturday. As I recall, in addition to Colonel Bonner and his XO Lieutenant Colonel [Alfred F.] "Mac" McCaleb, Ed Guell, his wife, me and my wife Margaret, were in the 225 CO's office for the change over, where it was simply a passing of the VMA(AW)-225 colors from Ed Guell to me.

Dr. Allison: A quiet change of command.

General Fitch: Very quiet. My log book shows that I stopped flying the T-1A (F-80) with H&MS-14 (while I was group S-4) on October 24, 1966.

Dr. Allison: What sort of condition was the squadron in?

General Fitch: Well the condition of 225 was pretty horrible at that moment in time. About five weeks after I took over 225, we would complete a long aircraft maintenance stand-down. At that time I had over 4,000 hours of flight time. The plan was that around December 1, 1966 we would start A-6 syllabus flying. I would fly my last flight with VMA(AW)-225 in June 1967, and after a leave during which my wife, Margaret Marie, and I moved to Annandale, Virginia, I would head for Vietnam as a new lieutenant colonel. But back to my new command of VMA(AW)-225.

In June 1966, VMA (AW)-533, VMA(AW)-242 and VMA (AW)-225 were the three A-6A squadrons in MAG-14. LtCol Howie Wolfs' squadron, 242, was the first to go to Da Nang, South Vietnam, and my recollection was that 242 left Cherry Point for Da Nang in the fall of 1966. They would TransPac.

During the summer of 1966 both 242 and 533 had priority on personnel, spare parts and H&MS-14 support. They were training for their forthcoming TransPac to Vietnam. This meant that A-6 parts from the aviation supply system plus priority for assignment of Marine personnel went to the two squadrons that were deploying to Vietnam, with 242 having priority over 533 and 533 having priority over 225. It was proper for the group to give those priorities, but it emasculated 225. In this process VMA(AW)-225 had been stripped of personnel and those personnel had been assigned temporary duty in 533. When 242 left Cherry Point for Da Nang, then 533 got the nod for top level support from MAG-14 and the 2d Wing. The day that I took 225 I looked around the hangar deck, and found that what few aircraft I had were scattered in various states of disassembly and parked in the 533 area.

That Saturday afternoon I talked with Jack Caussin, who was a first lieutenant and my aircraft maintenance officer. I asked him if we stood down to do maintenance work on our aircraft, how long would we need to do that stand down in order to get the aircraft in reasonable shape before we could start to fly. As I mentioned, most of those aircraft were hulks with all kinds of parts missing that had been cannibalized for months by 533. Jack said that they would need five weeks, and we would have to get his maintenance Marines back, who were on temporary duty to 533, including himself.

Dr. Allison: Your maintenance plan was forming.

General Fitch: On Monday I went to see Colonel Bonner, and in an extremely polite way, told the colonel that I wanted my Marines and aircraft back from 533, and if I could not have them back in 225, then I didn't want the squadron. All that was carefully phrased by "Major Fitch" to "Colonel Bonner" so that the major would not appear impertinent with a colonel. So Colonel Bonner took that very well and he told the CO of 533 (LtCol Bill Brown), "Give Fitch back his airplanes and Marines." There weren't many Marines for 533 to give back and the aircraft were in pieces. By Friday of that week I had my Marines and aircraft back at 225, and Jack Caussin was very busy figuring out how to get those aircraft into flying condition. For the next five weeks, the only flying that VMA(AW)-225 would do were a few re-fam hops for me and maintenance test flights.

Dr. Allison: Did the group start giving you personnel?

General Fitch: They did start a flow of Marines into the squadron, enlisted and officer. Both 242 and 533 were pretty well stabilized on personnel. When you look at one of the big Marine criticisms within Naval Aviation, it is a long time fact that the aircraft carriers have always had the highest priority for logistics (spare parts, etc.) support. The priorities within Naval Aviation supply have always been such that if parts are needed by the Marines, say at MCAS Cherry Point for an A-6 aircraft or if they're needed by an A-6 squadron at NAS Oceana, then Oceana is going to get the parts. That has always been because the Navy sets the priorities for parts and the Navy gets the top priorities for support of the aircraft carriers. Every thing is couched in a "Support the carriers" mentality. Thus, the highest priorities for parts go to the Naval Air Stations for their support of the airclast of the airclast of the Naval Air Stations for their support of the airclast of the airclast of the priority is the vere trying to make do with the airplanes they had because they weren't that high on the priority list, even though they had squadrons deploying to Vietnam.

248

Dr. Allison: What was the personnel situation and family readiness?

General Fitch: My wife, Margaret, would get to know the wives of the few officers that were in 225 at that time. But that would be short lived for my having just a few officers. Within a couple of months we had an abundance of officers and those officers had an abundance of wives. In December, Margaret and I would have a Christmas party at our quarters, 4 Johnson Place, at MCAS Cherry Point. We invited half the officers and their wives to be at the party from 1600 to 1800, and the other half with their wives to be there from 1730 to 1930. None of the officers ever left, so we must have had 40 or 50 officers and their wives in a tiny set of quarters, all at one time. Then of course there were the bachelors. The party food was going so fast, lieutenants can eat and eat a lot, that we had to enlist our neighbors to fix some food to keep the table going. After that, Margaret had lots of officer's wives to interface with. Plus, there was always the Officer's Wive's Club that had luncheons, etc.

Dr. Allison: You concentrated on aircraft maintenance, but what about aircrew training?

General Fitch: At the same time that we started our maintenance stand down, I told my operations officer, Major Gordon Emory, that we would rewrite the training syllabus that was in the Training and Readiness Manual [T&R] for the A-6. By that time I had reviewed the existing T&R Manual and found it sadly lacking in the types of flying that A-6 squadrons should do. In simple terms, at best the A-6 T&R manual appeared to be a copy of the A-4 Skyhawk manual. The flights in the syllabus were listed as having a one hour or 90 minute duration. The A-6 was a high maintenance aircraft, meaning that it was very difficult to maintain, and it took a lot of man-hours of maintenance work for each hour in the air. I told my operations officer that we would start flying about five or six weeks after I took 225. We of course flew maintenance test hops. We would have submitted a new training syllabus for the A-6 by the time we started syllabus flights. To start the T&R revision process, I told Gordon Emory that we would try to fly three hour flights, perhaps longer in some cases, and we would complete multiple training tasks on each flight. Since the A-6 was so hard to get in the air, the logic was that once it was in the air, you would keep it there and maximize training achieved. We had aircraft maintenance install two external fuel tanks (300 gallons each) on all 225 aircraft.

My comments to Major Emory were to ensure that we would do multiple tasks on each flight for the syllabus training, and of course we would fly the longer duration flights to do those

249

tasks.. It was a squadron essentially coming from nothing to turning into a squadron that within six months would fly more sorties and hours than any A-6 squadron had ever flown, and they would achieve extremely high levels of training.

Dr. Allison: You're getting personnel in too I guess.

General Fitch: Yes. After a few weeks there was a steady MAG-14 input of enlisted Marines into 225, with most of them going to the 225 aircraft maintenance department. And so, in summary what I told Gordon Emory – "You know the hardest thing about an A-6 is to get it in the air and keep it in the air." And I said, "This current T&R Manual calls for hour and a half flights, which is absolutely silly." I said, "When you get the airplane in the air you make it do lots of different things. And I told Emory, when you go out to do a navigation flight, yes, you will do the navigation for whatever portion and type of navigation flight that it is supposed to be," which were usually low levels, "and then you're going to wind up back at the target and you'll have, say, rockets aboard and you'll shoot your six rockets at the target, and then you'll have six bombs aboard and you'll deliver those six bombs and maybe you'll have six more bombs, but you'll do all these things on one flight." It was a truism that invariably with the A-6 in those days, when you got back on the ground the airplane was going to be down for several days. So get as much real training out of a flight as you could.

As we continued to increase Marines coming into 225, I received a new aircraft maintenance officer—Major John Carlton. I told John to split his Marines into a day and night crews, so that aircraft were worked on near 24 hours a day. Later I would tell him to split again into three crews, where two crews would work Monday through Friday and the third crew would work Wednesday through Sunday.

We rewrote the T&R Manual for the A-6 while we were doing the maintenance standdown. We would start flying our version of the T&R manual before it was approved, and that would be about the fifth week of the maintenance stand down.

Dr. Allison: Who did most of the work on re-writing the T&R manual?

General Fitch: It was primarily Gordon Emory doing the rewrite, along with a very sharp first lieutenant that was working for him at the time as his flight officer. The lieutenant was named Bill Bartels. Bill Bartels may have been a captain, but that is hazy. And we redid that T&R manual, and in it we put in a lot of night flying training flights. The night flying was very important, since

the A-6 in Vietnam would fly its combat missions primarily at night. The objective of the new T&R for the A-6 was not to bore holes in the sky but to get the maximum amount of training once you got the airplane in the air. When Emory had finished his T&R writing, we submitted it up through MAG-14 and the Wing to Headquarters Marine Corps, where it was quickly approved.

Dr. Allison: And that was a completely new concept?

General Fitch: It was an obvious concept that should have been done when the A-6 first became operational. While an obvious change to do in A-6 training, that was a totally new approach. And so five or six weeks roughly after we started that maintenance stand-down, John Carlton and Jack Caussin said that they were ready to start flying, so, I said, "Okay, now it's time to fly." We started to write flight schedules. And we started flying and we were also getting a big influx of people, both officer and enlisted. In the 1966-67 timeframe, the operational squadrons did all the training. This was before the time that you had the A-6 training squadron in the Corps. That A-6 training squadron came when I was CO of MAG-14 about four years later, and the training squadron would be under Training Group 20 at Cherry Point. Probably within six weeks 225 is getting bombardier/navigators and pilots in right out of school from Pensacola and a radar training school that I believe was at Jacksonville, Florida. We were getting pilots in, brand new. Some of those pilots and B/Ns later retired as colonels.

Dr. Allison: Like whom do you remember?

General Fitch: Well Mike Burns is one NFO who joined 225 during the formative period of late 1966. He lives in the Washington area now and is a retired colonel with the Silver Star. Mike was a 2d Lieutenant right out of radar school when he joined 225. Mike Burns would be a great bombardier-navigator in combat. He flew his combat missions with 242.

I took Mike on his first A-6 flight. I remember it well. It was a rail-recce and navigation flight. We went down a railroad track at about 500 feet all over North Carolina, with the aircraft twisting and turning, and with us staying clear of any airports or towns. I don't recall precisely when Mike arrived in 225, but my guess is that he arrived after we finished the five week maintenance stand down. Soon after we started that stand down for maintenance, we usually had several aircraft that had reasonably good weapons systems. Not everything would work, but radars were usually up. Bear in mind that these aircraft had been extensively cannibalized to keep 533 going

251

By the time that I had been CO of 225 for about three months, we probably had 20 young bombardier/navigator trainees and 20 young pilots in the squadron. Also at that point in time, about three months after I took the squadron, we were making great progress with the quality of aircraft that we were flying. As I mentioned John Carlton had come into the squadron and he was my aircraft maintenance officer.

Dr. Allison: He was a B/N?

General Fitch: John Carlton was a pilot. When we had started steady flying in December '66, we had that process going where once you had the airplane in the air we would keep it in the air, usually for about three hours. Navigation flights always ended with bombing on the targets. If we happened to have a buddy-store on a squadron A-6, we'd invariably would do aerial refueling and get that done as frequently as possible. The aircraft with the buddy store could always fly a navigation flight before and after refueling another aircraft. If two aircraft launched at the same time, they would do some section tactics before they split off to individual training such as a nav flight. Then they would both be on the bombing target before landing.

Dr. Allison: Where you're aerial refueling each other.

General Fitch: That's right. With a buddy store on a squadron A-6. We had pretty good radar targets in the Cherry Point area and we also had targets for visual bombing. We found that as the weeks and months went by that we could fly more and more. MAG-14 supported us well, and VMA(AW)-225 would be a large squadron when I left it in June 1967.

My first executive officer was Major Les Wydick and he was in that job for several months. Major Jim Penny became my executive officer a few months before I left the squadron, and he was an exceptionally fine "Exec" and a fine officer. Jim would later be the CO of VMA(AW)-242 at Da Nang, towards the end of my tour with 533. I only had 225 for seven or eight months before I went to Vietnam – but more or less the culmination for 225 with me as CO was when we deployed to Yuma. My log book for that period shows that we spent the entire month of May 1967 at Yuma, Arizona. For one thing we had gotten the airplanes of 225 so they'd stay up better. And so we would fly combination flights maybe for where it's a three-hour flight where you'd do navigation over a desert route, and then you'd hit the bombing ranges at Yuma where you would expend MK-76 practice bombs and rockets. Then we would come into the line area and we wouldn't shut down the airplane. In the normal way we would refuel with the engines

running, and while we were refueling we would change the aircrew, one at time. So one pilot and one B/N would taxi in at the refueling pits, and without shutting down the two engines a different pilot and B/N would taxi out to the arming area, rearm with practice bombs and rockets, and fly another flight.

Dr. Allison: That was legal?

General Fitch: Sure. The routine with the A-6 was always to hot refuel. There was nothing that said that both crewmembers had to stay in the aircraft while it was refueled. And then you could hot-turn. I mean that was done all the time. We used to do it in F4U-5 Corsairs, when we would be doing field carrier landing practice [FCLP]. That was the month that we set what I think is probably an all-time record for an A-6 squadron. We were deployed to Yuma for about four weeks, and we flew something on the order – it was something like 400 sorties that we flew with 11 A-6A aircraft, and we flew a total of about 900 flight hours. It was a colossal month of flying for the A-6A Intruder—it had never been done before or since to the best of my knowledge. We accomplished a tremendous amount of training, and the morale of the squadron was fantastic. When I would be around the flight line at Yuma during that month of May, lance corporals would ask me, "Major, do you think we will break a thousand hours?" And I would say, "We can, but it is up to you." As it wound up we flew about 900 flight hours and I don't think any squadron, Marine or Navy, ever equaled that in the years before or since.

Now a funny thing happened after we got back from Yuma. I was going to leave the squadron pretty soon after that to go to Vietnam. Colonel Ed Finlayson, was the group commander and we had a new wing commanding general. The general came down to MAG-14 for a visit and I had to brief him on what 225 was doing, including the recent Yuma deployment. And I mentioned the fact that we had flown about 400 sorties and about 900 hours during the prior month and the general turned to Colonel Finlayson and said, "Why did they fly so much?" And Ed kind of hemmed and hawed and said, "Well you know they're training for Vietnam," and the general kind of shook his head. Well he didn't understand what was involved, which I mean is not ignorance on his part, it's just that he didn't understand A-6 complexity and the training needs of all those aircrew that were pouring into and out of 225.

He was a brand new CG of the wing and he didn't understand the type of training that was necessary to give guys a fighting chance when they got to Vietnam. So in a strict sense, the general never got his answer to his question. There is a thing about military flying, where experience becomes a life insurance policy. The more flying that a pilot or NFO has, and we call

253

that experience, then the more likely it is that the pilot or NFO will survive in a difficult situation. In 225, with the help of some great aircraft maintenance Marines, we were giving our air crews that experience to survive.

When I got to Vietnam and took 533, I found that the only thing missing from our training in 225 was that we should have flown even more night time, close to the ground and close to the water. When we started getting aircrew replacements in 533, we still had to train them for the combat missions that they would fly, and a lot of that was close to the ground and the water, and nearly always at night. There were certain types of training that could only be accomplished when the North Vietnamese were shooting at you. Getting shot at is a great equalizer! Essentially everything in 533 was at night when it came to combat missions, and in the case of every new aircrew we took the position that they had to walk before they could run.

Dr. Allison: That type of training would certainly be different.

General Fitch: Well a different kind. In other words it was the type of targets you would send them to initially and it was a stair-step type of process on complexity and danger and all these other things. In every case with new air crews, you wanted them to be successful in their mission and get back to Chu Lai. But anyway, that training process that we set up in 225 was copied by follow on squadrons. All the A-6 squadrons back at MAG-14 then started flying the long flights, doing multiple tasks within a flight. Transformation is a popular buzz word in 2006. In 1966 we transformed the way you would train for all-weather attack.

Dr. Allison: I didn't realize an A-6 was a high-maintenance kind of an aircraft. I thought it was pretty reliable.

General Fitch: It was terrible. The meantime between failures was very low. I don't know what the maintenance man-hours were for each flight-hour, but if I just had to make a guess I'd probably say 70.

Dr. Allison: That's even more than a Harrier.

General Fitch: Well a Harrier is a much smaller and lighter airplane. Until they put the APG-65 radar in the Harrier, and then with the Litening pod which the AV-8 has had for about five years,

the Harrier never has had a complex weapons delivery system. The Harrier increase in complexity for a weapons system has only happened in the last 10 years – maybe 15.

But no, the A-6 was extremely high in maintenance hours and extremely low in reliability. The basic aircraft was reliable, but the sub systems were something else. Even the radar was iffy when it came to working right. When we get to talking about Vietnam I'll tell you about flying A-6s that aren't much more than just a day attack airplane but you're flying them in the middle of the night in mountainous areas.

Dr. Allison: That's interesting that you did that; innovations on the T&R Manual, did that remain a permanent change?

General Fitch: As far as the A-6 was concerned, in 225 we re-wrote the T&R Manual for the A-6 Intruder and then Headquarters Marine Corps adopted it. In 1968 after I had left 533 but was still in MAG-12 at Chu Lai, Headquarters Marine Corps had me come back to give a lecture on training in the A-6, and what needed to be done to have air crews more ready to fly combat when they arrive in Vietnam. A big part of that lecture, given at a training conference, was the air crews gaining experience at low level flying over uneven terrain, in the middle of the night. For the A-6 the night was your friend, the darker the better, and bad weather was an enhancement.

Dr. Allison: A question about leadership, this was your first command, how did you approach your duties as commander?

General Fitch: The same way I did it later on as a general.

Dr. Allison: Yes, don't give many orders.

General Fitch: I found that if you tell your Marines, what you want them to do and why you want them to do it, and why it's important to do it; why it's in the best interest of the Marine Corps to do it, and then you just ask them to do their job so we can accomplish that, they will work 24 hours a day to help you achieve the goals. Going back to Yuma in May 1967, every Marine in 225 knew what we were trying to do, and the role that he personally played in our making that goal. These young men were working hard, and they brought home success.

For emphasis I will say again, that early on with 225 I said to John Carlton, "We are going to divide the maintenance Marines so that we will have three shifts and we will work essentially 24

hours a day." That was after we had enough Marines to split them up to work three shifts. And I said – talking to John Carlton – "I don't care when your Marines come to work but if they're supposed to be there for the night shift then of course they've got to be there, but you're going to decide who comes at night and who comes in the morning." I left the details up to Major Carlton to decide, but he knew that I would be spending a lot of time in the evenings at the squadron. Nearly every night I walked around the flight line and hangar to see how things were going, and talked with those young Marines. And we did that. We'd have night crews that would work all night long and then we'd have Marines that worked during the day and then sometimes they would switch. But that was up to the maintenance officer as to how he did it. As we continued to gain maintenance numbers, John started a third shift that instead of working Monday through Friday or Saturday, they would work Wednesday through Sunday.

Essentially all I did was tell him what we wanted to do. I didn't tell him how to do it. But the key thing in dealing with Marines is all you had to do was tell them what you needed to do, why you wanted to do it or why it needed to be done, and then ask them to do their part and they'd do it. In June 1967 I was finishing up at 225 and the morale was absolutely fantastic because those guys knew they were accomplishing things that had never before been accomplished with that airplane. So it turned out well.

Dr. Allison: Anything else on VMA(AW)-225?

General Fitch: I guess that's about it on 225.

Dr. Allison: Alright.

Then you head to Vietnam.

General Fitch: Yes. Before I left I'd been selected for lieutenant colonel some months earlier. After the change of command, when LtCol Jack Reddy took the squadron, Margaret Marie and I moved to Annandale, Virginia, where she would live while I was in Vietnam. Within a few days of my departure, I had a call from Henderson Hall that my promotion papers were in. So I went down to Henderson Hall, with my wife, Margaret Marie, and my mother accompanying me, and had a promotion ceremony with me, my wife, my mother, and the lieutenant colonel who was CO at Henderson Hall. So that was within a couple of days before I left to go to Vietnam. So I left 225 as a major and I got to MAG-12 as a lieutenant colonel. Dr. Allison: Had your father passed away at that time?

General Fitch: No, but he seldom visited. The only time he and my mother both visited my wife and me was when I had 225 at Cherry Point. But in the summer of 1967, my mother had come up for a few weeks visit, and she was there before I went to Vietnam. My arrival in Vietnam was somewhat inauspicious, I guess you would say. I remember we arrived with whatever baggage we happened to have in hand. I had mostly brought flight suits and flight gear.

Dr. Allison: How did you get over there?

General Fitch: Well we flew over commercial. They had commercial flights going right into Da Nang all the time. We probably went through Tokyo and then down to Vietnam. I don't recall that since I have made so many trips to the Far East. But I do remember at Da Nang, when it was time to go from one place to another, regardless of rank, you went by cattle car.

Of course it was pretty basic. Within a few hours of arriving Da Nang, I was heading to Chu Lai which was about 40 miles south of DaNang.

Dr. Allison: Did you have any preconceptions about Vietnam?

General Fitch: No, not really. I had been to Vietnam in 1954 when the French were fighting at Dien Bien Phu. Back then we had flown the AU-1 Corsairs in to the French for their use in the final days of that war. As far as combat was concerned I figured I'd enjoy combat fine and it turned out that I did enjoy flying combat.

Dr. Allison: You were initially assigned to MAG-12, as OpsO?

General Fitch: MAG-12, that was a great environment to be assigned, and to have a squadron. And when I became the operations officer for MAG-12, it was an easy job as I saw it. The Marines always give you a good staff, and for the most part, being the S-3 of MAG-12 was a matter of letting that staff do its job. In the S-3 shop I relieved a lieutenant colonel that I had known for years, Bud Deering. I replaced him in the group S-3 and as I recall he went over to be the commanding officer of VMA-223, an A-4 squadron. In MAG-12 they had a well-trained group of lieutenants, captains, majors and staff NCOs, and your primary job as the S-3, the group operations officer, was making sure that everybody did their job. I had numerous assistants to make sure that happened.

Dr. Allison: Can you comment on the scheduling, command and control, how that worked?

General Fitch: Everything in flying was orchestrated around the FRAG that came down from the wing at Da Nang. The FRAG was the overall schedule of combat flights that had to take place in a 24-hour period. In addition to those scheduled combat flights, there were the ready squadron flights that would be scrambled during the day or night to meet commitments that were not on the FRAG. Each day we had a ready or alert squadron that stood the alert squadron role, and they would be scrambled to provide CAS as unexpected events took place in ground combat.

Dr. Allison: The FRAG being what the Air Force issued, is that right? Similar to an ATO?

General Fitch: The FRAG for us came from the 1st Marine Aircraft Wing. The wing negotiated with the Air Force as to what we would fly and when we would fly it. The exception to that was, all the A-6 deep north missions into North Vietnam were scheduled by the Air Force. The USAF owned North Vietnam, and then the Navy thought that they owned it too. The 1st Marine Aircraft Wing yielded to the USAF on the deep north missions, with the USAF establishing the targets to be hit by Marine A-6 aircraft, and the time on target. In the case of Rolling Thunder, the USAF even tried to dictate the route of flight for Marine A-6 strikes deep north, but the Marine aircrews paid no attention to that, and as Marines will do, the aircrew of the A-6 decided their route in and out of the target area.

The Marines considered the USAF FRAG to be very much a stereotype, where every Tuesday night Target "A" was hit at 2300, every Wednesday night Target "B" was hit at 0030, and so on throughout the seven nights of every week. The North Vietnamese invariably knew where you were going and the time that you would be there. FRAG (Air Tasking Order --ATO) writers need to mix it up a bit. It was a joking comment at the squadron, but we often wondered if 5th Air Force sent a copy of the FRAG to Hanoi.

The 1st Marine Aircraft Wing sorted out things with the 5th Air Force relative to what Marine aviation would do and not do. For example when the Tet Offensive started January 31, 1968, the 1st Wing stopped flying the Rolling Thunder missions, and told 5th Air Force they were doing so except for special missions. The wing wanted all assets to strike Tet targets in South Vietnam and just north of the DMZ in the Tally Ho area—Route Package 1. An exception was the night of 21 February when Charlie Carr and I hit the radio station in Hanoi.

Dr. Allison: They would get the ATO.

General Fitch: Normally the 5th Air Force got the Marine ATO and the Marines got the 5th Air Force ATO. The 1st Marine Aircraft Wing took care of writing the FRAG order for all Marine combat flying in the northern end of South Vietnam. The wing would also FRAG Marine aircraft into Route Package 1, which was the first 80 miles of North Vietnam above the DMZ. As the S-3 of MAG-12, I could add flights to the day or night schedule, simply by having my watch officer in the barrel call the wing G-3. The Air Force owned the airfield at Da Nang, and they of course had their strike/fighter aircraft doing the support of the Army. The Marines also supported the Army.

Dr. Allison: How would scheduling of close air support work?

General Fitch: The first wing FRAG addressed all the close air support for Marine ground units; everything in South Vietnam for the northern part of the country called I Corps That was handled 100 % by the 1st Marine Aircraft Wing G-3. When assets were slim, they just told the 5th Air Force that they did not have excess aircraft assets. The Marines did what ever they needed to do with the squadrons. But in the process they sent the 5th Air Force the Marine FRAG. The 5th Air Force in turn incorporated the Marine FRAG into their FRAG. The concept was that the FRAG for Marine aircraft belonged to the CG III MAF. The 5th Air Force did not debate the issue, since CG III MAF was responsible for all combat operations in I Corps.

When the Marines on 31 January 1968 established a temporary halt on flying Rolling Thunders, again the 1st Marine Aircraft Wing simply told the 5th Air Force they did not have assets for Rolling Thunders, except on a case by case basis

Dr. Allison: Who was the commander of MAG-12 when you got there?

General Fitch: The CO of MAG-12 for about the first month I was there was Colonel Baylor P. Gibson and he left the group the end of August. He was relieved by Colonel Dean Wilker, who was just a prince of a gentleman. We did an in country check out with Colonel Wilker in the A-6A while I had 533. Colonel Wilker flew some sporty combat missions in the A-6A, including flying at night and bombing North Vietnam trucks in Route Package 1. In March 1968 Colonel Charlie

Armstrong took over MAG-12, and in like fashion with Colonel Wilker, we checked Charlie Armstrong out in the A-6A. Charlie had the group until I rotated home around the end of July 1968. I believe that he and I left MAG-12 at about the same time.

Wilker was a fine colonel of Marines. He was an exceptionally fine group commander and he was a fine combat pilot. I had great respect for Dean Wilker.

Dr. Allison: What do you mean by that?

General Fitch: Well you see group commanders who don't fly and you see group commanders who do fly and Dean Wilker flew. He flew some very tough missions in the A-6A, where he got shot at a lot up in Route Package 1. Those were night missions for Dean Wilker. There are those colonels that are interested in flying and those not interested in flying and my respect goes to those who are interested in flying.

Dr. Allison: Anything else on that OpsO job?

General Fitch: To finish, the S-3 assignment, that was a job which in combat pretty well takes care of itself. First you have a good staff of captains and majors, who are supported by sharp staff NCOs and enlisted men. Those captains and majors know what they're doing. Ditto for the staff NCOs. We had one small group of majors in the MAG-12 S-3 who worked in what we called the barrel, which was located about 30 feet from my office. After takeoff all the flights checked in with the barrel, and the MAG-12 barrel was the link to the tactical air command center [TACC] at Da Nang. They stayed at their post in the "barrel", regardless of what was going on, including rocket attacks against Chu Lai. I should mention that the barrel was heavily armored on all sides and overhead with metal planking that is used for a SATS airfield [short airfield for tactical support].

Now during those first two or three months that I was the S-3 and running all group flight operations, I was also flying the A-6 and talking to some of the officers in 533. As I have mentioned, Terry Baker, the maintenance officer for 533 was a good friend of mine from our VMA-311 days back in 1960-62, so I was learning quite a bit about how well the pilots in 533 did in flying combat. About a week before I took 533 they lost a pilot and a B/N one night on what was really a training mission, and pretty much a milk toast mission.

Terry Baker told me that a particular aircrew in 533 was a very weak one. Since I trusted his judgments, I had told Terry that one of the first things I'd do when I took the squadron would

be to transfer those two Marines to the group. A week before I took over at 533, they would be the first crew that 533 had lost. Neither they nor their aircraft was ever seen again. But unfortunately I got there about a week too late for me to move them out. I'm convinced that they just flat flew into the water or flew into a hill or whatever. I don't think any enemy action killed them

All you ever know on most of those losses was that the aircrew and airplane did not come back. Now they did have airplanes up that monitored those deep north strikes. In this case this was a target that was about 40 to 60 miles northeast of Haiphong, so it was really a remote kind of target, and it was considered a training target. The enemy defenses would not be that much and the target would be close to the water. Although this weak aircrew had been in Chu Lai for about five months, they still needed exposure to the easier targets before they got to the complex ones with heavy AAA and SAMs. This aircrew couldn't handle the easier ones. Had they been around a week later, they would have been transferred to the group. That was my intent.

Dr. Allison: I've looked through the list of your missions and it struck me how often you alternated between different aircraft on combat missions.

General Fitch: I did alternate a lot while I was the group 3. I would fly an A-4 one day or one morning and then an A-6 that afternoon or night, or whatever. My log book shows that on July 31, 1967 I flew the A-6A on my first combat hop in Vietnam and Captain Don Hiltbrunner was my B/N. My second A-6A mission was on August 2d. On August 3d I flew my first A-4E combat hop in Vietnam, and that was an armed recce. Then I alternated quite a bit during August, September and early October, where I continually flew combat missions in the A-6A, the A-4E and the TA-4F. The A-4E squadrons that I flew with were VMA-211, VMA-121, VMA-223, VMA-311, and for the TA-4F, I flew with H&MS-12. I forget which date that I took the squadron. By October 10th I was flying just the A-6A, since by then I was the CO of 533.

Dr. Allison: Who did you relieve as CO of 533?

General Fitch: In early October 1967 I had relieved a lieutenant colonel, Bill Brown, whose full name was Williams P. Brown. Bill was a nice guy, and he had probably had 533 for about a year when I relieved him. He and I would have a different style of being a squadron commander. It was my view that I should fly more combat than anyone else in the squadron, and the tougher missions would come to me. I should point out that even amongst the first lieutenants in the squadron, 533 had some great combat pilots and some great bombardier/navigators. I would add to

that there were some great Marines in the enlisted ranks, who did an absolutely fantastic job of maintaining the aircraft.

The crew in 533 ordnance was under Chief Warrant Officer (CWO-4) John Scarborough. The ordnance Marines loaded a daily average of a hundred tons of ordnance on those VMA-533's A-6As, and they did this week in and week out, month after month. Ironically they loaded that ordnance onto the multiple ejector racks, where I held the patent on the -- multiple bomb rack from my VX-5 days. John Scarborough was a truly great Marine, and he was a premier marksman with the rifle and pistol. Over the years CWO-4 Scarborough won all kinds of shooting medals in Marine competitions and national competitions. The ordnance that our ordnance men handled every day, came to an average of 3,000 tons of MK-82 bombs a month. Sometimes they loaded the Air Force 750 pound bombs. On the A-6A we could carry 14 of the USAF 750s along with two external fuel tanks. The maximum load with the MK-82 was 28 of those 500 pounders.

Dr. Allison: Had you known Scarborough before?

General Fitch: Yes from our days in 311. My guess is that John Scarborough worked 18 hour days for the entire year that he was at Chu Lai. I should mention that when I was the aircraft maintenance officer in VMA-311 in the 1960-62 timeframe, CWO-4 John Scarborough was my Ordnance Officer.

Dr. Allison: Do you recall other key enlisted Marines?

General Fitch: The Marine directly responsible for every aspect of taking care of the enlisted Marines in 533 was First Sergeant Cleveland. For the daily leadership of the enlisted Marines in 533, I left the details to my executive officer and 1st Sergeant Cleveland. When I took 533, LtCol Lynn Ball was my XO and he was relieved by LtCol Ron Iverson. First Sergeant Cleveland made sure that all the troops were well taken care of in their living conditions and their mess hall. At Chu Lai the enlisted Marines of 533 lived in several of what might be called a large Southeast Asia Hut, and those huts were several times larger than the huts that the officers lived in. Their racks were stacked in the vertical, much in the same way as racks aboard Navy ships, and the staff NCOs lived just a little bit better than the privates and the lance corporals. All the enlisted men lived down near the water, as did the officers of 533.

But back to the French and their war in the early 1950s. That war between the French and Ho Chi Minh's Viet Minh culminated with the French defeat at Dinh Bien Phu. I had mentioned

that back on Easter Sunday of 1954, VMA-324 flew into the French airfield, Tourane, flying those AU-1 Corsairs in from the carrier, *Saipan*. And I mentioned standing on the flight line at Tourane watching that F8F Bearcat take off with napalm and drop it no more than ten miles from the airfield, and you never lost site of the F8F. And I remember one of the first A-4 missions I flew was dropping bombs just a few miles from Da Nang Airfield [chuckle] which was just like it had been in 1954, some 13 years earlier, when I was there that Easter Sunday [chuckle). That tells you a lot about guerilla warfare.

Dr. Allison: A little bit eerie.

General Fitch: And when flying the A-4 Skyhawk out of Chu Lai, I was probably dropping bombs on the same guys the French dropped bombs on, except they were now 13 or 14 years older. In 1967-68 we called them Viet Cong instead of the Viet Minh as they were called in 1954.

Dr. Allison: Well I guess you were hoping for a better outcome though.

General Fitch: In 1967 in South Vietnam you didn't worry about outcome of that war. You would hope that the South Vietnamese would prevail, along with their American help, but everyone knew that the United States was propping up government after government in Saigon. You figured that was somebody else's chore, since the Marines had only a small piece of that war—but a very important piece. And then there was the ongoing dialogue back when Lyndon Johnson got the Tonkin Gulf Resolution out of Congress. I believe that was 1965, maybe '64. There were a lot of questions about whether there really were small boat attacks against those U.S. Navy destroyers. There apparently was some smoke and mirrors then, just like everyone now talks about the smoke and mirrors that took place at the beginning of the current war in Iraq.

Dr. Allison: Was it difficult to handle flying the airplane and working the weapons system when you had all that AAA coming up?

General Fitch: It was not difficult. You had to pay attention to what you were doing, and where you ran into barrage AAA fire, you had to move out of it if you could. I was talking earlier about how we trained at Cherry Point to what we thought we needed to train to, as far as A-6 crews were concerned and maintenance personnel and everybody else. Then when you got to Vietnam for the

A-6, because it was a more complex mission at night and close to the ground, the thing you had to be most interested in was not killing yourself by crashing the airplane.

When you are flying at night at 400 or 500 feet off the deck at 420 to 550 knots, you have to pay attention to what you're doing. When you are pulling "gs" at low level you have to pay even greater attention to what you are doing, and what the bad guys are doing. And when the enemy starts filling the sky with tracers and other AAA, or starts shooting SAMs at you, then you have to be especially careful that you don't kill yourself.

Some of the A-6 deep north missions got pretty sporty. Now basically the way we flew the A-6 was of course you did the normal takeoff. You usually tried to take off with your taxi light on, which was attached to the nose strut. One of the most important things after takeoff, after wheels in the well and you got your flaps up, was to make sure that the taxi light was out [chuckle]. Because if you didn't, wherever you were going that night----- that light would be shining underneath your airplane like a spot light. If you didn't turn it off right after lift off from the runway, then you were also inviting the Viet Cong to shoot at you. Invariably at night there were VC off the approach end and takeoff ends of the runway, and they would hose you down if you left your external lights on. I normally turned off my external lights (wing, fuselage and tail) at the start of takeoff roll, and turned off the taxi light as soon as the landing gear was coming up.

. And there were some pilots who forgot to turn out that taxi light, which when it was on and the nose gear was retracted, shined like a spot light directly below the aircraft. I heard tell that one night the CO of 242 flew all over Route Packages 5 and 6 (RP 5 and RP 6) with his taxi light on.. RP 6 was the Navy's route package, and RP 5 was the Air Force's. That CO of 242 probably wondered why he got shot at so much until he got back to Da Nang and dropped the landing gear, and here's this big light out in front of him. He had his taxi light on the whole time he was up in Route Packages 5 and 6, all in the Haiphong and Hanoi areas.

Dr. Allison: Evidently there was nothing in the cockpit that would clue you in.

General Fitch: No! It wouldn't tell you the light was on or off. You had to check the switch. Only checking the switch would tell you that. If you flew in clouds the light would reflect on the clouds and that would tell you. But on a clear night, you couldn't see it from the cockpit when it was pointed straight down. You had to just look at the switch. So like whoever was flying with me, and most of the time it was Charlie, but it was always to say after takeoff, "The taxi light is off." You made sure that happened. And then probably before we ever got up by Tiger Island, which was up by the DMZ, I personally probably checked that taxi light was off about half a dozen times to make

sure, because the last thing you wanted to do was be driving around the sky with that light shining below you.

Dr. Allison: Can you take me through a routine flight up north?

General Fitch: You'd normally carry 18 MK-82s, the 500 pound low drag bombs, plus two 300 gallon external fuel tanks. But the normal routine for say hitting a target like Vinh which was, as a guess, 150 miles north of the DMZ, something like that, would be to fly up at about 20,000 feet. There was no need to climb higher. About 60 to 75 miles out from the target you would let down to about 500 feet off the water. Vinh was practically on the coast there. It was maybe three or four miles inland. But you'd let down to about 500 feet above sea level using a radar altimeter and then you would cruise in probably the last 50 miles to the target at about four to five hundred feet above ground level. And it was very important to have the B/N clearing the way ahead of you, because in those days we didn't have terrain-following radar.

I have said numerous times that the most important person in the A-6 aircrew was the bombardier/navigator. He had to read that radar and if there was a hill here and a hill here and say two miles in between them, and say those hills went up to 1,500 feet in each case, you're going in at four or five hundred feet above ground level and you had to make sure you went between the hills. That was up to the B/N to guide you with turns to miss the hills and other obstacles, while he was using his radar. The repeater scope for the pilot was low, in front of his shins, and it was not a scope to look at when flying low level. You depended on that B/N, 100%. So one of the most important jobs of the A-6 aircrew in addition to being able to hit the target, was to make sure you kept both of you alive. That meant the B/N reading the basic radar and saying, "Yes, that hill's there and that hill's there and we're going between them," kind of thing. Because as I mentioned, the last thing you wanted to do was to go up on a bright moonlit night where you could see those hills because those guys on the ground could then see you as you were coming closer to them.

But even on pitch black nights with weather, I've always been intrigued by the command and control system the North Vietnamese had and how they could track you so well. And to this day I don't know how they did it because I don't think the Americans could have done it. But you would be at, say 400 or 500 feet above the ground flying at 420 to 450 knots, maybe faster. You would be, as a number, say heading 270 and you'd be varying your flight path where you're weaving back and forth, and you're only going straight for maybe two or three minutes at a time and then you'd change headings somewhat. If they started shooting at you – and we always thanked God that about every third or fourth round was a tracer – which enabled you to see what

265

was coming up--that they would be shooting at you and you might do a 120-degree turn and they'd just keep right on shooting at you. We called it getting hosed down.

Dr. Allison: They seemed to be able to follow you.

General Fitch: And I don't know whether they had a telephone system or what they had. And these A-6 strikes are normally single airplanes. But to this day I don't know how in the devil that they were able to track you so well and they were not radar-controlled guns The radar guns had a multi-barrel rapid fire gun, called the Quad 23, that shot green tracers. A lot of those were just a barrage type of fire coming up. When it was radar controlled you could see it walking towards you, and turn away.

Dr. Allison: They were shooting at noise essentially.

General Fitch: Well yes, but usually the airplane had gone by before they'd hear the noise. So that would have them shooting behind your aircraft, but what I am talking about, this is shooting all around you—more or less constant barrage fire. When you've got rounds coming over the wings and the nose of the aircraft, it gets your attention when it goes on and on. Many a night I've seen AAA coming over the wings, and tracking from the sides, with tracer rounds criss-crossing the aircraft. Like I mentioned, Charlie was my B/N on the deep north missions, which were essentially from Vinh north. I'll tell you about Hai Duong; halfway between Haiphong and Hanoi. We went there numerous nights and it always was the same. Lots of AAA and invariably it was all over the aircraft—but fortunately not hitting it.

Dr. Allison: Tough target.

General Fitch: Well yes. If you wanted to say you'd been shot at a lot at night, Hai Duong was the best place to go.

But on this particular flight we were running in, we had let down to four or five hundred feet, 40-50 miles off the coast and crossed the beach about 10 miles to the south of Haiphong. It was probably 2 AM in the morning. You'd pick up the Red River, which the B/N could see on the radar, and as mentioned you'd be coming in about four or five hundred feet off the water and ground. In this case we were going to go to the south of Hai Duong initially. From Hai Duong to Hanoi is about 25 miles. We fly well to the south of Hai Duong, maybe 10 miles south. We had a

clock on the shroud in the A-6 cockpit at 1 o'clock from the pilot so that you could see the sweep second hand. All I did at those times was to count the 60 second sweeps since we were flying at about seven miles a minute. So we were going to go about 15 miles beyond Hai Duong and that would be two 60 second sweeps before the turn—the sweep second hand was easy to see and didn't distract your instrument scan. You're at 400 to 500 feet AGL as you cruise in towards Hanoi. You are flying the airplane using the vertical display indicator (VDI) which was a large display right in front of the pilot. At that point there wasn't much AAA shooting at us—just occasional rounds would come up—like maybe 200. Then 200 times four gives you 200 you see and 600 you don't see. When we reached the initial point (IP) about 10 miles to the south of Hai Duong, we turned north, still at 400 to 500 feet above the ground. Charlie has his head in the boot (a shroud around the radar scope) and he is tracking on radar. Throughout this turn, about a 120 degree turn, the aircraft is in the middle of heavy AAA. Charlie is giving me steering now on the VDI to turn to the target.

We finish making the IP turn and now we're heading towards the target. We're about eight or nine miles away, accelerating to 500 knots. Charlie says, "Skipper, you're in attack." He takes his head out of the boot and he looks up and there's tracers going over the wing, over the nose, everywhere you look there's all these tracer rounds coming up. Well they had followed us in that 120-degree turn. Not liking what he saw with all the AAA Charlie just put his head back in the boot because he didn't want to watch [chuckle]. At the proper distance from the target the cursor on the VDI starts dropping towards the bottom of the VDI display. When the computer reaches the proper release point, the bombs automatically release in a salvo. At this point the aircraft is at about 600 feet AGL, and with the automatic release salvo, in spite of my pushing forward on the control stick the aircraft balloons up to about 1,000 feet AGL and speed jumps to about 550. Starting a hard turn to the left, I usually always turned left off a target, we see the blast from the bombs, and I immediately push over to get back to 400 to 500 feet AGL. We egress the target on about the same track that we had approached it. The AAA going out for about 10 to 12 miles was about the same as the AAA going in. It was constant tracer rounds coming up. But there were no SAMs. The number of rounds the North Vietnamese threw up at those A-6As was unreal, and if you had never been there, which most have not, they seldom believed the AAA fire we talked about. When you are in the middle of a big fireworks display, and you know you are seeing only one in four rounds, it gets your attention.

As I recall, they gave us a single mission air medal for that flight, after being hosed down with AAA fire 10 miles into the target and 10 miles out. And if they happened to have a radarcontrolled gun -- you could just see those green tracers walking up on you. Their volume of fire

267

was tremendous, but with a few "Gs" and 420 or more knots airspeed on the aircraft, you could turn faster than they could track you.

Dr. Allison: That's a 20-millimeter?

General Fitch: Twenty-Three millimeter with four barrels.

Dr. Allison: How did you use altitude to obviate the threat?

General Fitch: Flying those deep north strikes, the Rolling Thunders, was kind of a "Catch 22" when it came to tactics. If you flew high you invited them to shoot SAMs at you, and if you flew low you got all the high volume AAA. I preferred to go low. Most of this AAA fire at low level was machine gun rounds, that kind of thing, as opposed to a heavier caliber AAA, because we were only like 400 to 500 feet in the air, sometimes 300 feet, and we were moving fast. It was very colorful.

Dr. Allison: Did you ever get a chance to get out of Vietnam during that tour?

General Fitch: At about this time in my tour the group decided that I should go to survival school in the Philippines. During mid November they sent me to Subic Bay where I did a couple of days of survival school. It was not particularly note worthy, but it was better than no survival school.

In December I had been in Vietnam for nearly five months, and I had flown over 130 combat missions. Towards the end of the month I had an R&R (rest & recreation) in Hawaii. My wife, Margaret Marie, flew out from Washington, D.C. and we had four great days in Honolulu, totally away from any thoughts of combat flying. It was great to see her again, since during Vietnam there was no good way to call back to the states, and there was no email in 1967. We had some superb lunches and dinners, and with a rental car we drove over most of the main island. Margaret was living in our new home in Annandale, Virginia, that we had bought just before I left for Vietnam. She was teaching in Springfield, just a few miles south of Annandale, where she had taught while I was at HQMC and National War College, before we went to Cherry Point. So for both of us the R&R was in sync, with her being able to leave teaching for the trip to Hawaii.

Dr. Allison: After the R&R was it back to the routine?

General Fitch: On New Years eve night of December 31, 1967, Charlie and I were back over North Vietnam, dropping our standard 18 MK-82 five hundred pounders. On the night of January 3rd we were flying a rolling thunder up in RP 5 and RP 6. I should mention that when we landed at Udorn the night of the third to refuel, I would telephone an old friend of mine who was stationed at Udorn. His name was Paul Craig, and Paul was a captain in the Air Force. He was flying missions in Laos. We had been friends in Fort Meade about the time I was a junior and senior in high school. His uncle was a neighbor of ours. In the 1946-47 timeframe, Paul and I had hitchhiked rides many times around central Florida.

At Udorn, sometimes I would see Judd Richardson, now a full colonel and Marine liaison at Udorn. Colonel Richardson had been the senior Marine at Patuxent River when I was in Test Pilot School. It was LtCol Richardson in 1957-58 who would be the one to tell Margaret and me at a Pax River party, that I would be going to VX-5 after TPS. So it was a small world.

Dr. Allison: What type of missions did the squadron fly and what was the op tempo?

General Fitch: Normally VMA (AW)-533 flew two "Rolling Thunders" each night in Route Packages 3, 4, 5 and 6, and we did about 12 "Tally Ho" missions each night in Route Package 1, just north of the DMZ. In Route Package 1 we would search for trucks with our moving target radar capability. We very seldom ever flew a daylight flight over North Vietnam. Nearly all of our daylight flights were in the northern sector of South Vietnam, the I Corps, and usually we carried ordnance on all five bombs stations. For morale purposes we might schedule one or two hops a day for a morale factor, just so aircrews could see what things looked like in the daytime. But you didn't, like I said, fly very much in the day time. Each aircrew might get one or two hops a month in the daytime and everything else would be at night. For the 12 months that I was in Vietnam, I had about 300 hours of nighttime. I logged most of those night missions in the A-6A during the six or seven months that I was CO of 533.

Dr. Allison: Did the Tet Offensive, which kicked off on 31 January change any of this?

General Fitch: I may have told you this story. On the afternoon of January 31, 1968, the group (MAG-12) told us to fly all missions as scheduled for takeoff by about 2300 that night, and then fly all other remaining flyable aircraft to the Ubon Air Force Base in Thailand. It would turn out that they had good intelligence on the forthcoming Tet event, especially compared to some of the intelligence that we hear about today with the Iraqi war. Any squadron aircraft that had not taken

off by 2300 we would just launch them for a TPQ and then send them to Ubon in Thailand. Get them out of Chu Lai. Of our eleven A-6A aircraft we had only one airplane that was down that we couldn't launch so – and again, this is the night of the 31st of January of 1968. So I fly whatever it was I was supposed to fly, and around midnight or one o'clock in the morning, I wind up at Ubon AFB in Thailand.

At about six o'clock the next morning Charlie and I were flying back across Laos, coming back from Ubon; when I called the TAC center at Da Nang. I give the TACC our call sign and told them that I'm en route to Chu Lai. The TACC says, "You can't go to Chu Lai." So with that, I land at Da Nang and I go up to the Wing G-3.

I see Pete Bonner and Pete says, "I don't know how they did this but they say they blew your hanger down and the rest of your squadron area." So I said, "Well I need to get down there." and Pete said, "Well you can't fly your airplane down there. We'll send you down in a helicopter." So they sent Charlie and me down to Chu Lai in a helicopter (CH-46). As we're coming in to land in the helicopter sure enough there's my squadron area just absolutely flat, except that the revetments are still in place.

Okay. The helo (CH-46) lands and lets us out at the squadron area. It is indeed flattened. What had happened; they'd had a rocket attack shortly after midnight, which was simultaneous with the start of the Tet Offensive. The rockets had hit in the bomb dump which was probably a quarter to maybe a half a mile to the south of my squadron area. My squadron area was the most southern of the squadrons at Chu Lai and directly north of my squadron area were the F-4 hangars. There was probably, I don't know, perhaps a quarter of a mile between my "former" hangar and the first F-4 hangar. What had happened when these rockets went into the bomb dump, they cooked off-- they estimated something on the order of 5,000 MK-82 bombs.

Dr. Allison: Wow!

General Fitch: So it was like a mini-nuclear explosion. And that pressure wave just leveled my hangar. It leveled the line shack, some maintenance shops that were in sheds adjacent to the hangar, and it leveled the administrative huts for the squadron that were about 100 yards from the hangar..

Dr. Allison: It wasn't shrapnel and stuff, it was just

General Fitch: It was the bomb blast that just leveled my squadron area with the blast pressure. I mean it leveled everything except the revetments. If you can imagine an estimated 5,000 MK-82 bombs going off. The revetments in my squadron area were about as high as this ceiling— probably about nine or ten feet. But the Southeast Asia hut that was my office, it was flat on the ground, and the few other buildings we had were all flat on the ground. Well when I got there, you know the Marines were trying to clean things up and get ready for the flight schedule because we were going to fly that night. As for the bad guys, the Tet Offensive was underway.

Dr. Allison: Amazing that your Marines went on about business.

General Fitch: In the month of January, as I remember the numbers, we delivered 3,000 tons of ordnance with eleven 533 A-6A aircraft. We were supposed to have 12 aircraft all the time, but the norm was to have only 11. The carriers had priority on replacement aircraft. We normally carried 18 MK-82 on each mission, except the in-country missions, those that were in South Vietnam, such as those to Khe Sahn. We frequently carried 28 MK-82 since fuel for the South Vietnam missions was not a problem. That day there were no squadron work spaces—zilch. The maintenance crews were working out of boxes the ordnance men were working completely in the open. We did however have a concrete ramp. [chuckle], the parking area for the aircraft and the small hangar that was now flat, had all been on concrete. This concrete kept the men out of the mud. As best I recall, there was no rain for a few weeks after Tet started, so the troops were working on planes in the open, and their shops were in tool boxes, but they weren't getting wet.

Dr. Allison: Was there an attempt to re-build your squadron's work spaces and hangars?

General Fitch: All that squadron area stayed flat for the rest of the time I was in the squadron. Up until the summer of 1968, nothing had been rebuilt. The F-4 squadrons that were about a quarter mile further north than my squadron area, even had damage to their hangars. The F-4 hangars were huge compared to the old A-6 hangar of 533, which now was just twisted metal.

Dr. Allison: Marine 'maintainers' are extraordinary.

General Fitch: The ordnance men of 533 were magnificent. They were loading upward of 100 tons of ordnance a day, sometimes more, onto the 533 aircraft.

With the advent of Tet, nearly all of our 533 missions would be within South Vietnam, the I Corps. We continued to fly some Tally Ho missions in Route Package 1 and we continued to fly in Laos. For most ordnance loads within I Corps we were carrying 28 MK-82 (500 pound) bombs on each mission. We were flying 15 to 20 missions a day, and sometimes a few more. During the month of February 1968, with all of our maintenance facilities flattened, the squadron dropped just over 3,200 tons of ordnance.

We had dropped about 3,000 tons of ordnance in January 1968. So, we dropped more in February with only 28 days and nights after everything was laying flat, than we did the month before that had 31 days. That tells you a lot about the dedication of those Marines in 533. VMA(AW)-533 would receive the Commandant's Aviation Efficiency Trophy for that year in Vietnam, but it would be a different commanding officer that would accept that award.

Dr. Allison: Did this tempo remain?

General Fitch: The squadron continued to do that, in March, April, May, and June.

Dr. Allison: So they were doing all their maintenance outside.

General Fitch: They were doing everything outside, and that was with rain or shine. It is fair to say that it rained a lot at Chu Lai. We had several of those mobile enclosures that probably had a 15 to 20 foot diameter. The shelter had an accordion folding and unfolding capability, they were on wheels, and that shelter could give shelter from the rain. On nights when it was raining hard, they would put one of those accordion type enclosures around the A-6A nose and cockpit, so that the aircrew would not be drenched getting in the cockpit to fly a mission. I forget just when the monsoons started, but there was a lot of very wet weather that winter and spring. The maintenance men used those shelters for every kind of maintenance that they could get the shelter into position for. And I forget what we called those shelters but they were huge things that rolled up in front and covered probably a fourth of the aircraft. If it was raining hard, it didn't make any difference whether it was raining or what, you were going to go on the mission, wet or dry.

Dr. Allison: Yes, all-weather attack.

General Fitch: Yes. The squadron did a magnificent job. As I said, they would later receive the Commandant's Aviation Efficiency Trophy. I never received the trophy. When it was time to give

the award, whoever was CO of 533 stood up and accepted it. All we did in my time in 533 was earn it. The caliber of that squadron when I took it was awfully good. When I left it I thought that it was even better, and especially so after the attack that night of January 31st leveled our squadron area flat.

VMA(AW)-533 was a great squadron in combat. Bill Brown deserves credit, I deserve credit, and Ron Iverson who took the squadron about June1968 deserves credit. The only qualms I had and--well I'll tell you how I flew a combat mission. Did you ever see the TV show, *The Twilight Zone*?

Dr. Allison: Right, I sure did.

General Fitch: And I forget what the guy's name who was the producer.

Dr. Allison: Rod Serling.

General Fitch: Yes, that was it. It was Rod Serling. One of the things that really impressed me before I went to Vietnam, with my wife and me watching that TV show (The Twilight Zone) one night, where it shows a middle aged man in his station wagon or sedan, and he's as happy as he can be as he's driving to work. Rod Serling is providing the dialog for this. He is saying something like, "Harry Brown has just kissed his wife goodbye and he is on his way to the office for another day. He loves his job and last week he was given a pay raise. Serling would go on to say, "What Harry doesn't know is that in one minute he'll be dead." Harry doesn't know that at this next intersection a truck is going run the red light, and the truck will kill him." [Laughter] And I remember this 'Wham" as the truck hits Harry's car broad-side. The next scene on the TV is a tearful wife as the funeral director lowers Harry's body into the grave.

So that's why, when I flew the A-6 missions I had my built-in evasive maneuvers that I would do down around four or five hundred feet off the deck, trying to create a fleeting target for gunners and to anticipate what could happen. I always had a bunch of intentional turns so that I never flew in a straight line for very long at a time—maybe two minutes maximum. I figured that the North Vietnamese knew about where we were and they were trying their best to track us. That was one of the lessons I learned from that Rod Serling TV show, and I took the logic relative to an automobile getting hit by a truck when the driver was not thinking, and I applied the same logic to avoidance of getting hit by AAA or a SAM in combat. I was trying to think ahead of my aircraft and the enemy.

Dr. Allison: When had the squadron arrived in Vietnam?

General Fitch: 533 had been at Chu Lai about three or four months when I arrived on the scene. The only thing that you really had to worry about – was aircrew killing themselves by not staying ahead of the aircraft. If you got shot down, that was another story. Here is a picture of a pilot, Mack Wallace, who I think probably hit the ground instead of getting shot down – you had to be careful, and aircrew always had to function as a team. This is why the B/N was such a key element of that crew – both the pilot and the B/N had to be constantly aware of where they were, what was right in front of them and what would they be hitting a minute from now if they flew straight ahead, turned right, or turned left. You had to think ahead of your aircraft. But you couldn't go up high because the last thing in the world you wanted to do was go up around 1,500 to 2,000 feet AGL, and all of a sudden they'd decide to shoot SAMs at you. The SAMs would be more effective the higher you flew. Flying at 400 or 500 feet above ground level reduced the probability that a SAM would kill you. Did you ever hear of "Thud Ridge"?

Dr. Allison: Yes.

General Fitch: Thud Ridge was to the south west of Hanoi—southwest--probably 25 or 30 miles without my having a map. What Charlie and I would do when we'd be attacking targets somewhere around Hanoi, which would be in RP 5, when we'd turn to egress we'd be running at four to five hundred feet -- I wouldn't be able to see a thing outside the cockpit --. I would be watching the vertical display indicator, the VDI in the instrument panel of the pilot; and flying that and checking the radar altimeter, and totally dependent on that B/N in the right seat telling me what was happening and what was ahead of us. Thud ridge at its closest point was about 3,000 feet high. We would run out at 400 to 500 feet AGL — bore-sighting the ridge. When we were about six miles short of the Ridge, Charlie would say, "Start easing it up." The idea was to use the ridge to mask you from radar, and then clear the ridge by maybe 500 feet. For us it worked every time. A miscalculation by Charlie, or his misreading the radar, and we wouldn't be here today. He always read it right!

Dr. Allison: Outside it was totally black.

General Fitch: It always seemed black. Believe I mentioned that you didn't want to be flying around the Red River with a bright moon shining down. And as I said, Thud Ridge was about 3,000 feet above the level of ground you would find in the immediate Hanoi area. So when you intended to fly to Laos from the Hanoi area, you would just bore right at Thud Ridge at about four or five hundred feet AGL which masked you from the radars and the SAMs and whatever they would use hoping to track you, because if you got above 3,000 feet too quickly, where you were trying to make sure you were clearing the Ridge, then you were a grape for whatever they wanted to shoot at you.

So, with total reliance on that bombardier/navigator sitting in the right seat I would say, "How far?" and Charlie would say, "Okay, you're six miles, five miles, start pulling it up, ease it up." Five miles at our speed would take less than a minute. Then Charlie might say, "Watch it now, don't go too high," and you would clear Thud Ridge by maybe five or six hundred feet maybe 800 feet in a slow climb. And if you didn't clear it then that was the end of the mission [chuckle] right there. But then immediately beyond the Ridge, if you looked over to the east, west and south, if it was a moonlight night, there were mountains going up to say five or six thousand feet over this way, five or six thousand feet that way. So again, that B/N in that right seat was talking you all the way up from 500 feet to just over 3,000 feet, so that you were using that masking effect As you moved over the mountains then you would continue the climb to 20,000 feet, then 25 and then maybe 30,000. Fuel was always a consideration because you had been flying at low levels so much.

Dr. Allison: Of course you wouldn't dare take one without a radar on a mission like that.

General Fitch: Not that part, no. If you didn't have a good radar, you didn't go to Route Packages five and six. But then I believe that I told you the story about Charlie having a bad radar, where there had been flooding, our target was in Hai Duong, and we hauled 18 MK-82 up to Hanoi, then we hauled them back down to Route Package One and dropped them on a ferry crossing.

Dr. Allison: How were the Route Package 1 flights different?

General Fitch: Route Package 1, was the first 80 miles of North Vietnam, with the DMZ as the southern border of RP 1 It was rare that there were any SAMs in Route Package 1. But you couldn't count on it. Occasionally they'd bring some SAMs in. But the way we did Route Package 1, looking for trucks, we flew about 2,000 feet above ground level, which eliminated the

effectiveness of a lot of ground fire. We would fly those Tally Ho flights at about 350 to 400 knots, since the AAA threat was not great. Over the period of an hour the cumulative AAA might be a lot, but it was spasmodic most of the time. With that said, there were many a time when we were at about 2,000 feet AGL and they would hose us down with AAA fire. They had quite a few quad 23 guns up there, the ones with radar control, a four barrel gun with a very high rate of fire. The quad 23 always had the green tracers that I mentioned. Tiger Island was just off the coast, to the east, it was North Vietnamese held, and you had to be careful flying around Tiger Island.

Dr. Allison: Would you overfly Tiger Island?

General Fitch: You usually flew around the island if you were low, and if you were high, say above 6,000 feet, then you'd just fly over the island. When we took off we did not take off with all those green and red lights flashing on the airplane. Once we started to roll we'd switch the lights off, still leave your taxi light on and then as soon as you were pulling up the landing gear and flaps you'd turn off your taxi light because a lot of times there would be bad guys right off the end of the runway that would shoot at you. When we got airborne at Chu Lai and out over the water flying north, maybe two minutes after takeoff, off the coast of South Vietnam, we turned the lights on the wing lights and the fuselage lights.

Dr. Allison: But this was at night too.

General Fitch: All of our flying was at night, with the exception of maybe one or two daylight flights each day for morale purposes. The A-4 Skyhawk when flying a combat mission in South Vietnam or Laos got shot at sometimes. The A-6 when flying a combat mission in North Vietnam got shot at every time—and many times it was large volumes of fire. I believe that I mentioned that I had nearly 300 hours of night time the year I was in Vietnam. When I was in the S-3, I flew the A-4 very little at night. So in the practical sense that near 300 hours of night time was in a six or seven month period when I was CO of 533-- instead of a year.

Since we are talking about the Tally Ho mission, I should tell you what we did one night in RP 1. We pretty well knew where we would get shot at a lot. So one day I decided that we would give our total attention that night, with about 10 sorties, hitting a target area that was routinely firing at us every night in RP 1. We knew where the fire was coming from, since we had marked it with a radar reference. Charlie and I had an early Tally Ho that night, and we unloaded a max load of napalm on the target in RP 1. Other aircraft would be loaded with 28 MK-82 bombs and the

aircrew would salvo them on that one target. Colonel Wilker had one of those flights that night, about two o'clock in the morning, hitting only that one target and not worrying about the trucks. I met him at the line shack when he got back, and when he finished signing off the aircraft, he turned and saw me. He smiled and said, "Thanks a lot." Apparently by two AM the North Vietnamese were so unhappy with us, they were filling the sky around that target with heavy, heavy AAA. Colonel Wilker had flown through it. After that night, that target area didn't shoot as much as they had before.

Dr. Allison: Any particularly memorable flights in day time?

General Fitch: I had one good – and this is worth telling – one good daylight flight in the A-6. I didn't spend a lot of time in the daytime down in my squadron area, because I had good officers taking care of the staff functions, and I was flying nearly every night. I always tried to get a little sleep in the daytime. For the most part you had to sleep in the daytime, at least for a few hours. I was doing my flying at night and I had learned, very quickly, to sleep in three and four hour increments. If I had a midnight takeoff time, which meant to be over at the squadron flight line by say 2200. I'd usually take a nap in the afternoon or I'd get the evening meal and then go sleep for two hours and then go down to the squadron. .I'm sure that I was getting eight hours sleep in a 24 hour period, but that sleep was in three and four hour increments.

But the routine was you didn't have to spend a whole lot of time at the squadron to run the squadron, because it was primarily a matter of who is flying and what the targets are and that kind of thing. And in Ron Iverson I had a superb executive officer. I had a great maintenance officer in Terry Baker. Bob Gondek took care of administration. First Sergeant Cleveland took care of any enlisted problems.

During the six or seven months that I was CO of 533, I had zero enlisted problems. Everyone was working too hard and flying too hard to have a problem. There were none! As I said, Terry Baker was a terrific aircraft maintenance officer. Terry took good care of aircraft maintenance and he flew nearly every night. By the way, some of my 1st lieutenants were also super combat pilots. Captain Mike Dale was one of the outstanding pilots.

Dr. Allison: Is that right?

General Fitch: Absolutely. I could look and see who was flying that night and what the target was, and I could tell you at 2 o'clock in the afternoon who would complete the mission that night just by knowing who they were and the target.

Dr. Allison: Besides Terry Baker are there others that you recall as outstanding?

General Fitch: Well Terry Baker was hands down the best I had. His bombardier-navigator was Dave Forter. You could be confident that regardless of the target, Terry Baker and Dave Fortier would do a superb job of flying the mission. The tougher the mission, the better that they liked it. The afternoon of the day that Charlie Carr and I were going to do another mission to Hanoi, February 21st, 1968, Terry came by my hooch. As I mentioned earlier, Terry and I had been captains in VMA-311. That day he told me that he and Dave Forter would really like to take that mission to Hanoi that night. I said no, Charlie and I are flying that one. Terry came back with a second request that he and Dave take the mission, and again I said, no, Charlie and I are doing that one. Then Terry went on to say, "You know you can always get a new maintenance officer anytime, but you can't get a new CO." Needless to say I was very touched by his offer, and it was a measure of the man that was Terry Baker. Again I said no, Charlie and I will fly this one.

After nearly 40 years, my memory gets kind of iffy. But amongst the pilots, Bill Kretzschmar was a standout, as was his B/N, Don Hiltrunner For a Hanoi mission, bombing the Dommier Bridge in a single plane low-level night strike, the odds of getting to the target in downtown Hanoi and getting back to Chu Lai were low, maybe a 30% or 50% chance of getting to the target and getting home. VMA(AW)-242 had lost planes trying to hit the Doimmier Bridge.

MAG-12 recommended both Kretzschmar and Hiltbrunner for the Navy Cross, since it was a very tough target and it was in downtown Hanoi. The Dommier Bridge was famous amongst pilots and B/Ns for trying to take it out. Either 1st Marine Aircraft Wing or Fleet Marine Forces Pacific (in Hawaii) downgraded both Kretzschmar and Hiltbrunner to a Silver Star. The big problem with downgrades by the First Marine Aircraft Wing and Fleet Marine Forces Pacific in 1967 and 1968 was, none of the Marines (usually colonels) on the awards board had ever been there—they had never flown a Rolling Thunder at night, they did not have any idea of the AAA and SAM defenses in North Vietnam—and they never bothered to find out. We checked some pilots out in the A-6 in country, like Ron Iverson, and we could have checked out others, such as awards board members on how to be an A-6A pilot or bombardier/navigator. None ever volunteered to get a first hand look. When I heard that both Kretzschmar and Hiltbrunner had been

downgraded from the Navy Cross to the Silver Star, I talked with the CO of MAG-12. It was too late for the group CO to intervene with the CG of 1st MAW.

Believe I mentioned earlier that as the CO of 533 in 1967-68, it was my conclusion that if you did a lousy job of flying with poor tactics, and managed to get your airplane shot up, and survived, then you got the award you were put in for. For some reason the awards boards liked to see airplanes get shot up. If both crewmembers got killed, then they were apt to get a high award. Aviation awards in the Marine Corps are not based on deep knowledge at the wing awards board. A lot of it had to do with how well the writer wrote up the citation.

MAG-12 recommended both Major Kent Bateman and his B/N Jerry Westendorf for the Navy Cross. In a night single plane strike they had hit an airfield target just west of downtown Hanoi, an airfield that the name of escapes me, although I think it was Phuc Yen, and they had a wild ride at very low levels and high "G". When I heard that Kent Bateman's and Jerry Westendorf's Navy Crosses had been downgraded at the wing, I told the MAG-12 CO, either Dean Wilker or Charlie Armstrong, at the time, that both Bateman and Westendorf were fully deserving of the Navy Cross and both should get it. I asked the group CO to call the general at 1st MAW, who was Major General Norm Anderson and talk with him. And with that phone call the general agreed to put the pilot, Kent Bateman, back up for the Navy Cross but leave the B/N (Jerry Westendorf) with the Silver Star. The wing's logic was, "Only the pilot can turn the aircraft around and run away." When I heard that I told the group commander that the B/N was more important to the success of the mission than the pilot. But on the second phone call the Wing HQ said, "It is a done deal and the B/N gets the Silver Star." Later Kent Bateman received the Navy Cross and Westendorf got the Silver Star.

But to name a few pilots and B/Ns that impressed me, I would say that Captain Mike Dale was a stand-out, as was his B/N, Captain Bill Cadieux. Another excellent pilot was Clyde Smith, and Clyde was in the Terry Baker league. Clyde was good. On the *Coral Sea* cruise, Clyde was a major in 224 and making his second combat tour, along with Charlie Carr who was on his third tour in Vietnam. Clyde got shot down over Laos in the middle of the night, and he had a very interesting 18 to 24 hours on the ground before he was rescued by a Jolly Green helo.

The crews of the Jolly Greens were all heroes, and a lot of helicopters were lost trying to make rescues. Other good pilots were Ed Birdwell, Cris Kern, and Bill Tickner. Larry Friezi was a fine B/N, as was John Cotton. Without question there were other fine pilots and bombardier/navigators who would merit mention, but this is a 77 year old working recall on events that are now 39 years ago. But I should say, which is probably a repeat, you flew with a lot of

bombardier/navigators on the easy missions, which included the Tally Ho night missions looking for trucks in Route Package 1. There were very few weak ones that flew in the A-6.

Of course everybody in 533 did pretty well flying those A-6A night missions, and the ones who did not will go nameless. There were a few that had abort or divert problems. Once I knew what the target was and the aircraft, I usually knew how well they would do before they ever took off. I pretty well knew whether something would go wrong with the airplane and they would abort or go to an alternative easy target, but that was not common. I should also mention, the lieutenants and captains in the squadron knew who the weak links were.

I'd say 90 percent of the aircrews were really very good. One afternoon, with lots of sunshine, I happened to be down at the squadron area, and this was before they blew up my office hut. The Wing sent word to the group, MAG-12, that some trucks had been sighted up in Route Package 2, heading south toward Route Package 1, which would be about 80 to 120 miles north of the DMZ. They said that there would be an Air Force airborne FAC (Airborne Forward Air Controller) in RP 2, and he would be waiting when we scrambled two A-6s.

I said, "Fine." So I grabbed Dave Forter, a B/N and a captain, who happened to be around and told him to suit up; Clyde Smith, an aviator, was there along with his B/N, and so we flew two planes up on a bright sunny afternoon to Route Package 2. It was like flying over Vermont because I hadn't seen that area in the daytime.

Dr. Allison: You mean it was mountainous and

General Fitch: Well there were mountains just to the west of there. This was mostly a rolling hills kind of thing. But we got up there and there's no Air Force FAC. And so we had CBU – I think it's CBU-24. It was a canister that had hundreds of bomblets in it - we each had a couple of those canisters on each plane, I guess, and then each of us had like six MK-82s on a centerline MER. Clyde Smith and I had taken two A-6As that happened to be on the flight line when the call to scramble came in. So with nothing to do, I mean nobody to talk to, there was a little bridge there so we dropped our bombs on the bridge. That was a mistake—big mistake. About 15 minutes later I would wish that I would have still had those bombs. Mu Gia Pass was very near there. So at about, I don't know, 1,500 feet, maybe 2,000 feet AGL, something like that, I go weaving back and forth flying down Mu Gia Pass, while looking for trucks because if they'd been in Route Package 2 and if they were going into Laos they had to go through Mu Gia Pass to get there. Clyde Smith had done very little formation flying in the A-6 recently, because again, it was normally a single-plane A-6 strike at night and we just didn't do formation flying.

With my weaving back and forth going over Mu Gia Pass, Clyde Smith lost me. We're still talking on the radio on UHF and we had what you called a UHF/ADF where somebody can talk and you can switch it on and the needle will point to whomever is talking on the radio. We tried that a time or two but just as we're coming out of Mu Gia Pass, still over North Vietnam I'm rolled up and the Dave Forter said, "Oh boy, lookie there," and here's about – I don't remember exactly – eight or twelve trucks, something like that were driving along near the end of Mu Gia Pass heading toward Laos. Well technically you're supposed to have an airborne FAC to control you, but if you looked at where we were coming out of Mu Gia Pass and where those trucks were, there was no question in the world where those trucks had just come from. They had come out of Route Package 2 onto Mu Gia Pass, and I would hazard a guess that they were the same trucks that had been reported some two hours earlier.

So Clyde Smith, is trying to find me. I've got the trucks. I'm telling him where the trucks are and I decide that we're going to drop these CBUs on those trucks because again, there's absolutely no question in my mind, because we are over North Vietnam. So anyway – and this is why I wish I had kept the bombs – if I'd had the bombs left it would have worked out a whole lot better. But anyhow, I roll up and do a glide bombing run to release the CBUs at about 2,000 feet AGL, and boy, that stops the trucks flat [laughter].

Dr. Allison: I bet it did.

General Fitch: Because all these bomblets, probably at least a couple hundred, raining down on them. And so then I keep telling Clyde where we are, just west of Mu Gia pass, and he keeps trying to find me but he can't find me [chuckle].

Dr. Allison: He didn't see any smoke or anything from the bomb?

General Fitch: There were hundreds of bomblets and each CBU bomblet detonated on impact with the ground. There were hundreds of those bomblets. After that run I didn't have any CBU left. Clyde didn't have any way except that UHF/ADF to find my plane, because there's nobody to paint you on radar and there's nobody else to talk to. Clyde then said, "Well I'm getting low on fuel, we've got to go home," so I said, "OK."

So we left those trucks sitting there at the end of Mu Gia Pass and I don't know what kind of damage we did to them, but I know we got their attention, and I have to say with all those bomblets somebody should have gotten hurt down there. I climbed to altitude-- 20,000 feet or so, and it's not that far, probably 90 miles until you're hitting the DMZ area.

I called the TAC Center. I tell them who I am by call sign, then tell them where I've been, and I say, "We've got about 10 trucks stopped up by Mu Gia Pass, " and the TACC controller said, "Well that's good because we've got a couple of your boys on their way up there now." Well it turned out that Terry Baker had launched with two more planes to go up to Route Package 2. So I called Terry on our squadron common frequency and I said, "Here's where these trucks are," and he said, "Fine, we're on our way." Clyde and I land at Chu Lai and I wait for Baker to get back. And here's where they really screw up in the Marine command and control system. I've told them what the target is. I've told them where the target is. And this is just; you know this desolate country up at Mu Gia.. It looks like the desert out West and they're sitting out in the middle of this place, and they were right next to Mu Gia and some 90 to 100 miles north of the DMZ.

Terry Baker gets back to Chu Lai and I said, "That's pretty good finding those trucks," and he said, "We didn't go there." And I said, "What did you do?" He said, "They diverted us to a TPQ cutting trees." That was, as far as I was concerned, a total breakdown in the command and control system because here's the tactical target, a group of trucks, stopped dead, it's real; you know where the trucks came from, the TACC has been told where the trucks are, and it is all Indian country. So I would suppose that truck convoy got itself organized and drove on to where it was going – like probably, Khe Sahn. I guess they fixed the flat tires and drove on. I don't know [laughter].

Dr. Allison: Would you want to talk about any of the other missions that you flew, the memorable missions—anything with Khe Sanh or the Tet offensive?

General Fitch: Oh yes. I never did get into that-- the Tet offensive. First let me cover this with the Tet Offensive. Normally on a TPQ you'd drop bombs and it was cutting trees. You really couldn't tell because you'd see the bomb explosions because you'd turn the airplane up on its side to an 80 to 90 degree bank angle. After you released you could watch the bombs explode and that was it. And you'd do this around 17,000 to 18,000 feet altitude. I don't recall what TPQ stood for, but it was radar bombing where a ground radar locked up your aircraft, they would give you an altitude and airspeed to fly, and then from their radar they would vector you to bomb release. It was all very mechanical. Up until Tet the TPQ runs had been pretty much hum drum, rather boring, but Tet changed that.

With the siege going on with Khe Sahn, the North Vietnamese moved a tremendous amount of artillery and other ordnance in around Khe Sahn. On nearly every TPQ that I flew after

the Tet Offensive started, there would be secondary explosions coming after the initial bomb blasts. Around Khe Sahn it was difficult to miss hitting something that belonged to North Vietnam.

At Chu Lai, we didn't notice any difference after they blew down the buildings in my squadron area. Occasionally we would get a rocket attack out of either the Viet Cong or the North Vietnamese, we never knew which, but they usually didn't cause much damage.

Dr. Allison: A lot of that was at night too, wasn't it; TPQs?

General Fitch: Well it nearly all at night as I remember, but there were some daylight TPQ flights up to Khe Sahn.. I mean you could do the same thing in the daytime but the rocket attacks at Chu Lai were always at night. When they started that Tet offensive you could drop bombs nearly anywhere up in that northern region of what would be South Vietnam, where Khe Sahn happened to be, and you'd get secondary explosions. Of course TPQ was not carpet bombing. There was a flow of intelligence on where the North Vietnamese were positioned. It was amazing the number of secondary explosions that you would get where normally if you'd have been up there a month earlier you wouldn't have gotten anything except the detonation of your own bombs.

But anyway, with that Tet offensive, as I mentioned, they stopped the northern missions including the Tally Ho and we were strictly doing in-country kind of things in South Vietnam with the A-6s. And maybe once every two or three weeks they'd say, "Okay, here's a "Rolling Thunder".

Dr. Allison: You flew an important mission up to Hanoi for which you got the Silver Star, can you describe that?

General Fitch: Well I'm in the group commander's (MAG-12) meeting one morning and my XO comes in – this was Ron Iverson who had replaced Lynn Ball as the XO of 533. Ron hands me a note and says – or leans over and tells me, I forget which – he said, "We've got a 'Rolling Thunder' tonight to the radio station, will you take it?" I said, "Sure." I said, "Tell Charlie to go start planning it." because we'd always plan our missions in the morning for that night. And I said, "By the way, what did you say was the target?" Ron Iverson said, "It's a radio station in Hanoi", and I said, "Okay." So we go on with the group commander's meeting for a few more minutes and I thought, "Hell, I better go help Charlie plan this." [Chuckle]

So I leave the group CO's meeting and go over to the group operations area where we have lots of maps, and Charlie is there, he's pouring over maps. We look over the maps, and talked

about how we were going to do this thing. And of course the Air Force, when they gave you a "Rolling Thunder" they always told you what your target time was and what your flight path was, but we never paid any attention to anything but the target time..

Dr. Allison: Why is that?

General Fitch: We weren't going to let some USAF intelligence guy who had never flown an airplane tell us how to fly. We paid attention to the target time but we didn't pay any attention to what they said the flight path was because we were going to do our own flight path.

At that moment in time we did not know that we would be the first to bomb that radio station. I'm sure that we bombed the same bridges in Hai Duong a hundred times. But they would say, "Come in from this direction and this will be your initial pointIP." Charlie Carr and I had been in this area many times before and we would decide what route we would fly and what the IP would be.

The Air Force fraggers were in a rut and they never changed much on their fragmentary order. Tuesday this week looked very much like the Tuesday last week and the Tuesday before and the Tuesday before that, all with the same target times each week.

Dr. Allison: Very predictable.

General Fitch: Charlie and I had decided how we were going to do that mission and as I recall the time on target (TOT) was about 2302 that night. And so we take off in the same manner that I described for you earlier, taxi light on, external lights out when in the takeoff area, run-up the engines, release the brakes, start roll, lift off at about 150 to 160 knots, pick up the gear and flaps, turn off the taxi light and make sure that it is off, then passing about 2,000 or 3,000 feet, turn the exterior lights on, and again check that the taxi light is out. During the climb out you again check your external lights on because you're in friendly air space, so to speak, and you don't want to get involved in a mid-air collision. You fly up over the waters of the Tonkin Gulf, as you approach Tiger Island you turn off your external lights, and again check the taxi light off. Several aircrews flew all the way into Route Package 6 with some of there external lights on, but they never did it twice. They learned quickly. They became the target in a shooting gallery.

Dr. Allison: You had mentioned that they had torn up some of your runway at Chu Lai.

General Fitch: I think that they were working on the center crown of the entire runway. That resurfacing had been going on for several months with the runway repair. In 533 we had been using the taxiway to takeoff and land. When we were flying this mission, on the night of February 21, 1968, the primary runway at Chu Lai was still being resurfaced. So our takeoff that night was from the taxiway. When we would come back after a mission, we would do an arrested landing on that taxiway with the tailhook and the cross deck pendant. The taxiway was narrow, probably 80 feet, so you wanted to be in the center when your tail-hook caught the wire.

Dr. Allison: You're out over the water.

General Fitch: If the wind was from the north or if the wind velocity was low, we would takeoff from that taxiway on a northerly heading. That would give you a right turn out for about a minute which puts you over the water, and then you would turn left to a northerly heading to fly towards Tiger Island adjacent to the DMZ. As we cruise north of the DMZ, probably 50 miles off the North Vietnamese coastline, a hundred miles further to sea are some ships of the Seventh Fleet, including a carrier or two. Tonight this will be a pretty tough target, and we know that we will need all of defensive systems, such as being able to drop chaff. The chaff is limited, so you don't want to waste any.

When you go in as a single plane in that area between Haiphong and Hanoi everybody wants to shoot at you because there are not that many airplanes up there in the middle of the night. So we're probably, I don't know, 30 or 40 miles east of Vinh, which is a city in North Vietnam, we're flying at about Flight Level 250 [25,000 feet] and all of a sudden we get tail warning lights flashing in the cockpit that an airborne radar is starting to track us [chuckle]. So we do essentially what is a Split "S" coming down like this, Charlie drops a couple of bundles of chaff, it is a black night, and then these fighters; whoever was tracking us, they break it off. Well we later found out they were a few sailors having fun, and they had come off the carrier. These guys, who were dumber than dumb, and these dumb s----- were just amusing themselves with this airplane flying up north. As far as Charlie and I were concerned at that moment we got that radar warning, it could have been a MIG-21 or whatever. When those little tail warning radar warning lights start flashing in the cockpit, you have to do something since you don't know who the airplane painting you happens to belong to.

Dr. Allison: Yes. You can't take any chances.

General Fitch: So that was pretty irritating because you lose all that altitude and now you've got to climb back up, and that probably cost us, you know, 500, 600 or 700 pounds of fuel that we would have rather had for later on. So looking back I hope those guys entertained themselves but I was irritated (a nice word) with them--stupid sailors playing fighter pilot.

But anyway, we drive on up north towards Haiphong and we did a descent pretty much as we routinely did going into that area to the south of Haiphong. We let down about 60 miles or so off the coast and get down to four or five hundred feet. And we're driving in, and again, in kind of an unsteady direction where you keep changing heading every minute or two in case somebody is tracking you so you don't make it too easy for them to shoot. And we were running at 500 feet, sometimes 400 feet AGL and I guess we were, oh, maybe due south of Hai Duong by maybe ten or fifteen miles or maybe we were southwest of it, and Charlie said, "Uh oh," and I said, "What's that?" and he said, "Look there," and here's a SAM launch that's taking place. Charlie releases a few chaff bundles as I move the aircraft closer to the ground.

As I've said, the key thing in the A-6 is to make sure you don't kill yourself. So what I did was instead of staying at 500 feet I went to about 350 feet above ground level (AGL). You're getting this off the radar altimeter. Charlie's looking on his radar for hills because you've got 200-300 foot hills scattered around the area there too, so if you hit one of those, that's spoils your whole evening. And the way to evade a SAM, depending, was to turn into it. Well that can get kind of sporty if you're four or five hundred feet off the deck and you start to turn with a high "G" and losing airspeed, which happens rapidly with high "g" loads. With high "g" you can find yourself in the ground if you're not careful. Loaded with bombs, the thrust to weight ratio for the A-6 was marginal to poor when pulling high G along with a heavy load of weapons. I may have turned a little bit but I didn't turn much into the SAM but I was down to 300 or 350 feet AGL. Remember if you hit a hill you are both dead. Well what the SAM did, it was an SA-2, and it came over the cockpit probably about 75 or 100 feet above the canopy, and it sounded like a freight train [chuckle] going over. I still can't figure out how it missed the right wing.

Dr. Allison: Could you hear it?

General Fitch: Oh yes. Like a train going over you. Apparently its rocket motor was still going as it passed over the canopy.

Dr. Allison: It made a good roar.

General Fitch: I'm redundant but it sounded like a train going over you. And so then they command detonated the missile – and this is just a guess since this is all at night – they command detonated it out, I don't know, six or seven hundred, maybe a thousand feet away from the aircraft. That command detonation shook the aircraft pretty well, and what I did at that instant was look to see if everything was still working, which it was, and I told Charlie, "We're still flying."

Dr. Allison: I guess you had a pretty good boom though too.

General Fitch: Oh yes, well it shook the hell out of the airplane.

Dr. Allison: Did it?

General Fitch: Yes. Big time shaking of the airplane.

Dr. Allison: Do you think anything hit you?

General Fitch: You didn't know whether anything in the airplane had been hit or not. The key factor was everything appeared to be working—remember it is night time, it is black out, and you are flying on the gauges. The SA-2 missile is like a 40 foot telephone pole in size.

We stayed between 300 and 500 feet above ground level, and Charlie was reading the radar to ensure there were no hills or towers in our flight path. We hit the IP and started easing the aircraft up to 500 or 600 feet as the cursor for weapons release crept downward on the vertical display indicator. We salvoed the 18 MK-82 bombs while at about 600 feet AGL, with a modest interval between bombs releasing. With that salvo, as is customary with the A-6A, the aircraft ballooned up to about a thousand or eleven hundred feet, with me pushing the stick forward trying to get the nose down and into a descent. The two throttles are forward and we were probably pushing 550 to 600 knots, and going back to 400 to 500 feet AGL.

Then it was pretty simple after that. They shot at us quite a bit before and after the SAM. I have no idea how many SAMs they fired, since I only saw the one. That one was close enough. After bomb release we were streaking for Thud Ridge at about 400 or 500 feet AGL. Remember, Thud Ridge went up to about 3,000 feet with mountains to the right and left going up to five or six, maybe seven thousand feet. As was the norm when we had bore sighted Thud Ridge for masking, Charlie called the distance to the ridge, using the radar—and probably at about six miles to the

ridge I started easing the aircraft up to clear the ridge top. Once back over the mountains it was a piece of cake as we flew to Udorn.

Dr. Allison: Now that radio station was right in Hanoi?

General Fitch: Well it was kind of southwest of it as I remember.

Dr. Allison: But was it a built-up area?

General Fitch: It was a black night. I have no idea if it was a built up area because I was not looking at a radar scope. There were no lights. We of course did not have FLIR (forward looking infra-red). The radio station was out kind of by itself, with a lot of antennas around it. It was the kind of thing – and I'll tell you another Charlie Carr story here in a minute. But Charlie was the part of the aircrew that acquired the target on the radar and then he steps you into the attack mode when the weapons computer is ready.

Once you do that the airplane weapons delivery system takes care of the rest of the release. The computer does the time of release based on altitude and airspeed inputs. As I recall, our bomb load that night was either 18 MK-82s or it was 14 of the Air Force 750 pound bombs, I forget which. We never got 'fragged' by bomb fragments dropping that way.

If you look at the fragmentation patterns for the MK-82 bomb it will say, "When you do that at 600 feet AGL you're right in the middle of the published frag pattern." But we never got a frag in the A-6A airplane. And of course the reason for the tactics – and everybody did it the same way flying the A-6s – was that if you got yourself up to the higher altitudes – and the higher altitude was 1,500 to 2,000 feet, or anything around that – then you were just inviting them to shoot a SAM at you—lots of SAMs.

I mentioned the run out from the target where we just bore sighted the ridge and stayed at 500 feet until just short of the ridge. I think that we landed at Udorn with about a thousand pounds of fuel. Low fuel in the A-6A is 2,000 pounds, so we were nearly running on fumes when we landed in Thailand.

Dr. Allison: What was the other Charlie Carr story?

General Fitch: As for the flight to Hanoi where we didn't drop a bomb in Route Package 5 or 6, it is worth telling. Charlie knows this one because I've told him a lot of times. The target that night

was Hai Duong. I don't remember just when it was but it was probably in the November timeframe of '67 is a guess, but maybe December. On this particular mission we were somewhere near the Red River, 400 to 500 feet AGL. Hai Duong is 25 miles west of Haiphong, and I was going to go up halfway between Hai Duong and Hanoi, which is, again, another 25 miles between those two major cities there, but I was going to go halfway in between them. Then I was going to turn back towards Hai Duong and then turn back to an IP, which would be about ten miles southeast of the target. Ten miles was pretty standard for our IPs but it depended on what the B/N could see on the radar.

Dr. Allison: Ten miles from IP to target?

General Fitch: Yes. First I need to point out that there had been a lot of flooding in the Hanoi and Hai Duong area, and radar aim points weren't that good. It also turned out that our radar that night wasn't very good. But anyway, so that I'd be heading essentially southeast and then I would make a turn of 120 to 150 degrees to the left as I'm approaching this IP, and I'm going in at about 400 to 500 feet AGL.

Well on this night, 15 miles west, that's two minutes of flight time roughly at 420 to 450 knots. The clock that I could easily see was near the top of the instrument shroud, and I start glancing at the sweep second hand of the clock -- about every 20 seconds -- because we're flying due south of Hai Duong heading west toward Hanoi. So I'm looking to see two minutes go by because that means we have flown 15 more miles past Hai Duong and Hanoi is now about 10 miles straight ahead. It is time to turn 180 degrees and go the other way, while still at 400 to 500 feet AGL. When we get to the two-minute mark I say, "Charlie, it's time to turn." He says, "Keep going Skipper." So I do one more minute. Now my count is that Hanoi is three to five miles in front of us. The 'Fansongs' [targeting radars associated with SAMs] are going wild.

I said, "Charlie, it's time to turn." He said, "Keep going." Well I went for about 30 seconds and I said, "Charlie, we're turning." Well the Fansongs were going crazy, with the Fansongs being the acquisition radar. The Fansongs were in high PRF, which sounds just like the rattles on a diamond back rattle snake, and which meant that the SAM sites were ready to shoot, for the SA-2 missile—a surface to air missile.

By the way there weren't any lights in North Vietnam that I ever saw, except for one white light that was rather bright and it was probably near a AAA gun position. I used to see it from time to time—at a distance.

Dr. Allison: There wasn't? It was always dark.

General Fitch: Always dark, zero lights. For the A-6 aircrews, you wanted dark nights with bad weather--the darker the night the better. You never saw a light on the ground--never. But anyway, what Charlie and I wound up doing was a pylon turn over downtown Hanoi at about 500 feet [chuckle], or close to downtown, after I finally convinced him it was time to turn [chuckle]. Well what had happened, as I mentioned, they had a lot of rain up there and his radar signals on the ground, you know the ground references and aim points, weren't that great.

So now we do this pylon turn with all these Fansongs going crazy and we're now heading east, and we've still got to go to that 10-mile IP sitting down there 25 miles away where we're supposed to turn towards Hai Duong. Charlie can't find the IP on the radar. We wanted to unload these 18 MK-82s. Anyhow, we'd been going east maybe a minute or two and I said, "Charlie, where are we going to come out?" He says, "I don't know" [laughter]. He said something akin to, "I can't see anything on this radar." That's not a very good response when so many people on the ground are unhappy with your being there. The Fansongs were still chirping away going into and out of high PRF.

So I said words to the effect, "Well let's get the hell out of here." I said to Charlie, give me a steer to the south of Haiphong. As I recall he said, "120." So I turned a little further to the south so I'm sure that we're going to clear Hai Duong because I don't want to fly through their AAA unnecessarily. And so we're just abandoning that IP and hitting that particular target at that point, even though we have flown a long way to get there.

So we fly on out at about 500 feet AGL, and when we get 20 miles out over the water, then we climb up to about 20,000 feet and now we're still hauling 18 MK-82s and going south. So what we wind up doing on that mission – we fly down to Route Package 1, to the northern end, and then at about 2,000 feet AGL we go in and we drop those 18 bombs on a ferry crossing at the north end of Route Package 1.

Then feeling somewhat sheepish, we head for DaNang because we are getting low on fuel. But that was a very interesting mission. We flew all over the place in route Packages 5 and 6, and got shot at quite a bit, we listened to the chirping of the Fan Songs, and all that, but we didn't drop a bomb within 250 miles of where we had planned to. With the air medal system, this whole flight that night with a bad radar and wetlands, doing a pylon turn over downtown Hanoi, it counts as a two-pointer. You do this ten times and you got yourself an air medal. Getting air medals was much easier in South Vietnam. Dr. Allison: But you got written up for the Navy Cross for the flight against the radio station.

General Fitch: Yes, they did that. That radio station flight was in February '68. That was the flight to Hanoi that Charlie Carr and I did on February 21st, 1998. Charlie and I were both written up for the NC by MAG-12, and as custom would have it, the award was downgraded either at 1st Marine Aircraft Wing or at FMF Pacific in Hawaii. As Terry Baker had indicated when he came by my hooch that afternoon of the 21^{st, ----}the odds weren't that great for Charlie and me getting back to Chu Lai after that 21 February strike.

Dr. Allison: Why did they ...?

General Fitch: Well I don't think the people on the awards boards knew what it was like to have a SAM come about 75 or 100 feet over your cockpit when you're down there at about 300 to 400 feet above ground level in the middle of a dark night, flying on instruments. Then the North Vietnamese do a command detonation that shakes the hell out of the aircraft. A SA-2 SAM is about the size of a telephone pole. They are not what you might call a small missile. The awards boards never believed that the North Vietnamese had all that AAA and those SAMs up there. Since they didn't believe it, they downgraded every Navy Cross written by MAG-12 for a 533 aircrew.

There were six (6) MAG-12 recommendations for the Navy Cross. Only Kent Bateman in 533 got the NC, and then only after I prevailed with the MAG-12 CO and he called the Wing commanding general direct. Bateman's B/N who was working two feet from him in the same cockpit, and as I have said, the B/N was doing a more critical job, that B/N got the Silver Star.

For single plane night strikes in North Vietnam, there were no volunteers from the wing awards board to come up and watch the fireworks. If Navy aircrews had flown those same three missions, then all six of them would have been awarded the Navy Cross within a couple of weeks. Now they did have airplanes which flew out over the Tonkin Gulf and monitored what was going on in the air defense system for the North Vietnamese. They knew how to listen to NVN communications and they had interpreters and all that. But those were tape recordings that were reviewed much later for intelligence purposes.

Dr. Allison: But you got the Silver Star for it.

General Fitch: Yes, both Charlie Carr and I got the Silver Star.

Dr. Allison: So that was an important target you hit.

General Fitch: Oh yes. We were the first to go in there. After Charlie and me, the Navy was in there the next two nights. I guess it is fair to mention that I was later told that those Navy aircrews all got the NC.

Dr. Allison: Was this a station that was broadcasting propaganda or something like that?

General Fitch: It was Hanoi Radio. The radio station was a concrete building about 100 feet on a side, made of reinforced concrete (I'm told), with a tall concrete wall around it, and tall transmitting antenna surrounding all of that. It was the one that beamed all radio broadcasts down to South Vietnam, where all the Americans could tune in and listen to Hanoi Hanna.

Dr. Allison: Oh really?

General Fitch: We used to listen to it from time to time..

Dr. Allison: You put her off the air?

General Fitch: No, we didn't put her off the air. It turned out the building itself was probably not much larger than right in this area where we're sitting and we scattered bombs all around it. But no, it kept right on going. But it was a building . I don't know how thick the walls were but it was pretty solid I am told. Colonel Pete Bonner, who was the wing G-3 at DaNang, later told me that we had put bombs all around it, based on intercepts. I should add, the Navy strikes that went in the next night, February 22d, and the night after that, February 23d, did not hit that concrete building.

Dr. Allison: Yes. But the fact that it was a high value target and a dangerous mission is why you were written up for the Navy Cross. plus the

General Fitch: Yes, as I said, the Navy guys who flew the A-6 and went against Radio Hanoi the next night, February 22d, they both got the NC, and when they did the same thing on the night of February 23d, again two NCs. The Navy had a different system for awards. With the Navy,

Charlie got seven DFCs in six months flying off Coral Sea, where his flying in two prior combat tours in Marine A6A squadrons, he got three DFCs in 24 months.

But that is all ancient history—and now it is nearly 40 years ago. Hopefully awards boards have learned how to handle complex aviation strikes, where you have two crew members, and those two crew members have equal importance to the success the missions, and perhaps some would agree with me that the NFO in an aircraft like the A-6 was more important to mission success than the pilot. But again, this is nearly 40 years ago.

But looking back on all those missions in the A6A in North Vietnam that I flew, in the A-6A and I recall that I had something over a hundred against North Vietnamese targets between the DMZ and Hanoi. I would still say that the toughest mission I ever flew was that one where Charlie and I went to Hai Duong, and they hosed us down steady for 10 miles from the IP to the target, in the turnout from the target, and for 10 miles to the south of the target. The one I rate as the toughest, MAG-12 put us in for a DFC, and the award came back as a single mission air medal to both Charlie and me. So the Radio Hanoi mission would come in a close second with the SAM nearly taking us out, but Hai Duong still rates as the toughest target I ever went against while in 533.

I was a lieutenant colonel in 1967-68, the CO of a squadron flying complex and dangerous combat missions, and the complexity and dangerous aspects of those night attacks into North Vietnam were not properly appreciated at higher headquarters such as the 1st Marine Aircraft Wing. I might add that 12 years after I was the CO of VMA(AW)-533 at Chu Lai in 1967-68, in the years 1980-1982 I was the commanding general of 1st Marine Aircraft Wing.

Dr. Allison: It was the Navy guys though, right?

General Fitch: Yes, the Navy guys.

Dr. Allison: Oh, they got the Navy Cross for that?

General Fitch: Yes, they were second in on the night of February 22d, and then third in on the night of February 23d. I was later told that the Navy A-6 aircrews got the Navy Cross for doing the same thing.

Dr. Allison: Did they get a SAM shot at them?

General Fitch: I have no idea.

Dr. Allison: You've given me a good feeling for the missions and sort of the routine command and control and how that flowed in and flowed out.

General Fitch: I can quickly say this. After I'd had the squadron about six or so months, then I turned it over to Ron Iverson, because my tour was going to be up in, I guess, two or three months, something like that. I went back to the air group, to MAG-12, back to being the S-3 and then I went back to flying A-4s and occasionally the A-6s again, for the rest of the time I was there. That all worked out pretty good for that year at Chu Lai. The last two weeks I was in the group; two weeks, three weeks, whatever it was, I was XO of MAG-12 under Charlie Armstrong who was still the CO.

Dr. Allison: You were the Assistant Group's Ops O for a while, weren't you?

General Fitch: Well I was probably Assistant Ops Officer for MAG-12 when I first got out to Vietnam in July 1967, for maybe a week or so while Bud Deering and I did a turnover and then I became the group S-3. I had the S-3 job for I guess a about two or three months or so, then I took 533. I had that for something like six or seven months, then I went back to being the S-3 for a couple months and then I was the group XO and then I went home, where I would do my second tour in Washington. That was when General McCutcheon had Marine Aviation and Colonel Tom Miller had his requirements branch (APW), where I would work for the next two years on the Harrier, A-4M and A-6A.

And that last three months I was in Vietnam, as I mentioned, my brother, Jay Blaine Fitch, was flying as a pilot in MAG-36. Blaine was a Marine first lieutenant and a pilot with a Huey gunship squadron at Marble Mountain.

We flew a combat mission together in the A-6A. He came down from Marble Mountain to see me one day, when I was back being the S-3 of MAG-12, and I asked him if he would like to fly a mission in the A-6A. He said that he would, so we gave him a cockpit check out for the right seat, and then we launched one afternoon with five MK-84 (2,000 pound) bombs aboard. They sent us up to the DMZ and had us dropping those five MK-84 bombs on targets in Route Package 1 – inside North Vietnam. Rethinking the wisdom of my invitation for him to fly in the A-6A, I was rolling in at 20,000 feet and out by 15,000 when I dropped those MK-84 on the North Vietnam targets. While flying up to the DMZ that day, I concluded that was not a place for two brothers to

be in the same airplane. He enjoyed it, however. He invited me to go on a mission with him in the Huey gun ship, and I declined.

Dr. Allison: Enemy ground fire, that could get your attention, no doubt.

General Fitch: Regarding AAA fire, people have different perception of what is light and then what is heavy. For example, I mentioned that going into Hai Duong that night and we're only 400-500 feet off the deck and it's like the 4th of July all around the airplane with all the tracers and so forth. Charlie's got his head in the boot. That was heavy because we had that constant AAA for ten miles in and ten miles out, so in the aggregate, that night, we were hosed down with AAA for about two solid minutes going in, a minute or so for the 180 degree turn, and a couple of minutes coming out. So about five solid minutes of being in the middle of the AAA and we were the only target they were shooting at.

Dr. Allison: Pretty much continuous.

General Fitch: Going in and coming out.

Dr. Allison: Which seemed like an eternity even though it may be a minute and a half.

General Fitch: Yes, that 10 miles was rather colorful; but gauging AAA is all in the eye of the beholder. So it depends on how things are perceived and if an award is involve, how it is written up. And again, that goes back to why I told Bob Gondek that he had done an absolutely magnificent job of flying that mission to Hai Duong. For some freakish reason, at an awards board they think it is better when you get hit. As I mentioned earlier, if you use lousy tactics and get your airplane shot up, then for some reason the awards folks like that. But as I told Gondek, "There's no sense writing you up because nobody will understand why you didn't get shot at."

Dr. Allison: Yes, and that's a shame too. Is it scary to see that or are you so focused on flying that you don't really notice it so much.

General Fitch: In a sense, flying combat is like a game. You always figure that you are going to win. You know it's just like anything, it's like driving a car in bad weather on a mountain road with patches of ice. You are concerned in that car but you figure you will make it okay. People

can tell you what your chances are of getting killed between here and Dolly Madison; like a deer jumping out in front of you. But you're not going to give it a whole lot of thought. You figure the odds are good that a deer is not going to jump out in front of you.

Dr. Allison: So you never know.

General Fitch: But no, it was a kind of thing where you knew you might have a problem but you figured the odds were pretty good that you wouldn't.

Dr. Allison: Do you lose people in your squadron, become POWs?

General Fitch: Oh yes. Some of those I pointed out, you know guys you thought flew into the ground. One of those was a major named Mack Wallace. They may have been shot down but it's more likely they flew into the ground. Well I'll give you an example. I had a crew flying a mission against an airfield a little bit west of Hanoi; kind of northwest of there – I forget the name of the airfield – Phuc Yen I think -- and they're coming in low, and again, about four or five hundred feet, and they start shooting several SAMs at them, and they're doing high "g" turns, you know four and a half, five "g" turns at four and five hundred feet off the deck. Well if you don't do it exactly right they don't need to shoot the SAMs at you, you just wind up hitting the ground and that's the end of that.

Dr. Allison: They've accomplished their purpose though.

General Fitch: They did it and they did it well, they hit the target, and in that case MAG-12 put both of them in for a Navy Cross because it was a helluva tough mission. The pilot got the NC and the B/N didn't. Earlier I mentioned that Major Kent Bateman was the pilot and Jerry Westendorf was the B/N.

Dr. Allison: Right. I mean there was always that discrimination against NFOs.

General Fitch: So I'm one of those aviators that has been there and done that, and I always said, "NFOs are awfully, awfully important people in an airplane. The NFO is more important than the pilot." Dr. Allison: Amen to that. Ok, time to quit for today.

END SESSION V

PAGE LEFT BLANK INTENTIONALLY



William H. Fitch in uniform at an early age; here he's about 12 years old in a Boy Scout uniform.

Margaret Marie, the future Ms. Fitch entertaining even at an early age.





Close up of flight gear for student naval aviators, CA 1951. William Fitch poses on wing of SNJ in his first flight suit, leather jacket and period flight gear which included canvas helmet, goggles, dye marker, shark chaser and a parachute to sit on.



Naval aviation cadet Finch in the cockpit of an SNJ May or June 1951



Naval aviation cadet William Fitch stands next to SNJ at Saufley Field, Florida, October 1951.

William Fitch's mother, Leila Nina Fitch, pins on bis "Wings of Gold," at Pensacola, Florida, 9 April 1951.





Second Lieutenant William Fitch bring an F4U Corsair aboard the USS Tarawa CVA-40, 19 May 1953; good landing, catches the threewire resulting in minimal damage to the aircraft. Incurring little damage, Fitch flew this F4U on a test flight off of the Tarawa ten days after the mishap.



1st Lieutenant Bill Fitch poses in his "poopy suit" next to a VMA-324 AD-1, aboard the Saipan (CVL-48) in the Yellow Sea in 1953 during its 'round-the-world' cruise.







Underside of A-4 with multiple carriage bomb racks (MCBR) during first test flight, flown by the racks' developer, Captain William Fitch, 19 November 1959.

Captain William Fitch with a VMA-311 A-B4 just before flying the first drops of 18 high explosive (HE) Mk-81 bombs on 27 June 1960. This was the first HE bomb drops ever done from the MBR (multiple bomb rack) which was the Douglas Aircraft Company's derivation of Fitch's multiple carriage bomb rack.





Captain Fitch (in baseball cap) gives the U.S. Marine Corps Commandant, General David M. Shoup a tour around an A-4B bung with the Douglas Aircraft built bomb racks derived from those developed by Fitch while he was at VX-5. Standard 5" rocket pod is in the foreground. This static display was at El Toro 30 June 1960, the day after Fitch had put on a firepower display dropping 18 Mk-81 high explosive bombs for General Shoup with the same A-4.

Office staff of Assistant Secretary of the Navy for Research & Development in 1964; 1-r: Capt Buddy Yates, Asst Secretary of the Navy Bob Morse, Major Bill Fitch, Asst Secretary of the Navey Dr. Jim Wakelin (outgoing), Capt Bill Moran. to Dr. Jim Wakelin (outgoing), Capt. Bill Moran.





William Fitch's mother and father pay a Christmas (1966) visit to their son, Major Bill Fitch, commanding officer of VMA(AW)-225 at Cherry Point, North Carolina.

Combat crew reunion flight. Bombardier/navigator Charlie Carr (1) and pilot Bill Fitch in front of a VMA(AW)-533 A-6. Although representative of their Vietnam tour of duty, this photo was taken many years after, in 1981 when Fitch , now a major general commanded the 1st MAW and Lieutenant Colonel Carr commanded VMA(AW)-533.





Squadron photo of pilots and bombardier/navigators of VMA (AW)-553 while Fitch commanded. Taken in an aircraft revetment at Chu Lai, RVN, January 1968.

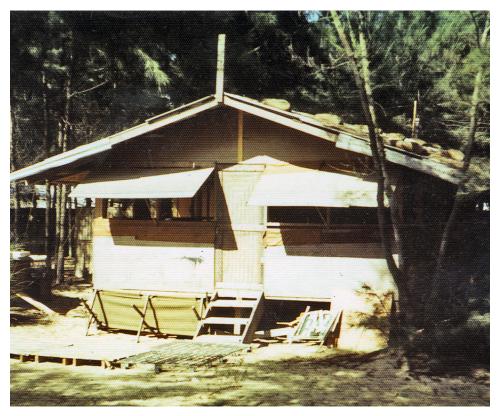
1st row (l-r): Col Dean Wilker, CO of MAG 12, LtCol Bill Fitch, CO of VMA (AW) 533

2nd row (l-r): Maj Bob Gondek, S-1, Maj Clyde Smith, Maj Paul Jones S-3, Capt Kent Bateman, Capt Jerry Marvel (POW with Larry Friese), Maj Mike Wallace (KIA with Pat Murray), LtCol Ron Iverson, XO VMA (AW)-533; Maj Terry Baker, Main Officer, Capt. Art Loring, Maj Dave Villeneuve

3rd row (l-r): Capt. Dave Williams (KIA with VMA (AW) 224 on Coral Sea cruise to Tonkin Gulf (1971-72), WO Philip Jonio, Avionics O, Capt Larry Friese (POW with Jerry Marvel), Capt Ed Birdwell, Capt Gus Leader, 1stLt Thomas Clem, Capt Pat Murray (B/N KIA with Mike Wallace), Capt John Cotton, Capt Dick Amos

4th row (l-r): 1stLt Mike Murphy, Capt Jerry Westendorf, Capt Chris Kern, Capt Chuck Buirge, Capt Ron D'Amura, Capt Mario Cadena, 1st Lt Charlie Carr, Lt Thompson, Admin, WO Layton Mathews, Supply, Capt Dick Tickner

5th row (l-r) 1stLt Smith, 1stLt Mike Dale, 1stLt Jim Perso, 1stLt Robert Avery, 1stLt Jim Cross, Capt Chip Carpenter, Capt Vic Urbanski, Capt Dave Forter, Lt Kent (Doc) Garmin (USN), Unkown, Capt Dick Tickner.



The only running water was the shower. Lieutenant Colonel Fitch's booch for the 13 months he spent in Vietnam, on the beach at Chu Lai. He lived on this end and Lieutenant Colonel John Miller lived on the other, it was typical for officers' housing at Chu Lai.

William Fitch and younger brother Jay a UH0-1 Huey pilot in Vietnam, taken at Marble Mountain.





Major General Keith B. McCutcheon, a legendary Marine aviator pins on the Silver Star, Legion of Merit and Air Medal on Lieutenant Colonel Fitch at HQMC in 1968.

William Fitch is promoted to brigadier general 1 April 1976 by the commandant, General Louis H.Wilson while Mrs. Fitch pins on the stars.





Retirement ceremony of Lieutenant General Fitch at 8th and I, 28 August 1984, Commandant, General P.X. Kelley wishes him well.



Mr. and Mrs. Fitch's 50th Wedding Anniversary, 7 August 2005.

SESSION VI

Interviewee:Lieutenant General William H. Fitch, USMC (Ret)Interviewer:Dr. Fred Allison, U.S. Marine Corps History DivisionDate:7 June 2006Place:Lieutenant General Fitch's Home in McLean, Virginia

Dr. Allison: This is the 6th session of the interview with Lieutenant General William Fitch done by Dr. Fred Allison and today's date is the 7th of June, 2006. It's good to be back and talking about Marine aviation.

General Fitch: Thank you for being here.

Dr. Allison: The last time we finished up talking about the mission in which you got the Silver Star for bombing the radio station in North Vietnam. On Vietnam you'd mentioned also that you started doing more close air support after the Tet Offensive and then the battle of Khe Sanh occurred. Can you elaborate on CAS in Vietnam?

General Fitch: Yes. The battle for Khe Sanh and the Tet Offensive were simultaneous. They had the same start date of January 31, 1968. What they did when the Tet Offensive started was for the 1st Marine Aircraft Wing to shut us down from going to North Vietnamese targets in the higher route packages, which would be RP 3, 4, 5 6A and 6B. With Tet our employment with the A-6A aircraft shifted primarily to in-country flight operations – that is the northern sector of South Vietnam designated as I Corps, which came under CG III Marine Amphibious Forces. And of course we still flew missions in Laos. The thing that was most interesting about the time during the Tet Offensive, was in my view, where the North Vietnamese had done a tremendous buildup of all kind of ordnance and supplies around Khe Sanh. Frequently each day during Tet, the Marine A-4s, and A-6 aircraft would do dive bombing in support of Marines at Khe Sanh. As an alternative to dive bombing, on many missions the A-6s would go in straight and level in TPQ type of bombing. TPQ missions per say were not challenging, they were somewhat dull, and they were: not enjoyable.

Dr. Allison: What was the routine in flying a TPQ?

General Fitch: After check-in with the TPQ controller, which was a UHF radio link, flying a TPQ was simply a matter of going up to 17 or18,000 feet in the target area and being picked up by the TPQ radar system. Frequently aircraft, especially the A-4, had a beacon to accelerate the lock up by the TPQ radar. After that lock-up by the radar, it was a matter of just flying a heading and an altitude and maintaining a precise airspeed, and the TPQ system would simply vector you to a drop point where you would pickle off whatever number of bombs that you had been instructed to drop on that run. It was a simple bomb pickle depression when you would get the drop signal. Prior to Tet this was normally a tree-cutting operation where bombs would just fall in the jungle canopy and a bunch of trees would be cut down. After Tet started, there would be a big change. The North Vietnamese had brought in so much ordnance and so many supplies in and around Khe Sanh when they went into the Tet siege that you could drop a bomb nearly anywhere in the vicinity of Khe Sanh and you'd get secondary explosions.

Dr. Allison: That's amazing they would have that much.

General Fitch: Well in a sense you didn't even have to aim at anything. All you had to do was drop a bomb and you'd start getting secondary explosions because there was so much ordnance emplaced around Khe Sanh.

Dr. Allison: Close air support then and now is of course quite different. Could you make a comparison?

General Fitch: The effectiveness of close air support today; they talk about doing close air support from 30,000 feet with a PGM; a precision guided munition. A former DCMC Aviation actually would tout CAS being done by anyone with a PGM. I totally disagree with that 30,000 foot CAS. First there are limitations to a PGM. Most are simply linked to the global positioning system [GPS], which means those PGMs go only against fixed targets. Most targets in combat, like 80% is the accepted number, are mobile. When you go after mobile targets, then you have to have a terminal guidance system like a laser tracker, which means that you have to have either an airborne FAC or a ground FAC designating a target.

In a simplistic way, you can say that a bridge will be there today and tomorrow, and it is a good target for a PGM. Troops maneuvering on the ground are a different story, because they are mobile. There's no question there's a lot of good places for PGMs to be employed but the people

have to be very, very careful about how they talk about close air support and how you can do it from 30,000 feet. I would not like to be in the GCE when CAS is being done from 30,000 feet, even with PGMs. The implication is that you can just have anybody show up to deliver a PGM; it can be Air Force, Navy, British, it doesn't make any difference as long as they can get up there and launch a PGM. But that is only good against about 20% of the combat targets that are not mobile. And when people talk like any service can do CAS that is a disservice to the Marine Corps.

Over many, many years the Marine Corps has refined its CAS procedures so that Marine strike aircraft can go against 100% of the targets in combat – mobile and fixed. Also it is fair to say, people who talk about CAS from 30,000 feet have never done real CAS—those people are just doing bar talk. I believe [Alfred A.] Cunningham flew the first time in 1912, and we have been refining CAS procedures every since.

Dr. Allison: May 22, 1912.

General Fitch: OK, you're the historian [chuckle].

Dr. Allison: Right, it's my job to know. We're coming up on the 100th anniversary.

General Fitch: Starting with the Banana Wars in the 1920s and 30s air support and using aircraft tactically to support Marine infantry units on the ground has been pretty well refined over those years. If you look at Vietnam of course you got shot at a lot when you were doing close air support, but again it was in very close contact with ground units, and I think for the most part the ground units really appreciated the kind of air support that they received.

Dr. Allison: Did you get much feedback from them?

General Fitch: Not as a rule. People were too busy. You normally got it from the guys that were flying the little observer aircraft, the airborne forward air controllers [airborne FACs or FAC (A)], who during the CAS would be telling you where the targets were. The only way you normally knew whether you were working with a ground FAC or an airborne FAC was to see the little airplane circling your target area. It was very seldom that you ever heard from the unit you supported with CAS. But the point being is that even though we didn't have PGMs in those days and the communications weren't necessarily the greatest in the world, it was a pretty effective system when you had Marines on the ground that were in deep trouble and needed help because a

301

500-pound bomb was a pretty heavy piece of artillery so to speak, or a 250 pound MK-81 as the case may be. But translating that into today I still personally feel that in the MAGTF and in close air support it needs to be Marines supporting Marines. That's not to say that the Air Force and the Navy and others can't do CAS, but it is fair to say that they can't do it as well as Marine aviation. CAS is a secondary mission for the USAF and CAS is a tertiary mission for the US Navy. In the case of the Navy the first priority is to defend the carrier battle group, and the second priority for the Navy air wing is deep strike. With Iraq air operations during the last four years, the use of the stack was a very ineffective way to conduct air strikes. It was also the most expensive way to do air strikes. Ordnance was expended whether or not there was a good target to strike. For the Marines, CAS of Marine and Army ground units is our first priority, and the forward air controller, ground or air, is our direct link with the infantry units needing the CAS.

Dr. Allison: Can you provide some background on why the Marine Corps makes CAS a priority.

General Fitch: First it comes from the MAGTF concept, which has been in being for about 40 years as I recall, where the synergistic effect of the MAGTF is greater than the sum of the individual combat power of the aviation combat element [ACE] and the ground combat element [GCE]. The close integration of aviation and ground with the Air Force and Army does NOT exist as it does with the Marine air and ground. It is just a different world with the USAF and the Army, and the Army would love to have the integrated support that the MAGTF provides. The first step in the integration within the Marine Corps is where Marine aviators and Marine ground officers all go to the same schools, such as Basic School, Expeditionary Warfare School and Command and Staff College. It is that close association between the Marines in the ACE and the GCE, which I think is key to the whole air support operation.

When you talk about the long war and a sophisticated enemy, we had better have lots of PGMs and laser designators in the GCE, along with the ACE having lots of laser seekers on the bombs for terminal guidance. Both laser terminal guidance and IR terminal guidance become very important for hitting those 80% of combat targets that are mobile. Regarding laser guided weapons, you have to think about interference caused by many laser designators on the mobile battlefield, and which codes are being used to avoid interference. Hitting mobile targets such as trucks, tanks and enemy infantry units is a lot different than hitting a bridge or some other stationary target.

Dr. Allison: Yes, you see that a lot in current operations. You see the old style of CAS where the pilot's got to see the guys on the ground; the FAC has to see the airplane to make sure they're going to hit the right target. You still see that today.

General Fitch: Yes. From the political standpoint if you go back about four or five years ago there was a head long rush to go to war against Iraq, when they talked about the weapons of mass destruction. You don't hear anybody talking about going to war with North Korea because that would be an entirely different ballgame and an awfully tough war. I have long agreed with General Tony Zinni that it was a big mistake to go to war with Iraq. Zinni had the advantage of saying before the war started that it was a mistake, and of course he had been commanding general of CentCom for a number of years before General Tommy Franks took over. I am not an admirer of General Franks. I think that it is safe to say that while many in Washington said in the 2003 timeframe that the Sunnis and the Shiites would love each other in peaceful harmony in an Iraqi democracy, Tony Zinni knew different. And then there were the Kurds to consider, and Turkey's concern about a Kurdistan. My guess is that 10 years from now we will have large troops numbers in Iraq, and like with South Korea, we may still be in Iraq 50 years from now. And then there are the Iranians with their interests in the Middle East.

Dr. Allison: Indeed. To go back to Vietnam, how would you assess your squadron's morale?

General Fitch: I thought it was outstanding and I think the best example is, well one: like in the area of race -- I thought you'd ask a question about that. In VMA(AW)-533 and MAG-12, there were absolutely zero racial-type issues, absolutely zero. And it is important to say, this was nearly 40 years ago.

Dr. Allison: Did you have many blacks in your squadron?

General Fitch: Oh sure we did. But we never paid any attention to numbers – we were simply all Marines with a job to do. But the relationship of those Marines - and it's typical of any environment where you're working real hard - you don't have time for any other things to come into focus there. And the living conditions that the squadron enlisted had at Chu Lai, as well as the officers, it didn't make any difference because none of it was very plush so to speak. It was really tight quarters in a barracks.

Dr. Allison: Squad bays?

General Fitch: Well it wasn't a building like you're thinking about. It was a large Southeast Asia barracks near the beach — and these barracks, Southeast Asia style, were all made of wood. There was a lot of open air since there was no air conditioning. It was austere, but it was a lot better than living in a tent. No one at Chu Lai had air conditioning, with the possible exception of colonels such as the CO of MAG-12. I don't recall, but Charlie Armstrong as CO and Lee Barton as the XO of MAG-12, each had much better living facilities than did those of lesser rank. In the enlisted barracks you had racks stacked about three or four high where Marines slept. Staff NCOs had a little more room. When you're in a combat environment you've got to get along with everybody. So I would say absolutely zero racial incidents. The morale-- it was a "can do" kind of spirit and I found in the leadership role that if you explained to Marines what you wanted to do and why you wanted to do it and how they fit into the goals, then in the end they really turned to and made good things happen. During my tour as CO of 533, I never had a single office hours for enlisted Marines or officers. It was a problem free command. Even with the Tet offensive 533 was problem free.

Dr. Allison: I was shown some pictures of that.

General Fitch: Yes, it pretty much flattened the rest of the area there. But then I had previously told you about the 533 squadron areas being flattened.

Dr. Allison: Doing all your maintenance outdoors.

General Fitch: All of it was outdoors, everything was.

Dr. Allison: That was a rainy time too in Vietnam, wasn't it? Is that the monsoon season?

General Fitch: I don't remember. If it rained or it didn't rain, which was a 50-50 probability. What we had was – and I don't remember what they called them now – it was an accordion like shelter arrangement, which was on wheels. Those shelters were very helpful for many tasks. When they loaded the bombs on the A-6 aircraft, if it was raining they just did that bomb loading and fusing in the rain. They didn't have any cover to do that except for those mobile clam shell shelters. And then when the pilot and the B/N were going to get into the airplane they'd roll this shelter up and of course if they were doing maintenance on the radar they'd use the same shelter. But we went rain

or shine and you really preferred bad weather because when you're going deep north that meant that the worse the weather the less you got shot at, which was kind of a nice feature of that.

Dr. Allison: Do you recall the mission you flew on 28 June, 1968; a close air support mission, you came in and the recon team was in trouble . . .

General Fitch: Oh yes, I remember that.

Dr. Allison: . . . and they found 23 NVA bodies there where you had dropped your strikes. Its in your records here where it's written up but I didn't know if you remembered it?

General Fitch: Fairly soon after I arrive at Chu Lai I had one mission in the A-4 where they found 39 bodies or pieces of 39 bodies. That one was in a flat area, which would not have been the same mission you are talking about. I had a wingman on that one, but that was a different mission than you are talking about—the terrain was flat.

On the mission you are talking about, I apparently was the wingman on that one, where I was flying with Colonel Lee Barton the MAG-12 XO. A flight of two was the norm in the A-4. But if I remember this one, it was this Marine recon unit was on the slope of a hill or a mountain and they had a forward observer flying; an airborne FAC, and he knew where the recon team was – of course we never saw them because of all the trees – but if this is the one you are talking about – this was a daylight mission in an A-4.

On that one I showed Lee Barton how to start above the peak of the hill or mountain, roll in, and fly the terrain down to the bottom at about a hundred feet over the tree tops. That worked well as long as you allowed for a pullout altitude that was reasonable. I ran into Lee Barton at a MCAA reunion a few months ago, and he told me that he got the DFC for that hop. After I showed him how to fly the slope down the side of the mountain or tall hill, I didn't.

Dr. Allison: Right, an A-4E. Your call sign was 'Hellborne 235."

General Fitch: That doesn't help me a bit on memory [chuckle]. But this again is why it's important for Marines to provide air support to Marines. But these Marines were on a hill which sloped down like this and the only way to drop - you couldn't drop going this way - was to roll in to the glide run over the hill or mountain, whatever you'd call it. Thinking back it was probably 3,000 feet from the upper ridge line to the level ground below. With the A-4 on this mission, you

would simply fly the sloping terrain down. And I don't remember whether we were dropping napalm or MK-81s or 82s, what it was. We may have been dropping snake-eye retarded bombs. But anyway it helped get the recon team out of trouble. We found that out later.

Dr. Allison: According to this you strafed also; did some strafing.

General Fitch: I would guess that we might have done some strafing. But then I am not sure. I was never a fan of strafing. If you weren't careful, the bad guys could kill you.

Dr. Allison: Intense volume of fire that was directed at you.

General Fitch: That could have been. I don't know. That would have come from the airborne FAC because we wouldn't have known that until he sent out a message or something to MAG-12. In the daytime it was very hard to see rounds coming at you, since it takes some water vapor in the air to make the rounds standout. That of course was not the case at night when the tracers were lighting up the sky.

Dr. Allison: I think it was under the control of an Air Force Captain John Mansub [phonetic] who wrote it up, who's on the report here. I'm sure they all start coming together after a while.

General Fitch: Well yes. After nearly 40 years. You know the thing about getting shot at, if it's nighttime you can tell it because about every third or fourth round is a tracer. If they ever quit shooting tracers you'd really be in trouble. When a whole bunch of tracers would start coming up towards your left wing, you'd turn your airplane to the right to get out of the way of the tracers. So had they not been using tracers they'd have hit a lot more airplanes because the tracers didn't help them at night.

Dr. Allison: I heard too that tracers didn't go where the real bullets went because they had a little bit different aerodynamics.

General Fitch: That could be. I don't recall ever hearing about a body count after that mission. Maybe that body count came after I left Vietnam. Dr. Allison: So if you were flying to avoid the tracers you might be flying into where the real bullets were. Anyway, that's just something I heard.

Do you think that affected you psychologically flying in combat like that?

General Fitch: Not a bit. Flying combat is a game.

Dr. Allison: You never were afraid to fly?

General Fitch: I wouldn't say afraid. I would say there were times when you were concerned because you knew where you were going, like between Haiphong and Hanoi and flying at night, single plane, low level like as few hundred feet above the ground. There probably were no other American aircraft in that route package, you were all alone, and you, the B/N and the aircraft were the focus of attention with the entire North Vietnamese air defense system. Everybody in the route package, every North Vietnamese gunner, was looking at you and wanting to take you and your aircraft out of that night sky. And of course that's why we flew low when we were up there. The pilot went where the bombardier/navigator essentially told him to go because you had an automated system and he was tracking aim-points and so forth on the radar, and giving you steering to the next turn point or IP. Then the display that the pilot was looking at was all geared to what he was looking at and the steering was telling you to go this way or that way. So fear was not a factor.

When I said it was a game you just figured the probabilities, and you always rationalized that they weren't going to hit you [chuckle]. But I have to say, when you had tracers coming over the wings and at the nose of the plane, you kind of wondered about your rationalization. That was called pucker factor.

When I came back from Vietnam just talking to some people they would say things like, "Well the way you described it; what you did over there... it was more dangerous for me to go drive my car on the beltway than it was for you to be flying a combat mission," and I'd normally say, "Probably so."

Dr. Allison: [Laughter].

General Fitch: But there were different aspects of it that those people driving on the dangerous beltway didn't get to see – like getting shot at. I know that I am repeating myself, but I told you that when I was going to go to downtown Hanoi to the radio station that February night, one of the most touching things that I ever encountered was when my maintenance officer; Terry Baker came

by my hooch to see me. He said that he wanted to fly that mission that night instead of me, and I said, "No, Charlie and I will be flying this one." Terry was a very thoughtful person. That night the SA-2 missile didn't miss us by much.

But anyway, back to the afraid question that you asked. Concerned; yes, diligent, yes, careful, yes, trying to outwit the AAA shooter with good tactics, yes, but again it is somewhat like a game where you were just figuring the odds were that you weren't going to have anything happen to you. I only got hit one time in Vietnam and that was due to stupidity on my part. I was flying an A-4 out near either Khe Sanh or in Laos. There was either a VC or a North Vietnamese in a hole; a fighter hole or a spider hole I think they called them, and that hole was probably about as big as this table. He had an automatic weapon of some kind in the hole.

The big inhibiter was that we had a cloud layer or ceiling that was probably three or four thousand feet at the most, so with a low ceiling combined with a poor thrust-to-weight ratio of the A-4E engine [J-52], you couldn't get much altitude or engine thrust to get up much speed. And so normally in a combat zone I want to make one run, period. Well when you start making repeated runs things can happen that are undesirable and that was the only time I ever got hit.

It was a stupid event. That hit was in the leading edge of the right wing, and I didn't know that until I was back on the taxiway at Chu Lai, and noticed that the right wing slat would not extend. I was very fortunate that the VC or NVA guy didn't get more rounds in the airplane because working underneath that cloud layer wasn't the smartest thing in the world to do. It also was dumb to make about six runs at that guy in the hole.

Dr. Allison: Did you hit him?

General Fitch: We were shooting rockets and did not have any bombs. I don't think we ever hit him because every time you'd start a run at him he'd drop down in the bottom of the hole.

Dr. Allison: You were talking about the Air Force earlier. At this time there was a big controversy with a single management for air in 1968 around Khe Sanh. Were you aware of that or any command and control issues or problems?

General Fitch: Not that particular issue, and there was no concern at the group level. We gave it no thought. But yes we had single management by the Air Force for a long time, but the wing didn't abide with that. They had an agreement between CG III MAF and CG Fifth Air Force. In fact in 2006 the USAF is ready to make another claim for establishing single management. But 35 plus

years ago, the Marine sector of South Vietnam under CG III MAF, which was I Corps, from the DMZ south by about 150 miles, the wing fragged their missions pretty much in the way that they wanted to frag them. I believe that 1st MAW gave the Air Force a certain number of missions a day for them to control, which was the Rolling Thunders for RP 2 north to RP 5 and RP 6.

Dr. Allison: The Air Force had control.

General Fitch: Yes, in a sense they did but in a sense they didn't. They were over in Thailand enjoying peace and tranquility, with a fine officers' club, with officers living out in town on the economy, with kitchens, hot showers and modern bathrooms. Some Air Force general was in charge, and I'll tell you a quick story about that Air Force general. I don't remember what his name was, but I believe his retirement incident happened after I was back in Washington.

Dr. Allison: Was it [William W.] Momyer?

General Fitch: No. It was not, Momyer. But what this general did was – and he was a three or four star, I don't remember which – but he was running this Fifth Air Force from an air base in Thailand. I don't know if he personally was flying USAF aircraft, but from the controversy about 1970 or so, I think that he was flying military aircraft. As best I recall part of the questioning of him by Congress was relative to his being able to pass a flight physical, then when he is ready to retire, he applies for 100% disability.

I don't know if he flew any combat missions. When he retired in the late 1960s or early 70s, he applied for something like 100 percent disability and got it. Shortly after that or maybe even during the congressional hearing, they started questions on how he could pass a flight physical and be actively flying, and then all of a sudden be 100% disabled. All that folded into a big stink, so to speak, relative to military retirements and disability retirements. So here this general was apparently just as healthy as a horse one day and the next day he's claiming he's 100 percent disabled for whatever reason. Then in 1975, there was a replay of that when a very senior Marine retired with a high percentage disability, and I believe that he still has it to this day.

Dr. Allison: Do you recall on the command and control arrangements that the Marine Corps and the Air Force made at that time?

General Fitch: The Air Force did have single management, and they also had high-level agreements with the Marine Corps which pretty much neutralized that single management. The essence of the high-level agreements were directed to the Fifth Air Force which technically had full control of aviation, and where the III MAF III Marine Amphibious Force now called III Marine Expeditionary Force or III MEF) had control of Marine aviation. Relative to I Corps, where CG III MAF owned all aviation operating in I Corps, plus he had responsibility for all aviation operating in Route Package 1. I Corps real estate went from the DMZ south to a line about 40 miles south of Chu Lai for all ground and aviation operations, plus Route Package 1 which ended about 80 miles north of the DMZ. CG III MAF controlled all ground combat units operating in I Corps.

At that point in time, III MAF had two divisions plus logistic support along with one Marine aircraft Wing (1st MAW) plus its logistic support. According to Pete Bonner, former 1st MAW G-3 in 1967-1968, for the Marine A-6A aircraft, CG Fifth Air Force fragged only the Rolling Thunder missions, where the norm was about four total Rolling Thunders a night for the Marine A-6As. That wound up a split of two Rolling Thunder a night for VMA(AW) – 533 at Chu Lai and two a night for VMA(AW)-242 at Da Nang. In the case of 533, the norm was as I said, two Rolling Thunders a night, but one of those would be deep like in RP 5 or RP 6, and the other would be shallow, like in RP 3 or RP 4. The wing stopped providing A-6As for Rolling Thunders with the advent of Tet, except for special missions such as the night of February 21, 1968.

From the single management standpoint, CG Fifth Air Force wanted the Marines to provide about 20 A-6A Intruder sorties a night in Route Package 1, to kill moving targets. The 1st Marine Aircraft Wing fragged those approximately 24 A-6A missions per night in RP 1, with a split of about 12 missions to 533 and 12 missions to 242. The Tally Ho missions for the Marine A-6As continued after Tet. The Wing had the option of increasing or decreasing those missions in RP 1.

Colonel Pete Bonner had been CO of MAG-14 when I was CO of VMA(AW)-225 (in MAG-14), during the period about October 1966 to about June 1967. I recently talked with Colonel Bonner, who I mentioned was G-3 of 1st Marine Aircraft Wing during the time (1967-68) that I was at Chu Lai. Pete confirmed the comments on USAF control in the paragraphs above.

Route Packages 2 through 5 belonged strictly to 5th Air Force, with Route Package VI Alpha belonging to the Navy. CG III MAF wanted Marine A-6As doing the Route Package 1 missions because Marine ground units were operating just to the south of the DMZ. Marine deep air support is based primarily on interdicting an enemies' capability to impact the ground battle within 24 hours. That is why CG III MAF had control of RP 1. The Marine strike aircraft also were provided to Fifth Air Force for strike operations in Laos.

The ridiculous part of that "aviation control" or single management by the USAF was that a lot of that targeting for Rolling Thunders was done right back here in Washington in the White House. This was where they would go in to President Johnson and say, "Okay Mr. President, we know we need to go here, here and here", and Johnson would say, "Okay" or he'd say, "No." This was very unfortunate that they had targeting in the White House, but they did. At least it's alleged that they did. But we had been there night after night on deep north missions where they'd just shoot the hell out of you when you flew by a logical target area. That was while enroute to an approved target. Then all of a sudden they'd decide at the White House that now you could hit the target back here where you were getting shot at so much. But it was a very poor system for running an air war in my view. It would be fair to say that it was not a system.

Dr. Allison: Any command and control issues with close air support around Khe Sanh or anything that you remember?

General Fitch: No, after you were airborne, you would check in on UHF radio with the 1st Marine Aircraft Wing Tactical Air Command Center, who in turn would give you a frequency to contact the 1st MAW direct air support center (DASC). The DASC would turn you over to either a ground FAC or an airborne FAC, along with the radio frequency to use. Or they might pass you direct to TPQ control. And normally you wouldn't really know where they were until they started giving you some indication of where they were, relative to a TACAN station. Then you would fly to that TACAN bearing and distance, which was very precise. At that point you would start working with the FAC, and they'd of course use the smoke and whatever means they wanted to use to direct you to the target.

Dr. Allison: It was all jungle, wasn't it?

General Fitch: Well a large part of it was jungle, except where they'd cleared the jungle with bombs.

Dr. Allison: Right [chuckle]. But did you ever lay eyes on the enemy before you could . . . ?

General Fitch: I never personally saw one. But bear in mind that in I Corps we were probably flying anywhere from 5,000 feet AGL to 8,000 feet AGL.

Dr. Allison: Except the guy in the fighting hole, at that time there.

General Fitch: Well I saw that one, yes, but that was because I looked at him too many times. I call that a dumb-guy flight on my part. No, you'd see him as you were turning in for an ordnance run, which would have you flying right over him. And if you did that, he would hose you down with his automatic weapon. Believe that I told you my A-4 was loaded with rockets that day. I wish that my aircraft had been loaded with MK-82s. With the cloud cover keeping us from getting faster than about 350 knots, dropping bombs would have been better than the rockets. I should add that the airborne FAC was trying to keep us making runs on this guy in the hole, and we made the mistake of obliging him.

Dr. Allison: Yes, otherwise you're just hitting smoke and stuff, right?

General Fitch: Yes. Or hitting relative to smoke. The wind would drift the smoke. In I Corps it was pretty much classic close air support for the Marines.

Dr. Allison: What do you mean by "classic close air support?"

General Fitch: The thing that people have to remember is that classic close air support for the Marines is a helluva lot closer than say an Air Force or a Navy definition of close-air support. I should add that the Viet Cong and North Vietnamese liked to dig tunnels, and they liked to have bunkers, deep under ground. In the A-6 during Tet, we would frequently carry about four or five MK-84 bombs (2,000 pounds each) with delayed fuzing. They would have us drop those in areas where they suspected that there were underground tunnels or bunkers.

Going back to that A-4E mission that we talked about earlier, where the recon unit was pinned down on the slope of that 3,000 foot hill -- where we had to fly down the slope since the Marines were near the bottom of the slope, I'd say we were probably at the most a hundred meters away from this recon unit when our ordnance impacted. But the key was that the airborne FAC knew precisely where the Marine recon team was relative to the VC, and he was talking to us and he was talking to the recon Marines, and the FAC was telling us where to drop. He would drop a

smoke, then as we rolled in he would say clock codes like, "Hit 30 meters to the right of my smoke."

Dr. Allison: Right. So were you aware of that at that time though; that Marine Corps CAS was different than Air Force CAS and Navy CAS?

General Fitch: Oh sure, I had known that from the time I was a new 2nd lieutenant in VMF-114 flying the F4U-5 Corsair.

Dr. Allison: That's how you grow up with it in the Marine Corps.

General Fitch: Yes, and it's probably an unkind comment but we're in Fairfax County and if this were a combat area with ground troops in some 20 different locations in Fairfax County, then to the USAF, dropping ordnance somewhere in Fairfax County is close air support—even if the ordnance is delivered a mile or two or ten miles from any friendly ground forces.

Dr. Allison: Right. Yes, they have a funny definition for it.

General Fitch: Just as long as it is in support of a ground unit then with the USAF and the USN that's called close.

Dr. Allison: That has to do with the Marine air-ground team.

General Fitch: We have to make sure that we maintain the integrity of the MAGTF. It is a tremendous force multiplier in combat. It is the combined arms team that provides the unique combat power of the MAGTF. There is a synergy there that is hard to define.

Dr. Allison: Coming out of Vietnam, you go on and have a very successful career involved in aircraft programs, development and policy, maybe some doctrine. How did Vietnam affect your later career when it came to those things?

General Fitch: For one thing it gave me superb experience in combat, where I was commanding an A-6A squadron and flying complex all-weather attack missions in one of the most highly defended areas in the world—at least the Hanoi area held that status up to that point in time. The number of

anti-aircraft guns (AAA) in North Vietnam defied the comprehension of anyone who had not flown those Rolling Thunder missions. At the same time NVN had a significant number of SA-2 surface to air missiles sites, and they didn't hesitate to shoot those missiles at you. Flying those middle of the night Rolling Thunders made you very much aware of the fact that an A-6A Intruder flying low level in Route Packages 5 and 6 was normally there all alone, not another American aircraft was in the sky in RP 5 and RP 6 at that time, except for an EA-6A forty miles away to the south that was giving you electronic warfare coverage. The entire North Vietnamese AAA/SAM defenses were arrayed against your single aircraft.

I spoke earlier about the tremendous firepower that would come to bear against a single A-6A aircraft penetrating the Haiphong, Hai Duong and Hanoi areas, and doing so at low altitudes in the middle of the night. During the one year that I spent at Chu Lai, I flew over 200 A-6A combat missions, with over a hundred of those missions against targets in North Vietnam. From the A-4E standpoint I gained a great deal of combat experience flying close air support and other missions, in I Corps in support of both Marine and Army ground units, and also on rare occasions, flying the A-4E across the DMZ into Route Package 1. I flew over 100 combat missions in the A-4E and TA-4F. All of that experience flying combat in the A-6A, the A-4E and the TA-4F, coupled with my command experience as CO of two squadrons, CO of a Marine Aircraft Group, CO of a Marine Expeditionary Unit in the Mediterranean Sea aboard amphibious ships, CG of a Marine Expeditionary Brigade (MEB) in Korea, and CG of 1st Marine Aircraft Wing, gave me an experience platform in the Washington scene, where I could hold my own quite well in any forum in OSD or with the Congress.

After my tour in Vietnam, my focus while on Washington duty was to ensure that to the best of my abilities, the most important thing was that the weapons system had to be capable of doing what they were supposed to do. The requirements needed to be demanding and the weapons systems needed to meet the requirements.

Dr. Allison: Aircraft maintenance?

General Fitch: Well the A-6A was high intensity maintenance. It required a lot of maintenance man-hours per flight-hour. I don't remember what it was, probably 60 to 70 maintenance man-hours per flight-hour, but the importance of a system working is brought home to you, when you'd go through so-called "harm's way" to get to where you're going and then if parts of the weapons system don't work, you get pretty unhappy. I'll give you an example. On this one particular mission, and it happened numerous times; similar thing, but you had a radar in the airplane, which

if it was working was a pretty good radar, and then you had various other equipments in the airplane to fly all-weather. But the key thing was to have the computer system and the inertial navigation system in the airplane working properly, along with the radar identifying the obstacles in your flight path and position update points, along with the radar presenting the target for the weapons drop, and then the weapons delivery system dropping the ordnance at the right time. The computer system had to be able to determine how the airplane would, based on altitude, air speed and so forth, and heading, to hit that target, and then all of this of course displayed to the pilot in the VDI. The vertical display indicator was a critical component, since the pilot relied on it to steer him to the target. At the same time you had to have a weapons system that would keep you alive, while flying over and very near to dangerous terrain on dark nights, where you couldn't see the terrain with your eyes. Flying the A-6A on a complicated mission was just about 100 percent instrument time.

Dr. Allison: I can see how that's important, making sure aircraft and weapon systems worked.

General Fitch: Well today it's remarkable with GPS [global positioning system] but with GPS a lot of people say, "Well that's the solution, that's the solution for a fixed target." If you want to bomb this house GPS will do a great job. If you want to bomb this end of the house or that end of the house you can pick between the two with GPS. If you want to hit six tanks moving through the area, then GPS is not the terminal seeker you need. So you also need systems and terminal sensors that will detect moving targets. For example the Maverick Missile is good. It has an IR seeker in the Maverick Missile so as long as it can see the target with the infrared system then it can hit the target. Then you have the option of a laser seeker in the Maverick. I understand that there is interest in producing more laser Mavericks. But you hear a lot of people talking about global positioning system and what kind of accuracy and that's absolutely great for fixed targets but it's no good for a moving target.

Dr. Allison: A different topic, leadership; you've led Marines in combat and peacetime both, what were some key leadership things?

General Fitch: Well you've just got to trust the officers under you, and again, it's making sure that everybody knows what you're trying to do regardless of what kind of unit it is.

Dr. Allison: In combat or peacetime.

General Fitch: It doesn't make any difference whether it's combat or peacetime or whatever. As long as the Marines understand, whatever kind of unit you have. If they understand what it is that needs to be done, and why, they'll help you do it provided that they know where they fit in. Because things like ordnance - you know a tremendous amount of ordnance - when you talk 3,000 tons of ordnance, delivered on enemy targets in a month, just 30 or 31 days, that's an awful lot of heavy bombs that go on airplanes. I don't remember how many Marines would be in an ordnance section – I'll make a guess and say probably 35, maybe 40 – but those Marines had to do an awful lot of work to get all those bombs loaded on an airplane and fused. The same thing applied to the mechanics of working the weapons system. Sometimes it would be just hours and hours of working on an airplane to get it back into an up-status. But as long as a man, or a woman I guess today, understands what it is you're trying to do then they'll do their best to do it. So I never studied a book on leadership but it turned out pretty well.

Dr. Allison: Sir, anything else on Vietnam; what was your wife doing during this time?

General Fitch: While I was in Vietnam, my wife, Margaret, was living in Annandale, Virginia, which is about ten miles from Headquarters, Marine Corps. She was teaching at North Springfield School.

But one interesting thing was - and this gets back to your comment about being afraid. I would not call this afraid; it was a matter of a Marine thinking he was pressing the odds on survival. I only saw one instance in 533 where an aviator got a little concerned about flying combat and his chances for survival.

Dr. Allison: They all wanted to fly as much as they could?

General Fitch: They wanted to fly combat. This pilot that I mentioned was a very good combat pilot and he did an excellent job of flying deep north against those tough targets. After a few weeks he asked to go back to flying. But I told you about that.

Dr. Allison: Yes, you did. You'd mentioned, I believe, that you only lost one crew there and that was an accident, wasn't it; an operational accident, or did you have others?

General Fitch: No, I lost more than one. I had several people residing up in Hanoi. We also had a plane shot down in Route Package 1, which would be in April or May 1968. Curt Lawson was the pilot and the B/N was named Brown. Brown had been in 533 just a short time. They were there for about five years. If my memory serves me well, I had three aircrews that went down while I had 533.

Dr. Allison: I couldn't find anything in the reports or anything where it would be mentioned.

General Fitch: Yes. One aircrew was Captain Jerry Marvel as the pilot and First Lieutenant Larry Friese was the bombardier/navigator. I forget which month it was, but I would guess it was early January 1968 when they went down. Jerry and Larry had been in 225 at Cherry Point when I was the CO of that squadron. I know that Larry Friese was in 533 by early November 1967, since he flew with me on November 11th. Jerry Marvel probably arrived Chu Lai about the same time—early November. So they had been flying combat in the A-6A for about two or three months when they went down.

But Jerry was captured nearly right away, and as I recall he told me about five years later he was only on the ground an hour or two before they captured him. I believe he walked into a group of NVA or civilians. We had to accelerate their flying the Rolling Thunders, since the main body of aircrews in 533 would be leaving about early May after a year in Vietnam. Both Marvel and Friese would have to be the experienced aircrews for the follow-on members of 533.

But even with the bit of urgency for them to be able to fly the tough missions, we worked them up in a methodical way on complexity and threats with the missions. They would fly a few I Corps missions in the daylight, then a few I Corps missions at night, and then we would put them on the schedule to fly the Tally Ho missions in RP 1, which were the flights where we were trying to kill trucks. As I mentioned we flew those Tally Ho missions at about 2,000 feet, so they were low pressure missions. Then we gave them easy Rolling Thunders where the AAA would not be too bad, and we proceeded with increasing threats at the targets.

But what happened to Marvel and Friese was, they were going into a target that Charlie Carr and I had been to a night or two before--and they got hit going in. The target was Hoa Loc Airfield, which was to the south of Hanoi about 20 to 30 miles. Charlie and I had hit Hoa Loc several times. I did not consider Hoa Loc to be an overly tough target, since the hardest part of the mission was for the B/N to carefully read the radar as you would let down in the mountains to the south of the target, then when you came to the ridge about 10 to 15 miles south of Hoa Loc, the terrain quickly dropped straight down to a few feet above sea level.

The key to flying that mission was to push over hard as soon as you cleared the ridge, so that your aircraft would not be hanging out at 3,000 feet AGL--- and be an inviting target for AAA or SAMs. I explained all that to Jerry Marvel the afternoon before he and Friese flew that night. I told Jerry that if you don't push over hard as soon as you clear that ridge, you will be flying at 3,000 feet AGL and you will be a grape for a SAM or the heavy AAA. And I told him that Charlie and I had been to Hoa Loc just a few nights earlier.

My guess is that Jerry didn't push over quickly enough to get to a lower level above the ground. I don't remember what they got hit by, but they got hit soon after they crossed the ridge, and probably 10 or 15 miles south of the target – it wasn't a SAM, probably a 37 millimeter – but the aircraft remained flyable—at least for a short time. And as I remember that ridge was about 3,000 feet high and this airfield was probably 10-15 miles to the north of the edge of the ridge. But then it was the kind of thing where Marvel said, when I talked to him five years later, "Yes, we were still flying so we got to the target and dropped the bombs, and then we had made a turn and were coming back toward the ridge when the airplane started coming unglued."

The A-6 had a bad feature. You had two J-52 engines in it --- and frequently when you'd get hit by a 37 mm, it would be in the bottom area of the fuselage, right next to those engines. A characteristic of the A-6 airplane was, when hit by a 37mm in the engine area, both engines just fell out of the airplane---which is kind of bad when you're flying an airplane over what we called at the time, "Indian country."

And so, the airplane held together until they got their bombs off and got turned around coming back out and if they'd have gotten another--in fact I guess they may have gotten back to the hills but Marvel, he got captured real quickly while walking in the flat lands between the ridge and the airfield. I think he told me back in 1972 that he blundered into a group of NVA. As a point, since they were heading toward the target and were probably eight to ten miles from the target, once they got hit the best thing to do was to keep going at the target and unload the bombs on it, then with bombs away they would make their 180 degree turn, which with less drag and weight on the aircraft, would then enhance chances of getting back some distance to the south—maybe even to Da Nang or Udorn in Thailand. Larry Friese would have played a key role in that decision, since he was an extremely good B/N and a very bright guy. Since Marvel and Friese would have been on the same UHF channel as the EA-6A supporting them, they would have made a Mayday call that the EA-6A should have picked up. Apparently they didn't do that, since at MAG-12 the next morning, all we knew was that they were down.

I have mentioned that both Marvel and Friese had been in 225 when I had it at Cherry Point. About a month after they went down, Charlie and I were in Thailand at Korat Royal Thai Air Base for a Red River Rat reunion, hosted by the 5th USAF. Red River Rats was an organization that started in Vietnam, with the members being those who had flown the Route Packages 5 and 6 missions, the Rolling Thunders. And this Korat Royal Thai Air Base was a fairly plush air base, especially compared to what we had at Chu Lai. It was all very civilized with air conditioned quarters, and all the things the USAF puts into a base. The River Rat event was a flight suit gathering with all the aircrews in flight suits of one kind or another. We're standing at the bar and this USAF pilot walks up to me and said, "I heard from one of your guys not too long ago." and I said, "Really?" He told me the call sign, which was Larry Friese's. You didn't have fixed call signs in 1967-68. In those days the call sign went with the mission that you were flying and if you flew a mission at 2200 at night you had one call sign and if you flew one at 0500 the next morning you had another call sign.

Dr. Allison: Yes. You had mentioned earlier you didn't have a personal call sign.

General Fitch: No. Those personal call signs have cropped up in the last 20 years or so. Like I know that General Jack Dailey has a call sign, "Zorro." If Jack Dailey were using the call sign Zorro in combat, and the enemy was doing communications intercepts as they would be expected to do, then it wouldn't be very long before Dailey might as well just have a call sign of Dailey.

But back to the Red River Rats and the Korat gathering-- I think that I was talking with a F-105 "Thud" driver or he may have been flying the F-4 Phantom. He said that a few weeks earlier he was flying in a large group of USAF fighters, bombing a target to the west of Hanoi. This USAF pilot said that when they dropped their bombs this downed aviator came up on his survival radio (we carried two UHF survival radios)– and he said, "Good show." This strike was in daylight. So, of course it turned out to be Larry Friese on one of his survival radios, and who apparently was up in a mountainous area looking down at the area that was being bombed. Anyway, he said, "Good show." He gave the USAF flight his call sign for the mission the night before. Of course when he came up on guard channel to talk with the USAF flight, he also gave his call sign to the North Vietnamese, since they would monitor guard channel.

Then the Air Force pilot started talking to Friese on the guard channel UHF radio frequency. They didn't talk long, and I guess the USAF flight leader tried to get Jolly Greens in to get Friese out, but they never could make contact with him or find him. I guess it was a day or two later he got picked up by the North Vietnamese and wound up sitting up North in a cell for five years. But that was an interesting aspect. Now that's one crew we lost.

Dr. Allison: Who were the others?

General Fitch: Then we had another one, which I believe happened before Marvel and Friese went down. This one was probably in November or December. Major Mack Wallace and his B/N, First Lieutenant "Papa" Murray" went down on a Rolling Thunder. I don't recall the route package, but it was probably a target in either RP 4, RP 5 or RP 6. Murray was an experienced B/N who had come over with the main element of 533 about May 1967. He had flown with me on a daylight CAS mission on October 30, 1967. Mack Wallace was a relatively new pilot in 533, and we had been scheduling him for the "combat training" missions we gave every new pilot or B/N, starting with daylight flights in I Corps, then night missions in I Corps, then Tally Ho missions at night in RP 1, then easy Rolling Thunders where the AAA defenses weren't too bad, such as shallow Rolling Thunders in RP 3 around Vinh, and finally Rolling Thunders in RP 5 and RP 6. As I said we tried to put an experienced pilot with an inexperienced B/N and we tried to put an experienced pilot.

We never heard anything from the Wing (1st MAW) on any intelligence indications that Wallace and Murray had been shot down. I suspect that they encountered some AAA that they were trying to avoid, and accidentally crashed in the process of doing evasive maneuvers, such as high "g" turns at very low altitudes.

I don't think that I told you about the aircrew that got shot down in RP 1 while flying a Tally Ho mission? That happened soon after I went back to MAG-12 to be the S-3 again. The pilot was Major Curt Lawson and the B/N was a young Marine named Brown. The B/N had not been in the squadron long, perhaps a couple of weeks. Lawson had been in 533 for probably three or four months. They were flying a typical Tally Ho in RP 1 where they were bombing trucks moving south. Route Package One was usually pretty sedate where you'd fly around about 1,500 to 2,000 feet AGL and the B/N would try to acquire the trucks with the moving target indicator (MTI), which was a mode of the radar system. The MTI could normally see a vehicle if it was moving over about ten miles an hour. It was normal to be sprayed with automatic weapons fire and some AAA such as the quad--four barrel-- 23 millimeter. Lawson and Brown as I recall were 15 to 20 miles above the DMZ when they were hit, and it was probably a 37 millimeter that hit in the bottom of the fuselage. The J-52 engines probably fell out. I should mention that we had heavy armor plate attached to the lower fuselage of all A-6As at Chu Lai.

When the aircraft went uncontrollable, the B/N, Brown, ejected followed by Curt Lawson. The bombardier/navigator came down close to North Vietnamese troops and was captured very quickly. He wound up a POW in the Hanoi area, probably at the Hilton. When the POWs came

320

back about five years later, they did not have kind words for how Brown had acted while a POW. As most are aware, there was one Hanoi Hilton in Hanoi, but the other POW locations were frequently referred to as a Hilton. As I understood it, POWs were moved from time to time to other "jails."

Major Lawson descended in his parachute and landed in the apex of a river that meandered back and forth about 15 to 20 miles above the DMZ. He was extremely lucky, since a hundred yards left or right or ahead or behind, and that would have put him on land. The NVA had dogs to track downed pilots, and the apex of that river was the best spot he could have picked – for those bad circumstances. As I recall Curt said that the river was probably 100 yards wide. It was about 2300 on the clock when he landed in the water.

When he lands in the middle of the river he gets out of his chute and harness, and either swims or walks (on the bottom) – I don't know how deep it was – over to the water's edge, and he finds a place under the river bank that is undercut, where the water has washed out below the bank and you can get back under the bank with about three or four feet--with dirt over your head. And he said later; a couple days later, that he hadn't been underneath that bank ten minutes and there were footsteps on the river bank above him, and dogs barking over his head. And so he's sitting scrunched up under this river bank because he probably had, you know, about 18 to 24 inches of air between the roof of the undercut and the water. This is about 11 or 12 o'clock at night – so he's got people all around him. Then there are swimmers in the water. And so he stays back up in his hole so to speak and comes up on his survival radio about six o'clock in the morning. He comes up on his radio and that's when the Jolly Greens started trying to get him out. The aircrews of the Jolly Greens were the bravest of the brave.

The Jolly Green helicopter (H-53) had a couple of A-1 Skyraiders flying cover/escort and strafing any threat. You may recall that I flew the Skyraider in the second squadron that I was in, VMA-324 in 1953-54, when we were aboard USS *Saipan* (a small straight deck carrier – CVL) out in Korea, and that cruise wound up as an around the world cruise, with our carrier *Saipan* going through both the Panama Canal and the Suez Canal. The Jolly Green (there may have been more than one) keeps talking to Lawson about coming into pick him up and that goes on all day long. During the morning and afternoon hours, the Jolly Green with its escorts made several attempts to come in and pick up Lawson. Each time AAA drove them off.

Lawson of course has to conserve his battery (he has two survival radios) and pick times to be on the air, and he had to let the Jolly Green helicopter know those times. As the S-3 of MAG-12, I queried the A-4 squadrons to see how many aircraft they could put up during the day in RP 1 to provide cover for the rescue. We offered the Wing G-3 about 120 sorties over the span of the day. The USAF was in charge of the search and rescue of Curt Lawson.

So we had a whole bunch of A-4s going up there and it's getting to be about 1800. Curt Lawson has now been sitting in that water for about 18 or 19 hours. While he sat under that river bank, all huddled up, he would look out across the river and see stacks of straw and tree limbs. Then he would see NVA walk out and pull the straw and limbs away, and there would be a AAA gun. He said there were numerous AAA guns across the river from him. I should add, that at this point in time, the North Vietnamese probably knew about where Lawson should be. For one thing they could have recovered his parachute.

At about 1800 this Jolly Green says to Lawson, "Okay, we're going to do it this time." The Jolly Green pilot tells Lawson that his helo is going to have two USAF A-1 Skyraiders flying escort for AAA suppression. Then the Jolly Green pilot tells Curt Lawson to pop a flare. It is still daylight. Lawson looks out across the river; on the other side of the river, and a flare pops. The NVA are monitoring the UHF transmission between Lawson and the Jolly Green. So he calls the Jolly Green and he said, "That flare is not mine" [chuckle], and then he pops a flare and throws it out there on the water and he said, "That's mine, the second one", and the Jolly Green (H-53) comes in and sets down right beside the flare. Lawson climbs out from underneath the river bank and goes running out through the water and climbs into the helo. They get him out. His B/N, Lieutenant Brown, as I said, ejected first and he came down half a mile or so from Lawson. The B/N wound up a POW for the rest of the war. That would have been from spring of 1968 to early 1973, as I recall. . . .

Dr. Allison: Interesting story, just a second made all the difference there.

General Fitch: About that, maybe a second or two between the two ejections. Then there was the loss about a week before I took over as the CO of 533. I told you about that one, with an easy target about 50 miles northeast of Haiphong. I think they probably flew into the water as they approached the target. Or they may have hit a hill. Or they may have been shot down.

Dr. Allison: That was in an operational accident, wasn't it?

General Fitch: Well it wasn't an operational accident. When you go down while attacking a target, even if it is a screw up in tactics, it is still a combat loss. I mean we don't know what happened to that pilot and B/N because it was a target up northeast; probably 60 miles northeast of Haiphong,

so it was up near the Chinese border. But what I think he was doing was some rather sporty flying which is a mistake to make when you're in combat, and especially at night. Anywhere it's a mistake. But we don't know whether he got too low and just hit the ground or water – or what happened to them. They just never came back.

Dr. Allison: Yes. Well that has to do with leadership right there sir. You're talking about you would have gotten rid of him.

General Fitch: I would have gotten rid of him in a heartbeat, yes.

Dr. Allison: So that's a type of leadership you've got to have in an air squadron.

General Fitch: You need to be decisive, and also to know what you are talking about. But anyway, that airplane got lost about a week before the change of command, and -I'm trying to think back. That was probably late September when they went down. This is the trouble, see, when you're looking back 40 years or something like that. I won't mention the pilot's name, nor the B/N's. They have an A-6E parked near the gate at Cherry Point, and their names are on that A-6E.

Dr. Allison: Charlie Carr would probably know. How's he doing anyway?

General Fitch: Oh he's doing fine. This is a photo of Charlie Carr, who flew with me when he was a 1st lieutenant and a captain. Within a couple of months after I took the squadron he was a captain. Charlie Carr retired as a colonel, but he should have been a general officer of Marines. When Charlie was CO of 533 in the 1980-82 time-frame, he deployed to Okinawa where I was the CG of First MAW. Charlie knew the name of every Marine in his squadron, and he knew all about their families. Charlie was a superb leader of Marines. He lost his right leg here about a month or so ago due to Salmonella poisoning. But no, I talked to him a couple days ago and he is doing well.

He had a remarkable career. Charlie Carr was my action officer for strike aircraft like the A-6 when I was Deputy Chief of Staff Aviation, which is now called the Deputy Commandant for Aviation. It was Charlie and a couple of other bright lieutenant colonels, like Dave Seder, who in late 1983 convinced me that the A-6F Intruder was not survivable against the threats of the 1990s and beyond. At the time, Charlie had nearly 700 combat missions in the A-6, after three tours in Vietnam, with the last tour flying with VMA(AW)-224 from the aircraft carrier, *Coral Sea*. The A-6F in 1983 was in development as a follow on to the A-6E. That presented an awkward situation,

since the Secretary of the Navy, John Lehman, was a big advocate of the A-6F. But I can talk about that at a later date, Charlie also was CO of MAG-14 at Cherry Point, about 15 to 20 years after I was CO of MAG-14.

Dr. Allison: He was a pretty rowdy kind of a guy, wasn't he, in Happy Hour and stuff like that from what I've heard? I don't know.

General Fitch: No, not that I ever knew about. But Charlie, he's a pretty exceptional guy, clearly the finest A-6 bombardier/navigator that ever came down the pike, and he is one of the happiest Marines I ever knew. Charlie enjoys life!

With your oral history program, you should try and do an oral history on Charlie Carr. He had a remarkable Marine Corps career from private to colonel. As I said, he should have been a general—at least a brigadier. I used to hear about Charlie lacking a college degree, but that doesn't wash, since as I recall, Al Gray never had a college degree. Lack of a degree didn't seem to make a difference for Al. But back to your question, I never heard anything bad on Charlie, and I never heard the rowdy comment

Dr. Allison: Did you get a chance to go on R&R during your time in Vietnam?

General Fitch: Yes, in December of '67 when I had been at Chu Lai about six months.

Dr. Allison: Where did you go during that time?

General Fitch: Hawaii. It was easy to get a commercial flight out of Da Nang. They ran those commercial R&R flights every day from Da Nang. My wife met me in Hawaii and I guess we were there four days, and then I went back to Vietnam. The total time with travel was probably six days away from Chu Lai. Later when I gave up 533, the 1st Marine Aircraft Wing sent me back to the states to attend a training conference. They wanted me to talk about how we trained A-6 aircrews once they arrived overseas and were ready to learn how to fly combat With the new aircrews coming into 533 that would be a fast pace, since the original members of 533 who had come from Cherry Point when 533 deployed, would all leave Vietnam around May 1st

The training conference they sent me back for was at El Toro. It was at that conference that Lieutenant General Fitch first met Colonel Tom Miller. During my talk on A-6 training, he would disagree with some of my statements about how we trained aircrews after they arrived in

Vietnam. In response I would tell him, "That is the way that we do it, colonel." A couple of months later I was told that I would be working for Colonel Miller at HQMC when I returned Washington the summer of 1968. I soon found that Tom Miller wanted Marines working for him who would tell him what they think rather than tell him what they thought he might want to hear. He's a great man, and a great Marine! Tom Miller is also a legend in his time.

Dr. Allison: I see. More on your tour in Washington later, but on the lay out at Chu Lai, I wanted to ask, how many A-4 squadrons did MAG-12 have?

General Fitch: As I remember it, we had four or I guess it was five A-4 squadrons on the east side of the field, three F-4 Phantom squadrons and a MAG-11 headquarters on the west side, plus of course there was VMA (AW)-533 on the west side. There were also some Army headquarters at Chu Lai, north of the MAG-12 area, but I never paid any attention to them. I think that I did go to the Army area one time to get a hair cut. The Vietnamese barbers that we had at the MAG-12 PX were not the most sanitary barbers. Since we suspected that all the barbers at the PX barber shop were VC at night, you had to wonder where those clippers had been before they started cutting your hair. You could say the same for the barbers in the Army compound.

Dr. Allison: And you each had your own hangar?

General Fitch: I think it was MAG-11 that was on the other side, with three squadrons of F-4s as I remember it. They may have had four squadrons. I only visited MAG-11 one time in the year I was at Chu Lai. That was to attend some kind of flight operations meeting, and I remember talking with Colonel Phil Shutler, who at the time was XO of MAG-11. I believe that I mentioned earlier that I checked out in the F-4 Phantom in 1964, while I was working in SecNav R&D, but when I arrived Chu Lai I had only about 15 hours in the Phantom, compared to about 350 to 400 hours in the A-6A Intruder.

Regarding the F-4, as I remember it the Phantom had a limit Mach while carrying the MER/TER (without bombs) of 1.1 indicated Mach number [IMN]. One time when I did talk with the CO of MAG-11, I suggested to him that at night when his F-4s were finished with a bombing mission, and if they were clean of bombs but still had the MER/TER attached, they could make a 1.1 indicated Mach run at about 6,000 feet AGL over Ashau Valley, out to the west of Khe Sahn. The 1.1 Mach of course would be supersonic and would cause a boom and over pressure. I told him that the Mach 1.1 shock-wave would collapse the tunnels that the Viet Cong in Ashau Valley

occupied a lot of the time. If the supersonic run did not collapse tunnels, then it would keep the Viet Cong and North Vietnamese awake all night. I think that this would have been very effective at night in collapsing those tunnels where the VC were trying to sleep, and it would keep them awake even it they weren't in a tunnel. He told me that he wasn't interested in doing that. So, to the best of my knowledge, there was never an F-4 flying supersonic at low altitude at night over Ashau Valley.

Dr. Allison: MAG-15 was at Da Nang I believe.

General Fitch: But my squadron was on the west side of Chu Lai..

Dr. Allison: With the Phantoms; with the fighters?

General Fitch: Yes. What you had for the F-4 squadrons were these huge hangars and 533 had this small hangar; the one that got blown down with the advent of Tet. But I'd say they were a quarter of a mile away. Regarding the A-6 squadron at Chu Lai, it had been there about three months when I arrived. The F-4s had probably been at Chu Lai for a year, maybe two years, when I arrived.

Dr. Allison: Any special memories about off duty activities at Chu Lai, the O Club, happy hour?

General Fitch: No, I don't recall there being a happy hour at the MAG-12 O Club. That doesn't mean that there wasn't a happy hour, but I doubt it since drinks were so cheap without one. I believe that I mentioned that the MAG-12 officer's mess used part of the O Club for seating. But the reason being is that the only other airplanes in MAG-12; besides the A-6, was the A-4s and most of their flying was in the daytime and they didn't fly that much at night, in fact very, very little at night and that was usually under flares or whatever. But no, I'd say the happy hours were very well attended, if there were happy hours (and I don't remember them), but if you happened to be in A-6s you had a problem because our normal takeoff times, depending on the time of the year, were anywhere from about six o'clock in the evening up until 4:30 or five o'clock in the morning. You couldn't go to the bar under those circumstances. By the way, the food was great.

Dr. Allison: Is that right?

General Fitch: Yes, they had an officer's mess right there as part of the club, so to speak, probably taking 25% of the MAG-12 Officer's club building. The club had a straw-thatched roof and it was very picturesque, but it burned down a year or two after I left Chu Lai. But no, the O Club was well attended. No one ever got rowdy that I saw.

Dr. Allison: Okay sir, anything else on Vietnam? I guess you were pretty glad to get home after that.

General Fitch: Yes, you were glad to get home. But all good things must end, and around April 8, 1968 we had the 533 change of command. Two days before that change of command, on April 6th, my log book shows that I flew a night mission in the A-6A with Lieutenant Brown as my B/N. It was a TPQ. Lieutenant Brown of course was the B/N that was shot down with Curt Lawson in RP 1, with that shoot down probably taking place in May. Brown unlike Lawson, spent about five years in a Hanoi jail.

I note that my log book shows that on April 7, 1968 I flew my last A-6A mission as the commanding officer of 533. From then on, during May, June and July 1968, I would fly the A-6A about half a dozen missions a month and I would fly the A-4 about 25 to 30 missions a month. For the rest of my tour in MAG-12, I would be the group S-3 operations officer, except for the last two or three weeks when I would be executive officer of the group. Sometime in the last 10 days of July 1968, I left Chu Lai and headed for the states. I had logged just over 200 combat missions in the A-6 and just over 100 combat missions in the A-4. But it was not a long year because you were so busy. And when there was spare time, there was always the beach next to your hooch where you could swim or take the sun. Charlie Carr looked like an Indian the entire 12 months that he was at Chu Lai.

Dr. Allison: Back to working for Tom Miller at Headquarters, how did you get that assignment?

General Fitch: I had been back at Chu Lai from R&R, probably three or four months when I went to El Toro for a training conference. That was right after I gave up the squadron around early to mid-April.

This was a 1st MAW tasking for me to go back to CONUS, and I flew back to Washington, where I went to HQMC to talk about my next assignment. The lieutenant colonel monitors told me that they wanted me to go to the Naval Air Test Center at Patuxent River. I told them I couldn't think of anything as a lieutenant colonel that I wanted to do at Patuxent River. And so they said,

"Well where do you want to go", and I said, "Headquarters Marine Corps". So that's why I went to Headquarters Marine Corps where for the first year I would work for Colonel Tom Miller. I should note that back then, in 1968, as an aviator you did proficiency flying at Andrews AFB.

After the talks at HQMC, I flew to Los Angeles for the training conference at MCAS El Toro. My wife, Margaret Marie, was out of school (she was a teacher) for a few days while she accompanied me to El Toro. I would guess that my time back in the states, with the visit to HQMC and the training conference, was probably on the order of ten days. The training conference was where I met Colonel Tom Miller. I think I told you about that.

Dr. Allison: Yes you did, where he kept disagreeing with you in your talk. . . .

General Fitch: He kept interrupting me and saying, "I disagree." and I said, "Well that's the way it is, colonel." Of course for the A-6, I was talking about the training for the tough missions, the Rolling Thunders, where they would be at night, in Route Packages 3, 4, 5, and 6, with the majority of them in RP 5 and RP 6, and where the air crews would have to fly low level against an intense AAA and SAM threat. One of the big elements of those flights and the training that was needed, bearing in mind that we did not have forward looking infrared [FLIR] and we did not have terrain following radar, was teaching aircrews how to get down to 400 to 500 feet AGL at night in all kinds of terrain, including mountainous, in all kinds of weather, and in the dark of the night. I believe that I told you, for the deep north missions we liked a very dark night, and some bad weather thrown in, was welcomed. And when they learned how to do that, they had to maintain their confidence level in their tactics while being shot at, with anything from automatic hand held weapons to anti-aircraft guns to SAMs.

I was a lieutenant colonel and General Miller at the time was a colonel. Apparently he liked my replies to his disagreements. Later he would ask at HQMC that when I came to Washington, I would work for him.

I should mention that Lieutenant General Tom Miller and I, along with our wives, have been close friends for nearly 40 years.

Dr. Allison: Where was it you were working there in the Department of Aviation?

General Fitch: Yes, and my job there was initially – I guess I got there maybe in late August '68. That's a guess – my job initially was having the A-6 and the A-4 programs as an action officer in Code APW. And then probably – I don't remember exactly – but probably six weeks, two months after I got there Colonel Miller was going to go to England to fly an airplane called a Harrier. Bud Baker was a lieutenant colonel and his desk was about ten feet from mine. Bud had also been through test pilot school. Colonel Miller and LtCol Baker were going to go to the UK to fly the Harrier. They did that trip to Dunsfold about November of 1968.

They came back with a glowing report about how versatile the aircraft was, with vertical takeoff capability along with rolling short takeoffs, plus the capability for vertical landings and roll-on landings at extremely slow airspeeds. In essence the Harrier could effectively operate from a short strip with a hard surface of about 1,000 feet or less, and do it very effectively with significant ordnance loads. At the time it was very important that the Harrier development was in the final stages, and both the Royal Navy and RAF intended to operate the aircraft.

General [Keith] McCutcheon had Aviation and he was a prince of a gentleman and highly respected. You had asked me what I thought of McCutcheon. I greatly admired General McCutcheon. But on a comparative basis, when you look at all the great things that McCutcheon did for his country and the Marine Corps, starting with pioneer work with the helicopters in the Marine Corps in the late 1940s, when it comes down to the magnitude of contributions to country and Corps, I put Tom Miller ahead of McCutcheon.

Dr. Allison: Is that right?

General Fitch: Absolutely. Both were giants as Marine officers, but I feel that General McCutcheon has to yield to Tom Miller when you count contributions to our country and the Marine Corps. Now that's not to denigrate McCutcheon at all. It's just that if you looked at the span of what was done for Marine aviation I felt Tom Miller did more for Marine aviation overall than what McCutcheon did. McCutcheon was a great leader, and highly respected. I don't know if you knew how McCutcheon became the Assistant Commandant and a four star general for a few days. Do you?

Dr. Allison: No, I don't know that.

General Fitch: Well I might as well tell you that, as I understand it because I have to say things while I remember them.

Dr. Allison: I'll be glad to hear that story.

General Fitch: General McCutcheon had liver cancer while he was a three star and had III MAF in I Corps of Vietnam. For a period of time he was treated for liver cancer on a hospital ship near Vietnam. When he was transferred back to Bethesda Naval Hospital, it was clear that Lieutenant General McCutcheon did not have long to live. General Chapman at the time was the Commandant and Chapman greatly admired McCutcheon. In fact had McCutcheon lived there was an awfully good chance McCutcheon could have been Commandant of the Marine Corps.

Dr. Allison: The first aviator Commandant. That's what a lot of people say.

General Fitch: Yes. And so McCutcheon is in his final days from liver cancer and General Chapman arranges with OSD and the Congress to get McCutcheon promoted to four stars. As I recall, and I would guess that the year was around 1971 or '72, General Chapman goes to Bethesda where he finds General McCutcheon dressed in his Marine uniform with three stars on his shoulders. Remember this is hearsay on my part. According to the story as I heard it, General Chapman promotes Lieutenant General McCutcheon to full general, four stars, and a few days later General Keith McCutcheon passes away.

Dr. Allison: Interesting! Now back to Aviation and working for General [Colonel at the time] Miller.

General Fitch: Backing up, General McCutcheon had Aviation and I had the A-4 and the A-6 desk in the weapons requirements branch, where I worked for Colonel Miller. In the same office with me were Lieutenant Colonels Clay Comfort and John Metzco. John Metzco was involved in looking at new technologies, and it was John who first read about the Harrier successes in the UK. He in turn got Colonel Tom Miller interested in the Harrier with its V/STOL [vertical/short take off and landing] capabilities. Colonel Miller wanted John Metzco to go to the UK with him to fly the Harrier, but the Brits said that the pilots had to be graduates of a test pilot school, which Metzco was not. Clay did a similar effort with advanced technologies, which was a natural endeavor for him, since he held a master's degree in aeronautical engineering from Monterrey. Clay would soon relieve John Metzco when John finished his tour in the Air Weapons Systems Branch.

In later years (1972-73) when I was commanding MAG-14 at Cherry Point, Clay would be one of my A-6 squadron commanders (VMA(AW)-332), and he would later serve as my executive officer in MAG-14. Both Comfort and Metzco were deep thinkers, and extremely fine Marine Corps officers. Clay would later be a major general in the Marine Corps and would be the CG of the 3d Marine Aircraft Wing. He was a truly great friend, and he passed away from lymphoma in October of 2004. I flew out for his funeral in Lawrence, Kansas, and that was indeed a sad day. On November 17th he would be buried in Arlington Cemetery, and I would attend that burial, not knowing that two days earlier I had had a severe heart attack—a heart attack with none of the classic symptoms.

Then as I mentioned, Colonel Tom Miller and Bud Baker go fly the Harrier over in England, about November 1968, and they come back after a couple of weeks with this glowing report, where they convince Major General McCutcheon that the Harrier is a mature technology and ready to go into operational squadrons. General McCutcheon and Colonel Miller in turn convince General Chapman that the Harrier is the way of the future for Marine tactical aviation, and it will be the first step in the all STOVL force. General Chapman agrees that the Marines will trade 94 F-4s for the funds to procure some number of Harriers - I think it was 150. I don't remember exactly – and so everybody agrees to that. The Navy is very supportive.

Dr. Allison: They're very supportive of the Harrier-the Navy is at this point?

General Fitch: Yes, at that point. Well what it really came down to is they didn't want to buck McCutcheon. McCutcheon had the Commandant behind him.

Dr. Allison: He had that much clout or . . . ?

General Fitch: Well he was just highly respected, yes. In fact that was-- normally OP-05 who was the "Daddy Rabbit" for Navy aviation; they usually got along extremely well with whoever was running Marine aviation. That was when the Navy had the so called "barons," who were three star admirals, with a baron in charge of Navy aviation, and other three star admirals as the barons in charge of Navy surface warfare, and sub surface warfare. Having looked at the Navy's organization over the past 20 or so years, with the N-8 running most of the Navy, I have to go with the barons. The Navy has been exceedingly unhappy that the Marines have had a three star general in charge of Marine aviation for the past 32 years. If you ask most admirals today what a MAGTF is, most will say, a "MAG what." It is also relevant that the Navy has been pressing the Marines for many years, ever since they came up with the N-8 organization, for the Marines to have a similar organization. While the Marines have wavered a time or two, throughout the years the Marines have stood fast on their current organization of HQMC. They need to continue to stand firm.

But back in the 1965 to 1984 timeframe, it was only in rare instances where you would encounter a personality in either the Navy or the Marine Corps where there was friction. We had our differences, but we were all gentlemen about it.

Dr. Allison: Who had OP-05?

General Fitch: As I recall it was Vice Admiral Bill Houser who was OP-05 at the time. He agreed on the number of F-4s for the Marines to give up for the necessary funds in a trade for Harriers, which I recall was 94 F-4 Phantoms were traded in order to create the funding to buy about 150 Harriers. During the first year after he and Baker had flown the Harrier, Tom Miller is pretty much the spokesman when anyone wants to talk Harriers, V/STOL, or STOVL. Even though he's a colonel he still does most of the talking relative to Harriers, whether it's congressional committees or OSD or OPNAV, or wherever.

A few weeks after they returned, it was decided that Bud Baker would go back to London to work on the Harrier in the Ministry of Technology. Bud Baker would work with an air commodore – the last name I forget. Bud would be in the Ministry of Technology for a couple of years, with the underlying thought that he'll come back and be CO of the first squadron -- which would be VMA-513. So Baker leaves just about immediately –and I inherit the Harrier desk from him. He was the Harrier project or action officer for about a month. So then it becomes a matter of my working very closely with Colonel Miller, and I'm writing things like the Harrier concept of operations [ConOps], putting those ConOps into what would later be called the "Gold Book." Soon after the program was underway, General McCutcheon told me that he wanted me to get the airplane designated as the A-8A.

Dr. Allison: Why was that?

General Fitch: I started negotiating with OSD on the A-8A designation, because you had to go to OSD to get an aircraft designated like McCutcheon wanted. There was some office there that you had to get to agree to the designation of the airplane – and I would talk with them and they insisted that it had to have a "V" in it because it had a vertical takeoff capability. So it became the AV-8A where I had wanted the A-8A designation and McCutcheon had also wanted the A-8A. It is an interesting observation that some 39 years later, with the Marines preparing to establish initial operating capability [IOC] with the F-35B in 2012, that the F-35B is a short takeoff, vertical landing aircraft (STOVL), and there is no "V" in its designation. The vertical takeoff is another

capability with the F-35B Lighting II, but the Marines have stopped giving consideration to vertical takeoff as a practical takeoff operation. A short rolling takeoff gives you so much more capability. But with the Navy, vertical takeoff could still be used in defense of capital ships against threats such as small boat threats. Of course the Navy has chosen to go to armed H-60 helicopters for small boat defense. The Navy's refusal to allow STOVL on the aircraft carrier costs them a lot in tactical flexibility.

Dr. Allison: They didn't want the "V" in there?

General Fitch: No. To the best of my knowledge it was that bureaucrat in OSD that insisted the Harrier had to have a "V" in its designation. But that has not been the case for the F-35B STOVL.

Dr. Allison: I wonder why?

General Fitch: Well I'll tell you why. Because let's see, that was late 1968, early '69, so that's nearly 40 years ago. So the answer to your question should be, "There never was a good reason for the Harrier to have to have a "V" in its designation. It should have been the A-8A as McCutcheon wanted it to be.

The F-35B will routinely do a short takeoff and land vertically, but there's no "V" in its designation. So whoever had decided about 35 plus years ago that it had to have a "V" in the A-8A, well they're gone into retirement, and so much for that. It was just a bureaucrat in OSD and he said, "No, you've got to have a "V" in it." So we had to have a "V" in it to get their approval. That was about 1968.

During the time that General McCutcheon was still at HQMC, which was about a year; roughly a year after I arrived in his Department of Aviation, maybe a little more before he took III MAF.

Dr. Allison: You did work on the A-4M while you were there. That was a great airplane.

General Fitch: Yes. The competition with the A-4M was the A-7 Corsair II, which the Marines did not want. McCutcheon would not even consider the A-7. In AAW as a lieutenant colonel I was given pretty much *carte blanch* where I decided what the configuration of the aircraft should be. I would take my recommendation to Colonel Miller, and there never was a position that I took on the A-4M configuration where Colonel Miller disagreed with me. In each instance I would discuss my

logic with Colonel Miller and then we would get General McCutcheon to agree. And there were capabilities and deletions that I thought the A-4M should have and the first is the radar. I forget the designation of the radar but it had been in the A-4B/C/E/F, earlier A-4 aircraft, and the radar never had worked. I probably flew the A-4 with 10 different squadrons over the years, and that radar was a piece of junk.

Dr. Allison: Was it a ground mapping radar or what?

General Fitch: That is a good question. It was supposed to be ground mapping but it didn't work. In the A-4A/B/C/E we were just hauling around something we didn't need. And of course the contractor would always tell you they'll get it to work and all that but I didn't believe them. That was Douglas Aircraft Company.

At Chu Lai I had frequently stood the alert when I was S-3 of the group, and I'd be scheduled to fly with an A-4 squadron that had the alert. That meant an alert pilot was to be airborne in ten minutes after we were told to scramble. In each A-4 squadron we had two little compressed air starters and we called them "huffers" or "puffers" or something like that. They would hookup the air hose to the A-4 aircraft and turn the huffer on. As I said, you had an air hose that was plugged into the airplane. With all that, then the airplane wouldn't start. So then they'd go get the other huffer, because they only had two in each squadron. They'd bring it over and the airplane wouldn't start because that one wouldn't work either. So then they'd go to the squadron next door and get another huffer. Well by then 30 or 40 minutes would have gone by.

So with that experience with poor support equipment such as the huffer, I decided that rather than rely on an external starting system such as the huffer, we would give the A-4M self-start capability. I told, then Colonel Miller, "We want to do this and here is why." and he said, "Fine, do that." Keeping General McCutcheon informed we would then send correspondence to NavAir to make the self start happen in the A-4M.

And then back when I was initially doing the bomb racks up at China Lake I had to fly to various places to put on static displays or demos of some kind. So I would land with 16 MK-81 inert bombs on the airplane (sometimes it was HE) and you had to have a little higher airspeed for the higher gross weight when you were landing. The heavy weight with the bombs then made it interesting to stop the A-4 on the runway without having a tire problem. That was true even on a long runway, and especially at an airfield like MCAS Yuma or MCAS El Toro. It was a little bit on the sporty side as to just when you were going to stop the aircraft, when you had 16 or 18 bombs hanging on it. You didn't want to use the brakes so much that you set them on fire or blew

out a tire. So I decided the airplane needed a drag chute. Then flying combat, from time to time you might have unexpended ordnance to land with. I was convinced that the A-4M needed a drag chute.

So at some point in 1969 I told Colonel Miller that we ought to put a drag chute on the A-4M and I told him why, and he said, "Fine, do it." So anyway, as a lieutenant colonel I was able to decide what the configuration of this A-4M airplane would be and that's what went into production and which was around for, I don't know, operational for twenty years or so. I think they retired it in the late 1980s. The A-4M was a very good aircraft and pilots loved it.

Dr. Allison: And didn't it have a lot of different electronics behind the canopy?

General Fitch: It did, right under the shellback.

Dr. Allison: Was that ECM [electronic countermeasures] gear?

General Fitch: Yes, some of it was. It has been so many years since I flew an A-4M that I forget a lot of details. I enjoyed flying the A-4M and I have a lot of hours in it. But again, that's essentially how a staff job works.

Dr. Allison: Well you had to have a lot of credibility to get the carte blanch authority.

General Fitch: I had a fairly free rein on deciding what the configuration should be, but then I still had to explain it to Colonel Miller and to General McCutcheon. After they left it was explain it to Colonel Finlayson and General Hill. But, within the Aviation Department in the period 1968 to 1970, I had a lot of credibility by virtue of my China Lake tour in VX-5 and my work on the multiple bomb racks, plus my combat flying was not considered to be shabby. Then you tie that in with my flying the A-4 a lot in Vietnam. Not too many people questioned me about things.

But that's pretty much how the staff job worked where you had a given area of responsibility and so you're kind of the "Daddy Rabbit" for whatever that area happens to be, and people rely on you to be correct in what you recommend. It would be fair to say that action officers in the current Department of Aviation at HQMC in 2007 work in exactly the same way--- although they probably have a few more regulations and approval routes to abide by than I did. When I was DC/S Aviation 1982-84, I wanted action officers to give me the details. Being on my fifth tour in Washington, I could understand them.

Dr. Allison: Didn't the A-4M also have a bigger engine in it too? Didn't you get a bigger engine?

General Fitch: Yes, it had a little more thrust in it.

Dr. Allison: How much time did you spend on the Harrier project?

General Fitch: Well the Harrier took a tremendous amount of my time both internally to HQMC and with OSD, the Congress, and the congressional staffs. The way that worked out, and especially after Colonel Miller became a brigadier general and moved to HQMC G-3, with Lieutenant Colonel Bud Baker in London at the Ministry of Technology, I was the one who had to answer the tough questions. Colonel Tom Miller was selected for brigadier general, as I recall about a year after he had gone to England to fly the Harrier. He moved from Aviation to HQMC G-3 about late summer or early fall of 1969, so I worked for him for about a year on that tour. After that I worked for several more colonels in Aviation Requirements Branch.

Dr. Allison: Finlayson?

General Fitch: Yes, I worked for Colonel Ed Finlayson and then Colonel Herb Mendenhall. Starting in the summer of '69 I worked for Colonel Finlayson for about five or six months, then Herb Mendenhall relieved Finlayson. Colonel Mendenhall had been a captain in my first squadron, VMF(N)-114, where we were flying the F-4U Corsair, and I was a brand new second lieutenant right out of flight school. Colonel Mendenhall wound up replacing Finlayson as the head of the Air Weapons Systems Branch of Marine Aviation. I then worked for him for about five or six months. And then we had another colonel in the office named Noah New, and Colonel New took over when they moved Mendenhall somewhere in HQMC, just before I left. I believe I worked for Noah New about one or two weeks before I was able to detach and report to National War College in August 1970.

Most of my work, especially the last year from summer 1969 to summer 1970, was on the Harrier program. Now relative to that, several months before General McCutcheon left they called me down to his office one day, and General McCutcheon said something like, "Fitch, what is it you're supposed to do?" I said, "General, I've been selected to go to the National War College." He said, "No. We're not going to let you go to school." He added," I have deferred Colonel

Shutler from school and I am going to defer you." I didn't argue with him. It is fair to say that one did not want to argue with General McCutcheon.

And then, as I recall, it was late fall of '69 that McCutcheon left HQMC to take III MEF in the I Corps region of Vietnam, and Major General Homer Dan Hill replaced him as Deputy Chief of Staff, Aviation. Aviation was still a two star job at the time, and would be for ten more years. Tom Miller would be the first three star to run Marine aviation, and I would be his executive assistant (EA). He got his third star in late 1975.

As best I could tell General Hill had very, very little background in Washington and I would guess very little experience in dealing with the Congress and OSD. So as it turned out General Hill never went anywhere, whether it was over to OPNAV, OSD or up to Congress or wherever, that he didn't take me with him. It seemed it was just in case there was a question about the Harrier.

At that point in time there were ongoing negotiations between the Brits (Ministry of Technology) and the United States that includes negotiations between Hawker Siddeley and McDonnell Douglas Aircraft Company. The substance of those negotiations was that if there were to be a second version of the Harrier; an AV-8B, it would be built in the United States. About a month after General Hill and I were at the 1970 Harrier hearing with the Senate Appropriations Committee, Hawker Siddeley and McDonnell Douglas signed that agreement where McDonnell Douglas would be responsible for designing and producing the follow-on to the AV-8A. Hawker Siddeley as I said was the company that was developing and test flying the AV-8A Harrier. Later I believe that Hawker Siddeley became part of BAE. I'm not sure just what all happened over in the UK in those later years after the early 1970s. The point being that now McDonnell Douglas in St. Louis, Missouri, is the American counterpart to Hawker Siddeley in UK, and they're all supporters of the AV-8A Harrier program.

Dr. Allison: Well that had to be a big hurdle to get over-- that it was a British aircraft, how it was done.

General Fitch: Well actually it was the only major hurdle, and again, this gets into forward thinking with McCutcheon and then Colonel Miller, where the two of them kind of think out front – or as some would say "out of the box," which becomes very important in conveying just how you want to do things. And in those few months where we were figuring out how to pay for Harriers and how we would use them and all of that, the program was sorted out for the all STOVL force. For Marine TacAir the decision was made nearly 40 years ago that the Marine Corps would go to an

all-STOVL force. The only thing that wouldn't be STOVL would be the KC-130; on the other hand, while not STOVL, the KC-130 aircraft is pretty good at short runway operations, where it can do very well on a 3,000 foot strip.

So that concept came around very rapidly and McCutcheon in his hearings, which he would have had in that case in the spring of 1969 where he would have been appearing before the various defense committees on Capitol Hill, all that was sorted out in that roughly first year of us trying to acquire the AV-8A. And then because it was a production airplane it was a question of how fast the money could be made available and where it came from relative to those 94 airplanes that we traded off to get them. And when McCutcheon had told me that he wasn't going to let me go to school he had around another month or two before he would be relieved by General Hill. And so when General Hill is there he becomes essentially totally dependent on me relative to anything Harrier. With that my going to National War College remains very iffy.

Dr. Allison: You had mentioned that 1969 was a sad year for you.

General Fitch: Simultaneously with my being busy with the A-4M, a little busy with the A-6A and very busy with the Harrier, during 1969 a great deal of sadness entered the lives of the Fitches. For several years, probably about eight or ten, my parents had been living near Winter Haven, Florida. On September 16th my mother passed away in the Winter Haven hospital. She had been ill for several years, first from kidney failure and various illnesses including cancer, that had her mostly bed ridden the last year of her life. She was buried in our cemetery plot in Fort Meade, Florida, with her funeral held at the Moody Funeral Home in Fort Meade. I had known Dan Moody since we were young boys.

My father then became rather a lost soul, and I flew down to Orlando several times during the two months after my mother's funeral. On November 28th, just two months after our mother's passing away, I received a phone call telling us that my father had passed away the night before, on November 27th. So in less than two months in 1969, both my parents were gone. They told me that my father had been stricken with a blood clot in the brain. He was buried beside my mother. I then arranged for our baby brother, Charles Robert, who had passed away at about age six months in 1934, to be moved from our grandfather's cemetery plot to the plot where my parents were buried. Early in December I was back at work at HQMC. The Harrier continued to take the majority of my time each day. The configuration of the A-4M was locked in by then, with an up rated engine, drag chute, self start and the radar had been taken out of the aircraft.

Dr. Allison: What was your top priority then?

General Fitch: Well the Harrier, it was the top priority. There wasn't anything like a V-22 Osprey back then. The A-4M by that time was moving along nicely, and it would become operational quickly, since it was simply a model update with added capabilities over its predecessors in the A-4 Skyhawk family of attack aircraft. The A-6 was essentially on autopilot.

But, there was not a day that went by that I did not deal with Harrier issues.

Dr. Allison: So you made several briefings before Congress?

General Fitch: Oh, I made a bunch of briefings to the Congress. I briefed congressional staffs and congressional committees and all that, and I had to go over and do pop-up briefings in OSD and PA&E, plus these other places too.

As we're getting closer to my time to go to the National War College, with the school starting in August 1970, General Hill would say one week, "Bill, I'm not going to let you go to school." and I'd say things like, "Well you know General, for my career and keeping a good balance, I really should go to school soon." Then he'd say, "I am not going to do it."

The personnel department got my relief in as far as AAW was concerned, about six months before I was supposed to leave. It was a lieutenant colonel, a fine Marine aviator named John Bradden. I never asked but I would suppose that either Colonel Miller or Colonel Mendenhall had arranged for John Bradden to come to AAW (later changed to APW).

John Bradden would have a rocky start with General Hill, but he would live through that OK, and a few years later he became the program manager for the Harrier at the Naval Air Systems Command. During that period of time John also had a heart attack.

Dr. Allison: How did you finally get out of there and to your school?

General Fitch: Bradden is in working with me and we're doing ConOps and working up briefings, and writing the first "Gold Book" on the Harrier program. After John had been there for a few months I told General Hill, "General, you know we've got Lieutenant Colonel Bradden here and he knows everything that I know." and General Hill would say, "No." And then two weeks later he would say, "Well, I may let you go." And it finally got down to, if I remember it right, school started in early August 1970 on a Monday morning at 9 o'clock.

Now it is the week before and General Hill still has not told me I'm going to be able to go to school. However, I had gone over to Fort McNair where National War College was located, and registered. Fort McNair was located about three miles from HQMC. And so finally it got down to Friday before school starts on Monday and General Hill said, "Bill, come see me Monday morning at 7 o'clock." and I said, "Yes sir." And at 7 o'clock Monday morning I was there and he said, "I don't know, I think I'm making a mistake but I'm going to let you go to school." So I said, "General, you made the right decision. May I go?" [Chuckle]

I went over to Fort McNair and I think we assembled at 0900. John Bradden took over the Harrier, A-4M and A-6 at the Air Weapons Systems Branch of HQMC -- so he's now got the whole job. About six weeks later, Colonel George Brier, who was the monitor in Manpower at HQMC, and who was later a BG, calls me one day, and said, "General Hill wants to take you out of school." and I said, "Why?" And he said, "Well he's not getting along that well with Bradden." [chuckle], and I said, "Well please try to talk him out of it." As it turned out, that was the last I heard of it. Apparently they talked him out of doing that.

Dr. Allison: There's got to be more to the Harrier story there at this time, but that's the beginning.

General Fitch: Well yes, I'll get into the sortie rate validation here later. As I remember it, National War College [NWC] had a guest lecturer each morning, where the lecture lasted about 45 minutes and then there would be a Q and A for an hour or so. After the Q & A you would go to your discussion group- and talk about the lecture. I should mention that some very important people gave those lectures, and they came from sources both in and out of government. The thrust of the National War College curriculum was international relations. In addition the NWC has a master's degree program with George Washington University (GWU), and I decided to be in the Master's program. The way the GWU program was set up, the curriculum at NWC provides some credits, probably half, and then there is a separate program of reading and study, along with the thesis that has to be written. The GWU program extends probably a month beyond the end of National War College, but the Marine Corps as did the other Services, would let you finish that.

A few days after I finished the GWU masters work, I get a phone call at home in Annandale, while on leave, from Colonel Noah New. Colonel New is now head of the Air Weapons Systems Branch at HQMC. He tells me that I have been deep selected for promotion to colonel, and the list will be out in a few days.

Dr. Allison: You're living in Annandale?

General Fitch: I was home in Annandale, Virginia, which was about five miles from Headquarters, Marine Corps. We bought a home in Annandale just before I went to Vietnam. My wife lived there while I was in Vietnam, and when I returned to Washington in August 1968, I just had to put my suitcases down and I was home for another tour in Washington.

So I'm at home on leave and Noah New calls me and said, "You've been selected for colonel." I never asked him how he knew that, but I guess that Noah was on the selection board. And I said, "Well that's very interesting. I appreciate your letting me know that." This was a below the zone selection for colonel and a surprise, my second below the zone, since I had also been selected early for major. I told my wife, Margaret, that I had been selected for colonel. Then I went and got my suitcases. I starting packing because I knew if General Hill had heard that I had been selected for colonel, then in all likelihood he was going to make me stay in Washington [chuckle] for another tour back-to-back. I had been told that he wanted me to be the program manager for the Harrier.

Dr. Allison: He'd probably put you at AAW.

General Fitch: Well he could have done that with AAW or he could have put me in as the program manager at NavAir. But anyway, I'd been told that he wanted me to stay in Washington. At that time I had orders in hand to MAG-32 at MCAS Beaufort; and since I was on leave, I could execute those orders at any time. So I immediately started packing and I left that night to go to Beaufort, South Carolina.

Dr. Allison: Get out of town.

General Fitch: It was a "get-out-of-Dodge" situation. At that point I had been in Washington for three years, and if I waited, I might wind up doing six years straight. And so I get to Beaufort late the next day, and spent the night in the BOQ. The next day I checked in to MAG-32, and paid my respects to Colonel "Shine" Morgan, the CO of MAG-32. Shine and I had known each other as lieutenant colonels, and he was a year or so ahead of me in rank.

Dr. Allison: Tom Morgan?

General Fitch: Tom Morgan never had an air group. Shine Morgan is the CO of MAG-32. I become the MAG-32 executive officer. The first Saturday I'm there, General George Axtell, the CG of 2nd Marine Aircraft Wing is down to Beaufort for a visit. We are sitting in some kind of hut or trailer, General Axtell doesn't know me and I don't know him. Finally General Axtell walks over and says, "Axtell's my name." and I said, "General, it is nice to meet you -- my name is Bill Fitch." "Fitch, Fitch, I just saw that colonel's list yesterday. You've been selected for colonel, right?" and I said, "Yes sir, that's what I understand." And he said, "Well we're planning on bringing you up to Cherry Point." and I said, "General, I'm here now." He looked me in the eye, smiled, and replied, "Temporarily." And so the wing immediately decided to move me to Cherry Point, North Carolina, but they left me in Beaufort for about four weeks. That would be my one and only tour at MCAS Beaufort during my entire Marine Corps career, and it was destined to last just about four or five weeks.

Dr. Allison: Yes, your record shows that you were working on a Harrier project, the Harrier specialist or something like that.

General Fitch: I'll get to that. But I would soon find out what plans General Axtell had for me, and you are right, it would be with the Harrier.

Dr. Allison: Yes.

General Fitch: But I don't know how much you want to know about the National War College going back.

Dr. Allison: Well I've got a couple other questions about while you were working with the Harrier. Do you remember anything about the CSAR [combat search and rescue] rescue pod capability?

General Fitch: I don't know the term CSAR rescue pod. From time to time we would talk about a Harrier capability to do rescues of downed aircrew, but there were a lot of negatives along with the positives in that capability. There were downsides to that option.

Dr. Allison: Evidently that was something being worked where the Harrier could actually do combat search and rescue and use a hovering mechanism or you could hover, you could rescue people possibly.

General Fitch: First, at that time there was not a two seat Harrier. Regarding the rescue of a downed pilot who was out of range for a helicopter rescue, if you could find the right place to land you could land and have a container for a downed pilot to get into. Now it would be pretty sporty for the poor guy that had to get inside that container [chuckle] but it might be the only way to get out of a very bad situation. If I remember right, and that is very iffy, during the Vietnam war there was an Air Force pilot (major I believe) flying an A-1 Skyraider which as I recall had four seats, and this Air Force major did a landing deep in North Vietnam on a road or in a grass field, and picked up a downed pilot. As I recall they gave him the Medal of Honor for doing that. But my memory is very sketchy on that.

I recall what I did in 311 for dropping a survival tank, but not the system you mentioned. But the Brits, I flew with them later on in Germany in the Harrier. They were working out of a cow pasture.

Dr. Allison: With a Harrier?

General Fitch: Yes, an RAF Harrier. It was a typical grass field with no preparation of the surface, there were weeds, lots of grass, and small football size rocks all over the place. Those Harriers (about 20 of them) would go taxiing around where there were many small rocks, and then make short rolling takeoffs. They had a pad for vertical landings right there next to the pasture, but there were no prepared surfaces there but the small pads for vertical landings. And if they wanted to do a STO takeoff then it was on the grass and weeds, and watch out for the rocks. To the best of my knowledge, they never damaged an engine with foreign object damage [FOD]. The RAF operations from grass were impressive.

Dr. Allison: You did become a believer in the Harrier evidently to be able to do all this.

General Fitch: Well I had to be a believer to say all the things that I said while I was in that staff job working for Colonel Miller, Colonel Mendenhall, General McCutcheon, General Hill, and others.

Dr. Allison: You had said that the Navy was supportive of the Harrier initially, yet they seem to have opposed it later on, or at least not fully supportive.

General Fitch: Yes, the Navy staff was supportive of the Marines getting the AV-8A. In other words if the Marines wanted to trade off F-4s for Harriers, then the Navy did not object.

Dr. Allison: Sir, to wrap it up on your Headquarters Marine Corps experience, you obviously were quite successful at this work. Did you enjoy doing that sort of work?

General Fitch: Yes, I did enjoy the work in Washington. In the defense business Washington is the center of the universe, and this is where the action is, year in and year out. In 1968-1970 that was my second out of five tours in Washington. It is always a challenge to help make things happen, rather than waiting around hoping to see things happen.

I enjoyed it because every day was another day of challenges. I believe that I was well prepared for the work in the Aviation Branch at HQMC. After the rigors of Test Pilot School, then a successful tour in VX-5, a tour in the Bureau of Naval Weapons, a tour in SecNav R&D, and a successful tour flying combat in the A-6A and A-4E, I believe that I pretty well understood what needed to be done in the Air Weapons Systems Branch at Marine Aviation.

I might mention that Major General Hill recommended me for a Legion of Merit for my tour in Marine Aviation the summer of 1968 to the summer of 1970. But as the Marine Corps does so frequently, that award was downgraded to a Navy Commendation Medal. Later at National War College when they told me that they had a Navy Commendation Medal to present to me, I told them to just put it in my mailbox.

But, instead of doing that second tour of duty in Washington, I could have gone to the Naval Air Test Center at Patuxent River for the tour after Vietnam. That was what the Manpower monitors wanted me to do, before I told them that it was not a good idea. I really couldn't see it. As I said, the real action was in Washington. And besides, in those days we still had proficiency flying, so I could keep my hand in flying, even though the aircraft were old.

Dr. Allison: Right. What's the key to success working in Headquarters Marine Corps there? You were obviously very successful in it.

General Fitch: The first key is to believe that you have been assigned to an important job. A second key would be spending some time each day, say maybe 30 minutes, thinking about how to do the job better. It pays to have some innovative thought. A third key is understanding that you can leave no base untouched when you want to get a certain action approved. You can leave nothing to chance. That means that you have to ensure that every person in the chain, especially

the chain above you, understands why something has to happen, and the way that it has to happen. That last point is extremely important!

Dr. Allison: You hear about the work routine there--seven days a week.

General Fitch: Well no. You don't have to work seven days a week, except perhaps in war time. That's another thing I'll tell you about working. Many senior officers at HQMC think that you have to work extremely long hours in order to get the work done. Many colonels and generals think that you have to put in 14 hour days and then they think that you have to come in and work all day Saturday. I look at it as a situation where if you feel uncomfortable in your job, then you will work extremely long days, six days a week, to make up for your inability to get the job done in a reasonable time. Back to General McCutcheon, he was normally in his office by seven in the morning, and at 5 PM he was walking out the door and going home. McCutcheon felt comfortable in his job. The Commandant, General Chapman, knew not to call McCutcheon at 5:15 in the afternoon, because McCutcheon would no longer be in his office.

So the solution as I see it is to know your programs well, know more about them than anyone else, and don't spend a lot of time during the day wasting the time of your staff with long bull sessions on irrelevant matters. When I took Marine R&D in1977 — I told my staff, "I may come to work on a Saturday," but I said, "That's my choice." And I said, "There is absolutely no need for you to come in and you do not come in just because I'm there." And I said, "If you've got things you need to do then come to work. But if you're coming to work for no good reason, then don't do it." When I was the EA to Lieutenant General Miller in 1975-76, I had an appreciation for how the staff interfaced with the general – when the time was well spent and when time was wasted. And then after my one year tour as a brigadier general in 1st MAW in Japan, I was back in Washington for my fourth tour in Washington. I had Marine R&D for three years. During those three years, to the best of my knowledge, my staff never worked a single Saturday.

Dr. Allison: Is that right?

General Fitch: In the three years from 1977 to 1980 that I had Marine R&D, and I believe I recall this accurately, I would go in to the office some Saturday mornings – but not often. During the week I usually was at work by 0730 and I frequently stayed until seven or so at night but I didn't require anyone to stay with me. I knew how to pull a door closed so that it was locked and I knew how to put papers away and I knew how to put a lock on a filing cabinet. So when I took Aviation

I did the same thing, and there were numerous times that I was in my office by myself on Saturday morning but I didn't need anybody else to help me do what I was going to do. I might add that frequently the Saturday mornings at the office are driven by travel taking place the prior week, and your need to catch up because you were only in your office two days the prior week. But for the majority of the time when the weather was nice, I was on the golf course on Saturday morning. It all depends on how you use your time.

But that's just my approach. I mean you know different people do things different ways but that was the way I did it. And I should mention, that it was very helpful to have had those five tours of duty in Washington, serving in the nation's capital from captain through three stars. You have to learn a few things along the way.

Dr. Allison: Like, leadership?

General Fitch: Well its leadership but it's also how you approach work. I might add that I hate the one page briefing paper. I prefer seeing the pages that it takes to tell the entire issue, pros and cons. If it takes five pages to tell it right, then I always wanted to see the five pages. And my preference was, rather than a staff member writing something up, I preferred that they come see me and spend a few minutes explaining the issue in a give and take, rather then wasting their time with a point paper. It helped focus my views regarding staff work, after my multiple tours as an action officer.

Dr. Allison: Well sir, we're about out of time for today. We have another appointment.

General Fitch: Okay.

Dr. Allison: We'll talk about the National War College at another time.

END SESSION VI

SESSION VII

Interviewee:	Lieutenant General William H. Fitch, USMC (Ret)
Interviewer:	Dr. Fred Allison, U.S. Marine Corps History Division
Date:	26 June 2006
Place:	Lieutenant General Fitch's Home in McLean, Virginia

Dr. Allison: This is the 7th session of the oral history interview with Lieutenant General William Fitch. Today's date is the 26th of June, 2006 and it's being done by Dr. Fred Allison accompanied by intern Mary Dail.

Sir, last time we talked about your tour of duty at Headquarters Marine Corps in AAW. But in regards to that, you had mentioned working on the concept of operations [ConOps] for the Harrier. Could you elaborate on how that was developed?

General Fitch: Well actually it was pretty simple. The British had done an awful lot and they had their idea of operating from damaged airfields and grass fields and various kinds of ships, and they were just in the process of going into the ski-jump on what would be one of their small carriers. So the British had done a tremendous amount. And so essentially what I did, and let me inject - and I think I've probably said this before – that one of the smartest things I ever did was take a year of typing in high school, which stood me in good stead for over 60 years, because I've done an awful lot of typing in the years since then. When I was an active duty three star and head of Marine Aviation, I typed many of my memorandums and letters, since I have never been good at dictating a memo or letter. But in 1968 and 1969 I was a lieutenant colonel. In AAW of course each of us had a big typewriter there and lots of paper and it was just a simple matter for me to type the concept of operations for how we would employ the Harrier. It was simply a matter of blending the British concept of operations for the Harrier with Marine Corps doctrine and tactics on how we do air warfare. It was including how the Marines do ground combat and how the GCE [ground combat element] relies on aviation for continuous air support with all their ground units. It was an exercise in taking the Marine doctrine for how we do warfare; forward-basing and so forth, rapid response to requests for close air support, and showing how you build a basing concept to support rapid CAS response. And interestingly enough that concept of operations is all pretty much still around today -- some 30 plus years later. Of course it has been refined over the years, but the basics are still there. But it in a sense was taking the ideas of the British for austere flight operations from roads, small air strips, while conducting distributed operations with VSTOL aircraft while operating from small forward bases scattered in close proximity to the ground battle. It included

how you would put in a forward-base, what you would call it, how large would it be, how far it would be from ground combat, and then how much in the way of airpower; squadrons, detachments, could you put into such a forward base. There is tremendous combat power flexibility in the MAGTF, and STOVL and VSTOL carried that flexibility to a new plateau. Back then instead of the term STOVL it was STOL in most instances; short take-off and landing, with vertical takeoff and vertical landing [VTOL] playing a role in the early 1960s and 1970s.

Phrases change at least once every decade, and a few acronyms or phrases live on. Just like we've got thousands of acronyms in this town now and a lot of times you don't understand what the acronym is or means, but if you went back 25 years there was a different acronym that said the same kind of thing.

Dr. Allison: That's interesting. You know it went from STOL to VSTOL to STOVL and it's all the same thing.

General Fitch: Yes, VSTOL was around then too. Vertical takeoff was not efficient but it was a capability that might be useful at times. In the 1968 to the early 1970s timeframe there was a lot of emphasis on the "V" takeoff, but then it faded fast.

But it was just a matter really of simply sitting down at the typewriter and writing all this concept of operations out and making sketches and so forth, and then telling the reader or listener how we would put that to good use. I used a lot of ConOps when I had to go brief the various congressional committees. I would have a series of briefing charts which would lay out how we would do operations with VSTOL, with the short runways, the sections of existing roads, while emphasizing the reduction of aircraft vulnerability on the ground by not parking them close together.

Dr. Allison: That was entirely new concept.

General Fitch: VSTOL or STOVL as it is now called, was new and different for a tactical jet aircraft that could fly wing borne at 500+ knots. As I said in the early days there was a lot of emphasis on the capability to take the Harrier off vertically. As I recall, it would be armed with two 500-pound bombs (MK-82) on the airplane, fly out 50 miles, drop the bombs with five minutes of loiter time, or something like that, and then return and do either a vertical landing on a small pad or do a rolling vertical landing on a short strip such as we had at LZ Bluebird.

The vertical takeoff just wasn't too practical because you had to takeoff with partial fuel. But anyway, that went into the initial concept of operations. Where you would put in more expeditionary type matting; AM-2 matting, if you could have say 1,500 feet for your airstrip then you could do a short takeoff. Then if you wanted to you could do a vertical landing, or you could do a rolling vertical landing. There were lots of options for landing.

The U.S. Navy misses a great operational capability when it refuses to consider operating STOVL aircraft. With STOVL aircraft on board an aircraft carrier, that carrier is no longer helpless if it suffers damage to its flight deck. Then there is the launch capability of STOVL, where the ship does not have to turn into the wind in order to launch the STOVL aircraft, and of course the STOVL aircraft does not require a catapult to get airborne nor does it require arresting gear to land back aboard the carrier.

In a similar manner, the USAF misses a great combat capability by not employing STOVL. The F-35B would be a perfect fit for the USAF with their expeditionary air forces. Just think of the tactical flexibility that USAF would have if it had the F-35B operating in about 10 to 20 squadrons, with the capability to operate in combat from unimproved sites that provide forward basing. In my view, the USAF like the US Navy lacks vision. Both Services are imbedded in the view that their way is best, because this is the way that they have always done it.

Dr. Allison: OK, anything else on that tour at Headquarters?

General Fitch: Let's see, I think I'd covered the A-4M before and I'd covered the A-6A, and the A-6 was pretty well cut and dry because it was primarily the Navy driving what was going to happen there. For the Marines and the A-6 Intruder, it was just a matter of keeping the right number of all-weather attack airplanes in the Marine Corps. My having been commanding officer of VMA (AW)-533 in combat made that an easy task for me – especially when I had the backing of then Colonel Tom Miller and a general like General McCutcheon.

Dr. Allison: Wasn't there a move on by the Navy to take two A-6s out of every Marine squadron or something like that?

General Fitch: Well there may have been but in those days the generals like Major General McCutcheon weren't overly diplomatic and they'd just say flat out, "We're not going to do it." I mean you didn't have anybody to do a staff study or anything else, McCutcheon just said, "We're not going to do it," and that would be the end of it.

Dr. Allison: And he carried that kind of clout in his dealings with the Chief of Naval Operations?

General Fitch: Yes. In those days the Deputy Chief of Staff for Aviation was dealing primarily with the Navy OP-05. He'd just say, "We aren't going to do it" [chuckle] and that was the end of it. And he was backed up by Chapman. General Chapman had the greatest admiration for McCutcheon.

Of course interspersed in there were some trips to England where you'd go over there, and you'd talk to the people at the Ministry of Technology, along with Rolls Royce who did the engine, and Hawker Siddeley who produced the aircraft.

We had Lieutenant Colonel Bud Baker at MinTech [Ministry of Technology] and so you could get updated on what the Brits were doing. But the thrust of the whole matter is that we had a pretty solid program. It was innovative. It was driven by who was then Colonel Tom Miller and he had McCutcheon's confidence, and McCutcheon said, "Let's do it." and probably today what was done in a period of say a year or two it would probably take four or five years because in today's acquisition system they would study the many options, they would have many meetings, many days would be spent to obtain approvals, along with more work and more approvals and so forth. It is remarkable how long it takes now to do a similar acquisition effort. I'll give you a quick example. I've been retired come 1 September 2007 it will be 23 years. Early on in my tour as head of Marine Aviation I signed a requirement for a tilt-rotor that was going to be the V-22. That would be late 1982 or very early 1983. The MV-22 will IOC [initial operational capability] in September 2007. The Joint Strike Fighter (JSF) program was started in 1994 or close thereto. The Marine F-35B JSF STOVL will IOC in 2012, and it is the first of the JSF to IOC.

And so that's about 24 years ago that I signed that operational requirement, and we are doing IOC for the MV-22 in September 2007.

Dr. Allison: So the MV-22 initial requirement was in...?

General Fitch: That decision was made in late 1982. Now it is 25 years later and we are just reaching IOC. In that operational requirement we defined what the aircraft should be capable of doing, and about late 1982 we stated that the tilt rotor would replace the CH-46 helicopter.

When you're going to do a program, no matter what it's going to be in the military, you have to have an operational requirement. There's got to be a need for it. If you don't have a requirement, then you don't have a program. It is as simple as that. You describe the capabilities

that you expect to have in the aircraft, along with reliability, etc. For example, and I believe I am repeating myself, when Colonel Tom Miller first became interested in the Harrier, the first thing he did after flying the AV-8A in UK in 1968, was to have an operational requirement written and established.

Dr. Allison: Had a prototype [of the MV-22] been built at that time?

General Fitch: No. The only thing we had at the time was the XV-15. And that XV-15 effort had been funded by NASA. Then NASA had pretty much completed what they were going to do with the XV-15. They moved the airplane to Bell in Fort Worth. Bell then started trying to promote the tilt rotor, and they let various people in the military fly it. I was one of those who flew the XV-15. But like Hans Mark who had DDR&E and he had been the Secretary of the Air Force, he was a great believer in the tilt-rotor and to this day Dr. Hans Mark, I think he's at the University of Texas now. But he's a great believer in the tilt-rotor.

Dr. Allison: You were talking about the Harrier and how quickly that came into the Marine Corps though, interesting to compare with how long things take now.

General Fitch: Well it did because in 1964 there was not a Harrier. The airplane that Hawker Siddeley had flying in 1964 was the P-1127 – a small prototype of a VSTOL aircraft. Four years later Hawker Siddeley has the Harrier flying, it is in flight test, and it was being procured by the RAF and Royal Navy. Starting in late 1968, the U.S. Marines wanted to buy it. Now that is how aircraft procurement used to work. Now it moves at a snail's pace.

Dr. Allison: In comparison.

General Fitch: But when you're going to do a program like that you've got to give up something and between Colonel Tom Miller and General McCutcheon, they had decided they'd give up 94 F-4 aircraft; F-4 Phantoms, and that presented an interesting thing.

Did I tell you about Senator Symington the last time?

Dr. Allison: No.

General Fitch: I'm a lieutenant colonel in my congressional hearing uniform, standing up in front of this Senate Appropriations Committee. General Hill is there. The full colonel who was the Harrier program manager in NAVAIR was there, plus a whole bunch of other Marine officers.

I'm standing out front briefing this concept of operations, using flipcharts and so forth, and telling them how we're going to use this airplane tactically. Then Senator [Stuart] Symington walks in and the Chairman said, "Senator Symington . . ." who happened to be from Missouri which includes St. Louis and McDonnell Douglas Aircraft Company, said to Symington, "Senator, I know you're heading for a foreign relations committee hearing but the Marines are telling us about the Harrier," and he said, "Do you have any questions?" And Symington turned to me and he said, "Colonel, why are you taking those 94 airplanes out of my state?"

Dr. Allison: Oh, that's how you remember 94.

General Fitch: That's right. I will go to my grave remembering the number, 94.

And so I started explaining how we're going to do this tradeoff to get funds to get the Harriers, and Symington said, "That's an unsatisfactory answer Colonel." (I was only a lieutenant colonel). [Laughter] And in the meantime I've got General Hill and all of these other people; the Harrier program manager from Naval Air Systems Command, sitting over there and they don't say a word – they are totally silent as Senator Symington skewers this lieutenant colonel, and he gets his words in the congressional record for his constituents. [chuckle].

Dr. Allison: No reinforcements coming.

General Fitch: Absolutely zero. They're like this [laughter]. And so anyway, Symington says, "Well I don't like your answer, colonel." With that the senator leaves the committee room and then we go ahead with the rest of my briefing, and that's all goes well. Now what's significant – and this is how politics works – at that point in time there were ongoing negotiations between the Brits and the United States, that is between Hawker Siddeley and McDonnell Douglas Aircraft Company. The substance of those negotiations was that if there were to be a second version of the Harrier; an AV-8B, that it would be built in the United States. And about a month after General Hill and I were at that hearing with the Defense Subcommittee of the Senate Appropriations Committee, where Symington grabbed a hold of me, they signed that agreement between Hawker Siddeley and McDonnell Douglas. Hawker Siddeley as I said was the company that was developing and test flying the Harrier initially and then it all, I think, became part of BAE. I'm not sure just what all happened over there in those later years after the 1970s. But anyway, the point being was that now McDonnell Douglas in St. Louis, Missouri, is the American counterpart to the Hawker Siddeley people in UK and they're all part and partial to the Harrier program. Symington became a one hundred percent supporter of the Harrier after that.

Well he was just asking questions that I shouldn't have had to answer. The AV-8A program manager, Colonel Moose Trainor, and the Deputy Chief of Staff for Aviation, General Homer Dan Hill, should have answered the question. But instead, I'm standing out in the middle of God and everybody at this Senate Appropriations Committee hearing, and so he's asking Lieutenant General Fitch the questions.

Dr. Allison: Yes, it's all politics.

General Fitch: Yes, but back to concept of operations. It was a pretty easy thing to write and it turned out that they still have it around today in probably the 10th or 20th revision of what was then called the "Gold Book."

Dr. Allison: For the Harrier?

General Fitch: Yes. Well it's for STOVL which today is the AV-8B, since the F-35B is still five years away from IOC. I think it's called the "Gold Book". But again, it wasn't that hard to do. All that you had to do was take what the Brits were talking about, you knew what the Marine air control system was, you knew the concept of operations for airplanes in the Marine Corps, and you just had to marry the elements of a ConOps together. So that's what you did.

Dr. Allison: How did you take into account command and control of the Harrier?

General Fitch: You had the DASC [direct air support center] and the TACC [tactical air command center] and the TAOC [tactical air operations center] but you had to get it into that command and control system as to how you would launch the airplanes, how you would scramble airplanes and get the whole command and control system working with dispersed operations. The goal of Marine TacAir is to respond to a close air support request within 30 minutes maximum. We much prefer responding in 15 minutes to a CAS request. I should note that neither the U.S. Navy nor the USAF have similar response time goals for responding to close air support requests.

Dr. Allison: Right. Are you seeing the Harriers today in Iraq or Afghanistan meeting those goals in how they are forward-deployed?

General Fitch: Well one of the favorite airplanes over there has been the Harrier with a Litening pod.

Dr. Allison: But they had them operating out of a FOB [forward operating base] and FARPs [forward arming refueling point].

General Fitch: Well they had that and then there's a base in Afghanistan. Operating from a forward base or FARP is fully in accord with the Harrier ConOps. The intent is to get as close to the ground combat area as you can, with due consideration for enemy threats to the forward operating base. Harriers flying from an air base that has suffered damage is a routine capability. All a Harrier needs is about 800 feet of takeoff roll to get airborne with an operational combat load of ordnance.

Dr. Allison: Bagram.

General Fitch: Bagram. It had damaged runways and taxiways. The Harriers could easily operate from Bagram.

Dr. Allison: And also Kandahar.

General Fitch: Yes, but in Bagram they had a detachment of Harriers operating there and one of the keys that has made the Harrier so capable in its variable basing capabilities. The Harrier can operate from a multitude of bases, and in the case of the Navy's expeditionary strike group [ESG] ships such as the LHA and the LHD, the Harrier and soon the F-35B will be the only strike fighters that can operate from the LHA/LHD. The idea of the employment of Harriers at Bagram in Afghanistan was a good move.

It was very timely that Fred McCorkle, when he had Marine Aviation which is now about four years ago, was looking for a sensor targeting system on the Harrier. And he looked around and the guys in AAW were looking around and they came up with the Air Force's program for the F-16 which was called the "Litening targeting pod." McCorkle initially got enough money added by Congress to buy those targeting pods and then he got more money to buy more targeting pods, and it was a very simple system integration problem for the Harrier. And just as a matter of speaking, getting that Litening pod on the airplane probably doubled the capability of the Harrier so that's why it was the most desired airplane to provide air support over there. The Harrier with the Litening pod was highly responsive time wise for CAS. With the Litening pod the Harrier has real time data link capability for imagery. This allows the AV-8B Harrier to strike either fixed or moving targets. It could operate on bombed out bases like in Afghanistan that a conventional jet aircraft couldn't operate from. But the key to it was that Litening targeting pod. And then when you go back to two or three weeks ago-- what's that guy's name that was a big terrorist?

Dr. Allison: Oh, Zarkawi?

General Fitch: Zarkowi; what got him was an F-16 with a Litening targeting pod [chuckle].

Dr. Allison: It's good stuff. Well sir, you did go to the National War College.

General Fitch: I did finally. General Hill didn't like the idea that I was leaving the Aviation Department, but he finally agreed to my going to the school.

Dr. Allison: Despite the best efforts of General Hill to keep you from going.

General Fitch: Yes, and I'll probably repeat myself but he told me at 7 o'clock the morning the school started that I could go to the school.

Dr. Allison: Right. What did you think about the curriculum there; the course of study?

General Fitch: Well from the professional sense it was nice to do. And I think I mentioned this before. If you go back to Command and Staff College at Quantico they are giving you - as a major and very few lieutenant colonels at least when I went there, mostly majors in the class – they'd give you all these series of briefings on things that will be helpful to you maybe when you're a brigadier general and of course not that many people make brigadier general. So what would have been relative to Command and Staff College was if they had gone into more detail as to what you

needed as a major and a lieutenant colonel and maybe as a colonel but not what you needed as a general. Well they had the same thing at the National War College.

It was very simple but if I'd have been in the State Department or if I'd have been someone fairly senior in OSD; Office of Secretary of Defense, yes, that would have been kind of useful. But as it was, once you finished the school, okay, you've done that but it didn't really help you any to speak of for what you were going to be doing for the next five years. With that said it was a very good school, with a very relaxed pace, and with a strong international flavor to the course content. Now I'll say this and I don't really know but I suspect that with all the emphasis on jointness that we have today which you didn't have 30 years ago, probably the National War College provides a more useful curriculum.

Dr. Allison: But this was pre-Goldwater/Nichols so there wasn't that emphasis.

General Fitch: It was pre-everything just about. This was 1970 and 1971. But it was a good school from the standpoint of professional relations.

Dr. Allison: Okay, I was going to ask about that; did you make some good contacts?

General Fitch: Yes. Your classmates were all carefully selected to attend. Top-level school attendees are selected by a board of officers from their service. There were some interesting aspects of it. Like in looking at the Air Force we had quite a few Air Force colonels in the class who were younger than I and they had never commanded anything. They hadn't been a squadron commander or anything but they were a colonel. And I was told back in those days that the Air Force tries to find these super-performers when they're captains and they just give them accelerated promotions right along and they become a colonel. We had one colonel; I think he was 34/35 years old.

Dr. Allison: A golden-child!

General Fitch: Yes. If you go back to World War II I think the Army Air Corps, in those days, had a full colonel at age 21.

Dr. Allison: Is that right [laughter], commanding a MAG?

General Fitch: I don't know what they were commanding. It was a good group of people there and you didn't have to study hard. National War College is a gentleman's school. It was just a series of lectures and discussions and you talked about a great number of things. But again, I felt that it was at too high a level for the ranks of the people that were there. Most of the course content fit the nice to know category. They call the National War College the "House of Lords."

The absolutely great part of National War College was the trip in the spring, which was just before graduation, and in that case we had a C-141 totally at our disposal for three weeks. I would guess that there were 25 or 30 students and probably a half a dozen staff that went on this trip. You had a choice of like four or five different trips you could make, and if you were lucky you would get the one you wanted. They had one tour to numerous countries in South America – and this is nothing against South Americans – but that was called the cocktail trip. There would be a lot of socializing and cocktails. And there was a European trip and there was one to the Far East; Japan and so forth. Then there was Africa south of the Sahara. Back in those days there wasn't anything to do with China. But most of us had been to Vietnam so the last thing in the Marine Corps you needed was to go on a trip to the Far East.

So I picked the Middle East and it was a great trip. We went initially into Spain just to refuel and then we went over – I forget the name of the Air Force base – but I think it was in Turkey, maybe not, I forget. But anyway, we had trouble with the airplane and so we landed at this Air Force base and they got the airplane fixed and then we were going from there to Riyadh. Now an interesting thing about your passport - because you had to have a passport for this trip – two of them. Israel was on the tail end of the overseas trip and we were going to Saudi Arabia as the first stop. And if you were going into Saudi Arabia you could not have a Visa with your passport for going to Israel. That was a no-no. They absolutely hated the Israelis.

Dr. Allison: They were real prejudice against them.

General Fitch: Oh absolutely, and to this day [chuckle]. That tells you what kind of progress we're making. You had two passports and so when you went to everyplace except Israel you'd use one passport and then at the end of the trip when you're going to Israel then you'd take out the passport for Israel. But we went to Riyadh and this is all a good distance, a superb trip.

I think that it was King Faisal running the country then. We had a session with the King; he sat on his throne; and it was in a room about twice this size and we were just standing around the wall and the King, he's sitting on his throne. He has a couple of guards standing behind him, who would shoot you if you even walked towards the king. Except later on they screwed up and he was shot by one of his nephews; and was killed. But he, I guess the best term is to say that he ranted for probably an hour and about every other breath it was, "The Jews this and the Jews that" kind of a thing and everything that was wrong in the world was because of Israel Now it is about 35 years later and nothing has changed. And that went on for an hour or so. Well while you're listening to all this they're serving what they call coffee and – it is terrible tasting – and I don't know, it was kind of like drinking turpentine.

His guards would come around with a tray with all these little demitasse cups on it and they'd have you take one. You'd stand there and sip it, and you could have sipped it for two days. It was only about that big but it was something to get down. I guess if you are an Arab you would like it, but it was tough to drink. And so then they'd come back around again and they'd take your demitasse cup and if there was something left in it they'd just throw the liquid on the carpet, not the cup, but the liquid that was in the cup. Then they would refill the demitasse cup for another round. Well we did that and we met with other people like defense ministers and so forth. That was an interesting part. Then from Saudi Arabia we went to New Delhi and there were a lot of lessons to be learned in New Delhi.

We met with all the various heads of government in New Delhi. We had a side trip because they did have some excursions in this overseas trip. We rode the bus up to Agra to see the Taj Mahal and the Red Fort. The Taj Mahal is an architectural wonder and the Red Fort is absolutely huge to an extreme. It goes for miles. If you ever go to India go to Agra because it's very much worth going. But we met with all the heads of government in New Delhi. Then, if I remember right, when we left New Delhi we went to Afghanistan, initially to Kabul, and this was like stepping back 200 years in time. You had all the Afghanis in their heavy robes and every man was armed with a pistol and a rifle. It was as if the charge of the Light Brigade might come bursting around a corner at any time. Walking through the open market in Kabul, where you could buy a camel if you decided that you needed a camel. If you have ever seen the 1939 movie, 'Beau Geste', it was as if Douglas Fairbanks, Cary Grant and Robert Preston would come around a corner riding camels, with flintlocks blazing.

Our hotel was very near a market area and you've got all these people going around in robes with flintlock rifles on their shoulders and flintlock pistols in their belt, and it's like stepping back a couple of hundred years to the 18th century. I bought a flintlock rifle for about ten dollars U.S., with 1801 East India Company stamped on the metal plate on the stock. And the hotel we had in Kabul was terrible. It was good I am sure by Afghani standards, but sad indeed by American standards. Like I said, stopping in Kabul was like stepping back at least 200 years.

Dr. Allison: Were you able to meet the king there?

General Fitch: And again as was our program on this tour of the Middle East, we met with some of the heads of government but we did not meet with who I guess they called the King. The King was a rather shadowy person, pretty much cloaked in mystery. You could not even take a photograph of his palace. Although you could ask your driver to ride by the palace, in front of which there were no barriers. And the King, they just kept him off by himself. But one of the interesting aspects of that trip was what the locals called the Khyber Pass. So one afternoon a couple of us, we had a driver that was supposed to be getting us around and he took us up to see the Khyber Pass, which was kind of interesting from the Rudyard Kipling standpoint.

But it was very interesting being in Kabul. After the obligatory calls on various ministers in the government, we flew down to Kandahar. But before we did that, we went through their armaments museum. It was interesting to go through that museum and see the quad 23 and other weapons that had shot at me in my night missions over North Vietnam. Kandahar had this big airport and nothing else, I mean nothing. At the Kandahar Airport I don't recall seeing another aircraft. We of course were in our C-141.

At Kandahar they had an Agency for International Development [AID] group that was probably 30 or 40 miles from town and so we went out to visit that AID group. They briefed us on what they were doing, and strangely enough here they are in the desert and the AID people are there for the purpose of teaching the Afghans how to go about controlling floods; flood relief and this kind of thing in the desert. The most interesting aspect of that visit with the American AID people was a man with the AID group that was a collector of artifacts. He took us out in the country one afternoon with him – we were only there maybe two days. He took us out in the countryside and showed us where Genghis Kahn had come through five or six hundred years before. It was not far from the AID workers housing, that there was the remains of an old fort. He said that the fort dated back to Genghis Kahn. The fort was now a shambles with bats flying in and out of it, but just some of the area out there in that desert area was remarkable from the history standpoint.

On the way back to the AID settlement he said, "Would you like to see some of the things I've been collecting", and we said, "Sure." So he took us by this cottage where he lived in this group of houses for the AID workers. In his cottage he had artifacts scattered all over the floor, on tables, in drawers of chests, everywhere. Some of the things he had were bought in antique stores in Kandahar. He showed us a bowl that he had bought for the equivalent of maybe three U.S. dollars, and he said it was at least 500 years old. So we asked him where he was digging up the artifacts and he said, "Oh, for the most part about a hundred miles south of here." He said that a couple of thousand years earlier there had been a civilization about 100 miles to the south of Kandahar, with homes, buildings, work places, such as you would find now further north. He said that the artifacts he collected were what was left from that populated area that now was desert. People were there a thousand, two thousand years ago in this area and now it was all desert and essentially no one was there. But he said, "You could put a spade or a shovel in the ground and pry it up and you'd just find all kinds of things." Well he had and there were some things like the ruins of thousand year old temples and so forth I guess down there because he had some of these facings that he just cut off the walls. As he described his collecting effort, he said, "Now go to that chest and open up the top drawer and take yourself out a souvenir of Afghanistan." So we did that and I picked out a little horse's head and I'll show it to you. And I asked him, "Now about how old would this be?" and he said, "About 2,000 years." He said, "That should go from 100 BC to 100 AD." So I thought if he blew it by a thousand years it's still pretty old.

It's like it was made yesterday and it's only about two inches long, broken at the end of the horse's neck, with the head intact. The eyes are very distinct; the ears, the nostrils and the mouth of the horse. And I asked him, I said, "Now what was this?" and he said, "Well that was what's left of a child's toy but a couple of thousand years old." And so that was my souvenir. It sounds like we are getting some rain again.

Dr. Allison: Sure is; good A-6 weather.

General Fitch: Yes, flying the A-6 you wanted the weather to be bad and for the night to be dark. But that was my souvenir of Afghanistan. Where my visits in Afghanistan might be a little fuzzy regarding the ministers of the government that we met with, I don't forget that visit with the AID people.

Dr. Allison: Anymore on Afghanistan?

General Fitch: Well that was it as far as Kandahar is concerned. And then we went from there to Turkey. I remember in Turkey, now this is 1971, the late spring of 1971, just before I finish the National War College. We go from Afghanistan to Turkey, to Ankara, and we're staying in a very nice hotel in Ankara for perhaps five dollars a day. Out the balcony of my room was this huge

Olympic size swimming pool and then there was a fence, and on the other side of the fence were tents where extremely poor people lived; in tents just beyond this extremely nice hotel. I remember the hotel was three or maybe five dollars a night, so I will say five dollars a night or less. In Ankara it was a great contrast with the hotels there compared to Afghanistan.

In contrast, today in Washington it costs me seven dollars an hour to park my car. But the Ankara hotel was truly superb and they were cheap at three dollars – perhaps five dollars a night. But we did the same routine in Ankara, meeting with the defense ministers, and what would be their chief of staff of the Army, Air Force, and Navy. And then we, as I recall, we went to Israel from there.

Dr. Allison: You said that that was the high point of the trip, why was that?

General Fitch: Israel was clearly the high point of the three week tour of the Middle East. It was the high point for a whole host of reasons but primarily from a church standpoint. Most of us have heard about Jerusalem and Bethlehem all our lives. We landed, as I recall, at Tel Aviv Airport and our hotel was in Tel Aviv because the U.S. does not recognize Jerusalem as the capital of Israel. The US Department of State says that's occupied territory.

And so the next day we're supposed to see Golda Meier at nine o'clock and the Israelis are setting up the bus. As it turns out there are traffic delays and we don't get to her office in Jerusalem until about 10 o'clock that morning. She was very gracious. No one ever said anything about, "You're late." and, "I don't have time," or anything like that. She came out and she had a large table in her outer office, and she was scheduled to spend a full hour talking with us and she spent a full hour talking with us. I think that most everyone knows that Golda Meier was born in Wisconsin.

Dr. Allison: No, I didn't know that.

General Fitch: Yes. In fact I think she had been a teacher in Wisconsin before she went to Israel in the late 40s, or perhaps the early 50s timeframe. My understanding is that there are a lot of Israeli that were Jewish Americans who moved to Israel in the late '40s, and of course there were Jewish people from all over Europe that moved to Israel. As I understand that is how they populated the country.

But then when the hour was up with – and of course this is in Jerusalem – when the hour was up we were scheduled to see Abba Eban. We went to his office at least an hour late. He was scheduled for an hour with us and we were still running an hour late [chuckle].

He also was very gracious. And so he gave us the whole allocated hour. No one cut anything short. In the practical sense it is necessary to remember that the Israelis all thought we would be promoted to general or admiral at some future date, so they were very flexible for us on schedules. We met with other people, you know military leaders who were heads of the various military services, just as we'd done in all the other countries on this trip. And then there was a free afternoon in Jerusalem and we went on a walking tour of the old city of Jerusalem. Of course the old city is separated from the new city by the old wall, and I would guess that old wall is probably on the order of 2,000 years old. As I recall, Jerusalem was destroyed about 100 AD. The walk through the key sights of old Jerusalem was very interesting.

You quickly find that the same places that are holy to the Jewish people and the Christians are also holy to the Muslim people. And where Abraham, as I recall it – and I've got a bunch of books on this in our home library, but I haven't looked at them in many years – there was a hole in a domed ceiling and this hole by tradition is the hole through which Abraham went as he was sent into heaven. I would say that most of our time in the old city was spent at the Basilica of the Holy Sepulcher, where in close proximity you find so many of the shrines of the Christian religion.

Dr. Allison: I didn't know Abraham ascended into heaven. Did he?

General Fitch: That is what they tell you in Jerusalem. That may be a tour guide talking, but that is what they say. I guess that you can say that everybody's going to heaven [chuckle], I don't care what you have for a religion. That's if you go north [chuckle]. If you go south then you've got another problem. It is probably fair to say that each separate religion feels that your following that particular religion is the only way to get to heaven. On the other hand, if you believe in God, it is very likely that you will make it there. I read that most Americans believe in God.

But you know, this small area of the old city of Jerusalem is not much larger than this housing development that my wife and I live in, which is probably 60 or 70 acres. A lot of that area is just for shrines for all of the various and sundry religions. But we saw some of that in addition to seeing the leaders of the Israeli government. They took us up to the Golan Heights which was a separate day, and there's the Jordan River and where we were going to drive from the lower level up to the Golan Heights, which are right there, the Jordan River, it was about as wide as from here to that tall glass over there. The river Jordan at that point was more of a shallow stream,

which was maybe 30 feet wide and two feet deep. At that point below the Golan Heights, the Jordan is just a little stream [chuckle].

But you go up on the Golan Heights, and this is all Israeli Army talking with you. They have a briefing for you up there - and you stand up on the high cliff of the heights looking out on the valley below, on what the Israeli briefer calls the "Kibbutz"; or the Jewish settlements in that valley. It takes only a glance at the valley and you can see why the Israelis want to have the Golan Heights. It is all very simple, since the Syrians could put artillery up there and hit anything in that valley.

This is up to the north, above Jerusalem and above the Sea of Galilee, and it's on the border with Jordan. But anyway, that part was interesting; a lot of wrecked vehicles there on those Golan Heights, wrecks from the 50s or 60s. It is easy to see why they took the Golan Heights and kept them.

Dr. Allison: The '67 war too.

General Fitch: Yes, I guess '67. I went to the Med in '73 for the war that took place that fall. But back to the National War College trip of 1971, from Israel we came back to the states. But it was a great trip, and hands down, the Israel visit was the high point of the trip.

Dr. Allison: And little did you know a couple of years later you would be back over there.

General Fitch: Well yes. As a matter of fact I was over there just a couple of years later.

Dr. Allison: And there was a war.

General Fitch: Yes, but we didn't get connected in the war as such. My helicopters on the LPH, *Iwo Jima*, helped with the logistics aspect of mine sweeping in the Suez Canal.

Dr. Allison: Ok, after the National War College you went to MAG-32 and were the Harrier project officer.

General Fitch: Okay, MAG-32 was a very short tour.

Dr. Allison: You were the XO of MAG-32.

General Fitch: Yes, but before that I was finishing up National War College. And there was about two weeks of the graduate program beyond the end of the National War College curriculum. I was finishing that couple of weeks with George Washington University, and I had a phone call from Brigadier General Noah New. He said, "You've been selected for colonel." That came as somewhat a surprise since I had not been in the promotion zone. In spite of that, I knew that General Hill wanted me to be the program manager for the Harrier over at NAVAIR.

Dr. Allison: You mentioned last time you were notified that you had been deep-selected for colonel at this time and it was a surprise.

General Fitch: Yes, in a sense I was surprised and in a sense I wasn't surprised. The only thing I had heard was from Noah New with his telling me that I would be on the list. I had not heard anything at all until Noah New called that day, saying that I was on the colonel's list. On the other hand, my combat tour had turned out extremely well as the CO of VMA(AW)-533, and my tour in Marine Aviation from late 1968 to the summer of 1970, with all my work on the Harrier program and the A-4M had turned out extremely well. So, while I was not expecting to be picked up early for colonel, I was not completely surprised to hear that I had been selected. You might say that with the Marine Corps, early selection was possible but not probable.

Dr. Allison: They were Squadron of the Year after.

General Fitch: Well VMA (AW)-533 had been awarded the Commandant's Aviation Efficiency trophy for that year in combat, 1967-68, when I was CO most of that year. I'd been put in for a Navy Cross by MAG-12 for a February 1968 strike against a Hanoi target. However the Navy Cross had been downgraded to a Silver Star, which was the way the Marine Corps did it.

I wasn't that far below the zone; probably 50 or 60 numbers as a guess. What's interesting about that selection for colonel was you have to go back to 1961. In 1961 the Marine Corps selected about eight captains early for major; deep selected, and I was one of those that was deep-selected that year for major.

Dr. Allison: Were you?

General Fitch: I'd invented that multiple carriage bomb rack that was being used by every combat aircraft in Vietnam, I had the patent for the rack, and I had a pretty good reputation for that work. Getting deep selected for major in 1961 did surprise me though – at least a little surprise was there. As I remember it there were about eight early selectees that year for major.

What is interesting about the colonel deep selection in summer of '71 is, that out of those eight Marines who were deep selected as a captain to major, six out of the eight were deep selected for colonel in 1971. Then some of those selected early for both major and colonel were selected for brigadier general in early 1976.

Dr. Allison: Right. So you're kind of traveling with the same pack there.

General Fitch: I might mention that Al Gray was deep selected both times that I was.

Dr. Allison: Yes, future Commandant. Can you think of any others?

General Fitch: Well I could show you that picture of brigadier general selectees down stairs in my old office, because some of them are the ones selected early for major and then colonel [chuckle]. I have a terrible memory of names. But of the roughly eight; whatever it was, captains deep selected for major in 1961, then we were all at the bottom of the zone when we get selected for lieutenant colonel. But the important part of this is that Noah New calls me and I had worked briefly for Noah New when he was a colonel. In AAW he had temporarily been in charge of that office just before I went to the National War College. And anyway, he tells me that I've been selected for colonel, so I say, "Fine, General New, I thank you very much." And I go in and I get my suitcase and I start packing it for Beaufort. My logic was that I felt sure that if General Hill knew I'd been selected for colonel he'd say, "Fitch is not going to Beaufort, he's going to Naval Air Systems Command," which I did not want to do.

Dr. Allison: Alright. So you went down to Beaufort. Why did you go to Beaufort in the first place? Were you thinking you were going to get an F-4 because it's an F-4 base?

General Fitch: I had flown the F-4 quite a bit when I was on staff duty in the SecNav's office. I wasn't thinking about the F-4. I had more in mind flying the Harrier and the A-4M. MAG-32 had several A-4 squadrons in addition to the one Harrier squadron VMA-513 was just getting started with the AV-8A. I figured I'd go down to Beaufort and be the XO of MAG-32 for a year or so,

and then take MAG-32. There were probably two or three A-4 squadrons in MAG-32 plus 513. I don't recall the A-4 squadrons, although I flew with them some.

I had been flying the A-4 ever since I was in VX-5. I had a lot of A-4 experience, including over a hundred combat missions in the A-4 to go with my 200+ in the A-6. To that you can add that I had recently been the project officer at HQMC for the A-4M plus the Harrier. That was a very good fit for me to be the CO of MAG-32.

Dr. Allison: Why was that?

General Fitch: What I had done, back when I was a major working in SecNav R&D, I had gone down to Patuxent River and checked out in the A-6 which was pretty simple. I just got in the airplane and flew it [chuckle] and the formalities weren't very significant at Patuxent River. While on the SecNav staff in 1963-65 I had arranged for that F-4 Phantom checkout at Cherry Point. I'd flown the F-4 for two or three days at Cherry Point and come back to Washington, and then I could fly the F-4 down at Patuxent River.

But in the summer of '71, General Axtell is in Beaufort for a couple of days and he indicates that I'm going to be moving to Cherry Point. He doesn't say why, and at that time I'm working for Shine Morgan -- the CO of MAG-32. Shine was a bird colonel and I'd known him for years. My office was right across from his and the adjutant was in the middle between them. One day during that short tour in Beaufort, I'd come out of my swinging door, Shine had just come out of his swinging door, and I said something like, "Shine, do you want to go to lunch?" and he'd say, "Bill, come in here a minute." We'd go into his office and he'd say, "You know, I'm a colonel." and I said, "I know." He said, "Well it doesn't look right for you to call me 'Shine.'" So I said, "Okay Colonel."

So I called him colonel the rest of the time, which wasn't very long. Now I'd been selected for colonel at this point in time so I was going to be a colonel soon. So anyway, we go to lunch and a week later the 2d Wing sends down orders that tell me to check out of MAG-32 and move up to Cherry Point.

Now my wife, Margaret Marie, had stayed in Annandale because we didn't know about housing down at Beaufort. So with orders to the 2d Marine Aircraft Wing at Cherry Point, I said goodbye to MAG-32 and Colonel Morgan. I drove to Cherry Point and. I think it cost the Wing about 50 dollars for me to do that move. A couple of weeks later Margaret Marie and I moved from Annandale, Virginia to Cherry Point, to live in quarters 300 Jefferson Drive.

To end that story, in 1976 when I'm a brigadier general out in Okinawa and the Assistant Wing Commander for 1st Wing, Colonel Shine Morgan is on the staff of III MEF. Shine has missed brigadier a few times, since he once was several years senior to me. So I'm at III MAF – for some kind of meeting. Shine comes up to me at the meeting, I've got stars on my shoulders, and he said, "Bill this" and "Bill that" Shine liked to call me, Bill.

Dr. Allison: [Laughter].

General Fitch: And I was tempted to say, "Shine" lets go out in the hall and have a talk. But I didn't have the heart to do that to him [chuckle]. But I was amused about how much of a thing he made of me calling him "Colonel" and he was "Billing" me left and right when I was a brigadier.

Dr. Allison: Did MAG-32 have any A-6 squadrons?

General Fitch: No, it was two or three A-4 squadrons and the one Harrier squadron, then there was MAG-31 at Beaufort that had three or four F-4 squadrons. Maybe it was five squadrons MAG-31 had. I forget.

Dr. Allison: Okay. Did they have any maintenance problems in the MAG at that time?

General Fitch: Well I wasn't there long enough to work them. I was only there for about a month or six weeks, something like that. But of course in 1968 I'd been the XO of MAG-12 out at Chu Lai for a short while, when I was finishing up out there. I pretty well knew how an air group should be run. I don't recall really what I did at Beaufort, except interface with the squadrons and the staff, and call Shine "Colonel." But I can tell you this; the way Shine would run his air group and how I would run the same air group was totally different.

Dr. Allison: Is that right?

General Fitch: But that's kind of academic. But no, it was just such a short time because I would guess I probably didn't spend 20 nights in the BOQ there before I was gone. And so I get to 2nd Wing and Brigadier General Tom Miller is the Assistant Wing Commander. General Axtell tells me he wants me to be the Harrier project officer, which is kind of logical since from late 1968 to

the summer of 1970, I was the duty expert on the Harrier in Washington. In 1969 and 1970, Tom Miller was in Vietnam as deputy to Lieutenant General McCutcheon, CG III MAF.

And so as the new Harrier Project Officer, I say, "Fine with me, General." And then in that process of just getting started they're talking about whether it's going to be an operational test and evaluation of the Harrier. General Axtell says, "Now I want to make this a Marine exercise and I want you to run the Harrier part of this, the sortie rate validation." He was talking to me. Then General Axtell says," And I want you to plan it and all that."

I'm still a lieutenant colonel and they gave me a nice office space in the building there. I had an office twice as big as this porch. And they gave me a lieutenant colonel as an assistant. So I'm a lieutenant colonel, I've got a lieutenant colonel working with me, whose name I forget, and we start doing some of the detailed planning on how we're going to conduct this sortie rate validation. This will be both an operational test [OT] and it would be a Marine Corps exercise. And General Axtell wants to have the entire air control capability of the wing in the exercise, all of it operating in the field, including the tactical air command center [TACC] the tactical air operations center [TAOC] direct air support center [DASC], mobile radars. All of the C2 [command and control] system was deployed in the field, with the TACC and DASC at Bogue Field.

Dr. Allison: Were ground troops part of the play?

General Fitch: The 2d Marine Division at Camp Lejeune would have a couple of battalions of ground troops deployed in the field for ground combat training, while the wing had everything aviation in the field. The division was providing the GCE for Versatile Warrior, and we were intent on making the close air support realistic.

The exercise had momentum. In addition there will be some air operations by conventional jets out of Bogue Field, but that will not be part of the SRVT [sortie rate validation test]. For about the first five days of the SRVT, the Harriers will be operating from the main base at Bogue, with some operations from the forward base and some operations from a road, and from the VTOL pads – all remote sites at Camp Lejeune.

The lieutenant colonel working with me gets transferred, and I get Lieutenant Colonel Gene Russell as an assistant to plan and execute the SRVT. Gene and I worked together well. Ten years later Gene would be a brigadier general and the AWC for me at 1st MAW. Gene and I were planning this SRVT and one day we get in my car and drive down to Camp Lejeune to look at the various sites where we might put Harrier operations. Landing zone [LZ] Bluebird is probably a 10 or 12 acre grass field. It is a landing zone for helicopter operations. Bluebird was surrounded by trees at its perimeter and to me it looks ideal for a forward operating base.

Dr. Allison: Now you're talking about landing zones like for helicopter landings, right?

General Fitch: Helicopters could have landed anywhere in Bluebird. But I'm talking about putting in an AM-2 matting strip that will be 1,500 feet long, with short AM-2 taxiways to the tree line and AM-2 matting for parking. Our forward base at Bluebird will have refueling, rearming, and aircraft maintenance. The pilots and the supporting Marines in the squadron will live in tents positioned in the tree line. Even though the Harriers can operate from grass fields, you have to plan on heavy rains which would make the grass a muddy quagmire. Thus we specified the AM-2 matting, which can be quickly installed. Bluebird was just one of probably 20 or 30 suitable LZs for a forward base. Today in 2006 the Marines call such a forward base, a FARP [forward arming and refueling point]. I want to put an airstrip in there and it would be an AM-2 matting strip that was about 1,500 feet long. It would be installed by engineers from Camp Lejeune. From the air it would be difficult to see the aircraft parking area back in the tree line, where the six AV-8A aircraft would be camouflaged. Parking and taxiways would be AM-2 matting.

Dr. Allison: So they [Harriers] were coming into the Marine Corps inventory at this time?

General Fitch: VMA-513; the squadron, was at Beaufort--it had at least 12 Harriers at the time and maybe 20. We would use just six AV-8As and the intent was to never substitute aircraft. We would start and finish with the same six Harriers.

Lieutenant Colonel Bud Baker had started as CO of 513, then when a heart problem developed he was replaced by Major Jim Orr. Jim had flown the Harrier at the Naval Air Test Center, Patuxent River. Captains Harry Blot and Bill Scheuren had also flown the Harrier at Patuxent River.

As for the layout of the strip and parking areas at LZ Bluebird, I stood out in the middle of the LZ with Gene Russell. I looked at the trees around the perimeter, and I said, "We'll line it up this way." And that was the way that the AM-2 strip was put in at LZ Bluebird in early 1972, and it stayed in place for about 20 years. [laughter].

Dr. Allison: Very scientific, huh!

General Fitch: It was as scientific as it needed to be. It probably took Gene Russell and me about 10 minutes to decide the layout of that 1,500 foot strip. We had to cut down a few trees at one end and cut down a few trees at the other end. Then I wanted to put in some landing pads for vertical landings and vertical takeoffs.

From General Axtell we had *carte blanch*; it was anything we wanted to do the Wing and Division were going to let us do it. And so we went around primarily by helicopter; with somebody flying us around in a helicopter. We picked out these LZs where you'd put a vertical takeoff and landing (VTOL) pad here and maybe three miles over another way you would put in another pad for VTOL. I should mention that a few years later, the Marine Corps abandoned the vertical takeoff, but vertical landings are still routine with the Harriers.

On Lyman Road, a few miles from LZ Bluebird, we found a straight stretch of road that looked like a good site for doing road operations. The plan was that when car traffic was using the road, they would have to have traffic directors to keep the cars separate from the aircraft. We wanted about 1,500 feet of road that was useable, even though we could plan on the Harriers just using about 800 feet. We selected the area at Lyman Road that met our needs for rolling takeoffs and landings by the Harriers, and we arranged for an off-road pad for parking aircraft. The parking area would have fuel bladders in place for refueling. Aviation ordnance could be replenished at Lyman.

We planned on helicopters lifting fuel bladders with pumps into the remote sites, including Lyman Road, for refueling aircraft. We also planned on helicopters lifting in the aviation ordnance required to rearm aircraft at the remote sites. So every site would have a refueling and rearming capability and it would all be helicopter transportable.

We had ordnance men set up to rearm aircraft at remote sites. We had plane captains and mechanics from 513 ready to man the remote sites. And then we had the Golf-10 target impact ranges about 20 miles away where we could drop live ordnance with no problem. As I recall the impact area for live ordnance was called the Golf 10 Area.

So we go through all this planning, with most of it done by Gene Russell and me, and we lay out how we're going to do it. General Axtell concurs in our site planning. In most instances a Harrier would fly only 20 to 40 miles to reach their assigned forward air controller and their assigned target area for ordnance delivery. This meant it would take about four to six minutes from takeoff to reaching the target area at Camp Lejeune, the Golf 10 Area where we would deliver the high explosive ordnance. With refueling, rearming and aircraft maintenance available at the remote sites as well as the forward base, we were confident that each AV-8A could fly six sorties a day. Then in a surge we were confident that they could fly at least eight to ten sorties each day, per

aircraft. It would turn out that the surge gave us over 10 sorties per aircraft, while still using the same six Harriers.

We planned for a stream of visitors coming through. Part of the visitors that were going to come through would be the weapons systems evaluation group (WSEG) in OSD. WSEG was going to supervise various actions in the DASC and the 513 squadron area, and they would write up this whole operation as to how it was conducted and what sortie rates were met.

Dr. Allison: When would you be ready for the exercise?

General Fitch: By early March 1972, all the AM-2 matting had been put in place at LZ Bluebird, Lyman Road and the remote VTOL pads. It was installed by the division engineers, MWSG-27 and Marine Air Base Squadron 14. In early March 1972 we've got all these takeoff and landing pads scattered around Camp Lejeune and ready for flight operations. LZ Bluebird as the forward operating base is ready for flight operations, as is Bogue Field which is ready as the main base.

Dr. Allison: All at Bluebird; that was the one place you had?

General Fitch: No, we had any real estate that we wanted to use. Bluebird was the primary forward base and that's where the six-plane detachment of 513 kept its airplanes for the last five days of the SRVT. The first five days, 513 operated primarily out of Bogue Field, while also doing some operations from LZ Bluebird, the forward sites and Lyman Road. At Lyman Road the asphalt was just wide enough for the AV-8A outriggers to roll down the edge of the road. Pilots had to be careful how they used their wing reaction controls when landing at Lyman Road, since the blast of the reaction controls could dig a ditch in the soft soil.

Bogue Field was the main base and LZ Bluebird was the forward operating base. To disperse your airplanes you could have a short takeoff strip maybe 800 to 1,500 feet long, here at Bluebird, and somewhere maybe two miles away you can have a small piece of a road. You can have vertical landing pads adjacent to a road that can be used for vertical landing if desired, or for parking aircraft off the road. Road operations with STOVL aircraft are easy. You can disperse your airplanes in an area instead of having them all parked in a neat row.

Of course STOVL aircraft can also operate from grass fields. I watched the RAF operate from grass fields in Germany, about 10 miles from an airbase named Guttersloh. The RAF Harriers would do rolling takeoffs from the grass field then on return they would land on a vertical pad made from AM-2 matting. This was over 30 years ago that I watched that exercise, and I flew

a RAF Harrier from that grass field. The assumption for the RAF exercise was that the air base, Guttersloh, would only survive for about eight hours after war with the Soviet Union started. Thus the operations from the grass field away from the airfield. The RAF had set up where they would be operating from a remote base within that eight hour window.

In our SRVT we did all forms of takeoffs and landings from various basing in our ConOps. This included rolling takeoffs and rolling short takeoffs, along with vertical landings and slow roll on landings. For the six Harriers [AV-8A], they would operate from a main base at Bogue Field, a forward base at LZ Bluebird, a road (Lyman Road), and various AM-2 pads for vertical operations.

At a later date and totally separate from the SRVT, we planned to do the shipboard applications and ConOps verification, which would be done from USS *Guam* (LPH), USS *FDR* [CVA-42], and USS *Nassau* (LHA). At the time period when 2d MAW was doing these various efforts with the AV-8A, ashore and afloat, the RAF and the Royal Navy were also doing similar types of evaluations for ConOps.

For the SRVT it was a question of how do we integrate all the Harrier VTOL and STOVL capabilities into the TACC and DASC for effective command and control ashore, and how do you control these various Harrier assets that you've got at the short airfields, the roads and the vertical pads. And our primary objective was what sortie rates can be flown by six AV-8A Harriers. The command and control along with sortie capability had to be defined promptly.

We proved the validity of the C2 concept by conducting the SRVT at Camp Lejeune in March 1972. During the SRVT over a period of ten days, while operating initially from a small main base for about four or five days, then on to the forward base for about five or six days. For the SRVT the six AV-8A aircraft delivered ordnance on CAS targets every sortie.

We proved that the AV-8A Harrier could individually fly a sortie rate in excess of six sorties per day. That is six sorties per day per aircraft on a sustained basis. During a surge, which was the last day of the SRVT, the Harrier could sustain a surge sortie rate of over ten sorties per day per aircraft. Where Harriers were capable of operating 24 hours a day, only partial days were used for the SRVT. Somewhere in the Marine document storage there is a write-up on the SRVT done in the spring of 1972 -- March 1972 to be precise. The exercise that included the SRVT was titled Versatile Warrior and the SRVT was called Blue Ax. The OSD WSEG monitors wrote the report on the SRVT.

AM-2 matting was used for taxi and parking. Collectively the six AV-8A aircraft, which were never replaced in the test, and those six aircraft flew an average of about 36 sorties per day for the entire period. On the one surge day, we flew a total of just over 60 sorties with the same six Harriers. In the ten days of the SRVT, start to finish, with the same six AV-8A aircraft we flew

precisely 376 sorties. One mission was aborted after takeoff, which if it had not aborted would have been the 377th sortie.

I emphasize that we never substituted aircraft, and every sortie delivered ordnance under the control of a forward air controller [FAC]. Most of the ordnance delivered was MK-81 and MK-82 bombs, with some MK-83 bombs on occasion. Occasionally they used practice bombs such as the MK-76, but high explosive bombs were the norm.

That SRVT using the first generation Harrier AV-8A could be extrapolated to the fifth generation F-35B STOVL aircraft that the Marines will IOC in 2012. I would say that with forward basing ashore the F-35B should be capable of flying nine sorties a day sustained with each F-35B aircraft assigned to a squadron. I would suggest that with forward basing ashore, with the new technology that will be in the JSF STOVL aircraft, a surge rate of 12 sorties a day for each F-35B could be achieved. I should point out that with forward basing, the flight duration of the average sortie would be only about 30 minutes, sometimes only 20 minutes, so projected total flight hours per F-35B aircraft would be on the order of about two and a half to three hours per 24 hour day. That flight hour count for that large number of combat sorties tells you a lot about the value of forward basing close to the ground combat, and it tells you the combat effectiveness of a STOVL or VSTOL aircraft. For the Marines today that aircraft is the AV-8B, and beginning in 2012 it will be the F-35B. The Marine argument for the all-STOVL force is well documented. It is also well established by Navy studies that if you cut the distance to the target by half, then you double the sortie rate capability of a STOVL aircraft. The same applies to rotary wing aircraft. Austere basing close to the ground battle is the key and over a period of many years the Marine Corps has demonstrated its capability to forward base.

The sortie rate validation test was not done in isolation. The OSD provided oversight. The OSD WSEG monitored every aspect of the execution of the SRVT -- and wrote their report. They had monitors at key nodes within the SRVT, such as with the forward air controllers, at the TACC, at the DASC, and at the VMA-513 aircraft parking area. For example, at the Marine DASC, the WSEG monitors provided a dice arrangement to determine delays in aircraft launch after a CAS request was received. WSEG would throw the dice and that would establish when the next SRVT sortie could launch. Commander Operational Test and Evaluation Force-Norfolk [COMOPTEVFOR] also had monitors present for the SRVT.

That SRVT was very useful, again, for briefing visiting foreign dignitaries, generals and admirals along with members of congress and OSD civilians.

Dr. Allison: And your role in the SRVT, as project officer was....?

General Fitch: The Harrier project officer for 2d Marine Aircraft Wing, Gene Russell and I wrote and executed the plan for the SRVT with the six AV-8A. In summary the 1,500 foot strip at LZ Bluebird was a key element within the SRVT, since it was the forward base. A Harrier could operate from the forward base and then at the end of a mission it could land at a vertical pad, a remote site, or on Lyman Road. We had fuel bladders at each remote site to refuel each aircraft, along with rearming the ordnance. Ordnance men were always on hand to rearm the Harriers. There were communications at each site, and we had every site manned with plane captains and other support personnel, all to make sure that everything went right. I have mentioned that WSEG required that we had to throw a set of dice at the DASC to establish when a sortie would be launched to support a forward air controller. That roll of the dice gave a random nature to the sortie operation that made it more realistic. I don't remember whether WSEG used three, four, five or six dice in their launch scheme. The dice roll eliminated any suspicion that we just put aircraft in the air willy-nilly.

Dr. Allison: Every plane flying six sorties a day.

General Fitch: Yes, and it was a bunch of sorties – a total of 376 AV-8A sorties in 10 days. We go through the entire exercise to complete the SRVT, and we write it up from the Wing standpoint. WSEG writes their report. General Axtell is very pleased with how everything has gone. Just about simultaneously with that he gets selected to be commanding general FMFLANT and Brigadier General Tom Miller takes over the wing as the commanding general. Brigadier General Andy O'Donnell would come in as the AWC.

We had used all the assets of the 2d Marine Aircraft Wing including the Marine air control system, and we had scrambled many sorties, some 376 of them -- with six aircraft in 10 days. We showed how you could get a request to scramble a Harrier, and if the roll of the WSEG dice was favorable, in five minutes that Harrier could be in the air and heading towards the target.

Dr. Allison: Would you say it validated your concept of operations.

General Fitch: Validating the whole banana, yes.

Dr. Allison: So that impressed you more on the Harrier then you had been before, would you say that?

General Fitch: Well no, I expected it to happen that way. We had positive control of everything happening – that is everything except the roll of the WSEG dice in the DASC.

Dr. Allison: Okay, you didn't need anymore proof that this was the way we should go?

General Fitch: No, we did not need anything else! We needed to show it could be done and we did it -376 sorties by six Harrier aircraft in ten days. The sortie rate validation was the icing on the cake to justify our going to an all STOVL force. When the F-35B reaches initial operating capability in 2012, the Lighting II will put the candles on that cake.

Dr. Allison: Anything else on the SRVT?

General Fitch: That kind of finished that up the SRVT. With that we move on to when General Axtell and Tom Miller had their change of command. Margaret Marie and I would attend the change of command. As we are going through the receiving line to wish General Axtell well in Norfolk and to congratulate General Miller on taking the wing, General Miller said to me, "I want you to take command of MAG-14." At that point in time I'm still a lieutenant colonel. And so I said, "Yes sir." and [chuckle] then I said, "Like when?" and he repeated, "As soon as you can." [Chuckle] So the change of command for MAG-14 is soon set for a couple of weeks later. I guess that was probably the first change of command that General Tom Miller went to as CG of the 2d Marine Aircraft Wing.

So I take the group as a lieutenant colonel.

Dr. Allison: That was an A-6 group?

General Fitch: MAG-14 had three squadrons of A-6 Intruders, one F-4 Phantom fighter squadron, VMCJ-2 with RF-4B and EA-6A aircraft, H&MS-14 with TA-4F aircraft, and MABS-14 at Bogue Field. I've had a lot of experience with A-6s because I've commanded two squadrons, I had been flying the F-4 for about seven years, and I had been flying the A-4 for about 12 years. At the time of the change of command, one of my A-6 squadrons, VMA(AW)-224 was in the Tonkin Gulf flying from the aircraft carrier, USS *Coral Sea*.

Dr. Allison: Why did they have that F-4 squadron in there?

General Fitch: They were just there. I never asked them why. VMFA-312 was an excellent squadron; it was commanded by LtCol Bob Roche, who was a superb squadron commander. And I liked it because I flew their airplanes [chuckle]. In fact I flew a bombing hop in a 312 F-4, the day before my change of command when I left MAG-14.

But anyway, we did the change of command where I relieved Colonel Bill Nowadnick as group commander. A week or so later I got the squadron commanders in at group headquarters and I said, "Now we're going to go on a full systems operation."

Dr. Allison: What do you mean by that-- full systems?

General Fitch: Well everything in the airplane works that is required for meeting every mission of the aircraft.

Dr. Allison: Even the special electronic gear.

General Fitch: All the electronics systems, radars, computers, communications, ECM [electronic counter measures] equipment, etc. And that was unheard of. And I said, "What we're going to do..." I probably said something like, "You can fly the rest of the week and then Monday we start." or something like that. I don't remember that exactly. And I told the Wing that's what we were going to do and that was unheard of. And so the whole load was on the maintenance personnel in the squadrons to try and get these airplanes into shape, and this went on for, I don't know, three, four, five weeks. And of course guys were getting antsy. We didn't have simulators to speak of in those days and the ones they had didn't work very well.

Dr. Allison: In other words there weren't many airplanes to fly.

General Fitch: There weren't many airplanes flying.

Dr. Allison: Because you downed them.

General Fitch: But again, I wanted the whole system to understand the problem. In the tactical squadrons the mechanics and electronics Marines, the metal smiths, the ordnance men, the electricians, and other maintenance personnel, they can make all the airplanes full systems if they do their job reasonably well, and if they have the proper logistic support of spare parts and repairables. The tactical squadrons are the easiest link in getting full systems. The hard part is that it starts with the planners in Naval Air Systems Command and how many spares are procured and what the priorities are because ever since there was a thing invented called Naval Aviation about 1911 or something like that, the Navy has always had the priority for spare parts, equipment rework and whatever. It means that the Navy supply system in Philadelphia and other locations has to work and plan ahead. It means that the H&MS-14 had to do its electronic repairs quicker and better. I just wanted the world to understand that we were going to have to change some priorities here if this full system effort was going to work. MAG-14 had four of the toughest aircraft in Marine aviation to maintain – the A-6A Intruder, the F-4B Phantom, the EA-6A, and the RF-4B. And so I had squadron commanders coming to see me and pleading with me to let them fly, and I just kept saying, "No." And then an interesting thing happened not too far into this – probably a month after I had started the full systems effort. The Chief of Staff, Colonel Jim Weaver [of the Wing] calls me and says, "The General wants to talk to you." So I said, "Fine." So I'm talking to General Miller and he's saying this and I'm saying this point in regard to supply support from the wing, and he's saying this, and the substance was that the Wing wasn't getting us enough priority to get these airplanes fixed. And of course I had worked, at that point in time, a year for General Tom Miller when he was a colonel before he went to III MAF with McCutcheon to be the deputy in III MAF. But anyway, I'd say something, General Miller would say something. Finally he just slammed down the phone - hung up on me. After that Colonel Weaver called me and said, "God Bill, you can't imagine how mad he is." He said, "You're going to get yourself fired." I said, "Well I'm just telling him what I think." And he'd say, "Well I don't know." And we'd go another week and General Miller and I would have another conversation; the same thing might happen [chuckle].

Dr. Allison: He was wondering how come you're not flying.

General Fitch: Well no, he wasn't wondering. I had told him what I was going to do. My objective was to shake up the support system in Marine tactical aviation and I was doing that in spades. Everyone was coming to know the low priority that the Marines had relative to the Navy. However it is fair to say that he did not appreciate me casting any stones at the Wing for not doing their job. I was out to get it across that the squadron was the lowest point on the totem pole, and the squadrons couldn't do their job without proper support from above. They weren't giving us the supply support that we needed and they weren't doing anything about changing these priorities -- where the Navy had priority for everything. And to this day it's still the same way with the Navy having the highest priorities, because in Naval Aviation, the carriers are golden. The Navy has played this priority game for decades, and they have played it well.

The carriers are first priority for everything and if anything is left over, then the dregs go to the Marines. When the Navy air wing comes off a carrier and the carrier is going into a stateside training status, then that air wing goes down to zip. I mean they go C-4 just like that. All the people go away. The airplanes are in tatters and so forth and then when they start to build up to go to another carrier cruise, then all this support floods back in. They rebuild the Navy air wing allover again. The Navy has done the same process for many years, where it is a tear down build up, tear down build up. That's what the Navy does. With 10 carriers operational in the Navy, if the President said send them all to war now, the Navy might be able to get seven carriers deployed, but more likely only six.

But anyway, I finally told the squadron commanders, I said, "It looks like we just can't get there from the standpoint of the quality of the systems in the airplanes." And they were flying a little bit. They were flying some test hops and occasionally they'd get an airplane working the way it should but they weren't getting enough of them. And so finally I just told General Miller, I said, "We can't get these airplanes to full system because we just don't have the wherewithal of the spare parts and subsystems, to do this," and I told him why. I told him that while full systems was still my objective, we had to start flying. So then we kind of started flying a normal routine but they're still trying to make the airplanes better and about that time – it was early on – I decided we needed a bombing derby.

Dr. Allison: And they hadn't done that before?

General Fitch: Never. So I got my special services guy to order some nice trophies, and we soon had trophies that stood three feet tall. And I don't know, probably every three or four or five months, something like that, we'd have a bombing derby where everybody flew in this bombing derby. That worked out pretty well.

Dr. Allison: Why did you decide they needed that; a bombing derby?

General Fitch: Well I just thought it would put a competitive spirit into the air group.

Dr. Allison: Squadron competition.

General Fitch: Yes. We would have competition between squadrons, and we would vary the derby bombing tactics required in order to level the playing field. Because you know all the squadrons, then they'd want to win their trophies for various and sundry reasons.

Dr. Allison: What else training-wise for the MAG?

General Fitch: And let's see, we started doing some big strikes and we would do things like line up some KC-130s for tankers and we would launch 30 or 40 airplanes out of Cherry Point. We'd be carrying say MK-76 practice bombs. We'd have tanks on the airplanes and we'd have F-4s for fighter escort. We'd have EA-6As to do the jamming. We would have RF-4Bs to do the photo recce and A-6s along with A-4s to do the strike part. And I had three A-6 squadrons so I could probably put up about 25 A-6s. And then of course we had a dozen F-4s so we could probably put up eight or ten F-4s and we'd do things such as a strike against Pine Castle Bombing Range down in Florida, which was a pretty good trip down there; probably 600 miles or 700 miles, something like that down and back with aerial refueling going and refueling as required coming back. But it was quite a gaggle of airplanes which hadn't been done in a long time. And things went along, let's see, I guess I had the group about a year and a half, something like that, and it worked out well.

Dr. Allison: Did you fly air-to-air against them?

General Fitch: The air-to-air was for Bob Roche to work out, since he was the F-4 squadron commander. However, the CO of H&MS-14 was Lieutenant Colonel Jim Morley, and Jim was a very good pilot in air combat maneuvering [ACM] as well as air to ground. I am sure that Jim Morley and Bob Roche did some ACM – probably flew a lot of ACM. Both Bob and Jim knew what they were doing as pilots – experienced pilots, and they knew what they were doing as squadron commanders. The A-4s were primarily just for the group staff and the H&MS-14 pilots to fly. We had a really good squadron commander at H&MS-14. But no, they did some good flying and then of course they could fly in a strike group too. The strike group could go to Pine Castle and back, with some aerial refueling, but it was kind of the way you would do it in a

different kind of warfare than Iraq. You could use large strike groups if you had a war with North Korea.

It wasn't a night strike like we'd normally do with A-6s because we would do these large strikes in the daylight. With the A-6 all-weather aircraft you flew single plane at night, although some nights we might do a coordinated attack with two aircraft. One cardinal rule of doing a night coordinated attack with two or three aircraft was, you never fly in trace. If you fly in trace, the AAA for #1 hits #2 and the AAA for #2 hits #3. But anyway, the group did pretty well. And we finished that up and Tom Miller, he's CG of the wing – he'd been CG for a year and a half or so – and General Axtell up at FMFLant decides that they want me to take the 32nd MAU (now a MEU). Lots of Marine aviators have been a MAU commander.

Dr. Allison: That's interesting and something I was going to ask about.

General Fitch: In fact the Marine who had 32 MAU – the fellow that had the 32nd MAU before I took it was an aviator. Then in the summer of 1974 I was relieved as CO 32 MAU by an aviator. After that I became the wing G-3.

Dr. Allison: So that's not a big deal.

General Fitch: Well it's a big deal to get a Marine aircraft group and it is a big deal to get a Marine Expeditionary Unit. It's big time big deal to get a Marine aircraft group as I did with MAG-14, and it is another big deal to get a Marine expeditionary unit (today's term MEU)..

In the case of MAG-14, I had over 3000 officers and men, and in 32nd MAU I had a little over 2,000 Marines and sailors. So by the summer of 1974 I had commanded two tactical squadrons, VMA (AW) –225 and VMA (AW)-533, I had commanded MAG-14, and I had commanded 32d MEU. I was still a junior colonel at that point in time.

Probably today if you were to take all the generals in Headquarters Marine Corps, those at Quantico, and those at a Marine division, I have probably conducted more amphibious landings then most of them. I was the landing force commander for about 19 or 20 amphibious assaults. Most of those amphib assaults were done when I had 32d MAU and we were operating from ships in the Mediterranean Sea, and one was done when I had 9th MEB in Korea. The landing in South Korea had a 0400 H&L hour, and it was joint with the ROK Marines.

Dr. Allison: More than a ground general?

General Fitch: Yes, more than a ground general. That is very likely. You would be surprised at how many ground generals have never been a landing force commander. The only way that a ground general can be a landing force commander is to either have a MEU, a MEB or a MEF. I had the MEU and the MEB.

Dr. Allison: Well did that mean that you were cut short on your MAG-14 tour?

General Fitch: Not really but a year and a half was enough. If I hadn't left MAG-14 when I did, then I would not have had the 32d MAU.

Dr. Allison: That was enough?

General Fitch: Yes. You don't want to linger too long in any one assignment. A case in point would be when I was a major and the Marine aide to the Assistant Secretary of the Navy for R&D. My staying beyond 30 months would have been a good move for the ASN [assistant SecNav] R&D office, but for me personally, General Greene's point on my needing to attend a Marine Corps school was more important, in order for me to move ahead in the Marine Corps.

Dr. Allison: Before you talk about the MAU can I ask you a question or two about; do you remember an exercise called "Alkali Canyon?"

General Fitch: Oh yes.

Dr. Allison: Do you have any comments about that?

General Fitch: Yes, I had a Provisional MAG for that, which we called a PROV-MAG. As I recall it was Provisional MAG-22. That was towards the end of my tour as the CO of MAG-14. They just took me aside to run the aviation part of the exercise Alkali Canyon.

Dr. Allison: Where was that anyway?

General Fitch: Alkali Canyon took place at 29 Palms, and it should have been around the middle of 1973, a couple of months before I left MAG-14. Twenty Nine Palms had the long AM-2 matting airfield out there. I think that runway was about 12,000 feet in length.

Dr. Allison: Big desert exercise, expeditionary?

General Fitch: Well it was a helluva big exercise. The brigade commander for Alkali Canyon was Brigadier General Jake Poillon. Jake was and is a great guy--a fine gentleman and a superb Marine.

There is an interesting story in the planning for Alkali Canyon – I need my list of old generals here – but we're out meeting with General Hill – he now has 3^{rd} Wing at the time. I would guess this meeting took place at 29 Palms.

Dr. Allison: Was it an air-to-ground exercise?

General Fitch: It was all of the above, yes. It was a big one; a lot of air to ground. We would have fixed wing flying out of MCAS El Toro and Yuma, and we would have rotary wing flying out of Camp Pendleton and 29 Palms. No I have a PROV-MAG for it and I had, I don't know, three or four helicopter squadrons in it, maybe more, and in addition to the rotary wing I had fighters and attack airplanes coming out of 3rd Wing. We put in the entire air control system and we were at 29 Palms. We go out for this planning session at 29 Palms, and this brigadier who's going to run it; the Brigade Commander, is Jake Poillon. So Jake and I are out there – I'm a colonel at this point – and CO of Prov MAG 22 plus CO of MAG-14 back at Cherry Point. General Poillon and I go to a planning meeting with General Hill at 29 Palms, and we're talking about how we're going to conduct this exercise. From the aviation standpoint I tell General Hill that I'm planning to do, and he's talking about there's going to be a enemy air threat coming from some base 200 or 300 miles to the north of 29 Palms, I forget where that base was.

General Hill talks about these air strikes that he thinks that we can't defend against. I said, "Well General, I'm going to put a radar site up on top of this mountain." and I showed him the mountaintop on a map, which is about 150 miles to the north of 29 Palms. And General Hill said, "Well Bill, How are you going to defend that radar site?" and I said, "General, it's going to be very simple. I'm going to put a company of Marines up there with them."

And so we go on with the meeting – and what's important here – Major General Kenny Houghton, a Marine two star at the time and the CG of the 1^{st} Marine Division at Pendleton; is attending this meeting with General Hill. We finish the meeting and General Houghton walks by

my chair, he taps me on the shoulder and he said, "The next time I see you I want to see you wearing a star." I had never met the man before [laughter]. And so, we go ahead and we do the "Alkali Canyon" exercise, and it turned out very well.

Dr. Allison: Was it like a CAX [combined arms exercise] or something like that sir? Were they even doing CAX at that time?

General Fitch: This was before CAX. General Wilson started the CAX in 1975 when he became the Commandant. This is about two or three years before CAX was ever invented. But anyway, it all goes very well and the people fly the way they're supposed to and the air control system works the way it's supposed to. When we had a lull in the exercise, I asked General Poillon how he'd like to go fly in an A-4, and he said, "Yes, I'd like to do that." So I arranged for a TA-4F from 3d MAW and they brought it to 29 Palms. Prior to the flight we gave him a cockpit checkout and an ejection seat brief, and gave him some flight gear to wear. I've got my flight gear there and he and I go out and fly a low level from 29 Palms out over the desert, and we land at MCAS Yuma.

We go to an early dinner and then we go get back to the air station, get in the TA-4F and we fly back to 29 Palms, low level, you know two or three hundred feet all the way. I let him fly part of the time, giving him headings to take and altitudes to hold. General Poillon thinks that the flight over the desert is great [laughter].

Dr. Allison: Does he? No problem with airsickness?

General Fitch: Oh absolutely, he just loved it. No problems. We were flying the airplane two or three hundred feet, sand blower type flying, 400 knots and he's sitting back there steering the airplane and he enjoyed it. The upshot of the Alkali Canyon Exercise was that it turned out extremely well and we did all the things that we were supposed to do. After the exercise is finished and I get back to Cherry Point and MAG-14, then General Miller tells me he wants me to give up the group and that General Axtell wants me to take 32nd MAU. So, I said, "Fine."

Dr. Allison: Another question on MAG-14 before we move to the MAU--human relations training was big at that time--any issues in that regard?

General Fitch: Well we did but I was not an admirer of the human relations program. It was designed by people who were not leaders. I like the story; where they get these Marines in a

seminar on human relations. This sergeant major is at the human relations meeting and they've got the human relations leader who is trying to get everybody on a first name basis. He asks everybody to say what their name is, going around the table – I was not there but I was told the story – and they get to the sergeant major and ask his name. He says, "Sergeant Major Jones." And the team leader says, "What's your first name?" and he said, "Sergeant Major."

Dr. Allison: [Laughter]. But that training came out of Vietnam.

General Fitch: I'll tell you another story about MAG-14. From the standpoint of quality in recruits, things had changed so dramatically in the four years that I had been away from a ConUS command. For four years I'd been away from 2d MAW – because I had been at Chu Lai where the whole name of the game was to fight the war, and all the enlisted Marines and the officers just did an absolutely superb job of war fighting while in VMA(AW)-533. For the troops in 533 the stakes were very high. If they didn't do their job right, then aircrews could die.

I think I told you how with the advent of the Tet offensive in late January 1968, when we had Viet Cong or North Vietnamese rockets blow up the Chu Lai bomb dump and level my squadron area. They estimated that those VC or NVA rockets had detonated about 5,000 bombs in the bomb dump. In spite of that damage we never missed a beat in our flight operations and the amount of ordnance dropped on the enemy. VMA (AW)-533, dropped 3,000 tons of bombs on enemy targets in January 1968. My squadron area was flattened on the night of January 31, 1968. The squadron dropped 3,200 tons of bombs on the North Vietnamese enemy in February 1968. February was three days shorter than January. We delivered 200 tons more bombs in the short month than we did in the long month. All this was done from a flattened squadron area.

Dr. Allison: But had things changed, was there a need for human relations training after Vietnam, in ConUS?

General Fitch: There were a lot of human relations problems that the Marine Corps was having in the 1972 to 1975 period of time. This was because we were taking in—recruiting-- so many people into the Marine Corps that were essentially gangsters or very marginal people. When I took MAG-14, Clay Comfort was a lieutenant colonel – he was CO of VMA(AW)-332. Clay and I had been together in AAW at HQMC, working for Tom Miller. Clay was talking to me about how many special court-martials and office hours that he had, and I told him, "Clay, you're just not running your squadron right because I can tell you, when I had a squadron here; 225, which I had back

when I was a major at Cherry Point, I didn't have five office hours the whole time I had the squadron." And he said, "Well things are different." Well I didn't believe him. So then I take MAG-14 and I find out things are different. Clay Comfort was right, things had changed.

I mean they were big time different. You had many good Marines but you also had many bad Marines.

Dr. Allison: Plus you had the drug problems too.

General Fitch: On average there was a totally different class of Marine at Cherry Point in 1972 when compared to 1966 or 1967. In 1972, Vietnam had been going on for about eight years. In those days you would have a civilian judge of a circuit court, where the accused had been convicted for armed robbery or whatever other serious crime, and the judge, when it came time for sentencing would say, "Three years in prison or join the United States Marine Corps." You need to remember that in 1971-72 the Vietnam War had been going for a long time, and the Marine Corps was at a strength of about 250,000 or more. Crime was rampant in the Marine Corps in those days, because we had a lot of criminals mixed in with the good Marines.

And the guys would say to the judge, "I'll take the Marine Corps." I mean to emphasize that we had some real criminals coming into the Marine Corps in the 1970-75 timeframe. The lesson is there. The Corps has to always maintain its standards. It got very bad at Camp Lejeune and other Marine bases back in the 1971 to 1975 time frame.

As you know there's a large parade field down at Lejeune and as I remember it the movie theater and PX are on one side and the barracks are on the other side. The Marines who walked back and forth across this big Lejeune parade ground at night ran the hazard of being hit in the head with an axe handle. Many Marines were robbed on that parade ground at night. Many Marines were robbed when they got up at night and opened their locker. In many instances we had a totally different class of Marines than we had a few years earlier. It was all due to relaxing our standards. The solution will come when we get into when General Lou Wilson took over the Marine Corps as the CMC, because he was just a great Commandant. He got rid of these gangsters. But anyway, Comfort tells me about this problem. Well what I found was that there was just a heck of a lot of court martial actions that were going on because there were so many bad actors in Marine uniforms.

Part of the problem was these young lawyers that were supposed to be on the Wing and the air station staff for defending these guys. A lot of these young lawyers were as bad as the Marines getting the court martial. This was the free spirit age, and whatever went with that. I had one case

where a Marine had been AWOL for like six or eight months he'd been gone, and he finally had been picked up and brought back. I'd referred him to a special court martial. And the judge, who was a Marine captain lawyer, was going to throw out the case and I said, "No he's not." And so they then called me as a witness down in this court martial and there's obvious collusion with these young captains because I think they're all of the temperament, you know, "Hey Corporal, let's go out and have a marijuana or something." I mean it was the big buddy kind of thing and those young lawyers would say, "Yes, we just came out of college and we sympathize with you." and all that stuff.

Dr. Allison: "It's really not your fault, its society's fault", and all that business.

General Fitch: But on the stand the judge is asking me something and I said, "Well Judge, it's very simple." I probably called him Captain because that's what he was. I said, "You're either going to find him guilty or not guilty," but I said, "You're going to do a special court martial." [Chuckle] And the Marine judge said, "Well I guess we don't have any choice then." and I said, "As far as I'm concerned you do not have a choice and you will conduct a court martial." I said, "I don't care whether you come up with guilty or not guilty but you're going to do a special court martial;" and they did.

Dr. Allison: As MAG CO you could do that; you could tell them?

General Fitch: I was the court martial convening authority, I had referred the case to a special court martial, and a special court martial would be conducted. Note that I said that I didn't care what verdict they came up with, but they would do a court martial.

And I had cases like when a young Marine had done something and it looked like he deserved a second chance and maybe they had sentenced the Marine to some kind of confinement time, and maybe they had awarded a BCD [bad conduct discharge] as an example. I'd always call these young Marines in to give them another chance if it was possible. With that in mind, I've had Marines, when I had MAG-14, stand in front of my desk and I would say, "Now I'm going to suspend that bad conduct discharge for 12 months and if you do anything wrong in that 12 months you have just gotten yourself a BCD." I've had Marines respond to that by saying, "Colonel, I want that BCD now." and I would say, "You've got it!" The sad thing is that they had no idea what a BCD would mean in their later life.

But I mean we just had a lot of bad actors. Some were very bad, and in some cases there were extenuating circumstances that would prompt me to give them a break. Well things jump around here so now I've got to jump ahead about three years. In the summer of 1975 General Lou Wilson comes in as the new Commandant of the Marine Corps. He's one of the greatest Marines there's ever been. And when he takes over as Commandant one of the first things he says – and the Marine Corps at that point in time; this is 1975, we probably had 225,000 Marines, maybe 250,000 or more, I forget, because Vietnam being, you know in '75 you just had all that evacuation routine off the Saigon rooftops.

Dr. Allison: Yes, Vietnam was over.

General Fitch: When General Wilson came in one of the things he said was, "There are 20,000 people wearing the Marine uniform who do not deserve to wear the Marine uniform - get rid of them!" He said, "In six months I want to see them gone." and in six months 20,000 people wearing the Marine uniform were gone because they were all these bad actors, because in the four years prior to that you couldn't get rid of anybody. Just like when I'd give a court martial and the result would be these BCDs, if a guy had said, "I want it." it would still trickle on up to Headquarters Marine Corps and Headquarters Marine Corps would say, "No, put him back." In the early seventies the Marine Corps had gone for numbers and ignored quality.

Dr. Allison: "Give him another chance."

General Fitch: "Put him back to work." Yes, because they were looking for numbers. They weren't looking for quality, they were looking for numbers and the operating forces were paying the price.

Dr. Allison: Recruiting was so bad you couldn't entice them.

General Fitch: Recruiting was terrible. The people they were getting for the most part were terrible. But I have to say not all of them, you know 30 percent perhaps were very good but I mean some real bad actors were coming into the Marine Corps. But General Wilson said, 20,000 bad actors, get rid of them," and in six months they were gone.

Dr. Allison: And could you see a change in the Marine Corps right away then?

General Fitch: Dramatic. And I mean they didn't even have to go through much of a procedure. They would just do administrative discharges. If they had a guy that was a bad actor but maybe he hadn't done enough to deserve a court martial but he was just bad and a chronic disciplinary problem; didn't know what he was doing and didn't care whether he was doing anything, and they'd just give him an administrative discharge and he'd be on his way home.

Then the second thing that General Wilson did, which was dramatic, he said that, "The only way that a young man or woman can have achieved anything of significance when he or she is 18 or 19 years old is did he or she graduate from high school. And he said, "Beginning now, 75 percent of all accessions into the United States Marine Corps will be high school graduates." Most of us thought we'd never make it. And that was 1975. I retired in '84 so 1984 is now roughly eight or nine years after General Wilson established that 75% policy for recruiting. And I'm up at some kind of a big charity ball in Philadelphia and the director for recruiting in that district - the district director was there; a colonel – and I said, "How many high school graduates are you getting in your whole district of recruiting?" and he said, "Ninety-eight percent."

Dr. Allison: Wow!

General Fitch: And I said, "How about the other two percent?" He said, "Well we just figure that even though a young man or woman may not have graduated from high school, a lot of them still have an awful lot of potential so we're going to have the two percent for those who, even though they didn't graduate from high school, showed a lot of potential to be a Marine," and then of course the Marine Corps would ensure that they'd get their high school diploma afterwards.

Dr. Allison: An amazing turnaround.

General Fitch: Ninety-eight percent and it could have been a hundred percent if they had wanted it. And for example, when I had the First Marine Aircraft Wing in 1980-82, the quality of the young Marines was absolutely remarkable. It was totally different from what we had in 1975 when Lou Wilson took charge of the Marine Corps and established the proper criteria for being a Marine and staying a Marine.

Dr. Allison: Just four or five years later.

General Fitch: Well it only about five years after Wilson had said, "Get rid of them, 20,000 of them." But 1980 was about ten years since 1970 when we had started getting these dregs of humanity--we were in the Vietnam War. That tells you something about long wars, since Vietnam went on from about 1964 to 1975. But those were dramatic changes that General Wilson made. He was often called the "smiling cobra." He may or may not have a smile on his face when he said something, but it was clear that he meant what he said. By all standards he was truly a great Marine and a great Commandant.

Dr. Allison: Do you remember anything about hurricane seeding done by MAG-14 aircraft?

General Fitch: Not a thing. That must have come before or after I left.

Dr. Allison: That was in the command chronology from the time that you were in there.

General Fitch: Really? I don't recall it. It wasn't significant. It was where they just loaded some of these things in a dispenser; you know we had different kinds of dispensers.

Dr. Allison: Silver Iodide.

General Fitch: Whatever it was and they just went out and sprayed it over the hurricane clouds, but I don't recall it.

Dr. Allison: Anything about the energy crisis in 1973; did that affect the MAG-14 at all?

General Fitch: Not at all.

Dr. Allison: That's all I've got on MAG-14. Do you have anything else on it?

General Fitch: Well it was a good tour. I enjoyed it. I put my having the 32nd MAU on equal par with my having MAG-14, because of the personal experience standpoint. Believe that I mentioned that I was landing force commander for about 20 amphibious landings. And again, the way that worked out, I had the change of command in MAG-14. A colonel named Jack Reddy relieved me as the CO MAG-14, and it was also Jack Reddy who in 1967, had as a lieutenant colonel relieved me when I was a major and CO of VMA (AW) -225. And then about six weeks ago, my wife and I

went down to Quantico to a promotion ceremony at Harry Lee Hall for Colonel Reddy. It was Jack Reddy's son getting promoted to colonel, who had been just a kid when we were at Cherry Point in 1966-67. Now he's a bird colonel [chuckle].

Dr. Allison: That's neat.

General Fitch: He's working in the Marine Corps Systems Command on CAC2S [command aviation command and control suite].

But no, the tour at MAG-14 was great and of course I love to fly airplanes and I flew an awful lot of airplanes while I was heading up that air group. I should mention that I had a great executive officer when I was CO of MAG-14, and that was Lieutenant Colonel Clay Comfort, who would later retire as a major general.

Dr. Allison: Did you fly the Harrier while you were there? Had you started flying them?

General Fitch: No, I'm trying to think when I flew the Harrier. I flew the Harrier about half a dozen times. I know I flew one over in Europe – in Germany – with the RAF. I'm just trying to think. I guess it was down in Cherry Point that I flew it. That's just kind of mixed in with 120 other models of aircraft [chuckle].

Dr. Allison: Anything special about flying it you recall?

General Fitch: Well yes, it was special in a sense that the vertical landing in the AV-8A was kind of tricky. But I flew it about a half a dozen times.

Dr. Allison: You're a colonel at this point, you're still a lot of flying, isn't that unusual?

General Fitch: I'll tell you my philosophy on senior Marine aviators flying. There are a lot of people who say to a senior Marine aviator, "You should not be flying an airplane because you're denying a younger person the chance to fly that airplane." I don't believe that. I totally disagree with that. I think senior people should fly because when you fly, you find out things that ordinarily you wouldn't find out. I mean there's the pleasure of flying the airplane but also you find out what kind of airplanes your Marines are flying. And I'll give you an example of that when I had 1st Marine Aircraft Wing.

I was flying 13 different kinds of airplanes when I had the Wing, because I happened to have 13 different kinds of airplanes in the Wing. And VMA(AW)-242 shows up. They'd come out there for a six months unit deployment, and they have A-6s and I've got long experience in A-6s. So I asked the squadron commander about the quality of his airplane, overall quality. He made some rather large claims for his readiness of the 242 aircraft. Well I started flying his airplanes and they were some of the worst A-6s I'd ever flown, so immediately I had a negative estimate of that squadron commander and his squadron. But if I hadn't flown the airplanes I would have never known. And then I had the same thing with F-4s and helicopters and so forth. I didn't fly a squadron's aircraft just once, I flew numerous times with them, with my flights scattered over long periods of time, and they were tactical flights – not boring holes in the sky.

Dr. Allison: And that was a real issue for you because I remember you told me coming out of Vietnam that was the most important lesson you learned about Vietnam was to have good airplanes, fully mission capable. That's one thing you learned from that war.

General Fitch: Oh absolutely. Well the thing is, in combat if you take off here and go there; three or four hundred miles away to bomb a target, and you get to the target, and you've got some things that aren't working right, that's pretty bad. Remember nearly all of these night strikes were single plane strikes, deep into North Vietnam. Now your life and your B/N's life is on the line, and you have an aircraft that can't do that job. The Marines in 533 knew that, and they performed superbly in providing good aircraft for us to fly.

Of course that's the beauty of the systems that we have today is that they're so highly reliable. In 1967-68 there was no GPS and the inertial navigation system in the A-6 was not anything like what you have today. Ditto that for the mission computer. But anyway, I believe in the senior people flying all their aircraft so that they know what kind of aircraft their squadrons are operating.

I believe air group commanders should fly their airplanes. I've been in some air groups where the air group commander never flew an airplane or if he flew it, then it would be something like a twin-engine utility airplane or something like that. And I believe in the wing commanders flying tactical aircraft. When I had Marine Aviation and was a three star, I flew every aircraft model that there was in the Marine Corps. I think I counted up I flew 35 different models of airplanes when I was a general, and that included some USAF aircraft such as the F-15 and F-16. Some of them were kind of strange aircraft and I can't remember what some of them were. I'd go to visit a contractor and they'd want me to fly their new airplane. Dr. Allison: [Chuckle].

What was the composition of the MAU when you took it over; was it like a MEU today basically?

General Fitch: Well essentially it was pretty much like a MEU today, except you didn't have all the special operations that they have now. I had a reinforced infantry battalion, a composite squadron with the Huey, Cobra, H-46 and CH-53D in it. Then I had a logistics group. The special operations all came along with Al Gray.

Dr. Allison: MEU(SOC) [Marine Expeditionary Unit (Special Operations Capable)].

General Fitch: But no, we had a logistics unit that controlled all the battalion's spares, and then we had the infantry battalion; third battalion sixth Marines [3/6] as I recall, and we had a composite helicopter squadron that was commanded by Lieutenant Colonel Jim Harrison. And essentially when I took it there wasn't much there except the MEU staff. It is now referred to as a Marine Expeditionary Unit. We didn't use the word "expeditionary" for many years because the Pentagon worried that the term looked like the French in Algeria and the French in Indochina. That expeditionary word was bad as determined by someone senior, in the Pentagon, and now for the last 20 years or so we've gone back to "expeditionary." It is now acceptable. But no, the time was kind of short from the standpoint of getting ready. The battalion hadn't been chopped to us yet and of course we were having to figure all the load-out for these different ships; as to the equipment, tanks and whatever we were going to take out to the Med. The composite squadron had not chopped and then I don't remember exactly – probably two or three weeks or so after I took command of 32d MAU, which I'll make a wild guess and say it was probably about September of 1973 or a few weeks later.

Dr. Allison: Yes, your record book is showing you took it in September of '73.

General Fitch: Yes. But we had essentially nothing except the 32d MAU staff initially and then all of a sudden the battalion chopped to us and the composite squadron chopped to us along with the logistic group. And the reason being is that the Arab/Israeli war cranked up, I think in November, maybe October of '73.

Dr. Allison: October I believe.

General Fitch: So that caused a rough scramble there. So what we were doing is, we had these units but we hadn't really had a chance to pay much attention to them and we've got all this equipment which is supposed to go to the Mediterranean Sea. Then we've got an amphibious landing exercise we're supposed to do near Camp Lejeune. So we get the battalion and the composite squadron chopped to us. We decide how we're going to do the landing exercise. An interesting aspect of that – and again I'm a bird colonel – we get with the amphibious ready group which is going to take us out to the Med and support us during the eight or nine months we will be out there.

Dr. Allison: Any issues in regards to working with and for the Navy?

General Fitch: The very senior Navy captain who commanded the amphibious ready group [ARG] was called "Commodore." He wore the insignia of a captain but they called him a Commodore. Commodore Matty Matthews was a nice guy and he knew amphibious operations. When we first met he had words to the effect, "Bill, you and I are equals but I'm more equal than you." which kind of meant that he had the final say. It didn't turn out that way at all in practice, where with the amphibious landings I had the final say. And again, it was because he was a nice guy is why it turned out that my deciding how and when we would land, and then he would agree with me. Matty Matthews was a pleasure to work with.

Dr. Allison: Your MAU deployed early because of the Arab/Israeli War [1973], how did that play out?

General Fitch: We get into the initial landing, which we're doing at Camp Lejeune, and we've just gotten our first waves going in to the beach. The helicopter squadron is flying into LZs and putting out troops and we have got LVTP-7 amtracs going in to the beach. The whole landing is in progress. I had been complaining to FMFLANT that we weren't getting some of the equipment from the 2d Division we were supposed to get. And the word comes in for me to go see General [Samuel] Jaskilka who is Commanding General of the 2nd Marine Division. So I think, "General Axtell must have said something about those tardy equipment transfers to General Jaskilka. So I figure Jaskilka probably wants to tell me that he is not happy about an Axtell inquiry. So, I get a helicopter - and by the way, I had learned how to fly a helicopter at this point.

Dr. Allison: Have you?

General Fitch: I started out flying the Huey, I'd never flown a helicopter but I started out flying the Huey; that's about all I could fly at that point and I hadn't flown that very much. We fly in to 2d MarDiv headquarters and I go to see General Jaskilka. He says, "You've got to go see General Axtell." and I said, "Why am I going to see him?" He said, "Well you're going to sail early."

He said, "We need to get you a uniform." I had on utilities. And so his aide calls my wife and tells her that she needs to get out my greens so that I could go see Axtell. Margaret then gets Tom Miller's aide to come out because she doesn't know how to put together a uniform. They get a uniform for me while I am enroute to Cherry Point by helo.

When I got to the FMFLANT headquarters at Norfolk, General Axtell said, "What do you need?" [Chuckle] "Now you're going to sail early." So with my operations officer and logistics officer, we got with the FMFLANT staff and decided what we would add to the ship load out. As I recall we didn't leave Norfolk for four or five hours. The problem we had was that four of the five ARG ships would not sail when we sailed on the LPH. So it was a people and equipment problem to solve.

Dr. Allison: How did you know what you would need?

General Fitch: Well I had a couple of my MEU staff along with me, like my operations officer and logistics officer. The staff works out the details. We had their counterparts at FMFLANT for the discussions. Of course there was a limit as to how much could be added to the LPH load plan, which had already been worked out. In addition to my operations officer and logistics officer, both ground officers, I had one or two aviators mixed in there. The helo squadron CO was with us.

Dr. Allison: Had you heard that the war had started?

General Fitch: Oh yes. They were going at it over there and you could get all the details on the evening news on TV. But anyhow, we had five ships in that ARG of which *Iwo Jima* was the LPH. I was aboard *Iwo Jima* with my MAU staff. The commodore was also aboard the Iwo Jima with his staff. Both my battalion commander and my squadron commander were aboard the LPH. We've just been aboard for a couple days or so when we are doing this landing exercise on the

beach at Lejeune. Then we go up to Norfolk to see General Axtell and his staff. We sit down with all his planners and we come up with what extra Marines and equipment that we needed.

Dr. Allison: What were the special problems with an early sail?

General Fitch: The major problem was what was on the four ships that would not sail with *Iwo Jima*. One of the things is we're going to take extra troops with us and so we need extra bunks on the ships. So they start a crash effort to get more bunks aboard these five amphib ships, which is a chore for the commodore. I don't remember how many days it was but it was probably five or six at the most, and we were heading across the Atlantic on the *Iwo Jima* solo with the other four ships back at Norfolk getting modified. Those four ships when modified would follow and the commodore would be with them.

Dr. Allison: By the time you got the word until the time you sailed it was how many days?

General Fitch: Probably five or six days for the *Iwo Jima*. *Iwo Jima* required only a couple of days of extra work (more bunks, etc.) in Norfolk before returning to Morehead City, North Carolina for loading a major portion of 32d MAU aboard.

We left Commodore John "Matty" Mathews back in Norfolk, along with most of his staff, to take care of outfitting the four ships in work back there. Commodore Mathews was Commander Amphibious Ready Group 10. The four ships left behind would also embark the remaining Marine elements at Morehead City and sail from there for the Med. The plan was that the four ships with a delayed departure would rendezvous with us in the Med as soon as they complete their outfitting and crossed the Atlantic. Most of that rendezvous took place at Crete and Genoa in early December 1973.

As I recall we had about 1,400 Marines on the LPH as we sailed across the Atlantic. Many Marines had to sleep on the hangar deck a couple of nights while the ship rearranged the enlisted berthing on the *Iwo Jima*. The four ships that stayed behind in Norfolk were to get all this welding done. They were going to provide the berthing facilities for the added troops going on those ships, and the space for the extra equipment that would be going aboard those ships.

Dr. Allison: How did the chain of command work?

General Fitch: In the chain of command for me, there is General Andy O'Donnell – he's a brigadier – he's AWC of the 2d Marine Aircraft Wing, but he also is the CG of the 4th MEB. The 4th MEB was doing an exercise over in Turkey I believe, perhaps Greece, and so he's got his 4th MEB staff on a command ship in the Eastern Mediterranean.

With a hurry up departure from Morehead City, we sail across the Atlantic. A few days out we finally get all of our additional Marines into proper berthing and facilities on the LPH, *Iwo Jima*. We've got our composite helicopter squadron aboard. We've got a lot of our battalion including the battalion headquarters, we've got 1,400 Marines on board, along with my composite squadron, to include the squadron commander. By the time that we were halfway across the Atlantic we had solved the problem of Marines sleeping on the hangar deck. And so we go through the straits between Gibraltar and Morocco and we're coming up – it's about 8 pm that night – and we're moving east at about 15 knots, maybe 20 knots, about 25 miles north of Algiers. That night I'm up in the bridge with the captain of the ship; the LPH - *Iwo Jima* – who is Captain Joe Josephson.

Our ship is solo with no surface escort. Joe and I get to talking and we say, "You know, with all these fast boats some of these countries have, like the Algerians, we'd be pretty embarrassed if all of a sudden they came bolting out here at high speed; out of Algiers bay, and decided to make a few firing runs on us." So I said, "I'll put an AH-1J Cobra up here on the bow of the flight deck – armed with rocket pods." So I had them bring up a Cobra, put it on the bow of the flight deck and arm it [chuckle]. Then I had a chat with my squadron commander, Jim Harrison, and with the *Iwo Jima* operations officer. Jim Harrison set up a scramble plan if it should be needed.

It is now the middle of the night. After that Cobra was in place on the flight deck, I sent Andy O'Donnell as CG 4th MEB a message and I said essentially, "Unless otherwise directed, as a precaution for ship defense, we're doing this with one Cobra on the flight deck." The next morning when we were about 300 miles from Algiers and well out of range of small attack boats, I get a message back from CG 4th MEB saying, "'Unless otherwise directed" is not a satisfactory term [chuckle] in 4th MEB and you can't do that—arm a Cobra and have it on the flight deck.' I didn't care at that point because I already had the Cobra where I wanted it, and *Iwo Jima* was now long gone from where they might have had some of these fast boats do what was alleged to be done in the Tonkin Gulf some eight years earlier.

Later on Andy O'Donnell, who was a personal friend, told me, he swore up and down he had absolutely nothing to do with that message that he said had been sent by his staff. He said, "My staff did that and I don't understand why they did that, but they shouldn't have done it." Andy O'Donnell was a fighter pilot, and he had no trouble with decisions being made, especially when they were obvious and correct. We were kind of bare because we were one air capable ship steaming unescorted. We didn't have a destroyer with us or anything. We were cutting across just north of the coast of Africa.

And so then we get over to Crete and we start circling Crete, and in the meantime the war didn't last very long. I don't remember how long it lasted but probably two or three weeks at the most. We keep going around Crete for, I think it was 30 or 40 days, something like that. Then we finally pull into the harbor there which is nice because that's civilized and you're not going around in circles. As I recall the other four ships showed up about that time. And then they decide – and I forget the exact timing on this – let's see, we're in Crete and then they finally decide that, "Okay, now you can go back to a Med cruise because the war is over." That order to revert to a normal Mediterranean cruise probably came from Commander of the Sixth Fleet, who we came under operationally.

Dr. Allison: On the war there, before we talk about the other part, I heard the Russians mobilized and moved south. Do you remember anything on that?

General Fitch: No. I don't recall hearing anything on that. But bear in mind, we did not get a lot of timely news in late 1973 or early 1974.

We go into a normal Med cruise with time spent in exercise areas where we would do our amphibious landings and train both the battalion and the helicopter squadron ashore. Then there were the port calls, which were generous in their length. I don't recall if we went right in and did a landing or not but what is significant about that whole cruise – and then I'll come back to Venice and picking up mines in the Suez Canal in a minute. Our first port call after Crete was Genoa, so I had called Margaret Marie and we made plans to meet there. She had been planning the venture for some weeks so it was just a matter of getting her ticket to Genoa and securing the last minutes details. It would turn out that she would spend the next five and a half months meeting me at the various ports in the Med. While the ship was at sea she would travel inland.

The big moment arrived but to our chagrin, there was a serious water shortage in Genoa. Our hotel would be getting water briefly in the early morning hours. But to our good fortune the ship's officers had been invited to a noonday reception atop the Martini Rossi Building. The view of Genoa is spectacular, the food is wonderful, and there is plenty of water. What's more, the public relations lady for Martini Rossi tells us that she lives in a beautiful village on the coast just south of Genoa and they have plenty of water there. Santa Margherita Ligure was nestled in a cove just north of Portofina and it was divine.

We get a lovely hotel, and Margaret Marie and I go to dinner at a quaint restaurant where the food is splendid and reasonable. When we get back to the hotel, the phone rings and it's my logistics officer, Major Jim Green. He says, "Colonel, you may have to fly a 53 to Tunisia tomorrow." I said, "Why do I have to go to Tunisia?" He said, "Flood relief." and I said, "That's definite?" and he said, "Well it's not definite yet." I said, "Well when it gets to be definite you call me back." So in about ten minutes he calls me back and he said. "It's definite." [Chuckle]

So my wife has just arrived in Genoa --- she has now been in Italy for 30 hours, she'd never been in Europe in her life --- and with the 16,000 lira for the dinner she has no idea what things cost. I tell her, "Just take the train from Genoa to Toulon. I'll see you in Toulon Christmas Eve. As I give her my remaining lira and kiss her goodbye I tell her that she'll be fine. "But Toulon is in France and I'm somewhere in Italy and I don't even know where." she tells me as I'm going out the door.

I'm driving back to Genoa and she's in this little town of Santa Margherita Ligure. I get back to the ship, which is moored alongside the pier in Genoa. I talked to some of the officers to see if their wives were in the area. One lieutenant commander, Jim Heegeman who works with the commodore as his operations officer, tells me that, his wife Margo, has just arrived in Genoa and she will go down to Santa Margherita and team up with my wife, Margaret. That really saved the day and they became fast friends.

Dr. Allison: You left for Tunisia the next day?

General Fitch: The next morning I would fly a CH-53D down to Tunisia, with a stop in Sardinia to refuel. We had a couple of helicopters (CH-53D) going with us, and we've got these various and sundry relief supplies that we'll use initially to distribute with our three helicopters. The *Iwo Jima* is to follow us to Tunisia and arrive in three or four days. When the *Iwo Jima* arrives it has been through very rough seas with some damage, such as my cabin was a shambles. However, we garner more relief supplies and the relief operation goes on for several more days. It was interesting that in the flood relief, the relief supplies went to the supporters of the Tunisian government. We would over fly villages along the way and they would get nothing, since they were not allied with the government. The Tunisians decided who got the relief

Dr. Allison: Did the Tunisians appreciate your efforts on flood relief?

General Fitch: I never heard them say whether they did or not. The details are a little hazy for those days after we leave Tunisia, and I don't recall whether we did an amphib landing or went to Toulon soon after leaving North Africa. In any event we showed up in Toulon for Christmas Eve. Margaret and Margo are there to greet the *Iwo Jima* as we tie up at pier side. All turns out well for that port visit in Toulon, with chestnuts roasting on an open fire, in accord with French tradition.

Margaret and I have our first experience with the French arrangement for the Circle Naval. Which in essence is a naval officer's club that also rents rooms to naval officers, both French and foreign officers. In Toulon the Circle Naval worked out well for Margaret Marie and me, with our having a nice but not elaborate room.

Dr. Allison: What happened after New Years?

General Fitch: As soon as the Christmas and New Year holidays were completed and the new year1974 began, we went into our training mode with amphibious landings. I don't recall the sequence of the landings, but we did 18 landings while in the Med, and 12 of them were done in the dark of night. We did our amphibious landings at Porta Scuda in the southern area of Sardinia; at Gythion in Greece; and at Carboneras in Spain.

In betwixt the landings we made various liberty port visits the whole time we were out there, which I guess was about seven or eight months. Our liberty port calls with *Iwo Jima* included Rhodes; Valencia, Barcelona and Palma in Spain; Toulon and Menton in France; plus Genoa and Venice in Italy. I should note that in Venice, Margaret and I stayed at an Italian Circle Naval, and it was great with nice rooms and a restaurant.

Other ships of the amphibious ready group made calls in other ports as well as sometimes the same ports as *Iwo Jima*. The Mediterranean cruises were designed for port calls and show the flag. With 32 MEU we took a departure from that and made a bunch of amphibious landings.

Dr. Allison: Is it normal to do that many landings?

General Fitch: No. At least I don't think that it is.

Dr. Allison: But the night part was really different.

General Fitch: The night part was totally different, because in most landings we were going into mountainous terrain.

Dr. Allison: That's when you'd really do it in a real war.

General Fitch: Night is the better time to land if you are confident of your training.

Dr. Allison: Night close air support too?

General Fitch: No. We didn't have close air support day or night. We didn't have any fixed wing airplanes to support us. The Navy with their aircraft carrier was off doing other things. During the time that we were in the Med I never saw an aircraft from an aircraft carrier. I assume they were around but I never saw any. There were no volunteers to do CAS. We had a joint operation with the British Marines at Porto Scuda, and there was no fixed wing air support for it.

Dr. Allison: When were you in Venice?

General Fitch: Easter 1974. All of a sudden while we are in Venice, we get the word that 6th Fleet needs the LPH down in Egypt to help do the search for mines in the Suez Canal.

Dr. Allison: Operation "Nimbus Star". What do you recall of that?

General Fitch: I vaguely remember Nimbus Star. So I just said, "They don't need me to go down to Egypt. I've been through the Suez Canal before and they didn't need me down there because they were just going to go down and park and they were just going to be a support platform for these helicopters running back and forth trying to find those mines."

Dr. Allison: It's all done by helicopters.

General Fitch: Yes. The Navy had their mine sweepers, the CH-53D in those days. I believe that they called it the MH-53.

Dr. Allison: That's what they used in Vietnam too; 53s for mine clearing.

General Fitch: Yes. The LPH *Iwo Jima* went down to the Suez Canal, and I and my immediate staff moved aboard another ship with the Commodore and his staff. As I recall we moved aboard an old LPD. The important thing was the ship had a single screw as opposed to twin propellers and that was the only ship that had a single screw. So we put out to sea after we were through with that port call in Venice, it is night time, and one of the first things that I hear about midnight is they sound the crash alarm when we're operating with some Italian ships. We are going one direction when they sound the crash alarm. My cabin was on the main deck and it was a little bit larger than this couch. It was right off the main deck on this LPD. And so I go out the hatch into this open area, and about that time here's an Italian ship – I guess it was a destroyer – the Italian ship is probably doing 20 to 30 knots -- our ship is going like north and he comes at us nearly head-on going south. The crash alarm is blowing at max volume. The Italian ship just barely misses a head-on collision with us.

Dr. Allison: A close aboard pass.

General Fitch: Close aboard is an understatement. The Italian skipper had to be on his second bottle of vodka. Oh boy, it was bad because I mean here was this huge ship and I'm looking right out at him and he's about as far as that wall over there from us [chuckle] at an angle off. Whoever had the con on the ship had to be brain dead, middle of the night. And then we lose the steering capability with our ship. The ship the commodore and I were on completely lost its steering capability, and was going in circles. That was not a good night for the U.S. Navy nor the Italian Navy.

Dr. Allison: In summary can you relate the significance of that cruise?

General Fitch: The upshot of that whole thing with the MAU was that it was a great experience over the seven or eight months that we were deployed. I learned things about the Marine Corps and amphibious operations that most aviators and infantry officers never experienced. It is interesting how very few ground officers experience an amphibious assault, because there's not that many amphibious landings that the Marine Corps does, especially at night, so not everybody gets a chance to run a landing force in amphibious landings.

Toward the end of our Med cruise when we had the *Iwo Jima* back from Egypt, the proof of the pudding was that we were doing a landing in Spain at Carboneras. We were finishing that landing up and we're now heading back towards Porto Scuda, down on the southern end of

Sardinia. I say," What time are we going to arrive?" – I was talking to the captain of the ship and the commodore as to when we were going to get there. The commodore told me, "We're going to be ten miles off the Cape at 1 o'clock in the morning." I said, "Matti, I would like for the H-hour to go at 2 A.M. Doing an amphibious assault upon arrival will stand us in good stead. It will show our level of training."

To that, Commodore Mathews said that was fine with him. So what we did, we sailed from Carboneras in Spain to Porto Scuda in Southern Sardinia, which as a guess was about six or seven hundred miles. Immediately upon arrival at Porto Scuda about one A.M., we went into the landing in the middle of the night. We did both air and surface assault. During the entire cruise we never scratched an aircraft nor injured a Marine. It all worked out beautifully the way it was supposed to. We never counted the aborted landing at Camp Lejeune. I had one other landing which was in Korea when I had 9th MEB and I was a brigadier general.

So if you go back, we didn't have any night vision goggles in those days and we didn't have any infrared systems. So we had everybody well briefed on how we were going to do it. The air assault was the dangerous part where you had to do everything right. I emphasize that we never scratched an airplane the whole time we were there.

Dr. Allison: Any comments on host nations there at that time?

General Fitch: I'll say this about the French; when I was in the Mediterranean in the '53 timeframe – and back there again in '54 when we were aboard *Saipan* coming from Korea – and when we did the around the world cruise, the French were very difficult to get along with. They didn't particularly like Americans. It had been only about eight years since we had "liberated" the French for the second time in 25 years.

In sharp contrast the French were very nice to us in 1973-74. They would host luncheons and dinners when we were in port. My battalion went to Canjeurs and trained for a couple of weeks with the French Foreign Legion.

Dr. Allison: They have a short memory.

General Fitch: A very short memory.

Dr. Allison: We better call it a day sir. END SESSION VII

SESSION VIII

Interviewee:Lieutenant General William H. Fitch, USMC (Ret)Interviewer:Dr. Fred Allison, U.S. Marine Corps History DivisionDate:6 July 2006Place:Lieutenant General Fitch's Home in McLean, Virginia

Dr. Allison: This is the 8th session of an interview with General William Fitch by Dr. Fred Allison and today's date is the 6th of July, 2006, and we're again in McLean at his home.

To finish up the 32d MAU, off tape you had referred to some personnel issues, could you recount those?

General Fitch: Well first let me say that aboard ship, at that point in time – and this is in the '73 early 1974 timeframe – we had some pretty bad characters in the Marine Corps. Stealing did not always happen just in the darkened passageways. There were problems with the enlisted personnel in their bunking area in that a Marine or Sailor, as the case may be, might get up in the middle of the night and decide to open his locker and he might get hit in the head and robbed. So there were a lot of shipboard problems going on. You could say the same for Camp Lejeune. Of course there were many good Marines, the majority, but there were some very shady characters wearing the Marine uniform, and the Navy, and the Army, and the Air Force.

We also had to get rid of a lieutenant colonel in 32d MAU, a ground officer, who had a rather severe drinking problem. As I recall, it was while we were in Venice that he was sent home. My S-4 of the MEU staff then took over as XO; Jim Green, a great guy. He really knew the logistics business. But that was pretty much the end of any personnel incidents.

Dr. Allison: Ok, anything else on the 32d MAU?

General Fitch: One of the interesting things about doing amphibious landings in such places as the southern end of Sardinia, in Greece, and the south of Spain, was that those locations offered all kinds of terrain for training – flat lands to mountains. From the outset of the cruise I was convinced that amphibious landings, surface and airborne, should be done at night. I took all my meals with Commodore Mathews in his mess when we were at sea, and frequently in port, and I'd frequently talk about a night landing and he'd say, "Well Bill, no. I don't think we really have to do

those landings at night", and I'd say, "Well here's how we should do it," and I would go into the synergistic effect of landing both surface and by air assault in the middle of the night. Then Mattie would say, "Okay we'll do it at night."

Dr. Allison: Did you have night vision systems?

General Fitch: We did not have any night vision goggles nor did we have any infrared systems such as the FLIR. The only thing that we had for the helicopters was a small glide slope indicator where if you arrived at the correct initial point, then you picked up the red glide slope indicator, and as long as you could see this red glow you were in the proper zone in your descent. But at the Cape Teulada exercise area, which was a reasonably mountainous area in the south of Sardinia, they had mountains that probably went up to 3,000, maybe 4,000 feet.

Our helicopter squadron with their CH-46 Frogs and the CH-53D Sea Stallion heavy lift helicopters were doing night troop inserts back in that mountainous terrain. We had Cobras and Hueys flying support. We also were doing the simultaneous surface assault with our LVT-7s and we did those 12 landings at night with no night vision devices. It was a surface and airborne assault, and again we didn't scratch an airplane. We also never lost a Marine in the whole process.

Dr. Allison: That's pretty impressive there.

General Fitch: Well it was awfully good. And I'll say this: anything I asked for as 32d MAU commander, FMFLant gave it to me. I was working for CGFMFLant; General Axtell, in the process, but technically I was under 6th Fleet operational control in the Med. The 6th Fleet didn't give me anything but training sites, but they were very good at that. So if there was anything that I wanted for the MAU I just sent a personal message to General Axtell and here it came by the next Marine transport flying across the Atlantic. It worked beautifully.

Dr. Allison: Did you have any contact with the Russians during that float?

General Fitch: We had a Russian ship, a tattle tail ship that nearly sailed in formation with us most of the time that we were at sea in the Mediterranean. We had an interesting incident – with a man overboard – an interesting situation. We had a total of five ships in the amphibious ready group, and from time to time we had a destroyer with us. On one of the times at sea when we had a destroyer with us we were in rough seas; either it was a chief petty officer or an officer aboard the destroyer, and he sent a sailor forward to do something on the bow of that ship. The sailor went tumbling – with the bow going up and down, and the sailor went through one of the hawsers, the hole where the anchor chain goes through to the water.

The sailor went through that hawser and he did not have any flotation gear on. He didn't have anything on except his dungarees, which would be the working uniform. And this happened probably around 11 o'clock at night. We didn't get the word that he was missing, for perhaps 30 minutes to an hour. We immediately put up helicopters with flares, looking for him, but you're not going to see much of anything at night with choppy seas. And they were dropping flares, but here's this sailor somewhere in the water with the rough sea. We had gone back to where they estimated that he fell overboard. Well in that process we had a tattletale ship; a Russian ship, and he immediately came up with signal flags and on the radio and said, "How can we help"? The Russian did that immediately.

Dr. Allison: We're in the middle of the Cold War.

General Fitch: Yes, absolutely. And so what you had is these five American amphib ships plus the destroyer, and this one Russian ship, and we're all in formation looking for this sailor.

Dr. Allison: That's interesting. Well I've seen in the command chronology that you had some Navy close air support on some of those landings, do you recall that?

General Fitch: Well we may have, but since I flew in every exercise and spent a lot of time ashore in the exercise area, I can say that I never saw any close air support from Navy TacAir. But I have to emphasize, I never saw any Navy TacAir. Not one!

Dr. Allison: It included even some night CAS they did and I was interested in how they were going to night CAS, for that you would need RaBFAC [radar beacon forward air controller].

General Fitch: I do not recall any close air support at night or in the daytime. I do not recall that. My staff and I used to wonder where the aircraft carrier was. However, regarding RaBFAC, when I was a lieutenant colonel working at HQMC in the Aviation Department for Tom Miller, I coined the term, RaBFAC. The acronym stood for radar beacon forward air controller, and I shortened it to RaBFAC when I took over the program. We never used RaBFAC in the Med. Normally in close air support you can see the aircraft dive bombing (simulated) near a Marine GCE position, and they are talking with a forward air controller. My CP ashore was always close to my battalion. We would have seen them. I say this; the carrier – normally there was one carrier in the Med – and the best way I can describe the carrier is it totally ignored our amphibious group. We never saw it [chuckle]. Doing CAS is not a Navy priority. The commodore and I used to talk at dinner about the absence of any carrier activity where we were doing exercises.

And so if there was close air support, of course again we're talking over 30 years ago. But I would suspect that the close air support mentioned in the command chronology was what we could call "Parker 51" close air support. To whoever was writing up the chronology, it sounded good to put in the Navy was giving us CAS when it didn't happen. I don't recall seeing a single aircraft from an aircraft carrier.

Dr. Allison: Well that's all I had for the 32nd MAU if you didn't have anything.

General Fitch: Normally in the Med they wouldn't do that many landings because most of the interest for those aboard ship was on being in port and only doing a little bit of training along the way. That was not my view. I enjoyed the in port aspect, but I enjoyed the amphib landings and the training of the MAU. I would say that the Navy and Marines in the ARG, with the five amphib ships and the MAU with a battalion landing team, a composite squadron and a logistic unit – everyone really turned to and made it an extremely good cruise. I will say that I enjoyed flying the helicopters because that was my first experience flying helicopters and I would guess that we were deployed to the Mediterranean for about eight or nine months. In that time I probably managed to get 150 hours flying helicopters.

And I flew all my helicopters. We had the Cobra and the Huey, which I probably flew most, and we had the CH-46 and the CH-53 which I also flew. You didn't have Harrier detachments continuously committed to LPH operations in the 1973-74 period. The AV-8A was just getting started with those commitments. VMA-513 deployed to WestPac for a year during 1974-75. In 1980-81 the Harriers were doing a lot of shipboard operations. LHA-4, the *Nassau*, participated in a cruise to the Mediterranean Sea with two squadrons of AV-8A aboard. Those two squadrons were VMA-231 and VMA-542.

Dr. Allison: Coming home anything memorable about that process?

General Fitch: After we left the Mediterranean, we stopped in Rota for four or five days. They have a process there they put the ships in to get rid of all these snails, and the Marines and sailors wash down all of their equipment.

Dr. Allison: On flying helicopters, where did you learn to fly them; did you go through a formal training?

General Fitch: My flying helicopters was all OJT. We had deployed quickly. When I took 32nd MAU I would guess I had it maybe a month or six weeks at the most before we sailed across the Atlantic. I started with the Huey and I probably had four or five hops in the Huey when we sailed across the Atlantic. I would fly the Huey occasionally as we're crossing the Atlantic, and I would do a few landings aboard *Iwo Jima* on each flight. But let's see, I think that I had about 6,000 hours of flight time at that point in time.

Dr. Allison: Still flying a helicopter is different than a regular aircraft, reverse controls....

General Fitch: Well it was a lot different than flying jets or props; it wasn't so much that as just knowing the idiosyncrasies of a rotary wing airplane. But starting in the Huey, the easiest place to start would have been a 46 because the 46 in the helicopter world flies more like an airplane than any other rotary aircraft. This of course is before the MV-22. I would fly the XV-15 around 1982 or 1983.

Dr. Allison: Where did you get the idea to do night operations, was this being emphasized at the time by higher headquarters?

General Fitch: A lot of that came from my having A-6 squadrons and then there has always been the logic of being able to fight at night. You never want to have to say, "The night belongs to the enemy." A case in point would be the Vietnam War. The Viet Cong were very good at night. American forces had to be good at night warfare to counter the VC. It is all simple logic.

And I was also of the opinion that in daylight landings you're very vulnerable, and it's just flat better to do them at night. Of course the potential enemy in a real combat situation is probably going to have various and sundry devices like radar, precision guided munitions (PGM) and infrared systems. He can see what you're doing. Night vision systems have their limits. But if you can land at night your chances of success are a whole lot better, and the night vision devices we have in the Marine Corps now, such as superb infrared systems that turn night into day; night vision goggles, which for many years were light years away, now are very common in all combat units, aviation and ground. For many years, including when I took 32d MAU to the Med, we didn't have any of those things.

Dr. Allison: Well any more on the 32nd MAU Sir?

General Fitch: No, that's probably it except I would say, those months in the Med with 32d MAU were a great experience, and we were able to train those Marines to do a superb job of night assault. In other words, if I were a young colonel and somebody was saying, "Okay, here's your choice; you can either have a Marine Expeditionary Unit or you can have a Marine Aircraft Group, I would say, "Well can I have 30 minutes to think about it so I can make a choice?" Both of those options are excellent experiences. I was fortunate to do both.

Dr. Allison: And then from there you went to be Chief of Staff . . .

General Fitch: Then I became the Assistant Chief of Staff, the G-3 for 2d Marine Aircraft Wing.

Dr. Allison: G-3 at the wing. What did that job entail?

General Fitch: It was my responsibility to coordinate all the flight operations and air control for the 2d MAW. I had a superb staff in G-3 working for me. Regarding that staff let me say that I had never asked for any particular Marine to work with or for me during my 34-year career. I never asked for anyone by name to come work for me. It was just whoever happened to be there. In both staff and operational units, I am a strong believer in you work with the hand (personnel) that you are dealt.

Dr. Allison: Why did you think that?

General Fitch: Well I didn't figure I needed it [chuckle]. I wouldn't call Headquarters Marine Corps and say, "Hey, send me so and so." Whoever they sent was fine with me, and they sent me some awfully good people. I never asked for anybody by name. The same was true with my aides when I was a general officer. My aides were those Marine officers that were readily available. In fact just looking back at my career and as far as assignments are concerned – and this goes right back to second lieutenant. Of course second lieutenants and first lieutenants, they don't get a vote on anything – but I never asked for an assignment except one in my entire career and the only thing I ever asked for was to go to Test Pilot School. Everything else just happened.

Dr. Allison: Well you see some officers are together their whole career. They sort of have a group around them.

General Fitch: That's right and people will get into senior jobs and they'll say, "Well I want Colonel So and So to work for me and I want Lieutenant Colonel So and So to work for me." But I never did that since I always had good Marines and Navy on my staffs. Just whomever they assigned, that was fine with me.

By the time I became the G-3, I was fortunate with some of the experience I had coming along the way.

Dr. Allison: Being the Wing G-3, did you find that a challenging assignment?

General Fitch: Being in the Wing G-3 was not difficult at all, when you consider that I was CO of MAG-14 for about a year and a half, and MAG-14 had about 3,500 Marines and 70 or 80 aircraft in it. I believe my air group had six squadrons with aircraft. Then I had been CO of two squadrons. So it wasn't as if I had skipped any steps along the way. Counting my carrier time as a lieutenant and captain, where I had over 300 traps [arrested landings], in comparison to the norm for a Marine aviator, I had a lot more carrier experience probably then over 98 percent of Marine aviators. In summary there were tactical squadron commands both as a major and a lieutenant colonel, along with an aircraft group, plus my experience with helicopters as a colonel. As G-3 of 2d MAW, there were very few surprises for me, since the Wing G-3 just supports the squadrons and groups. I used to impress on my G-3 staff that we were there to help the squadrons and groups do their jobs.

And then by having the MAU (MEU), as an example, I probably wound up with more amphibious warfare experience than 95 percent of the ground officers in the Marine Corps, because not many ground officers get a chance to have a MAU (MEU). Then there was the same thing with the brigade coming along in 9th MEB where I had a brigade for six months or so while we did that exercise in Korea, but not that many brigadiers get to do a brigade. Anyway, I was very fortunate my entire career that way. I don't know if someone was watching out for me or what.

Dr. Allison: During your time in G-3, whom do you recall as especially noteworthy?

General Fitch: Well Lieutenant Colonel Jim Orr, who was my staff operations officer, was superb. With him as a key staff officer, operations for the wing took care of themselves. Jim should have been a general officer, but then selecting brigadiers in the Marine Corps is not a science. Lieutenant Colonel Tom Maddock was my Assistant G-3. Tom was a superb staff officer, we got along great, and when I was not there he made everything run smoothly.

Dr. Allison: Jim Orr?

General Fitch: Jim Orr. As a colonel, Jim was later program manager for the AV-8B Harrier. Do you know Jim Orr?

Dr. Allison: Well I'm thinking he just took command of VMFA-251 or maybe

General Fitch: Well his son; Lieutenant Colonel Orr took command of 251 ...

Dr. Allison: He sure did. I was invited to that change of command, but it was on a deployed aircraft carrier- the *Enterprise*...

General Fitch: ... to the change of the command but if you recall the invitation, it said it's going to take place at 3 o'clock in the morning at Beaufort, South Carolina because they're on the carrier.

Young Orr did a fine job as a squadron commander aboard the *Enterprise*. And so I sent him an E-mail and said, "Congratulations."

Dr. Allison: Any challenges you recall with the Wing at that time, operations of significance.

General Fitch: The G-3 pretty well ran itself because I had Orr - and it escapes me, again, the memory is not that great on names from over 30 years ago. I had a good helicopter fragger – and of course we had requests from the 2d Marine Division at Camp Lejeune for certain aircraft; helicopters to be involved with their training. That was to do helicopter lifts and so forth - and so those frags had to be issued out of the wing down to the group at MAG-29 and MAG-26. Both MAG-29 and MAG-26 were at MCAS New River, adjacent to the division.

Then the group would frag down to the squadron. And Orr, he had been a Harrier pilot. He knew all the ins and outs as far as Beaufort was concerned relative to the Harriers. The F-4s were pretty much a routine type operation. They just did their thing and would let you know what they needed for training areas, air-to-air intercepts, air-to-ground, aerial refueling, etc. We'd have deployments to Yuma and those were pretty well cut and dry that at a certain point in time the squadrons would deploy and a certain time they would come back. As I mentioned my Assistant G-3 was Tom Maddock and if you ever have a staff job you would like to have a Tom Maddock working for you. Tom was great!

Tom was very methodical and he took complete control of handling details. Really as G-3 you didn't have to worry about a whole lot. And of course then I had to interface with the Wing staff; G-4 and G-2 and G-1, plus the CG and the Assistant Wing Commander, along with the air group commanders. I had that interface because I flew with most of the squadrons in the wing, fixed wing and helo.

Dr. Allison: General [Andrew] O'Donnell was your AWC [assistant Wing Commander], what kind of a fellow was? He's well known in Marine aviation.

General Fitch: Yes, he's just a prince of a guy and he had a tragic death with ALS.

Dr. Allison: Did he?

General Fitch: Oh, a tragic death. Next year he will have been dead ten years. Anyway, he was Tom Miller's AWC. After Tom Miller left the wing, Andy O'Donnell was AWC for Major General Smoke Spanjer. Andy loved to fly airplanes and he flew his last flight – if I remember this correctly – his last flight as CGFMFPac he went out in an F-4 that morning and dropped bombs and came back that afternoon for a change of command and retirement.

Dr. Allison: Are you going to tell me how he died?

General Fitch: Oh yes; ALS: Lou Gherig's Disease, Arterial Lateral Sclerosis I think it's what it's called. It was a tragic thing. He was always in great shape; 6 foot 4 or 5, 220 pounds, a great tennis player, a very good golfer, always taking care of himself, which is one of the tragedies when something like that happens to you. It's like getting cancer at an advanced stage before it is found.

The process of knowing he had ALS probably got started when he was out skiing – he and Jay Hubbard, and Hubbard was a retired brigadier and he's another great guy of aviation – and they're up on top of this ski slope, at Mammoth as I recall, and Andy says to Hubbard, "Check my grip." and it was like a elderly ladies grip kind of thing. In fact as described by Jay Hubbard, there was no grip at all. That was the first indication that he had the ALS. So they operate on the arm, and up to this point nothing has really happened except he doesn't have much of a grip. Talking with his wife Patty, she thinks that operation set the wheels really in motion for the ALS to progress. It was not too long after that they diagnosed that he had ALS. I think the time from diagnosis to death was something like a year and a half. After they diagnosed the ALS, Andy and Patty decided, "Well, we had better move back to ConUS, and they decided to go to San Diego. After the move to San Diego, then things get progressively worse. His brain stayed fully functional up until his death, but his body went downhill very fast.

The last time I saw Andy O'Donnell he was in a wheelchair, and he was brought to the MCAA reunion at San Diego, this was probably in the 1995-'96 timeframe, something like that. Looking at my Golden Eagle directory, Andy O'Donnell passed away on June 20th, 1997. He was a great Marine.

Dr. Allison: You spoke of Jay Hubbard, did you know him well?

General Fitch: I knew him for 30 years or more. Jay Hubbard was not a whole lot different in what happened to him. He had prostate cancer. Jay was doing yearly physicals and there was a bad PSA reading that a nurse just filed away and no one told Jay about the bad PSA reading. So the next year when they finally found that reading from the year before, the cancer was doing bad things.

Jay Hubbard went through every routine of prostate cancer treatment starting as I recall with surgery, then radiation, then the hormone treatments. Those were two great Marine aviators; Jay Hubbard and Andy O'Donnell, and they both had tragic deaths.

Dr. Allison: Well Jay Hubbard just died a couple years ago, didn't he?

General Fitch: Jay was also a Golden Eagle, and it says in the directory that he passed away on January 1st, 2003. Jay Hubbard and Joe Foss died the same day.

Dr. Allison: I didn't know that.

General Fitch: Working with Andy O'Donnell was a great experience. He was very easy going. We had known the O'Donnells for many years when Andy passed away, and we still see Patty. Another great Marine was Smoke Spanjer, and my first encounter with Smoke was when I was still a second lieutenant, and Smoke was the Executive Officer of VMA-324. My directory show that Smoke made his last takeoff in 1999. He retired as a major general.

That was VMA-324; an AD Skyraider squadron, I joined 324 in the summer of 1953, late July, as a second lieutenant, after spending about a year in VMF-114, flying the F4U-5 from several different aircraft carriers. Joining 324 brought one new experience to me as a second lieutenant. In 114 we went pretty much by the rule book when talking with officers senior to us, which everyone was. In 324, it was all nicknames, except for Colonel Ireland. Major Spanjer was Smoke to everyone that was an officer, including the second lieutenants. Major Curtis was Curt. Major Hastings was Snake. And so it went for the entire tour in 324.

But no, "Smoke" was an easy going guy and I have to say all those majors and captains were awfully nice to me. Colonel Ireland kind of stood aloof from the fray.

Dr. Allison: So being Wing G-3 was not much of a challenge then.

General Fitch: The job of running the G-3 was not difficult, and I still flew a lot. General Spanjer was not demanding of his staff and Andy O'Donnell was always lending practical advice to the CG. As I recall we did not have any major exercises the year that I was the 2d Wing G-3. Everything was pretty much routine.

Dr. Allison: Any comments regarding aviation safety at that time?

General Fitch: Of course there were still aircraft accidents from time-to-time, and flight safety was always emphasized. Smoke had done several tours as a flight safety officer, so as the Wing CG he emphasized that a lot. Smoke also spent a lot of time running or jogging. Frequently in the morning he would run from his quarters to his office, which was about five miles. Then the CG might run home to lunch. But I would say that his hallmark was emphasizing flight safety.

Dr. Allison: That was the time when safety programs took on more and more importance wasn't it, during that time?

General Fitch: They had been important all along, but again, this is the '74/'75 timeframe. Flight safety has been a constantly improving system over all those years to reduce aircraft incidents and accidents. Now it is over 30 years later and our safety programs are light years ahead of where they were 30+ years ago.

Back in the 50s and 60s there was an awful lot of emphasis on flight safety, but the accident rates were high. We have come a long way in the last 35 years. Today as compared to over 30 years ago, we have the computer systems now that are a tremendous help in flight safety and good aircraft maintenance. Then there is the BIT, the Built In Test, and the newer aircraft all have computers that analyze all the systems and sub-systems in the aircraft, and tell the maintenance officer what is wrong with the aircraft. Mechanical failures are pretty much under control, but they still need to work on the pilot error aspect of aircraft safety.

When I had 1st Marine Aircraft Wing things like that were emphasized, where we talked about poor maintenance practices. I would tell those stories to my safety officer and my G-4 and air group commanders. I'd say, "If I ever hear about a bad rotor blade that goes uncorrected, then people are going to get relieved." And in that regard I'll jump ahead.

I had to relieve the commanding officer of MAG-36. He had had a rash of accidents like five or six in a short period of time, and this was when we were doing unit deployment. And I told him, "It's not directly your fault. It just happened on your watch and I'm going to have to relieve you." And of course [chuckle] the poor guy I selected to relieve him, it just scared him to death to know that he was relieving a guy that had been relieved [chuckle] of his command. But the fact of life was we had to make changes.

Dr. Allison: Was that a helicopter MAG?

General Fitch: Yes, MAG-36 was a helicopter group. One of the weak links that I found was the WTIs, the Weapons Tactics Instructors. In those days they had an air of arrogance about them. And while we had – this was the early days of WTI – we would have WTI instructors who kind of thought they were supermen. And up in the northern end of Okinawa there are an awful lot of cables because there's a lot of logging that goes on in the north of Okinawa. These hazards were the logging cables where they first cut a tree down and then they have to get the tree out and down to the water. At that point in time those cables weren't marked, but they would soon be marked. And so I am sure that 25 years later, if you're going to Quantico, you see all these big round balls on the power lines, those cables took out many a helicopter.

Well when we started having some of those accidents where these 46 and 53 pilots were doing their low, low, low level flying in canyons and this kind of thing and saying, "I'm a WTI and I really know how to do this stuff." Then all of a sudden you'd have a dead WTI because they'd hit one of those cables and it would kill everybody. But there were several incidents like that and I did have to relieve the group commander, which again I told him, I said, "Your fitness report is going to be fine but you're not going to be the CO of MAG-36 [chuckle].

Dr. Allison: Sounds like you're just unlucky and you don't want someone that's unlucky in there either [chuckle].

General Fitch: Well that happens a lot where you have exceptionally good leaders and they've got some people under them who just don't do things right. But that's jumping ahead. That's going out to 1981 and '82.

Dr. Allison: Well still, that's relevant though. That's when you were the CG.

General Fitch: In 1980 and 1982, yes. I had the first accompanied tour as the CG of the First Marine Aircraft Wing. After two years I was promoted out of that job. But back to 1974-75, that is the G-3 job at Second Wing, and again I give credit to my staff there.

Dr. Allison: The Harrier had come in, any comments on how that was doing?

General Fitch: At that point in time the Harrier was already in several squadrons, this is 1974-1975. We had one squadron in 1971 and we did the sortie rate validation test [SRVT] in March 1972 at Camp Lejeune. We probably had three Harrier squadrons down in Beaufort in late 1974.

Dr. Allison: VMA-513 was noted in the command chronology as going to WestPac. That was the first Harrier squadron to go to WestPac.

General Fitch: I don't recall that. They probably left Beaufort about the time I was getting back from the Mediterranean with 32d MEU.

Dr. Allison: It was in the command chronology that they had done it.

General Fitch: I think there is a problem with dates. I still don't recall 513's departure. My guess is that they left for Japan at about the same time I got back from the Med.

General Fitch adds later: To solve the mystery of two events some 33 years ago, I checked some dates on the telephone with my former ops officer in 2d MAW G-3. As I enter my 79th year my memory for dates and details is not as good as it used to be. Of course 33 years makes a difference. After eight months in the Mediterranean, the 32d MEU and I returned to Camp Lejeune in late June of 1974. I was the CO of 32d MEU at Camp Lejeune until 8 July 1974. My wife tells me I took some leave after that. We were in quarters at Cherry Point, where we had been since the summer of 1971 when I finished the National War College. A few months later Smoke Spanjer would invite us to move down the street and be his next door neighbor.

VMA-513 probably flew their AV-8A aircraft to NAS San Diego in mid July 1974. VMA-513 was in San Diego from about the middle of July 1974 to the 27th of July 1974. They were moving aboard the <u>Tripoli</u>. On 27 July 1974, VMA-513 sailed from San Diego on the USS <u>Tripoli</u> –destination Iwakuni, Japan. The squadron originally left a six plane detachment at Beaufort, but after a short delay, that detachment also deployed to WestPac. In late spring 1975, Marines in 513 were receiving individual orders to return to ConUS. Replacement personnel began joining 513 at Iwakuni in late spring of 1975. The flag for VMA-513 was at Iwakuni for about two years. These dates were provided by a former CO of VMA-513, who flew out to San Diego to see VMA-513 sail on Tripoli on July 27th, 1974. The mystery on dates is solved.

The Harriers at that point in time, they were pretty busy just getting their training done down in Beaufort, South Carolina. It was about that time that the Wing received the first TAV-8A aircraft, the two seat Harriers.

Dr. Allison: So early on, they are operating at sea.

General Fitch: The Harrier squadrons and detachments would routinely operate from amphibs such as the LPH and later the LHA/LHD. Those early AV-8A shipboard operations were normally in the Atlantic.

Dr. Allison: Were they meeting your expectations as far as performance?

General Fitch: Yes. You know the AV-8A was a good airplane. It was the best STOVL airplane in the world at the time. The AV-8B is still the best operational STOVL airplane in the world. However the production F-35B STOVL will be flying in 2008.

And so it was a good airplane. The Marine Corps was looking well into the future for VSTOL or STOVL, with the AV-8A as the first step in a long term effort to have an all-VSTOL/STOVL force. The early 1970s was not the first time that the Marines had stated an objective for the all-VSTOL/STOVL force. It went back to at least General Pate's tour as the CMC.

Dr. Allison: What do you attribute the safety issues to with the Harrier?

General Fitch: Unfortunately we had an awful lot of accidents with the Harrier and the primary reason is very simple. The engine was frequently having problems and it was invariably an engine problem that caused an airplane to crash, but not always. The AV-8A was not an easy aircraft to fly. Occasionally you'd have a pilot error incident but most of the time it was an engine problem. But to handle that complexity in the AV-8A, there were some absolutely superb pilots in 513. They had all been hand-picked.

It is relevant that the way they count accident rates based on flight hours, it is a disservice to the AV-8A and the AV-8B. The Harriers fly short duration sorties. Sometimes they are only airborne for 30 minutes, sometimes an hour. Safety records are based on flight hours which favors aircraft that fly long duration sorties. A Harrier squadron could easily fly a thousand sorties in 700 hours or less. The short duration of the Harrier sorties are a product of the forward basing concept of employing STOVL.

With forward basing, using the forward operating base [FOB] and forward sites such as roads, the STOVL aircraft is normally operating very close to the ground combat action. Since the STOVL aircraft only has to fly maybe 40 to 60 miles to get to the target, the mission time is short – very short. In contrast, Navy aircraft are operating from an aircraft carrier 100 to 200 miles at sea, and those Navy aircraft have to transit that 100 to 200 miles to get feet dry, then they have to fly from the feet dry point to the target. Fact of life, launching from the aircraft carrier, Navy aircraft are not responsive to CAS requests. By the time they get to the target, the target is gone. But their accident statistics are affected by the longer duration mission that they fly.

Dr. Allison: You had mentioned the pilots in VMA-513 were great pilots, how were they selected to be the first Harrier pilots?

General Fitch: When 513 formed with the Harrier, the AV-8A, many of the pilots had been through Test Pilot School. Some of the pilots in 513, such as Harry Blot, had flown the AV-8A at

NATC Patuxent River. As with most aircraft introductions, the pilots were carefully screened. The same thing happens with every airplane when it's first introduced. Like when the F-8 Crusader was introduced, they probably didn't put anybody in those first F-8 squadrons lower than the rank of captain, most would have at least 1,000 hours in jets, and the same thing with the F-4, and not so much with the A-6. But the squadron would form up and then after a year or so all of a sudden they'd find out that a 2nd lieutenant and a 1st lieutenant could fly that same airplane and probably do a better job than the old guys did. When the Joint Strike Fighter comes in at IOC and the F-35B is introduced into the Marine Corps, with an IOC of 2012, it is probable that they'll do the same thing. The military has done it with just about every new aircraft, where they handpick people going to the first squadron. It makes sense to do that.

But after a year or two goes by, then all of a sudden the most complex aircraft is going to have air crew that are just as average as all the other squadrons.

Dr. Allison: Right. Did the young guys have trouble?

General Fitch: Well the primary reason initially is because we didn't have the training version of the Harrier, the two-seater, which later would be the TAV-8A.

Dr. Allison: Oh, okay.

General Fitch: You didn't have good simulators in those days like you now have. And as I said, you didn't have a two-seat airplane. Learning to fly a single-seater like the AV-8A was a challenge for even the most skilled pilot. Then you can add to that the large number of different ways to takeoff in a Harrier and the large number of ways to land in a Harrier. In a conventional jet strike/fighter you have two ways to takeoff. With a conventional jet fighter, either you are catapulted into the air from a aircraft carrier or SATS catapult, or you make a long rolling takeoff of about 5,000 feet or more on a long runway. STOVL capability eliminates the need for catapults and long runways.

And everybody was going out and getting in this single cockpit, single piloted airplane and they would have to do everything right or they could have a big problem. For example, an individual who will go unnamed, and who wound up as a three star. I think he (if I remember right), had MAG-20 and he went out to fly the Harrier and the first thing he had was an extremely hard landing that crumpled the landing gear. We had another Marine colonel who was going to fly the Harrier and he was at Yuma – and I don't recall his name-- and I wouldn't mention it if I could

418

- but he wanted to bypass a whole lot of ground school, and the Harrier was the kind of airplane that you needed to go to school on and you needed to make sure that you really understood that airplane. It wasn't just go jump in an airplane because you'd flown a jet before. You had to know what you were doing to get in a Harrier. But that individual, I don't remember, it was his first or second flight in the airplane; the last one I'm talking about-- he killed himself.

Dr. Allison: Because he thought he had plenty of experience flying.

General Fitch: Well he just thought he had the experience and this was just another airplane, and the Harrier, especially the AV-8A, was not just another airplane.

They got the two-seaters in and those two-seaters took away a lot of the mystery of VSTOL. With a complex aircraft, it is always a bonus to have an experienced instructor pilot to correct the errors, before the errors cause an accident.

Dr. Allison: In VMAT-203, right?

General Fitch: Yes, I guess it was 203. Initially we may have put the first TAV-8As directly into the tactical squadron, and then put them into a training squadron later. I don't recall on that detail. Right after the sortie rate validation test was completed, I took over as the CO of MAG-14, then after 18 months I became the CO of 32d MEU, and went to the Mediterranean. I stopped following the Harriers and I was out of the Harrier loop for about three years. But relative to the TAV-8A, you can have an experienced pilot flying with a neophyte. If the student pilot was getting in trouble then the experienced pilot could just take over and get the aircraft on the ground or into a safe condition. Then they can have a cup of coffee and talk about it.

Many of the Harrier problems were engine related. If you were at MCAS Beaufort in the 1970s, and I believe a little bit later like the 1980s at Cherry Point, when they moved the Harriers up there, you'd see the Harrier pilot out on the vertical pad doing vertical takeoffs and landings over and over and over again. Takeoff and landing is one of the most dangerous parts of flying.

Dr. Allison: Right, but at the same they'd want to do it because that's the most difficult thing to do so you'd want to get that practice.

General Fitch: Well it was in a sense – but I have always felt that Harrier pilots practice too much with their takeoffs and landings. But again, there's a certain value in building up experience in an airplane. In other words if it's your eighth or your tenth hop in an airplane you don't want to get too sporty with what you're going to do. You wait until maybe you've got 60 or 70 sorties. But I think that was part of the problem. Then the engine had its share of failures.

Dr. Allison: I noticed also in the command chronology that the landing pad had to be replaced over and over. Was it just getting too hot for it? Do you remember anything on that?

General Fitch: Well that could well be. Jet blast gets pretty hot if you keep doing verticals. That would have been a G-4 problem. But no, we put pads out at various locations, especially during the sortie rate validation and they got an awful lot of use. Tactically in the Harrier it is the norm to have one takeoff and one landing, and today we emphasize the short takeoff. With the short takeoff you can fly greater mission radius. Vertical takeoff is now more of an air show event. Those same pads stayed there for an awfully long time. But over a period of time when you're taking off or landing vertically, there's a tendency for the matting to want to rise up, especially out on the corners and the edges. And then also you've got a friction coating on the AM2 matting. That can wear thin over time.

But with proper maintenance of the AM-2 matting, the pads should have been easy to keep in shape. They have coatings that they put on the pads. As I have said, in the last 20 years the vertical takeoff has been deemphasized, but the vertical landing is still emphasized. That vertical landing along with the short takeoff gives you a lot of flexibility aboard ship and ashore. But there is a reasonable limit to how many times you practice it. The front nozzles in the Harrier are the cold nozzles. In the F-35B STOVL aircraft, the thrust from the lift engine is cold.

Dr. Allison: Are they?

General Fitch: Yes.

And interestingly enough with the Harrier, you get about the same amount of thrust out of the front nozzles as you do out of the rear ones.

Dr. Allison: But they're cold.

General Fitch: Yes they're cold. Just the way it works with the compressed air. The engineers say the thrust between the rear and front nozzles is similar.

Dr. Allison: Okay. Did they do any forward-basing on the Harriers in training at that time?

General Fitch: Oh yes. Tactically that started with the emphasis on forward basing that was the purpose of the sortie rate validation test. Of course the British were emphasizing forward basing of Harriers long before the Marine Corps would be doing it.

Dr. Allison: Yes, you mentioned that.

General Fitch: The whole premise of the SRVT was to show forward basing and the advantages it gave. In retrospect I'd say they did it pretty well because 513 did an awfully good job of flying during that test. One of the best pilots I ever saw flying a Harrier was Bud Iles, who was a captain in 513 when we did the SRVT and this was when we were going to put that strip in at Bluebird.

But Iles came out one night and just did a beautiful job of flying. It was a dark night and minimum horizon references. Bud Iles was hovering in an area where there was a black landing zone; there was no strip or anything, a grass field, not a light on it, and he was hovering that Harrier at about 50 to 100 feet off the deck, trying to look for this small glide slope indicator that we had out there.

But no, 513 had mostly hand-picked pilots like Bud Iles. Another superb pilot in 513 was Harry Blot. He was a captain. He had gone through the USAF Test Pilot School, then there was Bill Scheuren the same thing. He was in 513 and he too was a superb Harrier pilot. Jim Orr was a great Harrier pilot, and he was CO of VMA-513 when we did the SRVT.

Scheuren retired as a colonel and then went on to get his PhD, and Bill did a lot of work in the testing world. He was in DDR&E [Director, Defense Research and Engineering] for a while working for the head of DDR&E. In that job, where I believe his title was executive assistant, he could do some important things for the Marine Corps. One thing he did that was very helpful was to lean on his boss at DDR&E to get us the TAV-8B. When I was DC/S Aviation I had prepared a simple paragraph memo to his boss on the need for the two-place TAV-8B. At the time the Secretary of the Navy (John Lehman) was opposed to our getting the TAV-8B and thought we could make do with the older TAV-8A. Bill Scheuren was very helpful on making the right thing happen.

Dr. Allison: Interesting. Was anyone doing trans-Atlantic [TransLant] flights when you were G-3?

General Fitch: Not really. When I was G-3 I can't remember the 2d Wing having a TransLant. We may have. We did TransPacs routinely. When Charlie Carr had MAG-14, he would have his A-6 squadrons do TransLants. And when Charlie did a TransLant, he would take a good portion of his whole group – and this was probably in the late 80s – but he'd take, 15 to 20 of his aircraft, mostly A-6 Intruders, maybe more, and he'd fly to Sardinia [chuckle] with aerial refueling. I mean they'd get all the Marine or USAF tankers lined up and they'd be off for the Mediterranean from Cherry Point. As I recall the name of the Italian air base on Sardinia was called Decimamano. That may not be correct.

Dr. Allison: Doesn't that use up a lot of money?

General Fitch: Well it does but it's a relative thing and there's a lot of ways to spend money in aviation. But the best way; see if you spend – like I'm talking about Carr taking some of MAG-14 over to the Med and Sardinia – just say as a number, let's see, you've got to go 4,000 miles so that's probably somewhere on the order of 10/12 hours of flight time, something like that, 400 knots. And when you get there you're probably going to fly another six or eight hours or whatever and do some operations around that point and then you're going to fly back. So the whole thing probably takes 30 hours per aircraft. The key is what do you gain, and when you operated as Charlie did, he had superbly trained squadrons. That is the name of the game – well trained.

You probably get more training out of those 30 hours going to and from the Med than you would in a normal 30 hours at Cherry Point or Beaufort or wherever. Commanders need to do innovative training, and Charlie was very innovative.

Dr. Allison: Right, yes, it's more realistic. It's like if you're really going to war.

General Fitch: Yes, and you're doing the kind of things that you're supposed to do. So yes, it's expensive but it's no more expensive than flying the same number of hours back home. If you have well trained aircrews in combat, your losses will be lower. And you've got to get all that but also, you know I'm sure they still do it; cross-countries. Well cross-countries are good because they give you experience but a cross-country from Cherry Point say to San Diego; Miramar area, does not give you the kind of experience that you get in flying something like a TransLant or a TransPac.

Dr. Allison: Flying over water.

General Fitch: Yes. Over water and having to rendezvous with tankers, and having to aerial refuel at the right time with the right fuel reserve. If you are well trained this is all routine.

Dr. Allison: How difficult was it to balance money between squadrons and groups? Was equalization of resources an issue?

General Fitch: No, not really. What you'd do; every squadron had its allocation of the funding for fuel, spare parts for the airplanes and whatever and the squadron commander knew how much that was, and that was his job to run the squadron right. And then if there were factors that came in like all of a sudden the Wing wanted a squadron to go do this; like say do a lot of flying at Pendleton or whatever in support of the division, then the Wing had to take that into consideration. But you could always get more money. On the East Coast you go to ComNavAirLant. On the West Coast you go to ComNavAirPac. You say, "I need more money." It is important to balance commitments with training requirements, since some commitments don't necessarily give you the right kind of training.

Dr. Allison: Any issues or problems in regards to working with the Division?

General Fitch: I wouldn't say there were no problems at all. We just gave the 2d Division what they asked for to the best of our ability and resources. Sometimes we had to say no because we didn't have the resources. It helps for the G-3 of the Wing and the G-3 of the Division to talk to each other.

Dr. Allison: The Division commander and the Wing commander, they're co-equal, aren't they?

General Fitch: Normally both are major generals. Sometimes a brigadier general takes over a division or a wing, but in that case, usually that brigadier has been selected for promotion to two stars. Tom Miller was a case in point. When General Axtell moved from CG 2d MAW to CG FMFLant, then Tom Miller took over as a brigadier, but he had been selected for major general. Frequently the Commandant will frock a brigadier and give him two stars to wear until he gets formally promoted, but he will earn brigadier pay while he waits. Back in the 1982 and 1984 time

period it made no difference, since a one star, two star, three star and four star all made the same pay. There was a pay cap in effect. That pay cap was Jimmie Carter's doing. And of course back 30 years ago they both worked for either CG FMFPac or CG FMFLant as the case may be.

But no, I have never seen any friction whatsoever between air and ground commanders when it came to Marine aviation supporting the ground combat elements. If you look at Title 10 that is what Marine aviation is for, to support the Marine divisions, regiments and battalions.

I have never seen any kind of friction. Our tactical employment of Marine strike/fighters is built around the MAGTF, and the "A" is there to support the "G." What you do when you're working with a division is you give them everything they ask for if you can get it to them.

Our ConOps is built around our forward basing close to the GCE operations, and the all STOVL force is critical to that ConOps. Relative to that, reductions in force over the past 20 years have significantly reduced the amount of air support that Marine aviation can provide to the Marine ground combat elements. Back in the early 1980s Marine aviation had about 20 strike/fighter aircraft available to provide CAS to each battalion. Now that number is down to 10 or 12 strike/fighter aircraft per battalion, and that is due to other commitments being levied on Marine TacAir.

One example of those commitments is the Marines having to provide strike/fighter squadrons to the Navy's aircraft carriers. Then there is pressure from the Navy that all Marine TacAir squadrons operating from aircraft carriers will have to be the Navy variant (F-35C) of the joint strike fighter. Whenever the Marines procure a squadron of the Navy JSF variant, then those squadrons will be essentially useless for forward basing. The Navy variant will require long runways to operate from, and those runways will be on the order of 7,000 or more feet. STOVL aircraft can effectively operate from a 1,500 foot strip.

The Navy will say that carrier TacAir can respond to CAS requests as quickly as Marine TacAir that is forward based. That is not true. First the Navy cyclic operations aboard a carrier increase the time it takes to get an aircraft airborne and enroute to the target. Then the Navy insists on the carrier standing off 100 to 200 miles from the beach. Then there is another problem where the Navy puts deep strike, which is deep interdiction, at a much higher priority than they do for CAS of the GCE. It is projected that in about 10 years, the Marines will be lucky to be able to provide seven TacAir strike/fighters to support each battalion in ground combat. That is about a 65% reduction in air support to the GCE over a 30 year span of time, all due to other commitments for Marine TacAir and the reductions in the number of strike/fighter squadrons. The same applies to rotary wing squadrons. Those other commitments are in opposition to Title 10.

And for the aviation combat element [ACE], it's only if you've got some problem in providing what the ground combat element is asking for that you don't give it to them because that's what you're supposed to do.

Dr. Allison: Well do they ever get in the business of too detailed about what they want you to do; like "We want this type of bomb," you know this kind of thing; ordnance load outs?

General Fitch: Not that I can remember. It takes time to come up with special types of ordnance. The general rule is that when a CAS target is detected by the GCE, that target will be "strike-able" for about 30 minutes, then it will disappear and pop-up somewhere else. We normally carry ordnance loads that fit nicely with close air support. I have used the MK-82 bombs for CAS in combat, many times, and that 500 pound bomb works very well in CAS. A lot of smaller bombs are available now.

Dr. Allison: Well, any other comments on the G-3 tour at the 2d Wing?

General Fitch: The G-3 job, it was an enjoyable job but it sure wasn't the toughest job I ever had. I would not equate G-3 with being a MAU commander or a MAG commander, no way, but it was a nice job to have when you were doing a staff tour in the wing. It was a one year assignment and then I went to Washington to be the executive assistant to Lieutenant General Tom Miller at Headquarters Marine Corps.

Dr. Allison: What was the toughest job you had in the Marine Corps?

General Fitch: I didn't have any that were really that tough – that is from my perspective. I told you about the worst personality problem I ever had, and that was with that major in 311. I had never encountered anyone like him -- before or since.

I especially enjoyed my command assignments, and I was fortunate to have quite a few. As I've said this before – and that is if you explain to all the Marines in the command, whatever command you have – be it a squadron, an air group, a wing whatever the command was – if you explain to all hands what it is that you want to do, and why you want to do it, and then explain the role that they play, in the numerous commands I had, I've never seen those Marines fall short of doing exactly what I wanted them to do. I told you I gave only one order in 34 years. I always treated Marines as a member of a team – each one. Dr. Allison: MAWTU [Marine Air Weapons Training Unit] was still operating at this time and a new form of it, MAWTS [Marine Aviation Weapons Tactics Squadron] was about to come into being- any comments on that change?

General Fitch: Yes, MAWTU would go out of business after MAWTS came into being at Yuma. MAWTU kind of did its own thing, they got their students in and did the various and sundry kind of training that they needed to do. Of course MAWTU had an officer in charge and it was his job to train those students that were assigned to his school. But in the case of MAWTS, that was probably one of the smartest moves Marine aviation ever did and it's been the picture book testimonial to having that kind of a structure for training. And I was talking to John Cox the other day, who was the former CG of 3rd Wing, and he was talking about – in fact it was at the Commandant's reception here last Friday night – he was commenting about how many MAWTS commanders had made brigadier general and there are only two or three that haven't made brigadier out of that job.

Dr. Allison: Wow!

General Fitch: All the rest have. Fred McCorkle had MAWTS. And the ones that haven't, there was a pretty good reason why they didn't get promoted to general officer. So no, MAWTS has been a real success story. The only thing; the detractor I see in MAWTS is the Weapons Tactics Instructors, the WTI's, and when they get deployed -- sometimes they got carried away with how much they think that they know – and as a result an awful lot of accidents were generated by WTI's. That was the case when I had 1st MAW in Japan. And I hope that's not the case any longer. When I had the 1st Marine Aircraft Wing 20 plus years ago, I was not overly enthused to be told that a WTI is going to do such and such because I kind of had my doubts about WTIs in regard to the safety factor. They had a tendency to press the limits too much. But that's probably ancient history now.

Dr. Allison: What about, had the CAX started up yet? Were they doing CAX's at that time?

General Fitch: Yes, let's see. CAX's came in during '75 or when General Wilson became the CMC. It may have been 1976 when CAX got started.

Dr. Allison: '75, so you were right on the cusp of it there.

General Fitch: Twenty-nine Palms was still doing its thing that it had done for years, and when General Wilson decided on the CAX for battalions, 29 Palms went through a normal process to get properly organized for those exercises.

Dr. Allison: Yes. Was it "Alkali Canyon" a predecessor of CAX?

General Fitch: It would not have been. As I remember Alkali Canyon. Alkali Canyon was at Twenty-nine Palms in the summer of 1973. We had TacAir and helos flying out of 29 Palms, and we also had some TacAir flying out of Yuma and El Toro. Brigadier General Jake Poillon was the CG for the exercise and I was the CO of PROVMAG 88. So it would have been a precursor to the CAX in a sense. But the true CAX as such was generated about the 1976 timeframe when General Wilson was Commandant. That was a personal decision made by General Wilson, and executed by him. The CAX came directly from him along with a lot of other good things that happened in the Marine Corps. General Wilson was a truly great Commandant!

Dr. Allison: What did the CAX give the Marine Corps?

General Fitch: I think CAX was awfully good training and especially if you look at where the last two wars have taken place. It was very timely.

Dr. Allison: Do you remember General [Earl E.] Anderson coming out?

General Fitch: I don't remember that. You're talking when and where?

Dr. Allison: October '74 when you were Assistant Chief of Staff of G-3.

General Fitch: I remember his making a visit to 2d MAW, but that was a fairly frequent event for an Assistant CMC. I believe that he came to Cherry Point when General Spanjer was the CG. I easily recall General Cushman coming through Cherry Point when I had MAG-14, because I briefed him on my group. But me giving briefings, that was just routine. I mean the visitors came and they said, "Go brief them." and I would go brief them on MAG-14 when I had it, 32d MAU when I had it, and 2d MAW when I was the G-3. I remember briefing General Cushman down in the H&MS-14 hangar. The visits by generals and admirals with one to four stars were routine, and we briefed them all.

Dr. Allison: Any comments on General "Double E" Anderson?

General Fitch: Not really. He had his admirers and detractors. I was never personally involved with General Anderson, one way or another. I believe that I mentioned earlier that he downgraded my getting the Legion of Merit [LOM] when I was a lieutenant colonel doing the Harrier program for General Hill 1968 to 1970, and General Hill had recommended me for the LOM for the Harrier program. General Anderson approved the "green weenie" [Navy Commendation Medal] instead, and when they told me that at the National War College, I told them to just drop it in my mailbox – no awards ceremony. I'll take a pass.

Dr. Allison: What about joint operations sir; any comments in that regard?

General Fitch: We didn't do that much that was joint, at least from the aviation side. It was the kind of thing that if the division were going to have some training with the Army or whatever, then we'd just get a request to do certain flights in a certain time period and we'd go do the flights. But back then, now some 35 years ago, there wasn't any emphasis on joint at all like there is now. There are good things about jointness and there are bad things about jointness. But in those days, we're going back nearly 35 years to 1974 and there was no real emphasis on the joint part. That headlong rush to jointness came with Goldwater/Nichols.

Dr. Allison: Right.

I notice there was NORAD [North America Aerospace Defense Command]. Do you remember doing any work with the Air Force on air defense?

General Fitch: I don't remember a single thing on NORAD. My operations section would have scheduled something like that, and it was so routine that I may or may not have been told about it. By the way I was only G-3 for a year. And then I went to Washington.

Dr. Allison: Yes.

What about the HMA's and the HML's; were still separate?

General Fitch: Yes, they were still separate a long time after that. The Huey squadrons and the Cobra squadrons, they were separate entities for a long time.

Dr. Allison: Okay. Is that a good thing do you think or good that they got together; any perspective on that?

General Fitch: Well I would say in the current situation where we are, especially with the UH-1Y and the AH-1Z where you've got this high degree of commonality, it makes a lot sense to have squadrons with both aircraft. But I could as easily argue to have separate squadrons. It is relevant to your question that while the UH-1Y is doing OK in its development, the same cannot be said for the AH-1Z.

Dr. Allison: Don't they have the same engine??

General Fitch: There is significant commonality. The two airplanes are probably 80 percent common. But that Zulu program is having trouble right now and it will probably have trouble for several more years. It is even within the realm of reasonable probability that the AH-1Z might not make it to operational status. If that happens, the options could be very poor for having a viable replacement. On the other hand without my mentioning specifics, DCMC Aviation is reviewing his options on that point.

Primarily the question is, "Can Bell build the airplanes?" You know General [John] Castellaw who now has Aviation. He probably spends more time being concerned about AH-1Z's and UH-1Ys than most of his more complex programs. Bell is having some problems doing things right. In fact Bell has had some tremendous changes in management in the last two or three years. It's been connected with MV-22s, AH-1s, UH-1s, and there's been a lot of management level people come to Bell Helicopter from some of the fixed wing companies like Boeing; now Boeing at St. Louis where it used to be McDonnell Douglas. There have been spin-offs of people; you know from time to time 15 and 20 fixed wing people go down to Bell Helicopter at Fort Worth. The irony is that Bell has been building Cobras and Hueys for many years, they have produced four bladed helicopters for at least 25 years, but they have hit some real snags with the Yankee and the Zulu.

Dr. Allison: That's a shame because we're so dependent on them.

General Fitch: Looking ahead I would hope that both the AH-1Z and the UH-1Y are successful, but right now you won't find many Marine officers over in General Castellaw's office that will bet you money on it. The Yankee is more likely to be successful than the Zulu.

See we're probably on our fourth generation Cobra, fourth or fifth; somewhere in there, and back when I had Aviation we did the AH-1T+ which was re-designated the AH-1W, and that was smooth going. Then Major Randy West, who was the Cobra action officer in APW when I had Marine Aviation, was the key mover on making the AH-1W come to life and to do so very successfully. Now the AH-1W is a relatively old aircraft and the Marines need the Zulu. Bell has had a lot of problems for quite a long time.

Dr. Allison: So something internal. Bell had management issues.

General Fitch: Yes, big time management problems. And again, you know, it's not rocket science that they're doing.

Dr. Allison: Yes, it's not like they're trying to build an Osprey.

General Fitch: And the four-bladed rotor systems for the Zulu and the Yankee; as I said, they've had four-bladed rotor systems on commercial helicopters for 25 years at Bell. So it's not like something new. But now you've got to fold blades and all these other things for the shipboard aspect of it. And then one of the problems of course that cropped up relative to the Zulu, was before we got into this war with Iraq the plan was to take the AH-1W and remanufacture it, and so everyone thought that there was going to be some significant saving in money there. And now what they've done; they've had so much wear and tear on the AH-1W aircraft that now are in Afghanistan and Iraq, aircraft that are being flown at three times the normal utilization rate, and they don't have Whiskey resources to do the remanufacture to the AH-1Z. Then on top of that the AH-1W aircraft do not lend themselves to being remanufactured into the Zulu, since there have been too many mods to the Whiskey over the last 25 years. Both the Yankee and the Zulu will be new manufacture, if they get through development without being cancelled.

Dr. Allison: Of course that will cost more.

General Fitch: It may cost more or it may be cheaper to do the new manufacture. Both the Y and Z programs were started before we went to war in Afghanistan and Iraq. The old plan to

remanufacture the Whiskey into the Zulu is OBE [overcome by events]. We have had over four years of war since the remanufacture plan for the W to the Z was initiated, and it is no longer viable.

Dr. Allison: That's interesting.

General Fitch: And everybody's watching them very closely I understand.

Dr. Allison: Well here's one you probably will recall, the F-14 was going to come in and then it was cancelled.

General Fitch: Well the F-14 never came up to that point because what was happening there was you had F-14 training out at Miramar; NAS Miramar, and we had people like Chuck Zangas going through that training. I guess Chuck was a major at the time and he's going through F-14 training. General Wilson becomes Commandant in the summer of '75 and General Wilson says not only "No." but "Hell no!" on the F-14. "We're not going to do it." And he of course has brought Tom Miller in to be his head of Aviation and Tom Miller was very much a supporter of the F-14. And there were some other people pro F-14 of which I was not one but I was only a colonel at the time.

Dr. Allison: Why didn't you support it?

General Fitch: Never did. The F-14, when they're doing ACM [air combat maneuvering] – and I've never done ACM with an F-14 but the F-18 guys, talking to them, when they're doing ACM and there are F-14s in the air they'll say, "The target is about a mile to the right of the F-14." because the F-14 was such a huge airplane you couldn't lose sight of it. It had a radar signature like a B-52. That radar signature was also a problem for the F-14 when it was doing air-to-ground strikes. And of course a tremendous radar cross section and a lot of other things that go with it. In the 1970s and 1980s the F-14 did not have an air-to-ground mission.

Dr. Allison: Do you know why General Wilson did not support the Marine Corps getting it?

General Fitch: General Wilson had been CG FMFPac and he came to Washington convinced that the F-14 was a loser. The General had some preconceived notions about the F-14, which I think were excellent preconceived notions. For one thing, the Navy was buying it for the war at sea with

the Soviet Union, and it was primarily at the time oriented to fleet defense. As I recall the Phoenix missile had a range of about 50 to 60 miles, and the Phoenix missile was the primary weapon for the F-14.

Dr. Allison: I wonder where General Wilson got those preconceived notions?

General Fitch: I don't know. Not from Tom Miller who was his deputy at FMFPac; probably when he was CGFMFPac from some of the fighter pilots at 3d MAW or 1st MAW. When he walked in the door as Commandant, and I got there a few weeks later, he was hard over against the F-14 when I got there to be General Miller's EA. So everybody was taken aback; the Navy was taken aback, Tom Miller was taken aback, Phil Shutler who had preceded Tom Miler as DC/S Aviation was taken aback, and all told General Wilson, "Oh, you're making a big mistake." General Wilson just said flat, "We're out of that program. Get those Marines out of there." I think that the CMC was exactly right on his decision, and he did the right thing. On the negative side, when he gave up those F-14s that were funded, he lost that funding back to the Navy.

Dr. Allison: And it was well on the way, like you were saying.

General Fitch: Well yes, it was well underway. So the people that were at Miramar started coming out of Miramar and coming back to the Marine Corps and all the plans for the Marines to buy the F-14, well the F-14 would have been a lousy airplane for the Marines. They made it a better airplane when they put LANTIRN on it, but that happened 20 years later. Getting an air-to-ground capability in the F-14 was a long term after-thought for the Navy.

Dr. Allison: A long term after thought.

General Fitch: Yes, a long way down the road. But see the F-14 goes back to 1964 when I was working in SecNav R&D and you had the CNO, Admiral George Anderson, who was very much opposed to the TFX, that SecDef thought the TFX was going to be the cure for everything wrong in USAF, Navy and Marine aviation. It was going to be a joint airplane by SecDef McNamara's dictate, and Admiral Anderson successfully fought it in the Congress. As I recall, Admiral Anderson was short toured as the CNO, for his opposition to TFX. It was called the TFX and then it became the F-111. The F-111 was going to do everything – by SecDef mandate. The F-111B

was going to be a Navy airplane and a Marine airplane. As the F-111A it is going to be an Air Force in those days was anti-F-airplane.

Well the CNO111 and it was a kind of a thing where he would get to congressional hearings and he would do the party line on the F-111 and so forth. And then the senators and the congressmen and chairman – and they know how to handle military people – they'd say, "Thank you very much Admiral. Now I want you to tell me your personal professional opinion of the TFX." If you don't tell them the truth at that point, they can hang you because that's just an absolute no-no not to be absolutely truthful. And they expect you, when you're doing your statement and your initial testifying and so forth, to talk nothing but the President's budget and the Secretary of Defense's budget and the programs that have been approved. Well when they say, "General" or "Admiral, we want your personal professional opinion," you better tell them the truth then they truth then they'll find it out and now you're really in trouble. They call it contempt of the Congress.

I know a Marine two star who was asked that question in a House Armed Services Committee hearing and he was a nice man; a nice Marine general, but he was temporarily testifying instead of General McCutcheon. The Chairman of the House Armed Services Committee said, "General, we understand all this that you've got in your Marine aviation program." In your personal professional opinion, what is there that is not in this budget that you need? What is it that's not there?" The general made a terrible mistake. He said, "We've gotten everything we've asked for and everything we need." and the Chairman said, "General, you're a disgrace to the uniform." It's really serious when you say things that the congressional committee knows are not true. The chairman, Mendel Rivers from South Carolina, went on to say, "We know that there are things missing in this budget that Marine aviation needs." The chairman said, "I want you to provide that list for the record."

Dr. Allison: Well as he was trying not to ruffle any feathers.

General Fitch: Well he wasn't going to ruffle any feathers back in SecNav. He had been asked his professional judgment and he had not been truthful with the committee. He had made a big mistake. He retired as a two star. Where are we now – still the F-14?

Dr. Allison: Yes; anymore on that?

General Fitch: But the F-14 was probably a good airplane for the Navy at the time because of the Phoenix missile and the perceived threat of the Soviet fleet attack on our aircraft carriers. At least that was the reason for both the F-14 and the Phoenix missile. In those days the Navy was oriented toward fighting the Soviet fleets in the middle of the oceans of the world.

There's an F-111A and F-111B that were going to be in this joint program. The CNO was opposed to the program and he thought the Navy ought to be doing their own airplane. Well Grumman, at that same point in time and this is 1964, they're working on an F-14 as a concept, and it is a paper airplane. They're doing all these drawings and they're padding around the corridors and wings of the Pentagon. They're going to OP-05 and they're briefing all the Navy admirals and so forth on this airplane, which would be their alternative to the F-111B.

Grumman was doing the planning and the preliminary engineering for an aircraft that later would be the F-14. This is when Grumman was an individual company doing A-6s and the EA-6A. And I remember them padding the halls because they'd come into our office, which was Assistant SecNav R&D, and they were very open about the whole thing -- talking about their airplane. Well what happened of course was that the F-111 was killed by the Congress as far as the Navy was concerned and then all of sudden here's this F-14, ready to step into the breach. I suppose they probably ran a competition to be legal, but hands down the airplane that Grumman was touting was going to win. If there was a competition I don't remember that part, but the Marines getting out of that program was a very wise move and General Wilson made a wise decision. He didn't listen to anybody telling him he was making a mistake. He said, "We're going to be out of it." and we got out of it and that was good for the Marine Corps. Both Tom Miller and Phil Shutler to this day think that it was a mistake.

Dr. Allison: Interesting.

General Fitch: Now you tell that to Tom Miller and he'll say, "I disagree." [Chuckle]

Dr. Allison: Now it's out. He covers it well in his interview; his thoughts on it. The Navy really was concerned about the Soviet Navy in those days....

General Fitch: The Navy's been wrapped around the axel on a war at sea for an awfully long time and still to this day, you know, it's all the emphasis on protecting the carrier and if you've got any airplanes left after you protect the carrier then you can go do something else. Dr. Allison: Interesting.

VMCJ became VMAQ during this time. Any comments on how they reworked the electronic warfare the reconnaissance piece?

General Fitch: Well it was a joint squadron when I had MAG-14, it had both the RF-4B and the EA-6A, and it was VMCJ-2 and then later with the EA-6B the squadron became VMAQ. I guess that kind of went along--we still had the RF-4B in 1982; the '82 timeframe, because I was still flying the RF-4B in 1982. Second Wing was still deploying the RF-4B detachments out to 1st Wing. Second wing also had the EA-6B. I believe that when I talked about being in SecNav R&D in the 1963-1965 timeframe, I told you how the EA-6B program was started, with Vice Admiral Thatch as OP-05 and Dr. Fubini in DDR&E. I would say VMCJ-2 went away about 1982.

When I had MAG-14 I had EA-6A's and RF-4B's all in the same squadron, in the VMCJ's. And I don't recall just at what point in time that split would have occurred, but then again, going back to General Wilson on the RF-4B – and again this is '75 – he wanted to get rid of the RF-4B.

Dr. Allison: Did he?

General Fitch: And Tom Miller was successful there in that he was making the points about tactical imagery and being able to have photo planes go in after a strike and do the imagery [chuckle]. And General Wilson said, "I never saw any of those pictures." [Laughter]

Tom Miller was able to talk him out of getting rid of the RF-4B. In the case of the RF-4B we kept it for another seven or eight years -- I guess, something like that. When I was CG 1st MAW I flew the RF-4B frequently, and since I had been to photo school and been in VMJ-3, I always took photos with the system.

Dr. Allison: While G-3 at 2d Wing did you have any comments on innovations, expeditionary operations or

General Fitch: Not in the case of the G-3. When you get to the EA I've got one that will probably surprise you.

Dr. Allison: Okay. Well we're almost there if you want to go ahead with that.

General Fitch: When General Miller was selected to do Aviation he selected me to be his EA and I was down at Cherry Point. And so the day he arrived there to be DCS Aviation I arrived to be his EA.

I was only in that EA job for a year before I made brigadier general. But during that year I did the typical executive assistant things. Tom Miller at the time was a two star but General Wilson wanted him to be a three star.

Dr. Allison: Was that a two star billet?

General Fitch: Deputy Chief of Staff, Aviation at HQMC was a two star billet when Tom Miller took it, but the Commandant immediately nominated him for a third star. It was a two star billet when General McCutcheon had it and then Homer Dan Hill had it as a two star. Phil Shutler had it before Tom Miller, with Phil a two star. Then when Miller took over, Shutler went to the J-3 as a three star. So in the late summer of 1975, Tom Miller is going to be a three star and I think he got his third star probably five or six months after he got there -- around January 1976.

Dr. Allison: How did General Miller employ you as his EA?

General Fitch: In my case, as the EA, I was to manage the outer office and make sure that everything went smoothly for General Miller. John Cox, who I mentioned earlier, was a colonel at the time, later a major general, and he had APP under Tom Miller.

Dr. Allison: What was the innovation you had mentioned?

General Fitch: I got to thinking that these one-year deployments are insanity and there's a better way to do it. So without talking to General Miller at all I got a, pencil and a piece of paper, and I started thinking about how to rotate Marine squadrons through WestPac, using a six-month period of time My idea was simple, and that was to leave the families at the home base in CONUS or Hawaii, keep the kids in the same school, and rotate the squadrons TAD for a six month period of time. My view was to have the Marine Corps pay all squadron members TAD while deployed. And you'd have them over there for six months. Their families would stay in place where they came from and they would come back to the same base – usually the same air group, the same living quarters – the kids in the same school -- and you wouldn't have all this disruption of family life like one year PCS generates. There would not be any family moves connected with putting the squadrons into WestPac. So then I got this lieutenant colonel in APP to help me and we put together some slides about how we would rotate squadrons on a six-month basis and the squadrons would come back to the same base from which they left--they'd come back to the same air group. I showed how we could fill every squadron required in WestPac and enhance family stability at the same time. And then we started briefing this in the ARC; the briefing room we had at Aviation.

So I just had different people in from different places in Headquarters, lots of colonels and lieutenant colonels, and some generals from time to time. I got some pretty senior people in there, and I also at this same point in time started talking to General Miller and I told him, "I figured out how to do unit rotation for Marine aviation." He said, "I don't want to hear it. You get the division in it and then you can tell me about it." So I said, "Okay, that's easy because you could do a battalion just like you do a squadron." And so I came up with charts on how to rotate all these battalions out of Camp Lejeune and more people got interested in it and then yet Les Brown interested who was Chief of Staff to General Wilson - he got into the act - and then when everyone started being supportive, they turned it over to Manpower. And then Jim Mead got into the unit deployment assignment since he worked in HQMC Manpower.

I did all this in less than a six month span; I showed how you could unit deploy squadrons to WestPac primarily, but the same thing is pretty much that way for a carrier where the squadron would go aboard the carrier, they'd go away on the carrier for six months and then they'd come back to the same place. Well I mean there was no invention there really. It was really kind of take the logic that you use for carrier deployments and applying it to shore-based requirements. And that way we did the whole banana; the squadrons and battalions, and everybody said, "Hey, you know this is great!" And so then it got turned over to Manpower shortly before I left – and I don't remember if I'd been selected for BG at that point or not – but we briefed a whole flock of people and everybody thought it was a great idea and they thought it would work. General Lou Wilson said, "Let's do it." [Chuckle] And that's how we got into unit rotation.

Of course we had 2d and 3d Wings into this rotation idea and then we had 1st Division and 2d Division into scheduling. Laying it out was all simple arithmetic, and then you just take the numbers and layout a schedule for the squadrons to deploy. It was all done with a simple hand calculator. Then in the same manner as we did squadrons, we went with the battalions and you'd lay this whole thing out and it was very simple math problem [chuckle].

Dr. Allison: The UDP. When did it go into effect?

General Fitch: As I recall it all went into effect while I was out in Okinawa and the AWC of the 1st Marine Aircraft Wing. That of course was some 30+ years ago, so the unit rotation might have come a year or so later. They of course had to get the Congress to come up with the funds to pay TAD to Marines in all the battalions and squadrons doing the unit rotation. But it went real fast and we also paid people TAD to deploy for the six months.

So there were just all kinds of benefits. The guys that were deploying made money because before it was PCS. The families of the Marines had more money coming in because of the TAD pay. For the families there was a lot less disruption of family life style, and there was more stability for every Marine.

Dr. Allison: An overall good idea.

General Fitch: In the many years prior to unit rotation, you would go to Iwakuni or wherever you might go in WestPac, and you were going to be there for a year and there was no TAD. Your family would have moved somewhere in the United States when you went PCS. Well all of a sudden they had to come up with TAD money but it was the logical thing to do because normally the Marine is here and his family is here, and he were going to 29 Palms for a period of time he'd get paid the TAD, unless it was duty in the field. So, since we paid TAD for other things, unit rotation just added another justification for TAD pay. That's for the aviators and a lot of enlisted Marines, and it applied to the battalions too. But not many people remember the genesis of unit deployment but it went quite well. The other day I looked through my old fitness reports, and General Tom Miller didn't say a word about the creation of UDP when I was his EA, and how we sold that idea.

And I'll say this; if we would have had a different Commandant it probably never would have happened. It worked out extremely well.

Dr. Allison: You mentioned about General Miller playing tennis....

. . .

General Fitch: If General Miller was going to play tennis, boy, that was a good day for us because that meant we would get out of there by 1400 on Saturday. And that's why, when I took R&D a couple years later, that – in fact I guess it was only a year later – I said, "We never work on Saturday unless there's an awfully good reason." I never could find a good reason for the Marines in R&D to work on Saturday. Sometimes I would work on Saturday but I didn't ask anybody to come in. The norm was that we got our work done in the five day week.

Dr. Allison: So overall did you notice a mood change from General Cushman and when General Wilson took over as Commandant?

General Fitch: As a lieutenant colonel General Cushman had been aide to Vice President Nixon and so this was kind of a political thing. But there were things that were unfortunate, like the troops would frequently say that the PFT will consist of three laps around the Commandant -- because General Cushman was rather portly. Well in fact General Cushman retired six months early. The normal changeover of Commandants was in January and he chose to retire in the summer of '75.

Dr. Allison: Which was six months early.

General Fitch: And then there was the problem with who was going to succeed General Cushman and it was very fortunate that we had some alert three stars at the upper levels of Headquarters Marine Corps. General [Robert] Nichols is an unknown hero in that whole process that took place. He is now deceased. But he took some actions to correct some things that were going wrong.

In the case of General Wilson, here he is the CGFMFPAC. Tom Miller is his deputy. And General Wilson gets a call from General Cushman and General Cushman says, "Lou, I think you ought to retire. It's time to go" – and this is probably three or four months before Cushman is going to step down – and General Wilson said, "Well General, I appreciate your thought there," or words to that effect, but he said, "You know, I think I may have a chance to relieve you so I don't intend to retire." Well what you have to understand is that Senator [John] Stennis was very close to General Wilson; two great Americans.

Dr. Allison: Both from Mississippi.

General Fitch: From Mississippi; Senator Stennis is Chairman of the Senate Armed Services Committee and he's chairman of the Defense Sub-committee of the Senate Appropriations Committee so he is a very powerful man because anything that the Senate's going to do relative to defense, Senator Stennis had to agree with it. He has got both key committees. Well Wilson knew that Stennis wanted him to be Commandant and so General Cushman didn't press the issue. And so then General Wilson was named to be the Commandant. And of course when he came in – I think I've already mentioned things like, he said, "There are 20,000 people wearing a Marine uniform that don't deserve to wear that uniform, get rid of them." In six months they were no longer Marines. Then he had the other good ideas like in aviation he said, "We don't wan t the F-14". [Chuckle] And, "We do not want the F-14. We're not going to do that," and that was the end of the F-14 in the Marine Corps. He transformed the United States Marine Corps. He made it what it has been for the last 20 years, 30 years I guess; 30 years. Because in '75 the Marine Corps was in deep, deep trouble personnel wise, leadership wise, a whole host of things, and he turned the whole thing around. He did some great things for the Marine Corps; like the high school graduates would be at least 75 percent of all recruits, and getting rid of bad actors. In a short period of time the other services followed suit. The quality of the entire military increased because of Lou Wilson.

So you'd probably suspect I'm a great admirer of General Wilson.

Dr. Allison: I sort of got a little bit of a hint of that. Did you have an opportunity to meet him or have much direct interaction to do with him?

General Fitch: Oh, I had a lot to do with him. I had never met General Wilson until I got to Headquarters Marine Corps in the summer of 1975, when I did a year as EA to General Miller. I spent two years on General Wilson's staff running R&D, with my third year of R&D under General Barrow. In betwixt I did a year as AWC at 1st MAW. The CMC and I talked a lot. We frequently had lunch together in his CMC mess, and the norm was for all HQMC generals to eat in his mess. He never failed to approve any decisions that I made.

Dr. Allison: What are some of your favorite memories of him?

General Fitch: He was just a prince of a guy. I mean he was tough but fair. They called him the "Smiling Cobra." He was just a prince of a gentleman and as long as he thought that whoever he was dealing with was not trying to take advantage of the Marine Corps in some way or take something from the Marines, he was very amiable. This applied to anything that he thought that the Marine Corps deserved to have – such as the AV-8B. But I don't care if he was talking to the CNO, SecNav or whomever it might be, if he thought somebody was trying to do something adverse to the Marine Corps' proper needs, then he got forceful and sometimes rather severe. But he was a great person to deal with when you were a member of his HQMC staff. Did I tell you about how, when I took R&D which is again skipping ahead, that I told him about this complex weapon system that I thought should be cancelled. Did I tell you about that?

Dr. Allison: No.

General Fitch: I'm going to jump ahead.

Dr. Allison: Okay, yes, that would be fine. That's not that far ahead. That will be next session.

General Fitch: Well it jumps ahead to where I'm a brigadier and it has been only a few weeks since I took over Marine R&D.

I had been the AWC of 1st Wing for a year, then I came back to Washington and HQMC, and I've been assigned as the head of Marine R&D. I have now been a brigadier general for a year. Al Gray is a brigadier and he's down at the Development Center at Quantico. And when I take R&D they, that is my staff, start telling me that this assault amphibian, called the landing vehicle assault, the LVA, system, is the highest priority development program in the Marine Corps. The LVA was going to be a high speed replacement to the LVTP-7 which had been in service for probably 20 years or longer; you know an LVTP-7 goes through the water probably at about six or seven knots and this LVA was going to have either a 'planing' hull or an air cushion system that would enable the LVA to ride on top of the water at speeds of about 25 knots. And so they had several contractors that were doing the development of the LVA. They had programs and they were spending money on it, and I emphasize again that the staff tells me that this LVA is the highest priority R&D project in the Marine Corps.

So I guess it was a couple of months after I took R&D that I decided I'd go out and get briefed by these competing companies and look at their mockups of the LVA. And when I did that one contractor was up in Buffalo, New York and the other was out in California. In both cases they were absolutely huge vehicles and they were also extremely complex. As I remember it, the contractor in Buffalo was doing the air cushion vehicle variant and the one in California was doing the planing hull. The planing hull was like having a boat hull underneath the tracks of the LVA, and as the vehicle would gain speed the planing hull would enable it to ride on top of the water. The air cushion variant worked in a similar way where the air cushion system enabled the vehicle to ride on top of the water.

I go out and look at these mockups and I get the briefings by the contractors. From the personal experience standpoint, at this moment in time I have been the commanding general of a brigade (9th MEB) and we did a night amphibious landing (joint USMC and South Korean Marines) in Korea, and as a colonel I've had a MEU in the Mediterranean Sea with my 18 landings there. So I knew something about amphibious landings and landing assault vehicles such as the LVTP-7. I also know something about the kill capability of a precision weapon with laser

guidance, etc. And again, at that time I'd probably made more amphibious landings than most senior officers in the Marine Corps at that time.

So I looked at these mockups, which were very large from the target standpoint, and I thought, "On the battlefield these things are going to be 'a grape' when they get ashore, because they're so large, and if you've got an enemy with precision-guided munitions, like something beyond a TOW maybe, these are going to be very easy to take out – it will be easy to kill them. It's kind of like the F-14 in the air; being as large as it was you couldn't miss it up in the sky and these LVAs, they were so large that an enemy defense was not going to miss them running around on the battlefield. They were huge – with a length equal to an Abrams tank and much higher. So I went to Bell in Buffalo and I guess it was FMC in California, and I came back with a very negative view of the LVA. At that point it was my conclusion that the LVA would be too difficult to maintain by Marines and the vehicle would be so large that it would not survive on the battlefield against a reasonably sophisticated enemy with precision guided weapons.

Lieutenant General Larry Snowden was the Chief of Staff under General Wilson. This would be in the late summer of 1977, or maybe September or October of 1977. And I go down to see General Snowden. I start telling him about my trip and I said, "I've looked at mockups of these vehicles and I can tell you the complexity is such . . ." and of course the contractors had briefed me on all the various aspects of their LVA when I was visiting their plant, plus my staff had briefed me before I went on the trip. I said to General Snowden, "They're so complex I don't think Marines can maintain these LVAs, and I think that the Marines will have a maintenance nightmare in the LVA. Some 30 years later the AAAV may be proving me right on that point. But in 1977, I said to General Snowden, I think that the LVA will be an extremely high maintenance item. That conclusion of mine came just from looking at the mockups and being briefed by the contractors, Bell and FMC. Then once they come out of the water and they're ashore, anybody that's got a PGM can take them out." I said, "They're about as high as this ceiling and a little longer than this room and not quite as wide as this room."

So when I'm talking to General Snowden he's got his eyes shut and I paused for a minute because I thought, "Maybe he'd gone to sleep," [Laughter] and there was about maybe 15 seconds of pause and he said, "I'm listening." Because what Snowden would do when he really wanted to hear something he'd shut his eyes. So then I said, "Well General, I'll tell you what I think. I think that LVA program should be cancelled for two reasons." First both vehicles will be highly complex and difficult to maintain, and I think that once they are ashore they will be extremely vulnerable to enemy defenses. Now this is a huge, huge program in 1977 and I'm a brigadier general talking to a three star. And so I said, "I think you should tell General Wilson that this LVA is going to be too hard for Marines to maintain; too complex, and the LVA won't be survivable on the battlefield." With no hesitation, General Snowden said, "No, you're going to tell him."

So he calls the Commandant on the intercom and tells him that we want to talk with him. General Wilson tells him to come on over – the CMC office is about 30 steps from the Chief of Staffs office. So, General Snowden and I go see the Commandant and I tell General Wilson the same thing that I told General Snowden. He slams his hand down on the desk and he says, "I'll cancel that program." I said, "Wait a minute General. This is supposed to be your highest priority program in Research and Development," and he said, "It is?" And he said, "I didn't know that," and he goes on to say, "If it is the highest priority program in the Marine Corps, then I should think that I would know that." Then I said, "Well that's what I'm told." And I said, "What I think you should do" - and again, I'm a one-year brigadier at this point - I said, "I think you should get all your generals in your conference room, 2206, and tell them you're concerned about the program but you want to hear what they have to say in support of the program." So General Wilson then says, "You set it up." So I said, "Yes Sir." [Chuckle] General Snowden and I leave and I set up 2206 for a CMC meeting with his generals who are at HQMC and those at Quantico.

It's in the Navy Annex. In turn, General Snowden's office tells the various generals to be there, what the meeting will be about, and when the meeting will take place. Remember, none of HQMC had moved to the Pentagon until Krulak came in as CMC about 20 years later.

Dr. Allison: Right, Krulak, any thoughts on that, it was a big move.

General Fitch: General Krulak made a mistake when he moved all of the HQMC to the Pentagon. When Jim Jones replaced Chuck Krulak as the CMC, Jones was prone to say, "This move to the Pentagon is one of the dumbest things we ever did." Now it is ten years later and HQMC is scattered all over the Pentagon. We have to remember that the Pentagon was built in the 1942 timeframe and at first there was only an Army and Navy to occupy the Pentagon, along with the Joint Chiefs and a few other agencies. Then the USAF became a separate entity when they split out of the Army about five years later, and it was easy for the USAF to occupy spaces within the Pentagon.

Then the next big move was 40 years later when the Marine Corps moved from the Navy Annex to the Pentagon, and by then, all the good spaces were occupied by USAF, USN, USA, and OSD. The Marines got the dregs that no one else wanted. General Krulak should have arranged to have a CMC office next to the SecNav, and he should have left the rest of HQMC where it was in the Navy Annex. The Navy Annex is now scheduled for the wrecking ball a few years downstream, but had HQMC stayed in place there, the west end of the Navy Annex would have remained intact. He should have kept the old CMC office functioning. Krulak made a mistake in moving all of HQMC.

Dr. Allison: Thanks for that perspective, now on the LVA.

General Fitch: So, we are back to the LVA and General Wilson. All the generals are invited to the LVA meeting in conference room 2206 at HQMC, and those generals were all the ones down at Quantico, and every general at Headquarters Marine Corps. Al Gray comes up from the Development Center. He's junior to me by one or two numbers, so he's about the next chair down from me at the most junior end of the table. John Miller had Operations in PP&O (Plans and Policy). John Miller is a two star so he's the sponsor for the LVA. And let me think here. General Barrow is there as DC/S Manpower. We had General Jaskilka there as ACMC, General Snowden as Chief of Staff was there, and General Miller was there as DC/S Aviation.

Dr. Allison: Who had P&R or was it R&P in those days?

General Fitch: For Requirements and Programs, that would have been a two star job at that point in time. P.X. Kelley was R&P. My guess is that there were about 30 to 40 generals in Room 2206 when we met to have General Wilson hear the supporters of the Landing Vehicle Assault. This was probably the first time that a meeting of this sort had been held, where a top priority program was in jeopardy. Everybody is sitting at the table in 2206 when General Wilson walks in. Conference room 2206 is probably about 30 or 40 feet long and 20 feet wide, and the ceiling is probably about nine or ten feet. Everyone of course stands up for the CMC, then they all sit down.

General Wilson leans back in his chair and he said, "We're going to talk about this LVA," and he said, "I want to hear what you've got to say; why we should do it." Then he said, "I understand that it's the highest priority program in the Marine Corps and I didn't know that. I thought I was supposed to know what is the highest priority." He went on to say, "You know, it's about as high as this ceiling and it's nearly as wide as this room and it's nearly as long as this room."

The Commandant is pretty much saying the same things I told him when General Snowden and I were in his office [chuckle]. The General then said, "I don't think this LVA is going to survive on the battlefield and I think it's so complex that Marines can't maintain it. Then he said, "I want to hear what you've got to say." General Wilson then turned to the ACMC, and General Jaskilka had nothing to say. Then it migrated down the ranks of generals. It moves to General Barrow, he doesn't say anything. He goes to Snowden, he doesn't say anything. It just ricochets. It gets to John Miller who is a two star not too far from Wilson at the table, sponsor of the program, and John Miller didn't say anything [laughter]. It continues to ricochet down the room without a single soul saying a word in defense of the program. Now this tells you that sometimes high priorities are established and they have no real depth of support.

And it gets to me and I'm about three from the end of the table maybe, maybe two, I don't remember, and I said, "General Wilson, if you intend to cancel this program then you need to be very careful how you do it because there's an awful lot of money involved and you'll lose the money if you don't do this right." And then it ricocheted to Al Gray; head of the Development Center, and Al didn't say a word; not a word. And it gets to the end of the table and General Wilson said, "Well none of you had anything to say" [chuckle], and he says, "I'll let you know how it turns out." So he stands up, we stand up, he walks out then we walk out.

I get up to my office and the intercom's buzzing and it's General Wilson. He says, "Bill, come on down here. I want you to tell me how to cancel this program." So I go down. I think I picked up General Snowden en route and General Wilson said, "What do you think I ought to do?" and I said, "Well General, I think it's pretty simple." I said, "You've got a House Armed Services Committee [HASC] hearing in a week or two." Then I said, "When you get into your introductory remarks after the SecNav and the CNO have had their opening remarks, and you're asked to have your opening remarks," I said, "I think you ought to make a simple statement where you say that the Marine Corps has made a mistake and we have undertaken the development of this LVA and I as the Commandant now question the requirement for this type of vehicle. Mr. Chairman I don't think this Landing Vehicle Assault will survive on the battlefield and I think the LVA will be too difficult to maintain in the combat environment. Mr. Chairman I think that the LVA program should be cancelled, and what I would like to do is transfer the funding from this program to a more suitable tracked vehicle for the Marines, which we call the mobile protected weapons system."

Dr. Allison: How did that hearing go?

General Fitch: The House Armed Services Committee gave the Commandant exactly what he asked for and the Marines did not lose a penny in funding when he canceled the Landing Vehicle Assault. It is interesting that about 20 years later the Marine Corps undertook the development of

the AAAV, which I believe they called the Advanced Amphibious Assault Vehicle [later the EFV-expeditionary fighting vehicle]. As I recall the AAAV has cost and schedule problems for a production version, and I would imagine that the AAAV will have some survivability issues ashore along with vehicle maintenance issues.

And it was a hearing that when General Wilson finished his opening remarks, the committee members stood up and applauded, because he was truthful with them. Two months earlier or even a month earlier, no one would have thought that the CMC would cancel the LVA program – but he did. General Wilson was honest and straight forward with the HASC, and he said, "We have made a mistake with the LVA."

Dr. Allison: They don't hear that often.

General Fitch: And the money for the LVA was transferred over to this program we wanted to have, a very small tracked vehicle that would have technology for a high survival rate in combat, it would have a new high velocity gun, and we called it the mobile protected weapons system [MPWS]. Unfortunately a few years later the MPWS was cancelled for some reason, and I don't know that reason. But the MPWS went down after my watch in R&D.

This has been a rocky road to get a suitable replacement for the LVTP-7 vehicles. Cost wise the AAAV is probably going to cost 15 million dollars for each AAAV. It's going to be a very expensive vehicle.

Dr. Allison: Is it basically the same thing as the LVA brought back to life?

General Fitch: I haven't paid any attention to it. I never looked at it but I assume it's probably a planing hull. If someday you interview Lieutenant General Jim Amos, who as you know well, is currently the CG MCCDC, he can tell you how the AAAV is doing in its test program and in production at that point in time. Jim Amos can tell you how survivable they expect the AAAV to be on the battlefield.

But I did not work on it long after I took over R&D, because it was one of the first programs I looked at with a critical eye. General Wilson promptly cancelled it based on my advice to him. I had probably been retired ten years or longer when the AAAV went into development, and I have not followed it at all. All I ever hear on AAAV is fragments of talk as to how it is doing. My last chat about AAAV indicated that there was several years delay in the program and the cost was way up there, over \$15 million a copy. And of course the PGMs are much worse now than they were back in the 1977 timeframe.

The AAAV requirement was probably motivated by Al Gray because he probably thought, "Well, we should have done this back in '77." He didn't speak up when he had the Development Center as a brigadier general. The AAAV, from what I have heard casually, is probably problem plagued so to speak, cost wise, development wise, and I don't know just where they are in that program. But in the 21st century, with a little better technology available after more than 25 years, they appear to be doing what they first attempted to do in the 1977 timeframe. I would not bet a nickel that the AAAV survives operational test and a production run, but then I don't gamble.

Dr. Allison: That's interesting.

Were there any other major issues that were coming along at that time that you recall when you were EA?

General Fitch: We were doing the F/A-18A and we were doing the AV-8B. In the '75 timeframe we were doing what would be the F-18 and that was just getting started. And then we were looking at the XV-15 which Tom Miller can elaborate on for you. I flew the XV-15 later. It was about '83 when I flew it. Bell had done the XV-15 on NASA funding for several years, the program is moving along, and then for whatever reason NASA decided to terminate their program with Bell. Tom Miller can elaborate on that--he and I were just talking about the XV-15 this morning. NASA was going to withdraw their funding and then Tom Miller gets into the act. He gets into the act with Dave Mann who at the time is the Assistant SecNav for Research, Development and Acquisition. They get the SecNav into the act at that point in time. And Tom Miller is one of the prime movers at keeping the XV-15 program alive because they got some additional funding to keep the XV-15 going. In turn the XV-15 proved to be a successful concept with the tilt-rotor. Then of course the MV-22 came after that. The MV-22 got started about late 1982. I signed the operational requirement for a tilt rotor to replace the CH-46, and that was around the end of December 1982 or perhaps in early January 1983.

Dr. Allison: So that was the beginning of the MV-22, 'Osprey'?

General Fitch: It was happening in the 1975 to 1978 timeframe. The reason Tom Miller and I were talking about it, he was trying to remember dates because they arranged to get the XV-15 some funding; like a million and a half I think he said that Dave Mann put into it. Dave Mann by the way

was an outstanding Assistant Secretary of the Navy for Research and Development. Mann funded that and then the thing Tom and I were talking about this morning he was asking me when I thought the XV-15 got to the Paris Air Show for the first time. I couldn't remember and he can't remember, but we're trying to pin that down.

Dr. Allison: There must be records of that somewhere.

General Fitch: Well yes. I suggested that he go to you but he kind of acted like you were one of the ones asking the question.

Dr. Allison: No, I wasn't.

General Fitch: Okay.

Dr. Allison: No. I'll make a note of it and see if I can dig it up. I don't know if we'd have it since it's not a Marine Corps thing.

General Fitch: If you can he'd sure appreciate it because the question is, "When did the XV-15 first go to the Paris Air Show?" And what happened between Dave Mann who had the Assistant SecNav job and, Dr. Hans Mark who was either the Under Secretary of the Air Force or he was Secretary of the Air Force.

Dr. Allison: Oh, you had mentioned him last time in our last interview.

General Fitch: Yes. Hans Mark was a very big advocate of the tilt-rotor and he arranged to get a C-141 that was flying some training missions to fly a disassembled XV-15 to the Paris Air Show. In Paris they got the XV-15 back together and the tilt rotor test bed aircraft then flew some demos at the air show.

Dr. Allison: There a big battle fought over getting the AV-8B; do you recall that?

General Fitch: Only with PA&E was there a big fight. The Navy knew we had the support of the Congress and they knew that they could oppose the program and maybe save some internal Department of the Navy funding. They knew that the Marines would get it anyway. We have done

so many programs directly with the Congress that it's absolutely unreal. For as many years as I can remember one of the most accurate phrases in the programming world is, "The Marine Corps routinely gets screwed by the Navy in the POM [program objective memorandum] process, and it happens so frequently that the Congress knows that well." The congress knows that the Marines wind up getting short-changed routinely in the POM process, and if you don't have a strong Secretary of the Navy, the uniformed Navy wins out and they get their way in the POM.

Well in the case of the AV-8B they knew we had so much support relative to the AV-8A that the AV-8B program was going to get funded, so I don't remember any strong opposition at all coming out of the Navy like OP-05. A lot of that Navy support for the AV-8B came from admirals like Bill Houser being very even handed with the Marines. The Marines later, in 1979 and 1980 had a problem with funding because of PA&E. The head of PA&E was a guy named Russ Murray, and he was the problem. Murray didn't believe in VSTOL or later as it is called STOVL.

And the problem with the funding at that moment in time was it had been funded like in probably the first year, probably about 1976, and then again in'77 and '78. In the FY79 budget, which would have hearings in '78, I have R&D at HQMC at the time. I have a good relationship with Tony Batista who is staff director for the R&D Subcommittee of the House Armed Services Committee. Tony was a very powerful person by being staff director of that committee. And so Dave Mann, and again, this is jumping ahead to '78, but Dave Mann was a big proponent of the AV-8B. At every congressional hearing that I went to with him, which was all four or five of his hearings, he wanted me to brief each committee and answer their questions about the AV-8B.

Ironically the AV-8B was not my direct responsibility at HQMC. Tom Miller was responsible for it, but he didn't go to Dave Mann's hearings and testify with Mann. In Marine R&D you have everything ground relative to the Marine infantry, like 155 howitzers, all the communications programs those programs for amphibious warfare, air control systems and weapons systems like surface-to-air missile systems. If a program was not unique to the Marine Corps and amphibious warfare, then the Army was supposed to do those programs.

Dave Mann wants me to brief each committee on the AV-8B, and the HASC R&D subcommittee was a very important committee for Dave Mann. With Tony Batista the Marine programs were very important. I could talk to Batista for 20 minutes and tell him what the Marine Corps needed and why it needs certain programs. Invariably he would say, "Fine, I'll take care of it."

One of the programs we saved was the position locating reporting system- PLRS. With PLRS we were joint with the Army. Soon after I had gotten to R&D, and I'll get back to the AV-8B here in a minute, but soon after I had gotten there, and this was at the same time I was in this

LVA cancellation, I had a phone call that the PLRS program was cancelled. Well I knew that PLRS, was very important to General Wilson, and to him it probably was his highest priority program. Lou Wilson knew what it was because anytime we talked about PLRS he'd say, "That is really great. For the first time the Marines on the ground are going to know where they are, be it urban, jungle or desert, and those Marines are going to know where everybody else in his battalion or regiment is located." Remember, GPS has yet to be developed, and in the late 1970s PLRS shows great promise.

Dr. Allison: Was it anything like GPS?

General Fitch: No, there wasn't such a thing as GPS at that point in time. It was where they would set up a central system which they called a main station. The main station had to be surveyed in so that it would know its location. This central system would have computers and the position locating systems. Then there would be what was called user units at the squad, platoon and company levels. It was a network of user units and a main station sending out signals that provided accurate position locations. It was probably accurate to within a hundred feet, where GPS today is accurate to within 10 feet. That way you had very precise information on where different units were located including your own unit. Well one of the first things out of the chute was to find out the PLRS program has been cancelled. So I said, "Who cancelled it?" They said, "Ev Grenky over at DDR&E." So I go over to see Ev Grenky and I take this Marine lieutenant colonel with me. This lieutenant colonel is a walking talking encyclopedia on PLRS. He really knows the program, how it works and what capabilities it provides.

I've always found it handy to bring along people that know a lot of details. So we go see Ev Grenky and I tell him, "You've cancelled the wrong program." I had never met the man until I walked in the door. And Ev said, "Well I had two programs I was looking at and I had to cancel one so I cancelled PLRS." I said, "Well you've cancelled the wrong one as far as we're concerned." And I said, "General Wilson wants this program to happen so I'm going to get a million dollars put into it to keep the program going." Back then you could do a lot with a million dollars. And Ev said, "Well I'm not going to object to that at all." He then said, "If you want to reprogram some money that's fine with me." So I said, "Well that's what we're going to do."

So then I go to the Army staff and I tell them that we think that DDR&E has made a big mistake in trying to cancel that program. I tell the Army that we're going to reprogram some money to make PLRS happen. I'm talking to probably two or three Army brigadiers. And they said, "Well we're not going to reprogram anything." Then I said, "Well I think you ought to get

the lieutenant colonel here to give you some more detail on just how this PLRS system is going to operate." So the lieutenant colonel starts talking and he knows chapter and verse about how PLRS is going to play on the battlefield. And when he finishes about a ten minute discourse on that, the brigadiers say, "We'll put two million dollars into it." I said, "That will be fine." That's what they did, and so PLRS was kept alive that year. After that Tony Batista kept PLRS funded.

Then as I recall it was the '79 budget, and I had Tony Batista over to my office at HQMC. In a very small conference room I briefed Tony on the AV-8B. I went through the essentials of the program for the AV-8B and what we needed to do. Tony then said, "How much money do you have in this program?" Well at that point in time Russ Murray at PA&E had cancelled every penny out of the Harrier II program.

Jimmy Carter was president at the time. Harold Brown was the Secretary of Defense and he had agreed with Russ Murray on killing the program. And so Tony said, "How much money do you have in it?" I said, "Zero because Murray has cancelled the program." I told him that in the POM process we had come up with about 200 million for the AV-8B. And he said, "How much do you need?" I said, "Well we need about 200 million dollars." Two hundred million dollars was a lot of money back then. And Tony said, "I can't get you 200 million dollars." He said, "I want to give you five million for this and six million for that and two million for that." He said, "The best I can do is 180 million." I said, "That's good. That 180 million will be fine." Then I said, "Let's go down to Marine Aviation and talk with General Miller."

So Batista and I go down to see Tom Miller. Tony and I are sitting on the couch in his office and Tom Miller is sitting in his chair leaning back and I said, "General, Tony says he can get you 180 million for the AV-8B program in this budget." General Miller, whenever he was unhappy the corners of his mouth turned downward and he's frowning - so he frowns and says, "I need 200 million." I said, "General, you didn't hear what I said. Tony can get you 180 million. You have to remember that Miller's looking at a zero [chuckle] until I walked in the door with Tony Batista. General Miller thought for a minute and he said, "That would be fine."

And what Tony did and this was routine for him – now I've told you how close General Wilson was to Senator Stennis. As you will remember, Senator Stennis chaired two committees in the Senate; the SASC [Senate Armed Services Committee] and the Appropriations Defense Subcommittee. Tony was true to his word. In every instance what he said he would do he did. Tony went to the staff directors of the other committees, and he went to the Senate committees. All of these guys have trading stamps because you're a staff director, I'm a staff director and I want you to do something and support me and you've got something you want me to do to support your program that has a high priority. So they had all these trading stamps that, the trading stamps are

451

really the taxpayers' money but they're trading back and forth to get the right programs funded. So Tony went to the other committees and he got everybody on the staff at the staff director level, which is the key to any committee because congressmen and senators don't go delving into details. It's the staff that really puts these things together. So Tony got every committee staffer to agree, and what's important in that budget, exactly 180 million dollars, not a penny more, not a penny less was authorized and appropriated.

So then it's a year later and we're briefing Tony again and we're going through these different programs in the Marine R&D and then I'm briefing the AV-8B. Then the same thing happens. That year we needed like 210 million I think it was and Tony says, "How much do you have in the budget," and I say, "Zero. Russ Murray has zeroed it out again." Harold Brown is still Secretary of Defense and he's agreed with Murray.

So as far as the Secretary of Defense is concerned there is no funding for the AV-8B. Tony says, "Well how much do you need?" and I said, "We need 210 million." Tony said, "I can get it for you." And so he funded 210 million. He went around to all the other staff directors and exactly 210 million dollars was authorized and appropriated and that's what kept the AV-8B going. Remember we are talking about 1980 dollars, and that is 27 years ago – today it would be six or seven times what it was in 1980.

Dr. Allison: So the Navy wasn't kicking in anything.

General Fitch: Well yes. What happened, the \$210 million had been through the POM process. The budget leaving the Secretary of the Navy's office for OSD had the \$210 million in it for the AV-8B. Russ Murray simply canceled the program again and took all the money.

What would happen in the programming process was the Marines would give up a lot of things. Like maybe they wanted to spend a hundred million dollars on the CH-53 but in looking at their priorities maybe they'd say, "Well no, we can't spend a hundred million dollars on the 53. We can only spend 75 so we need 25 for the AV-8B," so they would give up 25 million out of the CH-53 and put that into the AV-8B program. In the case of the AV-8B that would happen several times while sorting how where the \$210 million would come from. Then Murray would cancel it when it got to the OSD level. It would be like your wife making a grocery list and giving you a hundred dollars to buy the groceries then when you get to the store someone steals a \$20 bill from you. And it's working within priorities of the Marine Corps. And then the Marine Corps is working with OP-05 in this process and they've both got to get the blessing of the Secretary of the Navy. So when I said 210 million dollars in the last instance, the United States Marine Corps had

given up 210 million dollars worth of various programs in order to create 210 million dollars for the AV-8B in that whole process. So the Marines would pay twice.

So now Russ Murray has taken the money away. He just zeroed it out of the budget and there is no 210 million. It's gone back into the coffers of the Secretary of Defense or wherever.

Dr. Allison: So that's really punishing the Marine Corps there.

General Fitch: Well yes it's punishing the Marine Corps.

Dr. Allison: Not only do they lose their money, they lose the program too.

General Fitch: Well it slowed down things here because if you weren't doing an AV-8B these other programs would have been funded at a higher level. But Tony kept that Harrier program going and I think that was the '79 budget for the \$180 million and the '80 budget for the \$210 million. In the summer of 1980 I went to Japan as a two star to take the 1st Marine Aircraft Wing. Then when I came back in the summer of '82, that was when Reagan had come in and the Reagan administration said, "Boy, this AV-8B is great." [Chuckle] So once Reagan and his team were in, the AV-8B was funded big time. And as soon as the Reagan administration got there they felt the AV-8B was super and it was fully funded for the eight years that Reagan was President.

The guy I really give the credit to – and I give Tom Miller all this credit up through the summer of 1979 – June 1979 when he retired – but the key thing in those two years, the guy who really kept the program alive with funding for those two critical years was Tony Batista. Tony is an unsung hero on the AV-8B. PLRS too.

Dr. Allison: And you going to him; that relationship. Fox Turner, do you have any comments on him?

General Fitch: Bill Houser replaced Fox Turner as OP-05 after about a year or so. That's how the Harrier got funded in the late '70s and of course everybody's forgotten Tony Batista now. He's the guy who kept the program going. Of course I haven't forgotten him. I'll tell you when I had Marine Aviation; I'll tell you how we got the two-seat trainer for the AV-8B.

Dr. Allison: Let me try to finish up a couple things on this time here. Anything on 'stealth'?

General Fitch: Stealth wasn't talked about. In the late 1970s there was no talk of stealth. Stealth was happening but stealth was not talked about. You know an interesting thing about stealth is, during World War II a tremendous number of aircraft were shot down without any benefit from radar. Fighter pilots found the enemy aircraft with their eyeballs and killed them. Of course in the late 1970s the Air Force was working on what became the F-117, in that timeframe but it was super, super secret.

Dr. Allison: What about electronic warfare [EW] for the Marine Corps?

General Fitch: The Marine Corps is kind of the daddy for naval aviation electronic warfare, because you had some very smart people back, even with the old AD-5s, doing some EW type work, then an EW variant of the F-3D came into operation, and then it was the EA-6A which was really the first high performance tactical electronic warfare airplane. In Vietnam in 1967 and 1968, I always hoped that an EA-6A would be supporting me on a Rolling Thunder mission to the Hanoi/Haiphong area, rather than an EF-10 which is what the F-3D was re-designated.

The F-3D or call it the EF-10 was in there a little bit but it wasn't much of an airplane when it came to EW although we used to have them support us on some of our deep-north missions in Vietnam. The F-3D would be a gap filler in the 1955 to 1964 timeframe and the EA-6A was going pretty well in the 1964 timeframe. The Marine Corps was the leader in electronic warfare, but during Vietnam the Navy did not ever say they wanted a single EA-6A. They never said that. It was the Marine Corps leading the way, giving up money, taking A-6s and turning them into EA-6s. So that was totally a Marine only program.

Dr. Allison: That's one of the many things that Marines can claim credit for when it comes to aviation-- electronic warfare.

General Fitch: To my knowledge it's always been standoff jamming that's been done with the EA-6A and the EA-6B, which is not as effective as it would be if they were right down with the strike group. But then also there's always been the fear if they were right down with the strike group, they feared that the EW aircraft might get shot down if they were with the strike group.

Dr. Allison: While you were at Headquarters you mentioned that the F-18 was coming in.

General Fitch: Yes, that was the beginning of the F/A-18A. It was a couple of years earlier they had the F-17 at Northrop.

Dr. Allison: Wasn't there a controversy in regards to the A-7 and the F/A-18?

General Fitch: No, the A-7 was ahead of that. The A-7 was becoming operational in the 1967 timeframe, because OP-05 was leaning hard on General McCutcheon in 1968 to buy the A-7 instead of the A-4M. That was when I was a lieutenant colonel in what is now APW and the Navy had already done the A-7. Admiral Connolly was OP-05 and he wanted the Marines to go into the A-7A program. But if I remember right, in the early, early 70s or maybe in the late 60s, the Air Force had had the competition for what would be what we know today as the F-16 and the F-16 had won out over the F-17, which was the precursor to the F-18. It looked very similar. In fact if you go to Tom Miller's house and go downstairs you'll see a picture of an F-17 that looks like an F-18, hanging on the wall. Tom Miller flew the YF-17. That was where the F-16 came from because of that USAF competition. So now you've got an F-17 left over and the F-17 people start touting – and this would be Northrop – touting the F-17 for naval aviation. Then McDonnell Douglas got into the act with Northrop, a joint effort, to take what was essentially an F-17 and change it around a little bit and they'd call it an F-18, and that's where the F-18 came from.

Dr. Allison: Some people characterize it as the airplane nobody wanted.

General Fitch: Yes, there was a certain element of reluctance there but the F-18 was just getting started. It is important to know that the Navy was looking at the F-18 Hornet as just a fighter. The Marines were looking at the F-18 as a strike/fighter. That was in 1975. I would guess that about 1976 the Navy got on board for the F-18 being a strike/fighter. Now my job as EA to Tom Miller; the F-18 was just something that was kind of happening. For the Marines they had their strike/fighter requirement in the F/A-18, but most of the Marine thinking was given to the AV-8B.

Dr. Allison: Do you remember when you were promoted to brigadier general; any thoughts on that?

General Fitch: Well yes, as I recall the date was April 1, 1976. At least that was the effective date for my promotion. It was an awfully nice event and I've got a picture of that, with Margaret Marie and General Wilson. Because when they do MCAA in September I'm supposed to be the

Honorary Chairman of the reunion, which is a nice gesture by MCAA. I had to send them some pictures for their program, and I think I sent that one of my promotion to brigadier General.

Dr. Allison: You're the Honorary Chairman this year?

General Fitch: Yes. But anyway, I took a bunch of pictures down from downstairs and sent them to MCAA for them to pick from for the program at the banquet.

Dr. Allison: But you're going to be the Chairman at the thing this year at the convention?

General Fitch: Well what it is, it's just an honorary thing. They did it for Tom Miller a couple years ago and they did it for Frank Lang I think it was last year.

Dr. Allison: Well that's quite an honor though sir.

General Fitch: Well that tells you I'm getting older [chuckle].

Dr. Allison: [Chuckle].

General Fitch: And I sent those photographs to MCAA. One of them is of me and my F4U doing a one wheel landing on the aircraft carrier, *Tarawa*. Another one of those pictures is of General Wilson promoting me to brigadier and my wife, Margaret Marie, standing there while they were doing the pin-on of stars routine. The group of photos has one of Charlie and me standing in front of a 533 A6 at Chu Lai.

I think I told you about Lou Wilson writing me that letter when I told him I was going to retire, didn't I? The one where he and Bob Barrow suggest that I might should be the next Commandant of the Marine Corps.

Dr. Allison: No sir, but I noticed it on your wall downstairs.

General Fitch: We might take that out and Xerox that letter. The letter from General Wilson might be a good one to put in the oral history. It is kind of rare for former Commandants to talk about an aviator being the CMC [chuckle]. Dr. Allison: Right. Well that's all I've got for that time period sir.

General Fitch: Okay.

END OF SESSION VIII

PAGE INTENTIONALLY LEFT BLANK

SESSION IX

Interviewee:	Lieutenant General William H. Fitch, USMC (Ret)
Interviewer:	Dr. Fred Allison, U.S. Marine Corps History Division
Date:	19 July 2006
Place:	Lieutenant General Fitch's Home in McLean, Virginia

Dr. Allison: This is the 9th session of an interview with Lieutenant General William Fitch and today's date is the 19th of July, 2006, and we were just talking about the Golden Eagles.

General Fitch: It is very worthwhile to talk a little bit about the Golden Eagles since the current members and the past members have carved a lot of history into Naval Aviation. The Golden Eagles was formed in 1956 by a group of World War I Naval Aviators, who were amongst the first 1,900 to qualify for their gold wings. The membership is limited to 200, and in my view the selection for membership is more difficult than making flag rank in the Marine Corps or the Navy. The dominant criteria for membership is to have made significant contributions to Naval Aviation each year, since we have attrition due to deaths and some in ill health going emeritus, we pick about 10 or 12 new members. Those 10 or 12 are picked from about 70 or 80 nominees.

Dr. Allison: How do you get selected; what is the criteria for membership and who decides?

General Fitch: Well the criterion is your reputation in the cockpit. You can be the finest program manager or the finest wing commander or the finest carrier skipper and we don't care anything about that. You have to be recognized for your skill in flying, and a good combat record is very helpful. I have seen individuals who were otherwise well qualified, but they had no combat experience and did not make it. Rank has no place; zero place. We don't care what your rank was. I was head of Golden Eagles back in the 2000-2002 timeframe.

In 2000-2002 I headed it up as The Pilot for a couple of years. Our leadership has a Pilot who corresponds to president, a Copilot that links to vice president, Navigator who is like the secretary, a Chief Pilot who is like chairman of the board of governors. I sat on the board of governors for a number of years – like eight or ten. In the last 20 years I have been the Pilot, Copilot, Navigator, Flight leader and member of the board of governors. For the past two years I have headed the nomination committee for Golden Eagles, which selects the officers to head up Golden Eagles and to select the board of governors.

I know a vice admiral for example that had a very good record and all that, but it probably took him ten years to get selected. He went before like ten boards before he was ever finally selected. I know a four star admiral that had to come up at least three or four times before he ever was selected As I said, we care nothing about rank..

Dr. Allison: I see Howard DeCastro is in there. He was the first CO of MAWTS.

General Fitch: Yes, that's correct. Howard's probably been a member for seven or eight years now; something like that. If you remember, he retired from the Marine Corps as a lieutenant colonel. If you read the biographical sketches, then you will understand what I am talking about on selectivity of members. We have one second lieutenant as a member. Then we had Dick Best, a hero of the Battle of Midway; Dick Best left the Navy as a lieutenant. Dick Best became a Golden Eagle about 1993 and to me, I mean we have great naval aviators in the Golden Eagles but I thought Dick Best kind of personified what a Golden Eagle is, and it's an endorsement of the fact that rank has no place. In 1942 Dick Best was a lieutenant and I guess he was flying off Enterprise in the Battle of Midway. On the first day of the battle he gets two combat missions. That's all Dick Best ever flew was two combat missions, both flown the same day. At Midway as a lieutenant he is the CO of an SBD squadron. And in the morning he flies one mission and in the afternoon he flies a second mission. In the morning he got a direct hit on the flight deck of a Japanese aircraft carrier and in the afternoon he got a direct hit on the flight deck of another Japanese aircraft carrier [chuckle] To my knowledge, Dick Best is the only Naval Aviator in history to have hits on two enemy carriers in one day.. Dick is the type of Naval Aviator that we seek out to be a member of the Golden Eagles. So a fair number of World War I Naval Aviators were gathered together in 1956 and they all went out on Forrestal, and of course they also visited the naval air station. And when they got back they said, "Hey, you know this is pretty great. We ought to do this again." So they decided to form what they called The Early and Pioneer Naval Aviators Association and it took them a couple of years or so to get that going. Then they added another name, The Golden Eagles. The original criteria was that you had to have been one of these very, early pioneer aviators from World War I.

But that's how it got started. Then of course if it was going to continue then they had to have some criteria for selecting members and of course you couldn't select for World War I because that was definitely a limited number,. So that's when it migrated into significant contributions to naval aviation and your performance in the cockpit.

460

Dr. Allison: An interesting organization. The Golden Eagles kind of started the same way in the sense it was World War I Marine aviators that started what would become the MCAA.

General Fitch: I think that we pretty well covered Marine R&D [Research and Development] last session. Naval Air Systems command does naval aircraft for the Navy and for the Marine Corps. RD&S [Deputy Chief of Staff for Research, Development and Studies] does the development for the ground combat equipment and the command and control. The army does a lot of development for the Marines. The Marines are allowed to do only those equipments that are unique to the Marine Corps.

When I had Marine R&D, General Kelley had R&P [Resources and Programs] and he was a two star. I was a brigadier for part of my tour in R&D, and then I became a two star. In talking to key people in DDR&E [Director of Defense Research & Engineering] they told me that the Abrams tank was going to come out with a heavier caliber gun. I think it was, a 120 millimeter gun instead of a 90 millimeter gun. I told P.X. Kelley that and he said, "Well do you recommend that we wait to procure that tank until we get the heavy gun?" I said, "My friends in DDR&E tell me that we should wait. That sounds like a good idea to me." and he said, "It sounds like a good idea to me." So we delayed Marine procurement of what would be the Abrams tank for a couple of years. It was that simple. P.X. and I talked five minutes.

But from the air and ground command and control side and the logistics side, then that came under Research Development and Studies. But there were pretty hard and fast rules back then and that was that just about everything that the Marine Corps did relative to ground equipment was in conjunction with the United States Army. The Army developments included rifles, pistols, artillery, and armored vehicles. The LVA that I talked about earlier was unique to amphibious warfare. The only exception was for systems unique to amphibious warfare, and the Marines did that. And so what we would do, you would have programs, for example, like an Abrams tank - to go back to that – sponsored by the Army and there would have been many hundreds of millions of dollars in R&D funds that would have gone into the Abrams Tank. The Marine Corps might contribute \$500,000 a year to the tank R&D funding, maybe less, to make sure that special requirements of the Marines would be addressed in that particular weapon system. The Marine Corps was never going to be authorized to go out and sponsor their own tank. But we did get into things like the mobile protected weapons system (MPWS), which was going to be a small tank that would be unique to the Marines and amphibious warfare. The MPWS would be helicopter transportable.

Dr. Allison: Like an LAV, light armored vehicle?

General Fitch: Well except the MPWS was going to be a tracked vehicle as opposed to wheels, and it was to be helicopter transportable. The MPWS was to have a high velocity gun, on the order of 75 millimeters, with a steeply sloped glacis on the front. The MPWS would have an extremely low profile, which would be a big factor when you consider precision-guided weapons on the battlefield. The LAV wheeled vehicle actually came later. The primary objection that I had to the LAV was its extremely thin skin and its high profile. In those days we had never heard of an IED. When the Marine Corps started pursuing the LAV, which was primarily driven by Al Gray, then the MPWS went away. I was retired several years when all that happened.

Dr. Allison: That was an interesting story.

General Fitch: If you are speaking of the LVA amphibious assault vehicle as opposed to the LAV wheeled vehicle, then in 1977 it was the LVA that was supposed to be the Commandant's highest priority program -- that is it was a high priority until the General Wilson heard about it, then after I talked with him, he cancelled the program for the LVA.

Dr. Allison: And then killed it. It was huge.

General Fitch: The MPWS was going to weigh about eight to ten tons. So we were actually allowed to do that kind of thing that would be Marine unique, which would fit into the Marine Corps concept of operations, along with the CH-53 helo transportability.

Dr. Allison: Could a 53 pick it up then?

General Fitch: We expected the MPWS to be lifted by the CH-53E. We were shooting for an eight-ton weight capability, maybe ten tons, for the MPWS, and in those days a 53E was talked about as being able to carry 16 tons. The 53E would carry 16 tons on a standard day at sea level. You go to 3,000 feet elevation and along with a 100 degree F day, the CH-53E would be marginal for carrying 10 tons.

The 53 Echo has always been advertised as being able to lift 16 tons as an external load. It is a 16-ton lifter that is limited to sea level and on a standard day of about 59 degrees F. The higher elevations and higher temperatures would reduce that lift capability. You start getting a hot day

and mountainous terrain, and the 16 ton lift capability disappears in a hurry. Tactically the H-53E is probably good for 10 or 12 tons in a typical objective area.

But in any regard, we started that mobile protected weapons system and then after I left in 1980 to go to 1st Wing, then the mobile protected weapon system kind of went by the boards and that's when they got into the wheeled vehicles. Al Gray was pushing that pretty hard and we wound up with the LAV. In the newscasts now, I cannot recall seeing an LAV in Iraq or Afghanistan.

Dr. Allison: Speaking of Al Gray; this time period, were you hearing any talk about this new maneuver warfare now that you're in this ground equipment stuff?

General Fitch: Oh yes. They had this guy who was a civilian, who had never served a day in the military.

Dr. Allison: Lind?

General Fitch: Lind; Bill Lind. He had read a lot of books and actually he had Al Gray pretty well convinced on all this stuff.

Dr. Allison: So Al Gray really picked up a lot of his stuff and went with it?

General Fitch: Well he did. In fact Al Gray was one of the few friends that Bill Lind had. Headquarters Marine Corps did not like Bill Lind until Al Gray became the commandant. And some of the ideas that Bill Lind had were okay but also some of them were not. Bill Lind kind of went into oblivion when Carl Mundy became the CMC. Lind kind of disappeared after Al Gray retired [chuckle].

Dr. Allison: Well was DCS RD&S; was that a precursor to MCRDC and the SYSCOM?

General Fitch: Yes, all of that. When Jack Dailey took R&D they made it a three star job and expanded the scope. Then they moved it all down to Quantico and expanded it some more with Systems Command.

Dr. Allison: Okay, so this was a grandfather of MCRDC and SYSCOM and that's kind of where it fit in.

General Fitch: I don't know how long Research and Development & Studies had been around, but when I was a major working in SecNav R&D in 1963-65, General Hochmuth was the head of Research, Development and Studies. And he was the general who picked me in 1963 to go over and be the aide to Secretary Wakelin. General Hochmuth was killed in a helicopter about 1966 in Vietnam. I believe that he had a division at the time he was killed. He was a prince of a gentleman.

You have a building at Quantico named after General Hochmuth and it may still be, I don't know. Marine Corps Systems Command was in there for a while. But if you're driving down Barnett Avenue going straight south towards the airfield, it's on the right, and it's probably half a mile before you would turn off to the left to go to the airfield.

Dr. Allison: Was that where MCRDC was too before it became Systems Command?

General Fitch: Well I'm not sure it was. I think MCRDC may have been in rented space in Rosslyn, since I visited with Jack Dailey there when he headed up the MCRDAC [Marine Corps Research Development and Acquisition Command]. When they decided to work towards a system command as such in the Marine Corps, I think that they did it because all the other services had a systems command except the Marine Corps. "So in keeping up with the Jones" the Marine Corps decided that it wanted to have a Systems Command too. Well then they changed the name again.

Dr. Allison: General Gray's influence....

General Fitch: Yes. Well he had the Development Center at Quantico at the same time I had Research and Development in the late 1970s. Al Gray was CG FMFLant when I retired as DC/S Aviation in September 1984.

He was a brigadier, and he had the Development Center at Quantico. I was a brigadier and had RD&S at HQMC. We both got promoted to major general at about the same time. I've mentioned that I was always two or three numbers senior to Al Gray. You are very fortunate to be senior to Al when you will be dealing with him. You will remember that Al did not speak up when General Wilson was talking cancellation of LVA.

Dr. Allison: . . . who was running the Development Center at the time.

General Fitch: Gray was running the Development Center at that time.

Dr. Allison: Okay. He must have been Commandant then when he stood up MCRDAC under Dailey.

General Fitch: He probably was. Bob Barrow became CMC in the summer of 1979 and he would have retired in the summer of 1983 when P. X. Kelley became the CMC. Then Al would have become the CMC in the summer of 1987. And then of course Dailey became Assistant Commandant and Al Gray was still Commandant when Dailey became Assistant Commandant. I think that he was.

Dr. Allison: He was. Dailey had also worked for Gray when Gray had II MEF.

General Fitch: Well he had that school down there; that joint school at Norfolk, the Armed Forces Staff College.

Dr. Allison: In your time at R&D and RD&S, what was the importance to the Marine Corps of those offices?

General Fitch: One key thing about Research and Development was we did run the studies and those got farmed out to various Beltway Bandits, because you know the Marine Corps had gotten away during the years from doing so many studies at Quantico. There were some studies done at Quantico but the volume of studies to support various and sundry concepts and systems and so forth, most of that got farmed out to these various think-tanks around town. But, we had our studies. The significant thing about Marine Research and Development in 1977 when I took it, it had a total budget, as I remember it, on the order of 35 to 40 million dollars.

In RD&S we did everything for studies and we did everything where we'd make a contribution for certain capabilities and certain weapon systems that the Army was going to do; ground combat systems. And then we would have projects, like the TPS-59 radar which is still around and operating well today.

Dr. Allison: That's a good radar too.

General Fitch: It is a good radar and one of the first electronically scanned antennas.

Dr. Allison: The other services don't have it, do they?

General Fitch: Well I don't know if they do or not.

But of course we've got electronically scanned antennas now in airplanes like the Joint Strike Fighter, and they give you amazing agility to work with the radar. The Navy has the AESA radar in the F/A-18E/F. But we did the TPS-59, which was basically a long-range radar. We did some other small radars that were tied into Marine aviation command and control, plus ground radars came under our cog relative to aviation along with the TAOC [tactical air operations center] and the TACC [tactical air command center].

Dr. Allison: As part of the command and control piece.

General Fitch: A lot of it was under the command and control programs. On the ground side; the command center elements of the ground side, as I recall during the late 70s, we weren't doing much relative to ground command and control. Regimental commanders and division commanders, they had their command center but it was the same one they had had for probably 30 years. Every once in a while they'd give them new radios. But in 1977 there were various and sundry small development programs but it all fit within about a 35 to 40 million dollar budget. We let the Army do a lot of development for us. It avoided duplication of effort.

When I left RD&S about three years later, if I remember right, our R&D budget was up somewhere between 150 and 200 million. But back in the RD&S timeframe of course one of the more notable successes we had was, again, the interface with Tony Batista on getting the Harrier funded, along with getting the LVA cancelled, plus getting Tony to fund the programs we needed. There was also a staff director at the Defense Subcommittee of the House Appropriations Committee, named Bob Serrafin. Bob was very helpful to Marine R&D and he supported us at the House Appropriations Committee.

Dr. Allison: Did they do anything with artillery in those days?

General Fitch: Yes, we did the 155 lightweight howitzer and this was in conjunction with the Army. The Army had the lead on the lightweight 155. We did the M198.

Dr. Allison: I see the 155.

General Fitch: Yes, We did a 105 and a 155; lightweight, and then as I recall the 105 went away in the process. But that was all in conjunction with the Army because the Marine Corps was never going to develop an artillery piece of its own. We may be able to do some things like small mortars and so forth but no artillery as such. But in connection with that there are now programs I just ought to mention like there's one called Excalibur which the Army is doing. Are you familiar with that?

Dr. Allison: No.

General Fitch: Excalibur is a 155 mm artillery round. It has been very successful and has been going through operational test in Iraq. Excalibur looks like it will be a tremendously successful PGM. In Iraq an Excalibur round recently took out a key insurgent in a safe house. It uses GPS guidance and it has demonstrated in OT [operational test] that it has a CEP [circular error probably] of about 10 meters. The requirement is 20 meters for CEP.

Dr. Allison: So does it have some sort of self-contained propulsion system?

General Fitch: Well it does not have a propulsion system. In the 155 gun barrel it receives over 10,000 "g" as it travels in the barrel, I repeat that is 10,000 "g," but that is all a result of the charge built into the round. You will remember that the 16 inch round on a battleship went about 20 miles, and that was relevant to the powder charges in the barrel. This one has the powder charge as part of the round, it has tail fins, canards for guiding the round, a high explosive payload, GPS guidance, an inertial measuring unit, a range over 20 miles, and an impact accuracy within 20 meters. It is a precision strike weapon. This particular kind of round, the Marine Corps would never be able to develop themselves. The Army has developed the Excalibur and recently the Marines were given four rounds to fire at Yuma. They fired four rounds and had four direct hits. The program is on a fast track and it is very likely the Marines will procure it.

Dr. Allison: Interesting.

General Fitch: Excalibur is a good example of what the Marines have to rely on the Army to develop. But in any regard I guess the key thing in the RD&S tour of duty was the fact that we were able to increase the R&D budget from about 35 million dollars a year to around 200 million a year. I have no idea what it is now. Back then in the late 70s, people in DDR&E and other offices recognized there were a lot of things the Marines needed to do in the amphibious assault area. One of the significant programs was the Position Locating Reporting System; PLRS, which was joint with the Army.

PLRS was effectively used by the Marines in Desert Storm to go through the Iraqi mine fields. Another was the TPS-59 radar that was developed in the late 1970s and which has been upgraded a number of times in the past 30 years. The TPS-59 will probably still be operational 10 or 15 years from now.

Dr. Allison: What were the most significant factors during your tour there.

General Fitch: Well I would say that those I just mentioned were highlights when I was head of Marine R&D. I had that assignment from summer 1977 to summer 1980, and then of course working with Dr. Dave Mann who was the Assistant Secretary of the Navy for Research and Development. We had a great relationship. He was very supportive of the Marine Corps and there was nothing, absolutely nothing that we ever asked Dr. Mann for that we didn't get. So it was a 100 percent success story for anything the Marines wanted. And I would say Dr. Mann, having been the Assistant Secretary of the Navy for Research and Development, that's why we were able to increase that budget probably six or seven fold, something like that.

Dr. Allison: Who was Secretary of the Navy in those days?

General Fitch: Let me think about that one.

Dr. Allison: Was it [J. William] Middendorf; no he was earlier.

General Fitch: I remember when Middendorf was there because when I was EA to Tom Miller, Middendorf liked Tom. It would have been [Graham] Claytor who replaced Middendorf. Claytor later became Deputy SecDef.

Dr. Allison: Do you remember who the CNO was?

General Fitch: No. But it will come to me in a few minutes.

Dr. Allison: You wouldn't have had much relationship in that job with the CNO, would you?

General Fitch: I wouldn't have had much interface with the CNO. Again my R&D job was mostly ground weapons systems and communications systems, command and control. The CNO didn't have an interest in those programs.

The CNO always worries about aviation. I remember now, Tom Hayward was the CNO because I had occasion to go with General Wilson to talk with him. And I recall that Hayward was CNO when [John] Lehman came in as Navy Secretary, because they didn't get along at all. Lehman became SecNav in 1981 when Reagan came in as President. I remember that Hayward refused to take a Navy Distinguished Service Medal from Lehman. When Tom Hayward retired, I don't believe that he and Lehman were speaking.

Did I tell you my Tom Hayward story about when I was AWC 1st Wing?

Dr. Allison: No, you haven't mentioned him at all.

General Fitch: Well this would have some parallels with today when the Navy is seeking TacAir integration [TAI], and the Navy is trying to get Marine strike/fighter squadrons dedicated to the carriers. In the late 1976 and early 1977 period, Vice Admiral Tom Hayward was Commander 7th Fleet. I was the AWC of 1st MAW as a brigadier. Hayward, who's a great guy, and I've known him pretty well in later years, he now lives in Seattle and is a Golden Eagle, and he regularly attends all reunions. But the Navy always has had policies that would be beneficial to the Navy, but less likely of benefit to anyone else – such as the Marine Corps.

Dr. Allison: Who had the 1st Wing?

General Fitch: Major General Joe Koler was the CG 1st Marine Aircraft Wing on an unaccompanied tour of one year. Joe Koler, and he is a good guy. Joe caused me to take up golf after my ignoring the game for about 45 years. I swung my first golf club on Okinawa in 1976. But back to 7th Fleet. Tom Hayward was Commander Seventh Fleet and operationally 1st Marine Aircraft Wing came under Commander Seventh Fleet; as a component within the 7th Fleet. That

was operational control. Joe Koler was also CG III MAF [MEF], he worked for CG FMFPac, but operationally 1st MAW was under OpCon to Commander 7th Fleet.

So Vice Admiral Tom Hayward comes to see us for part of the day and we're sitting in Joe Koler's office. I had been thinking, because we had F-4, A-4 squadrons and A-6 squadrons, it would be worthwhile if periodically we carrier qualified. And so when Hayward comes to visit us I say, "Admiral, I've been thinking about an option that I think would be helpful to 7th Fleet and to the 1st Wing. We could easily set up field carrier landing practice with those squadrons. I would suggest that the air wing could fly off to Atsugi - or some portion of the air wing could make space on the ship. Then the day before the carrier pulls into port, one or more Marine squadrons could come out to the ship and do carrier qualification. That way the Marine aircrews could get the carrier experience of landings and catapulting. That would give you a ready reservoir of squadrons that could augment the carriers of Seventh Fleet if they were needed."

And Hayward thought for a minute and he said, "No, we can't do that." I thought that was very unfortunate and very shortsighted for an admiral who had all of these Marine squadrons under his operational control. Here we are a component operationally under his command of Seventh Fleet, and he's saying, "No, you don't need this kind of training."

And if you go back 20 years earlier; 25 years earlier when I was in that Corsair squadron and in that AD squadron, those were all short notice carrier cruises. In the case of the F4U squadron, I was only in it six weeks when we deployed across the Atlantic. In the next squadron, the AD squadron, I was only in it three months before we got underway on the carrier for Korea.

But we've kind of drifted away from that. I was talking about policies. One of the policies now is the United States Navy, which they are very hard-nosed about, and I said this before in these interviews, but they will not tolerate STOVL aircraft on the aircraft carrier. They don't have a reason for this policy. They simply say, "No STOVL on the carriers." And there is some kind of an assumption within the Navy that if you ever go to STOVL and allow STOVL on the carriers then all of a sudden you're going to wind up going to small carriers instead of the *CVN-21*. I think that's a very ill-conceived policy and it's a big issue between the Marine Corps and the Navy now. As part of that point on aircraft carriers, I understand that the next aircraft carrier will cost on the order of 12 billion dollars, before the air wing costs are added. The Navy is pricing themselves out of business.

And what I have said when asked my opinion - and occasionally I am still asked my opinion where we are into issues such as TacAir integration which has a negative impact on air support for Marine ground units -- I have recommended that the position of the Commandant of the

Marine Corps should be, that if they don't want STOVL on the carrier, then they the Navy will not get anything from the Marine Corps -- period.

In the military we have a tremendous failing in that we always fight the last war over again. All you hear now is the war on terror -- everything is war on terror. We will probably do this war on terror for the next 15 years. They've got the Iraq war going with no guess on how it will turn out, and they've got the Hezbollah and all that running around in Southern Lebanon creating a lot of hate and discontent. So they are thinking terror is the only thing now – at this moment in time. But if you look downstream – in fact you don't have to look very far – if you look at North Korea and what's his name; Kim Jong-il, if he has a bad night because you know he drinks more brandy than Winston Churchill did--if he has a bad night you know he may just start things rolling against South Korea, you can never tell. Then there are the Chinese to think about over the next 30 years. They are expanding their defense capabilities. Then there is Pakistan when [Pervez] Musharraf is on the ropes and he may be overthrown at any time. Then you can toss India into the Pakistan situation. The war on terror is just one war for the United States to worry about.

It would be a totally different ballgame than we saw in Iraq. I believe the North Koreans maintain a million troops in their army at all times.

Dr. Allison: And you would need an air-to-air capability in that case.

General Fitch: Oh absolutely. I don't imagine they have very good airplanes, but the Chinese would probably give them aircraft....

Dr. Allison: It would be something to shoot at

General Fitch: It would depend on what kind of support they have and whatever.

Dr. Allison: They kind of surprised us in the Korean War with what their MIG-15s could do.

General Fitch: We get surprised from time to time. In the case of the Navy and the Marine Corps and the TacAir integration issue, the problem has several aspects to it. The first is Title 10, which is the basis for tactical fixed wing aviation in the United States Marine Corps. Title 10 says that Marine air wings are there to support Marine divisions, period. The Navy doesn't care about Title 10. The Navy has their big carriers, then they have the LHAs and LHDs for their expeditionary strike groups. The LHA and the LHD have been launching and recovering the AV-8B for years, as did the LPH earlier. If the LHAs and LHDs are going to continue to have a TacAir capability in addition to rotary wing, and it is important that they do so, then that TacAir has to be either AV-8B Harrier VSTOL, or it has to be a the F-35B STOVL Joint Striker Fighter. There has not been a new AV-8B manufactured in about 15 years. The most up-to-date Harriers are those that were remanufactured, and the last of those was received about 2002. The Marines are short of Harriers now, and cannot meet the 14 aircraft for a Harrier squadron. The F-35B does not have IOC for another five years. Due to Navy Department funding shortfalls, the F-35B has already had its IOC slipped from 2010 to 2012.

The Navy's strike/fighters, the F/A-18E/F/G and the F-35C are incapable of operating from either the LHA or the LHD, and they are incapable of operating from a forward operating base [FOB] or a forward area refueling point (FARP). If you look 20 years ahead it is probable that the Marines will no longer have the F/A-18A/C nor the AV-8B. Our strike-fighter will be the F-35B STOVL aircraft, and if the Navy has their way, with their prohibition of STOVL on the carrier, then the Marines will probably have five squadrons of the Navy variant, F-35C.

The Commandant has to consider that the F-35C will be useless to the Marines for LHD/LHA operations or operating from a forward base. The runways at both the FOB and the FARP are a maximum of 3,000 feet in length, and are too short for the F-35C to operate. The F-35C is not capable of takeoff and landing on a LHD/LHA. If the Navy can say no STOVL on the aircraft carriers, then the Marine Corps can say that the Navy has to procure the F-35B STOVL for those Navy squadrons that the Navy has to provide to the Marines in accord with commitments for TacAir integration.

The number of Marine tactical squadrons, the strike/fighters, has been reduced and reduced and reduced over the years. Compounding the problem the numbers of aircraft in each squadron have been reduced many times over the years. The first Marine F4U fighter squadron that I was in back in 1952 to 1953 had 24 aircraft assigned. The second squadron I was in 1953 to 1954, an AD Skyraider squadron, had 24 aircraft assigned.

At that time the USAF had 24 aircraft in each fighter squadron. Today the Marines have about 10 aircraft in a strike/fighter squadron. The Navy has 10 aircraft in a squadron but they always throw in a few extra aircraft when they deploy on the carrier. Where 50 or more years ago the US Air Force had 24 aircraft in a fighter squadron, today the Air Force strike/fighter squadrons still have 24 aircraft assigned. So in naval aviation we've whittled the numbers down in a squadron, where the Air Force has kept their numbers up.

The easiest way to make the point is, with 24 airplanes you can be in 24 different parts of the sky or over 24 different pieces of terrain, and with 10 aircraft you can only be over 10. For

Marines it is critical that close air support be provided within 30 minutes of the request from the ground unit. Within 15 minutes is even better.

Marine aviation's capability to provide close air support [CAS] has gone down markedly in the last 25 years, due primarily to the drastic reduction in aircraft per squadron and where carrier commitments take strike fighter squadrons. Carrier commitments compound the problem since the CAG wants the Marines well before and long after deployment. In 1980 the Marines had 20 strike fighter aircraft for each battalion. Now it is 10 aircraft for each battalion. It is projected in about five to ten years to be down to seven aircraft per battalion. The impact is that there will be more Marine casualties in the infantry units.

It is a simple matter of numbers and response time. Forward basing with STOVL at a FARP solves a lot of the problem relative to CAS. The closer the aircraft are located relative to the ground battle (like a FARP), the lower the response time for executing CAS. The Navy tries to dictate to the Marines what the Marine numbers per squadron will be, based on the Navy's needs rather than the Marine's needs.

But anyway, the point being is, as I understand the latest BRAC, we come down to 19 Marine tactical squadrons for TacAir, and that means F-18s and AV-8Bs as our TacAir. I believe the Harriers are currently holding at 14 aircraft per squadron, but they don't have enough Harriers to have 14 per squadron. Regardless the Marines keep the PAA up at 14, much to the disdain of the Navy. Then the EA-6Bs go away out in the 2016 timeframe, and I guess the Marine Corps gets out of the electronic warfare business. I think the Marines are rethinking the fate of the EA-6B detachments, since the Marines will fly legacy aircraft such as the F-18C out to 2025 or beyond. The 18C needs EW support. Ditto for the Harrier. Ditto for the rotary wing aircraft. Aircraft like the Joint Strike Fighter do not require the electronic warfare support that say an F-18 does. But there is a problem where rotary wing will require EW. The Marine F-18s should transition over the next roughly 20 to 25 years into the F-35B Joint Strike Fighter

Then there is the issue where the Navy is saying, "Well hey, we're not going to allow STOVL on the carrier and the Marines should really buy the Navy variant, which is the F-35C. The Navy variant would be a useless aircraft for the Marines, since it requires 7,000 feet of runway to takeoff combat loaded, and only 3,000 maximum feet are available at the FOB and at a FARP. The heart of the problem is that the US Navy does not understand close air support of ground units. The Navy's primary focus is on deep interdiction -- they have tunnel vision.

Dr. Allison: And that's what they're kicking around now, isn't it?

General Fitch: This is the issue right now. In essence what the Navy is seeking with TacAir integration is for the Marines to provide them with 25 percent of their strike/fighter squadrons to support 10 aircraft carriers. This has the Marines paying the bill for those squadrons in regard to personnel, training and force levels, but the aircraft will be bound tight to the Navy's aircraft carriers. Those squadrons would be useless to the Marines, because by Navy dictate regarding STOVL, those Marine squadrons tied to carriers would be unable to operate from Marine forward basing. That point does not bother the Navy one bit – they are just interested in aircraft for their carriers.

The Navy says, "The Marines should buy the F-35C for all carrier operations." This is totally contrary to the law, Title 10. You go back to Title 10 which is still effective law, where it states, "Marine Aviation is there to support Marine divisions," period. That's why you have a MAGTF; the Marine Air-Ground Task Force. The Navy could care less. They are only interested in their carriers and their carrier squadrons. Timely response to CAS requests is a requirement unknown to the US Navy. The Navy will claim that they can meet any response time required for close air support, but they have to stack aircraft in the air to do it. That is very expensive. If no target appears, then they dump their ordnance in the water.

Dr. Allison: Of course they'd come back and say that the Harrier, "Yes it supports Marine divisions but so has the conventional F-18. So why do you need a STOVL version?"

General Fitch: Fred, the best way to answer your question is to make it personal. Let us assume that your son is a 20 year old lance corporal in the third battalion sixth Marines. Then assume that 3/6 is in combat, they call for close air support and state they are about to be overrun. Would you rather a flight of the F-35B STOVL aircraft provide the support within 15 to 30 minutes or would you rather your son wait an hour for a flight of the F-35C to arrive from the aircraft carrier? Which time period would you prefer? Neither the F/A-18 Hornet nor the F-35C Navy variant can meet forward basing requirements, and neither will operate from an LHA/LHD.

The point is you're talking combat capability and the MAGTF, you are talking Marine aviation being able to do effective CAS for the next 35 to 40 years, and you are talking whether your son might be a casualty if there is not quick response to the CAS request. The Marines have been addressing this CONOPS for over 35 years. STOVL is the only way that you get forward basing close to the GCE. The Marines intend to do CAS with STOVL that meets the Marine Corps needs, as opposed to the F-35C Navy variant that does not, repeat, does not meet Marine ConOps or their requirement for basing.

The issue of saying, "You're in F-18s today so you can do the Navy variant tomorrow," that doesn't wash. When we buy a F-35 Strike fighter, it is an aircraft, the same aircraft, that we will still be operating 30 to 40 years later. If it is the F-35B it is an aircraft that fits with the MAGTF and the forward basing ConOps that has been blessed by every Commandant since General Chapman. The JSF STOVL does not have IOC until 2012, so we are at least five years away from IOC. Add 30 to 2012 and you get to 2042 before you start replacing the F-35B. If it is a F-35C it is an aircraft that does not, repeat does not fit with the MAGTF or forward basing.

It is relevant that the STOVL variant costs just about the same as the Navy carrier variant. And when you're looking at the employment of Marine aviation with expeditionary strike groups and forward-basing, this is not a brand new idea that the Marines want to have. The forwardbasing and need to operate strike/fighters from amphib ships goes back many years—at least 35+. This goes back over 35 years to when [Keith] McCutcheon was head of Marine aviation. The basic logic for STOVL goes back even further, but until there was a Harrier, there was no way to base strike/fighters on the LPH in those days, and now the LHA and LHD. We have now been operating Harriers from amphibs and using forward basing for over 35 years. We did it during the 1991 war and the latest Iraq war that is still ongoing. But even going back to McCutcheon the idea was to forward-base. If you're not there within 30 minutes you might as well not go because the target's gone.

With its large stand-off distance for carriers, normally a hundred miles or more, and the cyclic carrier operations, the only way a carrier air wing can respond in a timely manner is for the aircraft carrier to launch aircraft whether they are needed or not, and to use the stack while the Navy aircraft await a target. That is a very costly way to operate. The Marines prefer forward basing, close to the ground battle.

Dr. Allison: Which is why the Marine Corps has always wanted the Harrier.

General Fitch: We don't want to have to build airfields or capture airfields with 10,000-foot runways. At the same time we need to be able to provide this TacAir capability to the LHA and the LHD, where you have a mix of strike-fighters and rotary wing. You either have a detachment of STOVL aircraft, or VSTOL in the current day, and a composite rotary wing squadron.

The Harrier's the only aircraft you can do the LHA/LHD TacAir with today. In about four more years the F-35B will be operational. But you have a lot of flexibility on the LHA/LHD, in that you may have a STOVL detachment or you may have a couple of STOVL squadrons aboard. It depends on the need for CAS early in an operation, the mix of rotary wing for lifting troops, the

space on the ship, and how you can effectively operate. The amphibs such as the LHD, LHA, LPD operate close to the beach, and frequently can be found within 10 miles of the shoreline. But along with Navy policy it is a rarity that you'll ever find an aircraft carrier skipper or a fleet commander who will let one of these major aircraft carriers come within a hundred miles of the beach. They really like 200 miles. There is a certain amount of "CYA" with carrier skippers and carrier group commanders. In wartime they will keep an extra margin of mileage between their aircraft carrier and harms way. Cruise missiles are a reality for the aircraft carrier. A couple of cruise missiles can spoil the day for an aircraft carrier. So that, again, gets you right back into response capability, and the carrier air-wings lack thereof. If you've got to turn the carrier into the wind, you've got to catapult these aircraft off, the deck spots are a factor regarding who is most available to launch, and then they've got to fly 100 to 200 miles after launch to get to the beach and then maybe the requirement for the air support is 100 miles or 200 miles further inland, and as a result the 30 minute response time is out the window.

Dr. Allison: Either that or you've got to have on-call . . . you've got to have airborne CAS status.

General Fitch: Airborne is a costly and inefficient way to provide CAS. Marine aviation prefers to loiter on the ground at a FOB or FARP. It is not infrequent that Navy pilots are going to have to get rid of a lot of ordnance in order to get down to the carrier trap weights. And after all, combat capability is the name of the game. But then the expeditionary strike group [ESG] that's a different breed of cat when it comes to distance of standoff from the beach. The ESG ships have to get in closer to the beach, with standoff distance of only 10 to 20 miles, and they don't have this 100 mile or 200 miles problem like the big carriers do. The ESG has to get the troops ashore and they cannot operate effectively when they are great distances from the beach. Just get the ESG ships over the horizon is a reasonable objective during an amphibious assault, and frequently they operate in a combat environment while within the horizon from the beach. After the troops are off the ship and control is moving ashore, then the LHA and LHD can function as mini-aircraft carriers. There is no reason why two squadrons of the F-35B could not operate from each LHA and LHD. Those F-35B can shuttle during combat missions between basing at a FARP or aboard the LHA or LHD.

Dr. Allison: Historically, I'm thinking the carriers came in closer.

General Fitch: The carrier admirals of World War II would most likely be total disbelievers when it comes to carrier standoff distances in the 21st century. They would frown on the standoff distances that current day admirals insist on for their carriers. But when you consider that existing aircraft carriers cost at least six to eight billion dollars to build, and those are the ones 20 years old, then the new CVN-21 will be on the order of 12 billion dollars or more, and future carriers after CVN-21 would probably go for 14 billion dollars or more. Then you can understand why those carrier skippers plan 100 mile standoff for the wife and kids, and 200 miles for the tax payers.

The LHA and LHD are similar in capability to conventional aircraft carriers in the 1950s and early 1960s, except they have an axial deck. They can do the mix of rotary wing and strike/fighters, or they can be just rotary wing, or they can by just strike/fighters. It all depends on the situation. The LHA and LHD are more equivalent to the CV *Tarawa* that I deployed on in 1953. Except for the axial deck, they would be equivalent to the *Hancock* that was a CV in the 1960s. An important factor is an LHD or LHA does not cost 12 billion dollars.

Dr. Allison: They were used in Korea.

General Fitch: Yes. And very effectively, even though the aircraft on their flight decks were nowhere near as effective as aircraft are today. So think what you could do for example if the Navy were to get rid of their paranoia on STOVL; if the Navy had one STOVL squadron on each carrier, with U.S. Navy painted on the side of the STOVL aircraft, then they would have the option of moving that squadron either to an LHA or LHD whose rotary wing are ashore, or they could move that Navy STOVL squadron ashore to a FARP. Now that would be jointness. However, the Navy would never agree to that. But the Navy cannot deny that under such a capability, a detachment of that squadron or the entire squadron moved to the LHA or the LHD, could then operate effectively with combat operations ashore. That squadron would be 100 to 150 miles closer to where the war's going on than when they were aboard the carrier. That one STOVL squadron, with Navy painted on the side, would be a tremendous force multiplier for the carrier air wing. But the Navy will never consider that.

About 20 years from now all strike-fighters in the Marine Corps will be the F-35B STOVL, except possibly for the Marine strike-fighters that are assigned to the aircraft carriers. Those Marine aircraft on the carrier may be the F-35C if the Navy has its way. In contrast, unless the Navy procures the F-35B STOVL for their commitments to the Marine Corps, then the Marines will be saddled with the Navy using the F-35C for commitments to the Marines, which will be

unable to fly from the expeditionary strike group ships and they will be unable to fly from the FOB or the FARP.

While the Navy will try to refuse to embrace STOVL, they should not be allowed to impede the Marines move to the all STOVL force. The Commandant has to take a firm stand on keeping the all STOVL force and providing timely support to Marine ground units in combat.

Dr. Allison: Do you think he will; the new Commandant?

General Fitch: I don't know how it's going to turn out. I do believe that General Conway will take a firm stand, and soon. If the Navy is successful in forcing the Marines to buy the F-35C Navy variant for carrier operations, then the CMC should force the Navy to buy the F-35B STOVL for the Navy commitments to the Marine Corps under the TacAir integration. If the CNO requires all F-35C squadrons for the Navy operations from a carrier, then the CMC should require all F-35B STOVL for Marine operations which includes Navy TacAir augment to the Marines. The translation would be: the CNO has his requirements that have to be met; and the CMC has his requirements that have to be met.

Dr. Allison: Have you kept up with how General Hagee has done in that regard; with TAI; has he held the line on it?

General Fitch: Well he has held the line. But in holding the line he has not been as firm with the Navy as he should have been. The Navy will walk all over you if you give them a chance.

Dr. Allison: Do we want to hold the line though [chuckle]?

General Fitch: For the integrity of the MAGTF and our concept of operations for Marine aviation supporting the GCE, it is imperative that the Marines take a firm position and refuse to buy the F-35C carrier variant. I think we could have solved this problem a long time ago if we had just taken a hard-nosed position.

Dr. Allison: Yes. Of course General [James] Jones let it out of the bag.

General Fitch: Well General Jones was not well served by his aviation generals. I would emphasize that his aviation generals gave him bad advice—repeat that, they gave him bad advice.

Those generals were playing political general instead of being a tactical general. A few days, about two days after I was briefed on TAI by General Jones and his staff, I wrote General Jones an email and told him that he had made a big mistake. At that time I was nearly 75 years old, but I was thinking like a tactical general and not a politician. Remember that when this TAI was agreed to by General Jones in 2001, there was no war.

General Jones thought that he was preserving Marine TacAir, based on the advice of his aviation generals, and he thought if he didn't do TAI, then Marine TacAir would be whittled away. He was advised by his aviation generals to go ahead and do it. They were wrong. Some of us who had spent a lot of time on the Washington scene knew from the outset that a mistake had been made. Then when the war in Iraq came along, no one said all bets are off on TAI, we are at war. So this TAI has trickled on and on.

Dr. Allison: By who?

General Fitch: By his aviation generals at the time. General Mike Hough was DCMC Aviation at the time. I won't go into any personalities, but just let's say that in my view General Jones was not well served by his aviation generals back in 2001. Those HQMC aviation generals said, "Do it." They had not thought through the problem and now they know there is a problem, a big problem that will seriously impact the GCE in combat, but they don't know how the TAI problem is going to turn out. I don't know either. But if you look at overall combat power, which is supposed to be the name of the game for being in a war, be it a war on terror or another kind of war.

Naval Aviation in its entirety would be better served in the TacAir area if, just like McCutcheon said 40 years ago, "We're going to an all-STOVL force with forward basing capability, where we've got rotary wing that doesn't require large areas to operate from forward bases, and we will have TacAir that does not require large areas or long runways to forward base." We've proved all that with Harriers nearly 40 years ago. But maximum combat power for whatever kind of conflict – I don't care if it's a war on terror or a full-scale war; whatever it might be, the combat power is at it's maximum if the Marines have all STOVL, they forward base close to the ground combat, and they fully function as a MAGTF.

On the other side of the TacAir integration issue, I would say that if the Navy had some number of STOVL squadrons operating the F-35B, Navy STOVL squadrons that are integrated into their carrier air wings, squadrons that would maximize their combat capability with their carrier air wings. The Navy carrier air wing would be far more combat effective. The Navy picks arbitrary requirements, which are not currently met by carrier air wings. The Navy has the idea

that a TacAir aircraft such as the F-35 operating from the carrier has to be able to go 700 miles. Well I don't know what's magic about 700 miles because I've heard 700 miles for about the last 40 years and I know that the A-6 would not do a 700 mile mission radius -- tactically.

The current day F/A-18E will not do a 700 mile mission radius, without aerial refueling, even if it carries no ordnance. For the F/A-18E to fly tactically for 700 miles mission radius, it has to have a full load of large external fuel tanks. As a result it presents a great radar target for a surface-to-air missile (SAM), or to enemy fighters. Since it is vulnerable to SAMs and fighters, the F/A-18E/F has to fly a threat evading route in order to miss the enemy defenses. That means that it can't fly in a straight line due to enemy threats. That evasive route thus means it can't do anything like a 700 nautical miles mission radius from the carrier to the target, unless it refuels in the air.

Forty years ago the Navy said that the A-7 Corsair II would fly a 700 nautical mile mission radius, but I don't think tactically it would because there is a difference in flying a peacetime profile where no one is going to shoot at you. It is easy to fly optimum profiles when no one is going to try to kill you. Then there is the radar cross section of the F/A-18E when it is carrying external fuel tanks and ordnance. The Super Hornet is not a stealthy aircraft. A surface-to-air-missile can spoil your whole day, or night, if you have a significant radar cross section. The Navy doesn't recognize that probably 90 percent of all strike missions that would come off a carrier would probably be going against targets that are within 400 to 500 miles from the carrier. And then they don't address how many strike missions might have a target that might be 750 miles from the carrier, or maybe 800 or 900 miles. We still aerial refuel when it is required.

Dr. Allison: Like in Afghanistan they were flying around the clock.

General Fitch: So if the target is 700 miles away, the Navy's F-35C has got to aerial refuel to get to the target. They can't get there without aerial refueling. My understanding is that the F-35C, the Navy variant of the Joint Strike Fighter, comes up a little short of the 700 nautical miles, which means that the airplane must top off with aerial refueling soon after launch from the carrier. So to sum that up, the F/A-18E will not stretch its mission radius to 700 nautical miles, and even the Navy's F-35C with internal ordnance will have to top off after launch to reach out 700 nautical miles from the carrier. The current numbers support those summary comments.

Dr. Allison: I appreciate that perspective, good wrap up of today's issues and history of the issue.

General Fitch: But in any regard that's one of the issues of today and I hope it gets resolved, and as far as I'm concerned the answer is, the Marines require 19 STOVL squadrons equipped with the F-35B JSF. As for the Navy and the TacAir integration issue, the Navy will make up the rules as they go along.

Dr. Allison: Okay sir, on the 1st MAW, what did you think was your major goal when you took over as 1st MAW? I mean what did you want to accomplish there?

General Fitch: Well there are several things. Of course the key thing is combat capability and enhanced combat capability was one of the big advantages of the unit deployment program [UDP]. In 1980 and on into June 1982 when I left 1st Marine Aircraft Wing, all of our squadrons came over for the six-month UDP tour. This meant they arrived somewhere near fully trained (C1 or C2), and with that training level, from the outset the wing was able to meet the combat contingencies that went with the Korea situation. For the Korean contingency we had to be concerned with operational plans where we would move into South Korea and be ready to go to war on very short notice. Basing for the various tactical units of the 1st Marine Aircraft Wing were identified and we routinely had squadron deployments and exercises that put various tactical squadrons and units into South Korea. And then the relevant issue was maximizing the mission capability of the aircraft on hand. That meant that we had to have a training program that kept the skills of our aircrews finely honed. Embarkation plans had to be reviewed and updated on a scheduled basis. I had excellent officers in my G-3 and G-4 that did a superb job of laying out schedules for squadron training within Japan, Korea, and the Philippines, and for all contingency deployments to combat. The G-3 officer that did the key planning for all training deployments was Colonel Ray Powell, my G-3 for a year. Colonel John Carlton was G-3 the other year.

Ray optimized the schedule for USAF support with their cargo aircraft, and then we had our own KC-130s that we could use to support training deployments for our squadrons. With the Marine KC-130 aircraft we tried to keep them focused on aerial refueling and use the USAF cargo aircraft whenever we could. When supporting us the USAF cargo aircraft never flew empty. If they moved personnel and equipment for a squadron from MCAS Iwakuni, Japan to the Philippines, then those cargo aircraft brought back a squadron's personnel and equipment that had finished a Philippines training deployment. Ray Powell's scheduling of USAF support worked flawlessly. We received maximum USAF support for all our training.

In the1981 and 1982 timeframes there weren't any F-18s in 1st Wing. They were just getting started with the Hornet at El Toro. Our primary fighter was the F-4J and F-4S Phantom, our

all-weather attack aircraft was the A-6E Intruder, our light attack aircraft was the A-4M Skyhawk, the TA-4F Skyhawk, and we also had the OV-10A for multiple missions including light attack. We usually had a detachment of the EA-6B EW aircraft and the RF-4B photo reconnaissance aircraft, and we had the KC-130F for aerial refueling and tactical transport. For rotary wing we had squadrons of the CH-46D and CH-46E, CH-53D, UH-1N, and the AH-1J. We had a detachment of AV-8A Harriers for one six month period.

All of those aircraft squadrons and detachments deployed for training in Korea and the Philippines. The A-6, was an exceptionally difficult aircraft to maintain. My old friend, Charlie Carr, brought his squadron (VMA(AW)-533) to Japan for a six-month deployment, and they spent considerable time in Okinawa, the Philippines, and Korea. I flew quite a few flights with 533 while they were deployed with us those six months. A-4s maintenance wise were a different matter because there wasn't that much in an A-4 to keep the readiness down. The F-4 was a difficult aircraft to maintain. Lieutenant Colonel Duane Wills brought his F-4S squadron out for six months, and his Phantoms were the best-maintained F-4s that I flew. Most of the rotary wing squadrons did their training in Korea and Okinawa. Rotary wing aircraft, the KC-130s and the OV-10 aircraft were in MAG-36 at MCAF Futema. During my two year tour as CG 1st Marine Aircraft Wing, I flew all the aircraft in the wing. I even managed to get one flight in the Air Force's F-15, at Kadena AFB. Brigadier General Jim McInerny (later lieutenant general) arranged that F-15 flight for me.

We didn't often have major issues as such in 1st MAW and we very seldom lost an aircraft or aircrew. Colonel Kent Bateman was CO of MAG-12 during half my tour as wing CG, and he and Charlie Carr did have a rather spectacular accident. Kent was flying an A-6 with Charlie as the bombardier-navigator. They had just taken off from Iwakuni heading south for group commanders meeting with me, the cloud ceiling was low, they were quickly in the clouds, when they lost their primary attitude indicator (vertical display indicator). The aircraft quickly winds up upside down at a thousand feet altitude or less, and they eject at this low altitude – probably inverted. Kent gets about one swing in his parachute before his feet touch the water, and Charlie has the same experience. They were a bit banged up but not too badly. The aircraft crashed into the water.

Most of the aircraft that I lost during that two year tour as wing CG were helicopters. For a period of time there were several rotary wing accidents, with helicopters running into logging cables and other obstacles in the northern training area of Okinawa. The Japanese and Okinawans had significant timber cutting operations in that northern Okinawa area, with numerous cables for moving logs. We fixed that problem by putting brightly colored balls on the cables, with those balls visible from several miles away.

482

Being in Japan those two years was a great tour of duty, and it was a busy tour when you consider all the activity going on, including far-ranging deployments. Margaret and I enjoyed it. The Japanese are great people, and it was a very active command for me. I believed in spending a lot of time with my operational units. Frequently I would be in mainland Japan visiting squadrons at MCAS Iwakuni in the south of Japan. Then I would be in Korea or down in the Philippines. I tried to fly with all my deployed squadrons, wherever they might be. Being the CG of the wing was a relatively easy job for me, because during the two years I was there, I was blessed with having an extremely good staff in the wing, and I had excellent commanders for all my groups and squadrons in the wing. It has been over 25 years since I left Okinawa, Japan and the 1st Marine Aircraft Wing. It is fortunate for me that at age 77, I still remember most of the details of my tour when I was the CG of 1st MAW. Then what I forget, I am fortunate I can ask Margaret, my wife, to update my memory.

Dr. Allison: Korea is always a significant issue, any particular memories of operations in Korea?

General Fitch: Yes. Time goes by fast. I remember one Korean contingency event that's interesting. We had deployed some of the 1st MAW headquarters and several squadrons to our bed down base in South Korea for an exercise, and as I recall it was Team Spirit. For the four or five days that I would be in South Korea, I had brought only flight gear and several sets of camouflage utility dungarees to wear. I expected to be 100% involved in the Team Spirit exercise.

A couple of days after I arrived at our bed-down base for the 1st MAW, several South Korean four-star generals came through. I of course was a two star. At lunch that day, this Korean four star, General Lee, said, "General Fitch, we look forward to seeing you at our President's house tomorrow evening." That was the first that I head heard of that. I said, "General Lee, I regret that I won't be able to be there because of my being involved in the Team Spirit exercise." He ignored my answer. He went on to add, "Our President will be having you to dinner tomorrow night. And, General Fitch, you should plan to spend at least one night in Seoul. Our President will look forward to meeting you and having you as a guest at his Blue House." Before leaving the base, General Lee once again said, "I will see you tomorrow night at our President's house." After General Lee left the air base, I got to thinking, I had better figure out how to be in Seoul tomorrow night for that Blue House evening, since the South Korean heavies weren't taking my no for an answer.

Then I got to thinking, what to wear since the only clothes that I had were camouflage utilities and my flight gear. From time-to-time you read of incidents where a general or admiral would send an airplane to bring his golf clubs or something to his location. That was always a bad scene and a strict no-no. So I decided that I would not try to have a proper uniform sent to me from Okinawa. Instead, I decided that if they wanted me to come to the Blue House for a formal evening, then I would attend wearing my camouflage utilities.

The next morning I flew to Seoul. That evening I went to the Blue House wearing my camouflage utilities. It turned out to be a delightful evening, and it also turned out that I was not the only general there in a working uniform. Several US Army generals involved in Team Spirit showed up in their camouflage utility uniforms. The Koreans were all in formal evening dress, as were the various American generals and admirals who were stationed in or near Seoul. The Korean President was wearing a tux that night, as were the senior American civilians in Seoul.

The evening started with a formal Blue House reception where they presented us to the Korean President. Then in a different room there was the formal dinner where I was seated at General Lee's table, in my camouflage utilities, and with all the others at his table in formal attire. The Korean President and his wife were seated at the next table over. There were probably 15 or 20 dinner tables that night. It was all very impressive and it was all well done, including the cigars and cognac after dinner. I don't smoke cigars, but I gave it a shot – but not a serious shot since I don't smoke at all. After dinner we went into the Blue House theater, where a children's dance group and choir put on a remarkable show for about an hour or longer.

The next day, in my camouflage utilities, I returned to the 1st MAW bed-down air base to the south, and continued the Team Spirit exercise. A year or two later the South Korean president was ousted, then tried in court for graft, convicted, and he went to prison. But with all that said, it was a superb evening at the Blue House, and I enjoyed it. No one said a word about my camouflage utilities that I wore that night. I had pressed them myself in my BOQ room before going, and I probably got my aide to brush or shine my boots. I didn't have a shoe brush.

Dr. Allison: What is the primary focus of the 1st MAW?

General Fitch: The basic idea in the 1st Marine Aircraft Wing was to be mission capable and ready to deploy on very short notice. Even though we were forward-deployed to Okinawa and Japan, I don't think our priorities for aircraft support ever ranked with the aircraft carrier priorities. Operationally we were under Commander 7th Fleet, which at the time was Vice Admiral Carl Trost. Carl was a great guy and later became the Chief of Naval Operations. I remember noting that he was promoted to rear admiral lower half when he had been out of the Naval Academy for just 19 years. That would have made him about 40 when he became a flag officer. In my case I had been

early selected a couple of times, never passed over for any rank, but with that it took 24 years commissioned service to become a brigadier general. Carl Trost moved fast through the Navy officer ranks – very fast.

With spare parts for aircraft; the number one priority has always been the aircraft carriers get their spares first, and then everyone else can get in line after that. The mission capability of the aircraft is all-important – whether you are on a carrier or not -- because that's the only way a Marine aircraft wing fights –with the assigned airplanes and aircrews. Every thing that you do in the wing, you always try to do it safely. Proper spare parts support is an important element of training and it is an important element of aircraft safety.

Dr. Allison: That's been a tough one for the Marine Corps, hasn't it?

General Fitch: Very tough from time to time. Flight safety has come a long way in the last quarter century. Of course our aircraft are much safer now in the 21st century than they used to be, and our weapons systems are much better. Radars and infrared systems, along with good flight simulators, and having quality built in test [BIT] have been a big factor in enhancing flight safety. With BIT and computer systems for maintenance, the maintenance crews can know what an aircraft needs to have repaired before the aircraft lands after a flight. Also I should add NATOPS has been a very important part of aircraft safety.

I think MAWTS is a great institution and has made a tremendous contribution to Marine aviation tactical training, but some of our Weapons Tactics Instructors [WTIs], at least back in the earlier days, they often felt they were superhuman and bulletproof. They wound up causing an awful lot of accidents by more or less stretching the envelope with the airplanes they were flying.

Dr. Allison: You had mentioned earlier, this was an accompanied tour, and the first one?

General Fitch: At that point in time there weren't very many accompanied tours in the wing or the division in Japan. Margaret and I had the first accompanied tour for an aviation general commanding the 1st Marine Aircraft Wing. They had just started opening that up in the 1980's timeframe. Where that came from was that General Barrow and General Wilson, when they were more junior like brigadiers and two stars, they were out there together. General Barrow was a base commander and had his wife there. General Wilson was a division commander and did not have his wife out there.

Dr. Allison: For a year.

General Fitch: Yes. General Wilson had the division and General Barrow had the bases out there, and it was their view, "This is absolutely idiotic that we don't have accompanied tours out here." That was why my wife Margaret and I, we were picked to have the first accompanied tour for a CG of the 1st Marine Aircraft Wing. In 1976, General Wilson was the Commandant. General Barrow in 1976 had the Manpower Division at HQMC. General Barrow was the CG FMFLant before he became Commandant in the summer of 1979. In early 1980, General Barrow would select me to be the CG 1st MAW accompanied by my wife, Margaret, for a two year tour.

Then Steve Olmsted, at the same time I was scheduled to take the wing CG job, he was picked to have the first accompanied tour for the 3d Marine Division. Then because Steve was a couple of numbers senior to me he also was the CG 3d MAF [MEF]. The III MAF had the division, wing and logistic group under it. Brigadier General Joe Went had the logistic group.

Dr. Allison: Was wing headquarters at Okinwa, it used to be Iwakuni.

General Fitch: The wing had just moved down to Okinawa three years earlier when I was AWC; out of Iwakuni which was, when you look at it, the move was a good idea because you look at how they're now talking about moving a lot of those III MEF commands to Guam.

Dr. Allison: What was your focus as the CG in leading the wing vice an air group?

General Fitch: Running the wing was not a whole lot different than running an air group – there was primarily the factor of size. As the CG 1st MAW it was my policy to always let commanders be commanders, but I did tell them what we expected of them. Then we would have fairly frequent meetings with the aircraft group and other commanders, including the wing staff, and discuss where we were at that point in time, where we hoped to go, and the issues that prevailed. We always emphasized full mission capability but the supply system in the Far East would not support full mission capability in the 1980-1982 timeframe, anymore than it would support full mission capability in the 1971-73 timeframe when I had MAG-14. In the Seventh Fleet, which included the 1st Marine Air craft Wing, the aircraft carriers were first in line for support.

Dr. Allison: What do you mean the system wouldn't support it, the parts supply?

General Fitch: The parts system; just spare parts and the various components of aircraft like engines. The Navy would tell you that the Marines have the same supply support as the Navy. And that is true, except the Marines are in line behind the Navy, repeat in line behind the Navy, and not in line with the Navy. That has always been a sore point in Marine aviation. This is a priority thing, you know where you've got a lot of spares on the carrier and you've got darn few spares in a Marine aircraft wing.

Dr. Allison: I found stats in the command chronologies that FMC [full mission capable aircraft status] was coming up during your tour, any perspectives on why?

General Fitch: Well yes. I had done the same thing with the 1st MAW that I did when I took MAG-14 about eight or nine years earlier. However, we did not go into a maintenance stand down. Deployed overseas, we couldn't do that. We had contingencies that we had to be prepared to meet. I stood down the MAG-14 group for four or five weeks or something like that. That drove my squadron commanders to despair, but it was a noble effort and it got the wing's attention back in 1972-73.

Dr. Allison: Yes. You did the same thing at the wing?

General Fitch: That would be yes and no; in fact I even tried to a certain extent back when I had 225, which was my first squadron. In those days we did not have training squadrons, so you had to do all the A-6 training in the tactical squadrons. If you didn't have some semblance of a full system or near full system, then you couldn't train for combat. A fact of life was that in Vietnam the A-6 aircrews would be flying at night, low level in mountainous terrain, in good and bad weather, deep north into North Vietnam, and you had to have at least a partial system to fly combat. That meant you had to have at least a partial system to train back at Cherry Point. Bear in mind that 1980-82 is now over 25 years ago when I had the 1st Marine Aircraft Wing, if you go back to training in 225 that is now 41 years ago. The time period when I had MAG-14 is now 35 years ago, and these time marks are from looking back from 2006. But in the case of the 225 aircraft, and I think it was 10 or 11 aircraft assigned to the squadron; something like that. We were supposed to have a Marine A-6A taken off your flight line and transferred to the Navy -- again the Navy had priority for just about every thing. I mentioned earlier that when I took [VMA] 225 those airplanes were a parts bin for 533 to cannibalize. Then you will remember, I told Pete

Bonner the MAG-14 commander at the time, "If I am going to be a squadron CO, then I will need my airplanes back." He gave them back and they stopped being a parts bin for 533. Then in 225 we stood down for weeks to make the aircraft flyable. But that was all in 1967-68, and I was CG 1st MAW in 1980-82.

Dr. Allison: So what were you doing at the wing to increase the FMC rate?

General Fitch: Well talking to FMFPac, talking to group commanders, and talking to supply officers. In my G-4 I had the wing aircraft maintenance officer, and I tasked him with handling the details. I did the same with the wing supply officer.

Dr. Allison: So mainly parts supply was the damper for readiness?

General Fitch: Well yes, AFCAL and all that, but spare parts for the airplane, spare engines, the IMA [intermediate maintenance activity] reworking engines. All that plays in aircraft readiness. And then there were issues like the headquarters and IMAs and trying to emphasize with group commanders that their intermediate maintenance had to really be doing some rather spectacular things in order to make all these things happen. That their quality control; they had to readdress that. Quality control is a very key element of aircraft readiness. In some squadrons it is frequent that squadron pilots would come back from a flight and say, "The airplane is down for such and such a reason." The maintenance crews write it off and say, "Ground check is okay." I told them, "Aircraft are meant to fly. Ground check OK is an unsatisfactory term as far as I'm concerned." If they fix it and they do the test flights and they do the quality control, invariably aircraft readiness improves.

A few key supervisors in the intermediate maintenance squadron and group maintenance departments, like the squadron maintenance officer or group maintenance officer, are very key to success or failure in aircraft readiness. It's the kind of thing where probably the most important Marine in a tactical squadron is the aircraft maintenance officer. But it was emphasized that, one: we were going to fly; we were going to fly a lot, but we were also going to maintain airplanes. But I told my 225 maintenance officers, John Carlton and Jack Causin, that I didn't care when squadron Marines came to work, but that we were going to do aircraft maintenance 24 hours a day. We were going to have a day crew and a night crew and he had to figure out how he was going to split that up, and if a Marine came to work at 1800 in the afternoon that was fine with me, as long as he

knew what he was supposed to do for the next 8/10/12 hours. Jack Causin and John Carlton performed superbly, as did their aircraft maintenance crews. That was about 40 years ago.

And I know I've told you about telling my 225 operations officer, Gordon Emery, that we would rewrite the A-6 syllabus while we were rebuilding those aircraft to flyable condition. That rewrite of the training syllabus for aircrews turned out to be fully accepted for the A-6 T&R Manual. Those actions with 225 in 1966-67 played well when six years later I had MAG-14 (1972-73) and then 12 years later (1980-82) when I had 1st Marie Aircraft Wing.

So when I took 1st MAW the same philosophy went with me, and I think we pretty well proved it because the squadrons that came out there were pretty good when they got there and I think they were a lot better when they left.

Dr. Allison: What did you think of the unit deployment program?

General Fitch: UDP was working very well. Charlie Carr would be the capstone relative to A-6 squadrons. In my two years with 1st Wing out there I'd see four A-6 squadrons on unit deployment. As I recall I had about eight different F-4 squadrons, but it could have been 10 based on timing. Duane Wills was the capstone for the F-4 Phantom squadrons. We had two squadrons as I recall in MAG-15; two F-4 squadrons, so I'd see eight to ten squadrons of F-4s deployed out there.

Dr. Allison: Do you recall Lieutenant Colonel [Jeff] Howell's VMFA-212 coming out from Hawaii?

General Fitch: No. I don't recall. You're talking about Jeff Howell?

Dr. Allison: Yes sir, he became lieutenant general.

General Fitch: I told you how that happened, didn't I.

Dr. Allison: No, you never did. He worked for you though, didn't he?

General Fitch: Yes. Jeff was in APP when I had Marine Aviation. Then he was also our Marine rep in OP-05. Jeff was a lieutenant colonel working in my APP branch, and then he made colonel, and this was shortly before I retired. And let's see, I guess it was along the period probably a year or so before I retired, and then at some point after I had retired, probably three years later, I stopped

by to see Jeff and he was the OP-50M. I'm also seeing somebody else in OP-05 who probably was Vice Admiral Dick Dunleavy. At this point in time I have been retired for some period of time – probably three or four years -- and I asked Jeff, "How are things going?" and he said, "Well not too good." He said, "I'm going to retire." And he's probably been a colonel, I don't know, four years at that point, maybe five years. And so I said, "Why are you going to retire?" He said, "Well I missed brigadier," and I said, "Well I can tell you that it's not a science picking brigadiers in the Marine Corps." And he said, "Yes, but I've missed it twice," and I said, "Well when do you plan to retire?" He said, as I recall, "Something like the 1st of September." And I said, "Well why in the world would you retire just before the board would meet?" He said, "Well I have no chance." And I said, "Well I think you're making a big mistake," and then I said, "When I was coming up in the ranks, it was my view that if they ever passed me over - and this is an egotistical kind of comment but it was true – that I had said, "If they ever passed me over in the Marine Corps I'm gone."

Dr. Allison: First time?

General Fitch: Yes, I said, "My long standing view was that one passover and I'm out of here." Then later I found that was a ridiculous thing to say I would do. Fortunately I never had to test my will on that. When I started sitting on selection boards as a colonel and a general I found that wasn't too good an idea because you would see an awful lot of good Marine officers that for whatever reason might get passed over. I told him it was especially true in the case of the brigadier general rank where there are a lot of disconnects during a brigadier board. And I said to Jeff Howell, "You know you really ought to stick around and see what this next brigadier board does." So I don't know whether I influenced him or what but he stuck around instead of retiring and he was selected for brigadier. And then he did alright I guess, as I recall, for two stars and, I would assume he made two stars the first time he was up for major general.

Dr. Allison: I think he had 2nd Wing. Yes, he did, that was 2nd Wing. He ended up as FMFPac.

General Fitch: Well I'll tell you how he got to be CG FMFPac. He was deputy to Chuck Krulak when Krulak was CG FMFPac. Krulak gets selected to be Commandant and he has a transition office at the Navy Yard. He wants to talk to a few retired generals, and I don't know how many he talked to, but he apparently had my name for some reason. His transition coordinator asked me to

come in and see the new CMC. So even though Krulak and I had a casual meeting at the band hall several years earlier, it is fair to say that General Krulak didn't know me – other than his transition coordinator telling him that I had been a three star and had Marine Aviation. As far as I know we had never met except for a casual introduction at a Marine Barracks band-hall reception, when I was in civilian clothes. At that chance band-hall meeting, he was a major general at the time, and when I introduced myself as Bill Fitch, he said I am General Krulak. I was amused at that since he was in uniform at the time and wearing two stars. I didn't bother to say I was a lieutenant general.

I go to see the incoming Commandant and he starts talking about some of the generals and some of the things he's going to do. He goes and gets a book of the current Marine generals -- you know the social directory. It has the photo of each general and his current assignment. He starts thumbing through the photos and he'd point to a photo and say, "Great potential. He's going to do good things." and, then he would point to another general and say, "He's not going anywhere – no future." When he got down to Jeff Howell who was a two star, and who had been his deputy at FMFPac, the new CMC said, "He should be relieving me," and I said, "Well why isn't he?" And he said, "He should be CG FMFPac," and I again said, "Well why isn't he?" He said, "Just thumbs down," and I said, "I don't see where that's a factor." I then said, "You're going to be Commandant of the Marine Corps in about two or three weeks. If you want Jeff Howell to be CG FMFPac,"

So there was an existing three star who was supposed to go and become CG FMFPac. That three star was Ron Christmas who at the time had the Manpower Division at HQMC. All of a sudden the next thing I know Jeff Howell is going to be CG FMFPac and Ron Christmas is going to stay where he is, in Manpower. And I won't say that I influenced Chuck Krulak, but I think I did make the point that since he was going to be Commandant of the Marine Corps, he didn't have to worry about anyone agreeing with him on his pick for three stars but the Secretary of Navy. Jeff Howell got the third star.

Dr. Allison: What was your impression of Krulak when you met him there? Had you ever met him before?

General Fitch: Well yes, I had met him that one time when he was a two star [chuckle], when I had been retired maybe 10 years, and it was at some kind of function at the band hall. He apparently didn't remember me as a three star, so perhaps I don't have a memorable face. Well I guess he didn't but you know it's always better since you never know who you're talking to, to say, "My

name is Fred Allison." or "My name is Bill Fitch," or whatever, and if they're not smart enough to figure it out then that's their problem.

Krulak had good intentions and he was a good Commandant of the Marine Corps. But we had one session with him where he wanted to downgrade Marine aviation from three stars to two. And so for a Saturday morning meeting, as CMC, General Krulak called in some retired generals, some of whom had headed up Marine Aviation. The group included Carl Mundy his predecessor as CMC, Joe Went, Jack Dailey, Tom Morgan, Tom Miller, Bill Keys, Duane Wills, and myself. At the time, Harry Blot was the head of Marine Aviation. Krulak had been getting a lot of pressure from the Navy CNO to downgrade Aviation from a three star to a two star billet, in order to more closely match ranks with what the Navy had created in the N8 staff. It was a major irritation to the Navy that the spokesman for Marine Aviation was a three star and the spokesman for Navy Aviation was a one or two star. Rich Hearney was the ACMC at the time and he was in favor of downgrading Marine Aviation to a two star billet. The Chief of Naval Operations thought that the Marines ought to clone the N8 organization and be a mirror image of the Navy N8 staff.

There is an essential element here in Marine Corps tactical employment of combat forces, called the MAGTF, where the Navy doesn't have, a similar type structure. Prior to the Saturday morning meeting, General Krulak and General Hearney called in Harry Blot, and told him that he would support the downgrade of his billet to two stars. Harry Blot told the CMC that he could not do that, because he felt that the rank downgrade was a huge mistake, and he (Blot) was retiring from the Marine Corps. Harry Blot had integrity and he did the right thing. Twelve years earlier I had resigned in the same way, where the issue was the A-6F aircraft and SecNav Lehman. I had told P.X. Kelley that the program should be killed, he in turn said "Do whatever you need to do to kill it." I found it better to retire about 10 months later, and I never regretted my action to resign. The A-6F was cancelled. So, I could appreciate what Harry Blot had done.

So after Krulak and Hearney struck out with Blot, they called in the invited generals for a meeting in the CMC mess. This is the old CMC mess at the Navy Annex. He told us at the outset that he wanted to downgrade aviation. I knew pretty much what he was going to say and so at the outset I told him that he was going to, in essence, reduce the importance of aviation within the MAGTF. I said as I put a slide on the screen, "Instead of having all caps; MAGTF, we were going to have MaGTF with aviation being a "small a" in the MaGTF. When I did that, Krulak augured through the ceiling! Then I told him that he would be emasculating the air-ground team and such a move would be counter to the Marine Corps' long-term endorsement of the air-ground team. Chuck Krulak didn't like that. He asked me where I would take a star from if it wasn't aviation, and I told him it should come from Installations and Logistics. It was interesting how quiet some

492

of the attendees were. Two former aviator Assistant Commandants had nothing to say. Then Joe Went spoke up, he told the CMC that when he had I&L it was clearly a three star job, but it no longer was due to the I&L staff and functions being split between HQMC, Quantico, and Albany. General Krulak asked Joe Went where he would get the star that he needed for another billet, and Joe said he would take it from I&L. Went and I were in agreement on that point, and by the end of the morning, Chuck Krulak would also be in agreement.

When the meeting adjourned, General Krulak said that he would leave aviation as a three star billet and he would get the star he needed from I & L. Harry Blot retired a month or so later. You'd be surprised at some of the senior Marines present that day, who had absolutely nothing to say pro or con on the issue of Marine Aviation as a three star billet. I won't name the quiet ones who had nothing to say. In my view it was Joe Went who saved the day for Marine Aviation remaining a three star billet. General Krulak by giving Harry Blot an ultimatum before the meeting that morning, lost one of the finest aviators to ever head up Marine Aviation. That meeting was about eleven years ago, and today Marine Aviation is still headed up by a three star, and the Navy still doesn't like it. But every time there is a new Commandant, the Navy makes a play to have the Marines clone the Navy N8 organization.

Back in the 1980s when the Marine Corps was called to provide a three star over on the Joint Staff, the CMC had to take it out of hide. During those two decades the Marines did not have as many three and four stars as they have today. After all these 31 years since Marine Aviation became a three star job, I think everybody except the Navy understands why it is a three star job. Today the MAGTF is strong, but occasionally the same old threats arise. So I give Chuck Krulak his due. He made the right decision that Saturday morning, and to this day, he will tell the world that Marine Aviation has to be a three star billet. I should mention that Carl Mundy was a calming influence during that Saturday meeting, now a decade ago. I should mention that when Carl was the CMC prior to Krulak, we went through the same drill. However, we quickly convinced Carl that Aviation should be a three star, and I am sure he leaned on Chuck Krulak to leave it as such.

Dr. Allison: Any decisions you think that were wrong regarding aviation?

General Fitch: Well no. He had made some mistakes before that but I won't go into those. General Krulak gets credit for giving up two strike fighter squadrons when he didn't really need to do so. But in years since, but not on General Krulak's watch as CMC, the number of Marine TacAir squadrons has been whittled away, to where now we cannot support the GCE to the extent that we should. He made some mistakes before that, like when he was at Quantico and was CG MCCDC.

But it's very important when you're talking to a Commandant, you've got to get his attention and have him listen and absorb what you're saying and that has not always been the case with some Commandants. They would not listen. I'll say this for Chuck Krulak, he'd listen. He may not agree with you initially but if you make the case, and like I said I give Joe Went credit in this particular instance where he carried the day for keeping Aviation a three star job. Krulak later called Tom Miller and said, "As long as I'm Commandant of the Marine Corps, I guarantee you Marine aviation will be a three star."

Dr. Allison: General Hagee has had to deal with some tough issues.

General Fitch: Well I think General Hagee has been a good Commandant, but there is nothing special to remember him by. I would like to have seen him put to bed this TacAir integration issue. I don't believe that General Hagee made many waves in his dealing with the Navy.

Dr. Allison: But didn't he resist it to some extent?

General Fitch: Oh he did to a modest extent, yes. I think that General Hagee was hampered by having faith in his classmates from the Naval Academy. When Admiral [Michael] Mullen came in as CNO he had this so-called "Nathman study" that had been initiated by another four star admiral, Black Nathman. Admiral Mullen asked General Hagee to accept that study and General Hagee said no he would not. He knew absolutely nothing about the study except what Mullen was telling him. And of course what the CNO was telling him was that it was clear in this study that all Marine aircraft that operate from the carrier need to be the Navy variant. I give General Hagee credit. He said, "I do not accept that study." Because we've been talking STOVL for 40 years. The fat lady has yet to sing on TAI. The Marine Corps has been prosecuting a study with IDA, which should be finished soon. It will turn out that the Navy did an end run with IDA, where they stacked the deck, and they have biased the results. Any study that addresses TAI should also have to address STOVL on the carriers. It is a fact that STOVL can operate seamlessly on amphib ships such as the LHA and LHD, and there is no reason why STOVL cannot effectively operate from aircraft carriers.

Dr. Allison: Sort of an artificial yardstick.

General Fitch: Well it is an artificial yardstick and it's one somebody dreamed up 30 or 40 years ago. The Navy has never met the 700 mile requirement unless they also used aerial refueling. If you use aerial refueling, you can go 2,000 miles mission radius – just pick a number. When an aircraft carrier cannot get its air wing close enough for combat effectiveness, then the carrier air wing should have the capability to move ashore and operate like the Marines do – from forward basing. That would be true TacAir integration, but the Navy never mentions that. If the Navy had STOVL, then they would be capable of operating from the LHD and LHA. That would be real integration, but again, there is Navy silence. Fact of life is the Navy TacAir is tied to the carrier, and they have no flexibility in basing.

When you do multiple aerial refueling, you can do deep-deep strike. The way the CNO, Admiral [Vern] Clark, described this at a Marine aviation dinner - probably about mid-way through his term as CNO – was to say, "Imagine a carrier operating to the south of New Orleans; a hundred miles or so, and the target is in Chicago. You launch from the carrier with a strike group and then you fly and you aerial refuel and so forth up to Chicago. Then you drop your weapons in the Chicago area and you fly back and you rendezvous with the refueling aircraft and come back and land at the carrier." And he said, "That's tremendous."

But what he didn't say is it's lousy response time to do that and if you're supporting ground units its ridiculous to think that you're going to fly these long, long missions for four or five hours or so and have any kind of response time. Now if it's a bridge that's going to be there today and tomorrow and the day after, then yes, you can do those kinds of strikes against fixed targets. But very important in ground combat – and this is a generally accepted number – in ground combat 80 percent of all targets are mobile, so you can address the 20 percent that are fixed anytime of the day or night you want to. I might add that the night Admiral Clark was speaking, he never mentioned a 700 nautical mile mission radius.

It makes no difference for fixed targets. You can get them today or get them tomorrow because they're not going anywhere. That building's not going to move in a day, a week or a month. But those enemy ground units are going to move.

But in any regard, back to General Hagee; he just flat out said to Admiral Mullen, "No, I do not accept it." I wish at the same time he had said what I previously said, that we're going to be all STOVL and if you don't want STOVL on the carrier then so be it – you get nothing.

Dr. Allison: Yes, but doesn't the Navy have a tremendous amount of leverage in the fact that they buy the Marine's aircraft?

General Fitch: No, that's a misnomer. However if you ask just about any admiral in the Navy he'll say, "We buy the airplanes for the Marine Corps." That is BS! The Chief of Naval Operations does not buy a single airplane for the Marine Corps. The Secretary of the Navy, has two military services under him. The SecNav buys the airplanes for the Navy and the Secretary of the Navy buys the airplanes for the Marine Corps. The SecNav also pays for the Navy's aircraft carriers, and I understand that the next aircraft carrier will cost about 12 billion dollars, that is 12 billion dollars, maybe more, before they buy any of the aircraft to operate from that aircraft carrier. Aircraft carriers are very expensive basing for TacAir. The Navy is pricing themselves out of the aircraft carrier business. CVN-21 may well be the last aircraft carrier to be built.

Dr. Allison: So the airplanes the Marines fly come out of the Secretary of the Navy's budget, not the Navy.

General Fitch: It doesn't come out of the CNO's budget. Marine aviation does not cost the CNO a penny. Because when the Congress addresses the entire budget for the Department of the Navy it addresses what the Marine Corps is supposed to get and what the uniformed Navy is supposed to get. Those are two different services, and the Commandant of the Marine Corps and the Chief of Naval Operations are equals. When Admiral Mullen gets replaced as CNO, then General Conway as CMC will be senior to that new CNO in the protocol. Just take a look at the next state of the union address by President Bush in January 2008, with the chiefs, and see who sits where in the pecking order.

Now you won't get a single admiral in the Navy to agree with that last statement I made but that's the way it is. That's the way the Congress looks at it and that's fine. The Marines wind up with so many plus-ups because what happens in the programming world is that the Navy programs for the Navy, the Marine's program for the Marine Corps, but then en route to the Secretary of the Navy it passes through one more level of a Navy admiral, the N8, before it gets to the Secretary of the Navy. And hopefully they've got – and this is a personality dependent thing – if you've got a strong DCMC for Aviation and a strong DCMC for Program and Resources [P&R] then everything works very well for the Marine Corps. If we have a weak Secretary of the Navy, then the Marine Corps will probably lose out in the programming world. Then you've got a problem and the Marines may well lose in this process. But every Navy admiral and probably most Navy captains are convinced that every thousand dollars that the Marine Corps gets is stealing a thousand dollars from the uniformed Navy and that is absolutely untrue, absolutely untrue. The Department of the Navy budget belongs to the Secretary of the Navy – period. I'll say this about the Navy; in the operating Navy - with very few exceptions - but in the operating Navy and the operating Marine Corps, they get along great. In the programming world, it is a bitter fight, month after month. The uniformed Navy sees the Department of the Navy budget as theirs alone. It's only in the programming world where it's such a cutthroat type operation.

And it all stems from the fact that the Department of the Navy is unique. There are two military services within the Department of the Navy. The uniformed Navy since time immemorial has considered itself to be the superior being and they consider all dollars appropriated by the Congress to be the uniformed Navy's dollars –and theirs alone. But that's not the case. Now it doesn't help that a recent Secretary of the Navy decided to get rid of his Office of Program Appraisal (OPA), and the SecNav relies on the N-8 to properly allocate funds. That puts the fox in the hen house.

Dr. Allison: A couple more questions on the 1st MAW; your relationship with FMFPac, your direct superiors J.K. Davis and Andy O'Donnell?

General Fitch: Yes. First Andy O'Donnell and then he was replaced by J. K. Davis. A couple of years earlier, J. K. Davis had been the CG of 1st Marine Aircraft Wing. They were excellent-- I knew Andy O'Donnell for a long time. In fact he and his wife lived at our home in Annandale, Virginia for about six weeks when I was in Japan as AWC to Joe Koler in 1976-77. They were house hunting at the time. Then the O'Donnells wound up living at the Navy Yard. Of course he was General O'Donnell to me then. And I've known J.K. Davis for many years. In fact in the late spring of 1962, I went out to that little training command airfield. I guess it was Kingsville, I forget, and I was supposed to relieve J.K. He was a captain and I was a captain. But no, I didn't relieve him in Texas because me orders were changed to Washington, D.C. I've known J.K. a long time.

Dr. Allison: But did you get any direction from him, marching orders?

General Fitch: You don't get any direction. The 1st Marine Aircraft Wing was my command and that is the way I treated it. You know when you hire somebody-- if you're a group commander and you're dealing with squadron commanders, you give them broad guidance and say, "Okay, the first thing; I don't want you crashing airplanes, and you will emphasize safety. Then you say, and the

second thing; I don't want you holding back on the flying because flying is the way you go to war." Then you see how well they do.

And so you're going to fly and you want productive flights and this kind of thing but you don't tell them how to run their squadron. You know if you've got a wing no one is going to tell you how to run your wing. When I had Research and Development at Headquarters Marine Corps not a single soul ever told me what they thought I should do. It was up to me to know what I should do.

Dr. Allison: The Commandant didn't come down there and

General Fitch: Absolutely not and I didn't go see him unless I had something that required his attention. When I had R&D the first big issue for me was to get General Wilson to cancel the LVA program. When you are in charge, you never say, "Hey, how do you want me to run this?" You just don't do that. And like if you're a senior officer, if you don't know how to do it then you shouldn't be there [chuckle]. For example, when I took Marine Aviation, I did not talk to Lieutenant General Bill White who I was relieving. I felt that I already knew what needed to be done.

Dr. Allison: What do you look for in a good squadron? I mean you talked about Duane Will's squadron.

General Fitch: Well I looked at how much they flew. I looked at the quality of aircraft. That is an advantage of flying all of your aircraft. You get a first hand look at real quality or phony quality. You know a lot of times you'll have wing commanders - and it depends I guess on the personality to an extent – but the guy will say, "Well I'm not going to go fly with the squadrons because that would be depriving a lieutenant or a captain of flying." I never looked at it that way. If I fly with everybody - in my view and I think I had 13 different kinds of aircraft, then that is my flight time and it is a tool that I use to evaluate who does well and who does poorly.

If I fly a few hops with this squadron and a few with that one, over a period of time I don't really detract from that squadron flying because if they can't produce an extra hop or two then they've got a problem. And so my best evaluation on how well a squadron did was to go fly their airplanes and I found occasionally that some airplanes that I would fly were absolutely terrible airplanes. Thirty minutes in the air could tell you a lot about a squadron commander

Dr. Allison: And did you write fitness reports on the squadron commanders?

General Fitch: No, the group commanders wrote those.

Dr. Allison: And you would write them on the group commander.

General Fitch: Well I'd write them on the group commanders, yes, and anybody that was directly responsible to me; directly responsible like the senior members of my staff, then I would do them. Fitness reports are very important, and writing them is a task that you do not take lightly.

The only bad fitness report that I ever gave was to a squadron commander who was a lieutenant colonel and who let fitness reports stack up. He had to be pressured to write them and the first couple of times that I told him that, he did nothing. I had warned him enough ahead of time that he was going to get a bad fitness report if he didn't get the fitness reports written. He failed to do it, so he got an unsat fitness report that ended his career. He had failed to write about 75 fitness reports on young lieutenants, captains and majors. He found out that I wasn't kidding on his getting a bad fitness report. You can also kill the career of an officer with faint praise, which happens sometimes when it is deserved or when the reporting senior is lazy.

Of course when I was a general, I would get inputs from my senior staff such as the chief of staff. And in regard to 1st Wing I'll give you a comment about training. Ray Powell showed up about the same time I did and I was going to be CG of the wing, and I put Ray in as my G-3. And Ray has a brilliant mind. I told you earlier how Ray changed the training deployments.

The Powell training plan was very simple; it was based on a USAF cargo aircraft never flies empty. So if the Air Force was going to send 141s or whatever to Iwakuni to pick up a squadron of say F-4s, and take them to Cubi Point, it would do that but when it got to Cubi Point there was going to be another squadron there that was due to come back to Iwakuni. So that in essence doubled our training capability right there. It was very simple.

You never had an airplane flying empty. Ray simply dove-tailed all deployments so that every cargo flight was full. And so we just completely redid the training plan just like I did back in 225 back in 1966 when all the A-6s doubled the duration of training flights and accomplished more training. Well in 1980 we had an extension of that same concept relative to wing training 1980-82. When squadrons would deploy to 1st Wing during the timeframe of 1980 to '82, we probably doubled the amount of training that they got during that six months compared to what was accomplished prior to Ray Powell's system being in effect. But again, I didn't tell Ray Powell how to run the G-3 of the wing. I talked to him nearly every day of the week. We played golf on weekends and that gave us a lot of time to talk about a host of things. But to give credit where it is due, it was Ray Powell's idea of running the G-3 to maximize the flying efficiency. The same thing would happen from the G-4 standpoint in the logistics support and whatever where they would try to enhance the spare support for the squadrons while they were out there. My G-4 could do these things and do them well.

Dr. Allison: Did you get involved with any of the civilian leaders of these other countries at all to facilitate training?

General Fitch: Not really, that wasn't my ballgame. See, in Okinawa what you had was the Okinawa Area Coordinator and there was one Marine general in that job plus his staff. He was concerned with the local Japanese. He would worry about all the interface with the Okinawans, where Japanese laws were violated. We had very few problems relative to the civilian populous. They didn't like airplanes flying over their homes but there was little that we could do about that. We had been there for over 35 years and the airfields had been in their locations for all of those 35+ years. I seldom ever heard Major General Killeen talk about problems with the local populace.

We had a similar situation with senior visitors. But the interface as far as civilians and visiting dignitaries, that was up to the Okinawa Area Coordinator and Steve Olmstead as CG III MAF. The wing came under III MAF.

Dr. Allison: Okay. So you didn't really have much contact with VIPs visiting, I noticed Frank Petersen came in....

General Fitch: First handling visitors was a routine thing. They came, they visited, you entertained them, you briefed the men and showed them aircraft, and you saw them off when they left. I don't recall Frank ever coming out in the two years I was on Okinawa. At that time Frank Petersen was a relatively junior brigadier or two star. We had a lot of senior visitors, and I considered senior to be three and four stars. They always visited the wing in addition to the division and Joe Went's logistic group.

On Okinawa or at Iwakuni these visitors would follow pretty much a set pattern. The wives would go shopping and the husbands would get briefings. General and Mrs. Barrow came out once while we were there. For that CMC visit, my wife, Margaret Marie, and I had a reception and dinner for the Barrows at our quarters.

We normally had 16 seated at the dining room table for a dinner. If it were just a reception with drinks and a buffet that we had, then there might be 50, 60 or more guests there. We did not have a food technician (steward) since I was a two star. I wasn't senior enough to have a food tech. That meant that my wife and I prepared everything for the reception and dinner. As personal friends we'd see an awful lot of General Barrow and Patty. P. X. Kelley was ACMC, and he and his wife, Barbara, came out one time in the two years. Margaret and I had a dinner for them.

We saw a lot of Carl Trost since he was Commander Seventh Fleet and our operational boss. Margaret and I would get with Steve Olmstead, Cal Killeen and Joe Went, and we would all go to dinner at a nice restaurant, with either Steve, Joe or me picking up the tab. Andy O'Donnell and his wife Patty came out several times a year, and we would entertain them at our quarters. J. K. came out once as I recall when he was CG FMFPac. As I said, I don't recall Frank Petersen coming out but he may have.

Joe Went relieved me as CG 1st MAW in the summer of 1982, and Frank relieved Joe as CG of 1st MAW in the summer of 1983. Most of the visitors who came out would spend time at Iwakuni, and that always meant that Margaret and I would go to Iwakuni for that visit. There was always a senior general and his wife coming out for the Birthday Ball in November.

All in all, having visitors was no big deal. It was a frequent occurrence. In addition to entertaining all the visitors, about twice a year Margaret and I would entertain the senior members of my wing staff, plus the group commanders. We would frequently include squadron commanders at some of our receptions. Duane Wills would be included on occasion during his six months deployed out there. Charlie Carr visited us numerous times while he had 533 in WestPac. On those occasions, we would have about 40 or more over to our quarters for cocktails and buffet finger food. Margaret and I spent a lot of our personal funds for entertaining. My allowance for entertaining was a piddling amount – maybe a hundred dollars a quarter as I remember.

But it was a good arrangement. We were not ever inundated with visitors. I felt our tour at Okinawa and Iwakuni, and all the deployment sites, with the 1st Wing, ranked right at the top of the duty tours that I enjoyed in the Marine Corps. Of course the term enjoy is a random measure, since I never had an overseas tour that I did not enjoy, including combat in Vietnam.

Dr. Allison: And you had it for a couple years.

General Fitch: Well prior to 1980 the 1st Marine Aircraft wing was always a one year tour for a general and it was unaccompanied. When General Wilson came in as the CMC, the attitude of the Marine Corps towards wives visiting their husbands in WestPac changed dramatically. When

General Wilson promoted me to brigadier general, he told Margaret that he expected her to go out to Japan to visit me. Three years later, Margaret and I had the first accompanied tour for a CG of 1st Marine Aircraft Wing, from June 1980 to June 1982.

Dr. Allison: President Reagan had been elected too. Did you notice any significant change there as President Reagan comes in and Jimmy Carter goes out?

General Fitch: Not really. Washington was far away. President Reagan did some marvelous things for the military and of course President Carter cut an awful lot of things. We were not disappointed to see a change in administration, but the impact was indirect in 1981-82.

Dr. Allison: Pay started increasing and all.

General Fitch: I don't remember the pay increases. Reagan's increasing defense budgets, the defense budgets that were there in '81 and '82 were Jimmy Carter's defense budgets. Reagan's first real defense budget would have been in 1983 when I was back in Washington.

Dr. Allison: Morale was noted as high, any comments on why?

General Fitch: Well everybody was doing things. And squadrons knew that I'd come see them frequently. I was not a CG that sat in his office.

Dr. Allison: You were getting around quite a bit, huh?

General Fitch: Well yes, because you know the norm for a lot of wing commanders would be to get in the back of a T-39 and go from here to there. Well I'd have them bring an A-6, an A-4 or an F-4 down from Iwakuni, and I would fly myself to wherever I wanted to go. I was frequently at Iwakuni – I'll just make a guess – every week or two. And when squadrons would deploy into Korea, I would go visit them. Lieutenant Colonel, Dick Glass took his F-4 squadron to Korea for several weeks, so Dick would send an F-4 to Kadena, and I would fly that F-4 back and visit him in Korea. Dick and I were in 311 together in 1960-62, when I was a captain and he was a lieutenant. But when I had 1st MAW he was CO of an F-4 squadron so I'd fly over to Korea where he was. Frequently a squadron commander would send one of his aircraft to Kadena, then I would take it and fly wherever it was that I needed to go. There was not a squadron that came to 1st MAW that I did not fly with, be it helicopter or TacAir. But again see, I had four squadrons a year of F-4s. I had several A-4 squadrons each year, for six months at a time.

Dr. Allison: On aviation safety, there was one A-4 squadron that lost three A-4s. Do you remember that; in a three-month period; VMA-223?

General Fitch: That could be. I'm sure 223 was out there at some point when I was CG.

Dr. Allison: 223; they lost one in '81. I think it was in September, October and November.

General Fitch: It could well be. I probably had a talk with the group commander about it. I don't recall 223 being out there. Again, with that squadron you mentioned, that would have been up to the group commander. That would be the CO of MAG-12. And when did Kent Bateman come out there? Kent was a major in 533 when I had that squadron at Chu Lai. In late 81 and early 82 he had MAG-12. He only stayed a year because Sam Brutcher had MAG-12 the first year we were there.

Mrs. Fitch: Kent Bateman was there in '81/'82, because he was there when we left.

General Fitch: Was he, okay.

Mrs. Fitch: Because I remember he and Charlie had the accident

General Fitch: Yes. Now, you talk about an accident; the one that Bateman and Charlie Carr had was a doozie.

Dr. Allison: That A-6 accident when you were there? It went in the water right off the end of the runway or something. Was that Charlie Carr in that?

General Fitch: Yes. Kent Bateman was the pilot and Charlie was the B/N, and it was Charlie's A-6 that crashed. They were lucky to live through that one. If I remember right, during his career Charlie had three ejections.

Dr. Allison: What about the Iranian hostage crises; that was over at that time, wasn't it?

General Fitch: That was over on Inauguration Day, in January 1981.

Dr. Allison: Do you remember anything about doing VSTOL operations on Iwo Jima [phonetic]?

General Fitch: The island was not Iwo Jima. It was one of the islands adjacent to the main island of Okinawa. Lieutenant Colonel Terry Mattke brought a detachment of AV-8A Harrier to Okinawa. They operated out there on a small strip at one of the outlying islands. Terry was a fine Harrier pilot. Of course Terry Mattke was the key member of my staff in 1983 who got me interested in the night system that the RAF was working on. The system used night vision goggles and a FLIR to turn the night into day. Then he talked me into going to Farnborough in December 1983 to fly the night attack system in a Hawker Hunter. Terry was my Harrier action officer in APW when I had Marine Aviation. But no, he brought a Harrier detachment out to Okinawa and I don't recall how long they were there. But they were there for some period of time and they did some good operations, short takeoffs etc. at the outlying island.

Dr. Allison: But you had the Harriers out there.

General Fitch: Yes, they had a half a dozen is my guess.

Dr. Allison: Okay. VMO went away during that time.

General Fitch: I don't recall that, I was flying the OV-10 and I was flying Hueys in May 1982, just before I left for Washington. The OV-10 aircraft were still there at that time.

Dr. Allison: And you actually developed the OV-10.

General Fitch: Not really. A friend of mine, K. P. Rice, was the father of the OV-10. I was the project officer in BuWeps in 1962-63 for a year, for what was then called the COIN aircraft [for counter insurgency]. When I went to SecNav as Dr. Wakelin's aide in the summer of 1963, I had a lot to do with bringing the OV-10 program into being. Lieutenant Colonel K. P. Rice and I had been together in VX-5 when we invented the multiple bomb rack, then we worked together on the

OV-10 in the Pentagon. But K.P. Rice was in DDR&E and I was in Assistant SecNav for R&D. But K. P. Rice was the daddy of the OV-10.

Dr. Allison: You had something to do with it.

General Fitch: Yes, I had a lot to do with the OV-10 program. I was the first project officer and that was when I was working for Captain Al Morton in the attack design office at the old Bureau of Naval Weapons (BuWeps). As Captain Wakelin's Marine aide I would be the OV-10 coordinator. The secretary leaned on me to sort it all out. I would do agendas for meetings, determine issues, and help Secretary Wakelin lead discussions with a host of people in the Pentagon, including his counterparts in USAF R&D and US Army R&D. The committee also had a representative from DDR&E.

At that time the Navy was not interested in procuring the COIN program, but Harold Brown as head of DDR&E had said it would be done. Later the Navy would buy some OV-10 aircraft and use them in Vietnam. The key person on the COIN airplane was K.P. Rice.

He was a lieutenant colonel at that time and he had been working on what would be the COIN aircraft for about 10 years. And it was an inexpensive airplane which the U.S. military could use today in Iraq and Afghanistan. It would be ideal in that desert environment. The foreign military services, such as Iraq, could use the OV-10. The OV-10 aircraft went to the desert long before they should have.

Dr. Allison: We had better let that be it for the day.

END OF SESSION IX

PAGE LEFT BLANK INTENTIONALLY

SESSION X

Interviewee:	Lieutenant General William H. Fitch, USMC (Ret)
Interviewer:	Dr. Fred Allison, U.S.Marine Corps History Division
Date:	11 August 2006
Place:	Lieutenant General Fitch's Home in McLean, Virginia

Dr. Allison: This is the 10th interview session with Lieutenant General William Fitch by Dr. Fred Allison and today's date is the 11th of August, 2006.

Finishing up on the 1st Wing sir, along this time period; late 70s, early 80s, there is increasing, further integration of women into the Marine Corps, were you seeing that at the 1st MAW and what are your perspectives on women in traditional male roles?

General Fitch: First let me say that from 1980 to 1984 when I retired, I didn't notice anything different in the number of women that were in the Marine Corps. I would guess that the increase in the number of female Marines took place after I retired on 1 September 1984. There has been the argument that women had to be in combat or they wouldn't get promoted. I never knew that to be the case, since there are numerous males that go to flag rank and they have never seen combat. When World War II started, Dwight Eisenhower had never seen combat. He missed it in World War I. With that said, the females that have joined the Marine Corps have done a fine job overall, and we have had women doing those remarkable jobs for about 60 + years. When I was the CG of 1st Marine Aircraft Wing, my comptroller was a female lieutenant colonel who later rose to be a lieutenant general in the Marine Corps. I seriously doubt that she had ever seen a day of combat.

Dr. Allison: That being Carol Mutter. All right sir, very good; when did you hear that you were going to be taking over Marine Aviation?

General Fitch: General P.X. Kelley was the Assistant Commandant to General Barrow, and he and Barbara came to visit the Marines in Japan. He told me that General Barrow had decided that I'd get a third star and take over Marine Aviation from then Lieutenant General Bill White. General White was retiring. He told me when I needed to be at HQMC, which as I recall was around the 1st of July in 1982.

General White retired the same day I took over Marine Aviation. Since Bill White did not want a retirement parade, he was retired in a ceremony in General Barrow's office. Bill White is a very low-key guy. Dr. Allison: And your promotion ceremony was where?

General Fitch: In the Commandant's small auditorium, it was right across the hall from the Commandant's office, a little down the second corridor and across from 2206. General Barrow as the Commandant did the promotion ceremony for me to lieutenant general. Then he and Margaret Marie pinned on the three stars. General Ken McLennan had sent me a set of his three stars, with a note that said, "Bill, I hope that these stars turn into four stars for you, as they did for me."

Dr. Allison: What was your thinking, vision and plans when you took on that job?

General Fitch: I was very familiar with DCS Aviation and its programs. I had been there in APW when I had the Harrier, A-6 and A-4 programs; then I'd been there as EA to Lieutenant General Miller. And again I had a continuing interface with DC/S Aviation when I had R&D. For Washington duty things don't change fast.

It was my fifth tour in Washington when I took Aviation. I don't count being at NATC Patuxent River in 1957 and early 1958 as being in Washington. At that time I had served in every rank in Washington starting with captain and had gone to two stars with R&D, and now I was starting my fifth tour as a three star. I never missed being in Washington in any rank in between captain and three stars. I also kept a balance with tours of duty in the Fleet Marine Forces, where I served in the FMF flying airplanes, in every rank from second lieutenant through two stars. And I would continue to fly as a lieutenant general.

Dr. Allison: [Chuckle] yes, okay. Now General Miller told me you had had six tours here.

General Fitch: Well it's five for active duty.

Dr. Allison: So this is your sixth tour?

General Fitch: While I am proud to have had all the experience in our nation's capital, I am more proud that I served in the FMF flying airplanes from second lieutenant through two stars. Then as a three star I would also fly aircraft in the Fleet Marine Forces, but they belonged to somebody else. I believe that I told you that I flew 35 different models of aircraft while a general officer.

In taking over Aviation I could hit the ground running because, it had only been two years since I had been there with R&D.

Dr. Allison: Was funding and budgeting a big part of the job?

General Fitch: In funding the aircraft and equipment for Marine Aviation, some people have trouble with blue and green dollars. That is especially true with the Navy. The green dollars buy all the equipment for divisions and for the air control systems used in aviation. They buy all the equipment for command and control; both aviation and ground. And then blue dollars buy the airplanes and the things that go with airplanes and keep airplanes operating; spare parts, aircraft engines, and all that. And then all the schools just about without exception are Navy schools associated with aircraft maintenance and so forth. But I emphasize, the dollars that the Marines spend directly on aviation, those dollars belong to the Secretary of the Navy and not the uniformed Navy. The term, blue dollars, is just a convenience to separate from the green dollars. The Secretary of the Navy has two kinds of funds, blue and green.

Dr. Allison: Which is out of the blue dollar pot.

General Fitch: Yes. And it's always been the blue dollar split that has created the problems in the programming world. The admirals think they own all the blue dollars, but they don't; where this all gets very iffy is if you have a weak Secretary of the Navy.

Dr. Allison: So you are getting right back into that now. Are you talking Navy or Naval Aviation?

General Fitch: Naval Aviation means both Navy and Marine. To keep it straight, just remember that the Navy secretary has two services, one is Navy and the other is Marine. To avoid duplication of effort, there is one Naval Air Systems Command to serve both the Navy and the Marines. There is one aviation supply system to service both the Navy Aviation and the Marine Aviation. There is one Naval Air Test Center to support both Navy Aviation and Marine Aviation.

From nearly day one with Naval Aviation, Marines have participated on the various staffs so that we did a fair share of participating directly in various functions that support Naval Aviation. There were earlier acronyms but for many years it was the Bureau of Naval Weapons, that is BuWeps, which was responsible for developing aircraft and providing for support of aircraft – both Navy and Marine aircraft. We always had Marines on the staff of BuWeps. Then the Naval Air Systems Command was established to replace BuWeps. Major General Joe Anderson was the #2 flag officer in Naval Air Systems Command about 10 or 15 years ago. Joe had also done a tour at the NavAirSysCom, when he was a lieutenant colonel and he was class desk for the Harrier. The same kind of Marine representation is found at the Naval Air Test Center at Patuxent River. Then the same is true for Commander Naval Air Atlantic and Commander Naval Air Pacific.

Dr. Allison: Who were your contacts with the Navy at the time?

General Fitch: Vice Admiral [R.F.] Dutch Schoultz was OP-05 when I first took Marine Aviation. Dutch is just a real gentleman, and I can say in the over two years that I had Marine Aviation, Dutch and I never had a disagreement and I never lost a thing. I never lost a penny in the programming world. Admiral Schoultz and I would be in a meeting, which we did periodically in his office, because he happened to be senior to me. His staff, which included some Marine officers, would be doing different kinds of presentations and occasionally I'd see something or hear something that I didn't like. That meant that the Marines weren't being appropriately supported, and I would just say that I felt that Admiral Schoultz and I should have a private discussion on that matter and would everybody please leave. The staffs would step out of the room and in about three minutes Schoultz and I would talk about this and he always agreed with what I said was the right thing to do. His staff didn't always agree but he did. That was the important part. Dutch and I have shared many hours at Golden Eagles in subsequent years, and now we find that nearly 23 years later we are still good friends. Dutch always played everything fair and square. It was always a pleasure to work with him.

Dr. Allison: Do you recall the key issues that came up?

General Fitch: There were several issues that came up, nothing of tremendous importance with the exception of the A-6F. Did I talk to you about the A-6F?

Dr. Allison: No.

General Fitch: A-6F. It was the issue of the A-6F that caused me to decide to retire. This gets back to my view that generals have to have the courage of their convictions, and they should always do the right thing, first for the country and second, for the Marine Corps. Sometimes generals confuse the priorities and put themselves first. They should do the right thing regardless of the impact on

their personal careers. I'll remind you again of one example of doing the right thing, before I talk about the A-6F and what I did. Earlier I told you about Lieutenant General Harry Blot and the issue that he had with General Krulak on keeping Marine Aviation as a three star billet.

As a quick refresher, for many years the Navy OPNAV had the barons. The barons each had three stars and you'd have a surface warfare baron who would worry about everything connected with surface warfare. Then you'd have a sub-surface warfare baron who would worry about everything in submarine warfare. Then finally you had the aviation baron, OP-05. In my case as DC/S Aviation, it was my job to address everything for Marine Aviation, which meant my working with Dutch Schoultz.

About 15 years ago the Navy adopted a system where they were going to have a "super" three star admiral, who would be the N-8, and he was going to have requirements and programs. He was going to be the final decision-maker on programs and issues that formerly were decided by the barons of aviation, surface warfare and submarine warfare.

The N-8 would decide the operational requirements for the Navy, then he would decide what the various programs were to be, and then he would decide how much money was going to be allocated in the funding of the programs. The N-8 got to do a lot of deciding. In this process they decided they didn't want to have barons anymore. The admiral in charge of Navy aviation would allegedly be a two star but often times he was a one star admiral, the same for the submarines and the same for surface warfare.

From time to time the Marine lieutenant general who has Programs and Resources gets the idea that he would like to have the HQMC adopt the Navy N-8 system where he would have Marine Aviation and PP&O under him. So far that has gone no where, and it never should go anywhere.

In Harry Blot's case, he chose to retire when General Krulak gave him the ultimatum on agreeing that Marine Aviation should be a two star billet. And so Marine Aviation has been a three star billet ever since. Blot chose to put the Marine Corps ahead of himself, and he did the right thing for the Marine Corps. Since 1975 we've had the advantage of having a three star general in charge of Aviation, now known as Deputy CMC Aviation, where he is dealing head-to-head with the Navy three star, who is now the N-8 that runs the programming of the Navy staff. And that Navy admiral, he's a super three star, because again, he not only determines the requirements but he also decides how to execute on meeting the requirements and the funding of everything. It's a powerful job. And Admiral Mullen, who is now the CNO, he used to have that job of being the N-8.

Dr. Allison: General Barrow's ACMC was P.X. Kelley, what is your perspective on an ACMC being a non-aviator?

General Fitch: When you consider the importance of the MAGTF, it is best for the ACMC to be an aviator. The Commandant does not always get to choose his ACMC. Sometimes the Secretary of the Navy or the Secretary of Defense steps in. General Barrow had Ken McLennan as ACMC for two years, and then he had P.X. Kelley. The last ACMC to be a ground officer as ACMC, as I recall, was Walt Boomer. Since Boomer, all ACMCs have been aviators, except Bill Nyland who is a Naval Flight Officer. When you look at the MAGTF and support of the air-ground team, it is always better to have an aviator as the Assistant Commandant, or an NFO.

On the other hand, there is no reason why the Commandant cannot be an aviator. You will recall seeing the letter to me from General Wilson, when he said that he and Bob Barrow thought that I should be a strong candidate to be the next Commandant, and he hoped that I would be the next CMC. Considering the man who was the Secretary of the Navy at that time, in 1984, that was impossible. With that said, I know one Commandant who did not choose his ACMC, and his name shall go unsaid.

Dr. Allison: If the ACMC is not an aviator, does that indicate a negative attitude toward aviation?

General Fitch: Relative to the MAGTF it indicates a negative attitude in a sense, but that also depends on the ground officer that is chosen to be the ACMC, and it depends on his relationship with the CMC and also his knowledge of Marine Aviation. In the case of Ken McLennan, he was perfectly balanced in his approach to the air-ground team, and I was pleased that Ken served that tour as ACMC. However if I had my druthers at that point in time, I would have preferred that Tom Miller be ACMC under Bob Barrow. Another good choice would have been Andy O'Donnell. As General Barrow's tour as the CMC progressed, General Barrow gained a tremendous respect for Marine Aviation. I believe that if he had it to do over again, I think he would have picked Tom Miller or another aviator to be his first ACMC.

The routine as a rule, is that no one becomes a three star in a military service unless the head of that service wants him to be a three star and no one becomes a four star in that service unless the head of that service wants him to become a four star. But from time to time that rule is broken and especially so now with all the joint assignments and the way things are run now. Jointness has taken over. It used to be that the Marine Corps had only the CMC and ACMC that were four stars. Now you might have four or five Marines wearing those four stars. You have

some three star Marine generals who are in joint staff billets, and by human nature some of those generals are hoping to line up four stars by working with the SecDef. Those in joint assignments don't always get the blessing of the Commandant for another promotion.

Being close to the throne has its advantages when the king is doing the picking. In some instances the Secretary of Defense decides those promotions pretty much on his own, and even the Secretary of the Navy does not have a say in the selection. They say that Secretary Rumsfeld, when there's a candidate that might take over as a CINC somewhere, then Rumsfeld will arrange to have him brought to the Joint Staff so he can see him and decide on his own, whether he wants him to be a CINC or not.

Dr. Allison: Which might override the service chief?

General Fitch: When the SecDef does the choosing of an officer for promotion, there is no one person that might override that decision – the fact of life is that the SecDef will prevail -- unless the US Senate has an objection. General Peter Pace is a recent example of the last point being a player. The same thing applies when the Secretary of the Navy wants his favorite admiral to get promoted, or his favorite general, or his favorite colonel. That was very much the case in the early 1980s with the Secretary of the Navy at the time. In the mid 1980s there were cartoons about that SecNav in the *Washington Post* – along with the then CMC – regarding promotions. But again, on promotions within the military service – and it's the same for all of them – where you have a selection board through two stars, that's where you've got the real competition.

When you go above two stars - then that's the luck of the draw where timing becomes important. If a head of the service, wants a two star to become a three star then that usually happens. So the norm is that normally you've got a head of a service who knows who he'd like for his various deputies.

Dr. Allison: Exactly, it's a lot more personality driven.

General Fitch: Yes, with the three and four stars it's personality driven to an extent, and it often gets into who you know and when you know them. But that is just for three and four stars. Many years ago I heard about a Secretary of the Navy who had a neighbor across his backyard fence, who was a two star admiral. This SecNav was reported to have personally taken the steps to make that two star admiral into a three star admiral and then after a brief period, to make his neighbor into a four star admiral. The CNO at the time didn't get a vote. Since that is ancient history, all those in this instance shall remain anonymous. Suffice it to say that some promotions are made without any regard to merit.

Dr. Allison: Who were some of your key staff members? General Howell worked for you, didn't he, when you had DC/S Air?

General Fitch: Yes. Jeff was a good staff officer.

Dr. Allison: And also wasn't General Dailey your . . . ?

General Fitch: General Dailey was my deputy for the two years that I had Marine Aviation. He is a superb officer and I valued him highly. Jack Dailey was deputy DC/S Aviation. Now Jeff Howell was a lieutenant colonel in the Programs office at APP and then he made colonel and went over to the OP-50 staff.

Dr. Allison: You were going to talk about the A-6F issue?

General Fitch: First – and this is a bit repetitive – but I need it for clarity. I had commanded two A-6 squadrons; one at Cherry Point and one in combat at Vietnam. I had MAG-14 which had three A-6 squadrons in it, and during that time period I flew the A-6E on a very frequent basis, like probably three times a week. I flew with all my squadrons. When I had 1st MAW I flew the A-6E, along with a lot of other aircraft, so I knew the A-6s pretty well. It is relevant that I had over 200 combat missions in the A-6 in Vietnam. Nearly 100 % of those were at night against North Vietnam targets. When I retired in September 1984, I had been flying the A-6 for 20 years.

I had been running Aviation for, oh, I guess about a year, and I had been moderately supportive of the A-6F since I figured it was a done deal with the SecNav pushing it. During the prior year the A-6F had never come up as an issue.

One day, probably in late October or November 1983, Lieutenant Colonels Charlie Carr and Dave Seder (in APW) came in to see me to talk about the A-6F. Charlie had the A-6 programs and Dave had the F/A-18 programs. They said, "We are making a big mistake doing the A-6F." Carr and Seder then went on to tell me why the A-6F was a mistake and why it would not survive against the current and future threats.

Dave Seder was an F-4 and F/A-18 pilot, and earlier had been selected as Marine Aviator of the Year. Charlie, a Naval Flight Officer and an A-6 bombardier-navigator, had about 700

combat missions in the A-6 during three combat tours in Vietnam, and he had about 10,000 flight hours. The thrust of the Carr-Seder argument was, "The A-6F won't be survivable against the threats now and those threats coming over the next 25 years." And of course there are all kinds of surface-to-air missiles and some are very good.

Charlie and I had seen the SAMs in North Vietnam and we had them come very close to hitting us when we were at very low level, flying about 400 feet off the ground at night. But in the1980s and on into the first decade of the 21st century, when the threats are heavy, more sophisticated, and you're taking defensive measures, when folks are shooting at you with AAA and SAMs, then you have to put a lot of g's on the airplane to evade. You need to hold four or five g and hold that during the evasive turns at low altitude. If you go high, such as a thousand feet AGL [above ground level] or higher, then with the high radar cross section of the A-6 Intruder, you light up the enemy radar scopes like a Christmas tree, and you are very vulnerable.

Usually when the enemy fires a SAM at you, they don't just shoot one SAM, but they shoot several in sequence, with maybe 15 seconds time lag between launches. The enemy SAM sites hope that while the air crew is evading the first missile, the second SAM will hit them, and if not the second, then the third missile hits the aircraft. You can turn into the missile with high g; on the order of four to five g, while bearing in mind that you're only 400 feet off the deck and its night. With those sustained "g" the aircraft with full power on two engines is losing airspeed in the high g turn. All you've got to do if you start losing altitude is relax the g or lose more altitude. But if you relax the g then a SAM can catch up with you. If you lose the 400 feet, you're dead when you hit the ground. Both results are bad.

The big fault that Charlie and Dave described for the A-6F was that it would be a heavier aircraft with the same old engines, it would have the same high radar cross section, and its reduced sustained g capability would make it very vulnerable in a heavy SAM and AAA environment. There were other factors that also played in the unsuitability of the A-6F to meet the threats that would lie ahead in the late 1980s, the 1990s and into the early years of the 21st century. Aircraft produced in the late 1980s and into the 1990s would usually be operational for at least 20 to 25 years, or for the A-6F, out to about 2010 – and probably beyond to 2015 or later.

With my having flown the A-6 since 1963 and having commanded two squadrons, with my flying the A-6 on hundreds of night attack missions, I fully understood what they were talking about. I also respected their integrity. I agreed with Carr and Seder, and I decided that the A-6F program should not continue. Or if it continued, I did not want Marines to continue to fly it. There were a few problems with making that happen.

Now what we had at that time were A-6Es in our Marine all-weather attack squadrons and the Navy also had the A-6Es in their all-weather attack squadrons. The Marines usually got the older A-6Es and the Navy usually got the newer A-6Es. That split goes back to the higher priority at the aircraft carrier. But the Secretary of the Navy was a reserve A-6 Intruder bombardier - navigator. He wanted to have the A-6F and everyone knew that was his pet project. The A-6F was to be an advanced version of the A-6E.

It is relevant that the uniformed Navy did not want the A-6F. Those not wanting the A-6F started with me and included Vice Admiral Dutch Schoultz who was the CNO's OP-05 and Vice Admiral Jim Busey who was Commander Naval Air Systems Command. Schoultz and Busey were afraid to go contrary to the SecNav. Dutch told me, "Bill, I can't help you with the Secretary." For killing the A-6F, I found that I was the lone ranger when it came to doing something.

Too many admirals and generals were hoping for promotions, and you don't get promotions by picking a fight with the Secretary of the Navy. But, there is the matter of taking a stand on principle, doing the right thing, and doing so regardless of the impact on you personally. A lot of money would be wasted if the A-6F continued, because Schoultz and Busey said the uniformed Navy intended to kill the program when the current SecNav left office, but the CNO would not cancel the program until the SecNav had left office.

The A-6F program was more or less in its early stages at that point in time, with Grumman having been under contract and working on it for perhaps two years at that time. Later, but not much later, in talking with the three star admirals who had responsibility for Navy aircraft, i.e. OP-05 and the Naval Air Systems Command, I would have the concerns of Carr and Seder confirmed. Those discussions with the admirals on the A-6F, along with what Carr and Seder had said, convinced me that the A-6F should not happen, and if it did happen, then the Marines did not want it. My alternative aircraft was to go with a tactical two-seat version of the F/A-18 that would have an improved radar and fire control system. The advantage of an airplane like an F-18 with an afterburner is it has the additional power to get out of those potentially fatal situations when AAA and SAMs might prevail. Also the F/A-18 uses technology that would be 20 years newer than the technology found in the A-6F. The original A-6 competition occurred in the 1957 timeframe when I was in Test Pilot School, and in 1982 the technology was essentially 25 years old. So in the early 1980s period this A-6F is an airplane that is 25 years old right then, and if the A-6F goes into production, when retired the basic design and basic systems would be about 50 years old. That is very old for a strike aircraft.

Around January 1984 I had my staff put together a briefing which discussed and evaluated various aircraft in a Navy carrier air wing, out to the time that the 21st century began. The thrust of

the briefing was relative to combat effectiveness and survivability against the current and projected threats. We concluded by looking at this from the combat standpoint that it would be much better to have a two-seat F-18 as opposed to a two-seat A-6F. Based on all information available, including threats current and projected, the F/A-18 two-seater would be far more effective and much more survivable in combat. With the F/A-18 there had been considerable effort in its design to keep the Hornet radar cross section low. We gave this briefing to numerous two and three star admirals, to some Marine generals, and to the SASC [Senate Armed Services Committee] staff director and some of his staff.

At about that time (January – February 1984) the staff of the SASC was talking with me. During those talks the SASC came to the same conclusion we had that the A-6F was a mistake, and like the Marines, the SASC felt that the A-6F should not continue in development. The problem was that the Secretary of the Navy liked the A-6F, and he had promised to deliver new A-6Fs to his pals at Navy A-6 bases.

The SASC staff director asked me if I would give my professional judgment on the A-6F at the hearing we would have with the SASC that spring –about April 1984. They were aware of my background flying combat in the A-6. I told the SASC staff director that if asked I would be glad to give my professional judgment on the A-6F. I also told him that I was willing to state that I thought the program should be canceled, and why it should be canceled. At that April hearing, Vice Admiral Dutch Schoultz would be sitting beside me at the witness table.

In early December 1983, in a meeting in the ACMC's office, I told General Kelley (CMC) and J. K. Davis (ACMC), my views on the A-6F. I told them that I thought the program should be cancelled. I told them that the SASC agreed with me. That day both General Kelley and General Davis agreed with me, and <u>General Kelley told me that I should do whatever I needed to do to ensure that the A-6F program was cancelled</u>. I told the Commandant that my only interest was the Marines not having the A-6F. General Kelley asked me if I knew how to cancel the program, and I told him that I did. He was told the SASC wanted to ask me my professional judgment on the A-6F program, and I said that when I was asked by the committee, I would give them an honest answer. He told me that he and the ACMC would insulate me from any criticism from the Secretary of the Navy.

So after the New Year of January 1984, we proceeded down that track. That same month at the air board, with aviation generals and admirals in attendance, we briefed our study of a carrier air wing with the A-6F and as an alternative, with a two seat F/A-18 all-weather attack aircraft. The air board agreed that the A-6F would not be survivable against the threats of the 1990s and beyond.

In late January 1984, I found that the insulation from the SecNav as promised by the CMC was getting a little bit thin. At that point the first of my four congressional hearings was expected to take place in late March or early April. I would be testifying before the four defense committees.

The staff director of the Senate Armed Services Committee had confirmed to me that the committee would be seeking my professional views on the A-6F program and my judgment on the survivability of the A-6F against the threats of 1990 and beyond. On February 4, 1984, I decided that I should tell the Commandant that I intended to retire – in about eight months. I felt that my retirement plan and the letter to the CMC would give me more flexibility in addressing the A-6F issue. I wrote him a one-page memorandum wherein I told him that I intended to retire, with November 1st being my preferred date. I said again as I had in December, that at the forthcoming Congressional hearings I expected to be asked my professional opinion of the A-6F.

In that February memo I did not remind the Commandant that he had told me to do whatever I needed to do to kill the A-6F program, and he and the ACMC would insulate me from the Secretary of the Navy. I knew that would be a non-starter at that time.

On his receipt of my retirement memo, which would have been February 5, 1984, the Commandant called me in and asked if my retirement decision was irrevocable. I told him that it was. It was clear that he liked my answer, since he was not standing up well under the heat from the SecNav. He asked me if I could plan on retiring September 1st instead of November 1st, and I told him that would be easy for me to do. It was clear to me that General Kelley was feeling the heat from the SecNav, and he didn't like the heat.

Just before my first hearing, the day before, General Kelley called me down to his office and said, "The Secretary would appreciate it if you don't take on the A-6F at the SASC hearing tomorrow". He went on to say, "The Secretary told me that he will get the Marines the two seat allweather attack aircraft that Fitch wanted." I told General Kelley, "General, that's fine with me. If the Marines will get the two seat F/A-18 configured for all weather attack, then I won't take on the A-6F at the hearing tomorrow." Of course the Senators on the Senate Armed Services Committee were going to do the process where the SASC chairman would ask me for my professional opinion on the A-6F and the survivability of the aircraft in combat. I wasn't going to say anything about the A-6F until the Senate Armed Services Committee asked me those words, "What is your professional judgment?"

Now with General Kelley telling me about the SecNav's promise to get the Marines the aircraft that I wanted for the all-weather attack mission, the aircraft that later would become the

F/A-18D, I would need to tell the SASC staff director what had occurred between the Commandant and the Secretary of the Navy. As I said earlier, the SASC hearing was scheduled the next day.

Through their staff director, the SASC already knew what my professional opinion was on the A-6F. Now with the agreement between the CMC and the SecNav, I would have to change the plan with the committee. I knew that was doable.

Dr. Allison: The Senators did?

General Fitch: Oh sure they did; all the Senators on that Senate Armed Services Committee knew that I thought the A-6F was a dumb thing to continue with. The staff director had known that for several months, and he'd come to my office and talked to me about it in considerable detail. He had also talked with Charlie Carr and Dave Seder. He had talked with the Senators on his committee. The SASC felt that the A-6F was just wasting a lot of money.

Dr. Allison: Ok, so what happened at the Committee hearing?

General Fitch: At the Senate Armed Services Committee the next day, I arrived early so that I could talk with the staff director. I told him about the deal between the Secretary of the Navy and the Commandant of the Marine Corps, to get the Marines the all-weather attack F/A-18, providing I would not try to kill the A-6F with the SASC. When I told the staff director that, he said, "Do you really believe that the SecNav will do that?" I replied, "You have to assume that the Commandant of the Marine Corps and the Secretary of the Navy are honorable men." He then replied, "That is not the question, the question is do you believe that." I told him, "I have to believe it. The Commandant has told me that he has a deal with the Secretary of the Navy."

Before the hearing began, the staff director told the SASC chairman that the deal was off on getting my professional opinion on the A-6F. The hearing went smoothly until Senator [Ted] Kennedy came in late. When the chairman recognized Senator Kennedy, the Senator started asking me questions about the A-6F, which I had to dance around. Then the staff director leaned across the Senator's table and told Kennedy that the A-6F would not die that day – and why the deal was off.

I'll give the Secretary credit. He was true to his word with General Kelley that he would get the Marines the two seat all-weather attack F/A-18. He supported the aircraft that I wanted and we did get the F/A-18D beginning in 1991.

The Navy Secretary stayed on as the SecNav for two years after I retired on September 1, 1984. Two weeks after he left office, the uniformed Navy cancelled the A-6F program. It was said that about 500 million dollars had been spent on the A-6F development before it was canceled, which matched the 500 million dollar comment that an admiral had told me over two years earlier when he said to me, "Bill, why don't you relax and not worry about the A-6F. We'll let the Secretary spend about 500 million on that aircraft, and then we will cancel it immediately when he leaves the secretariat." And that is what the uniformed Navy did. For the Marines the F/A-18D turned out to be an excellent aircraft, and it flew combat in Desert Storm and the latest war in Afghanistan and Iraq.

One of the things that SecNav and I agreed on in 1984 was the need for a night attack system in the F/A-18 and AV-8B. I will tell you about that. The only shortfall on what I wanted for the F/A-18D was the radar capability that I wanted to see in the aircraft. The F/A-18D had the APG-73 which is an excellent air-to-air and air-to-ground radar, but the version in the D did not have the capabilities that I wanted to see. Those capabilities are available in what is called Expand 4 and Expand 5 for the APG-73, which gives a blow-up of the radar imagery. Then there is the new radar with a new antenna technology, that should have gone into the 18D, but hasn't to date. The Navy is putting that new technology radar in their F/A-18E/F/G aircraft, in the long established program of taking care of the Navy first. That is another case of where the Navy has the funds to do for the Navy what they want to do, but they don't have the funds to do for the Marine Corps. We've talked about the N-8 system and how the Secretary of the Navy is supposed to provide funding to the Marines and the Navy for aircraft programs.

Dr. Allison: That radar is called what?

General Fitch: AESA, it stands for the advanced electronically scanned antenna. But to the SecNav's credit back in 1984, the Marines did get the F/A-18D about six years later. If I had not taken a stand on the A-6F, and it was a lonely stand, then most likely the A6F would have been fielded around 1988 and Marines would still be flying the A-6F Intruder today. This gets back to having the courage of your convictions and standing up for what you think is the right thing to do, regardless of the impact on your personal career. Harry Blot did that when he was given an ultimatum by General Krulak on the three star – two star issue for the head of Marine Aviation. Harry proved to be right, as evidenced by eleven years later the head of Marine Aviation is still a three star general.

Regarding the A-6F, I did the right thing because I knew what the right thing to do would be, and I knew how to kill the program. It was easy for two fine officers, Dave Seder and Charlie Carr to convince me that it was time for the A-6 Intruder to die. What I didn't anticipate was that the SecNav would capitulate the day before my hearing with the SASC, and make the deal with General Kelley on getting the Marines what became the F/A-18D. Looking back, I am proud that I did what I did when I was head of Marine Aviation, and especially in regard to the A-6F, even though it meant shortening my career. In regard to night attack for the Hornet and Harriers, I will tell you later how the night attack system came about.

Dr. Allison: Did you have anything to do with that ATARS [advanced tactical aerial reconnaissance] system they put in it [F/A-18D] later on?

General Fitch: No. I never had anything to do on ATARS.

Dr. Allison: On a different subject, in current news we see some Marine generals speaking out against the war, Tony Zinni is one....

General Fitch: I think Tony Zinni is one of the brightest thinkers we've had in the Marine Corps, indeed the military services in a long time.

Dr. Allison: I give him credit for coming out against the war, long before the war in Iraq began.

General Fitch: Yes. Of course having been the CINC at Central Command, he knew that region of Iraq, Israel, Afghanistan, Turkey, Iran, the whole region a lot better than Franks did. I have to consider Franks to be a political general, since he caved on every issue with Rumsfeld. But Tony Zinni was of a different cut, and he knew what he was talking about relative to the Middle East.

It seems that they had skipped a lot of steps when they got the invasion going into Iraq. You would have thought that they would have brought in Tony Zinni and listened to his thoughts on Iraq, Afghanistan, and the entire region to include Iran. I would say that one of the greatest oversights in the Iraq war was, the failure of Franks, Rumsfeld and the State Department to plan on any process to provide work for the adults left jobless by the war. As a result there were thousands of men (and some women) with no jobs to work at, with most of them sitting around all day and all night, with nothing to do, so they would decide to go out and blow-up some of the people who had a slightly different religion. To this day, after the invasion in 2003, Iraq has a terrible jobless rate. Unemployment is rife, as I understand it. There are lots of idle hands to work on the IEDs.

Zinni had retired a couple of years earlier and been relieved by Franks. As seen on TV and in the newspapers, Zinni was working for the State Department at the time. He was a good friend of Colin Powell and he was working with Powell on various and sundry things like the Israel/Palestine situation. He had met with Arafat and other key people in the region. Zinni was a great reservoir of knowledge on the Middle East.

Colin Powell, as I understand it, had absolutely no enthusiasm for our going into Iraq; absolutely none. I feel sure that he was talking the Iraq issue with Zinni. The book, titled *Fiasco* and written by Thomas Ricks is very interesting as to what happened and didn't happen in gathering the intelligence for the Iraq War and the occupation of Iraq. As we know well, the CIA has taken some pretty heavy hits on their poor intelligence and there's no question that the analysts and others like George Tenet made some very big mistakes in their assessments on Iraq. Tenet did so poorly with the CIA analysis that President Bush gave him the Presidential Medal of Freedom, along with giving it to Tommy Franks and Paul Bremer. The Presidential Medal of Freedom has taken on the appearance of being a booby prize. But the head of CIA made some serious mistakes, and to that there's no question. But this book, *Fiasco*, brings out that in many, many instances the various and sundry intelligence agencies would come up with these badly structured estimates. They would have been well served to have listened to Tony Zinni. Another good book that gives a lot of insight into the Iraq war is Bob Woodward's *State of Denial*.

Dr. Allison: Okay Sir. We're kind of getting off track here--what you did with the A-6F characterized leadership at the high level.

General Fitch: Well it's very simple. If you see somebody driving you down a road that you know you shouldn't go down, from your professional judgment, then you've got to stand up and say, "Sir, I can't support you on that, and here is my resignation." You might wind up retiring long before you otherwise would have, but at least you don't have any trouble shaving in the morning.

Dr. Allison: Were there any other technological issues; technologies coming in that you remember being . . . ?

General Fitch: Well yes, the big one was tilt rotor that became the MV-22. The F/A-18 at the time was doing well, as was the AV-8B. In 1982 the F/A-18A squadrons were building up, and Colonel

Don Bergman was the air group commander. Don did a superb job with the Hornet build up at El Toro. Then there is the night attack capability for the Hornet and the Harrier that I said I would talk about. I'll talk about the tilt rotor first, and then I will tell you about going to Great Britain, to fly the Hawker Hunter at Farnborough. That Hunter aircraft had the RAF/RN night attack system in it, which combined the use of the Cats Eye night vision goggles (NVG) with a high definition look down FLIR display.

In roughly the October or November timeframe of 1982 the Army decided they'd bail out of the tilt rotor. At that time the tilt rotor was pretty much just a paper airplane. In late 1982, Bell had the XV-15 which they used for demonstration flights for tilt rotor. In late 1982 the Army had decided that, no, they were not going to do the tilt rotor, even though at the time they were the lead service. They decided that they would go for upgraded CH-47s. And again, I'll give the Navy Secretary his due credit in 1982. He was in some of those tilt rotor meetings and he said, "We'll take over the tilt rotor program and we will develop it in the Navy Department".

At that time I had an action officer in APW who was my tilt rotor action officer, and today he's Assistant Commandant of the Marine Corps; Bob Magnus. I had three officers on my staff in 1982-84 that some years later became the ACMC. They were Bill Nyland, Bob Magnus and Brigadier General Jack Dailey was my deputy when I was DC/S Aviation. Jack would go on to be a four star general and the ACMC when Al Gray was the CMC. Bob Magnus has now been the ACMC and a four star since September 2005, and chances are good that when he is relieved at some future date, another Marine officer, Major John Castellaw, who worked on my aviation staff in 1984, and who now is Lieutenant General John "Glad" Castellaw, might well replace him. When you count the members of my 1982-84 staff that made general, it is an impressive number – with Jack Dailey, Bill Nyland and Bob Magnus becoming four star generals and the Assistant Commandant of the Marine Corps (ACMC). There is a good chance that Castellaw might become the ACMC next year. I think it totals about 15 or 20 generals that came out of the staff I had back in 1982-84. Jeff Howell was one of those.

Jack Dailey retired about 12 or so years ago as ACMC, and he is currently the head of the Air and Space Museum in Washington and the Air and Space Museum at Dulles Airport. He has been running those two museums about seven or eight years.

And we finally signed the requirement [for the tilt rotor], and as I remember it, I signed off on the requirement, oh, probably early '83; that was my sign off for the operational requirement for the tilt rotor. Then we started the process where the Navy Department was funding it. The program went along pretty well until about 1989 I guess, maybe '90, and then they started having those accidents. It was also in the time period that then Defense Secretary [Dick] Cheney tried to cancel the program, and to his surprise, he found that it is very difficult to cancel a Marine program if the Marines and the Congress disagree.

The best thing that happened to the program was that Secretary Cheney cancelled it. It sounds crazy but that's the best thing that happened to the program – that seems like a strange statement but it is true. The MV-22 program was restructured as a result of Cheney's attempt to cancel it. That Cheney cancellation happened about 1989, but the Congress, with encouragement from the Marines, kept the program going. He cancelled the program but as I understand it, SecDef Cheney later said he didn't realize he couldn't cancel a Marine program . . .

Dr. Allison: [Laughter].

General Fitch: Someone said that Cheney said that and I guess it's true because the Congress was supporting the program. Bell and Boeing had not put forth their best effort on the MV-22 in the 80s, and this restructuring of the program was very fortunate. There was essentially a restart of the program in the early 1990s and as a result of that, changes were made to the aircraft, and those changes made the MV-22 a much better aircraft. Now it is considered to be an absolutely superb airplane, but on the downside it has taken a very long time to bring the MV-22 to its IOC. So actually it was best that Cheney cancelled it and that we started restructuring the program to yield a better aircraft, an aircraft that was more capable and more reliable. At the same time, the Bell and Boeing people, along with NavAir, started paying more attention to logistics. This aircraft has now been in development for about 24 years if you go back to late 1982.

Dr. Allison: What's the significance of the operational requirement that you signed?

General Fitch: Well for every aircraft or weapons system you've got to have an operational requirement. Aircraft are created around operational requirements.

Dr. Allison: When you say that's sort of the genesis of it, I mean you have the design out there.

General Fitch: Well you don't necessarily have the design when you write the operational requirement, but the requirement tells everyone what the aircraft should be able to do. The genesis was actually a little before that, but the events run closely together. Remember that it was late 1982 that the Army bailed out of the tilt rotor program. Regarding that bailout by the Army, now that the Marines are near IOC of the MV-22, I as do many others, expect the Army to come back

into the program. With the capabilities of the MV-22, plus with all the development costs already paid, many of us are confident that the Army will not sit still and not procure an aircraft that will fly twice as fast and twice as far with twice the payload of the Army CH-47.

The operational requirement, in the case of an aircraft like the MV-22, stipulates what the aircraft should be capable of doing. All kinds of individual requirements make up an operational requirement, like maximum speed, maximum altitude, maximum range without aerial refueling, cockpit pressurization, troop cabin pressurization, defensive systems, armament, internal payload, external lift capability in the case of rotary wing, shipboard suitability, etc. Overall the aircraft has to be capable of doing all the things spelled out in the operational requirement. From the operational requirement flows the specifications for an aircraft. The specifications are developed by an agency such as Naval Air Systems Command. Then you have to have a management structure both in the Naval Air Systems Command and at the contractors, and most importantly, you have to have the funding for the program.

Dr. Allison: Who were some key people that helped keep the tilt rotor alive in the beginning?

General Fitch: When I came in as DC/S Aviation, I was very impressed with the interest of Dr. Hans Mark in the tilt rotor program. I had probably been in the job for six or eight months and Dr. Mark wanted to come see me. He was a former administrator of NASA, plus being a former Undersecretary of the Air Force and then I believe that he had been Secretary of the Air Force. The last I heard of him, I believe he was at the University of Texas – or some other university in Texas.

But Doctor Mark would come see me about every six months because he was absolutely convinced that tilt rotor was the way to go. After his being Secretary of the Air Force, he had no qualms at all about coming to see me, just to deliver a message and say, "You keep that tilt rotor program on track because the country needs it." And he's been proven to be right because it's going to be a great airplane. I believe it was this year or last year that the MV-22 went to the Paris Air Show, and put on many flight demonstrations. As I recall they sent two aircraft over; they flew the two Ospreys across the Atlantic.

Dr. Allison: TransLant.

General Fitch: They ran into some icing near Iceland, which made it a little questionable about one of the engines. So the one aircraft with icing went into Iceland and they had a support aircraft with

them; a KC-130, I think it was a KC-130. They changed the engine in a matter of hours and they probably weren't in Keflavik 24 hours before they were on their way again. They wound up getting to Paris about 24 hours late. But then they did all the demos and the air shows and the V-22s did every commitment; 100 percent of all demos scheduled for the V-22 while there. And there were other aircraft that would go down and miss their demos and so forth but the MV-22 was the only one that did not miss a single demo during the last Paris Air Show. And then they flew them back across the Atlantic and I guess they're back down at New River now. And those were some of the earlier airplanes that they took over there.

But again, back to Hans Mark. He knew what he was talking about when he said, "That's going to be a great airplane." But it also tells you how long it takes now to develop an aircraft. For example the Joint Strike Fighter program was started around 1994 or 1995 with the technology demonstration aircraft. Then the JSF program moved into development with the selection of Lockheed Martin as the prime contractor for the F-35.

As I understand it the Marine F-35B will be the first joint strike fighter to reach initial operating capability [IOC], and that will be in 2012 -- about 17 years after the program started. That IOC for the F-35B is contingent on the program staying on schedule. The Marine IOC for F-35B was slipped from 2010 to 2012 due to shortfalls in Navy Department funding. I am sure that the F-35 will be as successful as a strike fighter as the MV-22 has been successful as a rotary wing.

Dr. Allison: Of course it's a controversial airplane.

General Fitch: Well in a sense it is controversial. Of course success has a thousand fathers, and the fathers for the MV-22 are quickly increasing in the numbers. I believe about 70 MV-22 aircraft have been delivered to date to MCAS New River. When the Marines go fully operational with the aircraft, and especially when they deploy for the first time, then a lot of the doubters on tilt rotor will say, "This is a great aircraft, and the days of the helicopter are numbered." As I understand it, the MV-22 squadron deploys on either an LHA or LHD, then when they get to the Persian Gulf, they fly into Iraq and operate within Iraq. But the options are many, and if need be, the MV-22s can go back aboard ship.

It is my understanding that they will take a whole squadron; go by amphib ship. The ships will have the option of going through the Suez Canal or going around the Horn of Africa. My guess is they will probably go through the Med and the Suez Canal, since that would probably be an easier transit than going around the Horn of Africa. I have heard that the seas get pretty rough down around the southern coast of South Africa. That reminds me that it has now been 53 years

526

since I was in 324 aboard USS *Saipan*, which was a CVL, and we went through the Suez Canal going north into the Med. For that we had sailed from Korean Waters south into the Indian Ocean, crossed the Indian Ocean into the Red Sea, and then Saipan went north through the canal.

Dr. Allison: In your post-Marine Corps career, were you able to stay involved with the Osprey?

General Fitch: After my retirement, I worked on the MV-22 program for about 12 years as a consultant to the Boeing Company.

Dr. Allison: Interesting that you were at the beginning of it, were there opponents to it within the Marine Corps or Navy at that point even?

General Fitch: There were some Marines that were not enthused about the tilt rotor, but it was a new concept, new technology, and it was a dramatic change. Even today in say some CH-46 squadrons, there are a few pilots who lament the demise of the CH-46. They will say some ridiculous things like I would rather fly a CH-46 than the MV-22. The ones who say that have never flown the MV-22. Once they fly the Osprey, they say it is a great aircraft, and they know that it is the only way to go. I would not be surprised if 20 years from now no one is developing a new helicopter for the military. The age of the tilt rotor is here.

It will all move to the tilt rotor approach because it's going to be the best way to do it. In a practical sense, a helicopter will not fly faster than about 190 knots, due to rotor tip speed. When commercial aviation moves into the tilt rotor, they won't need those big airfields in order to fly passengers from Point "A" to Point "B." With a 300 knot cruise speed, a tilt rotor commercial aircraft can go just about anywhere within 1,000 miles in three or four hours. And so you can have just a pad for tilt rotor takeoffs and landings, with a small terminal and tower. The demand for large airports will decrease. That was the original concept, to first have the military airplane and prove that the technology works, and then down the road they'd do a civilian airplane.

Dr. Allison: It won't come any too soon for the Marine Corps.

General Fitch: The Marine Corps is looking at a tilt rotor heavy lift aircraft to eventually replace the CH-53. The interim replacement for the CH-53E will be the CH-53K. The Marines need the 53K due to the wear and tear on Marine CH-53E assets in the war, to include the losses and the

extensive over-flying of flight hours. Rotary wing assets have been flying 90 to 100 hours a month per aircraft when their logistics support has been gauged on 25 or so hours a month per aircraft.

Dr. Allison: Have you heard of any plans for a tilt rotor gunship of sorts, possibly for the escort mission?

General Fitch: A tilt rotor gunship would be a good thing to have . . . but of course you can escort MV-22s with F-18s and Harriers or Joint Strike Fighters. You just do the escort patterns a little bit differently. In other words in any kind of rotary wing escort you don't want to be just sitting there flying in formation with the escorted aircraft. With higher speed aircraft such as the F-35B, you simply fly a different race track pattern during the escort of a tilt rotor aircraft.

You can have a 150 to 200 knot speed differential and still do escort with those higher speed aircraft. And then of course the thing about the V-22 is it will go so high that you don't necessarily always need an escort, because the enemy would need an awfully good missile; surface-to-air missile, or they'd have to have some fighters in order to create a threat to you. The shoulder launch missiles for example, they're good up to about ten thousand feet and that's about it.

Dr. Allison: Yes, it's an exciting time to be part of that.

General Fitch: Well it's just remarkable how well the MV-22 is turning out, because with all the emphasis on reliability and logistics support, those MV-22 aircraft are proving to be operationally ready a very high percentage of the time.

Dr. Allison: Did you ever get a chance to fly the XV-15 yourself?

General Fitch: Yes I did, I flew the XV-15 about a month after I took over as DC/S Aviation. I flew it in late summer of 1982. In fact when they brought it out I was somewhere out West on a trip. As best I recall I was attending the Tailhook reunion in Las Vegas in August of '82, and Bell brought it out there for me to fly. In fact I've got a picture downstairs after the flight. But the XV-15 was a very simple concept. It worked very well, and it was very easy to fly. It was about the same as flying a Huey. Very straightforward; there were some engine limitations but not severe and most of it was connected to hot weather and putting on power. You know if you're going into a

zone and you start putting on too much power you could have a problem. But no, it was a very nice airplane and it was a proof of the pudding for the tilt rotor concept.

Dr. Allison: You had mentioned about night attack systems, would you want to comment on that?

General Fitch: In early December 1983, I went to UK with Lieutenant Colonel Terry Mattke and Lieutenant Colonel Joe Anderson accompanying me. At Farnborough we were briefed on the RAF and Royal Navy night attack system that was in development. The system was simple, in that a cockpit display of wide field of view [FOV] look down FLIR was integrated with night vision goggles, the Cats Eye, to provide a remarkable capability to essentially turn night into day. My having flown a lot of night combat missions in the A-6 Intruder, made me very enthused about the prospects of putting the RAF/RN system into the F/A-18 and the AV-8B.

The three of us, Mattke, Anderson and myself were fitted with RAF helmets, which turned out to be the best flight helmet I had ever used, and that night at about 2100 I took off from Farnborough flying the Hunter. RAF Squadron Leader Taggart, the project test pilot, flew the left seat and I flew the right seat. After engine start he gave me the controls for the taxi and takeoff, the flight of about an hour, and the landing. Farnborough was completely blacked out – zero lights on the airfield.

After takeoff I climbed to about three thousand feet, which put me at the base of a cloud cover. About five minutes into the flight I flew across a mountain that was about 2800 feet high, which gave me about a 200 foot slot to fly through. Once on the other side, up towards Birmingham, where the terrain was relatively flat, I dropped down to about a hundred feet off of the deck and did some high g turns while using the night vision goggles and the FLIR display to fly the aircraft, just as if it were daylight. It was remarkably easy to fly the aircraft that close to the ground, even while turning at 4 and 5 g, and the FLIR enhanced the comfort level provided by the NVGs. I had flown NVGs at night in helicopters when I was CG 1st MAW, and the combination of the Cats Eye NVG with the augmenting by the wide FOV [field of view] FLIR display, presented a very low workload at 100 feet above ground level, while maneuvering the aircraft at steep bank angles. Terry Mattke and Joe Anderson flew their flights in the Hunter with Taggart later that night, with Joe finishing up around 3 AM.

When we returned to Washington, I had Terry Mattke arrange for Squadron Leader Taggart to come to Washington to brief the Secretary of the Navy and the Assistant SecNav for RD&A. That briefing and discussion went well, and we told the Secretary that we were going to set up a demonstration program of the night attack system, essentially the same as we had flown at Farnborough back in December 1983.

With Terry Mattke doing the setup, we then arranged for an A-7 aircraft to be used for a demonstration effort at China Lake that we called "Cheap Night." Terry Mattke even gathered up about \$500,000 from DDR&E to pay for modifying the A-7 and conducting the China Lake demo flights. The project pilot for Cheap Night was USN Commander Mickey Taylor.

The RAF provided us with the Cats Eye NVGs and the wide FOV FLIR system that we needed for the project. Then we scheduled various admirals and generals to come to China Lake and to fly the project aircraft from the front cockpit, with Commander Taylor in the rear seat. Around May or June 1984 the SecNav flew in the Cheap Night A-7 at China Lake. All who participated had the same reaction that I had at Farnborough when I flew the Hunter – the NVG and FLIR combination turned night into day. In the summer of 1984 the SecNav agreed that the British night attack system would go into both the F/A-18 and theAV-8B; that all came to pass in short order. I give credit to Terry Mattke for being the driving force behind getting the night attack system into the F/A-18 and AV-8B. As a lieutenant colonel he did a remarkable job of getting me interested in the British system, he arranged for our trip to Farnborough in December 1983, and he took the necessary actions to get the A-7 aircraft and the funding for Cheap Night. Terry Mattke was a remarkable action officer, and later as a colonel he would become the Marine Aide to the Vice President of the United States, George Herbert Walker Bush.

Dr. Allison: Do you have any other comments on programs or acquisitions?

General Fitch. To give you an idea of how some contracts were awarded, I will tell you about a study that I was told I was sponsoring. This happened about half way through my tour heading up Marine Aviation.

One day I had a telephone call from Phil DePoy, president of the Center for Naval Analysis-CNA. Phil and I had been together in VX-5 when we were both a lot younger in the 1958-1959 timeframe. At the time I had Marine Aviation and we had been friends for about 25 years. That day Phil said to me "I see that you (Fitch) are sponsoring a study on how to select Harrier pilots." I respond with the comment that, "I am not sponsoring any study on how to select Harrier pilots. I know how to do that." Phil then went on, saying, "Your office is shown as the sponsor for the study." Phil went on, "Our contracting department at CNA is supposed to process the study contract." Then Phil added, "I thought that you would be surprised to find that you are sponsoring a study like that." I told Phil, "I am surprised to hear that I am supposed to be the sponsor of any study. I told him I would talk to Gene Russell and get back to him."

I then told my EA that I wanted to see Brigadier General Gene Russell, who was heading up the HQMC Research, Development and Studies division, the division I had been head of about three years earlier, before we moved to Okinawa. Gene Russell had been my Assistant Wing Commander for a year when I was CG of 1st MAW. He and I had also worked together on the sortie rate validation test about ten years earlier.

General Russell came down to my office. I said, "General I understand that I am supposed to be the sponsor for a study that will tell the Marine Corps how to select Harrier pilots." I said, "I didn't know that I was a sponsor of any study." Then I said, "Where did this study come from?" Russell said, "It was directed by Secretary [Melvyn R.] Paisley's office (the Assistant Secretary of the Navy for Research, Development and Acquisition)" I asked Russell, "What is the amount of the study?" He said, "\$500,000." I then said, "Who selected the contractor?" Russell replied, "Secretary Paisley's office told me who the contractor would be." I then told Russell "Cancel that study. I went on to say that I was not going to sponsor any study on how to select Harrier pilots."

I then called Phil DePoy at CNA and told him, "Phil my thanks for the heads up. I've told Gene Russell to cancel that study, so you cancel any contracting work. If Paisley's office says anything, tell them that I said the study is canceled." Phil replied, "I figured that was what you would do."

It is relevant that when I first arrived back in Washington in the summer of 1982, when I was to take Marine Aviation, I had made a courtesy call on the Assistant Secretary of the Navy, RD&A, Melvyn Paisley. He was hand picked to be the primary advisor to the Navy Secretary for all research, development and acquisition, and he would serve in that capacity for about six years. I had worked in that same RD&A office from 1963 to 1965, when I was a major, and when I was the Marine Corps aide first to Dr. Wakelin and later Dr. Morse.

All of the Assistant Secretaries that I had known were always fine gentlemen. Dave Mann was also a perfect example of a gentleman. With Paisley I was not impressed with him at all. Melvyn Paisley did not impress me as someone that I would like to work with. I thought that it was unfortunate that I would have to interface with him for a little over two years.

After talking with Paisley that day for about 10 or 15 minutes, I was finished with my courtesy call and I left his office. I was somewhat amazed at some of Paisley's comments during my brief stay in his office. Those comments by Paisley were along the line that he would make the rules and we would follow the rules because they would be Secretary's rules. On my way to my

car I said to myself, "I would not like to buy a used car from that guy." My assessment of Paisley would prove to be accurate.

Dr. Allison: You talked about the TPS-59 radar last time, any other comments on that?

General Fitch: No, not really. Over a period of many years we have shown that the Marine air command and control systems are fully expeditionary, and they have demonstrated great flexibility in the field during numerous contingencies.

Dr. Allison: What are your perspectives on the future of Marine air?

General Fitch: Moving into the 21st century we have some new systems coming along which will totally modernize command and control both on the groundside for the divisions and regiments and for Marine Aviation. CAC2S [common aviation command and control system] is the basic system in development and it will be fielded soon. Over the past 22 years I have spent considerable time working on command and control [C2] systems. I am now well into my 23d year as a consultant to the Raytheon Company, and at age 78, I work full time. However, I work out of my home. Even though I feel that it is time for me to stop consulting and spend some time smelling the roses, Raytheon tells me that they want me to consult to them for at least three more years. If I do that, in three years I should be about 81 years old. That is rather old to still be working, but the work keeps the brain functioning pretty well.

CAC2S should be fielded in another year or so. The Marine Corps is leading the charge to get the CAC2S. It is quite probable that the Air Force will also use CAC2S. It would fit nicely with their employment of their "expeditionary air forces".

Dr. Allison: What's your perspective on UAVs [unmanned aerial vehicles] and especially UAVs for CAS?

General Fitch: Well I had a lot of reservations about UAVs a number of years ago. Now I am an advocate of the UAV, for the intelligence, surveillance, reconnaissance [ISR] role, and occasionally there is a strong argument for the UAV attacking a target with a Hellfire missile. However the ordnance payload of a UAV is extremely small – usually only one bullet (missile). The challenge with the UAV is to have the right command and control, and the correct allocation of air space, so that the fixed wing, rotary wing and UAVs do not try to occupy the same airspace at the same time. As I understand it, they have gotten the command and control fully established to keep the various types of air vehicles from colliding with each other.

But no, I'm really impressed with what UAVs are doing and I am impressed with the duration of flight for some of them. They are very good at taking out one target, and in future years their ordnance payload will increase. I am currently consulting to Raytheon on a UAV program.

The Israelis employ a lot of UAVs and do quite well with them. However, they recently had the unfortunate incident where they had properly targeted a building in southern Lebanon, since the Hamas was firing rockets from right next to this small building. But, what the Israelis didn't know was that there were a lot of civilians in the basement of the targeted building, adults and children, who were going to be killed when they bombed it. So the Hamas in Lebanon intentionally used civilians as shields, adults and children, to create an incident, because they knew the Israelis would retaliate against the missile firings.

Dr. Allison: What about for CAS--close air support?

General Fitch: Don't plan on a UAV being a significant close air support vehicle. A UAV is effective at taking out one fixed target. You can be very accurate with a UAV firing a single missile, but it usually has just one missile to fire – normally a Hellfire. Having just one "bullet" is not good for close air support as the Marines view CAS.

If you have more than one target or if it is not a fixed target, then the UAV is not that effective. The advantage of the UAV is the ISR mission. I am of the school that the UAVs will do well in coordinating a strike with imagery – and they can data link that imagery direct to a strike aircraft. I would not be enthused about close air support with UAVs. However I think there's a role they will play well with their sensors in controlling strike aircraft, and in the ISR role. And also regarding UAVs, they are very good for a surgical strike, where one "bullet" is enough.

The UAVs in the ISR role excel. As a rule no one knows they're up there. So the UAV can identify the target and it can transmit targeting information to a strike/fighter aircraft or a ground station. The trick is to keep the UAV and the strike/fighter separated in the sky.

They did come close to getting Bin Laden a few years ago, and it is unfortunate that they didn't get a kill on that maniac. Apparently the obstacle for that shot against Bin Laden was slow communications and the system being slow in getting a decision on the clearance to fire. In CAS you are normally working with a forward air controller either, on the ground or in the air and he is giving constant updates on what target or area is to be hit. Slow communications does not work in

a CAS situation. In that environment it helps to have a live pilot in the shooter aircraft. The UAV can play the shooter where there is one fixed target, and that target is easily defined. However in that case, if troops are close by, then there has to be solid communications link between the FAC and the UAV controller.

To date no one has been able to replace the human brain. In my view strike aircraft are going to be manned by pilots and other aircrew for an awfully long time. This is especially true where you're going to have aircraft dropping ordnance close to your own troops. In Vietnam I have personally dropped MK-82 bombs [500 pound] and napalm within a hundred meters of friendly troops, when those troops were in contact in dense terrain. There is no margin for error in those situations. When you are dropping live, high explosive, ordnance within a hundred or two hundred yards of your own troops, you cannot afford to have a breakdown in any of the communications. The Joint Strike Fighter, the F-35, is in my view not, repeat is not the last of the manned strike/fighters. With an IOC of the F-35B in 2012, you can anticipate that the JSF STOVL will still be in operational squadrons in 2042 and probably well beyond.

Dr. Allison: Just kind of back-tracking some; you had, during this time period, the Iranian hostage crisis and then you have the Grenada invasion when you were DC/S Air and the Beirut bombing, did that impact your job much at all?

General Fitch: No not really. During the Iranian hostage crisis that was mostly addressed on the Washington scene by the Commandant, General Barrow, and by PP&O. You also had the terrorist attack on the Marine barracks area in Lebanon during that time. General Kelley handled the bombing of the Beirut barracks where about 200 Marines were killed. Lieutenant General Keith Smith lost his son in that terrorist bombing. As you will recall, there were hearings on the hill regarding the Beirut bombing, where General Kelley as the CMC was testifying. Those hearings got a little testy for the Commandant.

The MEU in the Mediterranean Sea, which includes Lebanon, operationally came under the control of the Commander Sixth Fleet. Next in the MEU's chain of command was the CG Marine Forces Atlantic, then known as CG FMFLant. Generals at HQMC, including the Commandant, provide oversight of deployed units, but they are not in the chain of command until events for operational forces start working their way up to the Joint Chiefs of Staff and where there is an interface with the Congress.

Dr. Allison: You're not an operational commander, are you?

534

General Fitch: A general at HQMC is not an operational commander. From the standpoint of responsibility, all of those incidents with a deployed Marine unit come underneath you from the standpoint of being under your cognizance – but they are not under your command. The translation of that is that at HQMC you are involved but not directly involved. For example, aircraft accidents and incidents, and combat losses of aircraft, these all fall into your role with aviation safety and operational losses, at the HQMC level, but you are not in the chain of command. The former DC/S Aviation and the current Deputy Commandant for Aviation will have to tell the CMC what happened in an accident or incident with aircraft, to include combat losses. But that information comes to the DCMC Aviation from the field, through other commanders. The DCMC for Aviation would also keep track of the overall aviation safety record for the entire Marine Corps.

But no, the Grenada thing, that was so small. That was not a very big operation really. As best I recall it lasted about two weeks at most.

Dr. Allison: It's impact was more social, in what it did for attitudes, it restored a lot of good feelings toward the military and patriotism, you know after Vietnam and after Carter.

General Fitch: That wasn't very soon after. Grenada would qualify with the 'Banana Wars' of 80 to 90 years ago. The bad guys in Grenada were mostly of the bandit variety. You had that evacuation from South Vietnam about six years before Reagan became president. That was around the summer of '75? Gerald Ford was the president then.

Dr. Allison: Yes. Where were you, let's see, '75?

General Fitch: In 1975 I was the G-3 of the 2d Marine Aircraft Wing and that summer, around July, I left Cherry Point to go to Washington to be EA to General Tom Miller. Tom Miller had played a role in the Saigon evacuation when he was at FMFPac, just before he came to Washington to be DC/S Aviation. General Wilson was CG FMFPac for some of the time of the Saigon evacuation, just before reporting to Washington to be the Commandant. Tom Miller was CG FMFPac from April 1975 to July 1975.

Dr. Allison: So any thoughts on the evacuation out of Vietnam and the end of the Vietnam War?

535

General Fitch: Well they did that just before Tom Miller came to town. They also had the *Mayaguez* incident during that timeframe of early summer 1975. Yes, for the situation at hand in South Vietnam, I thought it was, well done under the circumstances. The evacuation was well executed under very bad conditions. It was a terrible national calamity and a terrible embarrassment for the United States to have lost that war.

And now that we're looking at the possibility of civil war in Iraq and some are saying it's already a civil war but it hasn't been formalized. But you just have to wonder because when you were doing Vietnam, here was the ocean real close and you didn't have that many people that needed to be evacuated in comparison to the situation today. Now you're talking what, 130,000 troops – maybe 150,000 troops plus a lot of civilians – Americans and Iraqi – who have to be in a withdrawal and brought out if there is an evacuation – a withdrawal – or whatever it might be called.

You've got all these contractor people and all these civilians doing things, and I believe the count is like 190,000 of them. If they get into a civil war in Iraq, which they may already be in, how do you evacuate when you are that far inland? Maybe you go out from Baghdad to Turkey, since the Kurdish area is fairly pacified and stable. However if it happens in Iraq, they have to have an orderly withdrawal if that comes to pass. When or if the decision is made to withdraw or evacuate our military and many civilians out of Iraq, then you are a very long way from the sea. I guess the key lesson for both Vietnam and Iraq is, "Do not get yourself into wars that you do not know how to get yourself out of." You will remember that Vice President Cheney said during the Iraq invasion that the Iraqi people will welcome the coalition forces with rose petals in the streets. Instead they welcomed the coalition forces with hand grenades and IEDs. In Iraq the United States and its allies failed to use overwhelming force.

And so the withdrawal from Iraq is something we have to hope doesn't come to pass as an evacuation. SecDef Gates indicates that they are planning for various contingencies within Iraq, to include a withdrawal. Let's hope they do it right when the time comes.

Dr. Allison: What were your thoughts on Iraq as we went in?

General Fitch: Going back to the genesis of Iraq and General Franks and Secretary Rumsfeld, it's unfortunate they didn't think about what would happen after the invasion itself was successful. Franks was not a good general. He should have stood up to Rumsfeld and laid out the troop strength required to have that overwhelming force. Tony Zinni brings out a lot of factors that the Defense Department and Franks should have thought about for consolidating a victory, but they

didn't think, and it seems like it was amateur hour at OSD with Franks participating in the amateur hour. General Franks should have told the Secretary of Defense, Rumsfeld, what it would take in personnel and combat power to consolidate a victory. He didn't do that. It is relevant that Franks "got out Dodge" quickly after Baghdad fell. I think that he knew what was coming with the insurgency. He retired and wrote a book!

Just before the invasion of Iraq, Colin Powell was at the White House having dinner with President Bush and after dinner they go down to the Oval Office. They start talking about Iraq, and Powell, who was Secretary of State at the time, tells the President that, "If you go ahead with this I have to tell you that all of a sudden you're going to become the daddy to about 24 million people.

Secretary of State Powell also told the President about the Pottery Barn rule, where "If you break it, you get to buy it." Speaking earlier on amateur hour, I recently heard that the Army has distributed 200,000 weapons, AK-47 and other arms, to the Iraqi people, with a value of several billion dollars, and no one knows where those weapons are.

Dr. Allison: What are your thoughts on jointness, and Goldwater/Nichols which came in about two years after you retired?

General Fitch: Well Goldwater had been doing things like that for a long time. When General Miller had Marine Aviation, Goldwater had his four air forces hearing.

Dr. Allison: Trying to unify the services?

General Fitch: Yes or maybe cut back on Marine TacAir. Goldwater was a reserve major general in the USAF. It took him some time to understand that Naval Aviation is just one air force. It has the same aircraft procurement system, the same supply system, the same funding system, we operate off the same aircraft carriers, we have the same pilot training system, and we have just one Navy Secretary that is also the Secretary of the Marine Corps.

In a sense it's good. In fact that would have been nice if we could have had the same degree of cooperation before we became so joint as we have had since. But there are certain drawbacks to jointness.

General Miller likes to talk about when the four air forces was a big issue, and how they turned Goldwater around on that. My guess is that hearing was in 1976 or 1977, maybe '78. In the 1982-84 period I had not seen anything about Goldwater-Nichols. It is fair to say that Goldwater was a very thoughtful Senator, and he wanted to reduce the competition between the services. But

in the time period I headed Aviation, I heard nothing about Senator Goldwater and Marine Aviation. Legislative Affairs at HQMC would be working that problem. General Miller testifying on four air forces would have taken place in the late seventies. As I recall Tom retired in June 1979.

Dr. Allison: As you were leading Marine Aviation I believe the first F-18s were coming in; VMF-314 and several of the West Coast squadrons were getting them.

General Fitch: I don't recall the squadrons but they were at El Toro and I believe it was MAG-11.

Dr. Allison: Were you happy with the progress?

General Fitch: MAG-11 did great. Major General Clay Comfort was CG of the 3d Marine Aircraft Wing at the time and he gave Colonel Don Bergman high marks as a group commander. It was General Comfort's job as the wing CG to make sure that the F/A-18 introduction went well. He did that. And of course the F-18, it's a much later generation airplane than the Marines had been flying with the F-4 Phantom. The F/A-18 was the first Marine strike/fighter that had a weapons delivery system that took out all the guesswork of weapons delivery. The first Hornet had an APG-65 radar that was very reliable, a good inertial system, a good weapons computer, a good HUD, and a fine cockpit layout. I flew about half a dozen flights in the F/A-18 when I had Marine Aviation.

I never had the benefit of a F/A-18 ground school or flying a simulator. All my flights were in the F/A-18B with an instructor pilot in the rear cockpit. On about my fourth flight in the F/A-18, I did some high dive at the Yuma bombing range, and with six MK-76 bombs I had a 29-foot CEP with bomb releases at about 3,000 feet AGL. Since I had never seen the HUD bombing displays before, I was impressed with how much of the work the weapons delivery system did for the pilot. Phrased another way, I didn't really know what I was doing, but the Hornet and its systems made up for my lack of knowledge.

The ComOpTEvFor [Commander Operational Test and Evaluation Force] operational evaluation of the F/A-18 was an interesting briefing that took place probably in the fall of 1982. Dutch Schoultz and I were briefed on the OpEval and with the first cut of the briefing, the F/A-18 had failed operational test. Dutch and I questioned the logic of the failure. The CO of VX-5 said that the aircraft needed a new wing. We questioned why. He didn't have a good answer. Then in later weeks we attended further briefings by ComOpTEvFor on the F/A-18 OpEval. It was

remarkable how the briefing changed. With no changes to the aircraft, all of a sudden there was nothing wrong with the wing of the aircraft. We later found out that the CO of VX-5 had been under the impression that the SecNav wanted to cancel the aircraft. He was wrong.

And some look back and they say, "Well the first F-18s weren't that good." That is true in comparison to where the later Hornets like the F/A-18D were 15 years ago and where they are today. But back in 1982, now 25 years ago, the Hornet was a very impressive aircraft and a big step forward in technology. When I compared it to the F-4S Phantom I had been flying for the prior 20 years, or the A-6 Intruder that I had flown for the same time period, the F/A-18A Hornet was a large step forward in combat capability. It was very much a new generation of strike-fighter aircraft.

Dr. Allison: Good bombers.

General Fitch: They were superb bombers and superb fighters, and the APG-65 radar, gosh, back when the APG-65 was relatively new, that radar in the F-18 and its reliability was superb. They held up extremely well compared again to other radars. They were a different generation radar than was in the F-4. The F-18 program in the Marine Corps was extremely well handled. I believe it was all done in MAG-11 in that time period. That program was very well done start to finish and of course what's interesting is it's a brand new airplane and the Navy didn't want it at first. That was the same situation as happened in World War II, where the Marines were the first to fly the F4U Corsair in combat, since the Navy had concerns about the Corsair's carrier suitability.

The Navy always has top priority. It is all part and parcel in regard to the fantasy of the aircraft carrier. Politicians love aircraft carriers.

Dr. Allison: Many new ones. They usually go through the Navy.

General Fitch: But the Hornet program was pretty well supported, and they had a good program well underway. As I recall the Hornets were extremely safe and they had good leadership in the group and squadrons. Well it's kind of typical of what you expect these days which we didn't always have years ago, as far as good reliability and the built in safety factor. The F/A-18 Hornet has been an exceptionally good aircraft for the Marine Corps. John Weaver and Corky Lennox were early program managers for the F/A-18, and they did a solid job of running the program. Those two were the program manager for the Hornet when I was DC/S Aviation at HQMC. With that said, the F/A-18 will not operate on the LHA, LHD, FOB, or FARP. To get forward basing for

rapid response for CAS, you need STOVL. The F-18 did quite well. Its only drawback was that it did not have STOVL capability.

Dr. Allison: Interesting how well the Hornet has turned out, including the F/A-18D, and yet it seems from what you said earlier, we came very close to getting an updated A-6 instead, if it were not for you taking a stand against it.

General Fitch: The Department of the Navy spent about 500 million dollars on the A-6F program, because the program went on for about two years after I had retired. I can tell you how the Secretary [John Lehman] left office.

Dr. Allison: How he left office?

General Fitch: Yes, I will tell you about that but first for some background. In about May 1982 I left Okinawa and came back to Washington for a Deputy Secretary of Defense interview for becoming a three star. That interview was with Deputy Defense Secretary [Frank] Carlucci. When I walked into his office, he asked, "General, what is it that you are here for?" I said, "I am here for an interview for being promoted to lieutenant general." The Deputy SecDef then said, "Have you ever served in Washington before?" I replied, "This will be my fifth tour in Washington." He then said, "If this is your fifth tour in Washington, why are we having this interview?" Carlucci and I then talked briefly about his latest congressional hearing, and I left. The total time in his office was about five minutes, after my flying over 10,000 miles from Okinawa to get there. The next night I would fly from New York City back to Tokyo. It would turn out I had left Tokyo on Thursday Japan time, was in Washington Thursday night EDT, and Sunday afternoon Japan time I was back in Tokyo.

While I was in Washington that one day for the Carlucci interview, I met John Herrington who was Assistant SecNav for Manpower. His Marine, aide, a colonel, knew I was in town and asked me to come to the Pentagon to meet Secretary Herrington. The aide was setting up a Japan trip for his boss, and he wanted John Herrington to meet me. John wound up inviting me for dinner at his home that evening, and to meet his wife, Lois. That night I met John Lehman, the SecNav and his wife. Lehman was Herrington's next door neighbor. A month later John Herrington and his wife, Lois, would be on an official trip to Japan, and they would visit the Marines on Okinawa.

Margaret Marie and I met the Herringtons when they arrived in Tokyo and we then brought them down to Okinawa in a T-39. As I mentioned, John at the time was Assistant Secretary of the Navy for Manpower. While the Herringtons were on Okinawa they did the standard tours of the Marine units and Secretary Herrington listened to all the briefings presented. While he was there, I arranged for John to fly in the front seat of a Cobra helicopter, and he loved it. He had never flown in an attack helicopter. John was a former Marine officer.

Moving along, around late 1985 John Herrington left the Navy secretariat and went back to the White House where again he would be doing presidential appointments for President Reagan. He had been with President Reagan ever since Reagan's first run for governor of California. At Christmas of 1985, John invited the Fitches and a few other friends for a private tour of the first floor of the White House. Jim Webb (now US Senator Webb) and his family were in our small group of about eight, since Webb and Herrington were good friends. At the time Webb was Assistant Secretary of Defense for Reserve Affairs. That tour of the White House included walking into the oval office and the cabinet room. The West Wing was ablaze with half a dozen huge Christmas trees, all lighted and decorated, and there were many Christmas decorations in the other rooms of the first floor. It was a very memorable tour.

Now back to when the Secretary left office. It would be two years after I retired that the Secretary—John Lehman, stepped down. He would not step down on his own volition.

The Secretary was skiing at Vail or Aspen when one day John Herrington was at the Pentagon to see Secretary of Defense Weinberger. At the time Herrington was back in his old job in the White House as head of Reagan's presidential appointments. In a corridor near Weinberger's office he ran into Jim Webb. He asked Webb how things were going. Webb said that he was seeing Weinberger later that day to tell him that he was resigning from his office as Assistant Secretary of Defense for Reserve Affairs. Herrington asked, "When would you leave?" Webb gave him an answer. Herrington then said, "How would he like to be Secretary of the Navy. Webb said, "Yes, I would like to be Secretary of the Navy."

Herrington and Webb then talked with Casper Weinburger, and Webb told Weinburger that he was planning to resign from his job at Reserve Affairs. Herrington then brought up the potential for Jim Webb to be Secretary of the Navy. The Washington story was that Weinberger did not get along with his Navy secretary. While they were talking, the Secretary of Defense decided he needed a new Secretary of the Navy. The incumbent had been in office about six years. Weinburger also decided that the new Secretary of the Navy would be Jim Webb.

Secretary Weinburger then had a press release put out, while the Navy secretary was still skiing at Aspen or Vail, that named Jim Webb as being appointed by President Reagan to be the

541

new Secretary of the Navy. Senate confirmation of Jim Webb to be the Secretary of the Navy was quickly done. Jim Webb was now the Secretary of the Navy. It was unfortunate that he was not the SecNav while I was on active duty. My last tour in Washington would have been much different.

Mel Paisley left the Assistant SecNav RD&A office about two weeks before the Navy Secretary (Lehman) left office. When he left, Paisley arranged to keep all of his various security clearances and his access to classified programs. He set himself up as a consultant and I was told by someone who should have known, that his consultant contracts totaled in the neighborhood of \$1,250,000 to \$1,500,000 a year. Paisley's problem was that he would get only one year of his consulting, then he could spend his money on lawyer's fees.

About a year after he left the Pentagon, Mel Paisley was indicted, tried in criminal court, and he was convicted. As I understand it he went to prison for nearly five years. It would turn out that for the final months that he was Assistant Secretary of the Navy for RD&A, Paisley's phones at SecNav RD&A and his home had been tapped by the Navy's investigative service. With the changeover, and with the new Secretary of the Navy, Jim Webb was briefed on the investigation ongoing in regard to the former Assistant Secretary of the Navy RD&A, Melvyn Paisley.

There were several high flying consultants that were also caught up in the sting that got Paisley. Earlier I had mentioned Paisley's office and the \$500,000 study on selecting Harrier pilots –that Paisley had initiated – that I was supposed to be sponsor of – which I had never heard about, and which I canceled when Phil DePoy at CNA told me about the study. Those kinds of things were part of Paisley's problems with the law. Suffice it to say that there was a lot of illegal activity going on with Mel Paisley and his cohorts, with lots of money changing hands. Mel Paisley's prison term as I recall was specified as a sentence with no parole.

Paisley died a few years after he was released from prison. I was told that he was locked up for the full sentence of four years and eight months. At about that time a book was written on Paisley and his cohorts. As I recall the title of the book was, *How the Pentagon Was Sold*. Paisley is mentioned many times in the book.

Dr. Allison: As we draw the interview to a close, I would like to ask if you could mention some highlights looking back over your 34 years as a Marine officer and aviator.

General Fitch: This is from the career standpoint-- I sat down and made a few notes and looking back on the 34 years, what would be the highlights along the way.

Dr. Allison: That sounds great.

General Fitch: The first and most important thing in my life and my career was that I had the good fortune to marry Margaret Marie on August 7, 1955. That clearly was the highlight of my life and she has been a steadying influence on both my career and me for 52 years. She always has shown great interest in everything I have done. She has proven to be an indispensable helpmate in every way she could. The enthusiasm we shared in the Marine Corps gave us many years of satisfaction and reward. It gives us a great deal of pleasure to recall the many people we enjoyed knowing and the unforgettable experiences that we had along the way. Now we are well into our sixth decade of marriage – 52 years and counting.

The second event in my career of paramount importance would be Test Pilot School. My going through TPS, Class 19, beginning in August 1957, and then going on to VX-5 at China Lake for a two-year tour, was a defining moment in my career. Those three years, with TPS and VX-5, shaped the rest of my career. The multiple bomb rack development clearly set the stage for my assignments, for years to come. Even though I was only a captain at the time at TPS and VX-5, it established my reputation for the next 25 years. Of course I enjoyed flying the Corsair off the ship and the AD in my first two squadrons, and all the things I did then. While flying those two aircraft are not key events, if I could pick just one aircraft out of the 121 different models that I flew, I would say that the F4U-5 was the one aircraft I am most proud to have flown operationally. There are not many F4U pilots left.

But looking at key factors that happened in my career, going to Test Pilot School was probably the premier event in my entire career and the academics was the toughest to complete. Of course I didn't have the math, physics and aero-engineering type background, as did most of my classmates. But what was very fortunate at TPS was that the test flying that you did and the flight reports that you wrote were of equal status and weight with the academic portion for the school. I never excelled in the classroom academics, since most of my classmates had masters in aero engineering or electrical engineering. However, the majority of my flight test reports, of which there were many, usually gained an "A" from the flight test instructors. Flying test hops and writing test reports was 50% of your grade.

In that regard it is relevant that I have spent the last 23 years consulting full time to major defense companies that included Boeing and General Dynamics, and as I approach my 78th birthday, I am still consulting in my 24th year to the Raytheon Company. For Raytheon I consult on all kinds of programs from radars, infrared systems, precision guided munitions for shipboard and land based, UAVs, etc. You could say that there was a lot of on-the-job training along the

543

way, and I was fortunate to start in the research and development world 50 years ago when I went to Test Pilot School.

My June1950 degree from the University of Florida at Gainesville, my Bachelor of Science in Agriculture, did not impact my career – pro or con. During my college days (Sept 1947 to June 1950) at the University of Florida, I thought that I would be going into the Florida citrus business after graduation. The war in Korea started June 25, 1950, just three weeks after my graduation, and the Korean War changed all of my intentions about being a citrus grower. At the time I was 20 years old.

On September 2d, 1950, three months after my graduation from the University of Florida, I had been sworn in the Navy. I was all signed up as a Naval Aviation Cadet (NavCad) and accepted for flight school, with a report date of November 1, 1950 to NAS Pensacola for pre-flight. On April 9, 1952, I would receive my Marine Corps commission as a second lieutenant and my wings. My original four year obligation would be up November 1, 1954, and I gave the Marines 30 years beyond that.

Dr. Allison: How important was Vietnam, your combat experience to you and shaping your career?

General Fitch: I would highlight my tour in combat as another defining moment in my career. Flying those 310 A-6 Intruder and A-4 Skyhawk combat missions gave me a large reservoir of combat experience. That experience flying the night Rolling Thunders to Hanoi and Route Packages 5 and 6, the Tally Ho missions at night in Route Package 1, and doing CAS in South Vietnam, stood me in good stead both for the rest of my Marine career, and for the many years of defense consulting after I retired from the Marine Corps. I would put the combat flying on an equal level with my work on the multiple bomb racks while I was in VX-5. In fact it was a bit ironic, since on all my Vietnam combat missions in 1967-68, I flew the A-6 Intruder and the A-4 Skyhawk with bombs attached to the multiple ejector rack--MER, on which I held the basic patent.

Dr. Allison: You seemed to think the MAU command was especially important, equivalent to a group command.

General Fitch: I equate having the 32d Marine Expeditionary Unit (MEU) up near the top of my tours of duty. That tour with 32d MEU gave me some great experience doing amphibious landings, and I would say that there were few Marines on active duty in the 1970s and 1980s who had been the landing force commander for as many assault landings as I had. Chances are good

that no one surpassed the 18 amphibious landings that 32d MEU made 1973-74, and of which a dozen landings had an H Hour well before sunrise. The MEU experience was unique because it was employing the MAGTF from the sea, with both surface assault and air assault. A big plus to having the MEU was that it gave me a chance to fly helicopters, which I had never done before.

But again, that Med cruise in 1973-74 turned out extremely well for 32d MEU, because we didn't dent an airplane or injure a Marine the entire time that we were operating in the Mediterranean -- for like eight months.

I have long believed that the night assault is the best way to land on a hostile shore. In 1976-77 when I was CG 9th MEB, I had a hard time convincing the then Commandant of the South Korean Marines that our amphibious assault for Team Spirit should have an H-Hour of 0400, about an hour before sunrise. But I finally convinced him. After that he said, "The only way to land is at night."

Dr. Allison: Squadron command seems to be a favorite with lots of people.

General Fitch: Let me say that a squadron command was a fun assignment. I look at squadron command as an excellent experience but also my having an awfully good time running the squadron. If you picked a point in time when you said, "What and when did you really enjoy it most what you were doing." it would be as a squadron commander. So I had that experience twice, first with VMA (AW)-225 when I was a major and then with 533 in Vietnam when I was a lieutenant colonel.

Of my awards as a Marine, I put the Silver Star at the top, for a low level night strike against a target in Hanoi. I put the Navy Distinguished Service Medal (I think that is what you call it) at the bottom, because the DSM is really nothing but the admiral's and generals "good conduct medal." It is fair to say that nearly every general and admiral gets a DSM when he or she retires. Some admirals get six or more DSMs in their career, with one for every assignment they have from one star on. I put my Legion of Merit as important to me, because I earned the LOM in Vietnam as a lieutenant colonel. Medals are deceiving. As I see it, either you have been in combat or you haven't. It is important to have been there, regardless of the medals you wear.

I put being the Executive Assistant to General Tom Miller as one of those career highlights. The reasons are two fold, in that being EA gave me an excellent insight into how the office of DC/S Aviation operated on a daily basis along with knowing the key aviation programs and issues. It was also while I was the EA that I came up with the unit deployment for six months scheme. I was there when I was selected for brigadier general. Tom Miller was very important to my making brigadier general, because I don't think he left a stone unturned when it came to writing supportive fitness reports to make sure that my chances would be very good. [chuckle] .

Being Assistant Wing Commander at the 1st Marine Aircraft Wing as a brigadier was very important, since not only did I learn from Joe Koler, but I had the opportunity to command 9th MEB for the exercise, Team Spirit. Then when I came back to HQMC in 1977 as a one star, General Wilson gave me a two star job running R&D.

Dr. Allison: Interesting that you don't consider the job you had as a three-star a favorite.

General Fitch: I did not put being a three star general as one of the key events or duty tours during my career. The environment within the Department of the Navy had been so politicized in the Navy Secretariat, where the Secretary of the Navy dealt in a lot of minutia that he should have steered clear of, that it was a disappointing assignment. A measure would be, two former CNOs did not get along with the Secretary, and they were Tom Hayward and Carl Trost. Carl had some interesting things to say about his association with that SecNav, which were published in the *Washington Post* and I suppose other newspapers.

Three notable experiences were getting the British night attack system going on the AV-8B and the F/A-18, then there was my taking a stand against the A-6F, and finally helping make the F/A-18D a reality. The Secretary's push for the A-6F was an example, where neither the Navy nor the Marine Corps wanted the aircraft, but the Secretary of the Navy spent hundreds of millions of dollars on the A6F -- and then it was promptly cancelled when he left office. The downer on that was that cancellation of the A-6F was several years late. While I enjoyed working for General Barrow, a great Marine and a great gentleman, it was not a good time to be a lieutenant general in the Marine Corps.

Dr. Allison: Any one key event, a turning point?

General Fitch: All these key events play together, and there were very few negatives in my career. The key to the whole story over a 34-year period, is that if you look at what did happen as compared to what probably would not have happened, the most significant of all key events was my going to Test Pilot School and then on to VX-5.

Dr. Allison: Interesting; that's interesting sir.

General Fitch: Fred, I appreciate that. You probably won't find many three star generals who say it was a bad time to be a three star, but in my case it was a bad time. Back when we used to eat lunch in the Commandant's dining room, even the Commandant used to joke about the Navy Secretary's political aspirations and his monumental ego. Some of us would say we thought that the Navy Secretary wanted to be the Secretary of Defense. The Commandant would say, "No. He wants to be the President." Since I worked for two Commandants during the time the Secretary was in office, you have to guess which of the two said that.

I have said before that being at TPS was the hardest I ever had to work, but with that said, as a lieutenant general I rose to the highest military rank of any in my TPS class. To the best of my knowledge, only one made it to two stars – that was John Tierney who graduated # one in our Class 19. I would imagine that I was the only member of my TPS class to hold a US Patent. It is important that the patent I held was for a very important weapons system, that was widely used for over 30 years, and which was key for strike aviation during the Vietnam War. The multiple bomb rack was used on all strike aircraft from about 1961 to about 1990 -- possibly later – by the USMC, USN and the USAF. I am told that some foreign air forces also used it.

Dr. Allison: Do you consider that your greatest achievement in the Marine Corps, the thing you take most pride in?

General Fitch: First would be my marrying Margaret Marie. Second in line would be my doing the right thing in my opposition to the A-6F program in 1983-84. That was when I laid my career on the line in an attempt to cancel the A-6F program. Had the Commandant not called me in the day before my Senate Armed Services Committee hearing in early April 1984, had he not told me about the "deal" between himself and the Secretary of the Navy to get the Marine Corps the F/A-18D, and if he had not asked me to not take on the A-6F at that SASC hearing, then the A-6F would most likely have been canceled by the Senate in 1984. That earlier cancellation would have been about two years ahead of when it was finally canceled, and it would probably have saved the taxpayers about \$300 million dollars or more in A-6F development costs.

So my having the courage of my convictions, and my standing firm on principle, would be my finest hour, up until the time the Commandant of the Marine Corps asked me to change my position. But with that said, the Senate Armed Services Committee knew what I thought of the A-6F program, they knew why it should be cancelled, and they knew why I thought what I did.

Dr. Allison: Conversely, is there anything that you wished you had a chance to do it over again?

General Fitch: No. I'd like to be about 50 years younger [laughter]. I would settle for 30 years younger.

Dr. Allison: Maybe doing something a different way, something you might regret doing it a certain way.

General Fitch: No. I was glad I didn't become an astronaut. I told you about being in the final 30 candidates of that Gemini program in '62.

Dr. Allison: No [chuckle].

General Fitch: Neil Armstrong and Jim Lovell are probably the only two you remember. Neil is a friend of mine. He and Jim Lovell are both Golden Eagles.

I treasure that letter from General Wilson where he said that he and General Barrow thought that I should be the next Commandant. But standing on principle is more important than personal gain. As some say, I don't have any trouble shaving in the morning.

Dr. Allison: You had mentioned Harry Blot's stand to keep the head of Marine Aviation a threestar.

General Fitch: Harry Blot did the right thing and stood on principle. Harry had a lot of upward momentum in his career when he took a stand on the three star issue, and he is highly respected for having done so. It's a little bit awkward when you're a three star and the Secretary of the Navy doesn't like what you're doing. But in my case the Commandant of the Marine Corps, General Kelley, had told me to do what was necessary to kill the A-6F, then his insulation quickly wore thin. I was moving down the track to kill the A-6F, then the Commandant made the deal with the Navy Secretary on the F/A-18D.

Dr. Allison: Well he [General P.X. Kelley] got a hard time over the Beirut thing, didn't he?

General Fitch: The congressional hearings were contentious. And that was awfully awkward. But you have to remember that General Kelley was under a lot of stress over the Beirut barracks bombing. As I recall he had been to Beirut just a few weeks earlier.

Dr. Allison: They never got the A-6F though, did they?

General Fitch: No, because the A-6F program was canceled immediately by the CNO and the new Secretary of the Navy, Jim Webb, when the old secretary left office. It was cancelled about 1986.

Dr. Allison: Ok sir, any final comments, saved rounds?

General Fitch: Fred, before you do that, I would like to express my appreciation to the Director of the History Division at Quantico, for the division's support in doing the oral interviews and the transcripts. Fred, I want to thank you personally for your efforts in bringing the ten interviews together, and I will look forward to seeing the book.

My career in the Marine Corps was an enjoyable ride for 34 years, and during those years I met some very remarkable Marines – some great Marines like Tom Miller, Lou Wilson, Bob Barrow, Charlie Carr, Dave Seder, Terry Mattke, Red Jones who let me fly all I wanted before I went to TPS – and so many more. I also met some fine Marine families and some great civil servants like John Herrington, Dr. Jim Wakelin, Dr. Bob Morse, Dr. Phil DePoy, and Dr. Dave Mann. I can say the same for our friends in the Navy. Margaret and I had many friends in the Navy, such as Rear Admiral Whitey Feightner, who had a remarkable career during World War II and long after. Whitey was a premier test pilot, with other greats such as Marion Carl. Now Whitey is in his 89th year. My friend, Tom Miller, has been a true visionary in his role as the advocate for the all-STOVL force. He has been relentless in his effort to see Marine Aviation equipped with truly expeditionary strike-fighters and rotary wing aircraft, to support the Marine infantryman. Tom is now in his 85th year and he is now battling cancer.

I am always amazed that my odyssey with the Marine Corps started just about exactly 57 years ago. I was 20 years old, had just graduated from the University of Florida at Gainesville, and the Korean War prompted me to be sworn in for the Naval Aviation Cadet program. At the time I had never been up in an airplane. Little did I know that when I signed up for four years, that it would be thirty-four years later when I left the military.

Dr. Allison: What do you see in the near future for Marine Aviation?

General Fitch: The Marines took a ten year holiday from procuring new strike fighters. This happened when they chose to skip a generation of strike-fighters, which meant that they would not

buy the F/A-18E/F Super Hornet. The Marines have worked diligently the past 35 years to create the all-STOVL force, and now it is within their grasp. That is happening. The MV-22 is now operational. The Marines promise to field a new attack helicopter, the four bladed AH-1Z, and the venerable Huey, the UH-1N will be replaced by a new four bladed Huey, the UH-1Y. The F-35B STOVL aircraft will have its first flight in about six months, and it promises to be a great aircraft, just as I am sure that the MV-22 will be a great aircraft. The all-STOVL force is designed to operate from forward basing, the Navy amphibs such as the LHA and LHD, the forward operating base [FOB], the forward arming and refueling point [FARP, and other expeditionary sites such as roads. The objective is simple with the forward basing concept, and that is to provide world class close air support to the Marines in ground combat.

It is critical that the Marines NOT BE FORCED to procure the Navy variant of JSF, which is the F-35C, for operations from aircraft carriers. The Navy variant of JSF requires either long runways or a catapult to takeoff, and it requires either long runways or arresting gear to land. If the Marines are forced into the F-35C, the result will be higher casualties in the Marine ground combat element (GCE). For over 30 years the Navy has feared STOVL on the aircraft carrier, because they believe that its successful STOVL operation on the big carrier would push the Navy into smaller aircraft carriers. The Navy is pushing itself into smaller carriers, with the outrageous cost of the CVN-21, which will probably be on the order of 12 billion dollars before the air wing is paid for. The Navy does not know how to spell close air support. The Navy has not changed their concept of carrier operations in the past half century. The Navy would be well served to procure some number of JSF STOVL squadrons, which would allow them to become a participant in the war on terror.

The Marine Corps is blessed to have a Commandant, General Jim Conway, who is in the mold of Lou Wilson and Bob Barrow. I have great confidence in his ability to steer the Marine Corps to a successful conclusion of the TacAir integration.

More than all that, I was fortunate, very fortunate, to have Margaret Marie with me for the past 52 years and we look forward to another 20 – at least. She is a great lady, and she has had a tremendously important impact on my career. Fred, I would like to also thank you for inviting Margaret Marie to answer your questions. I am sure she enjoyed the interview that follows mine.

And as a final comment, let me say I am proud to have been a Marine. Semper fidelis!

END OF SESSION X

SESSION XI

Interviewee:Margaret Marie FitchInterviewers:Dr. Fred Allison & Mr. Rob TaglianettiDate:18 September 2006Location:General & Mrs. Fitch's Home in McLean, Virginia

Dr. Allison: This is the 11th session of the interview with General William Fitch, except this session will be with Mrs. Fitch, General Fitch's wife-Margaret Marie. Today's date is September the 18th, 2006, and again we are in their home in McLean, Virginia.

The interviewer is Fred Allison and Rob Taglianetti. Good afternoon Mrs. Fitch.

Mrs. Fitch: Good afternoon.

Dr. Allison: I would like to start by asking if you could provide some information on your personal background; where you were born and raised and possibly the events that led up to your meeting General Fitch.

Mrs. Fitch: Alright. I was born in central Florida in a small town called Bartow. I grew up there, attended school there, and Bill's mom was my favorite teacher in high school. The summer that I graduated Bill was coming home on leave from the Marine Corps and she asked if I dated older men (Bill was seven years older) [laughter], which I knew I did not. My dad was strict because my mom had died when I was growing up. He said, "Since its Mrs. Fitch's son, just this once." My aunt was spending the summer with us and I said, "You know I can't tell him I've got to be home by 11 o'clock. He's a lieutenant in the Marine Corps." So she said, "Well stay out until 12 and I'll take care of your dad; which I think she forgot, because the next morning he said, "Is you watch in good repair?" And I said, "Yes sir." He said, "Well I suggest the next time you go out with Mr. Fitch that you wear it."

Dr. Allison: [Laughter].

Mrs. Fitch: I was elated because I had already accepted another date and I didn't know how I was going to broach the subject. We had several more dates before I went away to college at a girls' school in Macon, Georgia called Wesleyan. Bill was stationed in Pensacola where he was going through the photo reconnaissance school, this was August of '54. He would fly over to Macon from Pensacola on the weekends a lot. He would stay at Mercer College which had an ATO house, and he was an ATO . . .

General Fitch: I would fly into Warner-Robbins Air Force Base near Macon.

Mrs. Fitch: At Wesleyan you had to have a chaperone to date your first semester, which could be an upperclassman and her date. But I didn't know any upper classmen, so we sat in the student lounge a lot [chuckle]. But that was the old South, you know sitting in the parlor routine.

Dr. Allison: Yes.

Mrs. Fitch: I told you this is over 50 years ago, didn't I [laughter]?

Mr. Taglianetti: It still happens in Pensacola, Florida at Pensacola Christian College actually.

Mrs. Fitch: When we were home for Christmas, Bill asked me to marry him, but I didn't really have the nerve to talk to my dad 'til we were on the way for me to catch the train back to school. I told him that Bill was being transferred to California the next summer and we would like to be married, so that I could go with him. He said, "You're entirely too young." (But I knew that he liked Bill). Then he said, "We'll talk about it your senior year." (I was a freshman – thud!) I talked with him again at Spring Break, but his reaction was the same.

Meanwhile, unbeknownst to me, he wrote to a lady in Denver who had kept house for us after my mom had died. She and I had become very close friends, so he asked her if she would come and find out what I wanted to do.

She told me, "If you really want to marry Bill, your dad will go along with it." That was the beginning of the summer and my two favorite aunts and my girlfriends' mothers all pitched in and we had a lovely wedding at the end of the summer before we left for California.

Dr. Allison: General Fitch, did you get along with her dad?

General Fitch: Oh sure.

Dr. Allison: What did he do for a living?

Mrs. Fitch: He was a lawyer.

Dr. Allison: And what did he think of the military; did he have any preconceptions about it ?

Mrs. Fitch: Well he was in World War I but he wasn't married then

General Fitch: He had been in France in WW I in 1918..

Dr. Allison: But he liked the military. I mean some people; they just don't like servicemen at all.

Mrs. Fitch: Oh yes. He admired Bill very much, and he thought that it was an admirable profession!

Dr. Allison: Okay, so you got married then in your hometown?

Mrs. Fitch: Yes.

Dr. Allison: Did you have any preconceived notions of what military life was like?

Mrs. Fitch: Well I have a brother who was in the Judge Advocate Department. But I didn't know very much about the military, because in our small town very few people ever stay in the military.

Dr. Allison: So you really didn't have any idea what you were getting into.

Mrs. Fitch: None.

Dr. Allison: Was it quite a bit of shock then? Did you go right out to El Toro?

Mrs. Fitch: We drove across the country and Bill was stationed at El Toro. We lived in Corona del Mar for about six months and then we bought a house in Santa Ana. We were there for 16 months before he was sent to Test Pilot School at Patuxent River, Maryland. As he was checking in at Test Pilot School they told him that at the completion of school he would go back to California to VX-5 at China Lake. He developed his bomb racks there and I took another 30 hours of college work because there was a University of California extension there.

Dr. Allison: So you're moving back from coast to coast in this time period.

Mrs. Fitch: Yes, we just loved both places, especially China Lake.

Dr. Allison: Did you?

Mrs. Fitch: Oh indeed. It was delightful living.

Dr. Allison: You were there for quite a while.

General Fitch: Two years.

Mrs. Fitch: After the two years we returned to El Toro. He was in an A-4 squadron, [VMA] 311, and he went to Iwakuni with them. I returned to Florida and stayed with my aunt in Gainesville – finishing my last year of college at the University of Florida. So we lived apart that year while he was in Japan, then we moved to Virginia where I started teaching school.

Dr. Allison: Yes. Did you have much interaction with other wives; officer's wives?

Mrs. Fitch: Oh, very much so. In those days Patuxent River and China Lake were just about all Navy. We had many close friends there, which we still have today. Once we came to Virginia I participated all that I could. But I taught school during the time Bill was at BuWeps, while he was in the office of the Assistant Secretary of the Navy for RD&A, while he was at Command and Staff College – and later on while he was in Vietnam, at Headquarters Marine Corps, and at National War College. At Cherry Point I didn't teach. I would just be totally immersed in wives activities while he had command. His squadron, VMA(AW)-225 trained replacements for Vietnam. During that time we were at Cherry Point for about a year before he went to Vietnam.

Dr. Allison: How many did you have in the squadron down at Cherry Point?

General Fitch: Probably 300 to 350 enlisted and probably 75 to 80 officers.

Dr. Allison: In 225?

General Fitch: Yes, because it was A-6 and you had two people per airplane and a lot of them were flowing through. About three or four months later they'd be going overseas.

Mrs. Fitch: They were always transferring so we had a lot of dinner parties. As a group would leave we would have a dinner party for all of them. We entertained a lot!

Mrs. Fitch: One of the funniest things happened to us that year. We had a very small house at Cherry Point on the base. And like I said, we really did do a lot of entertaining but usually we would have just a portion over at a time for a dinner party. But at Christmas 1966, we decided we'd have a big Christmas open house for all of the squadron. We decided that we would stagger the time like from 4 to 6 for one group, 5 to 7 for another, and 6 to 8 for another group, so that it would stagger the amount of people in the house.

General Fitch: And the Cherry Point house was about as big as this addition to this house[chuckle].

Mrs. Fitch: [Chuckle] So everybody's standing there with his drink in front of his face, because the rooms were elbow to elbow. Everyone is having a great time. But they'd compared notes about their invitations and not realizing we had staggered the time, just about everybody came at 4 and left at 8 [laughter]. It was hysterical. And even though I had bought what I thought was far too much food, it just flew off the table [chuckle].

It was some years later that I learned from Patty Barrow when her husband was Commandant, that in planning for food it helped if you counted a captain and his wife as six people, a major and his wife as four, and a colonel and his wife as two.

Dr. Allison: [Laughter]

Mrs. Fitch. At any rate we had really good friends, Barbara and Charlie Higginbotham who lived next door. They had come over when we were trying to get everything organized for the party and they were both dressed beautifully [chuckle]. They were going to do something, I forget what. Anyway, like I said, about 80 officers and their wives are in the house and the food is disappearing so fast I can't believe it! So as the situation became more critical we went running over to their house with some things and said, "Help, we can't keep up." Fortunately that saved the evening and they kept the food reinforcements coming until the party ended about eight – but they looked like they'd been through a car wash! We had the neighborhood over after the party. It was a fun evening – and one we have never forgotten. It was the most hysterical thing we had happen to us in the Marine Corps. After that we got a freezer and I learned to make party food way ahead and make plenty of it!

Dr. Allison: Things were really different back in those days, I mean as far as socializing and stuff.

Mrs. Fitch: Yes, and everything was very formally done. Army-Navy cloths and silver!

Another time was the night before Christmas Eve on Okinawa. The Okinawans in the 1980-82 time were always trying to conserve water, because it was a desperate problem. It had to rain directly over the reservoir. A lot of the wives were visiting for the holidays because of their husbands being unaccompanied, so we were all getting ready for the party that evening. Somebody said, "You know the water pressure is awfully low." I said, "Oh, you ought to be here in the summer, that's when they just turn it off and we have day on and day off water." We were all talking and didn't hear the radio when they announced that they were turning off the water for some reason or other, the night before Christmas Eve. We had everything all set for the party and everybody was there; like a hundred people -- we had a much bigger house then – but at any rate a young man helping in the kitchen came out and said, "You know Mrs. Fitch, the water pressure is getting awfully low." I think we had hired about three food techs to help us that night. And sure enough he came back out in a few minutes and he said, "There is no water!"

General Fitch: So you've got a hundred people in your house and no water.

Dr. Allison: Is this when you were 1st MAW, CG?

General Fitch: Yes.

Mrs. Fitch: Yes. So we had plenty of food but no water - not even to rinse the 100 cocktail plates we used for the buffet.

This was December 23rd and on the 24th the office was having a luncheon. So with all these dirty dishes in the kitchen I went down to the office and just forgot it! Also the chaplain had gotten the measles so I went to see him. I finally got home and the water was on about 3 o'clock. I started washing dishes and when we left for Midnight Mass finally the kitchen was clean [chuckle].

Yet another evening on Okinawa was a big reception and our oven quit working. A friend went home and brought over his microwave. The next day they brought us a second oven so we could have a spare. My husband also bought us a microwave so we didn't have that problem again.

Mr. Taglianetti: Wow! With all the hostessing that you did – did the Marine Corps try to provide some etiquette classes for officers' wives on how to entertain?

Mrs. Fitch: No, but I do remember a talk on entertaining at one of the general officers symposiums when Bill was a brigadier general. Other than that I had marvelous examples to follow: the Tom Millers who taught us so much and were our mentors, the Barrows, the Wakelins. Dr. [James] Wakelin was Assistant Secretary of the Navy for RD&A when Bill was his Marine aide – and there were others!

Dr. Allison: Was it sort of expected as your husband goes up in rank; becomes a commanding officer and a general, are you supposed to do this? Is this perceived as your role?

Mrs. Fitch: Unwritten I guess. No one ever said you had to do this. My husband loves to entertain; really loves entertaining. In fact I used to laugh and say, "You know if they said the world's coming to an end next week he'd say 'Better get the office over Friday." When we lived at the barracks we had dinner parties every other Friday night, because he wanted everyone in the office (DC/S Aviation) to have the experience of coming to "8th and I" for an evening. We lived in Quarters 2 at the Marine Barracks, Washington. We were next door neighbors to the ACMC.

Dr. Allison: Oh, you lived at the barracks?

Mrs. Fitch: Yes at 8th and I in DC.

Dr. Allison: Right. What was that like living there?

Mrs. Fitch: Oh, we loved it. General Barrow was still Commandant our first year and were really good friends of ours – so we had enormous fun!

We had other interesting times but we had a food tech which made a huge difference entertaining. The hard thing was, we didn't just move, we often had to move and entertain right away. When we first got back to Washington we were living at the Navy Yard while they restored the furnace and plumbing in Quarters 2. They replaced the old boiler systems and the old water pipes in the walls at Quarters 2 at the Barracks, so we finally moved into Quarters 2 just before the Marine Corps birthday ball. We had a guest list that night for a seated dinner before the ball. I remember General and Mrs. Chapman were on the list as well as Admiral and Mrs. [Carlisle A.H.] Trost. It was exciting trying to get everything orderly with our shipments arriving from storage and Okinawa, and have a formal dinner, with people we didn't know very well. But it isn't often that happens. Usually it was whoever we wanted to invite. When it was time for Bill to host the parade at the Barracks, we would have the reception beforehand in Quarters 2. There would be many invited to those receptions that we didn't know. The Commandant usually would give us some guest names to include which would be about, oh, 80 to 100 people.

Dr. Allison: Were the Quarters good places to entertain, I mean the layout?

Mrs. Fitch: We had plenty of space like we have in this house. There was the living room, dining room and a big foyer, plus a sun porch on the front, so it really had room for a lot of people. It was a three story Georgian home that was built about 1905. Quarters Two was a lot of fun for entertaining, and our guests always seemed to enjoy seeing the old house. We enjoyed it too!

Like I said, I think we tried to get all of the office over and their wives, and then we just had some receptions. The first Christmas we were there we had a great big open house. There were a lot of Navy friends from the Navy Yard, which is just one block from the Marine Barracks. It was very close to Christmas, we really enjoyed it because we had just gotten back from Okinawa, and it was our first big party in Quarters 2.

Dr. Allison: You said you had people from the neighborhood there?

Mrs. Fitch: No, not the neighborhood as you might think of it. Our neighbors were those at the Barracks and those at the Navy Yard. The Wilsons and the Barrows used to do this, however.

They would have the people who lived around the Barracks into the Commandant's House for an open house every year before the parade season started.

Dr. Allison: Oh, the people that actually lived on the Yard there.

Mrs. Fitch: No, the people that lived in the neighborhood surrounding the Barracks. And they never had a complaint from any of the neighbors about the band or all the cars during the parade season.

Dr. Allison: Oh really-just people that lived around there.

Mrs. Fitch: Yes. When we lived at the Barracks there was a lot of public housing between the Barracks and the Navy Yard. I used to work a lot in our kitchen even though we had the food tech. I never, ever looked out and saw anyone I thought was poorly dressed. They were always neat and had good clothes. One night I was up very late getting ready for a party and it was about 3 o'clock in the morning, and I looked out across the way – and there was this little boy standing at the bicycle shop with his nose pressed against the window. I wanted to go running over there and say, "Which one do you want. We'll come back in the morning and get it." But you saw a lot of children out very late around the close by housing projects, with no one seeming to know where they were. We'd be driving home and a lot of little children would be playing like at midnight. It was really heartbreaking.

Dr. Allison: Yes. Were you still teaching at that time?

Mrs. Fitch: Oh my no! At that time I had not taught in seven or eight years. I last taught school when Bill was a lieutenant colonel and was finishing up National War College.

I have barely touched on the amount of involvement there is with Marine Corps wives activities. The dinner parties and receptions are very bonding, but a tremendous amount of work! And those are just the social events and meetings in our home. Each of the squadrons, groups or offices were expected to participate and carry their weight with volunteer organizations such as Navy Relief, Red Cross, Wifeline, Thrift Shop, to name just a few in my day.

It is the CO's wife who holds it all together and rallies around when families need help- as when there is an illness or wives need a "mom." Usually there is a very strong feeling of unity in a squadron and it radiates from the CO's wife! It is she who sets the tone – attends the meetings, does volunteer work, writes the newsletters, attends coffees, luncheons, changes of command, and is always available!

Dr. Allison: Doing the entertaining and whatnot and going to various functions was a full time job for you.

Mrs. Fitch: It was all consuming! Just being at dinners (industry and so forth) several evenings a week on a regular basis tires me out to think about it now. I don't see how we did that and kept up with our schedules.

Mr. Taglianetti: You need to shop for that all the time (chuckle)

Mrs. Fitch: Fortunately the food tech did the shopping when we lived at the Barracks, or otherwise we never could have entertained in the style we did and so often.

Back when I taught, after we decorated for the holidays we would have several dinners while I was out of school – because teaching rapidly was becoming year round. The intermediate schools (7th and 8th grades) were air conditioned back then so the summers weren't so bad, though time consuming. But that all came to a halt for me when we were sent to Cherry Point and Bill was given command of 225.

Dr. Allison: Then he went to Vietnam.

Mrs. Fitch: After a year he went to Vietnam and I went back to teaching here in Virginia.

Dr. Allison: Springfield?

Mrs. Fitch: Springfield the same school I had previously taught in, and then I had a traveling job team teaching in Area 2. So I was very involved. It helped because when he was flying at night I was involved with the kids during the day and then when I was at home at night I knew he was sleeping during the day because they flew their missions at night. It kind of helped a little bit.

Dr. Allison: To take your mind off of it.

Mrs. Fitch: But the hard thing in those days was that you got a letter and it took a week to get the letter, then you wrote back the answer to some questions and that took a week for him to get it. Later on as he got to brigadier I have to say it was easier, He could call. So it was really a luxury to ask him a question and get an answer right away. And I remember one of the hardest times; about 7 one morning I was dressing to go to school. I never turned on the TV in the morning but I heard on the radio that an A-6 had bombed the Hanoi radio station and I thought, "Oh Lord, Bill has an A-6 squadron." So I went running in and I turned on the TV and heard all about it. But it was a week before I knew that it was his A-6, and that he and Charlie Carr were in it. So there were times like that which were highly frustrating, because you had to wait to find out what had happened.

Dr. Allison: Even though you heard the news right away.

Mrs. Fitch: But I didn't know the details until I would get his letter. In fact he had even made a tape to tell me about it, and he gave the tape to Terry Baker, a good friend from 311 days, to give to me if they didn't come back. They weren't very confident that they would get to downtown Hanoi and back. The morning of February 21, his XO, Ron Iverson, came in during a MAG-12 meeting and handed Bill the target for that night. Bill said, "This is in Hanoi for tonight, so Charlie and I will take it." He then told Ron, "Tell Charlie to go to the map room at S-3 and start planning it, and I'll be there shortly."

Dr. Allison: So he was thinking he wasn't coming back from that?

Mrs. Fitch: So much so that he made that tape and gave it to Terry Baker and said, "Give this to Margaret Marie --- if" Every year they celebrate their anniversary on February 21st; Charlie composes a poem and sends it to Bill [chuckle]. Next year it will be 40 years since they flew that mission. Both were recommended for the Navy Cross for that mission which was downgraded, and they got the Silver Star for it. When Western Union stopped sending telegrams, then Charlie switched to e-mail for his poem and a phone call.

Dr. Allison: That's the night they flew that mission; February 21st?

Mrs. Fitch: February 21st, 1968.

Dr. Allison: Well did you ever worry about other things just in regular operational flying; you know you hear about a crash

Mrs. Fitch: All the time [chuckle]. I don't think he likes me to say that. But when we first got married it was interesting because I was Episcopalian and I just worried about him all the time. Bill was Presbyterian and had the philosophy of, "What is to be will be."

Dr. Allison: Predestination.

Mrs. Fitch: And so I kind of assumed that philosophy too and it really helped.

Dr. Allison: Yes, that God's in control of it.

Mrs. Fitch: It helped but I really did spend a lot of time worrying about flying; because it wasn't that unusual to lose a friend. And I remember in Test Pilot School, the morning of the first meeting they said, "Look to your left and look to your right and a year from now one of you isn't going to be here," and there were only 18 of them in the class. So you know that really kind of got my attention and I was ready to leave right then. He thoroughly enjoyed it but there were some lost at Patuxent and while we were at China Lake there were more lost from that class. It is just something that you never got used to and it was always in the back of your mind. I remember thinking that if I learned more about flying, it would help. So I went to the library and checked out some books. The main thing that I learned was that a plane flies because of it shape. Somehow that did not reassure me. But as my friend Patty Barrow used to say, "It is impossible to be unhappy when your husband is so happy. He really loved flying, especially at Cherry Point and in combat. Sometimes the wives used to say they didn't like the remoteness of Cherry Point and I'd say, "How can you possibly not be happy when your husband is so happy." He thoroughly enjoyed himself.

After Vietnam he came back to Annandale and he had the A-4, A-6 and AV-8A programs at Headquarters, Marine Corps. He then went to the National War College for nine months, which really was a lot of fun for him. He wrote his thesis and got his masters. He got the top honor for his thesis. We had a wonderful trip to the UN with the whole class going. I took off from school and we had about three or four days in New York City, which I loved. After National War College we went to Cherry Point after he was given command of MAG-14. Another funny story really was that [chuckle] the day of the change of command Bill had been sent to Washington; he was asked by General [Ralph] Spanjer to give a briefing. . . .

General Fitch: The day I was supposed to take the group.

Mrs. Fitch: So the change of command is set. Everyone is there and the parade has formed. Everything is ready to go, and no Bill. So General Miller comes over and sits down beside me and says, "You know if he doesn't get back in the next few minutes you're going to have to take the flag."

Dr. Allison: He said that to you?

Mrs. Fitch: Yes. And I said, "Will that mean it's my air group [laughter]?"

Dr. Allison: [Laughter]. That would be a first, wouldn't it?

Mrs. Fitch: I thought he'd never stop laughing. But anyway, Bill arrived at the last minute and everything was fine. He had MAG-14 and then he had the MEU — back then they called it the Marine Amphibious Unit (MAU). I needed six hours to finish my masters but I decided it would be more fun to go to Europe. So I did. The 32d MEU left at the onset of the Yom Kippur War; and sailed for the Mediterranean in mid-October '73?

General Fitch: Yes, '73.

Mrs. Fitch: Earlier before they sailed, he had said, "I'll call you when we know we are going into a port and it's safe to come." So he called from Cyprus and told me that the LPH was going to Geneoa. . . .

Dr. Allison: Because that's when the Israeli War was going on.

Mrs. Fitch: Yes. He called in early December and wanted me to come right away. I had been preparing for it, but it was rather exciting trying to get off in just a few days. He met me in Geneoa which was fabulous, but they had no water! There was a water shortage so they had turned it off!

Charlotte Walker and Terry Reddy had put me on the plane in New Bern with a bottle of champagne for Bill – so, we used it to brush our teeth! It foamed a lot, but it came in handy.

The next day we were invited to a reception and told about a beautiful village just south of Geneoa called Santa Marguerita Ligure – where they had water! We drove down there and it was lovely! We got a room at the Regina Elena, walked through the village and had dinner. We had just gotten back to the hotel when there was a phone call

General Fitch: It was my logistics officer, Jim Green, and he said, "Colonel, you might need to fly a helicopter to Tunisia tomorrow, and I said, "When it gets from 'might' to 'will' call me back." Well five minutes later Jim called me back and said, "Colonel you've got to go to Tunisia tomorrow."

So what it was, we were going to fly several CH-53Ds south out of Geneoa with some Marines aboard, and refuel in Sardinia. Then we would fly on to Tunisia. The ship-- the LPH *Iwo Jima*, was going to follow several days later. In Tunisia it would be a flood relief effort, with my helicopters and troops distributing relief supplies to villages.

It was Margaret's second day in Italy..... she had never been in Europe before.

Mrs. Fitch: That is right!.

General Fitch: . . . so in Santa Marguerita Ligure about 40 miles south of Geneoa I said, "Goodbye" to Margaret Marie with an added, "I'll see you in Toulon Christmas Eve", and I drove back to Geneoa and to the ship. The next morning we took a couple of CH-53Ds and numerous troops down to do flood relief for the Tunisians.

Mrs. Fitch: He had said to me, "I don't know why you're getting upset." I said, "Toulon is in France. I'm somewhere in Italy and I don't even know where!"

Dr. Allison: [Laughter].

Mrs. Fitch: With just a map Bill found his way back to Geneoa and the ship in the middle of the night. Both of us were feeling plenty uneasy. Once on the *Iwo Jima* he spoke to a Navy friend, Jim Heegeman, who's wife was in Geneoa. She called me the next day and said, "I'm here." That was music to my ears even though I had never met her. We became fast friends and Margo and I traveled together the rest of the time over there.

We had a great time. [chuckle] In fact I went over thinking, "Okay, I'll stay until the dependent's tour in January if everything goes especially well. And the 1st of May the men were

saying, "Margaret, are you going to be home in time to meet the ship in Morehead City?" I was still there! We just had a super time!

General Fitch: You saw what, 14 countries while you were over there?

Mrs. Fitch: Yes, I traveled the whole time when they'd go out to sea and then when they would come in I'd be wherever they came in. I'd have scouted out the city and I'd have the hotel all set up [laughter]. -- Along with the local currency, a map, and bottled water.

General Fitch: She had a Eurail pass, which at that point in time cost about \$300 for three months first class train travel. Those Eurail passes now are probably a thousand dollars.

Mrs. Fitch: Yes.

General Fitch: Three months of first class train travel anywhere in Europe for 300 bucks!

Dr. Allison: So you were there several months as it turned out.

General Fitch: Well I was there eight or nine months, I think and she was there about six, weren't you?

Mrs. Fitch: The 1st of December until mid-May. I even got as far as Norway that winter, though it was kind of lonely because I was by myself.

Dr. Allison: So did you get back for Christmas in Toulon?

General Fitch: Oh yes.

Mrs. Fitch: I was a seasoned traveler by then. We enjoyed Christmas dinner with a close friend, Admiral Josephson, (then captain of the *Iwo Jima* which housed the MEU). Dinner was at a small restaurant along the Grande Corniche above Toulon. There were several receptions for the senior officers of the MEU and the ships, and a small dinner at the home of Commandant Bacci high in the hills above Toulon. We had our first experience with roasted chestnuts. It was a fabulous Christmas! General Fitch: Something that was a big help was knowing about the officers' clubs in France and Italy. In France it is the Circle Naval. The French Navy has them in principal cities so that French officers can stay there. It's kind of like the old officers' clubs used to be when they had rooms and three meals a day. They were very lovely. I think the cost at that time, 1973-74, was about ten dollars a night.

Mrs. Fitch: It was such a good deal that in Venice we switched to the Circle Naval even though our hotel was next to the opera house where Pavarotti was appearing at the time.

General Fitch: Yes, very much like the old BOQ system. Another interesting note was when I was with the MEU in the Med and she was traveling around Europe, we put away more money than we did when I was the CO of MAG-14 at Cherry Point. The reason was, being at Cherry Point the cost of entertaining was so high when you had a large air group.

Dr. Allison: That was coming right out of your pocket.

General Fitch: There was no entertainment allowance for a colonel. You simply paid for every bit of entertaining that you did, and we did a lot.

Mrs. Fitch: After the 32d MEU we went back to our quarters at Cherry Point – 300 Jefferson Drive. Major General "Smoke" Spanjer soon relieved Major General Tom Miller as the CG of the Wing. Bill became the Wing G-3 with Colonel Tom Mattock as his Assistant G-3 and Lieutenant Colonel Jim Orr as his operations officer. That summer the Spanjers, whom we had known for 20 years, invited us to move down next to the general's quarters to be their next-door neighbors. The only downside was that we had to move ourselves since the station would not give us a courtesy move about a half-mile down the street. It took the better part of a week to move ourselves and get set up for 30 people to come to dinner on Saturday evening in our new quarters. The dinner had been planned before the move – and was a farewell for General [George] Axtell who was leaving the next day in retirement.

Dr. Allison: Among the squadrons, did it cross over to the enlisted wives also or was it mainly just the officer's wives that had the network?

Mrs. Fitch: It wasn't until Patty O'Donnell and I became good friends at Cherry Point that I became aware of the Enlisted Wives organization and functions. She took them very seriously and I went with her to some of their functions. I think that it was mostly at wing level that this was done. General O'Donnell was the Assistant Wing Commander at Cherry Point. This was in the 1972 to 1976 timeframe.

Dr. Allison: This was General Andy O'Donnell's wife?

Mrs. Fitch. Yes. The O'Donnells were at Cherry Point for a couple of years when he was a brigadier.

Dr. Allison: When your husband was in Okinawa and Vietnam, was there sort of a mutually supporting wives club?

Mrs. Fitch: Oh, very definitely! Always--whether it was Vietnam or wherever. That was the most rewarding thing about the Marine Corps. The camaraderie! It was like a big family unit and you knew you could depend on the Marine Corps if you needed help!

Dr. Allison: How was the interaction with enlisted wives when your husband was at MAG-14?

Mrs. Fitch: At MAG-14 the primary interface with the enlisted wives was at the squadron level. Our primary interface was with the CO's and XO's of the seven squadrons and their wives, and with the group staff of MAG-14 and their wives. After another year at Cherry Point, Bill received orders back to Headquarters, Marine Corps to be the executive assistant to DC/S Aviation. Major General Tom Miller and Bill would arrive at HQMC the same day. This tour, his third in Washington, my husband had been at HQMC, as the EA to Lieutenant General Tom Miller for about six months when he was selected for brigadier general. Just before Easter he would receive orders to the 1st Marine Aircraft Wing as the Assistant Wing Commander

In April 1976 Bill went to the 1st Marine Aircraft Wing to be the AWC. I went over to Okinawa a couple of times to see him. I stayed several weeks each visit.

Dr. Allison: When did you move out here, to McLean?

Mrs. Fitch: After his return from Japan in 1977, we sold our home in Annandale and bought this house in McLean. We moved out here in August 1977, when the population density in McLean was nothing like it is today. From the summer of 1977 to the summer of 1980, Bill had RD&S at HQMC. We moved back to Okinawa in 1980 for his tour as CG of the wing. Nearly all of the squadrons were on unit rotation when Bill had the 1st Marine Aircraft Wing, which meant six months unaccompanied for the Marines in the tactical squadrons. Then when he was selected by General Barrow to be DC/S Aviation, we moved from Okinawa to the Marine Barracks. It was the culmination of my husband's active duty career and a memorable, fulfilling time for us. It was such a privilege to have shared those years and experiences with him. I always was so proud to be his wife, and I cannot think of a life that I would have enjoyed as much. In late August 1984 Bill retired from the Marine Corps and we moved back into our home here in McLean.

Dr. Allison: Thank you very much for your comments.

END OF SESSION XI END OF INTERVIEW INDEX

1

1st MAW, 83, 116, 184, 200, 229, 258, 259, 278, 279, 291, 293, 299, 309, 310, 311, 314, 320, 323, 324, 327, 345, 367, 368, 388, 390, 414, 415, 426, 432, 435, 438, 440, 453, 469, 470, 481, 482, 483, 484, 485, 486, 487, 488, 489, 497, 501, 502, 503, 507, 514, 529, 531, 545, 556, 567, 568

2

2d Marine Division, 368, 393, 394, 410, 423, 437 2d MAW, 17, 19, 40, 55, 168, 192, 247, 342, 366, 372, 374, 375, 384, 396, 408, 409, 413, 416, 422, 423, 425, 427, 435, 535

3

32d Marine Expeditionary Unit (MEU), 112, 399
32d Marine Amphibious Unit (MAU), 83, 89, 93, 112, 380, 381, 383, 389, 392, 395, 403, 404, 406, 407, 408, 427
38th Parallel, 59
3d MAW, 101, 103, 116, 192, 331, 382, 383, 426, 432,

5

5th Air Force, 258, 259, 308, 310

6

6th Fleet, 397, 400, 404, 534

7

7th Fleet, 469, 470, 484

8

8th and I, 557

538

А

A3D, 130 A-4 Skyhawk, 65, 73, 82, 89, 93, 97, 112, 115, 126, 129, 134, 135, 138, 140, 143, 146, 147, 151, 152, 153, 154, 155, 159, 163, 164, 167, 171, 172, 174, 175,

181, 182, 187, 188, 202, 227, 228, 235, 238, 239, 249, 257, 261, 263, 276, 300, 305, 308, 312, 321, 325, 327, 328, 330, 334, 335, 365, 366, 367, 375, 379, 383, 470, 482, 502, 503, 508, 544, 554, 562 339 A-4B, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 149, 150, 153, 154, 157, 202, 334 A-4C, 134, 141, 143, 202 A4D, 24, 49, 123, 130, 134, 175, 181 A4D-2, 133, 134, 135, 171 A4D-5, 134 A-4E, 134, 202, 261, 305, 308, 312, 314, 344 A4M, 134, 152, 163, 217, 294, 333, 334, 335, 336, 338, 339, 340, 349, 364, 365, 366, 455, 482 A-5 Vigilante, 187 A-6 Intruder, 73, 89, 97, 99, 112, 126, 141, 153, 175, 178, 180, 181, 182, 187, 199, 202, 206, 219, 220, 221, 222, 223, 225, 228, 229, 238, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 269, 270, 271, 272, 273, 276, 277, 278, 280, 286, 287, 288, 290, 292, 293, 294, 299, 304, 310, 312, 313, 314, 315, 317, 318, 323, 324, 325, 326, 327, 328, 330, 338, 339, 340, 344. 349, 360, 366, 367, 375, 377, 379, 380, 391, 407, 418, 422, 470, 480, 482, 487, 489, 502, 503, 508, 514, 515, 516, 517, 521, 529, 539, 540, 544, 555, 561, 562 A-6E, 81, 89, 323, 482, 514, 516 A-7 Corsair II, 201, 217, 333, 455, 480, 529, 530 AAA, 57, 177, 225, 261, 263, 264, 266, 267, 268, 273, 276, 277, 278, 289, 290, 291, 295, 308, 314, 317, 318, 320, 321, 322, 328, 380, 515, 516 AAAV Advanced Amphibious Assault Vehicle, 442, 446, 447 AAW, 333, 339, 341, 347, 354, 365, 384 ACE aviation combat element, 302, 425 ACM air combat maneuvering, 21, 29, 32, 379, 431 ACMC Assistant Commandant Marine Corps, 184, 444, 445, 492, 501, 512, 517, 518, 523, 557 AD-1 Skyraider, 7, 11, 18, 28, 29, 30, 31, 32, 39, 40, 41, 44, 46, 47, 48, 54, 55, 56, 60, 62, 71, 73, 83, 89, 98, 100, 105, 122, 130, 132, 133, 137, 141, 143, 155, 183, 238, 242, 321, 343, 413, 454, 470, 472, 543

AD-4, 130 AD-4B, 7, 40, 44, 45, 56, 62, 71, 98, 104, 105, 107, 130, 183 AD-5, 104, 105, 111, 122 AD-5W.100 AD-6, 104, 105, 111, 130, 132, 133 Aden, 67 ADF automatic direction finding, 71, 72, 73, 106, 107, 281 Advanced Training Command, 161 Aero 15, 139, 141, 163 Aero 20A wing pylon, 162, 163 Aero 7 pylon, 136, 163 Aero 7A pylon, 135, 143, 162 AESA advanced electronically scanned antenna, 466, 520 Afghanistan, 354, 355, 358, 360, 430, 463, 480, 505, 520, 521 Africa, 25, 29, 30, 54, 89, 98, 357, 397, 399, 526 AGL, above ground level, 34, 132, 153, 162, 164, 175, 178, 181, 267, 274, 275, 276, 280, 281, 286, 287, 288, 289, 290, 312, 318, 320, 325, 328, 515, 538 Agra, 358 AH-1J, 82, 83, 112, 396, 482 Cobra, 112 AH-1T, 112, 430 AID Agency for International Development, 359, 360 Air and Space Museum, 52, 53, 197, 523 Air Medal, 224 Air Weapons Systems Branch, 330, 336, 340, 344 air-to ground, 234 air-to-air, 31, 91, 108, 181, 214, 229, 234, 239, 379, 411, 471, 520 Aldrin, Buzz, 190 Alexandria, Egypt, 67 Algiers, North Africa, 29, 396 Alkali Canyon, 381, 382, 383, 427 All Weather Flight School, 17 Alpha Tau Omega ATO, 3 ALS (Arterial Lateral Sclerosis Lou Gherig's Disease, 411, 412 AM-2, 349, 369, 371, 372, 382, 420 American Red Cross, 186 Amos, James, 446 Amphibious Ready Group 10, 395 Anderson, Earl E., 427 Anderson, George, 200 Anderson, Joseph, 510, 529 Anderson, Norm, 279 Andrews Air Force Base, 196, 202, 203, 209, 242, 328 angled deck carrier, 36 Ankara, 360, 361 Annandale, Virginia, 247, 256, 268, 316, 341, 366, 497 AP aviation pilot, 8 APG-65 radar, 254, 538, 539

Apollo, 185, 190 APW Department of Aviation Weapons Requirements Branch, 167, 217, 294, 328, 339, 430, 455, 504, 508, 514, 523 Arab/Israeli War, 393 Arafat, 522 ARG Amphibious Ready Group, 393, 394, 406 Arlington Cemetery, 185, 331 Armed Forces Staff College, 465 Armstrong, Charles, 219, 260, 279, 294, 304 Armstrong, Neil, 190, 191, 197, 548 Army Air Corps, 356 Ashau Valley, 325 ASN Assistant Secretary of the Navy, 381 ATARS advanced tactical aerial reconnaissance, 521 Athens, Greece, 29 ATO Air Tasking Order, 3, 258, 259 Atsugi, 61, 62, 64, 171, 470 Attack Design Office, 187, 192, 203 AU-1 Corsair, 41, 48, 61, 62, 63, 64, 83, 257, 263 Augrain, Richard, 85 AV-8A Harrier, 166, 167, 168, 214, 217, 232, 233, 234, 236, 254, 255, 294, 329, 330, 331, 332, 333, 336, 337, 338, 339, 340, 341, 342, 343, 344, 347, 348, 351, 352, 353, 354, 355, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 390, 406, 410, 411, 415, 416, 417, 418, 419, 420, 421, 428, 449, 451, 453, 466, 472, 473, 474, 475, 504, 508, 510, 523, 530, 531, 542, 562 AV-8B Harrier II, 90, 176, 229, 232, 233, 337, 352, 353, 355, 373, 410, 416, 417, 440, 447, 448, 449, 451, 452, 453, 455, 471, 472, 520, 522, 529, 530, 546 AWC Assistant Wing Commander, 368, 374, 396, 411, 438, 440, 441, 469, 486, 497, 567 AWOL absent without leave, 386 AWS Amphibious Warfare School, 242 axial deck carrier, 19, 24, 36, 49, 477 Axtell, George, 112, 342, 366, 367, 368, 370, 374, 375, 380, 383, 393, 394, 395, 404, 423, 566

B/N

bombardier/navigator, 99, 220, 221, 222, 223, 225, 252, 253, 260, 261, 265, 266, 274, 275, 278, 279, 280, 289, 291, 296, 304, 307, 317, 318, 320, 322, 323, 324, 327, 391, 503 B-52, 141, 160, 175, 431 BAE, British Aerospace, 337, 352

В

Baghdad, Iraq, 536 Bagram, Iraq 354 Baker, Bud, 329, 332, 336, 350, 369 Baker, J.W., 54, 83, 156, 157, 158, 159, 160, 161, 331 Baker, Terry, 219, 260, 277, 278, 279, 282, 291, 307, 561 Ball, Lynn, 262, 283 Banana Wars, 301, 535 Banger Board, 135, 138 Barcelona, 68, 399 Barkley, Alban, 3 Barrow, Robert, 239, 440, 444, 445, 456, 465, 485, 486, 500, 501, 507, 508, 512, 534, 546, 548, 549, 550, 557, 568 Barrow, Patty, 555, 562 Bartels, William, 250 Barton, Lee, 304, 305 Bartow, Florida, 2, 72, 80, 93, 551 Basic School, 73, 74, 75, 81, 184, 242, 302 Basilica of the Holy Sepulcher, 362 Bateman, Kent, 279, 291, 296, 482, 503 Batista, Anthony, 449, 451, 452, 453, 466 Battle of Britain, 4 Battle of Midway, 4, 84, 460 BCD bad conduct discharge, 386 Beau Geste, 358 Beaufort, South Carolina, 228, 341, 342, 365, 366, 367, 369, 410, 411, 415, 416, 419, 422 Beeville, Texas, 161, 183, 184 Beirut, Lebanon, 471, 533, 534 Bell Helicopter, 351, 429, 447, 524 Bell 206L, 112 Bell 222, 112 Bell 412, 112 Bennington (CVA-20), 49, 135, 183 Best, Richard, 460 Bethesda Naval Hospital, 211, 330 Bethlehem, Israel, 361 Big Bear Mountain, 106 Bin Laden, Osama, 533 Birdwell, Edward, 279 BIT built in test, 414, 485 Blot, Harry, 369, 417, 421, 492, 493, 511, 520, 548 Blue Ax, 372 Blue House, 483, 484 Boeing, 429, 524, 527, 543 Bogue Field, 168, 368, 371, 372, 375 Bon Homme Richard, 49, 160, 183 Bonner, Peter, 224, 225, 246, 247, 248, 270, 292, 310, 488 Boomer, Walter, 512 BOQ bachelor officers quarters, 25, 185, 341, 367, 484, 566 Borman, Frank, 191 Borneo, 65 Boyington, Pappy, 90, 91 BRAC, 186, 473 Bradden, John, 339, 340 Breckenridge Hall, 244

Bremer, Paul, 522 Brier, George, 340 Brooke Army Medical Center, 185, 188, 189 Brown, Harold, 192, 193, 203, 204, 451, 505 Brown, Les, 437 Brown, Williams P., 261 Brutcher, Samuel, 503 Bugbee, Stan, 7, 8 Burns, Michael, 251 Busey, James, 516 Bush, George Herbert Walker, 530 Bush, George W., 522, 537 BuWeps Bureau of Weapons, 83, 146, 150, 151, 156, 174, 176, 182, 185, 186, 187, 189, 191, 192, 193, 198, 199, 203, 204, 205, 216, 227, 344, 504, 505, 509, 510, 554

С

C-141, 357, 359, 448 C2command and control, 368, 372, 481, 532 C-45 Beechcraft, 16, 202, 203 Cabiness Field, 4, 10, 11, 12, 15, 85 CAC2S command aviation command and control suite, 390, 532 Cadieux, William, 279 CAG carrier air group commander, 30, 32, 35, 84, 222, 223, 473 Caldwell, Whiff, 142, 151 call signs, 55, 56, 86, 319 Camp Lejeune, 112, 368, 369, 370, 371, 372, 385, 393, 402, 403, 410, 415, 416, 437 Camp Pendleton 29 Palms, 103, 107, 152, 153, 154, 173, 382, 383, 423, 427, 438 Camp Upshur, 74, 81, 242 Cannes, France, 67 CAP combat air patrol, 30, 31 Cape Canaveral, 195 Cape Teulada, 404 Carlton, John, 250, 251, 252, 255, 256, 481, 488, 489 Carlucci, Frank, 540 Carpenter, Stan, 215 Carr, Charles, 220, 221, 222, 223, 235, 259, 264, 267, 270, 274, 278, 279, 283, 284, 286, 287, 288, 289, 290, 291, 292, 293, 295, 317, 318, 323, 324, 327, 422, 456, 482, 489, 501, 503, 514, 515, 516, 519, 521, 549, 561 Carter, Jimmy, 193, 451 CAS close air support, 31, 59, 60, 61, 75, 90, 135, 137, 138, 166, 167, 168, 169, 177, 178, 214, 230, 231, 233, 234, 235, 236, 238, 239, 258, 259, 299, 300, 301, 302, 303, 305, 311, 312, 313, 314, 320, 347, 353, 355, 368, 372, 373, 400,

405, 406, 417, 424, 425, 473, 474, 475, 476, 532, 533, 539, 544, 550 Casper, Wyoming, 105 Castellaw, John, 113, 429, 430, 523 Castro, Fidel, 27 Cats Eve night vision goggles, 523, 529, 530 Caussin, Jack, 248, 251, 488, 489 CAX combined arms exercise, 383, 426, 427 CentCom Central Command, 303 CEP circular error probable, 176, 179, 467, 538 Ceylon, 48, 65, 67 CG III MAF, 259, 308, 310, 368, 470, 500 CH 53Ds, 112 CH-46, 83, 113, 116, 232, 270, 350, 404, 406, 447, 527 CH-46D, 112, 482 CH-46F, 112 CH-47D, 112 CH-53, 81, 83, 406, 452, 462, 527 CH-53D, 112, 392, 398, 400, 482 Sea Stallion, 404 CH-53E, 112, 462, 527 Chapman, Leonard F., 330, 331, 345, 350, 475, 558 Charlie Range, 131, 140, 142, 144, 146, 149, 151, 152, 162, 163 Charlie signal, 35 Chattanooga, Tennessee, 1 Cheney, Richard, 523, 524, 536 Cherry Point, 17, 19, 20, 25, 27, 37, 39, 41, 46, 54, 88, 112, 168, 180, 192, 202, 219, 222, 228, 246, 247, 248, 249, 251, 252, 257, 263, 268, 317, 318, 323, 324, 330, 342, 366, 379, 382, 383, 385, 390, 394, 416, 419, 422, 427, 436, 487, 514, 535, 554, 555, 560, 562, 566, 567 Chief of Staff, 199, 209, 241, 337, 353, 377, 408, 427, 436, 437, 442, 444, 461 China, 32, 34, 68, 91, 93, 102, 105, 123, 124, 128, 129, 133, 135, 137, 142, 144, 146, 147, 150, 151, 152, 162, 163, 166, 172, 173, 174, 175, 179, 182, 187, 192, 202, 221, 224, 226, 231, 238, 334, 357, 543, 554, 562 China Lake, 32, 34, 68, 93, 102, 105, 123, 124, 128, 129, 133, 135, 137, 142, 144, 146, 147, 150, 151, 152, 162, 163, 166, 172, 173, 174, 175, 179, 182, 187, 192, 202, 226, 334, 335, 529, 530, 543, 554, 562 Christmas, Ronald, 491 Chu Lai, 65, 88, 113, 115, 153, 178, 219, 221, 222, 223, 235, 254, 255, 257, 260, 261, 262, 263, 270, 272, 274, 276, 278, 282, 283, 284, 285, 291, 293, 294, 303, 304, 305, 308, 310, 314, 317, 319, 320, 324, 325, 326, 327, 334, 367, 384, 456, 503 CIA Central Intelligence Agency, 522 Circle Naval, 399, 565, 566 Clark, Vernon, 495 Clavtor, Graham, 468 Close-in-interdiction. 235 Clyatt, Vernon, 2

CMC Commandant Marine Corps, 16, 89, 152, 206, 207, 213, 214, 216, 239, 245, 330, 385, 387, 417, 426, 427, 432, 440, 443, 444, 446, 456, 463, 465, 471, 478, 491, 492, 493, 494, 496, 500, 501, 511, 512, 513, 517, 518, 519, 523, 534, 535, 547, 548 CNA Center for Naval Analysis, 530 CNO Chief of Naval Operations, 83, 200, 201, 206, 207, 216, 233, 350, 432, 433, 434, 440, 445, 468, 469, 478, 484, 492, 494, 495, 496, 511, 513, 516 549 Cobra, 112, 113, 392, 396, 406, 429, 430, 440, 541 COIN counter-insurgency airplane, 192, 193, 198, 199, 203, 204, 205, 208, 212, 504, 505 Cold War, 164, 167, 180, 238, 405 Collins, Michael, 190 Colombo, 48, 67 Comfort, Clay, 330, 384, 385, 390, 538 Command and Staff College, 112, 202, 209, 228, 241, 242, 243, 245, 246, 302, 355, 554 Commandant's Aviation Efficiency Trophy, 272, 364 Commander Seventh Fleet, 83, 469, 501 ComNavAirLant Commander Naval Air Atlantic, 423 ComNavAirPac Commander Naval Air Pacific, 85, 423 ComOpTEvFor Commander Operational Test and Evaluation Force, 129, 173, 373, 538 Congress, 83, 171, 207, 212, 232, 263, 309, 314, 330, 336, 337, 339, 355, 432, 433, 434, 438, 448, 496, 497, 524, 534 Connolly, Thomas, 212, 213, 217, 455 ConOps concept of operations, 136, 137, 138, 168, 332, 339, 347, 348, 353, 354, 372, 424, 474, 475 Conrad. Peter. 191 ConUS Continental United States, 47, 161, 327, 384, 412, 416, 436 Conway, James, 478, 496, 550 Cooper, Charles, 194, 195, 196 Coral Sea, 19, 24, 27, 28, 42, 46, 49, 83, 115, 157, 167, 183, 222, 223, 279, 293, 323, 375 Corona del Mar, 80, 553 Corpus Christi, Texas, 10, 11, 15, 16, 17, 27, 47, 183 Corry Field, 8, 9, 10, 12 Corsair spin, 33, 34 Cotton, John, 279 Cox, Dale, 130, 138, 139, 140, 145, 146, 147, 151, 172, 173, 176, 179, 426, 436 Craig, Paul, 269 Crete, 29, 395, 397 CSAR combat search and rescue, 342 Cubi Point, 160, 161, 499 Cunningham, Alfred A., 301 Curtis, O.W. (Curt), 46, 55, 56, 98, 99, 113, 413

D

Da Nang, 41, 63, 65, 115, 178, 223, 247, 252, 257, 258, 259, 260, 263, 264, 270, 310, 318, 324, 326 Daddy Rabbit, 331, 335 Dailey, John, 216, 217, 319, 463, 464, 465, 492, 514, 523 Dale, Michael, 277, 279 DASC direct air support center, 103, 108, 311, 353, 368, 371, 372, 373, 374, 375 Davis, J.K., 161, 183, 184, 497, 517 Day, James, 231 DC/S Aviation Deputy Chief of Staff, Aviation, 335, 421, 432, 444, 464, 508, 511, 514, 523, 525, 528, 535, 539, 545, 557, 567, 568 DCMC Aviation, Deputy Commandant for Aviation, 300, 429, 479, 535 DDR&E Director Defense Research and Engineering, 192, 193, 200, 204, 351, 421, 435, 450, 461, 468, 505, 530 DeCastro, Howard, 460 deep interdiction, 235, 237 deep north missions, 175, 220, 221, 223, 258, 264, 266, 311, 328 deep strike, 145, 166, 167, 176, 177, 178, 230, 302, 424, 495 Deering, Bud, 257, 294 Dellamano, Al, 184, 185, 186, 188, 190, 196 Department of Aviation, 217, 328, 333, 335 Department of State, 361 DePoy, Phil, 530, 531, 542, 549 Deputy Chief of Staff Aviation, 323, 350 Desert Storm, 116, 468, 520 DFC Distinguished Flying Cross, 222, 223, 224, 225, 293, 305 Dien Bien Phu, 41, 48, 62, 63, 64, 65, 257, 262 DMZ, 59, 221, 259, 264, 265, 269, 275, 280, 282, 285, 293, 294, 309, 310, 314, 320, 321 dog fighting, 32 Dommier Bridge, 278 Dr. Gilruth, 188, 189, 195 draft, 4, 92, 117, 223 duct stalls, 77, 78 Dunleavy, Richard, 490 Dunsfold, England, 329 Dye, Nellis (Nelly), 213

E

E-9, 144 EA-6A, 89, 187, 199, 227, 228, 314, 318, 375, 377, 379, 434, 435, 454 electronic warfare, 199 EA-6B, 89, 116, 435, 454, 473, 482 East India Company, 358 Eban, Abba, 362 ECM electronic countermeasure, 335, 376 FCP engineering change proposals, 187, 188 Edenton, North Carolina, 25 Edwards Air Force Base, 125, 194, 196, 202 EF-10, 454 EF-3D, 101 Eisenhower, Dwight, 507 El Toro, California, 80, 87, 88, 100, 101, 102, 103, 105, 107, 108, 109, 110, 111, 122, 128, 134, 146, 147, 151, 152, 153, 154, 158, 160, 161, 174, 182, 192, 228, 235, 239, 246, 324, 327, 328, 334, 382, 427, 481, 523, 538, 553, 554 Ellington Air Force Base, 189, 190 Emory, Gordon, 249, 250, 251 Engen, Donald, 124 Enterprise, 410, 460 E-Ring, 200 ESG expeditionary strike group, 90, 354, 476 evasive maneuvers, 273, 320 EW electronic warfare, 100, 199, 454, 473, 482 Excalibur artillery round, 467, 468 Exocet missile, 230 Expeditionary Warfare School, 302

F

F/A-18A Hornet, 41, 89, 90, 111, 116, 176, 180, 181, 206, 214, 229, 232, 233, 234, 235, 237, 239, 431, 447, 454, 455, 472, 473, 474, 480, 481, 514, 516, 517, 518, 519, 520, 521, 522, 523, 529, 530, 538, 539, 540, 546, 549 F/A-18E, 90, 124, 167, 177, 233, 236, 237, 466, 472, 480, 520, 549 F/A-18F Super Hornet, 124 F-104, 129, 234 F-111B, 200, 210, 211, 212, 217, 432, 434 F11F-1.124 F-14 Tomcat, 212, 213, 214, 215, 233, 431, 432, 433, 434, 440, 442 F-15, 112, 391, 482 F-16, 112, 354, 355, 391, 455 F-18D, 89 F-22, 89 F2H-3 Banshee, 17, 18, 35, 40, 42 F-35A Lightening, 89 F-35B, Lightening II, 90, 214, 216, 230, 233, 237, 240, 332, 333, 349, 350, 353, 354, 373, 375, 416, 418, 420, 472, 473, 474, 475, 476, 477, 478, 479, 481, 526, 528, 534, 550 F-35C, 90, 166, 178, 216, 237, 424, 472, 473, 474, 475, 477, 478, 480, 550

F-3D Skyknight, 100, 103, 104, 105, 228, 454 F-4 Phantom, 81, 89, 112, 126, 129, 130, 141, 175, 176, 181, 182, 202, 228, 229, 234, 239, 244, 270, 271, 319, 325, 326, 332, 351, 365, 366, 367, 375, 376, 379, 411, 418, 470, 482, 489, 502, 514, 538, 539 F-4B, 206, 377 F4D Skyray, 101, 122, 123 F4H-1 Phantom II, 123, 175, 234 F4U Corsair, 11, 17, 18, 19, 20, 21, 22, 23, 25, 27, 28, 29, 30, 31, 32, 33, 34, 37, 38, 39, 40, 41, 43, 44, 47, 48, 51, 52, 53, 54, 55, 60, 61, 62, 67, 71, 73, 89, 97, 98, 107, 157, 181, 183, 201, 234, 238, 253, 263, 313, 336, 413, 456, 470, 472, 480, 539, 543 F6F-5 Hellcat, 11, 12, 17, 18, 19, 20, 23, 47, 82, 183, 238 F-8 Crusader, 123, 126, 171, 172, 228, 229, 418 F-86, 106, 134 F8F Bearcat, 11, 63, 65, 263 **F-8**[] Crusader, 123, 125, 126, 127, 128, 129, 159, 171 F8U-1P. 125 F-9, 18, 32, 39, 79, 95, 124 F9F Panther, 7, 17, 29, 30, 31, 35, 41, 55, 69, 70, 71, 72, 73, 76, 77, 79, 89, 105, 111, 133 F9F-2P, 95 F9F-5, 104, 110, 111 F9F-5P, 95, 100, 101, 104 F9F-6, 104, 110, 111, 122 F9F-8 Cougar, 104, 106, 110, 111, 133 FAC, 60, 103, 166, 301, 303, 305, 311, 312, 373, 533 Forward Air Controller, 280, 281, 300, 306 FAC (A) forward air controller (airborne), 301 Fairbanks, Douglas, 358 Falklands, 234 FAM, familiarization (flight), 19, 21 Fansongs, 289, 290 Far East, 48, 87, 257, 357, 486 Farnborough, England, 504, 523, 529, 530 FARP forward arming refueling point, 354, 369, 472, 473, 476, 477, 478, 539, 550 FCLP field carrier landing practice, 10, 12, 13, 24, 25, 26, 27, 29, 42, 97, 98, 135, 253 Feightner, Whitey, 84, 549 Fiasco, 522 Fight Test, 123 Fighter Design Office, 187, 192 fighter tactics refresher squadron, 111 Finlayson, Edward, 253, 335, 336

Fitch, (Williams) Margaret Marie, 80, 93, 100, 101, 128 Fitch, Beverly, 13 Fitch, Blaine, 2, 9, 13, 113, 220, 294 Fitch, Charles Robert, 338 Fitch, Margaret, 72, 129, 157, 161, 183, 184, 185, 189, 222, 247, 249, 256, 268, 269, 316, 328, 341, 366, 375, 394, 397, 398, 399, 455, 456, 483, 485, 486, 500, 501, 502, 508, 540, 542, 547, 549, 550, 551, 561, 564 Fitch, Sharon, 2, 9, 13 FitRep fitness report, 121 fixed wing, 112, 113, 232, 240, 382, 400, 411, 429, 471.532 FJ-4, 104 FJ-4B Fury, 34, 35, 49, 68, 83, 104, 105, 111, 122, 123, 127, 130, 133, 134, 135, 137, 139, 140, 141, 155, 164, 165, 174, 175, 183, 234, 238 flight pay, 16, 38, 81, 82, 88, 102, 114, 165 Flight Test, 117, 123, 124, 125 Flight Test Division, 117, 123 FLIR forward looking infra-red, 46, 49, 180, 288, 328, 404, 504, 523, 529, 530 Florida State Teachers' College for Women, 1 Florida State University, 1 Floyd Bennett Field, 126 Flying Leathernecks, 5, 15 Flying Tigers, 91 FMF Fleet Marine Forces, 183, 184, 242, 278, 508 **FMFPac** Fleet Marine Force Pacific, 184, 291, 424, 431, 432, 470, 488, 490, 491, 497, 501, 535 FMFLant Fleet Marine Force, Atlantic, 374, 380, 393, 394, 404, 423, 464, 486, 534 FOB forward operating base, 354, 417, 472, 473, 476, 478, 539, 550 FOD foreign object damage, 343 Fontana, Paul, 91 Ford, Gerald, 193, 535 Forrestal, 460 Fort McNair, 340 Fort Meade, Florida, 1, 2, 13, 17, 44, 54, 269, 338 Forter, David, 278, 280, 281 forward basing, 90, 166, 167, 168, 214, 229, 230, 236, 237, 349, 373, 417, 421, 424, 474, 475, 479, 495, 539, 550 Foss, Joe, 4, 90, 91, 92, 412 FRAG, fragment of an order, 258, 259 Francis, Robert, 187 Franklin Delano Roosevelt, 217, 372 Franks, Tommy, 303, 521, 522, 536 French Foreign Legion, 402 Friese, Larry, 219, 220, 279, 317, 318, 319, 320 Fuss, Paul, 19, 33, 35, 51 Futema, MCAF, 482

G

Gainesville, Florida, 157, 183, 184, 185, 543, 549, 554 Gammill, James, 118 GCA ground controlled approach, 71, 72 GCE ground combat element, 231, 234, 236, 301, 302, 347, 368, 406, 424, 425, 474, 478, 479, 493, 550 Geiger, William, 195, 196 Gemini, 184, 185, 188, 189, 190, 191, 194, 195, 196, 197, 548 Genoa, Italy, 395, 397, 398, 399 George Air Force Base, 106 George Washington University, 3, 340, 364 Gibson, Baylor P., 259 Glass, Richard, 502 Glenn, John, 16, 125, 184, 185, 186, 188, 195, 197 Golan Heights, 362, 363 Gold Book, 332, 339, 353 Golden Eagles, 85, 91, 205, 412, 459, 460, 461, 469, 510, 548 Goldwater/Nichols, 537 Golf 10 Area. 370 Gondek, Robert, 220, 223, 224, 225, 277, 295 GPS global positioning system, 95, 179, 180, 300, 315, 391, 450, 467 Graning, Tiny, 118 Grant, Cary, 358 Gray, Al, 15, 89, 216, 243, 244, 245, 246, 324, 365, 392, 441, 444, 445, 447, 462, 463, 464, 465, 523 Green, James, 398, 403, 564 Greene, Wallace, 199, 209, 241, 242, 381 Grenada, 534, 535 Grenky, Ev, 450 Grissom, Gus 185, 188, 195, 196 Guadalcanal, 4, 90, 91 Guam, 372, 486 Guantanamo Bay Gitmo, 26, 27 Guell, Edward, 246, 247 Gulf of Tonkin, 224 Guttersloh, Germany, 371

Η

H&MS-14, 246, 247, 375, 377, 379, 428
H-506D, 112
H-60, 333
Hagee, Michael, 478, 494, 495
Hai Duong, 223, 224, 225, 266, 275, 284, 286, 289, 290, 293, 295, 314
Haiphong, 221, 223, 224, 225, 261, 264, 266, 285, 286, 289, 290, 307, 314, 322, 454
Hamas, 533 *Hancock (CVA-19)*, 49, 135, 183, 477
Hanoi, 82, 178, 219, 221, 223, 225, 258, 259, 264, 266, 274, 275, 278, 279, 283, 285, 288, 289, 290, 291, 293, 296, 307, 313, 314, 317, 319, 320, 327, 364, 454, 544, 545, 561
Hanoi Hanna, 292

Hanoi Hilton, 320 Hanoi Radio, 292, 293 Harrison, James, 113, 392, 396 Harry Lee Hall, 245, 256, 390 Hart, John N, 24 Harwell, Po. 117, 118 Havenstein, Paul, 194, 195, 196, 197 Hawker Hunter, 504, 523 Hawker Siddeley, 337, 350, 351, 352 Hayward, Thomas, 469, 470, 546 HE high explosive, 152, 153, 154, 155, 334 Heegeman, James, 398, 564 Heegeman, Margo, 398, 399, 564 Hellborne 235, 305 Hellfire missile, 532 Henderson Hall, 185, 189, 256 Herrington, John, 540, 541, 549 Herrington, Lois, 540 Higginbotham, Barbara, 555 Higginbotham, Charles, 555 Hill, Homer Dan, 335, 337, 338, 339, 340, 341, 343, 344, 352, 353, 355, 364, 365, 382, 428, 436 Hiltbrunner, Donald, 261, 278 Hiroshima, 158 Hoa Loc Airfield, 317, 318 Hochmuth, Bruno, 193, 194, 198, 199, 200, 201, 206, 207, 216, 241, 464 Hong Kong, 48, 75, 87, 88, 159 Honolulu, Hawaii, 268 Horn of Africa, 526 Hough, Michael, 479 Houghton, Kenny, 382 House Armed Services Committee, 171, 433, 445, 449 Houser, William, 332, 449, 453 How the Pentagon Was Sold, 542 Howard, Robert, 128, 129 Howell, Jeff, 489, 490, 491, 514, 523 HQMC Headquarters, Marine Corps, 14, 24, 40, 70, 91, 99, 112, 134, 147, 152, 155, 191, 193, 196, 199, 209, 268, 325, 327, 328, 331, 333, 334, 335, 336, 337, 338, 340, 344, 345, 347, 366, 380, 384, 387, 405, 408, 425, 436, 437, 439, 440, 441, 443, 444, 449, 451, 463, 464, 479, 486, 491, 493, 498, 507, 511, 530, 534, 535, 537, 539, 546, 554, 562, 567 Hubbard, Jay, 91, 412

I

I Corps, 259, 269, 272, 299, 309, 310, 312, 314, 317, 320, 330, 337 IED improvised explosive device, 230, 462, 522, 536 III MAF Marine Amphibious Force, 259, 309, 310, 311, 330, 333, 367, 377, 486, 500 III Marine Amphibious Forces, 299 III MEF Marine Expeditionary Force, 310, 337, 367, 486 Indian Ocean, 48, 67, 527

IOC

- initial operating capability, 217, 235, 240, 332, 350, 353, 373, 418, 472, 475, 524, 526, 534
- IP
- initial point, 153, 267, 284, 287, 289, 290, 293, 307 Iraq, 92, 116, 208, 211, 230, 236, 263, 302, 303, 354, 380, 430, 463, 467, 471, 475, 479, 505, 520, 521, 522, 526, 536, 537
- Iraq War, 522
- Ireland, Julius W. (Bucky), 46, 55, 66, 68, 413
- Israel, 357, 358, 361, 363, 521, 522
- Israeli Army, 363
- Iverson, Ronald, 219, 262, 273, 277, 278, 283, 294, 561
- Iwakuni, 87, 115, 158, 159, 161, 167, 186, 188, 416, 438, 481, 482, 483, 486, 499, 500, 501, 502, 554
- *Iwo Jima*, 60, 363, 394, 395, 396, 398, 399, 401, 407, 504, 564, 565

J

Jack, Samuel, 146 Jacksonville, Florida, 26, 27, 44, 45, 54, 56, 65, 68, 161, 251 Japan, 45, 58, 62, 65, 87, 98, 102, 112, 114, 157, 158, 161, 167, 185, 186, 345, 357, 416, 426, 453, 481, 482, 483, 484, 485, 497, 502, 507, 540, 554, 567 Jaskilka, Samuel, 393, 394, 444, 445 JATO jet assisted take off, 167 Jerusalem, 361, 362, 363 John F. Kennedy JFK, 114 Johnson Space Center, 189 Johnson, Louis, 74 Johnson, Lyndon B., 43, 74, 189, 193, 211, 263, 311 Joint Strike Fighter, 124, 168, 217, 237, 240, 350, 418, 466, 473, 480, 526, 534 Jolly Green H-53, 279, 319, 321, 322 Jones, Elwin (Red), 67, 102, 103, 110, 549 Jones, James, 443, 478, 479 Jordan, 363 Jordan River, 362 Josephson, Joseph, 396, 565 JSF Joint Strike Fighter, 90, 166, 216, 217, 230, 237, 240, 350, 373, 424, 475, 481, 526, 534, 550

K

Kabul, Afghanistan, 358, 359 Kadena Air Force Base, 482, 502 Kahn, Genghis, 359 Kamikazes, 231 Kandahar, Afghanistan, 354, 359, 360 KC-130, 101, 161, 338, 481, 525 Keen, Timothy, 123, 127 Kelley, Barbara, 501, 507 Kelley, P.X., 184, 444, 461, 465, 492, 501, 507, 512, 517, 518, 519, 521, 534, 548 Kennedy, John F., 193 Kennedy, Theodore, 519 Kern, Cris, 279 Keys, William, 231, 492 Khe Sahn, 271, 282, 283, 299, 300, 308, 311, 325 Khyber Pass, 359 Killeen, Calhoun J., 500 Kim Jong-il, 471 King Faisal, 357 Kipling, Rudyard, 359 Kline, Rip, 29, 30 Koler, Joseph, 469, 470, 497, 545 Korat Royal Thai Air Base, 319 Korea, 15, 17, 18, 23, 39, 40, 41, 42, 43, 47, 48, 58, 59, 60, 61, 62, 63, 65, 74, 83, 88, 98, 105, 117, 183, 230, 231, 242, 246, 314, 321, 380, 402, 409, 441, 470, 471, 477, 481, 482, 483, 502, 544 Korean War, 4, 9, 17, 23, 39, 40, 41, 43, 64, 92, 113, 471, 544, 549 Kretzschmar, William, 278 Krulak, Charles, 443, 444, 490, 491, 492, 493, 494, 511.520 Kurdistan, 303 Kurds, 303

L

LABS low altitude bombing system, 35, 139 Lang, Frank, 456 LANTIRN low altitude navigation targeting infrared for night, 214, 432 Laos, 88, 175, 178, 182, 269, 270, 272, 275, 276, 279, 280, 281, 299, 308, 311 LAV light armored vehicle, 462, 463 Lawson, Curt, 317, 320, 321, 322, 327 Legion of Merit, 344, 428, 545 Lehman, John, 324, 421, 469, 492, 540, 541, 542 Lemoore Naval Air Station, 146, 235, 239 Lennox, Corky, 539 LHA, 90, 354, 372, 406, 416, 471, 472, 474, 475, 476, 477, 494, 495, 526, 539, 550 LHD, 90, 354, 416, 471, 472, 474, 475, 476, 477, 494, 495, 526, 539, 550 Libya, 30 Life Magazine, 4, 92 Light Brigade, 358 Lincoln, 87 Lind, William, 463 Lisbon, 25, 68 Litening pod, 254, 354, 355 Lockheed, 11, 117, 121, 124, 125, 195, 526 London, England, 332, 336 Lovell, James, 191, 197, 548 LSO, 30, 51 landing signal officer, 10, 12, 13, 19, 25, 26, 36, 38, 48, 51, 135 LST, 59 LVA, 441, 442, 443, 444, 445, 446, 450, 461, 462, 464, 466, 498 LVT-7 amtrax, 404 LVTP-7 amtracs, 393

Lyman Road, 370, 371, 372, 374 LZ Bluebird, 348, 368, 369, 370, 371, 372, 374, 421

Μ

Maas, Jack, 91 MABS-14, 168, 375 MacDill Air Force Base, 78, 79, 80 Mack, Duane, 131, 142, 274 MACS Marine air control squadrons, 103 Maddock, Thomas, 410, 411 MAG-11, 325, 538, 539 MAG-12, 88, 115, 160, 161, 219, 228, 255, 256, 257, 259, 260, 269, 278, 279, 280, 283, 291, 293, 294, 296, 303, 304, 305, 306, 318, 320, 321, 325, 326, 327, 364, 367, 482, 503, 561 MAG-14, 89, 99, 112, 113, 168, 225, 228, 235, 243, 246, 247, 248, 250, 251, 252, 253, 254, 310, 324, 330, 375, 376, 377, 380, 381, 382, 383, 384, 386, 389, 390, 409, 419, 422, 427, 435, 486, 487, 489, 514, 562, 563, 566, 567 MAG-15, 151, 152, 326, 489 MAG-16, 101 MAG-22, 381 MAG-26, 410 MAG-29, 410 MAG-31, 228, 367 MAG-32, 341, 342, 363, 365, 366, 367 MAG-36, 113, 294, 414, 415, 482 Magnus, Robert, 113, 523 MAGTF Marine Air Ground Task Force, 167, 177, 209, 229, 232, 236, 245, 246, 302, 313, 331, 348, 424, 474, 475, 478, 479, 492, 493, 512, 544 Main Brace operation, 39 maneuver warfare, 244, 463 Manila Bay, 48, 159 Mann, David, 200, 201, 447, 448, 449, 468, 531, 549 Mansub, John, 306 Marble Mountain, 63, 101, 113, 220, 294 MARCOR Systems Command, 216 Marine Air Base Squadron 14, 371 Marine Air Weapons Training Squadron, 192 Marine Corps Systems Command, 216, 390, 464 Marine Corps University, 246 Marion, Carl, 90, 91, 109, 549 Mark 4, 182 Mark, Hans, 351, 448, 525 MARS Marine Aircraft Repair Squadron, 103, 104, 105, 111 MARS-37, 103, 104, 105, 111 Marston matting, 62, 168 Martini Rossi, 397 Marvel, Jerry, 219, 220, 317, 318, 320 Masters Field, 41, 69, 76, 77 Matthews, John (Matty), 393, 395, 402, 403 Mattke, Terry, 504, 529, 530, 549 Maverick Missile, 315 MAWTS

Marine Aviation Weapons Tactics Squadron, 426, 460, 485 MAWTU Marine Aviation Weapons and Tactics Unit, 192, 426 Mawyer, Ralph, 111, 183 MBR multiple bomb rack, 126, 146, 147, 148, 150, 151, 152, 153, 154, 155, 173, 174, 175, 238 MCAA Marine Corps Aviation Association, 86, 305, 412, 455, 456, 461 MCAS, 17, 27, 40, 68, 98, 108, 146, 158, 161, 163, 174, 182, 192, 248, 249, 328, 334, 341, 342, 382, 383, 410, 419, 481, 483, 526 MCBR multiple carriage bomb rack, 126, 131, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 155, 162, 163, 167, 172, 173, 174, 176, 192, 365 McCaleb, Alfred F. (Mac), 247 McCauley, 76, 77, 78, 79, 80, 82 MCCDC, 216, 245, 446, 493 McCorkle, Fred, 354, 355, 426 McCoy, Frank, 142, 144 McCutcheon, Keith, 113, 201, 294, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 343, 345, 349, 350, 351, 368, 377, 433, 436, 455, 475, 479 McDonald, David, 200 McDonnell-Douglas, 121, 125, 126, 142, 143, 145, 146, 147, 148, 150, 151, 152, 155, 156, 173, 174, 175, 187, 229, 334, 337, 352, 353, 429, 455 McInerny, James, 482 McLennan, Kenneth, 508, 512 McNamara, Robert, 134, 210, 211, 234, 432 MCRDAC Marine Corps Research, Development and Acquisitions Command, 216, 464, 465 Mead, James, 437 MEB Marine Expeditionary Brigade, 314, 380, 381, 396, 402, 409, 441, 545, 546 Mediterranean Sea, 27, 28, 29, 30, 31, 32, 35, 40, 42, 43, 46, 47, 48, 51, 54, 57, 65, 67, 68, 81, 93, 183, 222, 314, 363, 380, 392, 393, 395, 396, 397, 399, 400, 401, 402, 404, 405, 406, 407, 408, 415, 416,419, 422, 441, 526, 527, 534, 545, 563, 566 Meier, Golda, 361 Mendenhall, Herb, 336, 339, 343 MER multiple ejection rack, 147, 174, 175, 176, 179, 280, 325, 544 Mercer College, 552 Mercury, 184, 185, 188, 194, 196 Mercury Nine, 194, 195 Metzco, John, 330 MEU Marine Expeditionary Unit, 112, 113, 380, 381, 392, 394, 403, 409, 415, 416, 419, 441, 534, 544, 545, 563, 565, 566 MEU(SOC)

Marine Expeditionary Unit (Special Operations Capable), 392 Miami, Florida, 4, 40, 41, 44, 45, 46, 47, 54, 68, 73, 76, 77, 98, 100, 101 Middendorf, J. William, 468 Middle East, 67, 303, 357, 359, 361, 521, 522 Midway, 49, 83, 91, 157, 158, 159, 167, 171, 172, 183, 460 MIG-21, 239, 285 Miller, John, 221 Miller, Thomas, 88, 108, 112, 196, 200, 213, 214, 294, 324, 325, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 339, 343, 345, 349, 350, 351, 367, 368, 374, 375, 377, 378, 380, 383, 384, 394, 405, 411, 423, 425, 431, 432, 434, 435, 436, 437, 438, 439, 440, 444, 445, 447, 449, 451, 453, 455, 456, 468, 492, 494, 508, 512, 535, 537, 545, 549, 557, 563, 566, 567 Ministry of Technology, 332, 336, 337, 350 Miramar, 91, 213, 422, 431, 432 MK-105, 135, 139 MK-76, 131, 133, 135, 136, 137, 138, 141, 144, 252, 373, 379, 538 MK-81, 135, 136, 137, 141, 142, 144, 145, 148, 149, 150, 151, 152, 162, 163, 172, 179, 235, 302, 306, 334, 373 MK-82, 135, 136, 137, 151, 153, 155, 175, 179, 235, 238, 262, 269, 270, 271, 272, 275, 276, 287, 288, 306, 348, 373, 425, 534 MK-83, 135, 141, 373 MK-84, 135, 294, 312 MOH Medal of Honor, 90, 91, 231, 343 Momyer, William W., 309 Monterey, 10, 12, 13, 183 Monterey, California, 114, 116, 119, 120 Moody Funeral Home, 338 Moody, Daniel, 338 Moore, Royal, 116 Moore, Thomas, 117, 118, 120, 123 Moran, William, 197, 198 Morehead City, North Carolina, 395, 396, 564 Morgan, Thomas (Shine), 244, 341, 342, 366, 367, 492 Morley, James, 379 Morse, Robert W., 107, 197, 199, 200, 203, 205, 215, 217, 226, 241, 531, 549 Morton, Al, 187, 191, 192, 193, 203, 204, 505 MPWS, 461, 462 mobile protected weapons system, 446 Mu Gia Pass, 280, 281, 282 Mullen, Michael, 494, 495, 496, 511 Mundy, Carl, 230, 463, 492, 493 Murray, Russ, 320, 449, 451, 452, 453 Musharraf, Pervez, 471 Mutter, Carol, 507 MV-22 Osprey, 113, 217, 232, 339, 350, 351, 407, 430, 447, 522, 524, 525, 526, 527, 528, 549, 550 MWSG-27, 371

Ν

N-8, 83, 207, 208, 331, 497, 511, 520 Naples, Italy, 29, 67 NAS Naval Air Station, 5, 27, 47, 64, 70, 171, 183, 248, 416, 431, 544 NASA, 133, 188, 189, 195, 196, 197, 351, 447, 525 Nash, Gordon, 245 Nassau, 372, 406 NATC, Naval Air Test Center, 112, 117, 126, 418, 508 Nathman, Black, 494 National War College, 3, 243, 268, 336, 338, 339, 340, 342, 344, 346, 355, 356, 357, 360, 363, 364, 365, 416, 428, 554, 559, 562 NATOPS, Naval air training and operating standardization, 20, 99, 107, 114, 125, 485 NavAir Naval Air Systems Command, 186, 334, 341, 524 Naval Air Station, (NAS) Miami, 5 Naval Air Systems Command, 146, 186, 216, 339, 352, 365, 377, 509, 510, 516, 525 Naval Air Test Center, 101, 110, 111, 121, 122, 124, 125, 327, 344, 369, 509, 510 Naval Air Training Command, 182 Naval Aviation Cadet NavCad, 4, 5, 10, 14, 15, 16, 17, 53, 69, 74, 75, 81, 82, 85, 117, 211, 219, 242, 544, 549 Naval Avionics Facility Indianapolis, 133 Naval Postgraduate School, 116, 117, 119, 120, 139 Navy Annex, 185, 193, 443, 492 Navy Distinguished Service Medal, 469, 545 Navy Flight School Naval Air Training Command, 182 Navy Relief, 559 NC Navy Cross, 225, 278, 279, 291, 292, 293, 296, 364, 561 NCH-53A, 112 NCM Navy Commendation Medal, 176 Neds, Joseph, 4, 23, 29, 37, 38, 39, 40, 43, 44, 45, 46, 47, 54, 55, 90, 91, 98, 486, 493, 501 New Delhi, 358 New, Noah, 336, 340, 341, 364, 365 NFO, 99, 213, 251, 253, 293, 296, 512 Naval Flight Officer, 512, 514 Nichols, Robert, 356, 428, 439 Nimbus Star, 400 Nitze, Paul. 200, 211 Nixon, Richard, 186, 439 Norfolk Naval Air Station, 20, 65, 173, 373, 375, 394, 395.465 North Korea, 40, 58, 59, 232, 303 North Vietnam, 88, 175, 178, 182, 199, 220, 221, 223, 224, 225, 258, 259, 275, 276, 278, 293, 294, 343, 359, 487, 514 Northrop Grumman, 212, 238, 239, 434, 455, 516 NOTS Naval Ordnance Test Station, 128, 129, 138, 140, 141.145.147.149 Nowadnick, William, 376

NPE Navy Preliminary Evaluations, 125 Nyland, William, (Spider) 512, 523

0

O'Donnell, Andrew, 374, 396, 397, 411, 412, 413, 497, 501, 512, 567 oblique photography, 96 Oceana Naval Air Station, 248 OCS Officer Candidate School, 75 O'Donnell, Patty, 412, 413, 501, 566 Office of Naval Research, 198, 206 Okinawa, 60, 65, 115, 200, 231, 323, 367, 414, 438, 469, 482, 483, 484, 486, 500, 501, 504, 530, 540, 556, 557, 558, 567 Olmstead, Steven, 500, 501 one wheel landing, 52, 54 OP-05, 212, 217, 331, 332, 350, 434, 435, 449, 452, 453, 455, 489, 510, 511, 516 OPA Office of Program Appraisal, 207, 233, 497 Opa Locka Marine Corps Air Station, 54, 68, 98 Operation Main Brace, 22, 25 Operational Test and Evaluation Force, 129, 173, 373, 538 OPNAV, 208, 332, 337, 511 **OpTEvFor** Operational Test and Evaluation Force, 129, 172, 173 Ordnance Test, 124, 125, 145 Oriskany, 49, 183 Orr, James, 369, 410, 411, 421, 566 OSD Office of Secretary of Defense, 166, 192, 207, 314, 330, 332, 333, 336, 337, 339, 356, 371, 372, 373, 443, 452, 536 OT operational test, 368, 467 OV-10, 112, 191, 204, 205, 208, 482, 504, 505 OV-10A, 82, 205, 206, 208, 482

Р

P2V, 122, 123 Pace Field, 7 Pace, Peter, 7, 513 Paengnyang Do, 59 Paisley, Melvyn, 531, 542 Paisley, Melvyn R., 531 Palestine, 522 Palm Springs, California, 106 Panama Canal, 41, 44, 47, 57, 67, 242, 321 Paraskos, Peter, 116, 117, 121 Paris Air Show, 448, 525, 526 Parker-51, 114, 115 partial panel jet penetration, 71 Patuxent River, Maryland (Pax River), 89, 101, 109, 110, 111, 112, 116, 117, 118, 123, 124, 125, 126, 127, 180, 186, 202, 205, 228, 269, 327, 344, 366, 369, 418, 508, 510, 553, 554

Peninsula Hotel, 87 Penny, James, 252 Pensacola Christian College, 552 Pensacola, Florida, 3, 5, 6, 8, 9, 10, 14, 15, 16, 69, 70, 71, 72, 73, 76, 85, 92, 117, 220, 251, 544, 552 Pentagon, 111, 112, 126, 200, 211, 212, 228, 392, 434, 443, 505, 540, 541, 542 Petersen, Frank, 501 PGM precision guided munition, 300, 301, 407, 442, 467 Phoenix missile, 214, 432, 434 photo reconnaissance, 95, 97 Phuc Yen, 279, 296 Pine Castle Bombing Range, 379 Pirie, Robert, 150, 172 Platoon Leader Course, 15 PLRS position locating reporting system, 449, 450, 453, 468 Poillon, Jake, 382, 383, 427 Point Mugu, 173, 196, 197 Port Lyautey, French Morocco, 22, 23, 24, 25, 27, 32, 33, 34, 42 Porto Scuda, Sardinia, 400, 401, 402 POW escort flights, 59 Powell, Colin, 522, 537 Powell, Ray, 481, 499, 522, 537 POWs, 59, 60, 62, 91, 220, 296, 320, 322 Presidential Medal of Freedom, 522 Preston, Robert, 358 PROV-MAG Provisional MAG, 381, 382 pylon, 135, 136, 138, 140, 143, 144, 149, 162, 163, 290

Q

Quantico Marine Corps Basae, 15, 74, 109, 112, 185, 202, 209, 216, 222, 225, 242, 245, 246, 355, 380, 390, 414, 441, 443, 444, 463, 464, 465, 493, 549 Quarters 2 Marine Barracks, 557 Quonset huts, 74, 75 Quonset Point, Rhode Island, 26, 27, 28

R

R&D Research and Development, 126, 193, 194, 198, 199, 200, 201, 202, 205, 206, 207, 209, 215, 216, 225, 226, 227, 228, 229, 241, 242, 325, 344, 345, 366, 381, 432, 434, 435, 438, 440, 441, 443, 446, 448, 449, 452, 461, 463, 464, 465, 466, 468, 469, 498, 505, 508, 509, 546 R&R rest and recovery, 268, 324, 327 R4D, 93, 104, 111, 115 R4D-8, 104 RaBFAC radar beacon forward air controller, 405 race relations, 303 RAF

Royal Air Force, 329, 343, 351, 371, 372, 390, 504, 523, 529, 530 Raffles Hotel, 66 Raytheon, 532, 533, 543 Reagan, Ronald, 453, 469, 502, 535, 541 Red Cross, 559 Red Fort, 358 Red River, 219, 266, 275, 289 Red River Rats, 219, 319 Reddy, Jack, 256, 389, 390 Reddy, Terry, 563 Reed, Edward, 101, 113 Reusser, Kenneth, 68 RF-4B, 97, 228, 375, 377, 379, 435, 482 Rice, K.P., 128, 137, 138, 139, 140, 141, 142, 145, 147, 148, 151, 172, 173, 174, 176, 192, 193, 199, 203, 204, 206, 221, 504, 505 Richardson, Judd, 269 Rickenbaker, Eddie, 91 Rickover, Hyman G., 198 Ricks, Thomas, 522 RIO radar intercept officer, 228, 234 Rivers, Mendel, 433 Riyadh, Saudi Arabia, 357 Robertshaw, Louis, 91, 116, 200, 201, 203, 206, 207, 227 Roche, Robert, 376, 379 Roland, Herc, 215 Rolling Thunder, 153, 178, 179, 223, 225, 228, 258, 259, 268, 269, 278, 283, 284, 309, 310, 311, 314, 317, 319, 320, 328, 454, 544 Rome, Italy, 67 Roosevelt Roads Puerto Rico, 27 rotary wing, 113, 117, 121, 230, 232, 237, 240, 373, 382, 407, 424, 472, 473, 475, 477, 479, 482, 525, 526, 528, 532, 549 Route Package 1, 259, 260, 269, 272, 275, 276, 280, 290, 294, 310, 311, 314, 317, 320, 321, 327, 544 Route Package 2, 280, 281, 282, 309 Route Package 3, 269, 299, 310, 320, 328 Route Package 4, 269, 299, 310, 320, 328 Route Package 5, 264, 269, 274, 275, 288, 299, 309, 310, 314, 320, 328 Route Package 6, 264, 269, 275, 284, 288, 309, 310, 314, 320, 328 Route Package 6A, 299 Route Package 6B, 299 Royal Navy, 329, 351, 529 Rumsfeld, Donald, 513, 521, 536 Rushlow, Ray, 154, 156, 157, 158, 159, 160 Russell, Gene, 368, 369, 370, 374, 530, 531

S

S2F-1, 122 SA-2 missile, 287, 289, 308 SAIC Science Applications International Corporation, 211 Saigon, 65, 211, 263, 387, 535 Saigon evacuation, 535 Saipan, 7, 39, 40, 41, 43, 44, 45, 46, 47, 56, 57, 58, 59, 62, 63, 64, 65, 66, 67, 68, 74, 83, 98, 109, 110, 113, 182, 183, 242, 263, 321, 402, 526 SAM surface to air missile, 82, 154, 177, 225, 261, 273, 274, 275, 278, 286, 287, 288, 289, 291, 293, 296, 314, 318, 328, 480, 515, 516 San Diego, California, 45, 47, 58, 412, 416, 422 Santa Ana, California, 80, 93, 101, 102, 111, 128, 157, 174, 553 Santa Margherita, 398 Sasebo, 58 SATS short airfield for tactical support, 62, 167, 168, 260, 418 Satterfield, Butch, 118, 120, 122 Saudi Arabia, 357, 358 Saufley Field, 9, 71 Sayer, Ralph, 23 Scarborough, John, 262 Scheuren, William, 369, 421 Schirra, Wally, 185 Schoultz, R.F. (Dutch), 9, 510, 511, 516, 517, 538 Sea of Galilee, 363 Sea of Japan, 40, 58, 59, 65, 74 SecDef Secretary of Defense, 43, 74, 134, 186, 192, 193, 208, 211, 212, 215, 216, 356, 432, 433, 451, 452, 453, 468, 512, 513, 524, 536, 540, 541, 547 SecNav Secretary of the Navy, 83, 123, 126, 194, 199, 200, 202, 205, 206, 207, 208, 209, 211, 215, 216, 218, 225, 226, 227, 228, 229, 233, 241, 242, 243, 246, 324, 325, 344, 365, 366, 421, 432, 433, 434, 435, 440, 443, 445, 447, 448, 449, 452, 464, 468, 469, 492, 496, 497, 504, 505, 509, 512, 513, 514, 516, 517, 518, 519, 520, 521, 529, 530, 531, 538, 540, 541, 542, 546, 547, 548, 549, 554, 557 Secretary of the Air Force, 525 Seder, David, 323, 514, 515, 516, 519, 521, 549 See, Elliot, 191 Segner, Donald, 116, 117, 118, 121 Sellers, Harry, 130, 131 Senate Appropriations Committee, 337, 352, 353, 439 Senate Armed Services Committee, 171, 439, 451, 517, 518, 519, 547 Seoul, Korea, 483, 484 Serling, Rod, 273 Service Test, 123, 124, 125 Service, James, 10, 85, 125 SETP Society of Experimental Test Pilots, 121 Seventh Fleet, 285, 469, 470, 486 SH-3D, 112 SH-60B, 112 Shaw, Milt, 198 shellback, 65, 66, 335 Shepard, Alan, 185, 188, 190, 191, 195, 196 Sherman Field, 6 Shiites, 303

Shoup, David M., 16, 147, 151, 152, 154, 155, 156, 157, 173, 174, 241 Shu Fly, 113 Shutler, Phil, 199, 213, 214, 227, 228, 325, 337, 432, 434, 436 Sidewinder missile, 128, 129 Silver Star, 225, 231, 251, 278, 279, 283, 291, 292, 299, 364, 545, 561 Singapore, 48, 65, 66, 67, 75, 159 SIOP single integrated operation plan, 159, 167, 171 Slayton, Deke, 185, 190, 194, 195, 196, 197 Smith, Burneal, 76 Smith, Clyde, 279, 280, 281, 282 Smith, Fred, 208 Smith, Keith, 534 SNB-5 Beechcraft, 16, 104, 111, 122, 130 Snead, Swoose, 180 SNJ, 6, 7, 9, 10, 11, 18, 23, 47, 71, 183 SNJ-4, 6 SNJ-5, 6 Snowden, Larry, 442, 443, 444, 445 Solliday, Robert, 195, 196 South Korea, 58, 59, 65, 303, 380, 471, 481, 483 South Vietnam, 62, 88, 175, 182, 259, 263, 269, 271, 276, 292, 299, 309, 535 Soviet Union, 167, 238, 372, 432 Spangenberg, George, 198, 204, 205, 206, 211 Spanjer, Barbara, 55 Spanjer, Ralph (Smoke), 46, 55, 56, 69, 100, 101, 109, 411, 413, 416, 427, 562, 566 Special Indoctrination Course, 74, 75, 76 Special Indoctrination School, 75 Special Weapons Delivery Handbook, 130, 132 Split "S", 285 Springfield, Virginia, 189, 209 Sri Lanka, 65, 67 SRVT sortie rate validation test, 166, 168, 368, 371, 372, 373, 374, 375, 415, 421 Stafford, Thomas, 191 State of Denial, 522 Steadman, Henry (Hank), 104, 105 Stealth, 454 Stennis, John, 439, 451 STOVL short take-off, vertical landing, 90, 124, 166, 167, 168, 169, 214, 216, 217, 229, 230, 233, 236, 237, 238, 240, 331, 332, 333, 337, 338, 348, 349, 350, 353, 371, 372, 373, 375, 416, 417, 418, 420, 424, 449, 470, 471, 472, 473, 474, 475, 477, 478, 479, 481, 494, 495, 534, 539, 549, 550 straight deck carrier, 12, 13, 19, 22, 24, 36, 46, 57, 321 Straits of Gibraltar, 28, 68, 75, 396 Streeter, Thomas, 37, 38 strike/fighter aircraft, 90, 169, 230, 234, 239, 259, 424, 472, 473, 475, 477, 493, 526, 533, 534 Subic Bay, 268 Suez Canal, 41, 48, 67, 242, 321, 363, 397, 400, 401, 526

Sumatra, 65 Sunnis, 303 Suribachi, 60 Symington, Stuart, 351, 352

Т

T-1A, 202, 247 T-28, 111, 196, 202, 203, 242 T-28B, 104, 122 T2V-1, 122 T-33, 11, 202, 242 T-33A, 104, 105, 111 T-38, 202 TA-4F, 261, 314, 375, 383, 482 TacAir, 90, 214, 230, 231, 232, 233, 236, 237, 238, 337, 353, 405, 424, 427, 469, 470, 471, 472, 473, 474, 475, 478, 479, 481, 493, 494, 495, 496, 503, 537, 550 TACAN, 71, 73, 76, 107, 311 TACC tactical air command center, 101, 102, 103, 104, 105, 107, 108, 109, 110, 111, 260, 270, 282, 353, 368, 372, 373, 466 TAD, 111, 436, 438 TAI TacAir integration, 469, 478, 479, 494 tail hook, 36 Tailhook, 528 Taiwan, 59, 60 Taj Mahal, 358 Tally Ho, 220, 221, 259, 269, 272, 276, 280, 283, 310, 317, 320, 544 Tampa Center, 76, 77 TAOC tactical air operations center, 108, 109, 353, 368, 466 Tarawa, 19, 24, 26, 27, 28, 29, 30, 32, 36, 40, 41, 42, 43, 44, 46, 51, 52, 54, 83, 107, 183, 242, 456, 477 Taylor, Elizabeth, 67 Taylor, Mickey, 530 Tel Aviv. 361 Tenet, George, 522 TER triple ejection rack, 175, 176, 179, 325 Test Pilot School, 87, 102, 104, 105, 106, 109, 110, 116, 122, 123, 127, 134, 182, 190, 194, 228, 244, 269, 344, 409, 417, 421, 516, 543, 546, 553, 562 Tet Offensive, 258, 269, 270, 271, 272, 282, 283, 299, 300, 304, 310, 312, 326, 384 TH-1L, 112 Thailand, 178, 219, 223, 269, 288, 309, 318 The Banger Board, 135 The Early and Pioneer Naval Aviators Association. See Golden Eagles The Elephant's Walk, 67 The Twilight Zone, 273 The Whale. See A3D Thud Ridge, 274, 275, 287 Tickner, William, 279 Tierney, John, 117, 118, 119, 120, 123, 547 Tiger Island, 264, 276, 284, 285

Title 10, 166, 232, 424, 471, 474 Tokyo, 61, 62, 63, 66, 83, 115, 257, 540 Tokyo Bay, 61, 62, 63, 83 Tonkin Gulf, 178, 222, 224, 284, 291, 375, 396 Tonkin Gulf Resolution, 263 TOT time on target, 284 Toulon, France, 398, 399, 564, 565 Tourane Airfield, 41, 48, 62, 63, 64, 168, 263 TPQ, 270, 282, 283, 299, 300, 311, 327 TPS U.S. Navy Test Pilot School, 87, 106, 109, 110, 111, 116, 117, 118, 119, 121, 122, 123, 127, 128, 269, 465, 466, 468, 531, 543, 547, 549 Training and Readiness Manual (T&R), 96, 97, 99, 114, 249, 250, 251, 255, 489 Trainor, Moose, 353 Trautman, George, 113 Tripoli, 416 Trost, Carl, 484, 485, 501, 546, 558 Truman, Harry S., 232 Tunisia, 398, 399, 564 Turkey, 303, 357, 360, 396, 521, 536 TV-2, 11, 104, 105, 111, 122, 130

U

U.S. Air Force, 30 U-11, 194, 202, 203 UAVs unmanned aerial vehicle, 532, 533, 543 Ubon, 178, 223, 269, 270 Ubon Air Base, 178 Udorn, 178, 223, 269, 288, 318 UH-1E, 112 UH-1H, 112 UH-1N, 82, 83, 111, 112, 482, 550 UH-60A, 112 Underhill, W.H., 13 Undersecretary of the Air Force, 525 United States Air Force, 4, 72, 78, 79, 106, 111, 121, 125, 134, 141, 175, 178, 179, 189, 190, 191, 194, 195, 196, 197, 198, 204, 205, 206, 210, 211, 219, 220, 230, 233, 234, 236, 244, 258, 259, 262, 264, 269, 280, 284, 288, 301, 302, 306, 308, 309, 310, 311, 312, 313, 319, 322, 343, 349, 351, 353, 354, 356, 357, 361, 391, 403, 421, 422, 428, 432, 433, 443, 448, 454, 455, 472, 481, 482, 499, 505, 525, 532, 537, 547 United States Army, 4, 6, 92, 178, 185, 188, 189, 198, 204, 205, 206, 211, 216, 236, 237, 259, 302, 314, 325, 356, 361, 403, 428, 443, 449, 450, 461, 465, 466, 467, 468, 484, 505, 523, 524, 525, 537, 556 United States Marine Corps, 1, 4, 8, 11, 12, 14, 15, 18, 22, 24, 39, 40, 41, 42, 43, 51, 54, 68, 70, 74, 80, 82, 83, 85, 86, 87, 90, 91, 92, 95, 97, 99, 111, 112, 113, 115, 117, 119, 121, 124, 128, 129, 165, 166, 167, 168, 169, 171, 175, 177, 179, 185, 188, 189, 194, 195, 197, 198, 199, 201, 204, 206, 207, 208, 209, 210, 213, 214, 215, 216, 217, 218, 219, 223, 227, 229, 232, 233, 234, 236, 238, 239, 240, 241, 245, 246, 255, 279, 299, 301, 302, 309, 310, 313, 324,

328, 329, 330, 332, 337, 340, 342, 344, 347, 349, 351, 353, 357, 364, 368, 369, 370, 373, 381, 384, 385, 387, 388, 390, 391, 401, 403, 408, 409, 410, 417, 418, 421, 425, 427, 431, 432, 434, 436, 440, 441, 442, 443, 444, 445, 448, 449, 452, 453, 454, 459, 460, 461, 462, 464, 465, 467, 468, 469, 470, 471, 472, 473, 474, 475, 477, 478, 485, 490, 492, 493, 494, 496, 497, 501, 507, 510, 511, 512, 520, 521, 527, 531, 532, 535, 537, 539, 543, 544, 546, 547, 549, 550, 551, 556, 557, 558, 559, 567, 568 United States Naval Academy, 15, 75, 484, 494 United States Navy, 4, 8, 10, 11, 14, 15, 17, 20, 23, 24, 25, 28, 29, 30, 35, 41, 42, 43, 44, 46, 53, 54, 59, 62, 63, 81, 82, 83, 84, 85, 87, 90, 92, 105, 116, 118, 119, 121, 125, 129, 133, 137, 142, 146, 147, 148, 158, 159, 166, 167, 168, 169, 171, 172, 175, 176, 177, 178, 179, 180, 182, 183, 185, 186, 187, 193, 195, 197, 198, 200, 201, 202, 203, 204, 205, 206, 207, 208, 210, 212, 214, 215, 216, 217, 218, 222, 223, 225, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 244, 248, 253, 258, 262, 263, 264, 278, 279, 291, 292, 293, 296, 301, 302, 310, 312, 313, 331, 332, 333, 343, 344, 349, 350, 353, 354, 361, 364, 372, 373, 377, 378, 393, 400, 401, 403, 405, 406, 409, 417, 424, 428, 431, 432, 433, 434, 443, 444, 448, 449, 452, 454, 455, 459, 460, 461, 466, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 485, 487, 490, 491, 492, 493, 494, 495, 496, 497, 505, 509, 510, 511, 516, 517, 520, 523, 526, 527, 531, 537, 539, 540, 541, 542, 544, 545, 546, 547, 548, 549, 550, 554, 556, 558, 564 University of California, 93, 554 University of Florida, 2, 3, 6, 62, 85, 92, 93, 117, 157, 161, 183, 543, 544, 549, 554 University of Mississippi, 118 University of Texas, 351, 525

V

V/STOL vertical/short take off and landing, 217, 230, 233, 238, 330, 332, 347, 348, 351, 373, 417, 419, 449, 472, 475, 504 Van Meter, Carl, 129, 173, 179 VDI, 267, 274, 315 Versatile Warrior, 368, 372 Viet Cong (VC), 24, 62, 65, 193, 263, 264, 283, 308, 312, 325, 326, 384, 407 Viet Minh, 62, 262, 263 Vietnam, 41, 48, 60, 61, 62, 63, 64, 65, 88, 101, 112, 113, 115, 116, 121, 141, 143, 153, 164, 167, 168, 175, 176, 178, 180, 181, 182, 186, 193, 199, 206, 208, 211, 220, 221, 222, 223, 224, 225, 244, 246, 247, 248, 251, 252, 253, 254, 255, 256, 257, 258, 259, 261, 263, 268, 269, 271, 272, 273, 274, 276, 279, 281, 283, 285, 289, 290, 291, 293, 294, 299, 301, 303, 304, 306, 307, 308, 313, 314, 316, 317, 319, 323, 324, 325, 327, 330, 335, 337, 341, 343, 344, 357, 365, 368, 384, 385, 387, 389, 391, 400, 407, 454, 464, 487, 501, 505, 514, 515, 534, 535, 536, 544, 545, 547, 554, 560, 562, 567

Vietnam Memorial, 186 Ville Franche, France, 67 Vincent, Hal, 151, 173, 174, 182 Vinh. 265, 266, 285, 320 VMA (AW)-225, 97, 99, 246, 247, 248, 252, 256, 310 545, 554 VMA(AW)-242, 247, 252, 278, 310, 391 VMA(AW)-332, 330, 384 VMA(AW)-533, 88, 272, 273, 293, 303, 364, 384, 482 VMA-121, 261 VMA-211, 161, 261 VMA-223, 115, 157, 257, 261, 503 VMA-225, 99, 112, 168, 219, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 317, 318, 380, 384, 387, 389, 487, 488, 489, 499, 555, 560 VMA-231, 406 VMA-324, 39, 40, 43, 44, 46, 54, 55, 61, 66, 68, 97, 98, 107, 113, 114, 182, 263, 321, 413 VMA-513, 332, 365, 369, 373, 406, 415, 416, 417, 421 VMA-533, 88, 112, 199, 219, 220, 221, 222, 247, 248, 251, 252, 254, 255, 259, 260, 261, 262, 269, 271, 272, 273, 274, 276, 277, 279, 280, 283, 285, 291, 293, 294, 304, 310, 316, 317, 320, 322, 323, 324, 325, 326, 327, 349, 364, 380, 384, 391, 456, 482, 487, 488, 501, 503, 545 VMA-542, 406 VMAT-203, 419 VMCJ-2, 228, 246, 375, 435 VMCJ-3, 87, 97, 100, 101, 113 VMF(N)-114, 17, 19, 22, 27, 28, 40, 81, 336 VMF-114, 17, 19, 22, 23, 24, 27, 28, 29, 32, 37, 38, 39, 40, 42, 46, 52, 53, 54, 57, 58, 81, 83, 87, 97, 98, 114.313.413 VMF-311, 83, 87, 93, 97, 100, 102, 112, 114, 115, 147. 151, 152, 154, 155, 156, 157, 158, 159, 160, 161, 165, 167, 171, 174, 182, 183, 187, 188, 192, 202, 219, 260, 261, 262, 278, 343, 425, 502, 554, 561 VMF-324, 40, 43, 46, 54, 55, 57, 58, 61, 62, 68, 70, 81, 87, 98, 99, 113, 413, 526 VMFA-312, 228, 376 VMFT Marine Fighter Training Squadron, 104 VMFT-10, 104, 110, 111 VMJ-3, 41, 55, 69, 76, 77, 87, 95, 97, 99, 100, 101, 113, 435 Vought Company, 126 VTOL vertical takeoff and landing, 348, 368, 370, 371, 372 VX-3.173 VX-5, 32, 34, 68, 73, 83, 87, 97, 102, 112, 119, 121, 122, 123, 126, 128, 129, 130, 131, 133, 134, 135, 137, 138, 140, 142, 143, 144, 146, 147, 148, 149, 150, 151, 152, 155, 162, 164, 172, 173, 174, 175, 176, 179, 180, 181, 182, 183, 187, 192, 202, 204, 242, 262, 269, 335, 344, 366, 504, 530, 538, 543, 544, 546, 553

W

Wakelin, James H., 193, 194, 195, 197, 198, 199, 200, 202, 203, 204, 205, 215, 217, 226, 464, 504, 505, 531, 549, 557

Walker, Charlotte, 563 Wall, John (Shorty), 32, 33, 40, 43, 44, 46, 47, 54, 55, 98 Wallace, Mack, 199, 274, 296, 320 War on Terror, 240 Warner Robbins Air Force Base, 72, 552 Washing Machine Charlie, 230, 231 Washington Navy Yard, 558 Washington Post, 513, 546 Washington, D.C., 3, 52, 64, 73, 91, 112, 159, 171, 182, 183, 184, 185, 186, 189, 193, 202, 203, 218, 225, 231, 246, 251, 268, 294, 303, 309, 311, 314, 325, 327, 328, 335, 337, 340, 341, 344, 345, 346, 361, 364, 366, 368, 425, 428, 431, 441, 479, 497, 502, 504, 508, 523, 529, 531, 534, 535, 540, 541, 557. 558. 562. 567 Watkins, George, 125 Wayne, John, 5 Weaver, James, 377 Weaver, John, 539 Webb, James, 541, 542, 549 Weinberger, Casper, 541 Weir, Kenneth, 195, 196 Weise, Gill, 204 Went, Joseph, 492, 493, 494, 500, 501 Wesleyan College, 70, 72, 93 West, Randy, 282, 423, 430, 538 Westendorf, Jerry, 279, 296 WestPac, 157, 160, 167, 188, 192, 406, 415, 416, 436, 437, 438, 501 White, William, 498, 507 Whiting Field, 6, 7, 8 Wifeline, 559 Wilker, Dean, 259, 260, 277, 279 Williams, C.C., 197 Wills, Duane, 482, 489, 492, 498, 501 Willy the Whale. See F3D Wilson, Louis H., 200, 213, 214, 215, 232, 239, 240, 383, 385, 387, 388, 389, 426, 427, 431, 432, 434, 435, 436, 437, 439, 440, 442, 443, 444, 445, 446, 450, 451, 455, 456, 462, 464, 469, 485, 486, 498, 501, 502, 512, 535, 546, 548, 549, 550 Windshield Degrease, 21 Winter Haven, Florida, 338 Wolf, Howard, 187, 199, 227, 247 women Marines, 507 Woodbury, Woody, 88 Woodward, Robert, 522 World War I, 8, 9, 186, 459, 460, 461, 507, 553 World War II, 4, 5, 6, 8, 11, 17, 18, 19, 23, 29, 42, 43, 46, 55, 57, 60, 66, 84, 89, 90, 91, 107, 186, 234, 237, 245, 356, 454, 477, 507, 539, 549 Wright, 19, 22, 23, 24, 25, 26, 28, 32, 40, 42, 46, 54, 98, 107, 183 WSEG Weapons Systems Evaluation Group, 166, 371, 372, 373, 374, 375 WTI Weapons Tactics Instructor, 414, 415, 426, 485 Wydick, Les, 252

X

XH-59A, 112 XV-15, 112, 351, 407, 447, 448, 523, 528

Y

YAH-64, 112 Yalu River, 231 Yates, Buddy, 197, 198 Yeager, Chuck, 194, 196, 197 Yellow Sea, 40, 58, 59, 65, 74 YF-17, 239, 455 Yokosuka, Japan, 48, 58, 61 Young, John, 191 Yuma, Arizona, 146, 148, 150, 163, 164, 172, 173, 192, 252, 253, 255, 334, 382, 383, 411, 418, 426, 427, 467, 538

Ζ

Zangas, Chuck, 213, 431 Zarkowi, 355 Zero, 234, 451, 452 Zinni, Anthony, 303, 521, 522, 536

THE SECRETARY OF THE NAVY

WASHINGTON



The Secretary of the Navy takes pleasure in awarding the NAVY COMMENDATION MEDAL to

CAPTAIN WILLIAM E. H. FITCH, IE UNITED STATES MARINE CORPS

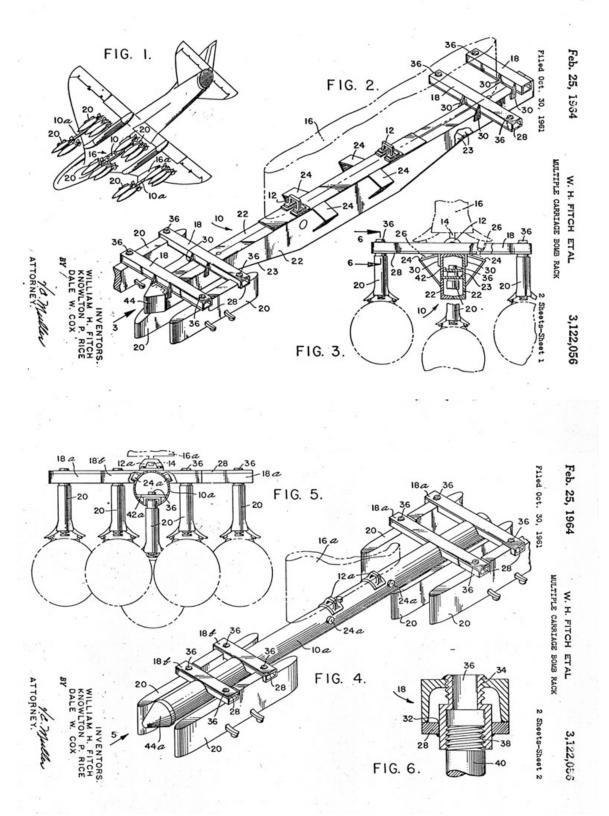
for service as set forth in the following

CITATION:

"For meritorious achievement in connection with the invention and development of the Multiple Carriage Bomb Rack for A4D type aircraft while serving with Air Development Squadron FIVE from April 1958 to May 1960. Realizing the severe limitation of A4D type aircraft to deliver conventional weapons insignificant numbers and the urgent need for such delivery in a limited type war, Captain Fitch conceived the idea of constructing Multiple Carriage Bomb Racks to increase the delivery power of the aircraft from three to sixteen 250 pound bombs. Pursuing the idea, he contributed design proposals, supervised construction of the initial racks, offered wiring suggestions and flew the first thirteen test flights which proved the feasibility of the Multiple Carriage Bomb Rack. His efforts resulted in a greatly increased delivery capability of fleet light attack squadrons. Captain Fitch's professional skill, perseverance and devotion to duty were in keeping with the highest traditions of the United States Naval Service. "

Secretary of the Navy

Appendix A



Appendix B



4 February 1984

Dear General Kelley,

Knowing that you will soon be involved in general officer assignments, it is now time to advise you that I am making plans to retire from the Marine Corps. My preferred date of retirement is November 1, 1984. On that date I will have completed exactly 34 years of active service, including 32 years seven months as a Marine Corps officer. It has been great! But now it is time to move on and I would hope to have your concurrence on my plans.

During the upcoming congressional hearings it is likely that I will be asked my professional opinion on various programs, to include the A6F. Since I have always maintained a policy of absolute honesty with the Congress, I have an obligation to state my professional opinion precisely. Also I have a deep moral obligation to those Marines who may be called upon to fly combat missions during the next 25 years, and I have a similar obligation to those Marines on the ground whose lives may depend on the success of those combat missions. I am in complete agreement with CG FMFLANT, CG FMFPAC, and CO MAWTS-1 (and also incidentally my Navy counterparts at the January 1984 Air Board) that the A6F cannot survive against the threat of the 1990's and beyond. Aircraft produced in 1993 would still be in active Fleet squadrons after the year 2010, and would face the even more severe fighter/SAM threat of that period. Most Marine A6E's now in service were produced about 1968 and have six to ten more years of active service to go.

A few might doubt my credentials to address the all-weather attack issue. As you may know, I have been flying the A6 for 20 years, along with a wide variety of other aircraft. Over 17 years ago I commanded my first A6 squadron at Cherry Point. Sixteen years ago I was in command of my second A6 squadron, VMA(AW)-533 at Chu Lai, when we flew single plane missions at night near such garden spots as Haiphong and Hanoi. In 1972-73 I was CO MAG-14 for 17 months, and the group included three A6 squadrons. In my approximate 7,000 hours of flying tactical military aircraft, over 1,000 hours are in the A6 Intruder. To have A6F's flying in the Fleet after the year 2000 would be like having F6F Hellcats in the Fleet today.

Margaret Marie and I plan to move back into our home in McLean. We would propose to move from Quarters 2 in the month of September, thus giving us about 22 very pleasant months at the Barracks. At your convenience I shall be happy to discuss this with you further.

Very respectfully,

Appendix C

LOUIS H. WILSON

March 9, 1984

LTGEN William H. Fitch Quarters 2, Marine Barracks 8th and 1 Streets, S.E. Washington, D. C. 20390

Dear Bill:

You are most thoughtful to write and inform me of the status of Marine Corps Aviation and tell me of your plans for retirement. I must say that for the Marine Corps I am saddened. Because of your ability, keen perception and demonstrated leadership I had hoped you would be the next Commandant. In fact, within the past year Bob Barrow and I have discussed your excellent chances for being selected.

However, my view has always been that retirement is an individual choice which only the one affected can make and I can understand your unselfish desire to allow more junior officers to move along.

You and Margaret have indeed made a lasting contribution to the Marine Corps and all Marines (including retirees since I still think of myself as a Marine) should be grateful.

If you ever feel that I can be of assistance, in the event you choose to seek employment or need a reference, please feel free to use my name without consulting me and I shall be most happy to reply. Such reply will reflect the genuine admiration I have for your abilities and patriotism.

Jane and I extend to you and Margaret our warmest good wishes for your continued health and happiness.

Sincerely yours,

Louis H. Wilson

Appendix D



DIFFERENT KINDS OF AIRCRAFT FLOWN BY LTGEN W. H. FITCH

1.	SNJ-5	21Apr51	41.	A3D-2	12Jun58	81.	EA-6B	13Aug80
2.	SNJ-4	24Apr51	42.	A-4B	18Jun58	82.	F-4S	19Sep80
2. 3.	SNJ-4 SNJ-6	7May51	43.	AD-5W	70ct59	83.	CT-39G	2Jan81
<i>4</i> .	F6F-5	17Dec51	44.	F9F-8T	130ct59	84.	CH-46E	17Sep81
ч. 5.	SNB-5	5May52	45.	A-4C	8Jan60	85.	TF/A-18	21Jan82
<i>6</i> .	F4U-5NL	10JU152	46.	F-104D	2Mar60	86.	F-15D	28May82
0. 7.	F4U-5N	11JU152	47.	A-4A	28Apr60	87.	CH-53E	10Aug82
8.	F4U-5	9Aug52	48.	T-2A	24Aug62	88.	XV-15	12Aug82
9.	AD-2	20Jul53	49.	A-4E	31Aug62		NCH-53A	25Aug82
10.	AD-4B	21JU153	50.	YA-4B	28Feb63	90.	H-500D	28Aug82
11.	AD-4	1Sep53	51.	U-11A	25Mar63	91.	UH-60A	28Sep82
12.	AD-4L	14Sep53	52.	YA-4C	27Mar63	92.	XH-59A	28Sep82
13.	AU-1	9Apr54	53.	TC-45J	2Sep63	93.	VH-1N	16Nov82
14.	JRB-6	24Jun54	54.	T-38A	190ct63	94.	CH-47D	29Nov82
15.	F9F-5P	120ct54	55.	F-4B	15Feb64	95.	AH-1T	9Dec82
16.	F9F-2P	9Dec54	56.	A-6A	20Aug64	96.	UH-1H	3Jan83
17.	SNB-5P	llMar55	57.	F-8D	18Feb65	97.	YAH-64	3Jan83
18.	OY-2	16May55	58.	O-IC	12Jul65	98.	OV-10D	6Jan83
19.	F9F-5	19Apr56	59.	TA-4F	12Sep67	99.	T-44A	25Mar83
20.	AD-5	27Jun56	60.	OV-10A	15Apr69	100		25Mar83
21.	F3D-2	7Jul56	61.	0, 1011	A-4M	lSep71		TH-57C
	29Apr83					-~ • P / •		
22.	F3D-2M	240ct56	62.	RF-4B	10May72	102	. TH-1L	29Apr83
23.	AD-6	260ct56	63.	EA-6A	HMay72	103		5May83
24.	AD-5N	lFeb57	64.	F-4J	7Feb73	104		10May83
25.	FJ-4	27Mar57	65.	UH-1N	27Jul73	105		12May83
26.	F9F-6	4Apr57	66.	UH-1E	lAug73	106		19Sep83
27.	F9F-8	8Apr57	67.	AH-1J	13Nov73	107		70ct83
28.	T-28B	31May57	68.	CH-46F	7Feb74	108	. B-412	70ct83
29.	C-117	HJun57	69.	CH-53D	7Mar74	109	. F16/79	70ct83
30.	T-33B	12Jun57	70.	VC-117	18Aug74	110	. B-222	30Nov83
31.	T-33A	23Jun57	71.	A-6E	25Sep74	111	. AH-1T+	30Nov83
32.	F9F-8B	16Jul57	72.	KC-130F	30Apr75	112	. Hunter	13Dec83
33.	FJ-3	13Aug57	73.	TA-4J	9Ju175	113	. TA-7C	17May84
34.	S-2A	14Aug57	74.	C-117D	22Jul75	114	. SH-3D	8Jun84
35.	UF-1	16Aug57	75.	TC-4C	24Ju175	115		8Jun84
36.	F4D-1	5Nov57	76.	TAV-8A	18Mar76	116	6. U-6A	8Jun84
37.	T-1A	10Jan58	77.	CH-46D	19May76	117		27Jun84
38.	F11F-1	27Jan58	78.	UC-12B	12Sep79	118		27Jun84
39.	FJ-4B	24Apr58	79.	RAF T4	90ct79	119		6Ju184
40.	F6F-5K	8May58	80.	OA-4M	240ct79	120		6Ju184
		-				12		11JU184

Note: Includes 29 kinds of helicopters and 45 different kinds of aircraft while a General Officer.

Appendix E