

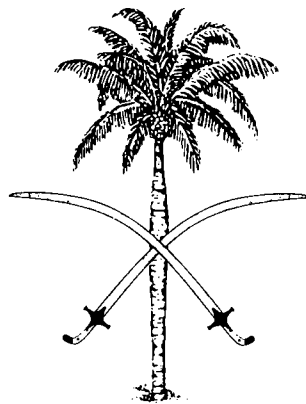
U.S. MARINES IN THE
PERSIAN GULF, 1990-1991:
ANTHOLOGY AND
ANNOTATED BIBLIOGRAPHY



HISTORY AND MUSEUMS DIVISION
HEADQUARTERS, U.S. MARINE CORPS
WASHINGTON, D.C.

COVER: Many of the Marines who participated in Operation Desert Shield practiced for weeks in the desert in preparation for their assault on the obstacles erected by Iraqi units.
(Department of Defense [USMC] photo by Cpl Kevin Doll, USMC)

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Compiled by
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HISTORY AND MUSEUMS DIVISION
HEADQUARTERS, U.S. MARINE CORPS
WASHINGTON, D.C.

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U.S. Marines in the Persian Gulf, 1990-1991**

In Preparation

With the I Marine Expeditionary Force in Desert Shield and Desert Storm, 1992

With the 1st Marine Division in Desert Shield and Desert Storm

With the 2d Marine Division in Desert Shield and Desert Storm

With the 3d Marine Aircraft Wing in Desert Shield and Desert Storm

Marine Forces Afloat in Desert Shield and Desert Storm

Operation Provide Comfort:

U.S. Marine Corps Humanitarian Relief Operations in Northern Iraq, 1991

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Foreword

This anthology of articles follows in the tradition of an earlier publication of the History and Museums Division, *The Marines in Vietnam, 1954-1973: An Anthology and Annotated Bibliography*. As with the Vietnam anthology, the purpose of this anthology of articles from the *U.S. Naval Institute Proceedings*, *Marine Corps Gazette*, *Field Artillery*, and *Washington Post*; messages and briefings from senior officers; and accompanying task organization, chronology, and bibliography, is to serve as an interim reference for use within the Marine Corps and for answering inquiries from other government agencies and the general public concerning Marine activities and operations in the Persian Gulf, until the History and Museums Division completes an intended series of monographs dealing with the major Marine commands in the area.

The 26 entries comprising this anthology provide a general overview of Marine involvement in the Persian Gulf conflict. The first five focus on the Marine Corps' contribution to the American effort to defend Saudi Arabia--Operation Desert Shield. The second group concentrates on the Marine Corps' role in the liberation of Kuwait--Operation Desert Storm. Within these two sections, the entries have been organized to progress from the highest level of organization, the Marine Expeditionary Force, to the lowest, the platoon, squad, and individual Marine. The last three entries deal with the aftermath of the war, and issues raised during the war. Also included is an appendix consisting of an annotated bibliography of articles that appeared in the *U.S. Naval Institute Proceedings*, *Marine Corps Gazette*, and *Naval War College Review*, from October 1990 to December 1991. While excellent articles pertaining to the Persian Gulf have been published in many other periodicals, due to the limitations of time and resources the History and Museums Division confined its attention to the three aforementioned publications. Finally, two additional appendices, one showing the task organization of I Marine Expeditionary Force in February 1991 and another giving a chronology of significant events involving Marines in the Persian Gulf from August 1990 to June 1991, have been included.

I wish to thank the editors of the *Proceedings*, *Gazette*, *Field Artillery*, and *Washington Post* for their cooperation in permitting the reproduction of their

articles. These publications made a significant contribution to the record of the Marine Corps' participation in the Persian Gulf conflict by originally publishing these materials. Reproducing them here yields further dividend.

A handwritten signature in black ink, reading "E. H. Simmons". The signature is fluid and cursive, with the first name "E." and last name "Simmons" clearly legible.

E. H. SIMMONS
Brigadier General
U.S. Marine Corps (Retired)
Director of Marine Corps History and Museums

Preface

This anthology is organized into five sections: Operation Desert Shield, Operation Desert Storm, after Desert Storm, related topics, and appendices. Within the first two sections, the entries begin with a broad overview and gradually work down the chain of command to the impressions of the Marine rifleman. Thus, the first section begins with an article by Brigadier General Edwin H. Simmons, USMC (Ret), which describes the deployment of Marines to the Persian Gulf in the broadest terms, and concludes with a report by Henry Allen describing how individual Marines reacted to their deployment.

The second section opens with materials describing the conflict from the perspective of Lieutenant General Walter E. Boomer, USMC, the commander of I Marine Expeditionary Force. It then moves from the division, wing, and force service support group level to accounts describing the actions of a regiment, followed by battalions and a squadron, to conclude with reports of actions by platoons and squads.

The fourth section consists of an article describing the Marine Corps' role in Operation Provide Comfort, the multinational humanitarian relief effort extended to the Kurdish refugees after Iraq's defeat.

The fifth section begins with a letter from a Marine to a class of school-children, which describes his reasons for fighting and also reflects the tremendous support shown to all servicemen and women by the American people. Last is an article on relations between the military and the media.

The appendices provide useful references, including the task organization, chronology, and annotated bibliography.

This collection represents the efforts of a great number of people. Miss Evelyn A. Englander, the Marine Corps Historical Center librarian, spent a great deal of time collecting articles from numerous professional journals, from which Major Charles D. Melson, USMC (Ret), formerly of the History and Museums Division's Histories Section, made the initial selection of materials for inclusion in the anthology and the bibliography. Major Melson also selected all maps with the exception of those that have been reprinted from the original articles. Miss Cynthia L. Davis of the Madeira School provided the bulk of the bibliographic annotations under the supervision of Miss Englander. Captain David A. Dawson, USMC, of the Histories Section, was responsible for the final selection of entries, and wrote their introductions. Mrs. Ann A. Ferrante of the Reference Section acquired the task organization and compiled the chronology.

Mr. Benis M. Frank, Chief Historian, reviewed the materials. Editing and Design Section staff members Mr. W. Stephen Hill and, particularly, Mrs. Catherine A. Kerns worked diligently to transform a collection of clippings into its present form. Colonel Daniel M. Smith, USMC, Deputy Director of Marine Corps History and Museums, and Brigadier General Simmons, Director of Marine Corps History and Museums, provided guidance and final review.

Although the entries have been reset, and new maps provided for some, all have been reproduced as faithfully as possible to the original, including typographical or other errors which may have occurred.

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In this article, Brigadier General Simmons describes the U.S. Marine Corps' involvement in the Persian Gulf from Iraq's invasion of Kuwait to the eve of Desert Storm. General Simmons places these actions in their global and historical perspective, emphasizing the unique capabilities provided by a large and ready expeditionary force.

Getting Marines To the Gulf

By Brigadier General Edwin H. Simmons, U.S. Marine Corps (Retired)

U.S. Naval Institute Proceedings, May 1991.

Few Americans could have identified Saddam Hussein on Wednesday, 1 August 1990, the day before the Iraqi invasion of Kuwait. In the Marine Corps, the most interesting things that were happening were taking place in the Philippines and off the coast of Liberia.

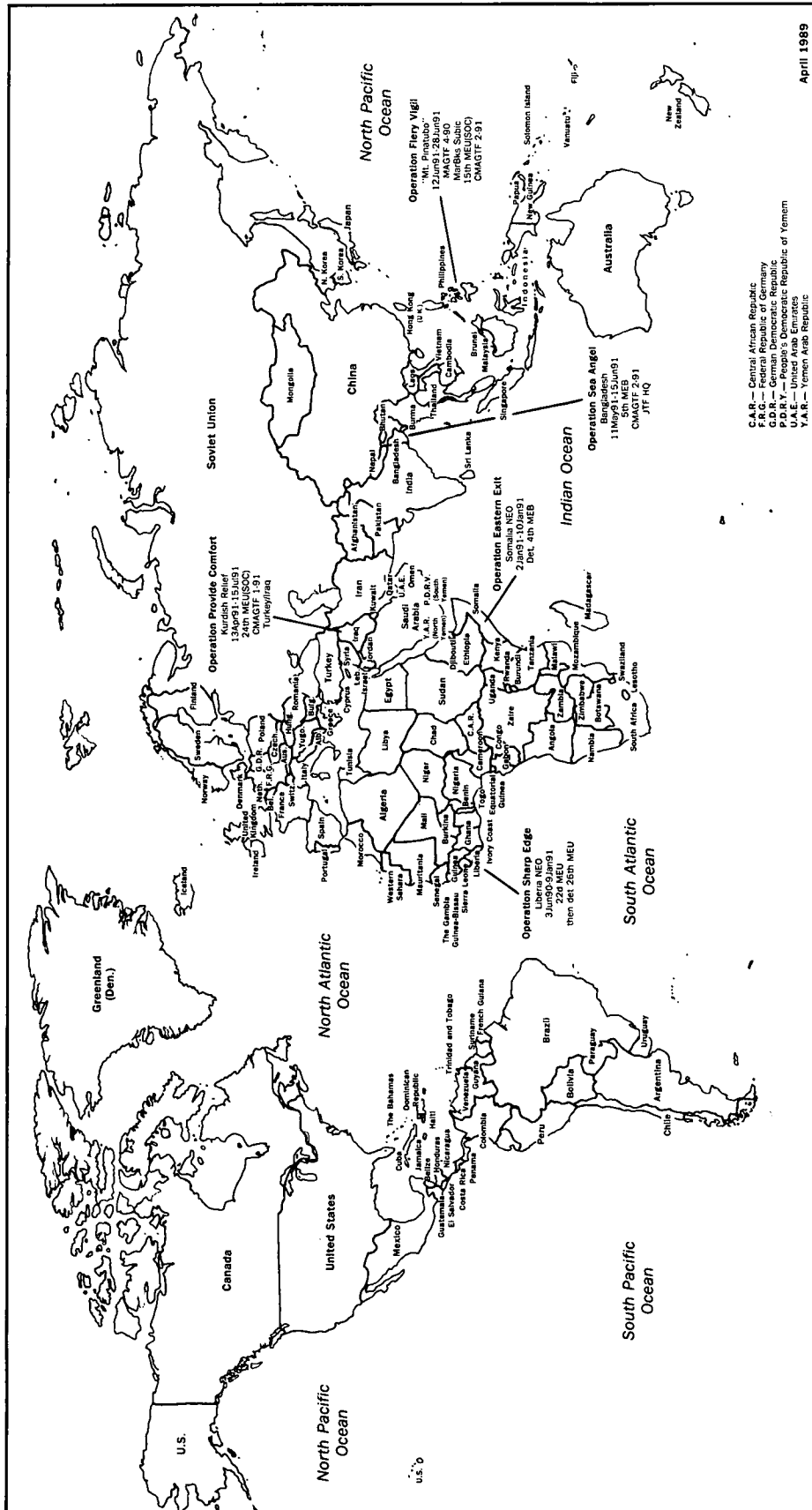
Afloat in Philippine waters was the 13th Marine Expeditionary Unit--the 13th MEU--which had sailed from Southern California on 20 June. Originally scheduled for a port visit at Subic Bay and training ashore, the 13th MEU found itself conveniently present to assist in earthquake relief. With Colonel John E. Rhodes as its commander, the MEU included Battalion Landing Team 1/4, reinforced Medium Helicopter Squadron 164, and MSSG-13, a tailored combat service support group.

Already ashore at Subic was a contingency Marine air-ground task force (CMAGTF 4-90) of about 2,000 Marines drawn from the Okinawa-based III Marine Expeditionary Force, ostensibly for training but also with the purpose of providing a deterrent against untoward antiAmerican guerrilla or terrorist activity. The core of CMAGTF 4-90 was the 3d Battalion, 7th Marines.

Halfway around the world, standing off Monrovia, Liberia, in amphibious ships, was the 22d MEU, with BLT 2/4, HMM-261, MSSG-22, and Colonel Granville R. Amos, commanding.¹ Civil war had progressed to a point where it was obvious that the government of President Samuel K. Doe would fall. The 22d MEU was prepared to evacuate American citizens and foreign nationals.²

As Marine Expeditionary Units, the 13th MEU and 22d MEU were two of the smallest of MAGTFs. With an occasional exception, these formations come in three sizes, Marine Expeditionary Brigades or MEBs being next larger in size, and Marine Expeditionary Forces or MEFs being the largest.³ By doctrine, MAGTFs must have four organizational elements: a command element, a ground combat element, an aviation combat element, and a combat service support element.⁴

Both the 13th MEU and 22d MEU were Marine Expeditionary Units, Special Operations Capable [MEU (SOC)s], meaning that they had become trained and practiced in a wide range of special operations. For example, in addition to being prepared to reinforce beleaguered U.S. embassies and carry out evacuations, they were trained in a number of other missions, including boarding



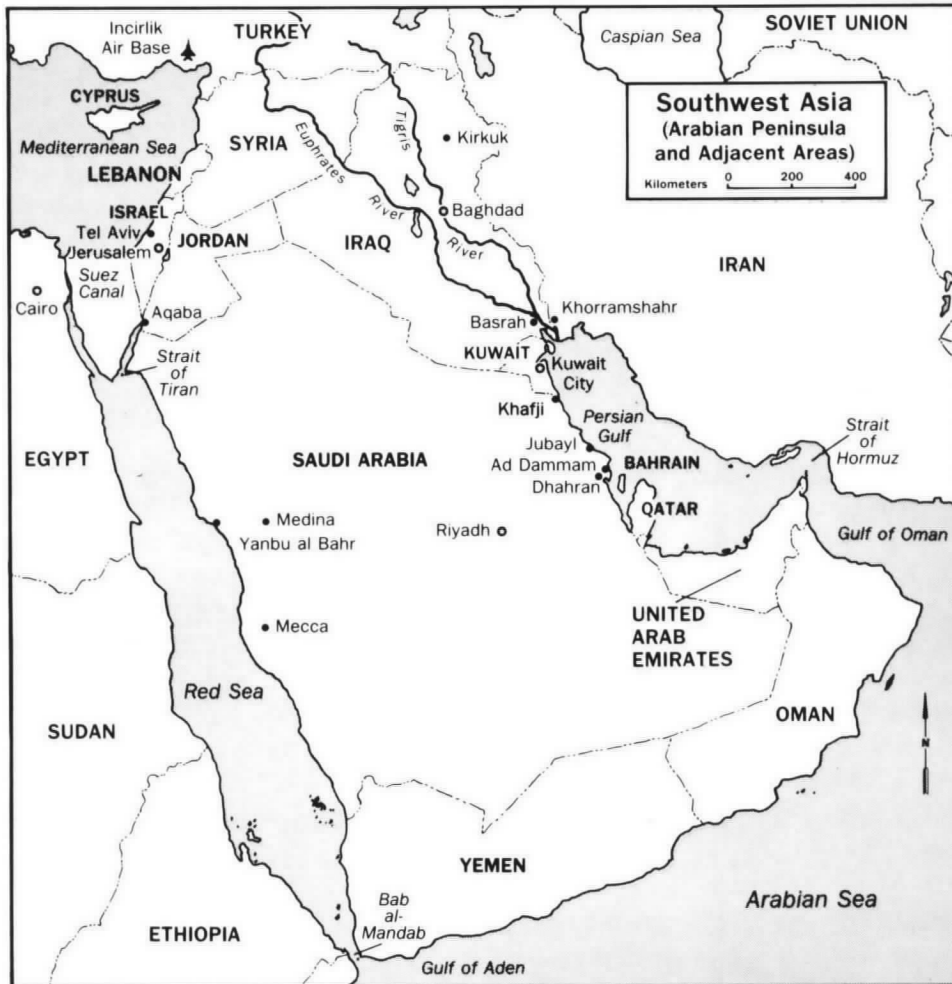
parties on suspect shipping, operations against terrorists, and amphibious raids, day or night.⁵

This special-operations capability is something the Corps has developed to a high art, and it has been a particular interest of the present Commandant of the Marine Corps. Anyone wishing to understand the Marine Corps must understand the status of its Commandant. There has been a Commandant, designated as such, ever since the United States Marine Corps was authorized by the Congress and approved by President John Adams on 11 July 1798. The Corps numbers its Commandants, as kings and popes are numbered. The incumbent is the 28th Commandant. No other service chief seems to have quite the clear and unequivocal control of his service as that enjoyed by the resident of the Commandant's House at the Marine Barracks, Washington, D.C. Since 1806, all Commandants have lived in that house, the oldest official residence in Washington still being used for its original purpose.⁶

The present Commandant, General Alfred M. ("Al") Gray, is now in the last year of his four-year tenure. Sixty-two years old, stocky in build, born in Rahway, New Jersey, and given to chewing tobacco, he spends as little time in Washington as possible.⁷ Gray enlisted in the Marine Corps in 1950, reached the rank of sergeant, was commissioned in 1952, and served with the 1st Marine Division in Korea. Trained as an artillery officer, he was soon doing more esoteric things. In the early 1960s, as a young major, he was engaged in some highly interesting intelligence operations in Vietnam. As a colonel, he commanded the ground combat element of the 9th Marine Amphibious Brigade in the 1975 evacuation of Saigon. Immediately before becoming Commandant in 1987, he was the Commanding General, Fleet Marine Force, Atlantic, and Commanding General, II Marine Amphibious Force.⁸ Before that, he commanded the 2d Marine Division. He is imaginative, innovative, iconoclastic, articulate, charismatic, and compassionate. His Marines love him.

Elsewhere in the world on 1 August 1990, the 24th and 26th MEUs were in predeployment workup training at Camp Lejeune, North Carolina. The 11th MEU was undergoing special-operations training in California. The 3d Battalion, 9th Marines, embarked in the *Belleau Wood* (LHA-3), was at Seattle, Washington, taking part in the annual Sea Fair.⁹ An engineer platoon was ashore in Sierra Leone, as part of a West Africa training cruise, working with local forces and keeping an eye cocked towards neighboring Liberia. A Marine detachment in the Caribbean was engaged in anti-drug trafficking operations, and another detachment was operating with other federal agents along our Southwest border. A reinforced battalion from the 7th Marine Regiment was undergoing mountain warfare training in California's Sierra Nevada mountains. Elements of the 1st Marine Expeditionary Brigade were exercising in Hawaii.

Then came the second day of August. At about 0100 local time, in opening moves reminiscent of North Korea's invasion of South Korea 40 years earlier, three Iraqi Republican Guard divisions crossed the Kuwaiti border and began converging on the capital of Kuwait City from the north and west, coordinating their movement with the landing by helicopter of a special-operations division in the city itself. The forces had linked up by 0530 and by nightfall, Kuwait



City was in Iraqi hands. By noon of the next day, the Iraqis had reached Kuwait's border with Saudi Arabia.¹⁰

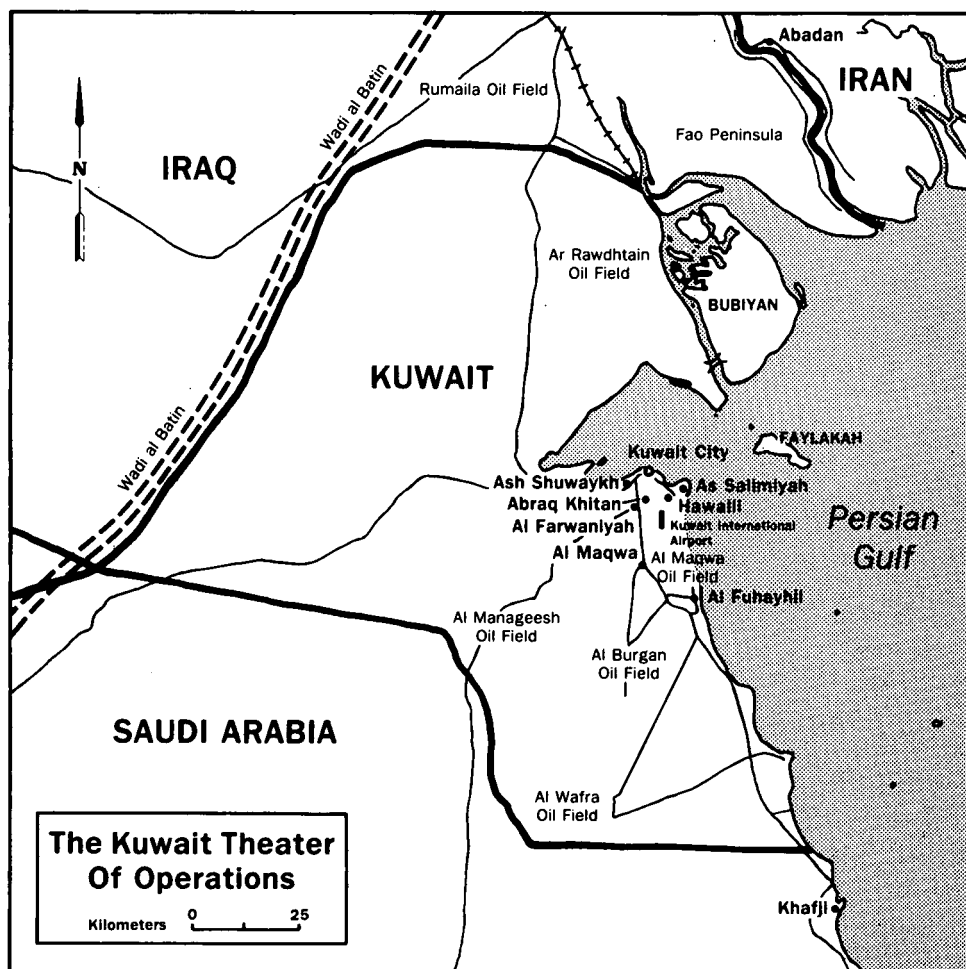
On Saturday, 4 August, the Chairman of the Joint Chiefs of Staff, General Colin L. Powell, and the Commander-in-Chief, Central Command, General H. Norman ("the Bear" or "Stormin' Norman") Schwarzkopf, both Army generals, met with President George Bush and key members of his administration at Camp David, Maryland. This was a day of decision.

Two days later, the 26th MEU(SOC), Colonel William C. Fite III, commanding, began to load out at Morehead City, North Carolina. The three major elements were BLT 3/8, HMM-162, and MSSG-26. The 26th MEU(SOC)'s Navy counterpart was Amphibious Squadron Two.¹¹ The deployment of

the 26th MEU(SOC) on 6 August was a scheduled rotation that had nothing to do with the Gulf crisis. The 26th MEU(SOC) was to relieve the 22d MEU(SOC) on station near Liberia on 20 August. Meanwhile, the 22d MEU(SOC) had begun evacuation operations and had put a reinforced rifle company ashore to protect the U.S. Embassy.

On 7 August, JCS Chairman Powell, as directed by Secretary of Defense Dick Cheney, ordered the first actual deployment of forces for Operation Desert Shield. By definition, this was C-Day--Commencement Day. The clock for Desert Shield had begun to tick.

In the case of the Marine Corps, the 1st MEB in Hawaii, the 7th MEB in California, and the 4th MEB on the East Coast were alerted for possible deployment.¹²



Marines have been deploying by brigades for more than a hundred years. The first expeditionary brigade worth counting was the one that went to Panama in 1885. At the turn of the century, another brigade marched to the relief of the embassies in Peking, shouldering aside the Boxers, then returning to the Philippines for service against Aguinaldo's insurgents.

When the Marine Advance Base Force, the forerunner of today's Fleet Marine Forces, was formed in 1913, it was a brigade of two small regiments. It also had an aviation detachment: two primitive flying boats. The Advance Base Brigade had its first expeditionary testing at Vera Cruz in 1914. Unfortunately, the aviation detachment did not go along. There was no convenient way to get the short-legged flying boats from New Orleans to Vera Cruz other than to take them apart and put them into boxes.

In 1917, after the United States entered World War I, it was planned that Marine aviation would support the Marine brigade that was sent to France, and which figured prominently at such places as Belleau Wood, Soissons, Blanc Mont, and the Meuse-Argonne. But the 1st Marine Aviation Force--four squadrons of DH-4 DeHavillands--which reached France in late summer 1918, was used as the Day Wing of the Navy Bombing Group, far from where the Marine brigade was engaged.

Between World Wars I and II, the Marine Corps sent small expeditionary brigades to Haiti, the Dominican Republic, Nicaragua, and China. In every case, these brigades had an organic aviation element. These bush-war Marine aviators of the 1920s and 1930s did not invent dive bombing or its handmaiden, close air support, as Marines sometimes like to claim, but they did do a great deal to develop those concepts and make them work.

In 1933, when the old-style East and West Coast Expeditionary Forces became the Fleet Marine Forces, there was a 1st Marine Brigade based at Quantico and a 2d Brigade based at San Diego. Each had its own aircraft group. At about this time, Marine squadrons began qualifying for aircraft-carrier operations. This carrier qualification cross-training has continued.

In early 1941 the 1st Marine Brigade became the 1st Marine Division and the 2d Marine Brigade became the 2d Marine Division. Correspondingly, the East and West Coast air groups became the 1st and 2d Marine Aircraft Wings. Early World War II Marine Corps deployments were made in brigade strength. In the summer of 1941, a 1st Provisional Marine Brigade was pulled out of the new 2d Marine Division, formed in 15 days, and sent to garrison Iceland. In January 1942, a 2d Brigade was taken out of the 2d Division and sent to American Samoa. Two months later, a 3d Brigade was stripped out of the 1st Marine Division and dispatched to Western Samoa. In 1944, a two-regiment 1st Provisional Marine Brigade (entirely different from the brigade that went to Iceland) was formed for the re-occupation of Guam. But the aphorism is that "The Marine Corps deploys by brigades, but fights by divisions." Thus it was that by the end of World War II, the Corps had expanded to six Marine divisions and five aircraft wings, and close air support had been developed to a fine art.

After the war, the Marine Corps shrank to a point where it could barely man the skeletons of two divisions and two aircraft wings. When the Korean War erupted on 25 June 1950, the Marine Corps hurriedly stripped down the 1st Marine Division to form a provisional brigade. This brigade landed at Pusan on 2 August and, with the support of a Marine aircraft group with three fighter-bomber squadrons, two of them carrier-based, had a great deal to do with the successful defense of the Pusan Perimeter. On 15 September, this brigade would join with its parent 1st Marine Division, now fleshed out with Reserves, for the landing at Inchon. The 1st Marine Division and the 1st Marine Aircraft Wing remained in Korea for the remainder of the war and turned in a good performance, both in the air and on the ground, but not without some jurisdictional and doctrinal problems with the Fifth Air Force.¹³

The four Marine battalion landing teams that landed in Lebanon in 1958 were brought together into the brigade size 2d Provisional Marine Force. After that, the time-hallowed term "provisional" fell into disuse. By the early 1960s the MAGTF concept had crystallized and the MEU, MEB, MEF triad had emerged. The Dominican Intervention of 1965 saw the initial employment of the 6th Marine Expeditionary Unit and a buildup to the 4th Marine Expeditionary Brigade.

In Vietnam, the first substantial commitment of U.S. ground combat forces was on 8 March 1965, when the 9th MEB landed at Da Nang. It had, of course, its aviation element. The 9th MEB was followed on 7 May by the landing of the 3d MEB at Chu Lai, some 55 miles south of Da Nang. Both brigades were then absorbed into the III Marine Expeditionary Force, which quickly had its name changed to the III Marine *Amphibious* Force because it was presumed that the South Vietnamese had unhappy memories of the French *Expeditionary* Corps. Eventually, the III Marine Amphibious Force would include two Marine divisions, two Marine regimental combat teams, and a huge 1st Marine Aircraft Wing, but this took several years, with battalions and squadrons being fed into the country one at a time. In Vietnam, there were also jurisdictional and doctrinal problems concerning the use of tactical aviation, this time with the Seventh Air Force.

The 1958 intervention in Lebanon had been a near bloodless success. This would not be the case with the Marine "presence" in Lebanon that began in August 1982 with the landing at Beirut of the 32d Marine Amphibious Unit. In the ensuing months, the 32d MAU was relieved by the 24th MAU which, in turn, was relieved by the 22d MAU (actually the redesignated 32d MAU). Then the 24th MAU returned once again and was there on that fatal Sunday morning, 23 October 1983, when the suicide truck-bomb destroyed the headquarters building of BLT 1/8, killing 241 U.S. servicemen, most of them Marines, and wounding 70 more.

The 22d MAU was routinely on its way from the East Coast to relieve the 24th MAU when it was diverted for the Grenada intervention, landing on that little island on 25 October and, after a week ashore, re-embarking and proceeding to Lebanon.

The designation of MAGTFs as "amphibious" rather than "expeditionary" continued until 1988, when General Gray put things back the way they had been, to reflect more accurately Marine Corps missions and capabilities. Said General Gray in explaining this change: "The Marine air-ground forces which we forward deploy around the world are not limited to amphibious operations alone. Rather, they are capable of projecting sustained, combined arms combat power ashore in order to conduct a wide range of missions essential to the protection of our national security interests."

For Operation Desert Shield, if the 1st and 7th Marine Expeditionary Brigades were to be deployed, as planned, by air, they would be taking virtually nothing with them but their individual arms and equipment.¹⁴ That would not give them much combat potential. It was expected that their heavy equipment and supplies would be borne to the scene by the Maritime Prepositioning Force.

In early 1980, then-Secretary of Defense Harold Brown testified to the Congress: "Although we can lift a brigade size force [by air] to the scene of a minor contingency very quickly, that force would be relatively lightly armed" To supply such a force by air with substantial mechanized or armored support, along with necessary ammunition, he went on, would occupy almost all of DoD's airlift force.

Dr. Brown's recommended solution to this problem was to preposition squadrons of commercial ships at strategic locations, each squadron loaded with most of a MEB's combat equipment and about 30 days of supply.

Thirteen modern ships, with civilian crews, eventually were dedicated to this concept. By the summer of 1990, there were three Maritime Prepositioning Shipping Squadrons in being: MPSRon-1 in the Atlantic, MPSRon-2 in the Indian Ocean, and MPSRon-3 in the Western Pacific.¹⁵ These ships did not need ports; they could offload either at a pier or in the stream. But they did need a benign environment. They were not a substitute for amphibious ships, which have an assault capability. Skeptics, among them many old-guard Marines, questioned their usefulness. It was dangerous, it was argued, to separate a Marine from his pack. A marriage of men and material on a potential battlefield was problematic. Desert Shield would provide an acid test for the MPS concept.

On 8 August (C + 2), Maritime Prepositioning Shipping Squadron 2 sailed from Diego Garcia--that speck of an island in the middle of the Indian Ocean--and Maritime Prepositioning Squadron 3 sailed from Guam. Destination for both squadrons was the Persian Gulf. MPSRon2 was to marry up with 7th MEB, and MPSRon-3 with 1st MEB, if and when those two MEBs deployed.

On 10 August (C + 3), CinCCent, that is, General Schwarzkopf, did indeed call not only for the airlifted 1st and 7th MEBs but also for the seaborne 4th MEB. No two MEBs are exactly alike in structure; they are task-organized. The size of a brigade can easily vary from 7,000 to 17,000 troops or more, mostly Marines, but also a considerable number of Navy men, because the Corps's medical support and its chaplains, plus some engineering help, come from the Navy.

General Schwarzkopf had succeeded Marine General George B. Crist on 23 November 1988 as commander of CentCom, with a staff of 675. In June 1990, Marine Major General Robert B. Johnston joined his command as chief of staff. Johnston, born in Edinburgh, Scotland, in 1937, emigrated to this country in 1955, and came into the Marine Corps by way of a commission in 1961, after graduating from San Diego State College. As a junior officer, he had two tours in Vietnam, including command of a rifle company. Subsequently, he would have the peacetime command of a battalion, a regiment, and of the 9th Marine Amphibious Brigade.

On 12 August (C + 5), the 7th MEB, moving out from its desert base at Twentynine Palms, California, with nearly 17,000 personnel, entered the air flow for Saudi Arabia.¹⁶ The planning figure was that the deployment of a Marine Expeditionary Brigade by air required 250 C-141 sorties or equivalents. It was no accident that 7th MEB was desert-trained. The brigade had long been earmarked for employment in CentCom's sandy area of operations.

The first elements of the 7th MEB arrived at Al Jubayl on 14 August (C + 7). The brigade commander, Major General John I. Hopkins, arrived the next day, as did the first ships of MPSRon-2, and the marriage of the 7th MEB and MPSRon-2 was consummated. Rolling out of the MPS ships came the tanks, howitzers, amphibious assault vehicles, light armored vehicles, and the other weapons, supplies, and equipment which would give the 7th MEB its combat punch. On 20 August its ground elements occupied their initial defensive positions in northeastern Saudi Arabia. They were ready for combat.

7th MEB's commander, General Hopkins, a 58-year-old New Yorker raised in Brooklyn and a 1956 graduate of the Naval Academy, is a tough Marine and looks the part. A ground officer, he has a Silver Star from Vietnam and a Master's degree gained at the University of Southern California from part-time study.

On 25 August (C + 18), General Hopkins, as CG I MEF(Forward), fully confident that he could counter an Iraqi offensive in his zone of action, reported to General Schwarzkopf that he was ready to assume responsibility for the defense of the approaches to the vital seaport of Al Jubayl. His brigade, numbering on that date 15,248 Marines with 123 tanks, 425 heavy weapons, including artillery pieces, and 124 fixed and rotary winged aircraft, had made a 12,000-mile strategic movement, using 259 MAC sorties and five MPS ships.

The 7th MEB's ground combat element was Regimental Landing Team 7 (RLT-7) with four infantry battalions and a light armored infantry battalion. The latter was equipped with the light armored vehicle (LAV) developed by General Motors of Canada, based on the Swiss Piranha. The LAV is a wheeled, rather than tracked vehicle, and is classified as an 8-by-8, meaning that it has four rubber-tired driving wheels on a side. It comes in a number of variants, but the basic LAV-25-so called because it mounts a 25mm "chain" gun, with its three-man crew-is primarily a troop carrier for six Marines, well-suited for light infantry and reconnaissance missions in the desert. It had, in fact, been tested in Saudi Arabia in the mid-1980s.

The combat service support element was Brigade Service Support Group 7 (BSSG-7).

The aviation combat element was Marine Aircraft Group 70 (MAG-70). A kind of pocket air force, MAG-70 had both fixed-wing and helicopter squadrons, flying a great variety of aircraft. Its fighter-attack aircraft was the F/A-18 Hornet, which the Marine Corps considers to be the best combination fighter and attack aircraft in the world. Its attack aircraft were the AV-8B Harrier and the A-6E Intruder. The Harrier is a true vertical takeoff and landing aircraft. The Marines are the only U.S. service that has this British-designed aircraft.¹⁷

The Corps's heavy helicopters are the CH-53D Sea Stallion and the CH-53E Super Stallion, its medium helicopter is the CH-46 Sea Knight, and for light helicopters the Corps has the AH-1W Super Cobra and the UH-1N, last in a long line of Hueys.

MAG-70 also had a detachment of KC-130s. The Marine Corps version of the Hercules serves both as a refueler and a transport.

The Commanding General, 3d Marine Aircraft Wing, Major General Royal N. Moore, Jr, had arrived in the objective area on 16 August, one day after General Hopkins. Born in Pasadena, California, in 1935, Moore had come into the Marine Corps through the Naval Aviation Cadet program, being commissioned in 1958. He has a bachelor's degree from Chapman College. He is both a fixed-wing and helicopter pilot. In Vietnam he flew 287 combat missions, primarily in high-performance reconnaissance and electronics countermeasures aircraft, and received the Distinguished Flying Cross and 18 Air Medals. His first task in Saudi Arabia was to determine the bed-down sites for the arriving Marine Corps squadrons. Fixed-wing squadrons went to Marine Aircraft Group 11 and helicopter squadrons to Marine Aircraft Group 16. Shortly after his arrival Moore publicly predicted a short, violent air war against the Iraqis.

On 17 August (C + 10), the first echelon of the 4th Marine Expeditionary Brigade, with forces drawn from North and South Carolina bases and air stations, sailed from Morehead City. The brigade, numbering about 8,000, included RLT-2, MAG-40, and BSSG-4. To move 4th MEB, Atlantic-based Amphibious Group Two, with Amphibious Squadrons Six and Eight, divided itself into three Transit Groups of about five ships each. Transit Group 2 would sail on 20 August and Transit Group 3 on 22 August.¹⁸

Major General Harry W. Jenkins, Jr., the 52-year-old commanding general of 4th MEB, is another Californian. A graduate of San Jose State College, he also has a Master's degree from the University of Wisconsin. Commissioned in 1960, he commanded a rifle company in Vietnam as a captain.

On 25 August (C + 18), the air flow of the 1st Marine Expeditionary Brigade from Hawaii began. The core of 1st MEB was the 3d Marines, with two infantry battalions. No command element was sent, for there was already a sufficient Marine Corps command structure in Saudi Arabia to receive the 1st MEB's ground and aviation components. On 26 August, MPSRon-3 arrived at Al Jubayl from Guam, and the marriage of 1st MEB and MPSRon-3 proceeded.

On 2 September (C + 26), the I Marine Expeditionary Force assumed operational control of all Marine forces in CentCom's theater of operations. I

MEF was formed by "compositing" or fitting together the elements of the 7th MEB and 1st MEB. In Marine Corps language, the 7th MEB "stood down" on that date. Either "deactivated" or "dissolved" would be much too strong a word; 7th MEB could be readily reconstituted if the situation required it. Major General Hopkins, the commanding general of the 7th MEB, now became the deputy commander of I MEF.

I MEF's command element had come from Camp Pendleton, California. The commanding general, Lieutenant General Walter E. Boomer, arrived at Riyadh on 17 August. Boomer is a North Carolinian, commissioned in the Marine Corps in 1960 after graduating from Duke University. As a captain he had two tours in Vietnam, the first as a rifle company commander and the second as an advisor to a Vietnamese Marine Corps battalion. He is an outdoorsman, whose favorite pastime is hunting. He received a Master's degree in technology of management from the American University in 1973, and then taught at the Naval Academy. As do most general officers, he has a chest full of ribbons, but the most significant are his two Silver Stars from Vietnam. Silver Stars require gallantry in action and are not given lightly by the Marine Corps. He had taken command of I MEF at Camp Pendleton on 8 August, immediately before deployment, coming from command of the Reserve 4th Marine Division. He is now 52 years old.

At the same ceremony, Brigadier General James M. Myatt became the new commanding general of the 1st Marine Division." Myatt had been commissioned a second lieutenant in the Marine Corps after graduating from Sam Houston State University in Texas. Later he would receive a master of science degree in engineering electronics from the Naval Postgraduate School in Monterey, California. He served two tours in Vietnam, the first as a platoon leader and company commander and the second as an advisor to the Vietnamese Marines. He, too, has a Silver Star.

On 5 September (C + 29) the 1st Marine Division "stood up," signifying that the headquarters of the division was in place, having arrived from Camp Pendleton, and was ready to assume control of the ground combat element of I MEF.²⁰

By 6 September, the three major subordinate headquarters of I MEF were in place: the 1st Marine Division, the 3d Marine Aircraft Wing, and the 1st Force Service Support Group, the last commanded by Brigadier General James A. Brabham, Jr. General Brabham is a native Pennsylvanian, born in 1939, and a 1962 civil-engineering graduate of Cornell University. During the first of his two Vietnam tours, he commanded a company in a shore party battalion; during the second he was an engineer advisor to the Vietnamese Marine Corps. Like General Boomer, he had a tour on the faculty of the Naval Academy. In recent years Brabham had been the Deputy J-4 at USCentCom, an almost ideal preparation for his present assignment. In addition to being the commanding general of the 1st Force Service Support Group, he also functioned as ComUSMarCent; that is, commander of the Marine component of the Central Command until General Boomer's arrival.

Consistent with existing doctrine and plans, General Schwarzkopf had directed that USMarCent be established as a service component along with Air Force (USAFCent), Navy (USNavCent), Army (USArCent), and Special Operations Command (SOCCent).²¹ ComUSMarCent would have operational control of all Marine forces ashore.

Meanwhile, the 13th MEU(SOC), embarked in PhibRon 5, was on its way from the Philippines, arriving in the Gulf of Oman on 7 September.²² Another name for PhibRon 5 with its embarked MEU was Amphibious Ready Group "A" or "ARG Alpha."

A second ready group, ARG Bravo, was also activated in the Western Pacific and dispatched to the Gulf, carrying a bob-tailed MAGTF 6-90 under command of Colonel Ross A. Brown and including the headquarters of RLT-4, BLT 1/6, and a combat service support detachment.²³ Back in the Philippines, elements of the 9th Marine Expeditionary Brigade continued to be involved in flood relief in the well-named Operation Mud Pack.

Recognizing the operational flexibility offered by an embarked amphibious force, General Schwarzkopf had decided to keep both the 4th MEB and 13th MEU(SOC) afloat. Command lines here would run from USCinCCent to ComUSNavCent (who was also Commander, Seventh Fleet) to CATF (Commander, Amphibious Task Force), to CLF (Commander, Landing Force). General Jenkins, as CG 4th MEB and CLF, would also have operational control of the 13th MEU(SOC).

On 11 September, the first echelon of the 4th MEB arrived in the Gulf of Oman in Transit Group 1. By 17 September, all three transit groups were in the Gulf of Oman, just outside the Persian Gulf, and the amphibious task force began to plan for landing rehearsals. The first of these landing exercises, which would have the code name "Sea Soldier," began with a night amphibious raid by the 13th MEU(SOC) followed by the 4th MEB landing across the beaches of Oman by both helicopter and surface craft.

The workhorses for the surface landing were the Marine Corps' amphibian tractors. In 1985 the Marine Corps changed the designation of the LVTP7A1 to AAV7A1--amphibious assault vehicle--representing a shift in emphasis away from the long-time LVT designation, meaning "landing vehicle, tracked." Without a change of a bolt or plate, the AAV7A1 was to be more of an armored personnel carrier and less of a landing vehicle. The LVTP7, which had come into the Marine Corps inventory in the early 1970s, was a quantum improvement over the short-ranged LVTP5 of the Vietnam era. Weighing in at 26 tons (23,991 kg) combat-loaded, and with a three-man crew, it can carry 25 Marines. With a road speed of 45 mph (72 km/h), it is also fully amphibious with water speeds up to 8 mph (13 km/h). It is not as heavily armed or armored as the Army's Bradley infantry fighting vehicle; on the other hand, the M2A1 Bradley carries only seven troop passengers.

About this time, I MEF learned that the 7th Armored Brigade ("Desert Rats") of the British Army of the Rhine was to come under I MEF's operational control.²⁴ The Desert Rats, numbering some 14,000 soldiers, had earned their name fighting with the British Eighth Army in North Africa in World War II,

but it had been a long time since they served in the desert. Their fighting vehicles, however, had names that seemed well-suited to the task hand: Challengers, Warriors, Scimitars, and Scorpions, The Challenger tank is roughly equivalent to the American M60A3. The Warrior is an armored personnel carrier chosen by the British after competition with the American Bradley. The Scimitars and Scorpions are tracked reconnaissance vehicles that might be called very light tanks.

Going into Desert Shield, the Marines' main battle tank was the M60A1, an improvement, several generations removed, of the M48 tank of the Korean and Vietnam wars. Weighing 58 tons (52,617 kg) and with a crew of four--commander, gunner, loader, and driver--the M60A1 has as its main armament a 105mm gun. Retrofitted with applique armor, it is considered roughly equal to, if lesser-gunned than the best tank in the Iraqi inventory, the much-vaunted Soviet T-72.

The T-72, which came into service in the late 1970s, was successfully met by the Israelis in Lebanon in 1982. Armed with a long-barreled, smooth-bored 125mm gun and with a three-man crew, the T-72 at 45 tons (41,000 kg) is considerably lighter than the Marine Corps's M60A1. Both tanks have six road wheels on a side but the T-72 with its squat hull and long-barreled gun is distinctive in silhouette from the M-60, with its more massive turret.

In the South Atlantic, the 26th MEU(SOC) had arrived on schedule off Monrovia, on 20 August, and began the relief of 22d MEU(SOC). By that time 683 persons had been evacuated and the Marine presence ashore had been reduced to half a company. Next day, 26th MEU(SOC) received a change of mission. It was to proceed to the Mediterranean, leaving behind the USS *Whidbey Island* (LSD-41) and *Barnstable County* (LST-1197) and a heavily reinforced rifle company (Co K/3/8), along with helicopters and a combat service support detachment to continue evacuation operations and protection of the embassy. This detachment, under command of Major George S. Hartley, picked up the informal name of "Monrovia MAGTF."

By C + 60, during the first week of November, Phase I of the Desert Shield deployment was complete. Nearly 42,000 Marines, close to one-quarter of the Marine Corps's total active-duty strength and a fifth of the total U.S. force in Desert Shield, had been deployed. More than 31,000 were ashore in I MEF. The remainder, the 4th MEB and 13th MEU(SOC), were kept afloat as the landing force of a strong amphibious task force.

But there was much more to come. During an 8 November press conference, President Bush indicated that U.S. forces in the Persian Gulf area would be increased by an additional 200,000 troops. Amplifying news stories conjectured that the number of Marines in the objective area would be doubled by the addition of the II Marine Expeditionary Force from the Corps's East Coast bases and the 5th Marine Expeditionary Brigade from California.²⁵ The Corps's Commandant, General Gray, added a footnote to the conjecture:

"There are four kinds of Marines: those in Saudi Arabia, those going to Saudi Arabia, those who want to go to Saudi Arabia, and those who don't want to go to Saudi Arabia but are going anyway."

It was a point of pride with the Marine Corps that it had completed Phase I deployments without any callup of the Marine Corps Reserve, except for a few individuals who volunteered for active duty to fill mobilization billets. The President's decision to expand the force changed that.

On 13 November, for Phase II, the involuntary callup of Selected Marine Corps Reserve units began. These units were drawn from all over the country from the widely dispersed Reserve 4th Marine Division and 4th Marine Aircraft Wing. They were needed to sustain the forces already deployed and to round out the additional forces that were to be sent.

A large-scale amphibious exercise, with the foreboding code name "Imminent Thunder," was held near the head of the Persian Gulf, beginning 18 November. Uncertain landing conditions were created by shallow water and high winds and the amphibious task force commander cancelled the surface assault because of the sea state. The media got on to this, chattering about the fragility of amphibious landings, not accepting the obvious explanation that in an actual operation the landing could have been made, but that you don't risk the unnecessary breakup of landing craft and vehicles in an exercise.

The helicopterborne part of the assault, launched from over the horizon, went well. A Marine battalion landing team coming from the sea linked up with I MEF forces ashore. Air support was not only Marine, Navy, and Air Force, but also British and French.

The 5th Marine Expeditionary Brigade, numbering about 7,500, sailed from San Diego on the first of December in the 13 ships of Amphibious Group Three.²⁶ The last operational deployment of the 5th MEB had been in 1962, when it went through the Panama Canal to take station in the Caribbean during the Cuban Missile Crisis. The ground element core of the 5th MEB was the reinforced 5th Marine regiment from Camp Pendleton; the aviation element, MAG-50; and the combat service support element, BSSG-50.

Brigadier General Peter J. Rowe was in command. From Connecticut and now 52 years old, he had been commissioned in 1962 after graduation from Cincinnati's Xavier University. Later he would take a master's degree at San Diego State University. In the Vietnam War, after completing Vietnamese language training, he had commanded an interrogation-translation team in the battles for Hue City and Khe Sanh. Before getting command of the 5th MEB, he had been assistant commander of the 1st Marine Division.

The 5th MEB's schedule called for it to arrive at Subic Bay on 26 December, for a brief training period. Then on 1 January, it was to proceed so as to arrive in the area of operations by 15 January. "Embedded" in 5th MEB was the 11th MEU(SOC)--meaning that the 11th MEU(SOC) could be reconstituted for missions such as those being performed by 13th MEU(SOC).

On the East Coast, the II Marine Expeditionary Force consisted essentially of the 2d Marine Division and 2d Force Service Support Group, based mainly at Camp Lejeune, and the 2d Marine Aircraft Wing, based largely at Marine Corps Air Station, Cherry Point, North Carolina. II MEF called itself the "Carolina MAGTF" and it bore the imprint of General Gray's time as Commanding General, 2d Marine Division (1981-84), and Commanding General, Fleet Marine Force, Atlantic (1984-87).

In command was the current FMFLant commander, Lieutenant General Carl E. Mundy, originally of Atlanta, Georgia. Commissioned in the Marine Corps in 1957 after graduation from Auburn University, he had served as an operations officer and executive officer of an infantry battalion. Later, his string of operational commands would include the 36th and 38th MAUs and the 4th MAB. Immediately before his assignment to FMFLant in July 1990, he had been the Deputy Chief of Staff for Plans, Policies, and Operations at Headquarters, Marine Corps. But he was not destined to go to the Persian Gulf immediately.

Nearly 30,000 Marines and sailors from II MEF were scheduled for the Gulf. Movement of the fly-in echelon (FIE) began on 9 December and was to continue, at the rate of about 1,000 troops per day, until 15 January. Part of II MEF's logistic support would come from MPSRon1, which left the East Coast on 14 November with a scheduled arrival date at Al Jubayl of 12 December.

The departure of the major part of II MEF for the Gulf was marked by an elaborate farewell ceremony at Camp Lejeune on Monday, 10 December, which saw 24,000 departing troops drawn up in massive squares on the parade ground. Both the Commandant, General Gray, and the Commander in Chief, U.S. Atlantic Fleet, Admiral Powell F. Carter, were there to wish them well. Perhaps the most impressive part of the parade was the massing of the scarlet-and-gold colors of II MEF and its subordinate units.²⁷

But of the major elements, only the colors of the 2d Division and 2d Force Service Support Group would be going to the Gulf, it having been decided that there was not yet a requirement for the command elements of II Marine Expeditionary Force and the 2d Marine Aircraft Wing. The deploying aviation units would be joining the already deployed 3d Marine Aircraft Wing. Thus on 15 January, the I Marine Expeditionary Force would be structured very much like the III Marine Amphibious Force in Vietnam: two divisions, a very large wing,²⁸ and a substantial service support command.²⁹ In addition there would be two Marine Expeditionary Brigades and a special-operations-capable Marine Expeditionary Unit afloat, offering a very powerful landing force for any contemplated amphibious operations.

Except for a demonstration incident to the 1962 Cuban Missile Crisis, the 2d Marine Division had not been operationally deployed since World War II, where it fought with great distinction at Guadalcanal, Tarawa, Saipan, and Tinian.³⁰ Reminiscent of expeditionary practices before World War I, a rifle company was stripped out of the ceremonial guard at the Marine Barracks, Washington, D.C., and sent to Saudi Arabia, as well.

Commanding the 2d Marine Division was Major General William M. Keys, a Pennsylvanian who had graduated from the Naval Academy in 1960. During his first tour in Vietnam he commanded a rifle company; during his second he was an advisor to the Vietnamese Marines at the battalion and brigade level. He has both a Navy Cross and a Silver Star. A graduate of the National War College, he also holds a Master's degree from the American University. Peacetime operational commands had included both a battalion and a regiment.

The new year brought an unexpected diversion of forces from Desert Shield. On Thursday, 3 January, a cable arrived in Washington from the U.S. Embassy in Mogadishu, Somalia, requesting immediate evacuation. A two-week urban battle had reached its climax and the government of the octogenarian president, Mohamed Siad Barre, was collapsing. Armed looters had entered the embassy compound. Orders went out to Seventh Fleet. The *Trenton* (LPD-14), operating in the Indian Ocean, launched two CH-53Es loaded with 70 Marines. The distance was 460 miles; nighttime aerial refueling was done twice from Marine KC-130s flying from Bahrain. The helicopters arrived over Mogadishu early Friday morning, 4 January, and sat down just inside the embassy gate. Part of the Marine detachment secured the perimeter of the luxurious (\$35 million) compound, big enough to include a nine-hole golf course. The rest of the Marines sallied forth into the corpse-littered streets to bring in stranded Americans and other foreign nationals, including the Soviet ambassador and his staff of 35 from the Soviet Embassy a mile away. By now more than 260 persons were in the embassy compound. The hired security guards were holding off the looters with small arms fire. A rocket-propelled grenade had impacted on an embassy building. The two CH-53Es took out 62 evacuees on Friday.³¹ The next day, Saturday, 5 January, five CH-46 helicopters from the *Guam* (LPH-9), which had closed the distance to Mogadishu, continued the evacuation. Altogether more than 260 people were taken out, including 30 nationalities and senior diplomats from ten countries.

Just prior to 15 January the British 7th Armored Brigade was detached to rejoin its parent, the 1st Armored Division, which had arrived in Saudi Arabia. The Desert Rats were to be replaced by the 1st Brigade, 2d U.S. Armored Division-the "Tiger Brigade"-some 4,200 soldiers equipped with more than a hundred M1A1 Abrams tanks and a large number of M2A2 Bradley infantry fighting vehicles.

The Marine Corps had not been scheduled to get its first M1A1 Abrams, the U.S. Army's premier main-battle tank, until November 1990, with an initial operational capability not expected until late 1991. General Gray met with General Carl E. Vuono, the Army's Chief of Staff, and asked for the loan of some Army M1A1s. By the first part of January 1991, with U.S. Army cooperation, I MEF had a significant number of M1A1s, considered the most modern tank in the world. Slightly heavier at 63 tons (57,154 kg) than the M60A1, the M1A1's most recognizable visual differences are its skirted seven road-wheels and long turret, mounting a 120-mm. smooth-bore gun.

By the 15th of January the Marine Corps had something close to 84,000 troops in the objective area, almost half its active-duty strength.³² Of this total,

some 66,000 (just over a thousand of whom were female Marines) were ashore with I MEF. Afloat were the 4th MEB, 5th MEB, and 13th MEU(SOC)-almost 18,000 Marines. Taken together, these forces were close to the number of Marines deployed to Vietnam in the peak year of 1968 and more than the total landed at Iwo Jima in 1945.

Obviously, the Marine Corps's deployment to the Persian Gulf, constituting as it did the largest Marine Corps movement since World War II, was dependent on the sealift provided by the Navy and airlift provided by the Air Force. Both the sealift and airlift were magnificent.

Contingency plans for deployment to the Persian Gulf--for all Services, not just the Marine Corps--appear to have worked amazingly well. U.S. deployments to the region were a logistical triumph. In the Korean War, under-strength, under-trained, and poorly equipped American troops were flung into battle piecemeal in an act of desperation. In some cases performance was poor, and in many cases losses were frightful. In the Vietnam War, the state of readiness of the armed forces was much better than Korea and often outstanding-but they were fed into the objective area with a deliberate slowness, reflecting the gradualism of the Johnson-McNamara strategy.

This time, as exemplified by the deployment of the Marines, the crux of the Bush-Cheney-Powell strategy was to position a superbly equipped and highly trained force in sufficient numbers on the anticipated battlefield.

Notes

1. Amphibious Squadron Four (PhibRon 4): USS *Saipan* (LHA-2), *Ponce* (LPD-15), and *Sumter*, (LST-1181).
2. Such evacuations from troubled spots around the world have been a Marine Corps mission almost from its inception. For a complete account of this effort--Operation Sharp Edge--see pp. 102-106 of this issue.
3. Special Purpose Forces might be considered a fourth type of MAGTF. These are small task-organized forces configured, as the name implies, for special purposes. Recent use of Special Purpose Forces by the Marines includes operations in Panama (Operation Just Cause) and in the Persian Gulf (Operation Earnest Will).
4. The commander of a MEB is ordinarily a brigadier or major general. The ground combat element is ordinarily a Regimental Landing Team. The aviation element is ordinarily a composite Marine Aircraft Group. The fourth element is the all-important Brigade Service Support Group. The repetition of the word "ordinarily" is intentional; there is no fixed organization for a Marine Expeditionary Brigade. Similarly, a Marine Expeditionary Unit ordinarily is commanded by a colonel and will include a Battalion Landing Team, a reinforced Helicopter Squadron, and a Service Support Group. A Marine Expeditionary Force, commanded by a major general or lieutenant general, will ordinarily have a Division, an Aircraft Wing, and a Force Service Support Group.
5. All MAGTFs have inherent special-operations capabilities. Before deployment, MEUs undergo demanding comprehensive training leading to formal certification and designation as "Special Operations Capable."
6. Although the British burned the White House in 1814, they left the Commandant's House unharmed, possibly because their commanding general was staying there.
7. As of 15 January, General Gray had been to Saudi Arabia three times to visit his troops.
8. The Commanding General, Fleet Marine Force, Atlantic (CG FMFLant), is also the Commanding General, Fleet Marine Force, Europe (CG FMFEur), with a small planning staff in London.
9. When CG I MEF asked ComPhibGru-3 for the immediate return of *Belleau Wood* from Seattle, she steamed back to San Diego that night. The 3d Battalion, 9th Marines disembarked and readied itself for air embarkation.
10. To put things into geographic perspective, look at the map of the Arabian peninsula and see it as a land mass as large as the United States east of the Mississippi. To the left or southwest is the Red Sea. To the right or northeast are the Persian Gulf, the Straits of Hormuz that form a choke point, and the Gulf of Oman. To the southeast are the Gulf of Aden and the Arabian Sea.
11. Amphibious Squadron Two (PhibRon 2) consisted of the *Inchon* (LPH-12), *Nashville* (LPD-13), *Whidbey Island* (LSD-41), *Fairfax County* (LST-1193),

and *Newport* (LST-1179). A PhibRon with an embarked MEU forms an Amphibious Ready Group (ARG).

12. The gears of command meshed as follows: USCinCCent was designated the theater commander and the *supported* unified command. USCinCPac, as one of the *supporting* unified commanders, tasked his component commanders, CinCPacFlt among them, to provide designated forces. CG FMFPac, subordinate to CinCPacFlt, in turn ordered CG I MEF to ready the 1st and 7th MEBs for deployment. Similarly, 4th MEB received its tasking from FMFLant which in turn had been tasked by USCinCLant through USCinCLantFlt.

13. With the U.S. Air Force insistent on the indivisibility of air power and the requirement for centralized operational control, and the U.S. Marine Corps equally insistent on the integrated nature of its air-ground teams, such doctrinal differences are inevitable, and, on balance, even have a certain virtue.

14. Readers should prepare for a whole new lexicon of acronyms in use in Desert Shield and Desert Storm. The air-transported elements of a MAGTF are known as the "FIE" or "fly-in-echelon."

15. All MPS ships are named for Marine Corps recipients of the Medal of Honor. The 13 ships were divided among the three squadrons as follows: MPSRon 1: MV *Kocak* (MPS-1), *Obregon* (MPS-2), *Pless* (MPS-3), and *Bobo* (MPS-4); MPSRon 2: MV *Hauge* (MPS-5), *Baugh* (MPS-6), *Anderson* (MPS-7), *Fisher* (MPS-8), and *Bonnyman* (MPS-9); MPSRon 3: MV *Williams* (MPS-10), *Lopez* (MPS-11), *Lummus* (MPS-12), and *Button* (MPS-13).

16. 7th MEB, as with the other MAGTFS, had a standing command element or headquarters. The ground combat element, i.e., the reinforced 7th Marines; the aviation combat element, Marine Aircraft Group 70; and the combat service support element, Brigade Service Support Group 7; were not permanently assigned elements of the brigade, but all were designated and all had recently exercised with the brigade.

17. The Harrier, a unique aircraft and uniquely suited to the Marine Corps, had proved its excellence in the Battle for the Falklands. The RAF's Harriers may well have been the premier tactical aircraft in that well-fought little war. The A-6 Intruder is an old-timer, nearing the end of a long and successful service life. Earlier models distinguished themselves in Vietnam, primarily because of their all-weather bombing capability. The Marines also have the EA-6B Prowler which is the electronic warfare version.

18. Transit Group 1: USS *Shreveport* (LPD-12), *Trenton* (LPD-14), *Portland* (LSD-37), and *Gunston Hall* (LSD-44). Transit Group 2: USS *Nassau* (LHA-4), *Raleigh* (LPD-1), *Pensacola* (LSD-38), and *Saginaw*, (LST-1188). Transit Group 3: USS *Iwo Jima* (LPH-2), *Guam* (LPH-9), *Manitowoc* (LST-1180), and *Lamoure County* (LST-1194).

19. This relief had been planned months before Desert Shield. A division is a major general's billet and it was a special tribute to General Myatt that he was given the command as a brigadier. Major General John P. ("Phil") Monohan was retiring after a distinguished 35-year career. His last assignment was as commanding general of both I Marine Expeditionary Force and 1st Marine Division. General Gray, who officiated at the 8 August ceremony, had decided

to divide these responsibilities between Boomer and Myatt, but at the same time designating Boomer as Commanding General, Marine Corps Base, Camp Pendleton. By eliminating a three star billet in Washington, Gray was able to promote Boomer to lieutenant general. Within a few weeks Myatt was selected for promotion to major general.

20. As eventually constituted, the 1st Marine Division in Desert Shield would consist of three infantry regiments--the 1st, 3d, and 7th Marines; an artillery regiment--the 11th Marines; and the following separate battalions: 1st Light Armored Infantry, 1st Combat Engineers, 1st Reconnaissance, 3d Assault Amphibian, 1st and 3d Tanks.

21. A separate component command for the Marines avoided the ambiguity of early Vietnam War command arrangements when ComUSMACV had a *naval* component which was sometimes commanded by the CG III MAF as the senior naval officer. 22. The ships in PhibRon 5 were the USS *Okinawa* (LPH-3), *Ogden* (LPD-5), *Fort McHenry* (LSD-43), *Cayuga* (LST-1186), and *Durham* (LKA-114).

23. MAGTF 6-90 was embarked in the USS *Dubuque* (LPD-8), *San Bernardino* (LST-1189), and *Schenectady* (LST-1195).

24. This was reminiscent of the Korean War, when a Korean Marine Corps regiment served under the 1st Marine Division and of the Vietnam War, when the Korean Blue Dragon Brigade served under the operational guidance of the III Marine Amphibious Force.

25. The JCS deployment order of 9 November 1990 did indeed specify the 11 Marine Expeditionary Force and 5th Marine Expeditionary Brigade.

26. The 13 ships of PhibGru3 were the USS *Tarawa* (LHA-1), *New Orleans* (LPH-11), *Tripoli* (LPH-10), *Denver* (LPD-9), *Juneau* (LPD-10), *Vancouver* (LPD-2), *Anchorage* (LSD-36), *Germantown* (LSD-42), *Mount Vernon* (LSD-39), *Peoria* (LST-1183), *Barbour County* (LST-1184), *Frederick* (LST-1184), and *Mobile* (LKA-115).

27. Intermittently throughout this period the East Coast-based 22d Marine Expeditionary Unit, having returned from its deployment, was on heightened alert, ready to respond to a possible protection of the U. S. Embassy and evacuation-of-U.S. citizens mission in Haiti, as that Caribbean country went through the trauma of a presidential election and post-election unrest.

28. The 3d Marine Aircraft Wing for Desert Shield consisted of two fixed-wing aircraft groups, MAGs 11 and 13; two helicopter groups, MAGs 16 and 26; Marine Air Control Group 38; and several separate squadrons.

29. The 1st Force Service Group, reinforced, was divided into a General Support Command, under BGen Brabham's immediate command and consisting of three combat service support detachments; and a Direct Support Command (essentially the 2d Force Service Command), under BGen Charles C. Krulak, consisting of the 2d Medical Battalion, the 7th and 8th Engineer Support Battalions, and three more combat service support detachments.

30. As organized for Desert Shield, the 2d Marine Division would include three infantry regiments--the 4th, 6th, and 8th; an artillery regiment--the 10th Marines;

and the following separate battalions: 2d Light Armored Infantry, 2d and 8th Tanks, 2d Assault Amphibians, 2d Combat Engineers, and 2d Reconnaissance.

31. It was reported that on the way out, a baby was born to one of the passengers while the CH-53E refueled in the air.

32. By 15 January some 17,000 Marine Corps Reserves had responded to the call to active duty.

Major General Hopkins commanded the 7th Marine Expeditionary Brigade, the first significant Marine Corps force to arrive in the Persian Gulf. Before he deployed with the brigade, he also commanded the Marine Air Ground Combat Center in Twentynine Palms California, where Marine units go for desert and combined arm training. When Lieutenant General Boomer arrived in Saudi Arabia, General Hopkins became the Deputy Commander of I Marine Expeditionary Force.

In this interview, General Hopkins discusses the first operational offload of Maritime Prepositioning Ships, and describes the measures taken by the first American forces to arrive in Saudi Arabia to defend against the large, menacing Iraqi Army in Kuwait.

This Was No Drill

interview with Major General John I. Hopkins, USMC

U.S. Naval Institute Proceedings, November 1991

Proceedings: When were you alerted?

Hopkins: The brigade was alerted officially to deploy on 8 August 1990, while the Maritime Prepositioning Ships [MPS] got under way on the 7th, and we started working the Time Phased Force Deployment Data (TPFDD). We didn't have all the ships in the right spots. Only three were at Diego Garcia; one was at Blount Island, Florida, on a maintenance cycle; and one was en route. So we didn't have our total package. But the Diego Garcia ships got moving.

We worked like hell. We had a problem with the TPFDD right away because it was due to be updated in October. This was August, it hadn't been reworked for a couple of years, and we had some problems. Everybody wanted to put on more gear than the 250 equivalent airlift sorties allowed. So after my staff came to me and said, "We need a decision. They're trying to dump everything on," I said, "If you put something additional on the aircraft, you've got to take something off."

Proceedings: Did you take more tanks on your ships, based on what you thought you would be up against?

Hopkins: No. We had the generic Maritime Prepositioning Force (MPF) equipment package. We couldn't have changed it anyway. The MPS concept equals the prepositioned ships plus the fly-in echelon. The flexibility is there, though, for new weapon systems like the light armored vehicle [LAV] variants, or new communications gear, and things that haven't been loaded on the MPS since the last maintenance cycle; those get put on the fly-in echelon.

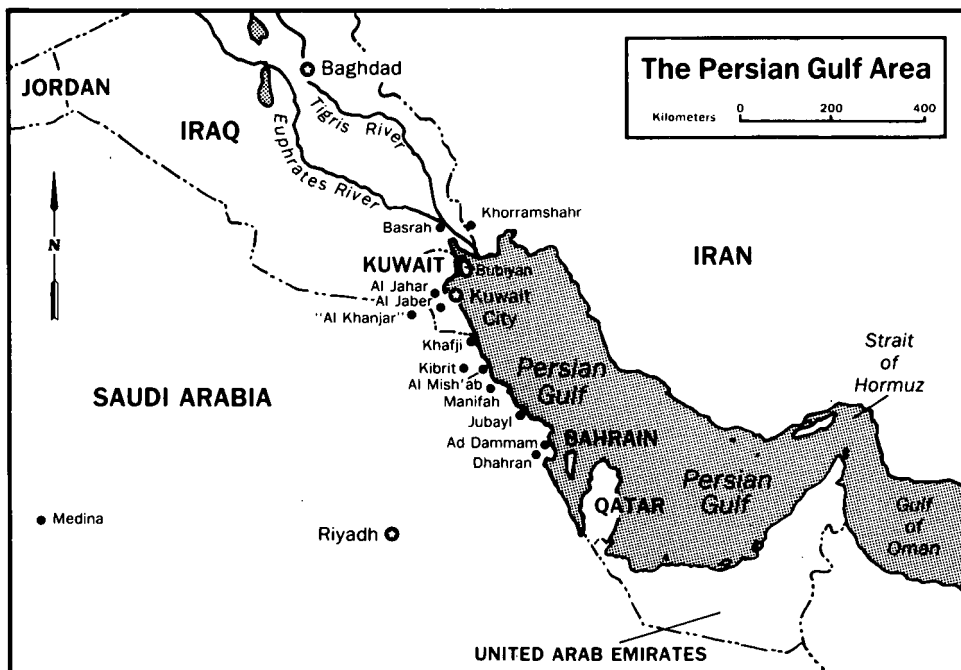
Proceedings: How was your intelligence support?

Hopkins: One of the failures of the whole damn war was intelligence. I think it was terrible, absolutely terrible. Strategic intelligence, what the Air Force was using in Iraq, that's something different. But the battlefield intelligence was inadequate. When the battalion commanders and regimental commanders--and I'm getting beyond my portion of it--crossed the line of departure, they didn't know what was in front of them, and that's just unconscionable, as far as I'm concerned.

Proceedings: You were the senior Marine commander in the area. Did you have to do most of the liaison with the Saudis?

Hopkins: Yes. [Brigadier] General Jim Brabham had served with Central Command on a previous tour and knew the area, so General Boomer sent him over to look at the infrastructure. He went to Riyadh right away and really didn't have anything to do with the 7th MEB. As soon as we got in we were hunkered down at the port and marrying up our units with the equipment, I focused on the tactical situation.

I conducted visual reconnaissance flights with the helicopters, and went down to talk with Major General Saleh, who was the Saudi Eastern Province Commander. Here we were, all these Americans coming into Saudi Arabia and we needed some decisions: Where we could deploy; what infrastructure could we use; where could we establish live-fire ranges. Those kinds of things.



Rear Admiral Bader was the senior Saudi naval officer in Jubayl, and he had a lot of influence in the local area. I would talk with him. There was a Royal Commission of Jubayl on the civilian side of the house which controlled most of the available infrastructure, but we had to get some camps set up to get our Marines out of the port. Our Marines were sitting in these warehouses in 130 degrees temperatures, with no heads or showers. The decision-making system in Saudi Arabia took a long time to get moving. We did the best we could in Jubayl, but the Saudis couldn't gear up fast enough. With the stench and the heat, it was just tough. We had a good setup at the port facility, but we had to get the troops out to the field for morale and security reasons.

Every day I would go around and see someone from the Royal Commission, or Bader, or I'd go down and see Saleh, and then I'd get in a helicopter and I'd go north to see how the hell we were setting up. We started to break the log jam. We got the ranges, and we got permission to deploy. But it took a lot of time.

Proceedings: Did you have to go immediately into defensive positions?

Hopkins: No. Like everything else, you've got to prepare the equipment and do the reconnaissance. While the subordinate units were getting ready, my staff was tying in with Central Command in Riyadh, and I was making liaison with the local authorities, both civilian and military, so we could do what we needed to do.

Proceedings: Were the Saudis defending?

Hopkins: No. They had a couple of trip-wire units deployed to the north, but for all practical purposes, the Saudis hadn't initiated any defensive plans for the eastern province. I wanted to get a sector assigned to the Marine Corps, get the ranges, and find out what limitations I had. For instance, they didn't want us to put the tanks and the amtracks [AAVP-7 assault amphibians] through the towns, because they thought we were going to damage the roads and alarm the people. That type of thing.

The 2nd Brigade 82nd Airborne Division was in there. We tied in with them defensively right away.

Proceedings: Did you have liaison teams with the 82nd?

Hopkins: Yes. We talked to them daily and figured out how we were going to defend. My mission was to defend as far forward as possible, grind down the Iraqis if they attacked, plus defend the vital areas around Jubayl. We were also supposed to defend Ra's Tannurah, which is to the south, but that's too big an area. We just didn't have the force for it, even though eventually we had 17,000 Marines in the brigade. The Army eventually picked up the mission.

Proceedings: What about the equipment coming off the ships?

Hopkins: We had no problems with the offload. The pier facilities and the airheads were great. We started to move the AV-8Bs up to the King Abdul Aziz Naval Air Station right in back of Jubayl so they would be responsive to the front lines. The F/A-18s were down at Shaik Isa in Bahrain.

There were only about three or four defensible pieces of terrain between the Kuwaiti border and Jubayl. I went up to Manifa Bay, which is about 70 miles south of the Kuwaiti border. We decided to screen there with the light armored vehicles, and then Colonel [now Brigadier General Carlton W.] Fulford could deploy the mechanized units and the greater part of the Regimental Combat Team by the cement factory, which was 40 miles north of Jubayl and 27 miles or so south of Manifa Bay, where there was some relief in the desert. It was the best defensible terrain and Fulford deployed his Regimental Combat Team there.

That was our concept. We would screen as far forward as possible, delay and attrit the Iraqis with air power, then defend in a main battle area along what became known as "cement ridge." The Iraqis had two possible attack routes. We thought they'd either come down the coast or use a route a little bit to the west, but both these routes come together at a junction near the cement factory. If they kept coming, we had drawn a line in the sand by the cement factory. We were going to stay there.

Proceedings: How soon were you ready?

Hopkins: 25 August. We were alerted on 8 August. The ships got there on 16 August. We started bringing in the troops, and we probably could have been ready a couple of days earlier if the air had gotten over sooner.

We had the attack helicopters, the Hueys, and the transports. The helicopters were coming in by Air Force C-5s. We had them all. They were coming in fine.

But the fixed-wing was stalled at MCAS [Marine Corps Air Station] Beaufort and at MCAS Cherry Point. The Air Force didn't give us the tankers that we needed to get across the Atlantic. That was my biggest concern, because basically the concept calls for us to be combat ready in about ten days. We were ready on the ground, with the MEB declared combat ready on 25 August; but the F/A-18s didn't arrive until around the 23rd, because they were delayed. The Air Force was moving its own aircraft, and that's one of the weaknesses of the MPF concept--it's not tied together at the Joint Chiefs of Staff level. They've got to say, "Okay. The ships are gone, but you also have tactical aircraft to deploy." The aircraft need the same priority as the ground forces, and they didn't get it.

Proceedings: When did you first get some OV-10s, either FLIR [forward-looking infrared radar]-capable or for tactical air coordinator (airborne) missions and radio relay?

Hopkins: Not in August. The first OV-10s arrived in the latter part of September. They self-deployed [via Greenland, Iceland, and down through Europe]. The weather affected them. So they didn't come till later, and that was a mistake.

Colonel Manfred Rietsch, who commanded Marine Aircraft Group 70, had said, "Let's crane the OV-10s on board the T-AVBs [the aircraft maintenance ships USNS *Wright* (T-AVB-3) and the USNS *Curtiss* (T-AVB-4)]." So I talked to General [Royal] Moore, who commanded the 3d Marine Aircraft Wing, and he said, "We'll let them go out with the 5th MEB." But the 5th MEB didn't come out for a couple more months.

If we had to do it again, we'd have to get the OV-10s over earlier. We could see vastness of the desert from the maps, and we knew that the OV-10 was a player. They're money in the bank. The one time you need them justifies all you have to go through to get them there. The carrier battle groups are always going to be around. But we've got to get the OV-10s in there. It's tough. I don't want to belabor this, because it was a hiccup; we were still combat ready. We used the Hueys to make up for it.

Proceedings: How did you tie in with the 82nd Airborne?

Hopkins: We had daily meetings with the 2nd Brigade of the 82nd, which was also at Jubayl. I asked, "What are you guys going to do'?" We divided up the pie and so forth. The 82nd was going to send their antitank [AT] teams out there, with tanks and AT weapons in front to hit them with whatever they've got, and then try to delay to Dammam.

Proceedings: The carriers were there early, and the Air Force F-15s came in fairly early; what kind of liaison did you have with the carriers?

Hopkins: We didn't go directly to the carriers. We went through Central Command and NavCent in Bahrain. Until we got our own aircraft there and we had the self-sufficiency of the Marine air-ground task force, we were mainly tied into the Air Force through CentAF in Riyadh. At that time, remember, the carrier battle groups were not coming up that far north because they didn't know what the missile and mine threats were. That evolved--they came up later when they knew the missile threat wasn't there.

Proceedings: How would you have gotten air support if you really needed it?

Hopkins: We would have gone right to the Air Force through our liaison officers with CentAF in Riyadh. We had our own attack helicopters, but every day we were hoping Saddam wouldn't come down. If he had come down, it might have been a different story in terms of the whole outcome. We would have hunkered down right around Jubayl. Jubayl is the petrochemical capital of Saudi Arabia. All the water that they get in Riyadh comes out of the desalinization plants in Jubayl, so they could have theoretically cut off Riyadh.

We were tied into all the command-and-control systems. We didn't have full Marine air support yet, but we planned to plug in, send a mission, say, "Hey, we need this." Central Command would have come through for us, and by 23 August Boomer was in Riyadh. I wasn't worried about getting air support.

Proceedings: Did you have any ground-based electronic warfare capability?

Hopkins: No, that was in the follow-on echelon. We didn't have radio battalion support going in, but we did eventually get that capability.

Proceedings: Where were you getting your battlefield intelligence?

Hopkins: We relied on Central Command pushing it down to us from Riyadh. Talking with General Saleh on a daily basis tied in the Saudi Army side of it, and I would talk with Bader. But their intelligence was poor. We didn't really have any intelligence except what was coming from Central Command, and it painted an overpowering picture--we were facing 11 Iraqi divisions. But this was from a macro-viewpoint.

Getting back to my earlier comment, intelligence was terrible. Later on after the 7th MEB had been absorbed into I MEF, we were tracking the Iraqi 80th Tank Brigade for months. Because of the T-72 tanks, it was a major threat--but it turned out that this unit wasn't in our sector after all. It had left Kuwait months before and we didn't know it. The intelligence was not accurate. They kept on building this guy to be a great fighter, great artillery; they had barriers and mines; they're going to put oil into these obstacles and light it off--and so forth.

Proceedings: Did you see any prisoners of war before the ground war started?

Hopkins: We never got any POWs until after the war started, and we got them for ourselves. The Saudis had the POWs and wouldn't let us interrogate them to get the intelligence we needed.

The Saudis picked up defectors. They took prisoners. But for the whole six months of Desert Shield, right until we initiated the attack, the Saudis controlled any defector who came across, and any POWs. At our level, we never knew whether we were getting any of that information.

Proceedings: What took most of your time while you commanded the brigade?

Hopkins: Planning. Conducting liaison. Preparing the defense. How we were to be supported? All those things you need to give the tactical commander exactly what he requires. Making sure the operations order we had was good tactically, that we tied in with the 82nd, that the Saudis knew exactly what we were doing. We worked those issues day in and day out.

Proceedings: The desert has few terrain features--how did that affect you?

Hopkins: We had enough GPS gear as the operation developed. There were a few problems with maps in terms of adequate numbers. Then, of course, when you're along the coastline it doesn't present the problem that you would have if you were in the middle of nowhere. We didn't want for anything logistically. We unloaded those ships; we got the ammunition into our positions; and then we trained as best we could. Colonel Fulford conducted combined arms training, working the artillery and air hard.

Proceedings: But until the 25th, were you depending a great deal on air?

Hopkins: Yes. If they had come down on the 25th, of course, we would have had a hasty defense instead of a more deliberate defense. We would have used Air Force air, and kept on unloading the ships, getting stronger each day.

Proceedings: When did you give up the brigade as it was absorbed by I MEF?

Hopkins: Between 3 and 6 September. The 7th MEB command element and the headquarters were absorbed by the MEF.

Proceedings: You run the Marine Corps training at Twentynine Palms in addition to commanding the brigade. Were the troops prepared for what they went up against? Do you plan to change any of the training?

Hopkins: With the commitments the Marine Corps has, every summer we're rotating about one-third the outfit. We were in the middle of that when the call came. Fulford assessed the state of training of his battalions--1/7 [1st Battalion, 7th Marine Regiment], 2/7, 3/7, and 3/9. The MEB had been scheduled to go to Turkey on Exercise Display Determination in September, and I used the cover of that exercise to get moving a little bit, because even before we were officially notified on 8 August, I thought maybe we would be involved.

We used a little operational security to good effect. On the West Coast, everybody said, "Hey, they're going out of the 1st Marine Division." Nobody said anything about Twentynine Palms. So it was a good thing. We got out of town without a lot of publicity. We set up an eight-day program--a minimum program--and a 14-day program, because when you deploy in echelon, you don't all go at the same time. Whatever training units needed, they got. We went 24-hours-a-day; we worked the Combined Arms Staff Trainer (CAST), command and control, and battalion and regimental operations.

The 7th Marines were at Twentynine Palms and 3/9 was on its way up to Canada to work with the Princess Guards. We brought them back. That was Fulford's best-trained battalion because it had been together the longest.

Proceedings: Was 3/9 ticketed to go originally?

Hopkins: No, but we brought four battalions over. It happened that we had the lift for four battalions instead of what we'd call a troop lift for three, so we had four battalions. We constituted one of the battalions as a reserve, but that came later.

Here is how it all evolved. One of the 7th's battalions--3/7--was on unit deployment, but 1/5 had just come back from Panama, so Fulford asked for 1/5 and Major General [John P.] Monohan [then commanding the 1st Marine Division] said, "Fine. Take 1/5." Remember, we still didn't know if 3/9 was going to be turned around. So we had 1/7, 2/7, and 1/5. Then as we started working the TPFDD, and because Fulford wanted to take as much as we could, he asked Division to turn around 3/9, and we got them. So the final bag was 1/7, 2/7, 1/5, and 3/9.

We worked all the staffs in CAST. We realized we could not do a standard combined arms exercise but we've got a mobile assault course that ties in artillery on a company level. So we said, "Let's get everybody on the mobile assault course that we can, tanks, amtracks, LAVs, and then we'll work the infantry guys, zero their battle-sights, put them on the weapons ranges, and do as much of that as we can." That's exactly what we did.

I think that was a dynamite program. I think it raised the level of confidence and maximized the opportunity that we had. The units that were going to flow first in the air lift went out to the field first. As the time-phased deployment unfolded, each one of the battalions got maximum opportunity to train before leaving.

Proceedings: People may forget now about the chemical threat because it didn't materialize. Did you have all your gear at the time?

Hopkins: We took everything we had. The intelligence guys knew the Iraqis had a hell of an NBC [nuclear, biological, and chemical] capability, so we brought all the gas masks, all the MOPP [mission-oriented protective posture] gear. The British gear came later. We got anything we asked for. The Marine Corps turned to; DoD turned to; the industrial complex turned to.

Proceedings: Are you emphasizing anything different in training now that you're back?

Hopkins: They caught us short in our mine-clearing capability, because we hadn't worked with that. The Army's National Training Center at Fort Irwin, California, went to battle stations, came up with some video tapes, brought them on over, and we worked that. But we started from ground zero in building up, getting equipment.

Proceedings: How did your equipment hold up over there--tanks, LAVs?

Hopkins: Terrific. People ask me, "Are these kids-or the officers--any better than they were ten years ago?" I say, "Marines are always Marines, but there is a big difference between us and 20 years ago, and that's the weapon systems we have." All our weapon systems worked perfectly. The only real glitch we had was the line charges we used to blow breaching paths through the mine fields; we had only about a 50-60% success rate. We just doubled up whatever our requirement was to do that, and we had some teams come on over and work on it. But that's basically the only thing that caused us any problems.

Proceedings: Did you have enough night-vision capability?

Hopkins: Not initially for everyone, but enough for the forward units. Eventually, we had plenty. That was one of the imbalances that cost the Iraqis. It was just dynamite. With the M60, we were taking T-72s out at 3,000 meters, using our night vision stuff. We used it and optimized it.

Proceedings: Did the 7th MEB have M60 tanks on the ships?

Hopkins: Yes. A lot of people said, "How can you go up against a T-72?" Well, take [Lieutenant Colonel Alphonso] Buster Diggs, who commanded the 3d Tank Battalion. When this thing came down, I called him in and asked, "What do we have to do?" He said, "The only thing we've got to do is when they come, we've got to close with them right away and take away the advantage they have of outgunning us. In close, we'll have more maneuverability, we'll have the sabot round, and we'll cause some problems." And he was right, absolutely right. During Desert Storm we were taking out the T-72s with M60s firing sabot rounds because we got in close.

Proceedings: You've also got remotely piloted vehicles [RPVs]. Did you take the Pioneers?

Hopkins: We had one company in the fly-in echelon of the brigade. Initially there were some problems but then they were worked out. They did a hell of a job. We used them for battlefield surveillance, for adjusting artillery. The RPVs are here to stay.

Proceedings: Do you have any strong feelings about whether some of them should stay with the division, some belong to the wing, who should own them?

Hopkins: No. That was a turf battle at first. They should either be owned by the division, and used by the surveillance, reconnaissance and intelligence guys; and by the artillery--or the assets should be pooled under the MEF. We've got to resolve that. The aviators wanted to control the RPVs to preclude any chance

for midair collisions, but that's not a problem. The RPVs have to be out in front of a tactical commander, although you could use it for rear area security.

Proceedings: Did you have any communications problems?

Hopkins: We used multi-channel and TacSat, but don't forget, we weren't that far out. The regiment was outside of Jubayl and we could still communicate with the LAVs that were forward, so the distances were okay.

Proceedings: Did you use an LAV for a command post?

Hopkins: No. My command post was not that far from the units. The command and control could still go from Jubayl.

Proceedings: Did you use commercial telephones much?

Hopkins: Absolutely. The reason for that is that whether people realize it or not, Saudi Arabia has the best telecommunications system in the whole world. Remember, the Iraqis weren't trying to take all that stuff out, so we used any means available while we established redundancy in our communication. Then as the units kept on flowing in, we got more communications gear, and it worked out.

Proceedings: Did the troops initially stay in the lines for a long time before anybody got to stand down?

Hopkins: Yes, they did, but their adrenalin was pumping--later on it was motivation that kept them going. We moved right to the field. General Boomer made a conscious decision that we would not have any built-up areas like those we had in Vietnam. We were going bare-boned. You put a camouflage net over somebody and it drops the temperature about ten degrees. We had to get them acclimatized as soon as we could, and the only way to do that was to put them in the field. Three or four weeks after we got there, they'd be down to their tee-shirts. These Marines really looked good. Then we just started training, training, and more training. Eventually we set up a rotation system from the field to Jubayl for some rest and relaxation.

Proceedings: Did individual weapons hold up in the sand?

Hopkins: Absolutely. We were cleaning the weapons twice, three times a day. Sand storms would come up and the Marines would be doubly careful. But we didn't have any problems like the ones we had in Vietnam, many of which were caused by improper care.

Proceedings: How did the LAVs hold up?

Hopkins: Remember that the Marine Corps and the Army went together on the LAV and then they left us. This is General [Alfred M.] Gray's initiative. One of the things in combined arms, and one of the things in the desert, is mobility. You can't walk. You've got to have mobility. The LAV is a dynamic weapon, and that includes the TOW and mortar variants. The 25-mm chain gun was deadly. The LAV held up. It could go 30-40 miles per hour across the desert floor. We used it when we were determining where we were going to breach and before G-Day, we used the LAV to run up and down the border of Kuwait to confuse the Iraqis on where our penetration was going.

Proceedings: Are you referring here to deception operations such as Troy?

Hopkins: Yes. [Brigadier General] Tom Draude ran that, and the LAV was a big player. The tires held up, everything worked.

Proceedings: Did you have any tank transporters?

Hopkins: No, our tanks went on their own tracks, or we got host-nation support. We did do that. Or you borrow them from the Army, once they are established.

Proceedings: What is the 7th MEB story?

Hopkins: I'm very proud of what happened. Since the Iran affair with the hostages, a lot of people in the Carter administration, the Marine Corps, and the Navy, invested in the MPS concept; it went like clockwork. We were the only service that had any initial sustainability. We could have fought on 25 August and sustained ourselves, but everyone else had to wait about six months for the buildup.

The Army moved all its combat service support into the reserves. In contrast, we were feeding hot meals in the mess hall within 16 days, before the MEF arrived. We had kept our field messes, had brought them with us, and had the capability to serve cooked Bravo [canned] rations augmented by some fresh food that came in from the infrastructure.

The secret of the MPS concept, of course, is exercises. When I came aboard in 1989, a year before, we took four ships and went to Exercise Thalay Thai. I had the same Colonel Powell who commanded the Brigade Service Support Group; I had Colonel Fulford with the ground combat arm. The only officer I didn't have was the MAG-70 commander, Colonel Fratarangelo, who was transferred to Central Command; Colonel Rietsch took his place.

At Thalay Thai my staff and those commanders did a two-ship offload in a worst-case basis--6,000 meters off the beach--by ferrying everything. People knew each other, and they knew me.

The secret is employment. Predeployment or deployment, we're going to get there--but then some people lose track. The real question is what are you going to do when you get there? Are you going to be combat effective? Do you know how to do these things? I've always tried for balance. The deployment mode is important. We've got to meet Transportation Command's requirements. But what we get paid for by the American people, Congress, the Commander-in-Chief, and the JCS, is employment. That's always my thing.

I believe that a lack of human intelligence regarding Iraq and its capabilities, (remember that Humint [human intelligence] was drastically cut at the national level in the 1970s), put us at the mercy of the National systems. These photographic systems can't tell you enemy intentions, although they can do other things well. The intelligence information flow was terrible. We had to send guys back to Washington to get photos three days before we went into the minefields.

We got terrific cooperation from the Saudis. In any kind of operation like this, you're going to have to spend a lot of time with the host country. In this case, the host country is very sophisticated and you're the outsider, just walking in there. You have to do the right thing. It all worked out.

By the end of the ground war, over 90 per cent of the Fleet Marine Force was in the Persian Gulf. In less than six months, Marine logisticians created an infrastructure that supported over 90,000 Marines, a larger Marine force than that present in Vietnam at the height of that conflict. Brigadier General Brabham commanded the 1st Force Service Support Group, the senior Marine logistical headquarters in the Persian Gulf. In this interview he describes the efforts of the Marines in his command both in preparation for and during the war.

Training, Education Were the Keys

interview with Brigadier General James A. Brabham, USMC

U.S. Naval Institute Proceedings, November 1991

Proceedings: Let's go at it chronologically. Where were you when you got your warning order about deploying to the Gulf? And how did you go about setting up an FSSG-sized operation in Saudi Arabia?

Brabham: The initial warning came very quickly after the Iraqi assault into Kuwait, which began on 2 August. Lieutenant General [Walter E.] Boomer, then in process of taking command of I MEF [Marine Expeditionary Force] at Camp Pendleton, California, began holding meetings with his subordinate commanders. It soon became evident that our first move would be to establish a presence in the Central Command headquarters in Riyadh, Saudi Arabia, as CentCom's Marine Corps component--MarCent. Since I had served earlier on the CentCom staff, General Boomer dispatched me to Riyadh on 10 August--not as an FSSG commander but as his personal representative, in charge of MarCent (Forward). My first task was to become involved in the initial planning for introduction of forces into Saudi Arabia--which involved real estate, transportation, and other things to be sorted out at the CinC's level. I took along a few Marines--technical experts--directly to Riyadh, and checked in with the senior representative of the Central Command, Lieutenant General Chuck Horner, who also served as the commander of CentCom's Air Force forces, or CentAF. Many of the CinC's staff, including the J-4 [logistics officer], Major General Dane Starling, U.S. Army, had already deployed to Riyadh.

Besides setting up MarCent (Forward), I had to work with the CinC's staff to prepare for the early introduction of the 7th MEB [Marine Expeditionary Brigade], and to establish a direct link back to General Boomer at Camp Pendleton, California, to keep him posted in near-real time about the situation developing in the Gulf region.

Within days, Major General [John I.] Hopkins had brought the 7th MEB into the theater, and was deploying his forces in their initial operating area near [the port of] Al Jubayl. I stayed in close contact with him to ensure that his immediate needs were being met by the CentCom staff. The inevitable problems in coordinating with the host nation were best solved at the CinC level, so that was another key task for me in Riyadh.

About one month later--6 September, as I recall--we had enough combat service support personnel in country to stand up the headquarters of the 1st FSSG at Al Jubayl. It was a composite unit, consisting largely of BSSG-7 [Brigade Service Support Group-7, supporting the 7th MEB]; the smaller BSSG-1, from Hawaii; and some of my own 1st FSSG people from Camp Pendleton. At the time I moved my flag from Riyadh to Al Jubayl, our composite unit was roughly half the size of a full-fledged FSSG. (See map on page 23)

Proceedings: These brigade service support groups had a lot of experience in MPS [maritime prepositioning ships] deployments, didn't they?

Brabham: Absolutely. This first combat MPS deployment [where Marines are flown into a crisis area to "marry up" with heavy equipment and supplies carried by ships of MPS squadrons) had been well-rehearsed, and it went very, very well. There was some hurry-up pressure to get Marines out to their defensive positions, in light of the Iraqi threat--and we had to get used to working in the heat and sand and other complicating factors--but we got a great assist from the fact that we had exclusive use of the large, modern port of Al Jubayl. It is a 16-berth port with full facilities, and it even had an indigenous work force in place, ready to assist.

Proceedings: Who coordinated that stevedore effort?

Brabham: Initially, General Hopkins coordinated the offload of the 7th Marine Expeditionary Brigade, and the follow-on 1st MEB handled their own unloading. Once my force service support group was in place, however, we picked up responsibility for the total port operation, including native workers and U.S. Army units.

Proceedings: That's got to be a Marine Corps first!

Brabham: I guess it probably was. But it was a cooperative effort, under 1st FSSG guidance. We had a naval support element that came with the MPS squadrons and became the Navy's cargo-handling group. Those sailors worked alongside the Marine Landing Support Battalion. Eventually, we added an Army cargo-handling group, the 10th Transportation Battalion, which handled some Marine shipping as well as Army shipping. Everyone cooperated, and it didn't matter who unloaded what. We just worked against the priorities of the port, and things turned out rather well.

Proceedings: Who handled initial construction?

Brabham: All of the general-support engineering came through the combined efforts of two Marine engineer battalions and one SeaBee regiment. The primary engineering effort was to improve the existing airfields in the region. The Saudi airfields had tremendous runways, but they were lacking in aprons and parking areas and those sorts of ancillary facilities. So we had a major Navy-Marine Corps construction effort under way, to make the airfields fully capable of supporting tactical operations. We couldn't spend much time building living or working spaces for the first couple of months, so units in the field had to rely on tentage--but living under canvas worked out okay, even though it was hot.

Proceedings: Other than offloading and getting the air-fields in shape, what were your major concerns? Any shortages?

Brabham: None to speak of. We were able to validate the MPS concept by providing 30-plus days of material and supplies. We were fortunate, in that the Saudi Arabian infrastructure is pretty good, even though it is concentrated along the coast. The Saudis were able to assist us initially with an abundant supply of fuel, some water, and even some basic ration support--helping to solve our first major problems. After that, our priority was to get our Marine forces deployed to their defensive positions in the desert, then to establish immediate resupply processes to keep them in water, fuel, and--of course--ammunition.

Most of our efforts from the beginning concentrated on unloading, hauling, and laying down ammunition in basic stowage facilities in the desert. In fact, ammunition remained the logistical driving factor throughout the entire operation. A 30-day supply of ammunition for a Marine division adds up to about 265,000 tons. Try to imagine stacking, moving, and storing that amount of ammo, and you'll get some idea of the strain it placed on our transportation system.

Proceedings: As more and more Marines arrived in country, did you spread your support operations out from Al Jubayl?

Brabham: Our initial defensive perimeter was some 30 miles away from the port, out in the desert. Within weeks, as we developed our defense-in-depth, we had forces operating 80 miles out from the port, in areas with absolutely no supporting infrastructure. Here we were, still in the defensive--Desert Shield--part of the operation, and we were already required to provide support over terrain and distances that Marines don't normally think about. Our immediate response was to establish several forward-based combat service support detachments, capable of providing all classes of supply to the forwardmost units.

I decided early on that the highly centralized command-and-control aspects of the FSSG would not work well over such distances, and that the proper solution was to break the organization into two groups--one for general support, and the other for direct support of tactical units. I built a small, streamlined staff (with a colonel in charge) for each group. This setup left the FSSG headquarters and me free to deal with the host nation and the other services; while exerting overall supervision over the two groups. Aviation support, among other things, fell to the general support group, except for those aviation elements deployed far forward with the ground forces. The direct support group commander--Colonel Alex Powell--had entered the theater of operations in command of Brigade Service Support Group-7. He took his BSSG-7 staff and shifted his focus to direct support of the ground forces, collocating his headquarters with that of Major General [J. M.] Mike Myatt, commanding the 1st Marine Division. Even though Colonel Powell was one of my subordinate commanders, he became General Myatt's advocate for resources and mobility--one of the keys to our success in operating over such great distances.

Before the 2d Marine Division arrived in-country in its reinforcing role, I had a phone conversation with Brigadier General [C.C.] Chuck Krulak, commanding the 2d FSSG. We agreed to continue the general support/direct support arrangement. My 1st FSSG headquarters would remain the overall logistics coordination agency, in a general support role. The 2d FSSG would run the forward logistics battle. At the height of the Desert Storm ground action, our supply lines were stretched more than 250 miles from Al Jubayl. I don't know how we could have succeeded without General Krulak and his FSSG in the direct support role, supplying the ammo, fuel, and water--the biggest logistical drivers of combat operations.

Proceedings: By the time the ground attack got under way, we had the equivalent of another Marine Expeditionary Force afloat off Kuwait, poised for a major amphibious assault. Did you have plans to support such an amphibious operation, if required?

Brabham: We sure did. From the day they first appeared in the Gulf, our amphibious forces received continuous support from our FSSG in Saudi Arabia. For example, we brought tanks from the amphibious forces to Al Jubayl, performed required maintenance on them, and sent them back to the ships. We provided secondary depots for Major General Harry Jenkins, the Commanding General, 4th MEB, in Oman or wherever he needed them.

Had there been an amphibious assault, the real logistical drivers would have been--once again--ammo, fuel, and water. We had a coordinated plan to support the amphibious forces along the lines already established: the 1st FSSG would pick up general support responsibilities and General Jenkins's own combat service support forces would become his direct support element in country. I had a lot of meetings with Colonel Jim Doyle, the embarked brigade service support group commander, and we were wired together pretty tightly.

Proceedings: Getting into Desert Storm itself--were you amazed by the swiftness of the victory? You must have had worst-case plans for a longer period, with more casualties.

Brabham: Yes, we were pleasantly surprised. I was always concerned about its turning into a real slugfest, and it had great potential to do just that. We could never discount the massive amounts of arms and material the Iraqis had in Kuwait. What we didn't know for certain was the strength of their will to fight. That's almost impossible to tell until the fight begins.

General Krulak and I decided that we needed a substantial surge capability to carry our committed ground forces through any period of heavy fighting--again, the drivers were ammo, fuel, and water. We planned to position ten days' worth of all classes of supply right up front with General Krulak, and in one intensive two-week period we managed to move all that gear up to a newly constructed combat service support area, way out in the middle of the desert, where it could best support the barrier and minefield breaching plans of the two Marine divisions. General Krulak called it "Al Khanjar"--the dagger.

We set a goal of staging ten days' worth of supplies and equipment at Al Khanjar, and General Boomer agreed. Then we began a most intense buildup period, which used every imaginable means of transport. In addition to our normal load-haulers, we used tactical vehicles--the logistics vehicle system ["Dragon Wagon"] vehicles, in particular. We even leased commercial tractor-trailers. At one point, I had more than 1,000 40-ton tractor-trailers leased from throughout the Gulf, as well as Saudi Arabia. Reserve motor transport Marines drove them, for the most part.

We got tremendous support from the Air Force C-130 transport pilots, who flew virtually every mission we requested. Chuck Krulak built an expeditionary airstrip for them at the forward combat service support area, and we augmented the C-130 hops with extensive use of Marine CH-53 heavy-lift helicopters. We even used Army boats--in particular, their large LCU-2000 landing craft and logistic support vessels--to ferry material up the Gulf coast to Ras al Mish'ab. From there, it was a relatively short leg by helicopter and truck to the forward support area. At the same time, we were establishing an extensive medical network--a casualty-handling chain between the forward base, the fleet hospitals, and the evacuation airfields. All in all, it took an incredible two weeks of effort to prepare that forward staging base for the two-division attack through the minefields. We really loaded it up--to ensure that we would have staying power if a slugfest started right away. Chuck Krulak can give you some more details. He built the thing and we just tried to keep him supplied--no small task for either of us.

Proceedings: With many combat units widely dispersed across the desert, and the potential for mass casualties ever present, you obviously couldn't replicate the Vietnam medical evacuation system of relying extensively on dustoff helicopters to get the wounded to medical battalion hospitals far in the rear . . .

Brabham: We had two medical battalions and their hospitals staged far forward with General Krulak, and at least one company from each battalion was mobile-loaded, so its field hospital could move with the ground units and set up rapidly even farther forward, if that were required. A lot of careful planning and hard work went into the mobile-loading of those hospitals. The blood--replacement system, for example, was in good shape. The blood was on hand and it was kept fresh. It is correct that we would have had to rely on ground transport for casualties, and we had leased at least 60 buses from Saudi sources. We took out the seats and built in racks to hold litters. The buses were staged and ready to go.

Navy medicine really came through in this operation. They got their gear there, and their doctors and corpsmen, and they were ready for anything. They have things to improve, as we all do, but they were a success story all the way. My hat is off to them.

Proceedings: Desert Storm had to be one of the few times since World War I that Marines faced the threat of mass casualties from chemical or biological weapons. What additional burden did this place on you or the medical chain?

Brabham: My biggest concern was water. Sourcing was not a problem--you can always find sources of water--but water hauling and distribution were always a concern, because most of our water was coming all the way from the Gulf coast. We had some possible sources in Kuwait, once the attack began, but we couldn't be sure of them until we could actually walk the ground. Now, if you add the demands of decontamination of Marines and equipment to an already difficult problem, you must start thinking of reallocating transportation assets to bring forward enough water. At that point, water--not ammunition--would have become the primary driver of the logistical effort.

Proceedings: Desert Storm highlighted the issue of women in combat once again. As I recall, women are well-represented in the combat service support units--from supply clerks to heavy-equipment operators--and they were certainly exposed to many of the stresses and dangers of combat in the events you have outlined. Were there any problems in the deployability or performance of the female Marines?

Brabham: Absolutely no problems--I say that unequivocally. They did their jobs, performed them well, and posed no special considerations in the FSSG. We simply did not worry about them. They did fine.

Proceedings: With the speedy resolution of the ground war, you had to shift gears rather quickly, to begin bringing all that material back home and putting it back into shape. What special challenges did you face during the equipment-retrograde phase of the operation?

Brabham: The logistical driving factor during retrograde was to reconstitute our maritime prepositioning ships program with prewar loads in those floating storehouses, restoring that vital rapid-response capability to the nation as soon as possible. At the same time, we were trying to get our forces back home and get their equipment cleaned up, to restore their readiness to deploy on short notice. It was truly a Marine Corps-wide effort, assisted by Headquarters Marine Corps, Quantico, Fleet Marine Force Atlantic and Pacific headquarters, and the logistics bases at Albany, Georgia, and Barstow, California.

Such a massive relocation of forces and equipment takes a while, even under the best conditions. We had to support the pullout of the 1st Marine Division and at the same time keep a 250-mile supply line open to the 2d Marine Division, which would come out months later. We probably were stretched as much during that critical early phase of redeployment as we were at any other time, trying to do everything at once.

But the equipment is now back, and it's ready to go, although residual cleanup efforts continue. Training has resumed at our bases, and we have no significant holes in our readiness or our capability to deploy again, when called. When you consider the hard, round-the-clock use that much of the equipment got for eight months, including combat, that's pretty phenomenal. And there are a lot of wonderful people out there in the logistics system who made that happen.

Proceedings: Is there any question I haven't asked that you would like to answer?

Brabham: The question I'm asked most frequently is, "What was the key to our logistic success in Desert Storm?" That's a complex question, but I have a rather simple answer: It's the educational level of our enlisted Marines and their officers in our Corps today. And I say that because the key to being able to do what we did in the Gulf is the flexibility of the Marines involved. The way to meet those huge logistical demands is to flow your resources to the focus of effort--the highest priority need at the time. This requires flexibility, in the form of intelligent, well-trained Marines who can be retrained on the spot and shift from one skill to another to meet the next week's demand. Today's Marines can adjust that way, and they can make decisions on their own to accomplish their missions, even though they may be 250 miles away from their bosses. In my view, that kind of flexibility goes straight back to education.

Proceedings: As the new head of education and training at Quantico, you now have a chance to put that theory into practice.

Brabham: I sure do.

In these articles Henry Allen, himself a former Marine, writing for The Washington Post, captures the outlook and idiosyncracies of the frontline Marine. The first article describes the most self-reliant of all modern warriors, the sniper. In the second article, Allen shows how Marines, having spent months in the desert away from their families, and with the prospect of war looming, celebrated Christmas.

Squinting at Death: The Desert Snipers.

by Henry Allen

The Washington Post, 28 December 1990.

Of course, when you are a sniper there is shooting.

In the Marine Corps this shooting is done with a custom-made 14-pound .308-caliber rifle with a glass-bedded bull barrel, a Remington action and a 10-power Unertl telescopic sight. It has a bolt that doesn't so much load the bullet as insinuate it into the chamber to be fired, a kind of smug perfection. It has the heft of one single piece of metal, like an ingot.

You ask if you can lift it to your shoulder and look through the sights.

A circle of Saudi Arabian desert reels in the lens, with a bit of scrub hovering there in magnified silence. There is something about it that is intimate and unreal at the same time, as if you were aiming at a thought inside your own mind.

"The first impression people get when you tell them you're a sniper is you're the guy in the tree," says Sgt. Dave Cornett as he puts the rifle, called an M4OA1, back in a sealed and cushioned carrying case. "But you'd never shoot from a tree."

On the other hand, there are all those stories your Uncle Louie told about Japanese snipers in palm trees, and there is the ongoing concept of man as the murdering ape, too, so the tree thing lingers. Trees do not figure in this theater. Snipers will be lucky to find a dune, a bit of scrub, maybe one of the little trash piles left by the Bedouins.

Snipers are among the last warriors in the Western world who choose their enemies and not only kill them but see them die.

This is not fashionable, nowadays, as Vietnam veterans learned when they were asked, with triumphal snickers: "Did you kill anybody?"

Sgt. Alvin York was a great American legend of World War I for his sniping. You shoot Germans like turkeys, he said, you start at the back of the column and work up. But ever since bureaucrats and intellectuals started doing most of the talking about war after World War II, this kind of killing has come

to seem vulgar, even psychopathic, a coarse necessity best ignored if you want to enjoy the benefits of it, like the making, as they say, of sausage.

It is more modern to press a button and annihilate scores, hundreds, thousands, whatever, with systems, capabilities, all of the euphemisms for the mass-production sniping that is war in the age of progress and technology.

As Jean Cocteau said of World War II, the plural has triumphed over the singular, a tendency Dylan Thomas deplored when he insisted in a poem about an air raid that "after the first death there is no other."

Sniping, the shooting part at least, is about first deaths. Snipers prefer to talk about the other parts. They have learned to do it in precisely the language that bureaucratic intellectuals approve of.

"People don't understand sniping," says Staff Sgt. Mike Barrett. "We're the most misunderstood people in the world. Our primary mission is intelligence, indexing targets, establishing disposition and composition of the enemy, surveillance and target acquisition, determining what's viable and what's not." Indexing. Disposition. Viable.

"We are the eyes and ears of the commanding officer. We carry cameras. We have to be able to draw, do panoramic perspective drawing of what we see. You have to be able to make it by yourselves out there, you and your partner. You carry one meal a day, I never take a sleeping bag, I don't believe in creature comforts. The more creature comforts you have, the less edge you have, and I'm not about losing the edge. If it gets cold, my partner and I, we hot-rack it, you roll up together inside a poncho liner, like you would with your wife."

Of course, there is the shooting too. Sometimes you might use the range of these rifles, well over 1,000 meters, to take out a radar installation. Sometimes, you might kill someone.

There is no fancy language for this part, it seems.

The sniper puts the rifle on his shoulder and his partner studies the target through a spotting scope, calculates the range, estimates how much to allow for crosswind by studying heat waves twitching out there.

The sniper takes a breath, lets half of it out and fires. It can take a full second for the bullet to get there.

"Your spotter is looking through the scope," Barrett says. "He sees the guy's head explode. Vapor."

Saudi Christmas: the Marines Banter and Brave the Cold

by Henry Allen

The Washington Post, 26 December 1990.

Shining in the east, far beyond First Battalion, Fifth Marines, were a couple of flares from gas burning over oil wells, the closest thing the Marines would see to Christmas lights.

The Marines had gotten here in August, back when the temperature was 130 degrees and everyone was saying they'd be home for Christmas.

Now it was 40 degrees. It was midnight on Christmas Eve. This is an old story, and against the gas flares you could see the outlines of Lance Cpl. Steven Shalno and a buddy sitting on five-gallon water cans having an old argument to go along with it, one of the older arguments in the history of the world.

"I am from Boston, Massachusetts," Shalno said very slowly, "and I am behind George Bush, my commander in chief, 110 percent."

"I am half Indian," said his buddy, not quite as slowly. "And I say it is cold . . . out here. This whole thing out here, you've got to be kidding."

"I am from Boston, Massachusetts," Shalno kept saying, "and I am a devil dog."

"Devil dog" is what the Germans called Marines in World War I. The Marines know their history. It seems like half the corps also has read all of the novels about Casca, the eternal mercenary, who pulled the duty of nailing Christ to the Cross and was doomed, the Marines will tell you, to spend eternity as a soldier, a career that can lead to billets like sitting on five-gallon water cans in the cold desert wind on Christmas Eve in Saudi Arabia.

After a while, they went back into their hooch, a bunch of canvas cots under camouflage netting. The wind blew through the netting. Men snored and talked in their sleep--they dream a lot out here in the desert, they say. You could see the stars through the netting. Jittery smears.

For a long time Shalno stood outside the hooch and stared at the cot of a stranger to the platoon, stared and stared until the stranger decided to move and show he was awake.

"You warm enough?" Shalno asked. "You look cold, man. I'll give you my poncho liner."

"Merry Christmas," the stranger said. "Merry Christmas," Shalno said. Then he curled up on his own cot, no poncho liner, didn't even get into his sleeping bag, and fell instantly asleep.

In the morning, the flares had turned to black smoke over the horizon and it was Christmas Day.

The Marines had a Christmas tree made out of netting, toilet paper, plastic plates, a cardboard star and some tinsel streamers that had come in all the Christmas mail, tons of it, the whole country sending presents to these guys.

A truck full of carolers labored through the sand from company to company, and Marines sang along with them in a tight, quiet way.

"Anybody tells you morale is high, they're a damn liar," said Pfc. Joseph Queen, who grew up in Northwest Washington. Then he went back to insulting a fellow radio man, Lance Cpl. Erik Holt, a Nez Perce Indian who was disputing Queen's taste in athletic teams.

"Celtics," said Queen. "Chief, you must be drinking that Indian water again."

Back home in Washington, Queen would have been helping his grandmother put toys together, he said. "I'm one of her elves."

Back in Idaho, Holt said, "we'd go to the sweathouse in the morning, pray to the Great Spirit, tell Indian stories about old times."

Wishing each other quiet Merry Christmases, Marines ambled toward the drop points for morning chow, cereal and milk. Four months of living in soft sand has given them a slow tread that makes them look tired and preoccupied.

"Reindeer!" somebody said. Eight Marines had lined up in front of a personnel carrier, and they pretended to pull it with a rope while guys on top in Santa hats tossed candy and presents.

"Actually, today is pretty motivating," said Staff Sgt. Brendon Van Beuge. "You get the whole day off."

A Marine standing behind him said, "The whole day."

It wasn't sarcasm, it was the way Marines have of taking irony just far enough that it becomes sincerity, and then taking that so far that it's irony again.

Over at Dragons platoon--Dragons are antitank missiles carried by two-man teams--Sgt. James Grassmick said, "Christmas," and lifted a slow thumb of approval.

In the back of their hooch, Gunnery Sgt. Darrell Norford heated coffee on a little gasoline stove.

"I've been married for seven years; I've been gone at Christmas for five of them," he said. "Before we came out here, we'd only been back from training in Panama for 24 hours. I patted my kids on the head, saw my wife ... and then we headed for the desert."

He had an old sergeant's way of watching you listen to him. "This thing isn't for democracy or Kuwait or Texaco, it's for 50 percent of the world's oil reserves, and that's what America runs on."

A lot of Marines in this battalion said something like this, part realism, part cynicism, part professionalism, part Casca and part because they've been alone

together for so long in the desert that any time they talk to a stranger they have the tone of people clearing up misconceptions.

"Everybody's so in sync," said Lance Cpl. Benjamin Bradshaw.

"I could tell you every story Ben tells about his dog, Gretchen," said Lance Cpl. Brian Archer.

"German shorthair," Bradshaw said. "No morals, but a smart dog." It was almost as if they didn't need Christmas the way the rest of America does to feel close, to feel like family, a family standing around dipping snuff together and growing their first mustaches.

A lot of them said morale had actually improved when they found out they wouldn't be home for Christmas after all.

There is a kind of logic to this, a logic that the Marine Corps runs on.

Capt. Jeremiah Walsh explained: "Everybody wanted to have a date they'd be going home, but once we found out there would be no date, a great burden was lifted from us."

Walsh has a master's degree in international relations, and he said he had no animosity toward Iraqis.

"I think they're nice people. I was in Beirut when the bomb went off and we lost all those Marines, but I don't hate those people either."

Very professional, but it was reasoning that was out there in irony/sincerity land too.

Walsh called a company formation to explain it to his troops. Guidon pennants rolled in the wind, and Marines did slow rounded facing movements in the sand.

"I want to wish all of you a Merry Christmas," Walsh said. "The surroundings are not what we want, but the camaraderie is here, the morale is here to do the job. Hopefully, a diplomatic solution will take precedence, but if not . . ."

After all the wristwatches and crossword puzzle books, yo-yos, footballs and Frisbees for the troops--one guy even got a box of caviar and quail eggs -- Lt.Col. Chris Cortez, the battalion commander, announced his own gift. From 6 in the morning till 5 in the afternoon, "in the spirit of Christmas," his troops would be allowed to listen to their tape recorders and radios without ear-phones--sound discipline would be relaxed for one day, but one day only.

There would be volleyball, there would be a lot of dandy games. But after 5 o'clock, 1700 hours, there would be silence again in the desert, and no lights again, not even reading under blankets with flashlights, nothing.

Silence and darkness, along with the gas flares and the stars, and here and there the old muttered arguments, to fight, not to fight -- not that they'd make the slightest difference.

This message was sent to the men and women of I Marine Expeditionary Force by their commanding general, Lieutenant General Walter E. Boomer, on the eve of the ground attack into Kuwait.

Message to members of I Marine Expeditionary Force, 23 Feb 91

Lieutenant General Walter E. Boomer, USMC

After months of preparation, we are on the eve of the liberation of Kuwait, a small, peaceful country that was brutally attacked and subsequently pillaged by Iraq. Now we will attack into Kuwait, not to conquer, but to drive out the invaders and restore the country to its citizens. In so doing, you not only return a nation to its people, but you will destroy the war machine of a ruthless dictator, who fully intended to control this part of the world, thereby endangering many other nations, including our own.

We will succeed in our mission because we are well-trained and well-equipped; because we are U.S. Marines, Sailors, Soldiers, and Airmen; and because our cause is just. Your children and grandchildren will read about your victory in the years to come and appreciate your sacrifice and courage. America will watch her sons and daughters and draw strength from your success.

May the spirit of your Marine forefathers ride with you and may God give you the strength to accomplish your mission.

Semper Fi.

Boomer.

This is a transcript of the famous "Mother of all briefings," in which General H. Norman Schwarzkopf, Commander in Chief, U.S. Central Command, described to the world on live television how United States and allied forces routed the Iraqi army.

CENTCOM News Briefing

General H. Norman Schwarzkopf, U.S. Army

Riyadh, Saudi Arabia, Wednesday, 27 February 1991

Good evening, ladies and gentlemen. Thank you for being here.

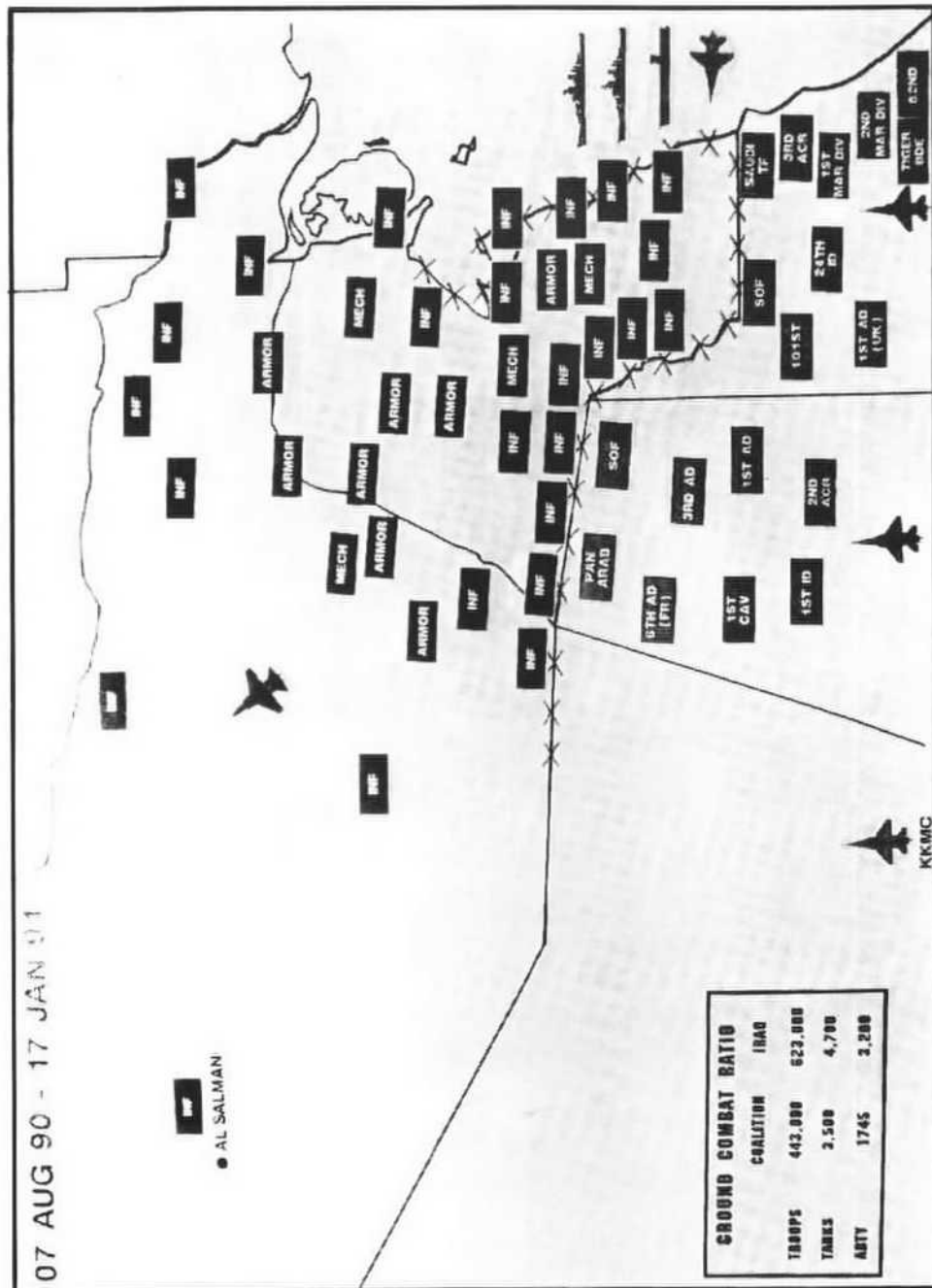
I promised some of you a few days ago that as soon as the opportunity presented itself I would give you a complete rundown on what we were doing, and more importantly, why we were doing it--the strategy behind what we were doing. I've been asked by Secretary [Richard B.] Cheney to do that this evening, so if you will bear with me, we're going to go through a briefing. I apologize to the folks over here who won't be able to see the charts, but we're going to go through a complete briefing of the operation. (Map 1)

This goes back to 7 August through 17 January. As you recall, we started our deployment on the 7th of August. Basically what we started out against was a couple of hundred thousand Iraqis that were in the Kuwait theater of operations. I don't have to remind you all that we brought over, initially, defensive forces in the form of the 101st, the 82d, the 24th Mechanized Infantry Division, the 3d Armored Cavalry, and in essence, we had them arrayed to the south, behind the Saudi task force. Also, there were Arab forces over here in this area, arrayed in defensive positions. That, in essence, is the way we started.

In the middle of November, the decision was made to increase the force because, by that time, huge numbers of Iraqi forces had flowed into the area, and generally in the disposition as they're shown right here. Therefore, we increased the forces and built up more forces.

I would tell you that at this time we made a very deliberate decision to align all of those forces within the boundary looking north towards Kuwait--this being King Khalid Military City over here. So we aligned those forces so it very much looked like they were all aligned directly on the Iraqi position.

We also, at the time, had a very active naval presence out in the gulf, and we made sure that everybody understood about that naval presence. One of the reasons why we did that is it became very apparent to us early on that the Iraqis were quite concerned about an amphibious operation across the shores to liberate Kuwait--this being Kuwait City. They put a very, very heavy barrier of infantry along here, and they proceeded to build an extensive barrier that went all the way across the border, down and around and up the side of Kuwait.



Map 1

Basically, the problem we were faced with was this: when you looked at the troop numbers, they really outnumbered us about 3-to-2, and when you consider the number of combat service support people we have—that's logisticians and that sort of thing in our Armed Forces, as far as fighting troops, we were really outnumbered 2-to-1. In addition to that, they had 4,700 tanks versus our 3,500 when the buildup was complete, and they had a great deal more artillery than we do.

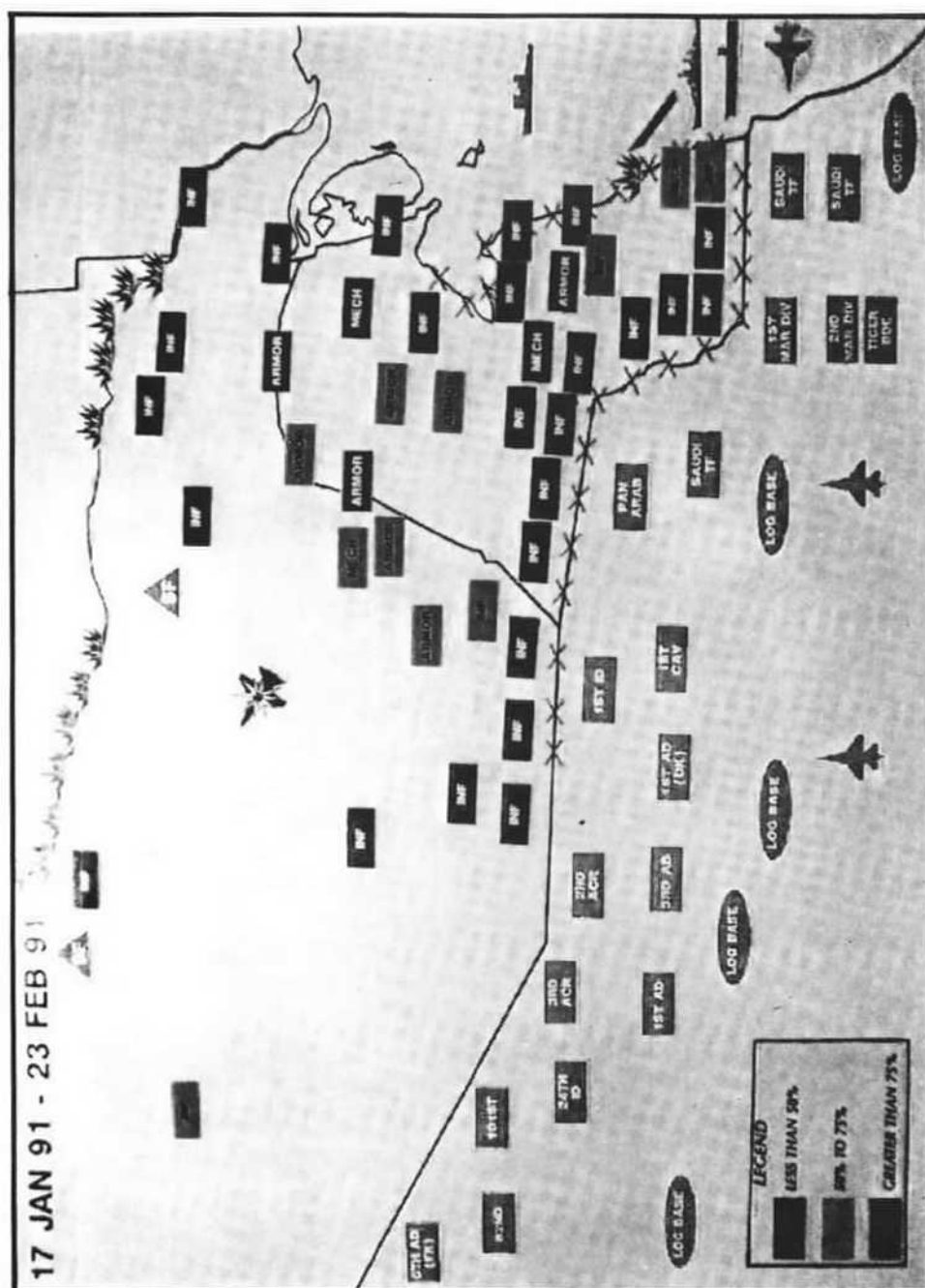
I think any student of military strategy would tell you that in order to attack a position, you should have a ratio of approximately 3-to-1 in favor of the attacker. In order to attack a position that is heavily dug in and barricaded such as the one we had here, you should have a ratio of 5-to-1 in the way of troops in favor of the attacker. So you can see basically what our problem was at that time. We were outnumbered as a minimum, 3-to-2, as far as troops were concerned; we were outnumbered as far as tanks were concerned, and we had to come up with some way to make up the difference. (Map 2)

I apologize for the busy nature of this chart, but I think it's very important for you to understand exactly what our strategy was. What you see here is a color coding where green is a go sign or a good sign as far as our forces are concerned; yellow would be a caution sign; and red would be a stop sign. Green represents units that have been attrited below 50 percent strength; the yellow are units that are between 50 and 75 percent strength; and of course the red are units that are over 75 percent strength.

What we did, of course, was start an extensive air campaign, and I briefed you in quite some detail on that in the past. One of the purposes, I told you at that time, of that extensive air campaign was to isolate the Kuwaiti theater of operation: by taking out all of the bridges and supply lines that ran between the north and the southern part of Iraq. That was to prevent reinforcement and supply coming into the southern part of Iraq and the Kuwaiti theater of operations. We also conducted a very heavy bombing campaign, and many people questioned why the extensive bombing campaign. This is the reason why. It was necessary to reduce these forces down to a strength that made them weaker, particularly along the front line barrier that we had to go through.

We continued our heavy operations out in the sea because we wanted the Iraqis to continue to believe that we were going to conduct a massive amphibious operation in this area. I think many of you recall the number of amphibious rehearsals we had, to include Imminent Thunder, that was written about quite extensively for many reasons. But we continued to have those operations because we wanted him [Saddam Hussein] to concentrate his forces—which he did.

I think this is probably one of the most important parts of the entire briefing I can talk about. As you know, very early on we took out the Iraqi air force. We knew that he [Saddam Hussein] had very, very limited reconnaissance means. Therefore, when we took out his air force, for all intents and purposes, we took out his ability to see what we were doing down here in Saudi Arabia. Once we had taken out his eyes, we did what could best be described as the "Hail Mary play" in football. I think you recall when the quarterback is



Map 2

desperate for a touchdown at the very end, what he does is he sets up behind the center, and all of a sudden, every single one of his receivers goes way out to one flank, and they all run down the field as fast as they possibly can and into the end zone, and he lobs the ball. In essence, that's what we did.

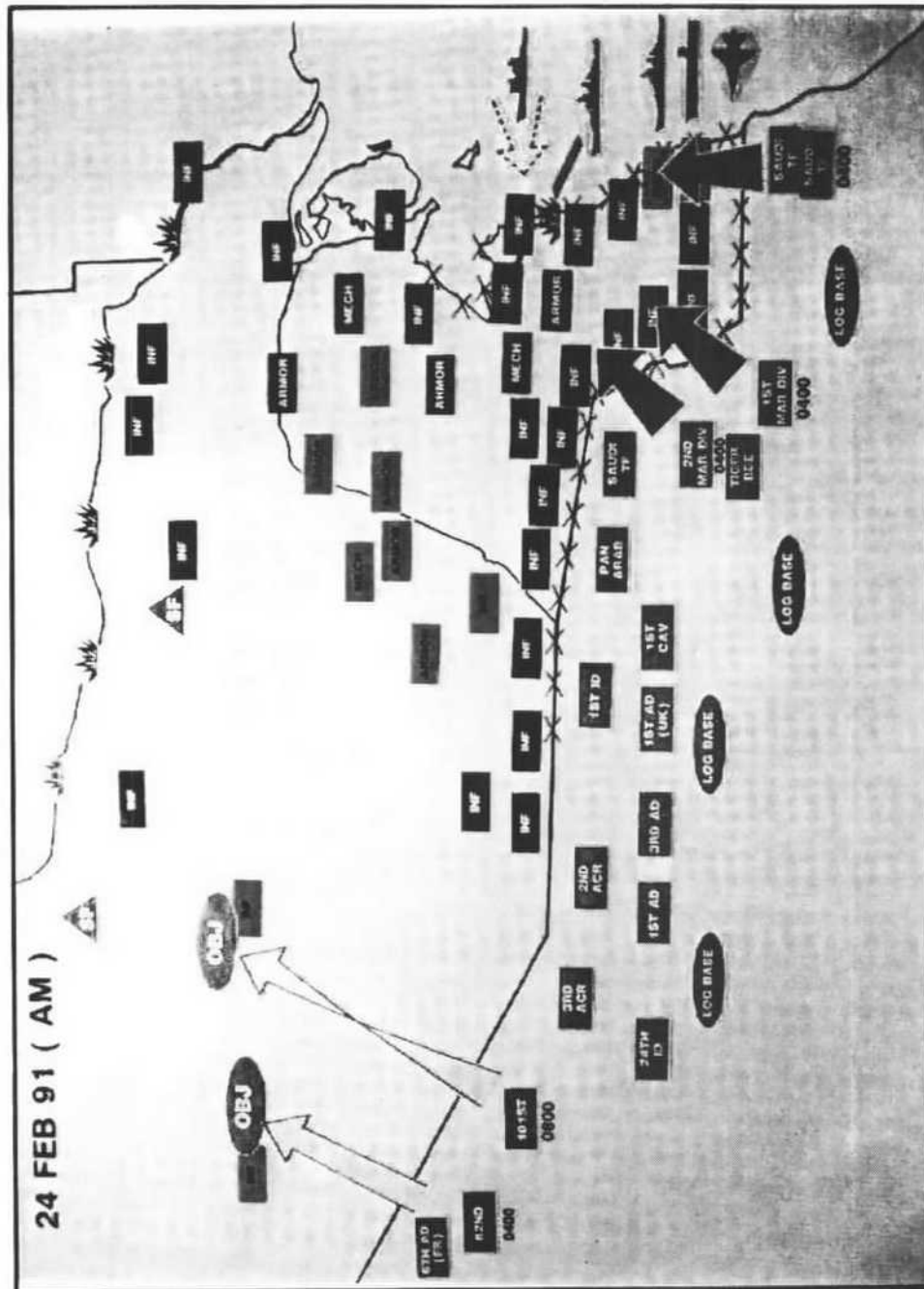
When we knew that he couldn't see us any more, we did a massive movement of troops all the way out to the west, to the extreme west, because at that time we knew that he was still fixed in this area with the vast majority of his forces, and once the air campaign started, he would be incapable of moving out to counter this move, even if he knew we made it. There were some additional troops out in this area, but they did not have the capability nor the time to put in the barrier that had been described by Saddam Hussein as an absolutely impenetrable tank barrier that no one would ever get through. I believe those were his words.

So this was absolutely an extraordinary move. I must tell you, I can't recall any time in the annals of military history when this number of forces have moved over this distance to put themselves in a position to be able to attack. But what's more important, and I think it's very, very important that I make this point, and that's these logistics bases. Not only did we move the troops out there, but we literally moved thousands and thousands of tons of fuel, of ammunition, of spare parts, of water, and of food out here in this area, because we wanted to have enough supplies on hand so if we launched this, if we got into a slugfest battle, which we very easily could have gotten into, we'd have enough supplies to last for 60 days. It was an absolutely gigantic accomplishment, and I can't give credit enough to the logisticians and the transporters who were able to pull this off, for the superb support we had from the Saudi government, the literally thousands and thousands of drivers of every national origin who helped us in this move out here. And of course, great credit goes to the commanders of these units who were also able to maneuver their forces out here and put them in this position.

But as a result, by the 23d of February, what you found is this situation. The front lines had been attritted down to a point where all of these units were at 50 percent or below. The second level, basically, that we had to face, and these were the real tough fighters we were worried about right here, were attritted to someplace between 50 and 75 percent. Although we still had the Republican Guard located here and here, and part of the Republican Guard in this area--they were very strong, and the Republican Guard up in this area, strong; and we continued to hit the bridges all across this area to make absolutely sure that no more reinforcements came into the battle. This was the situation on the 23d of February. (Map 3)

I shouldn't forget these fellows. That SF stands for Special Forces. We put Special Forces deep into the enemy territory. They went out on strategic reconnaissance for us, and they let us know what was going on out there. They were the eyes that were out there, and it's very important that I not forget those folks.

This was the morning of the 24th. Our plan initially had been to start over here in this area, and do exactly what the Iraqis thought we were going to do, and that's take them on head-on into their most heavily defended area. Also,



Map 3

at the same time, we launched amphibious feints and naval gunfire in this area, so that they continued to think we were going to be attacking along this coast, and therefore, fixed their forces in this position. Our hope was that by fixing the forces in this position and with this attack through here in this position, we would basically keep the forces here, and they wouldn't know what was going on out in this area. I believe we succeeded in that very well.

At 4 o'clock in the morning, the Marines, the 1st Marine Division and the 2d Marine Division, launched attacks through the barrier system. They were accompanied by the US Army Tiger Brigade of the 2d Armored Division. At the same time, over here, two Saudi task forces also launched a penetration through this barrier. But while they were doing that, at 4 o'clock in the morning over here, the 6th French Armored Division, accompanied by a brigade of the 82d Airborne, also launched an overland attack to their objective up in this area. As Salman airfield, and we were held up a little bit by the weather, but by 8 o'clock in the morning, the 101st Airborne air assault launched an air assault deep into enemy territory to establish a forward operating base in this location right here. Let me talk about each one of those moves.

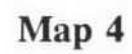
First of all, the Saudis over here on the east coast did a terrific job. They went up against the very, very tough barrier systems; they breached the barrier very, very effectively; they moved out aggressively; and continued their attacks up the coast.

I can't say enough about the two Marine divisions. If I used words like brilliant, it would really be an underdescription of the absolutely superb job that they did in breaching the so-called impenetrable barrier. It was a classic, absolutely classic, military breaching of a very, very tough minefield, barbed wire, fire trenches-type barrier. They went through the first barrier like it was water. They went across into the second barrier line, even though they were under artillery fire at the time--they continued to open up that breach. Then they brought both divisions streaming through that breach. Absolutely superb operation, a textbook, and I think it will be studied for many, many years to come as the way to do it.

I would also like to say that the French did an absolutely superb job of moving out rapidly to take their objective out here, and they were very, very successful, as was the 101st. Again, we still had the Special Forces located in this area.

What we found was, as soon as we breached these obstacles here and started bringing pressure, we started getting a large number of surrenders. I think I talked to some of you about that this evening when I briefed you on the evening of the 24th. We finally got a large number of surrenders. We also found that these forces right here, were getting a large number of surrenders and were meeting with a great deal of success.

We were worried about the weather. The weather was going to get pretty bad the next day, and we were worried about launching this air assault. We also started to have a huge number of atrocities of really the most unspeakable type committed in downtown Kuwait City, to include reports that the desalinization plant had been destroyed. When we heard that, we were quite concerned



Map 4

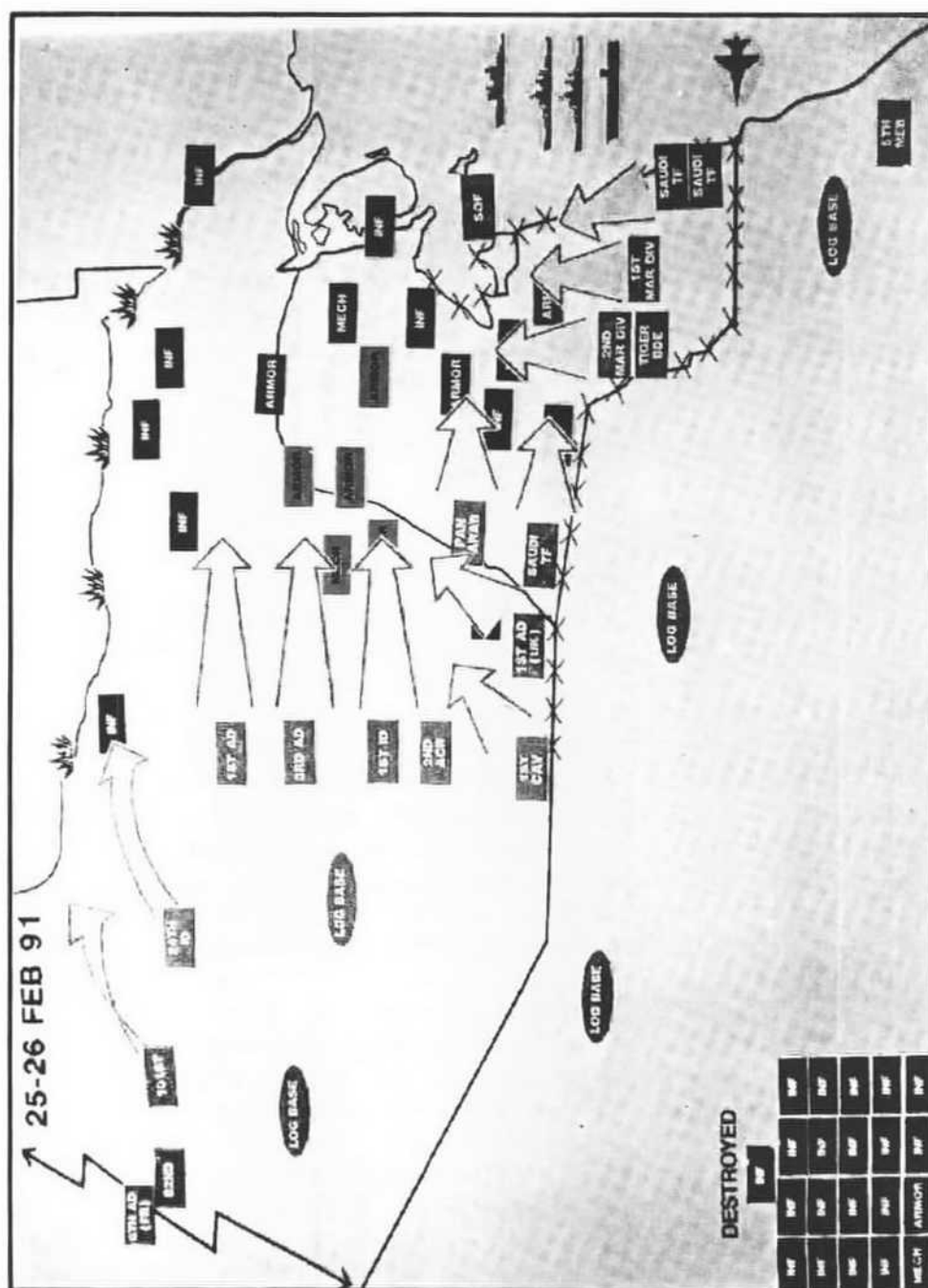
about what might be going on. Based upon that, and the situation as it was developing, we made the decision that rather than wait until the following morning to launch the remainder of these forces, that we would go ahead and launch these forces that afternoon. (Map 4)

This was the situation you saw the afternoon of the 24th. The Marines continued to make great progress going through the breach in this area, and were moving rapidly north. The Saudi task force on the east coast was also moving rapidly to the north and making very, very good progress. We launched another Egyptian/Arab force in this location, and another Saudi force in this location-again, to penetrate the barrier. But once again, to make the enemy continue to think that we were doing exactly what he wanted us to do, and that's make a headlong assault into a very, very tough barrier system--a very, very tough mission for these folks here. But at the same time, what we did is continued to attack with the French; we launched an attack on the part of the entire VII Corps where the 1st Infantry Division went through, breached an obstacle and minefield barrier here, established quite a large breach through which we passed the 1st British Armored Division. At the same time, we launched the 1st Armored Division and the 3d Armored Division and because of our deception plan and the way it worked, we didn't even have to worry about a barrier, we just went right around the enemy and were behind him in no time at all, and the 2d Armored Cavalry [Regiment]. The 24th Mech Division also launched out here in the far west. I ought to talk about the 101st, because this is an important point.

Once the 101st had their forward operating base established here, they then went ahead and launched into the Tigris and Euphrates valleys. There are a lot of people who are still saying that the objective of the United States of America was to capture Iraq and cause the downfall of the entire country of Iraq. Ladies and gentlemen, when we were here, we were 150 miles away from Baghdad, and there was nobody between us and Baghdad. If it had been our intention to take Iraq, if it had been our intention to destroy the country, if it had been our intention to overrun the country, we could have done it unopposed, for all intents and purposes, from this position at that time. That was not our intention, we have never said it was our intention. Our intention was truly to eject the Iraqis out of Kuwait and destroy the military power that had come in here. (Map 5)

So this was the situation at the end of 24 February in the afternoon.

The next two days went exactly like we thought they would go. The Saudis continued to make great progress up on the eastern flank, keeping the pressure off the Marines on the flank here. The Special Forces went out and started operating small boat operations out in this area to help clear mines, but also to threaten the flanks here, and to continue to make them think that we were, in fact, going to conduct amphibious operations. The Saudi and Arab forces that came in and took these two initial objectives turned to come in on the flank heading towards Kuwait City, located right in this area here. The British UK passed through and continued to attack up this flank. Of course, the VII Corps came in and attacked in this direction shown here. The 24th Infantry Division



Map 5

made an unbelievable move all the way across into the Tigris and Euphrates valley, and proceeded in blocking this avenue of egress out, which was the only avenue of egress left because we continued to make sure that the bridges stayed down. So there was no way out once the 24th was in this area, and the 101st continued to operate in here. The French, having succeeded in achieving all their objectives, then set up a flanking position, a flank guard position here, to make sure there were no forces that could come in and get us from the flank.

By this time we had destroyed, or rendered completely ineffective, over 21 Iraqi divisions. (Map 6)

Of course, that brings us to today. Where we are today, is we now have a solid wall across the north of the 18th Airborne Corps consisting of the units shown right here, attacking straight to the east. We have a solid wall here, again of the VII Corps also attacking straight to the east. The forces that they are fighting right now are the forces of the Republican Guard.

Again, today we had a very significant day. The Arab forces coming from both the west and the east closed in and moved into Kuwait City where they are now in the process of securing Kuwait City entirely and ensuring that it's absolutely secure. The 1st Marine Division continues to hold Kuwait International Airport. The 2d Marine Division continues to be in a position where it blocks any egress out of the city of Kuwait, so no one can leave. To date, we have destroyed over 29--destroyed or rendered inoperable--I don't like to say destroyed because that gives you visions of absolutely killing everyone, and that's not what we're doing. But we have rendered completely ineffective over 29 Iraqi divisions. The gates are closed. There is no way out of here; there is no way out of here; and the enemy is fighting us in this location right here.

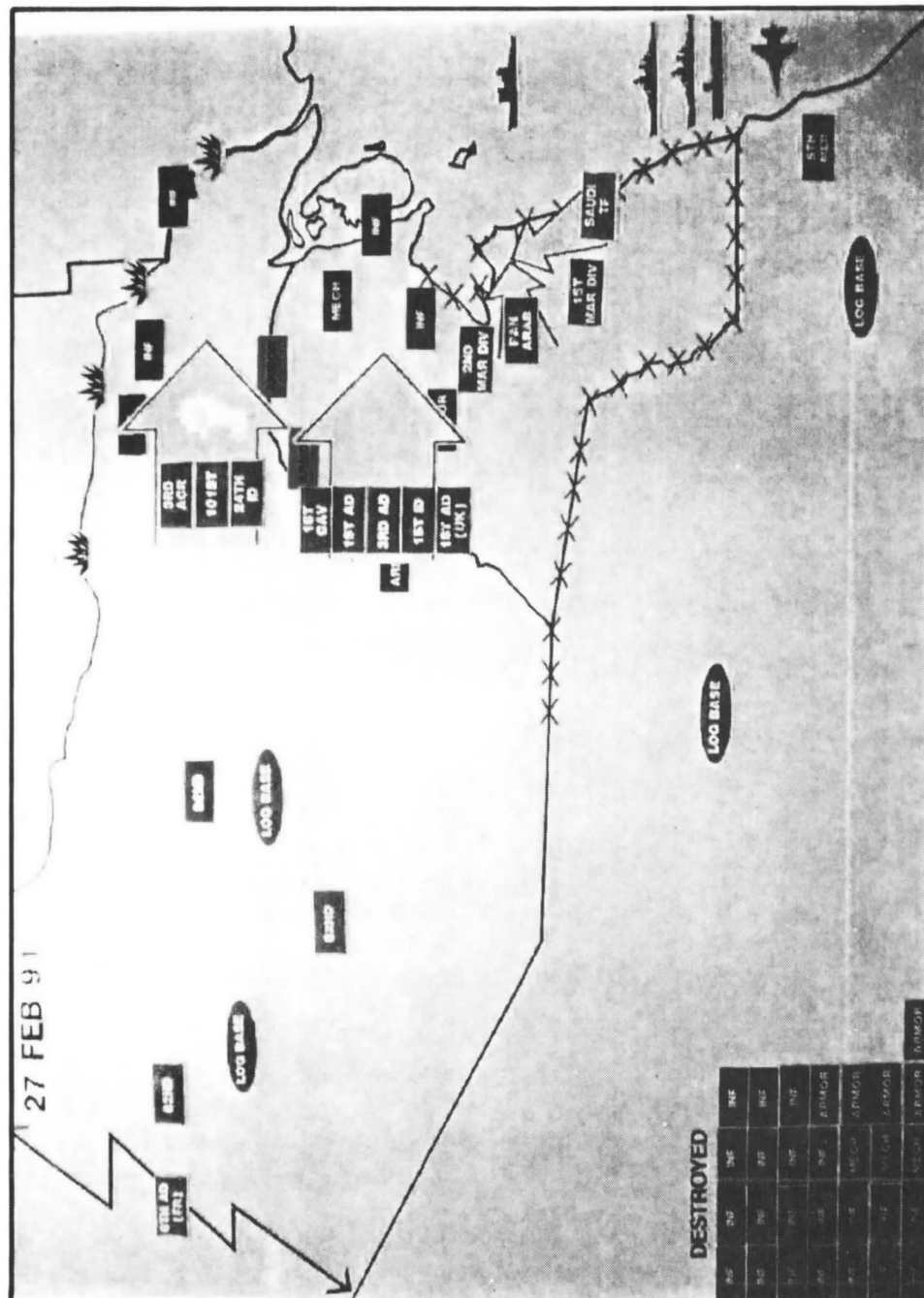
We continue, of course, overwhelming air power. The air has done a terrific job from the start to finish in supporting the ground forces, and we also have had great support from the Navy--both in the form of naval gunfire and in support of carrier air.

That's the situation at the present time. (Chart 1)

Peace is not without a cost. These have been the US casualties to date. As you can see, these were the casualties we had in the air war; then of course, we had the terrible misfortune of the Scud attack the other night which, again, because the weapon malfunctioned, it caused death, unfortunately, rather than in a proper function. Then, of course, these are the casualties in the ground war, the total being shown here. (Chart 2)

I would just like to comment briefly about the casualty chart. The loss of one human life is intolerable to any of us who are in the military. But I would tell you that the casualties of that order of magnitude considering the job that's been done and the number of forces that were involved is almost miraculous, as far as the light number of casualties. It will never be miraculous to the families of those people, but it is miraculous.

This is what's happened to date with the Iraqis. They started out with over 4,000 tanks. As of today, we have over 3,000 confirmed destroyed-and I do mean destroyed or captured. As a matter of fact, that number is low because you can add another 700 to that as a result of the battle that's going on right



U.S. CASUALTY COUNT

	KIA	WIA	MIA
CASUALTIES AIR WAR (17 JAN-23 FEB)	23	34	39
CASUALTIES SCUD ATTK	28	90	0
CASUALTIES GROUND WAR	28	89	5
TOTAL CASUALTIES	79	213	44

CHART 1

KTO GROUND ORDER OF BATTLE

	ORIGINAL STRENGTH	DESTROYED OR CAPTURED
TANK	4280	3008
ARMORED VEHICLES	2870	1856
ARTILLERY	3110	2140

CHART 2

now with the Republican Guard. So that number is very, very high, and we've almost completely destroyed the offensive capability of the Iraqi forces in the Kuwaiti theater of operations. The armored vehicle count is also very, very high, and of course, you can see we're doing great damage to the artillery. The battle is still going on, and I suspect that these numbers will mount rather considerably. (Chart 3)

I wish I could give you a better number on this, to be very honest with you. This is just a wild guess. It's an estimate that was sent to us by the field today at noontime, but the prisoners out there are so heavy and so extensive, and obviously, we're not in the business of going around and counting noses at this time to determine precisely what the exact number is. But we're very, very confident that we have well over 50,000 prisoners, of war at this time, and that number is mounting on a continuing basis.

I would remind you that the war is continuing to go on. Even as we speak right now there is fighting going on out there. Even as we speak right now there are incredible acts of bravery going on. This afternoon we had an F-16 pilot shot down. We had contact with him, he had a broken leg on the ground. Two helicopters from the 101st, they didn't have to do it, but they went in to try and pull that pilot out. One of them was shot down, and we're still in the process of working through that. But that's the kind of thing that's going on out on the battlefield right now. It is not a Nintendo game--it is a tough battle-

ENEMY PRISONERS OF WAR

17 JAN - 23 FEB	2,720
24 FEB - 27 FEB	48,000+
	<hr/>
TOTAL	50,000+

CHART 3

field where people are risking their lives at all times. There are great heroes out there, and we ought to be very, very proud of them.

That's the campaign to date. That's the strategy to date. I'd now be very happy to take any questions anyone might have.

Q: I want to go back to the air war. The chart you showed there with the attrition rates of the various forces was almost the exact reverse of what most of us thought was happening. It showed the front line troops attritted to 75 percent or more, and the Republican Guard, which a lot of public focus was on when we were covering the air war, attritted less than 75. Why is that? How did it come to pass?

A: Let me tell you how we did this. We started off, of course, against the strategic targets. I briefed you on that before. At the same time, we were hitting the Republican Guard. But the Republican Guard, you must remember, is a mechanized armor force for the most part, that is very, very well dug in, and very, very well spread out. So in the initial stages of the game, we were hitting the Republican Guard heavily, but we were hitting them with strategic--type bombers rather than pinpoint precision bombers.

For lack of a better word, what happened is the air campaign shifted from the strategic phase into the theater. We knew all along that this was the important area. The nightmare scenario for all of us would have been to go through, get hung up in this breach right here, and then have the enemy artillery rain chemical weapons down on troops that were in a gaggle in the breach right there. That was the nightmare scenario. So one of the things that we felt we must have established is an absolute, as much destruction as we could possibly get, of the artillery, the direct support artillery, that would be firing on that wire. That's why we shifted it in the very latter days, we absolutely punished this area very heavily because that was the first challenge. Once we got through this and were moving, then it's a different war. Then we're fighting our kind of war. Before we get through that, we're fighting their kind of war, and that's what we didn't want to have to do.

At the same time, we continued to attrit the Republican Guard, and that's why I would tell you that, again, the figures we're giving you are conservative, they always have been conservative. But we promised you at the outset we weren't going to give you anything inflated, we were going to give you the best we had.

Q: He seems to have about 500-600 tanks left out of more than 4,000, as just an example. I wonder if in an overview, despite these enormously illustrative pictures, you could say what's left of the Iraqi army in terms of how they could ever be a regional threat, or a threat to the region again?

A: There's not enough left at all for him to be a regional threat to the region, an offensive regional threat. As you know, he has a very large army, but most of the army that is left north of the Tigris/Euphrates valley is an infantry army, it's not an armored army, it's not an armored heavy army, which

means it really isn't an offensive army. So it doesn't have enough left, unless someone chooses to re-arm them in the future.

Q: You said the Iraqis have got these divisions along the border which were seriously attritted. It figures to be about 200,000 troops, maybe, that were there. You've got 50,000 prisoners. Where are the rest of them?

A: There were a very, very large number of dead in these units--a very, very large number of dead. We even found them, when we went into the units ourselves, we found them in the trench lines. There were very heavy desertions. At one point we had reports of desertion rates of more than 30 percent of the units that were along the front here. As you know, we had quite a large number of prisoners of war that came across, so I think it's a combination of desertions, of people that were killed, of the people that we've captured, and of some other people who are just flat still running.

Q: It seems you've done so much, that the job is effectively done. Can I ask you, what do you think really needs more to be done? His forces are, if not destroyed, certainly no longer capable of posing a threat to the region. They seem to want to go home. What more has to be done?

A: If I'm to accomplish the mission that I was given, and that's to make sure that the Republican Guard is rendered incapable of conducting the type of heinous acts that they've conducted so often in the past, what has to be done is these forces continue to attack across here and put the Republican Guard out of business. We're not in the business of killing them. We have PSYOP [psychological operations] aircraft up. We're telling them over and over again, all you've got to do is get out of your tanks and move off, and you will not be killed. But they're continuing to fight, and as long as they continue to fight, we're going to continue to fight with them.

Q: That move on the extreme left, which got within 150 miles of Baghdad, was it also a part of the plan that the Iraqis might have thought it was going to Baghdad, and would that have contributed to the deception?

A: I wouldn't have minded at all if they'd gotten a little bit nervous about it. I mean that, very sincerely. I would have been delighted if they had gotten very, very nervous about it. Frankly, I don't think they ever knew it was there. I think they never knew it was there until the door had already been closed on them.

Q: I'm wondering how much resistance there still is in Kuwait, and I'm wondering what you would say to people who would say the purpose of this war was to get the Iraqis out of Kuwait, and they're now out. What would you say to the public that is thinking that right now?

A: I would say there was a lot more purpose to this war than just get the Iraqis out of Kuwait. The purpose of this war was to enforce the resolutions of the United Nations. There are some 12 different resolutions of the United Nations, not all of which have been accepted by Iraq to date, as I understand it.

But I've got to tell you, that in the business of the military, of a military commander, my job is not to go ahead and at some point say that's great, they've just now pulled out of Kuwait--even though they're still shooting at us, they're moving backward, and therefore, I've accomplished my mission. That's not the way you fight it, and that's not the way I would ever fight it.

Q: You talked about heavy press coverage of Imminent Thunder early on, and how it helped fool the Iraqis into thinking that it was a serious operation. I wondered if you could talk about other ways in which the press contributed to the campaign. (Laughter)

A: First of all, I don't want to characterize Imminent Thunder as being only a deception, because it wasn't. We had every intention of conducting amphibious operations if they were necessary, and that was a very, very real rehearsal--as were the other rehearsals. I guess the one thing I would say to the press that I was delighted with is in the very, very early stages of this operation when we were over here building up, and we didn't have very much on the ground, you all had given us credit for a whole lot more over here. As a result, that gave me quite a feeling of confidence that we might not be attacked quite as quickly as I thought we were going to be attacked. Other than that, I would not like to get into the remainder of your question.

Q: What kind of fight is going on with the Republican Guard? And is there any more fighting going on in Kuwait, or is Kuwait essentially out of the action?

A: No. The fight that's going on with the Republican Guard right now is just a classic tank battle. You've got fire and maneuver, they are continuing to fight and shoot at us as our forces move forward, and our forces are in the business of outflanking them, taking them in the rear, using our attack helicopters, using our advanced technology. I would tell you that one of the things that has prevailed, particularly in this battle out here, is our technology. We had great weather for the air war, but right now, and for the last three days, it's been raining out there, it's been dusty out there, there's black smoke and haze in the air. It's an infantryman's weather--God loves the infantryman, and that's just the kind of weather the infantry man likes to fight in. But I would also tell you that our sights have worked fantastically well in their ability to acquire, through that kind of dust and haze, the enemy targets. The enemy sights have not worked that well. As a matter of fact, we've had several anecdotal reports today of enemy who were saying to us that they couldn't see anything through their sights and all of a sudden, their tank exploded when their tank was hit by our sights. So that's one of the indications of what's going on.

Q: If there's no air support, are you saying . . .

A: A very, very tough air environment. Obviously, as this box gets smaller and smaller, okay, and the bad weather, it gets tougher and tougher to use the air, and therefore, the air is acting more in an interdiction role than any other.

Q: Can you tell us why the French, who went very fast in the desert in the first day, stopped in Salman and were invited to stop fighting after 36 hours?

A: Well, that's not exactly a correct statement. The French mission on the first day was to protect our left flank. What we were interested in was making sure we confined this battlefield--both on the right and the left--and we didn't want anyone coming in and attacking these forces, which was the main attack, coming in from their left flank. So the French mission was to go out and not only seize Al Salman, but to set up a screen across our left flank, which was absolutely vital to ensure that we weren't surprised. So they definitely did not stop fighting. They continued to perform their mission, and they performed it extraordinarily well.

Q: When Iraq's air force disappeared very early in the air war, there was speculation they might return and provide cover during the ground war. Were you expecting that? Were you surprised they never showed themselves again?

A: I was not expecting it. We were not expecting it, but I would tell you that we never discounted it, and we were totally prepared in the event it happened.

Q: Have they been completely destroyed? Where are they?

A: There's not an airplane that's flown. I'll tell you where they are. A lot of them are dispersed throughout civilian communities in Iraq. We have a lot of indications--we have proof of that, as a matter of fact.

Q: How many divisions of the Republican Guard now are you fighting, and any idea how long that will take?

A: We're probably fighting on the order of ... there were a total of five of them up here. One of them we have probably destroyed yesterday. We probably destroyed two more today. I would say that leaves us a couple that we're in the process of fighting right now.

Q: Did you think this would turn out, I realize a great deal of strategy and planning went into it, but when it took place, did you think this would turn out to be such an easy cakewalk as it seems? And secondly, what are your impressions of Saddam Hussein as a military strategist? (Laughter)

A: Ha.

First of all, if we thought it would have been such an easy fight, we definitely would not have stocked 60 days' worth of supplies on these log bases. As I've told you all for a very, very long time, it is very, very important for a military commander never to assume away the capabilities of his enemy. When you're facing an enemy that is over 500,000 strong, has the reputation they've had of fighting for eight years, being combat-hardened veterans, has a number of tanks and the type of equipment they had, you don't assume away anything. So we certainly did not expect it to go this way.

As far as Saddam Hussein being a great military strategist, he is neither a strategist, nor is he schooled in the operational arts, nor is he a tactician, nor is

he a general, nor is he a soldier. Other than that, he's a great military man. I want you to know that. (Laughter)

Q: General, I wonder if you could tell us anything more about Iraqi casualties on the battlefield; you said there were large numbers. Are we talking thousands, tens of thousands? Any more scale you can give us?

A: No, I wish I could answer that question. As you can imagine, this has been a very fast-moving battle, as is desert warfare, and as a result even today when I was asking for estimates, every commander out there said we just can't give you an estimate, it went too fast, we've gone by too quickly.

Q: You went over very quickly, the special operations folks. Could you tell us what their front role was?

A: We don't like to talk a lot about what the special operations do, as you're well aware. But in this case, let me just cover some of the things they did.

First of all, with every single Arab unit that went into battle, we had Special Forces troops with them. The job of those Special Forces was to travel and live right down at the battalion level with all those people to make sure they could act as the communicators with friendly English-speaking units that were on their flanks, and they could also call in air strikes as necessary, they could coordinate helicopter strikes, and that sort of thing. That's one of the principal roles they played, and it was a very, very important role.

Secondly, they did a great job in strategic reconnaissance for us.

Thirdly, the Special Forces were 100 percent in charge of the combat search and rescue, and that's a tough mission. When a pilot gets shot down out there in the middle of nowhere, surrounded by the enemy, and you're the folks that are required to go in and go after them, that is a very tough mission, and that was one of their missions.

And finally, they also did some direct action missions, period.

Q: General, there have been reports that when the Iraqis left Kuwait City, they took with them a number of the Kuwait people as hostages. What can you tell us about this.?

A: We've heard that they took up to 40,000. I think you've probably heard the Kuwaitis themselves who were left in the city state that they were taking people, and that they have taken them. So I don't think there's any question about the fact that there was a very, very large number of young Kuwaiti males taken out of that city within the last week or two. But that pales to insignificance compared to the absolutely unspeakable atrocities that occurred in Kuwait in the last week. They're not a part of the same human race, the people that did that, that the rest of us are. I've got to pray that that's the case.

Q: Can you tell us more about that?

A: No sir, I wouldn't want to talk about it.

Q: Could you give us some indication of what's happening to the forces left in Kuwait? What kind of forces are they, their size and are they engaged at the moment?

A: You mean these up here?

Q: No, the ones in Kuwait, the three symbols to the, right.

A: These right here?

Q: Yes.

A: I'm not even sure they're here. I think they're probably gone. We picked up a lot of signals of people. There's a road that goes right around here and goes out that way. And I think they probably, more than likely, are gone. So what you're really faced with is you're ending up fighting these Republican Guard heavy mech and armor units that are there, and basically what we want to do is capture their equipment.

Q: So they are all out of Kuwait then? So in fact they are all out of Kuwait?

A: No, I can't say that. I wouldn't be the least bit surprised if there are not pockets of people all around here who are just waiting to surrender as soon as somebody uncovers them and comes to them. But we are certainly not getting any internal fighting across our lines of communication or any of that sort of thing.

Q: General, not to take anything away from the Army and the Marines on the breaching maneuvers . . .

A: Thank you, sir. I hope you don't.

Q: But many of the reports that the pools have gotten from your field commanders and the soldiers were indicating that these fortifications were not as intense or as sophisticated as they were led to believe. Is this a result of the pounding that they took that you described earlier, or they were perhaps overrated in the first place?

A: Have you ever been in a minefield?

Q: No.

A: All there's got to be is one mine, and that's intense. There were plenty of mines out there, plenty of barbed wire. There were fire trenches, most of which we set off ahead of time. But there were still some that were out there. The Egyptian forces had to go through fire trenches. There were a lot of booby traps, a lot of barbed wire. Not a fun place to be. I've got to tell you probably one of the toughest things that anyone ever has to do is go up there and walk into something like that and go through it, and consider that while you're going through it and clearing it, at the same time you're probably under fire by enemy artillery. That's all I can say.

Q: As tough as it was, was it less severe than you expected? I mean, were you expecting even worse, in other words?

A: It was less severe than we expected, but one of the things I attribute that to is the fact that we went to extensive measures to try and make it less severe, okay, and we really did. I didn't mean to be facetious with my answer, I just got to tell you that is a very tough mission for any person to do, particularly in a minefield.

Q: General, is the Republican Guard your only remaining military objective in Iraq? And I gather there have been some heavy engagements. How would you rate this army you face--from the Republican Guard on down?

A: Rating an army is a tough thing to do. A great deal of the capability of an army is its dedication to its cause and its will to fight. You can have the best equipment in the world, you can have the largest numbers in the world, but if you're not dedicated to your cause, if you don't have the will to fight, then you're not going to have a very good army. One of the things we learned right prior to the initiation of the campaign, that of course contributed, as a matter of fact, to the timing of the ground campaign, is that so many people were deserting and I think you've heard this, that the Iraqis brought down execution squads whose job was to shoot people in the front lines.

I've got to tell you, a soldier doesn't fight very hard for a leader who is going to shoot him on his own whim. That's not what military leadership is all about. So I attribute a great deal of the failure of the Iraqi army to fight, to their own leadership. They committed them to a cause that they did not believe in. They all are saying they didn't want to be there, they didn't want to fight their fellow Arabs, they were lied to, they were deceived when they went into Kuwait, they didn't believe in the cause, and then after they got there, to have a leadership that was so uncaring for them that they didn't properly feed them, they didn't properly give them water, and in the end, they kept them there only at the point of a gun.

So I can't--now, the Republican Guard is entirely different. The Republican Guard are the ones that went into Kuwait in the first place., They get paid more, they got treated better, and oh by the way, they also were well to the rear so they could be the first ones to bug out when the battlefield started folding, while these poor fellows up here who didn't want to be here in the first place, bore the brunt of the attack. But it didn't happen.

Q: General, could you tell us something about the British involvement, and perhaps comment on today's report of 10 dead through friendly fire?

A: The British, I've got to tell you, have been absolutely superb members of this coalition from the outset. I have a great deal of admiration and respect for all the British that are out there, and particularly General Sir Peter de la Billiere who is not only a great general, but he's also become a very close personal friend of mine. They played a very, very key role in the movement of the main attack. I would tell you that what they had to do was go through this breach in one of the tougher areas, because I told you they had reinforced here,

and there were a lot of forces here, and what the Brits had to do was go through the breach and then fill up the block, so the main attack could continue on without forces over here, the mechanized forces over here, attacking that main attack in the flank. That was a principal role of the British. They did it absolutely magnificently, and then they immediately followed up in the main attack, and they're still up there fighting right now. So they did a great job.

Q: General, these 40,000 Kuwaiti hostages taken by the Iraqis, where are they right now? That's quite a few people. Are they in the line of fire? Do we know where they are?

A: No, no, no, we were told, but again, this is--a lot of this is anecdotal, okay. We were told that they were taken back to Basra. We were also told that some of them were taken all the way back to Baghdad. We were told 100 different reasons why they were taken. Number one, to be a bargaining chip if the time came when bargaining chips were needed. Another one was for retribution because, of course, at that time Iraq was saying that these people were not Kuwaitis, these were citizens of Iraq and therefore, they could do anything they wanted to with them. So I just pray that they'll all be returned safely before long.

Q: General, the other day on television, the deputy Soviet foreign minister said that they were talking again about rearming the Iraqis. And there's some indication that the United States, as well, believes that Iraq needs to have a certain amount of armament to retain the balance of power. Do you feel that your troops are in jeopardy finishing this off, when already the politicians are talking about rearming the Iraqis? How do you feel about that?

A: Well, I certainly don't want to discuss, you know, what the deputy foreign minister of the Soviet Union says. That's way out of my field. I would tell you that I'm one of the first people that said at the outset that it's not in the best interest of peace in this part of the world to destroy Iraq, and I think the president of the United States has made it very clear from the outset that our intention is not to destroy Iraq or the Iraqi people. I think everyone has every right to legitimately defend themselves. But the one thing that comes through loud and clear over, and over, and over again to the people that have flown over Iraq, to the pilots that have gone in against their military installations, when you look at the war machine that they have faced, that war machine definitely was not a defensive war machine, and they demonstrated that more than adequately when they overran Kuwait and then called it a great military victory.

Q: General, before starting the land phase, how much were you concerned by the Iraqi planes coming back from Iran? And do we know what happened to the Iraqi helicopters?

A: As I said before, we were very concerned about the return of the Iraqi planes from Iran, but we were prepared for it. We have been completely prepared for any type of air attack the Iraqis might throw against us, and oh, by the way, we're still prepared for it. We're not going to let down our guard for

one instant, so long as we know that capability is there, until we're sure this whole thing is over.

The helicopters are another very interesting story. We know where the helicopters were. They traditionally put their helicopter near some of their other outfits, and we tracked them very carefully. But what happened is despite the fact that Iraqis claim that we indiscriminately bombed civilian targets, they took their helicopters and dispersed them all over the place in civilian residential areas just as fast as they possibly could. But quite a few of them were damaged on airfields, those that we could take on airfields. The rest of them were dispersed.

Q: General, I'd like to ask you, you mentioned about the Saudi army forces. Could you elaborate about their role, on the first day?

A: The Saudi army, as I said, the first thing they did was they--we had this Bahrain attack that was going through here, and of course we were concerned about the forces over here again, hitting the flanks. That's one of the things you just don't want to have happen to your advancing forces.

So this force over here, the eastern task force, had to attack up the coast to pin the enemy in this location. The forces--again the Saudi forces over in this area were attacked through here, again, to pin all the forces in this area because we didn't want those forces moving in this direction, and we didn't want those forces moving in that direction.

It's a tough mission, okay, because these people were being required to fight the kind of fight that the Iraqis wanted them to fight. It's a very, very tough mission.

I would point out, it wasn't only the Saudis. I tell you it was the Saudis, it was the Kuwaitis, it was the Egyptians, it was the Syrians, it was the Emiris from the United Arab Emirates, it was the Bahrainis, it was the Qataris, and it was the Omanis, and I apologize if I've left anybody out. But it was a great coalition of people, all of whom did a fine job.

Q: Is there anything left of the Scud or chemical capability?

A: I don't know. I don't know. But we're sure going to find out if there's anything--you know, the Scuds that were being fired against Saudi Arabia came from right here, okay. So obviously, one of the things we're going to check on when we finally get to that location is what's left.

Q: General, could you tell us in of the air war of how effective you think it was in speeding up the ground campaign? Because obviously, it's gone much faster than you ever expected? And ... how effective do you think the AirLand battle campaign has been?

A: The air war, obviously, was very, very effective. You just can't predict about things like that. You can make your best estimates at the outset as to how quickly you will accomplish certain objectives. But, of course, a lot of that depends on the enemy and how resilient the enemy is, how tough they are, how well dug in they are.

In the earlier stages, we made great progress in the air war. In the latter stages, we didn't make a lot of progress because frankly they--the enemy--had burrowed down into the ground as a result of the air war.

Now that, of course, made the air war a little bit tougher, but when you dig your tanks in and bury them, they're no longer tanks. They're now pill boxes. That, then, makes a difference in the ground campaign. When you don't run them for a long time, they have seal problems, they have a lot of maintenance problems and that type of thing.

So the air campaign was very, very successful and contributed a great deal. How effective was the air--ground campaign? I think it was pretty effective myself. I don't know what you all think.

Q: Can you tell us what you think as you look down the road would be a reasonable size for the Iraqi army, and can you tell us roughly what the size is now if the war were to stop this evening?

A: With regard to the size right now, at one time Saddam Hussein was claiming that he had a 7 million man army. If he's got a 7 million man army, they've still got a pretty big army out there.

How effective that army is, is an entirely different question. With regard to the size of the army he should have, I don't think that's my job to decide that. I think there are an awful lot of people that live in this part of the world, and I would hope that is a decision that's arrived at mutually by all the people in this part of the world to contribute to peace and stability in this part of the world, I think that's the best answer I can give.

Q: You said the gate was closed. Have you got ground forces blocking the roads to Basra?

A: No.

Q: Is there any way they can get out that way?

A: No. That's why the gate's closed.

Q: Is there a military or political explanation as to why the Iraqis did not use chemical weapons?

A: We've got a lot of questions about why the Iraqis didn't use chemical weapons, and I don't know the answer. I just thank God they didn't.

Q: Is it possible they didn't use them because they didn't have time to react?

A: You want me to speculate, I'll be delighted to speculate. Nobody can ever pin you down when you speculate.

Number one, we destroyed their artillery. We went after their artillery big time. They had major desertions in their artillery, and ... that's how they would have delivered their chemical weapons, either that or by air. And we all know what happened to their air. So we went after their artillery big time, and I think we were probably highly, highly effective in going after their artillery.

There's other people who are speculating that the reason they didn't use chemical weapons is because they were afraid if they used chemical weapons there would be nuclear retaliation. There are other people that speculate that they didn't use their chemical weapons because their chemical weapons degraded, and because of the damage that we did to their chemical production facilities, they were unable to upgrade the chemicals within their weapons as a result of that degradation. That was one of the reasons, among others, that we went after their chemical production facilities early on in the strategic campaign.

I'll never know the answer to that question, but as I say, thank God they didn't.

Q: General, are you still bombing in northern Iraq, and if you are, what's the purpose of it now?

A: Yes.

Q: What's being achieved now?

A: Military purposes that we--exactly the same things we were trying to achieve before. The war is not over, and you've got to remember, people are still dying out there. Okay? And those people that are dying are my troops, and I'm going to continue to protect those troops in every way I possibly can until the war is over.

Q: How soon after you've finally beaten the Republican Guards and the other forces that threaten you, will you move your forces out of Iraq, either into Kuwait or back into Saudi?

A: That's not my decision to make.

Q: What are you going to try and bring to justice the people responsible for the atrocities in Kuwait City? And also, could you comment on the friendly fire incident in which nine Britons were killed?

A: I'm sorry, that was asked earlier and I failed to do that.

First of all, on the first question, we have as much information as possible on those people that were committing the atrocities, and, of course, we're going through a screening process, and whenever we find those people that did, in fact, commit those atrocities, we try and separate them out. We treat them no differently than any other prisoner of war, but the ultimate disposition of those people, of course, might be quite different than the way we would treat any other prisoner of war.

With regard to the unfortunate incident yesterday, the only report we have is that two A-10 aircraft came in, and they attacked two scout cars, British armored cars, and that's what caused the casualties. There were nine KIA [killed in action]. We deeply regret that. There's no excuse for it. I'm not going to apologize for it. I am going to say that our experience has been that based upon the extremely complicated number of different maneuvers that were being accomplished out here, according to the extreme diversity of the number of forces that were out here, according to the extreme differences in the languages of the

forces out here, and the weather conditions and everything else, I feel that we were quite lucky that we did not have more of this type of incident.

I would also tell you that because we had a few earlier that you know about, that we went to extraordinary lengths to try and prevent that type of thing from happening. It's a terrible tragedy, and I'm sorry that it happened.

Q: Was it at night?

A: I don't know. I don't believe so because I believe the information I have, that a forward air controller was involved in directing that, and that would indicate that it was probably during the afternoon. But it was when there was very, very close combat going on out there in that area.

Q: General, the United Nations General Assembly was talking about peace. As a military man, you look at your challenge, and you can get some satisfaction out of having achieved it. Is there some fear on your part that there will be a cease-fire that will keep you from fulfilling the assignment that you have? Is your assignment as a military man separate from the political goals of the ...

A: Do I fear a cease-fire?

Q: Do you fear that you will not be able to accomplish your end, that there will be some political pressure brought on the campaign?

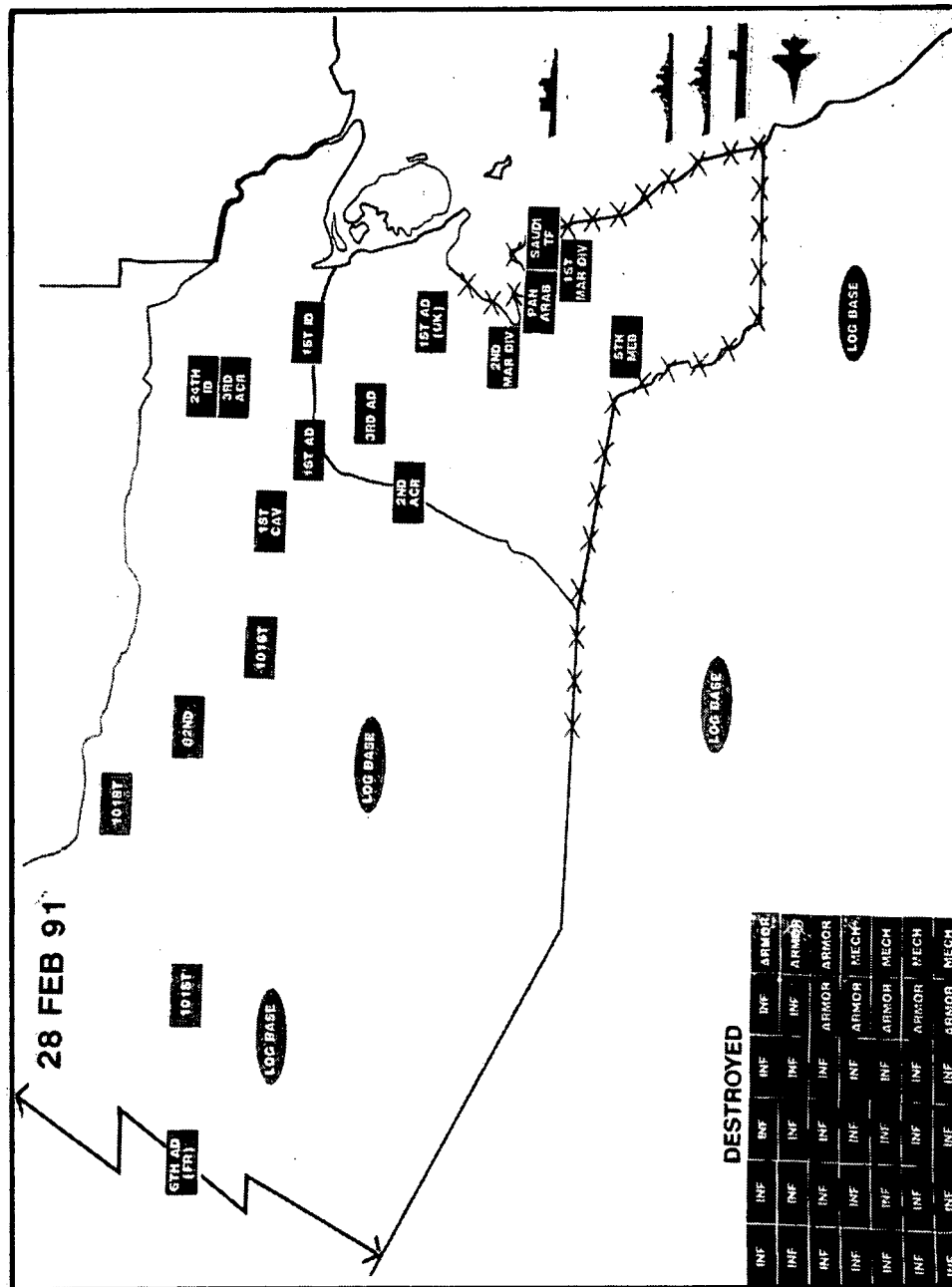
A: I think I've made it very clear to everybody that I'd just as soon the war had never started. And I'd just as soon never have lost a single life out there. That was not our choice.

We've accomplished our mission, and when the decision makers come to the decision that there should be a cease-fire, nobody will be happier than me.

Q: General, we were told today that an A-10 returning from a mission discovered and destroyed 16 Scuds. Is that a fact, and where were they located?

A: Most of those Scuds were located in western Iraq. I would tell you that we went into this with some intelligence estimates that I think I have since come to believe were either grossly inaccurate, or our pilots are lying through their teeth, and I choose to think the former rather than the latter, particularly since many of the pilots have backed up what they've been saying by film and that sort of thing.

But we went in with a very, very low number of these mobile erector launchers that we thought the enemy had. However, at one point we had a report that they may have had 10 times as many. I would tell you though, that last night the pilots had a very, very successful afternoon and night as far as the mobile erector launchers, most of them in western Iraq were reportedly used against Israel.



Q: General, you've said many times in the past that you do not like body counts. You've also told us tonight that enemy casualties were very, very large. I'm wondering with the coalition forces already burying the dead on the battlefield, will there ever be any sort of accounting or head counts made or anything like that?

A: I don't think there's ever been, ever in the history of warfare, been a successful count of the dead. And one of the reasons is the reason you cite: that's because it's necessary to lay those people to rest for a lot of reasons, and that happens.

So I would probably say no, there will never be an exact count. Probably in the days to come, you're going to hear many, many stories, either overinflated or underinflated, depending upon whom you hear them from. The people who will know the best, unfortunately, are the families that won't see their loved ones come home.

Q: If the gate is indeed closed, as you said several times, and the theories about where these Kuwaiti hostages are--perhaps Basra, perhaps Baghdad--where could they be? And was the timing for the start of the ground campaign a purely military choice, or was it a military choice with political influence on the choice of date?

A: That's two questions. When I say the gate is closed, I don't want to give you the impression that absolutely nothing is escaping. Quite the contrary. What isn't escaping is heavy tanks. What isn't escaping is artillery pieces. What isn't escaping is that sort of thing.

That doesn't mean that civilian vehicles aren't escaping. That doesn't mean that innocent civilians aren't escaping. That doesn't mean that unarmed Iraqis aren't escaping. And that's not the gate I'm talking about. I'm talking about the gate that has closed on the war machine that is out there ...

The timing for the beginning of the ground campaign, we made military analyses of when that ground campaign should be conducted. I gave my recommendation to the secretary of defense and General Colin Powell. They passed that recommendation on to the president, and the president acted upon that recommendation.

Why, do you think we did it at the wrong time? (Laughter)

Q: I'm wondering if your recommendation and analysis were accepted without change.

A: I'm very thankful for the fact that the president of the United States has allowed the United States military and the coalition military to fight this war exactly as it should have been fought. And the president in every case has taken our guidance and our recommendations to heart and has acted superbly as the commander in chief of the United States.

Thank you very much. (Map 7)

During Desert Storm, Colonel Pope was head of the Current Operations Branch at Headquarters, U.S. Marine Corps, the "nerve center" of the Marine Corps. He wrote this article the weekend after the end of the ground war. While not purporting to be the final word, this piece shows how the Marines monitoring the action as it happened viewed the war, before memories faded or an "accepted" version of the war emerged.

U.S. Marines in Operation Desert Storm

By Col John R. Pope

Marine Corps Gazette, July 1991.

Operation DESERT STORM began on 16 January 1991 with the initiation of the air campaign against Iraq and the Iraqi forces occupying Kuwait. D-day, 16 January, followed the 163-day-long Operation DESERT SHIELD, the positioning and preparation of the Coalition Forces for the combat that was to liberate Kuwait. From 7 August 1990 until D-day, the U.S. Marine Corps deployed approximately 86,000 Marines to Southwest Asia. By the cessation of offensive operations on 28 February 1991, this number had grown to over 92,000 Marines, which included 24 infantry battalions, 19 fixed-wing and 21 helicopter squadrons, and the associated command elements and combat, combat support, and combat service support organizations. These forces were required to support a Marine expeditionary force (MEF) ashore on the Arabian Peninsula and two Marine expeditionary brigades (MEB) and a Marine expeditionary unit (MEU) afloat in the Persian Gulf. Adding the more than 24,000 Marines deployed in the Mediterranean and in the western Pacific, which included an additional 6 infantry battalions and 6 fixed-wing and 9 helicopter squadrons, nearly 90 percent of the operational forces of the Marine Corps were deployed simultaneously. These numbers included 96 percent of the active duty infantry battalions (and 6 Reserve battalions), 79 percent of the active fixed-wing squadrons (and 1 Reserve squadron), and 91 percent of the active duty helicopter squadrons (and 3 Reserve squadrons).

In the months preceding D-day, Marine forces deploying to the Commander in Chief Central's (CinCCent's) area of responsibility (AOR) had been task organized as Marine Central (MarCent)/I MEF, and consisted of 1st and 2d Marine Divisions (MarDivs), 3d Marine Aircraft Wing (MAW), and 1st Force Service Support Group (FSSG) ashore in Saudi Arabia. Afloat Marine forces consisted of 4th MEB, 5th MEB with 11th MEU embedded, and 13th MEU, embarked aboard NavCent amphibious ships in the Persian Gulf and north Arabian Sea. The buildup of Marine forces validated the Marines' maritime prepositioning force (MPF) concept, with Marines falling in on equipment from the three maritime prepositioning squadrons (MPSs), in the process providing the first credible ground defense capability in the area following the invasion of



Kuwait. The Marine concept of compositing forces was also validated, with Marines and units from all three active divisions, wings, and force service support groups, augmented by Reserve organizations, melding together into I MEF, exactly as conceived. These Marines and their units came together from around the globe, to include California, Hawaii, North and South Carolina, Okinawa, the Philippines, and every point in between to join into the largest Marine force assembled for combat since World War II. In the process of the buildup, the Marines had met every deadline imposed by the CinC, and were ready at every significant point in the timeline to perform their assigned missions. While preparing for combat in Southwest Asia, the Marines managed to maintain a credible presence in the Western Pacific (Okinawa and the Philippines) and conducted successful noncombatant evacuation operations in two locations in Africa: the long-term (eight-month) Liberian mission in support of the U.S. Embassy in Monrovia, and the rapid extraction of several hundred noncombatants from the international diplomatic community in Mogadishu, Somalia, 4 through 6 January 1991.

The Day Before

On 15 January 1991, Marine forces were preparing for combat. For the Marines, the reinforcement directed by the President had been accomplished with the closure of additional forces from II MEF in North Carolina and the arrival of 5th MEB from southern California. The 13th MEU, which previously had

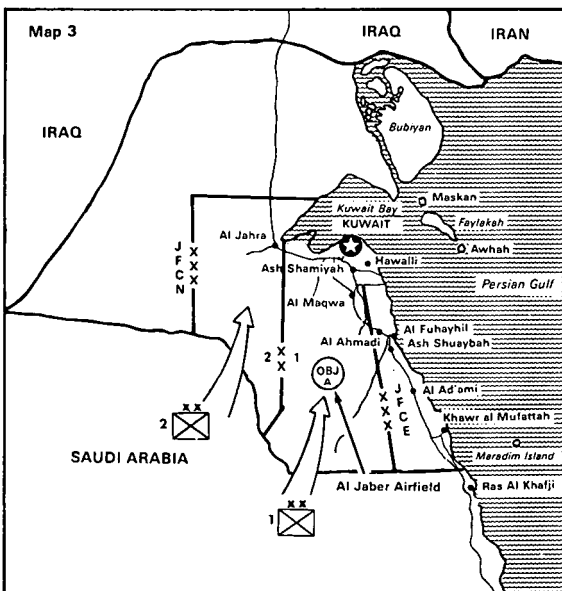
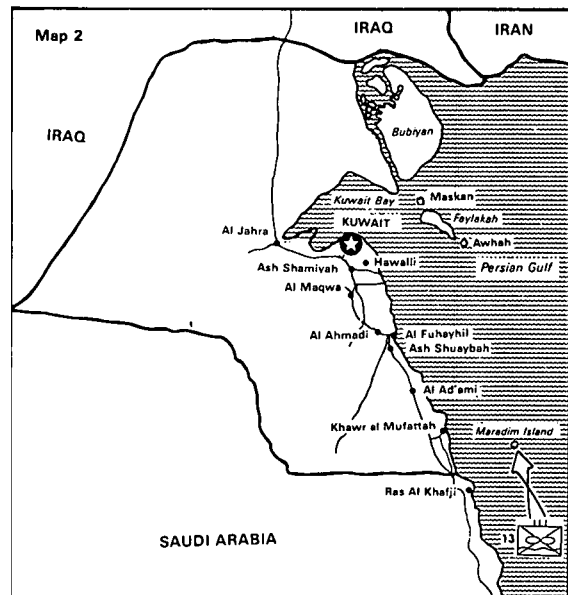
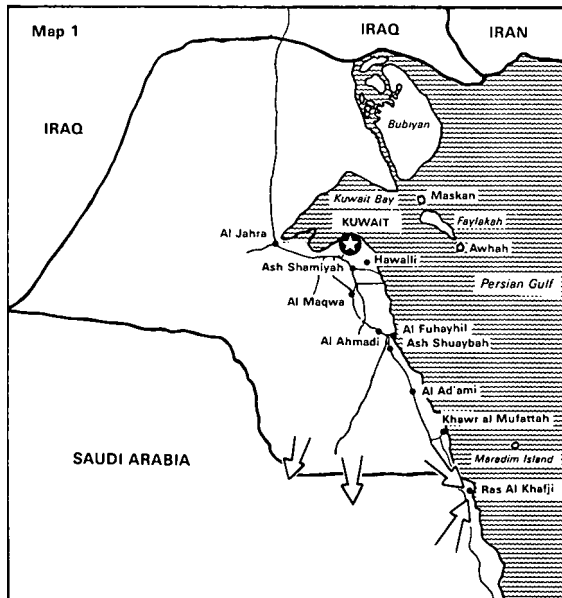
been in the Gulf, returned after a two-month training evolution in the Western Pacific. The I MEF command post had moved north to Safaniya and the 1st MarDiv was positioned in the northeast portion of the MarCent AOR. The 2d MarDiv occupied the northwest portion of the AOR. The 1st FSSG was establishing forward supply bases at Ra's al Mish'ab and Kibrit while continuing the offload at Al Jubayl. The 3d MAW supported I MEF, provided a 24-hour F/A-18 combat air patrol station, and was moving its tactical air control facilities north to Al Mish'ab as well. The 1st Brigade, 2d Armored Division (the Army's Tiger Brigade) had been assigned to I MEF and was further placed under the operational control of 2d MarDiv as a replacement for the British 7th Armored Brigade, which was detached to join the newly arrived British 1st Armored Division. The 4th MEB afloat had completed several highly publicized amphibious exercises in Saudi Arabia, the United Arab Emirates, and Oman, and was planning for Exercise SEA SOLDIER IV with the 5th MEB the last week of January.

Air Campaign

I MEF began combat operations on 16 January 1991, with the 3d MAW flying missions in support of CinCCent's air tasking order. The ground combat elements continued to phase north while maintaining a solid defensive capability. The first Marines to come under enemy fire were elements of the 1st Surveillance, Reconnaissance, and Intelligence Group (SRIG) forward at the town of Ra's al Khafji near the Saudi/Kuwait border. Task Force Shepherd, the 1st Light Armored Infantry (LAI) Battalion, continued its reconnaissance along the Kuwaiti border while other 1st MarDiv regimental task forces repositioned northward.

Marine aviation continued to strike targets in support of its air tasking order and I MEF, and on 19 January the first combat aircraft loss for the Marines occurred when an OV-10 was downed by enemy fire. The 1st Division's task forces began a continuing series of "roving gun" artillery raids, firing on suspected enemy positions in Kuwait. These raids were designed to provoke an enemy reaction, with aerial observers, tactical air on station, and artillery waiting to hammer the Iraqis should they come out of their fortified positions. These raids, which promoted deception, kept the Iraqis off balance and tested their response time as well as the accuracy of the response. The "roving gun" raids continued with significant success until the initiation of ground combat operations on 24 February.

As January progressed, Marine ground elements continued to move north. New boundaries were established between the 1st and 2d MarDivs, with the 1st to the west and 2d to the east in the I MEF zone. On 26 January, the 2d MarDiv commenced artillery raids with the 2d LAI Battalion and 10th Marines in its zone. Significantly, these raids constituted the first offensive action for the 2d MarDiv, as a division, since World War II. Coalition forces repositioned as well, with the Joint Forces Command North to the west of the Marines and the Joint Forces Command East to the east along the coastal main supply route



leading into Kuwait. The 4th and 5th MEBs continued with Exercise SEA SOLDIER IV at Ra's Madrasah, Oman, through 2 February.

On 29 January, the Iraqis penetrated the Saudi Arabian border at three locations: north of Khafji; east of Wafrah; and at the "elbow." (See Map 1.) The latter two incursions were repulsed by 1st and 2d MarDivs with heavy casualties to the Iraqis. A multibrigade task force conducted the attack in the east with the forward elements entering the town of Khafji. This was the most significant and publicized ground action between Coalition Forces and the Iraqis prior to the initiation of the ground offensive. Elements of the 1st SRIG, which were in Khafji when the Iraqis entered the town, and reconnaissance elements from Task Force Taro (3d Marines), sent to support a Saudi/Qatari counterattack on Khafji, played a significant role, spotting targets and adjusting fire for artillery and tactical air strikes throughout the battle. By the afternoon of 30 January, Coalition Forces had cleared Khafji and moved north of the town.

On 29 January, the 13th MEU conducted Operation DESERT STING, a raid on the Iraqi occupied island of Maradim. No enemy soldiers were encountered; however, large amounts of equipment, ammunition, and supplies were discovered and destroyed. The 4th and 5th MEBs completed Exercise SEA SOLDIER IV on 2 February, backloaded, and prepared for amphibious operations in support of DESERT STORM. (See Map 2.)

For the next several weeks, I MEF ground forces continued reconnaissance missions while repositioning in preparation for the ground offensive. Marines from Task Force Taro continued to provide training for Saudi forces in the vicinity of Al Mish'ab, completing the cross training on 14 February. The 3d MAF continued to attrit the enemy while flying missions in support of I MEF and the CinCCent air tasking order, and the 1st FSSG continued supplying the force while establishing new combat service support areas forward in the I MEF zone. On 13 February, I MEF established a new command post at Al Khanjar, completing its displacement by the 15th. A dirt strip capable of landing C-130s, known as Lonesome Dove airfield, was also established at Al Khanjar. On the 17th, 1st and 2d MarDivs began displacement to final positions, establishing new boundaries that roughly bisected 1st MarDiv's old sector. Task Force Troy, with tanks, TOWS, artillery, and reconnaissance elements, was employed as a deception force to continue activities in 2d MarDiv's old sector and to mask the division's westward passage through the 1st MarDiv into its final position.

On 20 February, Marine AV-8Bs from 4th MEB conducted combat stakes from aboard the USS *Nassau*--a first for the Marine Corps.

Marine units continued screening operations and began probing and infiltrating into the obstacle belts. The berm paralleling the Saudi-Kuwaiti border was cut in numerous locations in anticipation of the impending ground combat. Deception operations were continued throughout the I MEF AOR to conceal the actual point of main effort for the offensive. On 21 February, the 2d LAI Battalion was engaged on three separate occasions by Iraqi forces during cross-border screening operations, calling tactical air and artillery to suppress the enemy each time.

During a 22 February attack on Iraqi trenchlines by a section of F/A-18s, an Iraqi soldier was observed coming out of the trenches with his hands in the air. The F/A-18s orbited the target and contacted I MEF ground forces, who dispatched an LAI patrol to the location. Transfer of control of the enemy prisoners was effected between the aircraft and the armored vehicles-another Marine Corps first.

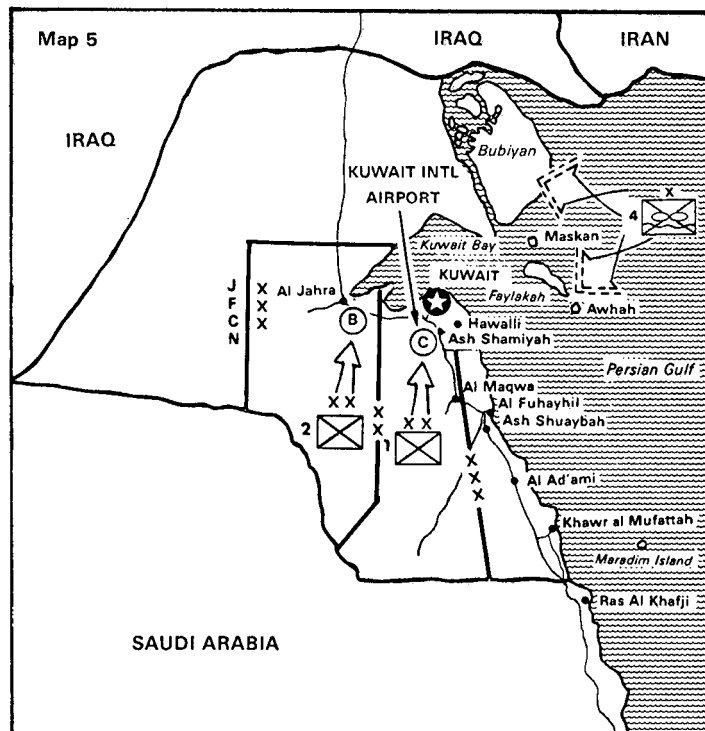
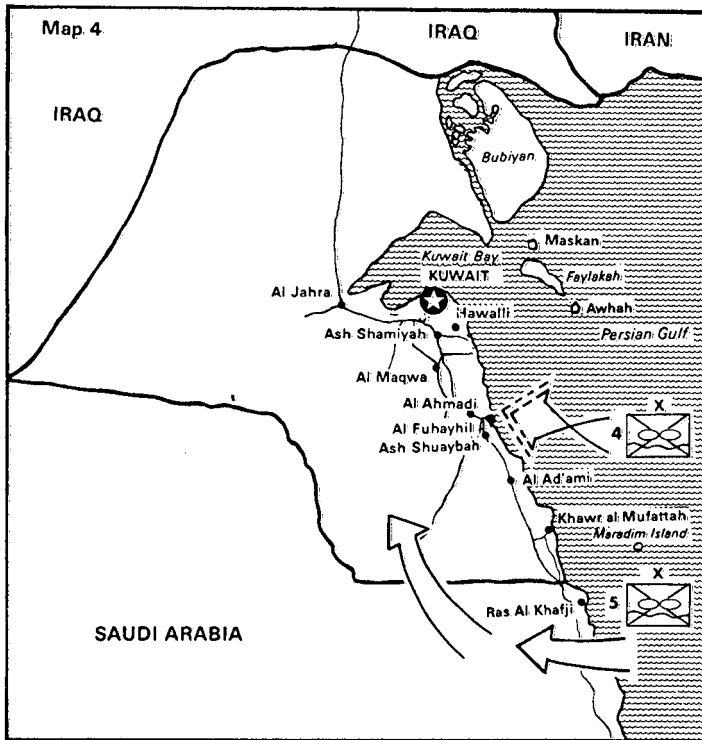
Deception operations continued on 22 and 23 February in both divisions' zones as offensive preparations were finalized. Forces moved to the line of departure, passed through breaches in the first obstacle belts, and began screening operations to secure the flanks. Engineers also completed earthwork for Marine artillery positions north of the border on the 23d.

G-Day

G-day, the designation for the commencement of ground operations, was 24 February 1991. I MEF spearheaded the ground attack for the Coalition Forces, with 1st and 2d MarDivs breaching the Iraqis' obstacle belts and penetrating deep into Kuwait. The 1st MarDiv led the attack in its zone at 0400 local, penetrating the first and second Iraqi obstacle belts against moderate Iraqi resistance. The 2d MarDiv followed at 0530, also penetrating the first and second obstacle belts with little Iraqi response. Later, CinCCent would lavish accolades on the Marine breaching operations, stating that military professionals would study these classic operations for years to come.

Task Force Shepherd, the 1st LAI Battalion, provided screening operations in the Al Wafrah and Al Burgan oil fields for the 1st MarDiv, engaging enemy tanks south of the Al Jaber airfield. Other 1st MarDiv elements, the 1st, 3d, 4th, and 7th Marines, organized as combined arms task forces, breached the obstacle belts and, by day's end, captured I MEF Objective A, the Al Jaber airfield, while consolidating positions around the airfield and the Burgan oil field. (See Map 3.) The 11th Marines provided artillery support to assault elements throughout the day. Bomb damage assessment for the day included 21 enemy tanks destroyed and over 4,000 enemy prisoners of war at a cost of 1 killed in action (KIA), 9 wounded in action (WIA), 3 damaged tanks, and 1 damaged light armored vehicle.

The 2d LAI Battalion provided screening for the lead elements of 2d MarDiv. Once through the obstacle belts, the Division, with the 6th and 8th Marines, and the 1st Brigade, 2d Armored Division (U.S. Army), with artillery support from the 10th Marines, temporarily consolidated its positions to defend against a reported enemy armored column moving out of Kuwait City. This column was engaged and defeated by a combination of ground and air delivered weapons, and the division continued the attack, capturing by day's end an intact enemy tank battalion with 35 T-55 tanks and over 5,000 enemy prisoners of war, to include a brigade commander, at a cost of 1 KIA and 8 WIA.



The 3d MAW flew 671 sorties in support of I MEF on G-day, striking elements of 6 Iraqi divisions and destroying 40 tanks, 3 armored personnel carriers, 18 trucks, 102 miscellaneous vehicles, 3 antiaircraft artillery (AAA) sites, and 4 FROG missile sites.

The 1st FSSG pushed supplies forward in support of the offensive, moving thousands of tons of cargo and thousands of gallons of water and fuel by road and airlift on the first day of ground combat. The southbound logistics effort focused on moving enemy prisoners to the rear.

The 5th MEB, from its positions afloat in the Gulf, began to fly its ground combat element Regimental Landing Team 5 (RLT-5) ashore to assume the mission as I MEF Reserve on 24 February. (See Map 4.)

G+1

On 25 February, the second day of ground combat, I MEF continued the attack on zone, advancing in the face of moderate resistance.

The 1st MarDiv began the day on a line forward of the Burgan oil field. In response to a division artillery time-on-target fire mission on suspected enemy assembly areas, enemy armor boiled out and a close-quarters battle ensued, involving all elements of the division. At the end of the day, the division consolidated and prepared to clear the last of the enemy from the Al Jaber airfield. With minimal casualties and equipment losses, the 1st MarDiv had destroyed 80 enemy tanks and 100 other vehicles and had captured more than 2,000 enemy prisoners of war with more surrendering every hour.

The 2d MarDiv began the day south of Al Abdallya, attacking north toward a hard-surface road grid nicknamed the "ice cube tray." Following artillery prep fires, scores of enemy prisoners of war began streaming toward division lines. In this encounter, 248 tanks were destroyed and 4,500 enemy prisoners were captured, including an Iraqi general officer and a brigade commander.

The 3d MAW flew more than 460 sorties, striking elements of 6 enemy divisions, destroying 52 tanks, 9 armored personnel carriers, 6 artillery tubes, and additional AAA and FROG sites. In the first recorded instance of a remotely piloted vehicle (RPV) capturing personnel, Iraqi soldiers waved white cloths at a Marine RPV as it overflew their position on 25 February.

The 1st FSSG continued to push supplies forward and move prisoners to the rear, providing thousands of tons of cargo and thousands of gallons of fuel and water to I MEF forces.

To support ground operations ashore, the 4th MEB, aboard Task Force 156 shipping, was tasked to demonstrate significant activity in the vicinity of Ash Shuaybah. (See Map 4.) Using a combination of deception activities, naval gunfire from the USS *Missouri*, and 4th MEB helicopters, an amphibious demonstration was underway by 0400 local on 25 February. In response to the demonstration, the Iraqis focused their attention to the east, fired two Silkworm missiles without effect, directed divisions in position along the coast to hold in place, and ordered another division north to reinforce.

G+2

On 26 February, the third day of offensive ground combat operations, I MEF continued the ground attack in zone, advancing in the face of moderate resistance. The 1st MarDiv's objective (MEF Objective C) was the Kuwait International Airport, and the final assault on the objective began at 1600 local. Encountering armored resistance, the division continued to engage until enemy forces surrendered northwest of the airport. In seizing the airport, the division destroyed 250 T-55/62 tanks and over 70 T-72 tanks, again with only minimal casualties and equipment losses. (See Map 5.)

The 2d MarDiv advanced to MEF Objective B, the city of Al Jahra, with moderate opposition, engaging and destroying enemy armor in zone. By 1600 the division had secured the objective and continued through to secure positions, to include the high ground at Mutla Ridge northwest of Al Jahra, blocking the Iraqi escape route north to Basrah. 2d MarDiv casualties and equipment losses were minimal, while 166 enemy tanks were destroyed and 4,200 enemy prisoners were captured.

The 3d MAW continued to support the I MEF advance, striking targets throughout the division zones, concentrating on artillery and armor in the vicinity of Al Jahra and Kuwait International Airport. Damage assessments included the destruction of 16 tanks, 2 armored personnel carriers, and 50 vehicles.

The 1st FSSG continued to push supplies forward and move enemy prisoners of war to the rear, while the 5th MEB ground combat element moved to Al Jaber airfield to assist in prisoner control and stood by as the I MEF reserve. In the second amphibious deception operation in two days, helicopters from 4th MEB conducted a predawn demonstration toward Bubiyan and Faylakah islands. (See Map 5.)

G+3

On 27 February, the fourth day of ground combat operations, I MEF continued the offense in support of Operation DESERT STORM.

The 1st MarDiv completed the consolidation and securing of Kuwait International Airport by 0900 local, began clearing operations, and prepared to receive special operations elements and Kuwaiti officials. The division also coordinated passage of lines for Arab forces from Joint Forces Command East to enter Kuwait City.

The 2d MarDiv remained in the vicinity of Al Jahra in blocking positions, to include Mutla Ridge; it linked up with Kuwaiti resistance forces and began clearing its zone while coordinating the passage of lines for Arab forces from Joint Forces Command North moving into Kuwait City.

The 3d MAW flew more than 200 sorties in support of the divisions, striking withdrawing elements of the Iraqi forces in northern Kuwait. By late afternoon, airborne forward air controllers reported that it was difficult to find a target

along Route 6 between Kuwait City and Basrah because there were so many Iraqis waving something white.

The 1st FSSG continued its resupply mission while processing the continuous flow of enemy prisoners. RLT-5 continued as I MEF reserve in the vicinity of Al Jaber airfield.

The 1st Platoon, 2d Force Reconnaissance Company established an observation post within the U.S. Embassy in Kuwait City on 27 February discovering in the process that the Stars and Stripes were still flying and that the Embassy appeared untouched, with Embassy vehicles present with full gas tanks. The Recon Marines also discovered an enormous sand table in a Kuwaiti school adjacent to the Embassy. The sand table depicted the extensive Iraqi defensive fortifications prepared in anticipation of an amphibious assault by U.S. Marines. The extensive fortifications, to include bunkers, obstacles, and minefields, were confirmed by the commanding general (CG), 1st MarDiv, who reported that the beach fortifications in and around Kuwait City were indeed extensive and formidable. The numerous amphibious exercises conducted by the 4th and 5th MEBs had obviously served their purpose.

G+4/V-Day

On 28 February, offensive combat operations ceased at 0800 local at the direction of the President of the United States. I MEF prepared to assist the Kuwaiti Government in clearing operations and civil affairs matters. Both 1st and 2d MarDivs had reached the limit of their advance with substantial combat power forward in position to block any Iraqi retreat. A preliminary statistical review provided by the CG, I MEF, for the 100 hours of ground combat indicated that U.S. Marines had destroyed or captured 1,040 enemy tanks, destroyed or captured 608 enemy armored personnel carriers, destroyed 432 enemy artillery pieces, destroyed 5 FROG missile sites, with 1,510 enemy KIA and over 20,000 enemy prisoners of war. Marine casualties due to ground action during this period were reported at 5 killed and 48 wounded in action. Marine aviation losses since the initiation of the ground war on 24 February amounted to 2 fixed-wing aircraft. (Aviation losses following the initiation of the air campaign but prior to the commencement of the ground war amounted to four fixed-wing aircraft and one helicopter lost in action with two helicopters lost in nonbattle mishaps.)

V+1

On 1 March I MEF continued operations in support of Operation DESERT STORM. The 1st MarDiv remained in defensive positions in the vicinity of Kuwait International Airport and Al Jaber airfield and prepared for retrograde operations. The division continued to uncover Iraqi weapons, ammunition, and equipment in its zone. The 2d MarDiv remained in defensive positions in the vicinity of Al Jahra, continued to process enemy prisoners, and destroyed enemy equipment while consolidating its defensive positions. RLT-5 was relieved of

its I MEF reserve mission and was directed to retrograde through the Al Wafrah forest area to clear any bypassed Iraqi units while enroute to Al Mish'ab for reembarkation aboard Navy ships. The 3d MAW entered an extended period of maintenance standdown while continuing to provide resupply and medevac support. The 1st FSSG continued its resupply and enemy prisoner transport effort while explosive ordnance disposal personnel continued to destroy enemy ammunition, clear bunkers, and neutralize weapons.

Aftermath

It is not too early to herald the performance of the individual Soldiers, Sailors, Airmen, and Marines of I MEF throughout the battle in MarCent's AOR. Reports from all quarters attest to their courage and professionalism under fire and in the face of the unknown. Their success is perhaps best reflected in the scenes of the reception provided them by the newly liberated citizens of Kuwait. The reason for the months and months of hard work, hard training, and sacrifice became self-evident as the world community watched their triumph.

Lieutenant General Boomer, as the Commanding General, I Marine Expeditionary Force, led all Marine Forces in Saudi Arabia. In this interview, he discusses tense moments at the beginning of the buildup, the planning and conduct of the ground war, and his relations with the media.

Special Trust and Confidence Among the Trail-Breakers

interview with Lieutenant General Walter E. Boomer, USMC

U.S. Naval Institute Proceedings, November 1991

Proceedings: When did you plan to make your own move into the theater of operations?

Boomer: I wanted to give John Hopkins time to get the 7th MEB in, and get his feet on the ground--then I would come in quickly, right on his heels. Having Jim Brabham there early was very important to us, because Jim knew the lay of the land.

Before leaving, for Riyadh, five days after the 7th MEB began deploying, I saw that the buildup on the aviation side was occurring very rapidly--but not for us. John Hopkins and I were concerned, because the ground elements of the brigade were virtually in position but the aviation component was lagging, through no fault of its own. We had to fight for in-flight refueling support, and I eventually had to ask CinCCent to intervene. He did, and we got the Air Force tanker support we needed to get our Marine aviation into the theater. There didn't seem to be a great deal of discipline in determining where various aviation units would bed down. It seemed to be "first come, first served" in acquiring airfields. So we needed to move very quickly, and Jim Brabham helped us do that. With his experience, he swiftly identified the airfields that would be the most useful to us and the improvements each field would require.

When I arrived in Saudi Arabia, it was evident that John Hopkins had things under control along the coast, so I went to Riyadh in order to establish myself with the Central Command. The commander-in-chief, General Schwarzkopf, had not arrived, and Lieutenant General] Chuck Horner, the Air Force component commander, was in charge. I spent about ten days in Riyadh, to get the lay of the land and to see how the CentCom staff would operate. They were very thin at the time, still coming together.

Next, I went to Al Jubayl to establish the I MEF headquarters. There were no major problems at the outset. John Hopkins had shown a lot of finesse in making arrangements with the Saudis to use port facilities, warehouses,

transportation assets, and everything else that was required to unload the MPS squadrons. He had quickly staked things out for us.

Getting unpacked, of course, was just the initial task. Our primary concern was setting up a defense to protect the Al Jubayl complex--the heart of the Saudi industrial area. Most of the oil fields are in and around Jubayl, along the coast and to the north. And Jubayl houses a huge petrochemical complex, as well as a large, modern port. So establishing that defense was the overriding concern.

Proceedings: At the time, did you sense a strong enemy threat? The 7th MEB had a lot of combat power, but was still relatively small, compared to forces the Iraqis had in the region.

Boomer: It was small--compared to what the Iraqis already had in Kuwait and what they continued to bring down from Iraq, as they consolidated their position in Kuwait. From our perspective, it made sense for the enemy to attack--and we planned for that. We took the threat very seriously. I have been asked many times if we could have defended with the forces we had in place initially. My answer--then and now: "Yes, but it would have been one hell of a battle."

Proceedings: It appears that the MPS system really proved itself, filling the gap between the first airlifted trip-wire force and the arrival of the first heavy armored and mechanized units . . .

Boomer: Yes, MPS did fill the gap--without question. The 7th MEB was the first force on the ground that offered a credible defense against mechanized attack. The Army airborne troops who got there first were good, but were too lightly armed and supplied to stop tanks for very long. The quick arrival of the 7th MEB and the MPS squadron must have put Saddam Hussein on notice that our President was serious about defending Saudi Arabia, for openers.

The MPS system worked exactly as planned. John Hopkins would certainly tell you that his earlier MPS deployment exercises paid off in spades. In general, we knew exactly what to do, and things went smoothly. I wouldn't change any of it--except to have moved the Maritime Prepositioning Force sooner, which I think General [A. M.] Gray [the Commandant of the Marine Corps] had been advocating.

Proceedings: Jim Brabham said that the original defensive perimeter 30 miles out from Al Jubayl expanded to roughly 80 miles out, as more Marine units arrived. When, in this process, did you shift gears and begin to think about offensive action?

Boomer: As early as October, we really began to think and talk among ourselves--about going on the offense. I believe that any group of prudent commanders would have done the same thing. We didn't know for certain that

we were going into the attack, but we knew that was a possibility--so we began to do some preliminary planning for that possibility.

Proceedings: Was a rotation plan with 2d Marine Division units pretty well firmed up by then?

Boomer: Early on, we began looking at a key question: If we wound up with a long-term commitment, and had to rotate our troops, how would we do it? General Gray and I firmly agreed on a key point: If we did not assume the offensive and instead began a rotation system, we would rotate by units--not individuals, as we did in Vietnam. Meanwhile, while we were thinking about this, the 1st Marine Division units continued arriving and we kept pushing out the defensive perimeter. Rotation planning was one of several things going on at the time.

Proceedings: After the President's decision to present a credible offensive capability to Saddam Hussein, the 2d Marine Division--among others--began arriving, and I MEF started to evolve into a Corps-level command. Was major compositing or headquarters reshuffling required to make the transition?

Boomer: Not really. The I MEF headquarters continued to grow as the MEF got bigger, and the 3d Marine Aircraft Wing headquarters continued to grow as [Major] General [Royal] Moore absorbed the bulk of Marine Corps aviation. Any early concepts of an extremely lean headquarters went out the window; as we kept growing, we needed more staff support. At that point, "compositing" was really a melding of staffs and addition of specialists from all over the Marine Corps. The real compositing took place when the 7th MEB headquarters composited into the I MEF headquarters.

We probably should have renamed ourselves the 1st Marine Expeditionary Corps. General Gray mentioned that, but other things were happening at the time and I didn't push for it. He was right, though--"Corps" was more appropriate.

Proceedings: Speaking of "compositing"--it's been suggested that the term is inaccurate, that what actually occurs is a breaking down of staffs that are later mix-mastered into a larger staff at a higher echelon. This is difficult, even under ideal circumstances to say nothing of combat. Thinking back over your compositing experience, is there anything you would do differently?

Boomer: Yes. The Marine Corps has tended to treat compositing as something relatively simple to execute. That's not so. The human dynamics alone can create significant problems in the process. So we need to devote more organized thought and effort to the question of compositing.

For example: A deploying MEB's officers need to understand early that they will not remain a brigade forever; they will composite into a MEF staff. They need to look forward to their next jobs. Compositing is not a tearing down; in

reality, it is a building process--and that's the way they should look at it. Instead of grieving over the loss of their old identity, they should be actively seeking their new warfighting identity.

Frankly, the sooner the term "brigade" leaves our vocabulary, the happier I'll be. I like the concept of the MEF (Forward), instead. It makes people look ahead, not back. If they realize that they are part of the MEF that is coming in behind them, they may start thinking harder about how to help the MEF build toward combat readiness. A shift of identity is required. After Desert Storm, anyone who thinks that a MEF does not have a fighting headquarters hasn't been paying attention.

Proceedings: Once you started offensive planning in earnest, the breaching operation--later praised as truly classic by General Schwarzkopf--came to the fore. What were your original thoughts along that line, and when did you begin thinking in terms of a two-division breach, instead of a single-division breach followed by a passage of lines?

Boomer: We were impressed initially by the speed with which the Iraqis erected their barrier line across Kuwait. We probably drew some erroneous conclusions at the time, assuming the Iraqis to be stronger than they really were. As time passed, our intelligence began to show that--while significant, with a lot of land mines--the barriers were not as refined as we once had thought. They could have been a lot better. Each day, we would find more pieces to the puzzle until we became confident that we could get through--although we remained very concerned about the riskiness of the operation.

At the outset, we did not have all the heavy breaching and mine-clearing equipment we needed. I think that will always be the case for the Marine Corps, because that stuff is hard to haul around on a routine basis. When you are faced with a special breaching problem, you have to send for the right gear. In our case, [Brigadier General] Bob Tiebout and MCRDAC [Marine Corps Research, Development and Acquisition Command] did a great job of gathering heavy equipment from around the world and getting it to us.

You need a lot of equipment for a division-sized breach, because of the requirement for redundancy. You are going to lose some gear when you push through the minefields--and that, of course, is exactly what happened. When the 2d Marine Division arrived in country, we still had only enough breaching equipment for one division. But the gear continued to come in, until it became apparent that we would have enough for two divisions--so we changed plans.

Getting the equipment was just the first step. Our Marines had to train with it, and learn to use it well. The 1st Marine Division had been training for several months, working against obstacles we constructed that were noticeably tougher than the Iraqi barriers. The 2d Marine Division had the benefit of watching over the 1st Division's shoulder and telescoping their own breaching training, but they still didn't have much time to become truly proficient.

About two weeks before the ground attack began, however, [Major General] Bill Keys [commanding the 2d Marine Division] came to me and said, "I can do

this breach with my division." Up to that point, we had planned to have the 1st Division do the breach, then pass the 2d Division through to continue the attack into Kuwait. I was not comfortable with that original plan. Any passage of lines under combat conditions is a horribly complicated evolution, and the thought of a division-sized passage--with troops and vehicles strung out for miles, vulnerable to artillery fire--really made me uneasy. But until the equipment and training shortfalls were fixed, we had no other choice.

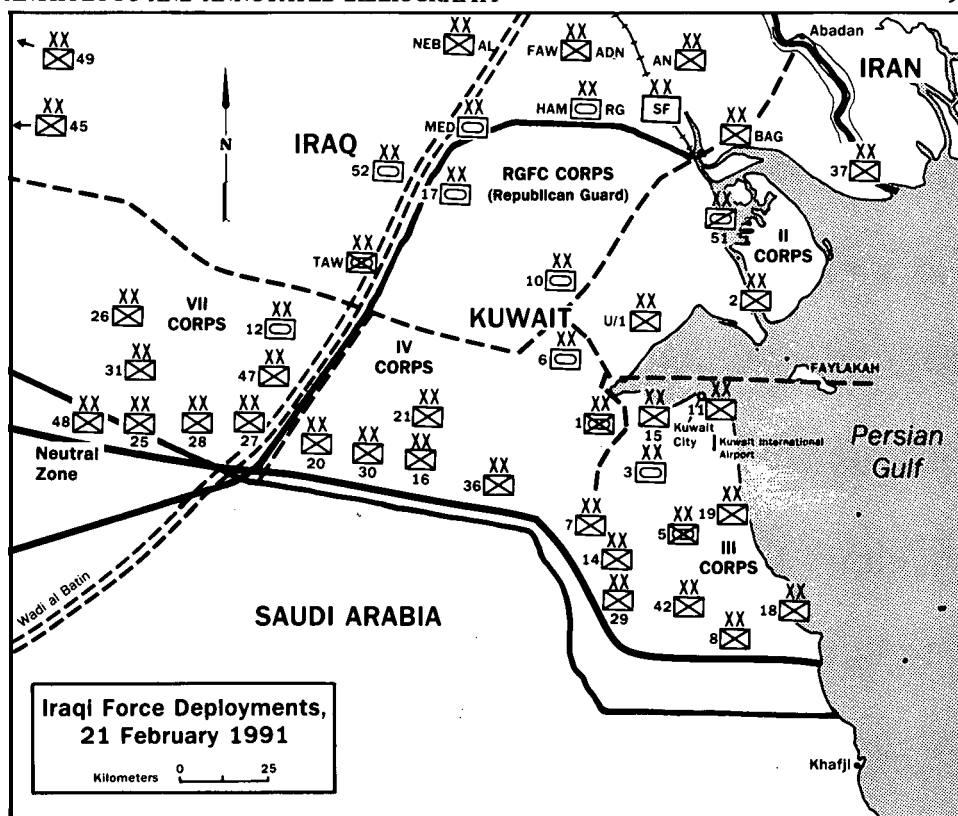
When Bill Keys said he could do his own breaching operation, I believed him. Almost 20 years earlier, Bill and I had fought side-by-side as *co-vans* [advisors to the South Vietnamese Marines] and I knew from that vivid experience that when he makes a commitment, he keeps it. So I asked Bill a few questions about his plan, then told him that I would go back to my headquarters and think about it overnight. In reality, I think I had already made up my mind by the time I got back to my command post. We would do the two-division breach. It would mean asking General Schwarzkopf for some extra time to move the 2d Division and our logistic support area farther to the west, but I felt the change in plan was a good one--and that's the way it turned out. I attribute that successful change in plan to Bill's positive thinking, his strong belief in his Marines, and his stepping forward to put everything on the line when it was most needed.

Proceedings: You've touched on something central here. In addition to you and Bill Keys, there were a number of former *co-vans* on the scene in key positions. Two characteristics of that combat advisory experience were the need to act independently--writing your own rulebook as you kept moving through new territory--and the need for shared trust and heavy reliance on the *co-vans* around you. It sounds as though history may have been repeating itself.

Boomer: The situation wasn't any different in the desert. The type of battle we were fighting was unique in the history of the Marine Corps, so we were continually breaking new ground. But I had commanders who were independent thinkers, people I could rely on. Whenever they told me they could do something, I knew them well enough to know that they could do it, even if it involved some risk. There were times when I would look at a battle plan and think, "I would do that a little differently." Then the second thought would roll in: "But the commander wants to do it this way." If you have faith in him, you leave his plan alone.

Proceedings: To ensure continuous support in the attack, you placed your logistical support areas far forward, at times miles ahead of the nearest friendly ground combat units. Did you ever have second thoughts about that, or was it just something that had to be done?

Boomer: I felt that it had to be done. I didn't have any second thoughts, but I didn't sleep well until we had consolidated our forces enough to remove some of the danger. And those logisticians were at risk-way forward of where they'd



normally be. But to sustain the attack with the speed and power it required, we needed to take some risks. I had a great deal of faith in the logisticians. I had been watching them for six or seven months by that time and had seen their self-confidence grow steadily, to the point where I could ask them to do things way beyond what doctrine said they were capable of doing. This may be cheerleading, but I firmly believe that Marines can do anything. If you give them at least some of the equipment they need and turn them loose, you'll always be amazed at what they can accomplish.

When I told Jim Brabham and Chuck [Brigadier General C. C.] Krulak [Commanding General, 2d Force Service Support Group] what I wanted to do, their only request was to get started on it as quickly as possible. What they created out there in the desert at the Al Khanjar support base was absolutely mindboggling. Even seeing it from the air, you could hardly believe they had done it--and in just two weeks! Earlier in the campaign, while we were still learning what we were capable of doing, I might have hesitated to ask for so much. But at that point I knew that I could ask for the near-impossible, and they would deliver.

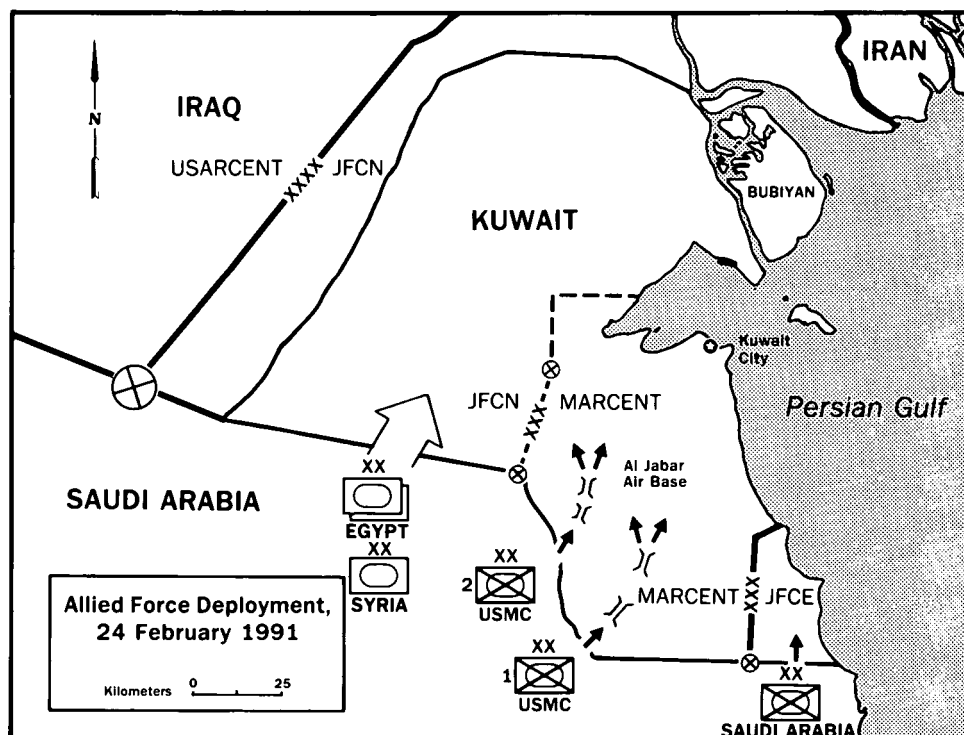
Proceedings: The possibility existed for a real slugging match, if the Iraqis resisted strongly or used chemical or biological weapons reportedly at their disposal. When did you first begin to think that they might not use their mass-casualty producing weapons?

Boomer: We went into the attack wearing chemical suits, and the four-day operation was about three-fourths over before I began to think that the Iraqis had probably missed their chance to cause heavy casualties to our side, and started to relax a little.

Proceedings: In light of the controversy over "managed news," you scored a coup by taking some journalists into the attack with your mobile command post. Overall, how did you think the war was covered?

Boomer: Taking the media with me was a spur-of-the-moment thought. I knew where my command post was going, and I thought to myself, "What a hell of a view someone is going to get of this war!" The less-experienced reporters want to cover a war from the rifle-company level--and there's a need for some of that. But the best way to get a picture of what's happening is to go with a senior command element that is operating far forward. Then you can get the sights and sounds along with a clearer idea of what is happening throughout the battlefield. I had no qualms about letting the media come along, and they could report on anything they saw.

Overall, I think we got a good shake with the media. We tried to treat them as fairly as we could and, generally speaking, they covered the Marines quite fairly. We had no problem with allowing reporters to talk to individual Marines. We thought that would result in good stories, because we have bright young people who express themselves well. There's always a chance that someone will get on camera and say something silly, but that's not confined to junior Marines and we regarded that as an acceptable risk. I think subsequent events proved us right on that.



Proceedings: You touched briefly on establishing Marine aviation in the region. In light of the joint air-tasking setup and the use of the Air Tasking Order [ATO], do you feel that Marine air got to support you in the way you'd hoped?

Boomer: Yes--there is no question about the quality or quantity of Marine air support. It worked exactly as we had planned, over the years. General Homer adhered to the Omnibus Agreement, with respect to allocation of sorties, and the ATO served a useful purpose and generally worked--although it's still a bit too large, too complicated, and too slow. We provided excess sorties to the Air Force, as promised, and the Air Force made no attempt to assume operational control of Marine aviation. The air support picture was not entirely problem-free, but all in all it worked pretty damned well.

Proceedings: In your new role at Quantico [Commanding General, Marine Corps Combat Development Command], you will be in a position to orchestrate the lessons-learned analysis effort and possibly correct some shortcomings. Two deficiencies that seem to come up during every war are tactical communications and intelligence . . .

Boomer: In the area of communications, we still are not equipped to conduct a joint campaign of that size. We have been giving some thought to the equipment we need to ensure interoperability, so we know what we need; it's just a matter of getting it. Frankly, it took some outside assistance to keep us plugged into the joint setup in the desert, so we need to fix that shortfall. That doesn't mean buying a billion dollars worth of gear, but selective buying of equipment, including the new SINCGARS [Single Channel Ground and Airborne Radio System] family of radios now coming on line.

The 1st Marine Division was particularly resourceful in using PLARS [Position Locating and Reporting System], which came into its own during this operation. We're just beginning to see its potential and must be innovative in its use. Of course, the GPS [Global Positioning System] is an absolute must, and we need to acquire more of that capability. If we get some money, we can make some rather dramatic improvements.

In terms of intelligence, we probably have put too many eggs in the satellite basket. In a campaign the size of Desert Storm, the satellites get overworked, and fail to meet the expectations of the commanders, especially at lower levels. We've led them to believe that they're going to get some marvelous stuff-and what they do get is pretty good-but it never quite measures up to their expectations, and they want to know why. We need to do some fine-tuning.

We desperately missed the tactical reconnaissance capability that the RF-4C, which left the inventory just as this campaign started, would have provided. It's got to be one of our top priorities to get that capability back into the Corps. We simply can't place total reliance on satellites for real-time surveillance, battle-damage assessment, and the like.

Proceedings: In closing, I'd like to give you a chance to answer any question I haven't asked.

Boomer: The campaign was successful, and I wouldn't do things much differently. The experience reinforced something that I have always believed in: Training must remain our first priority not only for Fleet Marine Force units, but at Marine Corps bases, as well. Quantico must take the lead in this.

The thing that made the big difference on the battlefield is that we had thousands and thousands of individual Marines constantly taking the initiative. The young lance corporal would take a look, see something 75 or 100 meters out in front that needed to be done, and go out and do it without being told. As I read through award citations from Desert Shield and Desert Storm, this theme reappears, time and time again. That aggressive spirit comes from being well-trained, and confident in your professional knowledge. It is young Marines with that aggressive spirit who take their divisions ahead. When you say that the division is moving forward, you are really saying that thousands of Marines are forging ahead as individuals and in small units. They are the real heroes of any battle. You can have the best battle plan in the world, but without the right people to execute that plan it is no more than a pipe dream. It's the well-trained Marine who turns that plan into reality.

Proceedings: Once again, it comes right back down to that young rifleman. . .

Boomer: Yes--and the young truck driver, and the young communicator, and the young engineer. Everyone has a piece of the action, and every piece is important.

Molly Moore, a reporter for The Washington Post, travelled with Lieutenant General Boomer's command group during the ground campaign. In the first article, she recounts the Marines' preparations for their offensive, particularly the intelligence gathering effort. The second article describes Task Force Troy, part of a comprehensive deception plan that also included the amphibious forces off the coast of Kuwait. The third article shows what it was like to be a part of the I MEF headquarters from the start of the ground war to its end one hundred hours later.

Porous Minefields, Dispirited Troops and a Dog named Pow

by Molly Moore

The Washington Post, 17 March 1991

Beginning the day after christmas, small U.S. reconnaissance teams sitting in observation towers along the Kuwait border watched as hapless camels and dogs were blown to pieces making their way through Iraqi minefields. The observers soon realized that the Iraqis never returned to the fields to replace the exploded mines.

The Marine recon teams also learned that the Iraqis had carefully marked paths through the killing fields with coils of concertina wire. "Once we found that, the only thing missing was the neon sign saying, 'Start here,'" said a U.S. military officer.

The porous minefields were just one example of an Iraqi military threat that never lived up to its advance billing. When the ground war finally came the Iraqis proved to be a smaller force--and a far weaker one--than U.S. commanders had initially expected.

The recon teams in the towers also began luring more and more Iraqi front-line troops across the border to surrender and learned that the Iraqi will to fight was far weaker than anyone had anticipated.

Sometime the Americans slipped notes urging surrender under the collar of a black-and-white mutt dubbed "Pow" which begged for scraps on both sides of the border. One day, Marines tied a nude magazine pinup to Pow's collar and sent him across the line. That night, they said, four Iraqi soldiers crossed the border and turned themselves in to the Americans.

U.S. intelligence sources significantly overestimated the size of Iraqi military forces, the complexity of their minefields and obstacle belts, and their ability to execute war, according to new details emerging from captured Iraqi combat documents, prisoner interviews and battlefield assessments by allied commanders.

Iraqi military logs seized from bunkers across the desert and debriefing of senior Iraqi officers taken prisoner during the war indicate that the Iraqi military had positioned no more than 350,000 troops in Kuwait and southern Iraq when the war began in mid-January--far fewer than the 540,000 troops cited repeatedly by Pentagon officials at the time.

The 540,000 figure was the full-strength level of the Iraqi military units that U.S. intelligence assumed were deployed in the Kuwaiti theater of operations. But many front-line Iraqi units were manned at only 50 percent of their full strength, and in the rear even the best artillery units were operating with little more than two-thirds of their troops, Iraqi documents show. Elite Republican Guard units in southern Iraq reportedly were the strongest, with approximately 80 percent of their force in place, officials said.

In addition, photographic intelligence from satellites, spy planes and remotely piloted aircraft exaggerated the severity of the minefields and obstacle belts that lay between the allied forces in Saudi Arabia and the frontline Iraqi troops across the border in Kuwait, making trenches and other barriers appear far more formidable than they were, according to military authorities. U.S. intelligence assessments based on the performance of Iraqi forces during their eight-year war with Iran also overestimated the ability of Iraqi troops to effectively use the sophisticated artillery, tanks and other weaponry in their arsenal, military officials learned.

"They built these guys to be a monster," said Maj.Gen. William Keys, commander of the U.S. Marines' 2nd Division. The burly general added that even the physical size of the Iraqi soldiers had been exaggerated in his mind. "I thought they were bigger people."

Operation Desert Storm's 100 hours of ground combat turned out to be two wars--a one-two punch by Marines who surged up the middle with what amounted to a right jab into the Iraqi midsection, and a left hook by U.S. Army and allied forces carrying out the most massive armored flanking attack since World War II that is the subject of part two of this series.

"They Can't Hit Me."

It was not until after Christmas, five months after Iraq invaded Kuwait, that the initial inflated assessment of the Iraqi military began to be punctured by the reconnaissance and Special Forces teams that had set up in grungy guard posts along the border and in cramped underground holes in Iraqi-held territory.

The border teams fired round after round into Kuwait in artillery probes and discovered that the Iraqis--for all their much-acclaimed artillery prowess--could not accurately pinpoint American positions to return fire. The Marine commander, Lt. Gen. Walter Boomer, recounts that after two weeks of these probes,

Col. Richard Barry, chief of the reconnaissance and surveillance teams, strode into Boomer's office and told his boss: "Those bastards have been shooting at me--they know where I am and they can't hit me. I don't think they're all that great."

With those reports, American field commanders began to suspect serious shortcomings in the Iraqi military. "As we began to accumulate evidence during those later weeks, we all began to sense certainly they were not up to strength," Boomer said. "But we weren't going to say anything about it."

Just as the U.S. intelligence agencies reported the massive buildup of Iraqi troops along the Kuwaiti border in late July but failed to predict Saddam Hussein's intent to invade the oil-rich emirate, these same institutions were unable to gauge the Iraqi soldiers' lack of commitment to fight a war for a cause they did not support. While captured maps and overlays reveal that intelligence agencies were extremely precise in their assessments of which Iraqi military units were deployed in the battlefield and where they were located, American intelligence badly misjudged the state of affairs within those units.

"Intelligence concentrated on things, people, equipment, numbers," said Lt. Col. Keith L. Holcomb, commander of a Marine team that penetrated into Iraqi territory to gather first-hand intelligence in the days before the ground war began. "War is a contest of wills. It's an intangible. They (the Iraqis) didn't have the will."

While many commanders now concede that the Iraqi military was only a fraction of the powerhouse it had been portrayed to be, they contend that the early assessments contributed significantly to a battle plan that allowed allied troops to overwhelm the Iraqi military with relatively small numbers of casualties on the allied side.

"The intelligence guys are paid to give you the worst case, within limits," said Boomer. "I think to some degree they did that, and that wasn't a failing on their part. In fact, if anything, it helped us."

Battlefield assessments and captured sand models showing in elaborate detail some Iraqi defensive positions indicate that the Iraqis had devised professional, well-planned defenses, in many cases not dissimilar to what American commanders said they would have established in the same areas.

Many defensive bunker complexes were masterfully designed; the main ammunition and supply depot for the Iraq army corps assigned to defend central Kuwait apparently went undetected by allied intelligence and remained well-stocked and intact until Marine forces overran it.

Vast stocks of ammunition--most of it produced in Jordan--were found with combat units throughout the battlefield, indicating that the Iraqis were equipped to fight far longer than they did. American forces also found among these stocks ammunition from the Soviet Union, China, Germany and the United States.

"Desertions Really Hurt Them."

In contrast to the Iraqi front lines, the bunkers of troops stationed farther north and nearer Kuwait City were stuffed amply with sacks of potatoes and rice and other foodstuffs. One Marine said he entered an Iraqi bunker and saw a plump roast in a pan near a stove, indicating the cook fled minutes before he planned to start dinner. In some areas, entire prefabricated houses had been buried, complete with indoor toilets, showers, kitchens and potted plants.

Allied forces say they captured at least eight brigadier generals or colonels who commanded brigade-sized units. One general captured by Marine forces at his desert command post was impeccably dressed, with meticulously combed hair and clean fingernails. According to Marine Maj. Gen. Keys, who met with the officer: "He was living a lot better than I was."

Personnel logs discovered in dozens of Iraqi command bunkers show that up until a few weeks before the air war began, Iraqi commanders allowed their soldiers to take leaves to visit their families. Those same documents show that at least 20 percent of the troops never returned to their units.

"I think desertions really hurt them," said Col. Bill Steed, plans chief for the Marine operation. "They had some units way below 50 percent strength."

As allied aircraft began pounding Iraqi military positions in January, Iraqi commanders formed execution squads and ordered them to shoot any troops caught trying to defect or sneak away from their units, according to military interviews with the captured Iraqi senior officers.

Meanwhile, from their body-sized holes in the sand miles inside Iraqi-held territory, U.S. reconnaissance teams began to discover details of the deterioration and lack of military commitment among Iraqi troops that had remained invisible to the sophisticated intelligence equipment in the skies above them.

On the night of Feb. 17, three six-member reconnaissance teams slipped across the Kuwait border. For the next 76 hours, with no sleep and little food, they crept through Iraqi defenses by night and hid in burlap covered sand holes by day. They communicated by radio to their rear base using cryptic one-word codes: "Cougar" meant the men were safe inside their holes, "alligator," in case they were discovered and came under attack. For the entire period, each man spoke only about a half-dozen words into his radio.

At one point, Sgt. John Smith, 32, heard Iraqi voices and coughs beneath his feet. He had walked across the top of a buried bunker.

On the second night, the teams reached the first Iraqi minefield and obstacle belt. In the cold, rainy darkness, four Iraqi soldiers began walking toward one of the teams. The Marines waited breathlessly, trapped between approaching enemy troops and the minefield. The Iraqis sauntered past, oblivious to the hidden intruders.

"It was nerve-wracking. The responsibility was awesome," said Capt. Rory Talkington, 33, who monitored their movements from the Saudi border. "The lives of a lot of people were hanging in the balance of what they learned."

Using night-vision goggles, the men picked their way through Iraqi minefields and began learning that the mines--although they were vast in number

and variety--were clumsily laid, most visible atop the ground. Before dawn, they each spent about two hours digging small trenches, called "hides," in the damp sand. From sunup to sundown, with burlap veil covering their bodies and faces, the men peered through binoculars at an Iraqi encampment just over 1,000 yards away.

"They were like civilians thrown into a military environment," Sgt. Troy G. Mitchell, 25, of Big Lake, Minn., said of the Iraqis he watched in the camp. "They milled around, we never saw them carrying rifles, they had no patrols, they had no reaction to the air power flying over them."

Cluster Bombs at Teatime.

Two days after the teams returned, American forces dispatched FA-18 Hornet attack planes to bomb the campsite, then sent armored vehicles in full daylight across the border to within 100 yards of the encampment, from where they demolished the site. "A lot of people got killed," said one reconnaissance team member.

At a U.S. military observation border post on the coast to the east, other reconnaissance teams observed seemingly oblivious Iraqi military officers, who gathered on the veranda of a deserted holiday hotel each afternoon to sip coffee and tea and watch the allied bombers flying overhead to targets farther north. On Jan. 20, the reconnaissance teams called in an air strike, which dropped a cluster bomb on the hotel patio, killing the officers during teatime.

Senior U.S. military leaders say they remain mystified as to why no chemical weapons stores have been found on the battlefield, after numerous captured soldiers and officers told them that the Iraqi forces were planned to use the weapons. While virtually all of the Iraqi forces were equipped with chemical protective masks and suits--some of which were American-made--many left their equipment in their bunkers when they surrendered. While allied forces found some yellow-painted artillery shells--yellow is the chemical-weapons warning color--they have been unable to confirm the presence of any chemical or biological weapons.

Allied commanders now believe that the number of Iraqi forces remaining in Kuwait and southern Iraq had diminished significantly by the time the ground war started as a result of almost six weeks of aerial bombing, as well as desertions. While some Iraqi officers told American military officials that the bombing had resulted in minimal deaths in their units, others reported massive deaths from the bombings.

U.S. military officials attribute the rapid capitulation of the Iraqi military to a combination of the brutal and relentless air attacks, the overwhelming ground assault from directions never expected by entrenched Iraqi troops and the Iraqi military's inability to adjust artillery and other weaponry and react quickly enough to repel the advancing land forces. The powerful military punches, combined with the pervasive lack of commitment to a cause Iraqi forces did not understand or support, led to surrenders of such massive proportions that they

overwhelmed allied efforts to collect and transport the prisoners from the earliest hours of the ground war.

While some forces, particularly those near the Iraqi army 3rd Corps headquarters outside Kuwait City, fought fiercely for short periods, they usually surrendered after allied troops destroyed the first tanks and artillery pieces.

In some cases, Iraqi officers, fearful that they would be killed crossing the battlefield to surrender, sent their enlisted troops ahead with orders to lead the Americans back to the officer bunkers so the leaders would then turn themselves in.

One captured senior Iraqi commander told Marine Col. Ron Richard, plans chief for the Marine 2nd Division, that the Iraqis referred to the Marines as "Angels of Death," originally believing that they would kill every soldier in their path, leaving no prisoners.

Even though some small-scale riots erupted at some of the overcrowded prisoner collection points when American forces first began distributing food and water, most U.S. troops said the Iraqi forces appeared happy that they could finally surrender.

Allies Used a Variation of Trojan Horse Ploy

by Molly Moore

The Washington Post, 17 March 1991

For two weeks before allied forces stormed into Kuwait and Iraq, a phantom Marine division stalked the border armed with loudspeakers blaring tank noises. It filled sand berms with dummy tanks and artillery guns. Helicopters landed daily, never delivering or picking up a passenger.

Military creators dubbed the team Task Force Troy--a subtler alternative to the original designation of Task Force Trojan Horse--460 troops trying to imitate the activity of 16,000 Marines who, in a major last-minute change of allied war plans, were actually racing more than 100 miles to the west for a new assault position.

"We wanted to avoid the appearance of the truth--that there was nobody home," said Brig. Gen. Tom Draude, who commanded the operation. "We wanted to create the illusion of force where there was none."

In the end, the team worried that it may have been too successful in its efforts. "It was touchy on G-Day. There wasn't very much in that area and we hoped no one counterattacked across the border," said Draude. "We didn't even have a TOW (anti-tank missile)."

It was to become only one of dozens of major risks that allied forces took in launching their free-flowing ground war against Iraqi forces, much of which was revised on the backs of cardboard cartons and etched in the sand as troops roared through Kuwait and Iraq at speeds far more rapid than commanders anticipated.

The entire Marine attack plan changed so dramatically in the days before the land war began Feb. 24 that one division did not receive its last pieces of mine-breaching equipment until the day before it crossed the border into Kuwait.

Allied forces moved so quickly through some parts of the battlefield that wide flanks were left vulnerable to attack from the estimated 80,000 Iraqi forces that American and Arab troops simply bypassed once inside Kuwait. The pace was so swift that some Marine commanders feared that front-line units would outrun the artillery batteries supporting them from behind.

Changed Plans on the Move

At the same time, the Marines pushed all of their ground forces through the breaches, leaving no reserves behind to fill gaps if the first troops encountered

major problems. An amphibious brigade intended to be used as a reserve could not be landed until well after the ground war began so as not to interfere with the war plan.

"We changed plans while on the move," said Col. Ron Richard, plans chief for the 2nd Marine Division. "We were mapping things out in the sand." His counterpart in the 1st Marine Division, Lt.Col. Jerry Humble, said commanders sketched the final plan for the takeover of Kuwait International Airport on the back of a C-ration carton just before troops began surrounding the field.

"This was not the old classic frontal assault," said 1st Marine Division commander, Maj. Gen. James M. "Mike" Myatt. "We wanted to create chaos for them. If we were there to destroy every artillery piece and every soldier, we'd still be there."

In the four months after the Bush administration ordered the military to begin planning for an attack against Iraqi forces, the Marine Corps changed its war plan five times, shifting from one end of the Kuwaiti border to the other as Iraqi forces changed their own defensive concentrations.

"I had the general officers in once a week for months and we'd sit down and war-game it among ourselves," said Lt.Gen. Walt Boomer, three-star commander of the Marine forces. "Everybody had a favorite plan, an area they favored, but by the time we finished there was general consensus, 'Yeah, this was the right place to go.'"

But barely two weeks before the ground war began, Boomer agreed to the most dramatic change of all. At the urging of 2nd Marine Division commander Maj.Gen. William M. Keys, he decided to send the two Marine divisions through separate breaches in the minefields, rather than one behind the other through the same gap.

Again, the plan meant major risks. The 2nd Division, based at Camp Lejeune, N.C., had less desert training experience than the California-based 1st Division, had been in Saudi Arabia about half as long as its sister division, and still had not received all of its mine-breaching equipment.

"The 2nd Division had to gear up, they didn't have as much time," said Boomer. "But he (Keys) assured me they were ready to do it. You have to trust your commanders' judgment. That's what we're paying them for."

Keys, who like many of the Desert Storm commanders had earned a healthy respect for the ferocity of minefields in Vietnam, said he was concerned that his men could become trapped in Iraqi-constructed obstacle belts. He worried that they could be pounded by artillery fire before they could reach the other side if they were forced to wait in line behind another division.

As both Army and Marine forces finished massive shifts westward across the desert, ground commanders asked allied war chief Gen. H. Norman Schwarzkopf for three additional days of aerial bombings, pushing back the planned start of the ground campaign until 4 a.m. Feb. 24.

Three days before allied forces punched through Iraqi minefields, a light armored infantry division pushed into Kuwait near the western point along the Saudi-Kuwaiti border that marks the shortest distance between Saudi Arabia and Kuwait City, in an effort to trick Iraqi forces into believing the assault would

come from that location. The Marine advance intentionally halted only a few miles into Kuwait.

Captured Iraqi officers later told American authorities that the ruse worked and that Iraqi troops were caught off guard on the night of Feb. 24 because they believed they had suppressed the allied incursion three nights earlier.

For Marine forces, the three-day blitzkrieg across the Iraqi minefields and the plains of burning tanks in the Kuwaiti desert resulted in extraordinarily few deaths--six during the war itself, two of which are believed to have been caused by accidents rather than hostile fire.

Despite the few casualties and the relative tactical ease of suppressing Iraqi forces, "there was a lot more fighting than people realized," according to Col. Larry Livingston, commander of the 6th Marine Regiment which spearheaded the minefield breach for the 2nd Division.

This was a war of nagging artillery fire and short, intense bursts of combat, rather than a campaign of prolonged battles and sustained counterattacks.

History will record firefights in obscure places such as the Burgan oil field, where Iraqi forces hid in clouds of smoke from burning wellheads, and an agricultural station which served as an Iraqi headquarters area and was dubbed the "Ice Cube Trays" because of its appearance from the air.

But the brief war was not fought without heroics. Just minutes after starting through the western minefield breach, Livingston's regiment lost four mine plows and 14 men were injured. When one line charge, which was supposed to blast a trail through one portion of the minefield, failed to detonate, one young Marine raced into the minefield twice in an effort to recharge the device. "Everybody knew we had to bust through," said Livingston.

The 2nd Division faced the toughest minefields inside the Kuwaiti border, obstacle belts laced through high-pressure oil pipelines between two industrial collection points. One of its three regiments suffered so many mechanical problems with equipment and imposing hurdles in the heavily seeded field, that it did not finish breaching the obstacle belt until the second day of the war operation.

As the troops emerged from the obstacle fields, there were constant reports of snowstorm, snowstorm," over the radio--codeword for incoming artillery. Livingston said that at one point, his men were "getting hammered" because they had remained exposed to an opposing Iraqi force too long.

"Budweiser" and "Hurricane"

During one encounter, a young tanker became so excited about shooting his first Iraqi T-72 tank that he failed to notice he had not destroyed the weapon. As columns of American tanks charged past what they believed to be a disabled T-72, a rear tank crew squinting through the oily black smoke that blanketed the battlefield spotted its turret creaking in the direction of the oncoming allied troops and fired in time to kill it.

On the eastern side of the battlefield, the 1st Marine Division was facing its own sporadic surprise attacks. One Iraqi tank unit it had bypassed came

rumbling out of a fiery oil field and opened fire on advancing Marines. Later, a Marine captain who had been shot in the jaw during the attack, rendering him unable to speak, was mistakenly grouped with wounded Iraqi troops because he was unrecognizable under the sand and oil that had turned his skin and uniform a smoky black.

Allied forces, trying to limit radio commands because of Iraqi success at intercepting transmissions, charted their progress in one-word codes. As the 1st Division slid into position across the Kuwaiti border the first night, it used name-brand beers to announce its positions: "Budweiser" indicated the artillery units were in place with their tubes up; "Miller" told commanders that Task Force Taro was beginning its infiltration; "Falstaff" meant Task Force Papa Bear was in attack position.

As the troops moved through the minefield, the codes switched to weather themes: "Hurricane" meant Task Force Ripper was breaching. Then came a series of football words as they moved through the second obstacle lines: "Snap" would have signaled that Task Force X-Ray had begun a helicopter assault, and "Split End" meant Task Force Grizzly was in position on the east flank. Moving out of the obstacle belts, the codes shifted to card game analogies: "Royal Flush" was the announcement that one military objective had been isolated, while "Aces" and "Queen" signified that task forces were rearming and refueling.

All the while, Marines and the Army's Tiger Brigade, which was assigned to the same sector, were constantly attempting to track the flow of Arab forces on both the left and right flanks of the two Marine divisions. Frequently the slower, more methodical Saudi and Arab forces were further behind the American lineup, leaving large expanses of Marine flank uncovered. Some Saudi units had not even practiced mine breaching before the ground war began, according to U.S. military officials.

One of the most dreaded missions of the war was aborted at the last minute. Bush ordered the cease-fire before the 2nd Marine Division could carry out its scheduled task of providing support for Kuwaiti resistance efforts in clearing the immigrant town of Jahra, west of Kuwait City. In the operation, Marines would have provided contingency support for dangerous house-to-house sweeps. Asked how U.S. forces could wage such a high-intensity war with so few allied casualties, Brig. Gen. Charles Krulak said: "It was a miracle."

Storming the Desert with the Generals

by Molly Moore

The Washington Post, 14 April 1991

Three days before the Desert Storm ground campaign began, the Marines' top general in the Persian Gulf invited me into his command post for what turned out to be the rest of the war.

Lt.Gen. Walter Boomer's official letter of invitation promised no "major scoops or revealing insights" and warned me to "expect some dead periods when there will be little to report."

There were no dead periods. Life with the top brass of the Marines was an unforgettable experience. In the postwar euphoria of what has been hailed as a quick and easy victory, it may be forgotten that there was nothing quick or easy about this operation for the troops who fought it or the commanders who directed it.

The charts at the daily Riyadh press briefings made the victory appear almost effortless, a smoothly run war of maneuver and speed against a clumsy and overmatched enemy. But the battlefield reality was vastly different, a string of intense episodes punctuated by split-second decisions and last-minute revisions that the generals sometimes mapped on the backs of cardboard boxes as their troops swept through the desert.

The cameras have shown smiling troopers waving triumphantly as Desert Storm roared onward. But the videotaped scenes simply do not reveal the raw emotion that bound the troops and their commanders together--a thick mix of pride, camaraderie and elation seldom encountered in civilian life.

I joined the generals the night before the ground assault began, reaching Boomer's compound after a seven-hour journey in the back of a military van from a base deep in the rear. The Marine headquarters was a collection of tents buried within sand berms, fighting vehicles and supply transports just a few miles from the Iraqi lines.

From Boomer down to the greenest grunt, everyone faced--and had to face down--the fear of dying. That fear became real in the days leading up to the ground war, when the Marines began swallowing fistfuls of pills--including nauseating nerve-gas antidotes and anthrax inhibitor--to ward off possible chemical or biological warfare by the Iraqis. Later, when the troops charged into the Iraqi minefields in stiff chemical suits, they did so thinking they might die, twitching like cockroaches, in the fine mist of a chemical attack.

Journalists who had spent months interviewing uniformed men and women in the desert, sharing their snapshots from home, their mothers' homemade cookies and their most private fears about death and dying, dreaded the prospect of finding the names of those same men and women on long casualty lists.

Nine hours before the Feb. 24 H-Hour that officially began the ground assault, the canvas tent called the "Chapel of the Breach" at the desert command post bulged with an overflow crowd that spilled onto the sands outside the open tent flap. When the service ended, there was a last-minute run on the over-sized wooden rosaries that hung on a nail at the rear of the makeshift church.

Across the camp, in the large tent that housed the combat operations center, commanders who seemed to have aged years in the months since President Bush ordered them to prepare for war solemnly awaited the long-dreaded breach of the minefields that would begin at dawn. Most of them entered this war shadowed by the ghosts of Vietnam, recognizing that the public perception back home of political or military failure in the Persian Gulf would be disastrous for the U.S. military.

What came through that night, however, was something much deeper-genuine anguish over the prospects of high casualties among their troops.

Those troops had come from the Bart Simpson-M.C. Hammer rap music generation, the first all-volunteer American force to fill the front lines of combat. They had arrived in the Arabian desert with their hand-held Nintendo games, VCRs and color television sets hot-wired to tactical military antennae. They left with the life-altering experiences that even a 100-hour battle imprints on the soul.

Boomer directed the assault into Kuwait from a perch atop a mobile communications vehicle stuffed with radios. Life was a sequence of stop-and-start desert travels as the headquarters rolled north toward Kuwait City. The general spent almost every waking moment on the radio telephones, listening, commenting, directing. When he wasn't on a circuit to someone, he was huddled with his staff or other generals.

For weeks before the assault, the ground forces had seen Desert Storm as something threatening but distant--pink-tinted jet streams that criss-crossed the evening skies as warplanes streaked overhead toward Kuwait and Iraq, booms and rumbles of cluster bombs and daisy-cutters slamming unseen into the sand beyond the horizon.

But within minutes of crossing the minefields, the Marines and the war came face-to-face. The bleak landscape lit up with ghastly fireworks as U.S. missiles and shells found Iraqi tanks and artillery, turning them into funeral pyres. Choppers thumped overhead, spitting missiles at Iraqis just beyond the next knoll. Artillery fire flashed and boomed across the sands from every direction.

At one point, Boomer's party of about 48 Marines and one reporter watched a tank assault at one point on the horizon and a Cobra helicopter attack at another.

"Look at those black dots on the side of the hill," ordered a voice on a tactical radio during one skirmish. "If they're tanks or artillery--take them out."

The response crackled: "They're artillery."

"Take them out."

The laconic command unleashed a furious assault that scorched the desert black and silenced the enemy guns.

The roving headquarters sometimes got closer to the middle of things than anyone anticipated. At one point, shells from dug-in Iraqi guns were screaming overhead from somewhere in front of us and answering American fire was ripping overhead in the other direction. In the middle--where we were--there were prayers that rounds from neither side would fall short.

Although Boomer's cavalcade stayed on the move, the threat from mines kept the drivers careful to remain inside the same rutted tread or tire tracks that had been traversed earlier by hundreds of tanks and trucks. Straying even a few inches off the traveled path could mean death from an undetected mine.

Periodically, commanding generals rolled their vehicles to desert rendezvous points, consulting over maps and paper cups of luke-warm coffee. They traded war plans as calmly as they traded throat lozenges to beat back the hacking coughs and sore throats brought on by the short, frigid nights and long, stressful days.

They tramped across the sand from mobile communications vans to tent command centers to satellite linkups--listening, planning, coordinating, fretting. Clutching folded maps, they summoned up radio voices at distant command posts and war rooms with code names like Gray Oak, Denver Foxtrot, Pitbull, Top Gun and Cobra. When communications links failed, they fumed and cursed and sent young enlisted men scurrying in all directions. In between strategy sessions and radio conversations, they paced the sand, pondering and worrying.

Boomer's closest adviser in the field was his operations chief, or G-3 in military parlance: Col. Bill Steed, a Mississippian with a deep drawl and an unflappable demeanor. Boomer consulted often with Maj. Gen. William Keys, commander of the 2nd Marine Division, whose own G-3 was a man with a different Southern accent, Col. Ron Richard, a Cajun from Basile, La. Periodically, Kuwaiti Col. Mahmaud Boushahri advised the generals of potential hiding places and ambush points for the Iraqi military around Kuwait City. He accurately predicted that Iraqis could leap out of burning oil fields and hide artillery and tanks behind ridge lines west of the city.

The headquarters' drivers and radiomen and other enlisted troops were a study in frustration: Here they were, confined to a command convoy and forced to watch others pull the lanyards on the howitzers and fire the tank cannons on nearby horizons. While generals and colonels directed the war from a few yards away, the enlisted men slumped against their armored vehicles and Humvees, or whiled away the time trying to raise the BBC on shortwave radios in hopes of gleaning details about the war that was going on all around them.

When it became apparent the Iraqis would rather give up than fight, the persistent fear of unexpected disasters over the next sandy knoll prevented the commanders from sharing much of the early exhilaration of the combat troops. The life and death demands of fast-paced war brought a sharpness and finality to their decisions that seemed alien to the peacetime military bureaucracy of the Pentagon. The mood of the brass remained as grim as the backdrop of the

battlefield, where flaming oil from sabotaged wellheads shot skyward across the horizon and a thick gray cloud spit flecks of black oil on everything below.

On the second night of the war, the command convoy was suddenly surrounded by armed Iraqis. Confused radiomen screamed warnings about "dismounted infantry!" Some Iraqis appeared ready to surrender, others remained prone behind sand berms with rifles pointed toward the convoy. It turned out that the Iraqis were indeed surrendering, but the convoy was immobilized for three hours while the Marines rounded them up.

The night was so black that when the driver of one Humvee stepped out the door to relieve himself, a Marine with the same plan from another vehicle bumped into him.

"I was so scared, I nearly shot him," the shaken driver said when he returned to the Humvee.

When the convoy finally began to move again, the inky darkness created by the thick layers of oily smoke forced traffic directors carrying faint red flashlights to physically walk the hulking armored vehicles and trucks through fields of mines and unexploded bombs.

The movements became so treacherous that the convoy finally pulled into a small campsite that had been cleared of explosives. As armed Humvees formed a safety circle around a small patch of sand, their drivers warned us not to step beyond the ring because of the mine dangers, Marines began setting up a makeshift radio command center. Forbidden to use any light except dim red filters because of fear of discovery by enemy troops, the young Marines worked by feel in virtual blindness.

During the brief nightly respites from the race through Kuwait, the troops slept beneath their Humvees or inside their armored personnel carriers. For the most part they lived on adrenaline and MREs, the packaged military rations called Meals Ready to Eat. MREs developed a major following among the desert's rats and mice. During a stay at one Marine supply center near the Kuwaiti border before the ground war, half a dozen large rats invaded our tent nightly, waking us as they gnawed through the brown plastic pouches and nibbled their way through the contents.

Months of desert living had taught troops to adapt to austerity. With several weeks between showers, many men shaved their heads bald to avoid dirty hair; the women brushed baby powder through their locks to absorb the oils of gritty, showerless days. I never did--I never had any baby powder. I just wore my camouflage hat. The companies that produce baby-wipes must have prospered during the war--no commanding general or grunt left for a desert tent or fox-hole without the moist towelettes that became invaluable in a waterrationed environment.

In three days of rolling through the Kuwaiti battlefields, there was something strangely missing--bodies, casualties of war. Eventually hundreds of Iraqi bodies would be found half buried in bunkers and draped over burning vehicles, but during the fast-paced campaign, entire areas of the battlefield appeared devoid of death.

There were, however, grim reminders of the Iraqi troops who once manned the now-burning tanks and artillery: combat boots sitting beside foxholes, pots with halfeaten portions of rice perched atop charred rocks and twigs, makeshift tables set for the next meal.

Across the desert, Iraqi troops emerged from hundreds of bunkers waving white undershirts and white toilet paper streamers in surrender. They flocked toward the Americans, kissing the troops and wailing thanks.

One young Marine corporal drove a truckload of prisoners into a rear American base camp after a long trip from the front lines and flagged down his commander, Brig. Gen. Charles Krulak. "Watch this, general," he ordered. The Marine then turned to the assembled captives and raised his voice: "Old McDonald had a farm...." He paused and pointed to the Iraqi soldiers. They responded in unison, "E-i, E-i, O."

On the battlefield one afternoon, Boomer peered through binoculars at an endless line of humanity stretching across the desert horizon. Unable to contain his curiosity, he ordered his driver to head for the spot.

Military police had been so overwhelmed by prisoners of war that they had fashioned a makeshift prison camp from coils of concertina wire and herded about 3,500 tired and hungry Iraqi soldiers into the corral.

As Boomer paced the perimeter of the encampment, trailed by bodyguards and a reporter, a buzz of whispers rose from the rows prisoners squatting on the sand. I asked a Kuwaiti officer accompanying the Americans to interpret the prisoners' comments. "They're saying, 'Look, there's a woman over there,'" he replied.

On what would become the final night of the ground war, after allied troops had encircled Kuwait City, Boomer was awakened by a frustrated voice outside his tent: "It's the [expletive] president. He's trying to reach the [expletive] CG [commanding general] and we can't get a connection!"

"As smart as these kids are," Boomer said later, sometime you'd think they know only one word."

When the war came to an abrupt halt after President Bush ordered a ceasefire that Wednesday morning (Feb. 27), a large percentage of the ground troops who swept through Kuwait and Iraq had seen little combat. Over the next few hours some expressed disappointment over the ease of the victory. But they also felt guilty for feeling that disappointment. In the same breath, they were relieved that few of their buddies had fallen in combat.

The commanders, after praising the plans, the weapons and the troops, then paused to reflect their awe at the relatively light number of American casualties. "I would like to tell you we're that good," said one commander. "But we're not. The only thing I can attribute it to is luck and lots of prayers."

When the first American troops, who had been stationed at desert outposts since August, reached the outskirts of Kuwait City early Wednesday morning after the initial ceasefire, they were almost incredulous. One young Marine peered out the window of his truck as it approached the city, "Hey, there's grass out there." A few minutes later he pointed to the horizon, "They even have trees here--I haven't seen a tree in months."

As the convoy rolled into Kuwait City and was surrounded by throngs of jubilant, tearful Kuwaitis, the same young Marine swiveled his head in all directions: "Look--they have women here and they don't wear veils!"

As Commanding General, 3d Marine Aircraft Wing, Lieutenant General Moore commanded all Marine aircraft assigned to I Marine Expeditionary Force. In this interview, he discusses the significant aspects of Marine Corps air operations during Desert Storm, including the effectiveness of air control and planning measures, the performance of various types of aircraft, and the role of Marine Aviation in intelligence collection.

Marine Air: There When Needed

interview with Lieutenant General Royal N. Moore, Jr., USMC

U.S. Naval Institute Proceedings, November 1991.

Proceedings: The Joint Force Air Component Commander (JFACC) concept has been controversial and dates at least to the single-manager concept in Vietnam. As Marine air built up over the months, how did the JFACC concept work? What are your opinions on the air tasking order (ATO)?

Moore: [Lieutenant] General Charles A. Horner [U.S. Air Force, the JFACC], Vice Admiral Stan Arthur [commanding naval forces], and General Boomer are reasonable individuals. When reasonable men come to a course of action, they can work out reasonable solutions. Yes, it wasn't always right with doctrine on either side, either green doctrine or blue doctrine, but we made it work. [See "Stop Quibbling: Win the War," *Proceedings*, December 1990, pages 38-45.]

The JFACC process of having one single manager has its limitations, as does every system. It does not respond well to a quick-action battlefield. If you're trying to build a war for the next 72 to 96 hours, you can probably build a pretty good war. But if you're trying to fight a fluid battlefield like we were on, then you need a system that can react.

The JFACC process can't do that if you're talking about command. If you're talking about general control or, more important, if you're talking about coordination, which is really what the commander-in-chief [CinC] wants, along the correct course of action and in accord with his guidance, then that's exactly what the process did out there in the battlefield. We coordinated the process so that General Horner knew where I was going, knew where the Navy was going, and obviously knew where he was going. The effort was focused where the CinC wanted it. When he wanted to change that effort, he would shift the weight, and we all responded.

We, in essence, had control of the air space over our Marines much as you would have a ground area of operations. We called them high-altitude reservation areas, and as we moved forward, we would uncover the air space over our Marines that we needed to influence the battle.

General [H. Norman] Schwarzkopf, as a ground officer, wanted to prepare the battlefield; this was very important in the evolution. He was not willing to let any of us go off and shoot down airplanes, or conduct deep strikes at the cost of preparing that battlefield in front of the Army, Marines, and Coalition forces. When it came down to that, General Schwarzkopf really directed all of us to start concentrating on different areas, and we responded.

The ATO process is very cumbersome. That document was upwards of 300 pages. What I did to make it work for us--and I think the Navy did the same thing--was write an ATO that would give me enough flexibility to do the job. So I might write an enormous amount of sorties, and every seven minutes I'd have airplanes up doing various things--and I might cancel an awful lot of those. This way I didn't have to play around with the process while I was waiting to hit a target. I kind of gamed the ATO process. The ATO we used, for example, two days prior to G-Day, would be good today. I would tailor it at the Tactical Air Command Center by saying, "I'm not sending that aircraft. Cancel that one. Cancel that one." This eliminated any requirement to add on a bunch of sorties.

I tried to make the ATO process work--because it will not respond to the type of campaign we had in Southwest Asia. It is a coordination process and we needed that. That we had no blue-on-blue air engagements and no midair collisions attest to the coordination aspect of the process.

Proceedings: How big a liaison team did you have in Riyadh?

Moore: We had a very heavy one, including Colonel Joe Robben, an air command and control officer. Of course we had Major General Jed Pearson there all the time, really as Marine Central Command liaison; and then Major General Norm Ehlert came in after him. We had a very heavy target cell of four or five people as we worked through the original concept of Desert Storm. We worked all these issues, and the Air Force, in turn, gave us an officer to work just the ATO process; he was very valuable to us. Major Robert Sands did a super job for us. He is an A-10 pilot and his father was a Marine. He stayed with us the whole six months. He knew the process and how to do what we needed to do to influence the process, and it worked.

Joint operations like Desert Storm badly needed our Marine air command and control. We told them that they would need us, that they couldn't do everything, that machines like the AWACS and Aegis cruisers would get saturated, that we all needed to play, and that proved to be true. I think they understood it. Our system is the only way that they can really get data link and pure information from the ships into the Air Force system and vice versa. That proved very beneficial.

Proceedings: The Navy was not able to receive the ATO electronically. Maybe it was a little easier for Marines ashore, but could you receive the ATO electronically? How did you get the ATO to the various air groups?

Moore: We had computers but old ones, and it was a very slow and cumbersome process. I've got to tell you, once I sent my ATO in--and we talked to Riyadh all the time and said, "You have any troubles with it? We're executing it."--we didn't worry about it from there on, because we knew we had enough flexibility in that system that we could do anything we wanted. We paid attention to the special instructions at the bottom of the ATO, because we coordinated the whole thing. It was a fait accompli evolution.

The Navy's trouble was that they tried to do it very honestly and write just what they were going to fly. They did that for a few days and then they started to use the same process we did. Also, their trouble was getting that passed out to the individual carriers, all the Aegis cruisers, all the rest of the support ships. When you try to do that electronically, it really becomes a burden on the communications system. They, more than anybody else, would have to build a system that gamed the ATO process, put enough flexibility in so the commander could do whatever he wanted to, and just read the special instructions. That's the way they did it at the tail end.

Proceedings: Were all U.S. Marine Corps air assets covered by the ATO--Harriers on the hot pad or attack helicopters? Or did you handle all of that separately?

Moore: All the fixed-wing guys were in the ATO, but we wrote it more in a generic fashion so that a particular squadron didn't know that the two F/A-18s at 0200 were theirs. We wrote them in as a generic evolution. As you get down to the helos, you've got a real saturation problem on your hands. We, in essence, just let the Air Force know what was going on. You just have too many sorties going on. Marine air flew, for the 44 days or so, 18,000 sorties. We had only about 500 airplanes. We flew 9,000 of those sorties in the last five days. When you start to put those kinds of numbers in the system, you just clog it up.

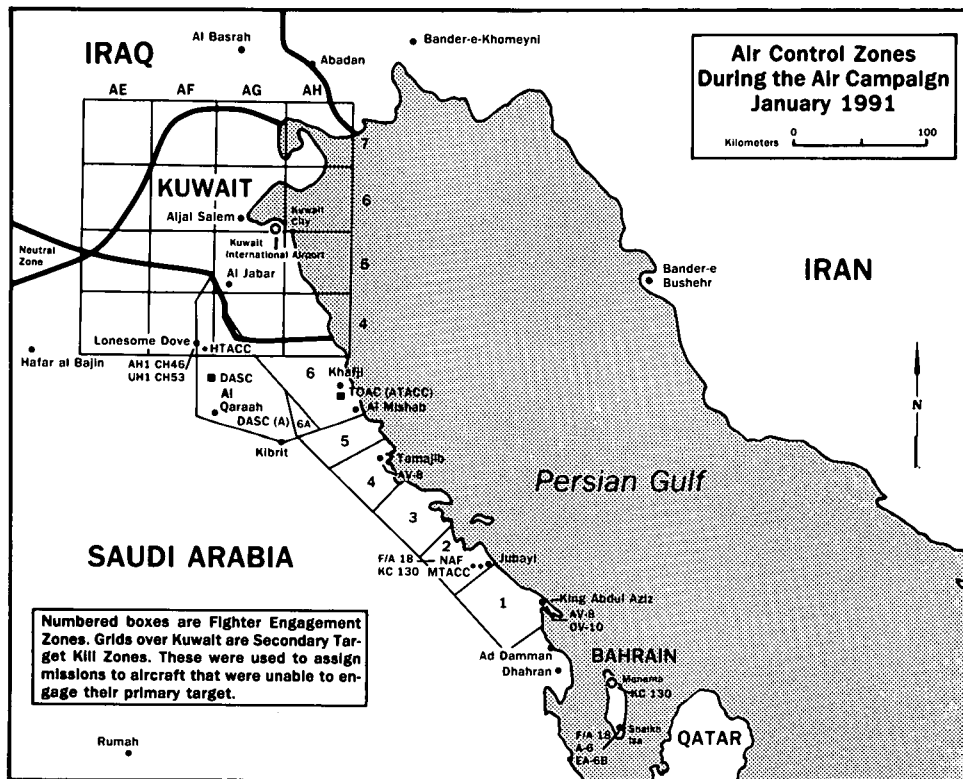
Proceedings: You started out on 16 January with interdiction. When you shifted back closer to the front lines and the ground attack actually began, were the sorties available to the Marine Corps commanders?

Moore: Yes. The original Desert Storm plan included 50% of the F/A-18s, all the A-6s, and only two KC-130 tankers. So that left me--and General Schwarzkopf did this himself--the remaining F/A-18s, all the Harriers, all the attack helos, and--on the Air Force side--airplanes like A-10s, some of the F-16s, and some of the others I think General Horner put in his pocket. The Army provided attack helos. We knew, even though we had a fourphase evolution, that Phase I (the strategic phase), Phase II (the SEAD--suppression of enemy air defenses), and Phase III (the preparation of the battlefield) would all probably go at the same time. That's exactly what happened. Even though we were running strikes to Baghdad, the enemy didn't sit there without shooting artillery, and a lot of the other stuff. So, in essence,

Phases I, II, and III kicked off within two hours of one another. SEAD never stops.

Right at D-Day in mid-January, the Harriers started to fly, two hours after the big strike started. The Iraqis started to shoot artillery, to move around the battlefield, and we started to hit them. So that process stayed tight, and we really had a solid script for the first 36 hours. After that, we started weaning out assets, and pretty soon, with General Schwarzkopf's acknowledgement, about 15 days prior to the ground campaign, we were into battlefield preparation. At that time, if a target didn't do something for the I MEF and battlefield preparation, we weren't going. The Air Force understood that.

Of course, they were being pressed by General Schwarzkopf, who said, in effect, "Start preparing the land in front of those Army corps. Start pulling back out of these great MiG sweeps and deep air war and start preparing the battlefield." That was General Schwarzkopf's guidance. It fell right in with ours, and by that 15-day period, we had weaned ourselves out of any deep strike support. When I say weaned ourselves, we made some tradeoffs. General Horner would come to me and say, "Hey, Royal, if you can hit these rail yards or you can hit this power line, I will give you 75 A-10 sorties as a tradeoff. If you can give me one more strike group late in the afternoon or in the morning, I will give you these F-16s or these F-15Es." So there were tradeoffs back and forth as we worked through the air war.



Proceedings: How good was your intelligence support during the Gulf War?

Moore: No commander is happy with the intelligence support he receives, you can never get enough. Having said that, the intelligence folks did a fair job. There are some major difficulties that we have within the Marine Corps with regard to intelligence support, that we're taking a very hard look at now.

We also need to take a look at our national assets--the Central Intelligence Agency, the Defense Intelligence Agency--to see that information gets to the individual commanders. Schwarzkopf told Congress that he was very unhappy with the intelligence support that he received.

Let me cite an example. Two days prior to the beginning of the actual ground campaign, we finally got pictures of the actual minefield breaching sites brought to us by two officers--one from the 1st [Marine] Division, one from the 2d [Marine] Division--we had sent to Washington. That ought to tell you that the flow of information just wasn't there. I am sure that CinCPac [Commander in Chief, Pacific], CinCLant [Commander in Chief, Atlantic], and other commands had a lot of great photos, but they weren't getting to us.

One of the major shortfalls was the photo-type intelligence and the verbiage that accompanied them. It never got any better.

We also had elaborate prototype systems like the Joint Surveillance and Target Attack Radar System [JSTARS]. The idea offers potential, but we could not make any tactical decisions based on its output. It was in early development during the Gulf War and had an enormous slewing problem. Frequently, when we sent an aircraft to verify possible targets detected by JSTARS, the targets turned out to be Coalition forces on the move. We have a lot of work to do in intelligence and the flow of intelligence before we step off in another operation like this.

Proceedings: What provided your most reliable intelligence?

Moore: Our own aircraft supplied us with our best intelligence. We had 177 airplanes at Shaik Isa, both Air Force and Marines, and some Air National Guard RF-4Cs. I retired the last Marine Corps RF-4B two days before I left California in August 1991. We looked very hard at bringing those RF-4Bs back; we just could not do it. But we had the same old problem of getting that information to the squadrons. It had to go up through the Central Command and back down through it. By the time it did that, it was no longer valuable.

Proceedings: We have heard from some infantrymen that they depended on the OV-10, particularly the OV-10D with the forward-looking infrared [FLIR] system out there at night to look out for them. Could you comment on that?

Moore: The grunts always love the OV-10, but they're picking the wrong airplane. The intelligence they were getting was from the F/A-18D that operated deep into the battlefield. It is true I kept the OV-10s up there, but I did this primarily so that any ground commander who got into trouble could use

them to relay back to me so we could help. They got very little intelligence from the OV-10. As you know, we brought VMFA(AW)-121 into theater, to do nothing but forward air controller/tactical air coordinator airborne (FACA/-TACA) missions. No night attack, no other fancy stuff, just FACA/TACA. [See "F/A-18Ds Go to War," Proceedings, August 1991, page 40.] (reprinted in this anthology.)

During the ground campaign, late in the afternoon, an F/A-18D or two would come into the fray with no other mission than to look at the battlefield. They would go on in, run in the 2d Division area, run in the 1st Division area, look at the Saudis' area, look at all of Kuwait, come back, tank, go back, and report to us. They had a direct line to the Tactical Air Command Center. The crews knew that Colonel Bill Forney, Colonel Charlie Carr, or I would be at the desk, and they could tell us what was happening on the battlefield. We would then catapult them back in--on a couple of occasions with night-vision goggles--to look at the battlefield. After that report--a quick kind of hot look in the air to us--they passed many other hot looks through the system. When they landed, the crews were driven to the Marine Aircraft Group-11 operations center where they picked up the phone and talked directly to one of us with a detailed report.

We had brought some very smart Army intelligence guys from Fort Huachuca [Arizona] who prepared the battlefield. We knew if a particular [Iraqi] tank unit started to move, that it had to come through a particular choke point. The area in Kuwait was very, very small for a pilot, and all our guys, by this time, after 38 days of combat, knew that area cold. They had names for everything, so they could pick up the phone and say: "We've got 25 tanks just west-southwest, five clicks [kilometers] from the ice tray."

I would take that information and, every four hours, contact all the commanders--Lieutenant General Boomer, the 1st and 2d Division commanders, the logistics commanders--via satellite communications. I would say to them for example that, on a pure time-distance factor, "There is nobody that can get to you within a certain period of time." That was of enormous value to those ground commanders. That was the only thing that they were getting, and it allowed them to bring artillery through, to bring regiments through the breaching areas, to span them out, to rearm, resupply, all those things that they needed to do in the battlefield.

Proceedings: What about remotely piloted vehicles [RPVS] such as Exdrone or Pioneer?

Moore: We used RPVS. Without the RF-4s and a lot of good information coming from the top, we used everything we had.

We used the Pioneer system extensively. We had all the Pioneer companies out there. [EDITOR'S NOTE: These systems are assigned to the Marine divisions, not the aircraft wings.] Aviation had walked away from those guys because we had the RF4Bs. We walked back because we found that we needed the RPVS. General Boomer and Major General Mike Myatt and Major General

Bill Keys allowed me to have those vehicles for set periods of time so that I could run them out there purely for an air look at the battlefield. For example, the RPVs caught some SA-6s coming down the road to Jabar and we knocked them stiff.

We had a couple of slewing problems that we didn't pick up right away, but we got those corrected.

Proceedings: Were these Pioneers, specifically, or Pointers?

Moore: These were primarily Pioneers.

Proceedings: The RPVs are, of course, division assets. Do you think that's the best place for them?

Moore: They really became more Marine Expeditionary Force [MEF] assets than division, because we had two divisions out there. But they were too much oriented toward the ground. We found that we have to share the information, and depending on the flow of the battlefield, it may be 80% in support of the air and 20% in support of the ground, and then as the ground combat starts to go, it may be 90% in support of the ground and 10% in support of the air. You have to weigh where you are on the battlefield, and we did that fairly well.

Proceedings: How about battle damage assessment (BDA)?

Moore: Getting BDA out of pilots is very, very tough. We put enormous pressure on the crews: "You go right to the S-2 [intelligence section]. Grab a bottle of water and sit down with that guy and not only tell him what you did on the battlefield, but tell him what you saw on the battlefield." That became the most critical asset of the whole campaign. We computerized this information and hot reports were funneled to us.

One day we caught a battalion of Iraqi artillery moving out of the oil fires to take the 2d Division under fire, and we hammered them. We diverted attack airplanes, and diverted F/A-18Ds to direct them. We did this based on pilot reports. It took an enormous amount of discipline.

Most important, the air crews could tell us how well we were doing on the battlefield. As you go through a campaign like this, you really start to get a feel for it, like you do in a football game. You develop a feel for how well it's going, your passing game is going good, your running game is not going worth a damn. The pilot reports gave us a feel for the battlefield, and I could then go to Boomer, to Myatt, to Keys, and tell them, "This is what I feel is on the battlefield."

Going into Kuwait City is a good example. The last day we had the Iraqis breaking contact with us. We didn't know if they were breaking contact to get out of there or breaking contact to actually go into Kuwait City and go into a very nasty battle--a house-to-house evolution. Because we knew the battlefield--all of us had a feel for it--we were able to give General Boomer a "Wait, let

them disengage, because they are running, and they are flowing through Kuwait International [Airport]. Let them go, because that's the best possible world for the artillery, tank, and air guys, and don't worry as much that they're going to stop and put up a fight in Kuwait City." Luckily, that's what happened. That is the type of feel for the battlefield.

Proceedings: The Iraqi fighter threat went away fairly early. How much did all the antiaircraft artillery [AAA] and surface-to-air missiles [SAMs] in your area of operations influence the tactics that were used by fixed-wing and helicopters?

Moore: You're right, the air-to-air threat did go away early. In fact, it lasted probably only two hours or so. That is about what we thought was going to happen. We thought, if they put up their best fight, this whole air-to-air campaign would last probably a day and a half.

I base that on the fact that on 24 August 1990, the Marines picked up responsibility for a 24-hour-a-day, seven-days-a-week combat air patrol (CAP) over the Gulf. We provided CAP for our Marines all the way up to 16 January 1991 [the beginning of the air campaign] and never dropped a sortie. We did that initially for two reasons. First, the Navy was outside the Gulf and was having a difficult time covering the Northern Gulf CAP; the Air Force was out to the west. Second, and most important, we put a CAP over our Marines. As we went through that CAP and that long process, we got several chances to see the Iraqis come down [south], and we got within seven or eight miles of them, and saw their tactics and how aggressive they were. We had electronic airplanes out there. We had all 12 EA-6Bs there. They were running up and down. We had the Air Force F-4G Wild Weasels out there with us at the same base. So we knew how this guy was going to react. I've got to tell you --and I'm not trying to be smart--we didn't get any surprises out of him from an air standpoint.

The Iraqis really are trigger pullers; you saw all that on CNN. They just unloaded and filled the sky with flak and SAMs. Keep in mind that less than 1% of my pilots had ever seen combat. That surprised me, but the time has gone by, and in MAG-11, with 13 squadrons, only four Marines were Vietnam veterans. So when these young kids go up there and they've got an SA-6, an SA-2, or whatever shot at them, they come back and it's kind of tough for me to tell them, "Hey, don't worry about it. That was all unguided." When a missile goes over the top of your canopy, you get concerned. The discipline in these young men was just fantastic.

We had not dropped a lot of real bombs in Southwest Asia. We knew we could have the high sanctuary, so we came in high. Our pilots would rock in as high as 30,000 feet, coast on downhill, pick up the target, acquire, and pull, and get out of there. We bottomed out at 12,000 feet; then 10,000; then 8,000. As we started to beat down the air defense system and the Iraqis started to run out of ammunition, we were then able to start coming in lower, stay in the area a little longer, and work the battlefield.

When we got around to the ground campaign, I went around to each one of my commanders and said, "Okay. This is the time to start earning your flight pay. Now we have Marines in contact. We have to start pressing." But it was also the right time to do that because we had beaten down the air defense system. We learned from the A-10s that, as soon as somebody shoots at you, turn and rock in, and dump on him. So if we got some AAA out of some area, we'd jump on that guy right away and pound him. Because of that, as soon as the first guy started to turn on him, they'd stop shooting. You're always learning on the battlefield.

But we stayed high. We didn't do any of the pop-ups [low-level run-in followed by a sharp pitch-up to roll-in altitude] that we practiced for so many years.

Proceedings: What about the Cobras and the OV-10s supporting the ground troops? What was their experience with AAA and hand-held SAMS? What kind of air defense was up close to the front lines?

Moore: They really lucked out. Because of the smoke and haze, I've got to tell you that we fought the ground campaign over the worst four flying days of the whole war. Two things happened to us. First, General Schwarzkopf and every weather guy in Southwest Asia promised us 72 hours of good weather, but we probably didn't get 72 minutes. The most important thing that happened was that the wind changed; instead of coming out of the northwest, it was out of the southeast. I walked out of my trailer about 0200 on G-Day and the wind was blowing in my face. I just looked up at the sky and said, "Hey, are you listening up there? We need good weather."

But the wind-shift helped us. The two large oil fields on fire are awesome. I've walked the ground, I flew it in a helicopter, I flew it in fixed-wing, and it didn't matter whether you saw it left, right, center, upwind, downwind, it is an awesome sight--and the wind blew all that smoke right back across the battlefield.

Proceedings: How long did the wind hold for you there?

Moore: It held the whole four days. In fact, it held till about day six or so after the campaign started, and then started blowing back again. So if you look at the battlefield, where those oil fires were, I was betting that I would have that northwest wind and that it would blow the smoke, so that after the 1st and 2d Division came out of their second breach the area that they would go into would be clear of smoke, where I could really influence the action and give them intelligence and lots of air support. Well, the weather changed that. I had six or eight Cobras air-taxiing down highways in Kuwait with their landing lights on to get into the 1st and 2d Division area to help them out. That's how bad it was.

Second, there was a high-altitude jet stream that just stayed there. About every four to six hours, the weather would go down, then come up, then go

down. It was like a North Carolina front passing through there coupled with smoke. We were lucky. Every time the ground guys got into a bad situation, somebody could get to them. When the counterattack took place in the 1st Division's area, some F/A-18s and AV-8s got in to help them out, but, more important, the Cobras got in.

Mike Myatt [1st Division commander] got in front of some of his battalions a little bit, just south of his reconnaissance teams, and they started coming back through his party, and all of a sudden he looked up and here come Iraqi tanks. He said the greatest sight he ever saw was a flight of four Cobras that came up right up behind his command vehicles and started firing on the Iraqis.

The same thing happened in the 2d Division area. They ran into some very stiff battalion-sized blocking positions about the end of the third day, and we pounded them. So whenever we needed it, the weather lifted just enough that somebody got in to them.

Proceedings: The Navy has commented that in its type of war it needed more precision-guided ordnance and didn't have enough on board ship. How did the ordnance you had on your attack helicopters and on your fixed-wing turn out? Did it work as advertised, or did you have any problems?

Moore: There are guys walking around saying, "We need precision-this and precision-that," and that's okay, but sustainability won the battle for us. Yes, you need some precision stuff, but I almost ran out of bombs. On Thanksgiving Day, I wrote a message with me as the action officer to everybody who was in the bomb-family chain of command. "Okay. Here are the assets we have out here. Here is the threat we're going against. We have looked at that threat from every angle, and this is the ordnance that I need for 60 days."

Well, we got a great bureaucratic runaround out of that message. We received a reply that said, "Well, wait a minute. The Third Wing is a Pacific wing, so he can have only Pacific allocation; he can't have the Atlantic allocation." We would go back to them and say, "We've got Atlantic and Pacific squadrons. This is war." Well, you know, ten days, 15 days would go by. Then I'd hear, "Well, we don't think he needs as many Mk-82 [500--pound] bombs." It was really frustrating.

At one point in the war, I got down to a day and a half of bombs left for Mk-83 1,000-pounders and half-a-day of Mk-82s before a resupply ship got to us.

Now, as to the ordnance, about 25% of my sorties went out with the wrong ordnance, meaning lower kill probabilities. So instead of sending Mk-83s, I might send Mk-82s and Rockeye cluster bombs. We dropped an enormous amount of Rockeye out in the desert, and it proved to be a good weapon. But we had to do some ballistics on it because we didn't have the high-altitude delivery tables for those weapons. We had to develop that for the F/A-18 and the AV-8.

But I've got to tell you, I ended the war with 14 days of ordnance left of a 44-day war. I got an awful lot of help from Headquarters Marine Corps.

[Lieutenant General] Wills [director of Marine aviation] turned into a three-star ordnance officer.

General Schwarzkopf became an ordnance officer himself, because he allocated it within theater. So we got some ordnance from the Air Force, and we got some ordnance from the Navy. They were told to cough it up. We dropped more than 29 million tons of ordnance during the war.

Proceedings: The Navy said there were never enough tankers to go around. We've heard it may not be tankers so much as hoses. How well did the Marine tankers work? Did you use Air Force tankers much, or did you stay with the KC-130s?

Moore: Tankers are very rare. You've got to be careful how you use them. All in all, I would give General Horner high marks on the use of tankers. We did use a lot of Air Force tankers. Plugging on the KC-135 in any of the airplanes is no thrill at all, and I did it. I came home with them. But doing it in combat when it's a must-pump night-time evolution is really no fun.

For example, on the CAP, working up to the war, the Air Force provided us tankers during the day. They were either KC-135s or KC-10s, probably KC-135s about 90% of the time. At night we used all our KC-130s, because plugging on a KC-135 at night is just too damn hard, too high risk, and I didn't want to lose an airplane because of that evolution.

I had 18 KC-130s. On any battlefield, you're tied to your shortest asset--FA-6Bs, KC-130s, OV-10s, F/A-18Ds--and you depend on those assets. I've run out of tankers during stateside exercises because of over-commitment, and that's a very painful process. I wasn't going to do it again.

So what we did do was offer to the Navy emergency tanking anytime they needed it. They could get to our airborne tanker and divert to Shaik Isa, where we had a complete Marine aircraft group to help them, and we did help them. We got a lot of airplanes through there and changed engines for them and so forth. It worked out. But I didn't volunteer a lot of airplanes out there, because I needed them. We needed to keep EA-6Bs and F/A-18Ds on station, so I set up two separate Marine-only KC-130 tanker orbits--and General Horner let me do this, in the great tanker scheme--that were available 24 hours-a-day, seven days-a-week to give us flexibility. When those tankers got down to a 24,000--pound giveaway and somebody [who needed fuel] was on the way to them, we scrambled the alert tanker and put it into the system.

Proceedings: A Navy pilot told us that a Marine KC-130 saved his bacon once when a control agency vectored him to a tanker he didn't realize was available.

Moore: We did an awful lot of that. Especially for the first 36 hours, I wanted to make sure we had enough emergency tankers so anybody who was coming south could get a drink of gas and kind of cool off a little bit and think about things before he had to come in. We put an awful lot of tankers up there and they did a magnificent job.

Proceedings: How about maintenance? You had pretty good facilities, from what we've read, unusual in some respects--at least you had ramps and some hangars. Did the T-AVB aircraft maintenance ships contribute much under the circumstances?

Moore: First of all, we did have some fairly good facilities, but we outgrew them very quickly. I cannot say enough good things about the Seabees. They've always been very close to the Marines, especially Marine air. They helped us lay in excess of three million square feet of AM-2 aluminum matting all over the place. The F/A-18s and A-6Es had it down at Shaik Isa, and we housed five AV-8B squadrons plus OV-10s on the mat up at Jabayl. We built a spot for a whole helo group. At Tanajib we did the same thing. We went out to Lonesome Dove, which was 145 miles out in the desert, and we built three fields for the CH-46s and the CH-53s, and the Seabees and Marine Wing Support Squadrons and logistics personnel put that together.

The T-AVBs worked out magnificently. The concept was right on target. We had some trouble getting one of the ships there, so the supply packages we built had to stay on line about three weeks longer than we planned. Marines fixed the ship that broke down and the ship's captain sent a great letter to the Commandant. We recognized those individuals who did the job. The T-AVBs unloaded just what we needed at the air groups, nothing more. They kept the rest on board; they can operate 180 maintenance vans. The new concept worked in fine fashion, and as the second T-AVB came in, we offloaded an enhanced capability to each one of the air groups and let the ship go on to Jubayl. We ended up with one ship in Bahrain and one ship at Jubayl. The ship at Jubayl supported primarily AV-8Bs and helicopters, and the ship at Bahrain supported A-6s and F/A-18s.

Let me just give you the bottom line. On G-Day, after 38 days of combat--and I clearly understand that the whole focus of parts and everything was coming our way--my mission-capable rate was 86%. That included old helicopters and new F/A-18s. You would expect that out of F/A-18s and Harriers, but this was across the span. That's an enormous compliment to all the people--the Naval Air Systems Command, Naval Air Forces Pacific and Atlantic, Marine Aircraft Wings--who funneled parts to us.

Proceedings: How did the helicopters hold up in the desert?

Moore: Initially we had some problems. We were trying to fight the desert until we found some smart helicopter guys in the oil companies. They told us, "You cannot fight the desert and win. First, you have to take care of your machines. You have to wash them down, scrub them, keep them at high readiness. Most important in our world, you have to operate them off clean sites."

We put it this way to the ground commanders: "We'll give 100% direct support to your Marines. You can use it in a couple of fashions, but here's the way we recommend using it. When you truly need it, no kidding, got to get in

Proceedings: This was a short war. What are the implications for a longer one?

What I didn't want to do was use up assets early. I wasn't going to get too tangled up in the first two phases of the air war. I planned to be at maximum efficiency on G-Day minus one. That's really where I wanted to be.

Air Control Zones During the Air Campaign February 1991

0 100
Kilometers

IRAQ

Al Basrah
Abadan
Bandar-e-Khormeyni

KUWAIT

11
10
9
8
7
6
5
4
3
2
1

Aljal Salem
Kuwait City
Kuwait International Airport
Al Jabar
Arab Islamic Eastern Forces Command
West Stack
Main Stack
Lonesome Dove
Hafar al Bajin
AH1 CH46
UH1 CH53
DASC
Al Qaraah
DASC (A)
Kibrit
East Stack
Khatji
TOAC (ATACC)
Al Mishab
JFACC
6A East
Tamajib
Jubayl
King Abdul Aziz
GV-10
Ad Damman
Dahran
BAHRAIN
Manama
KC 130
F/A 18
A-6
EA-6B
Sheikh Isa
QATAR

IRAN

Bandar-e Bushehr

Persian Gulf

SAUDI ARABIA

Rumah

Neutral Zone

JFACC West

IFACC

2 MAR DIV

1 MAR DIV

MTACC

TOAC (ATACC)

JFACC

DASC

Qaraah

DASC (A)

Kibrit

Khatji

TOAC (ATACC)

Al Mishab

JFACC

6A East

Tamajib

Jubayl

King Abdul Aziz

GV-10

Ad Damman

Dahran

BAHRAIN

Manama

KC 130

F/A 18

A-6

EA-6B

Sheikh Isa

QATAR

Numbered boxes are Fighter Engagement Zones.

tired, and I had only 18 of them. When you start to run those 24 hours a day in maybe two different fashions and maybe two of them up at any one time, that gets very hard on that airplane. So I found myself, after 20 days saying, "Whoops. I've got to slow down." I talked to everyone and said, "You're not going to get this support. You don't need it right now. I'll give it to you this hour and this hour and this hour, but I need to rest these guys a little bit. I need to maintain them." It worked out well.

Proceedings: So it was not just the threat, but also maintenance hours and flight hours on the OV-10s that caused you to change some of your procedures?

Moore: It was a lot of things. As I've said, I really held a very tight rein on some airplanes, a tight rein in the regard that I wanted to have them when I needed them, and the OV-10 was one of these. I told the OV-10 air crews, who were flying a slow but very valuable airplane--if you use it correctly--that, because of the shoulder-fired missiles and AAA we were seeing, I wanted them to stay south of a particular line. I said, "Don't go above that line because the threat starts to get too heavy. And, oh, by the way, I don't need to extend you above that line, because you can do all that I want done on the battlefield without going above that line."

I did the same thing a little bit to the AV-8s; "Until I can get you dedicated EA-6B support, I want you to stay below this line. Oh, by the way, there are plenty of targets to work down there, so I don't need you to go above that line." Those are the type of things I did.

Proceedings: The EA-6Bs are probably the best jamming aircraft going, and the Marine Corps can take a lot of pride in what it has done in the electronic warfare field over the years. But does this cause them to be fragged by the Air Force? Could you get them when you wanted them?

Moore: The EA-6B is very dear to my heart. Early on, the Air Force, because of lack of assets--and I would have done the same thing; this isn't anything bad to say about it--came to me and said, "We want to unite all the EF-111s and EA-6Bs."

I said, "Hey, that's fine, but let me tell you. I spent a lot of time with Jack Daley [General, USMC, now Assistant Commandant of the Marine Corps] and others going to North Vietnam in support of somebody else, and I will not let (nor did it happen) any Marine airplane go north without EA-6B support." The guy looked at me like I [had] shot him in the chest. I said, "That will just not happen." Now, if that means that we can send him back to a tanker and he can come up and support an Air Force strike and we can work out something, then that's fine. But not a Marine airplane went north without Marine EA-6Bs and, in some cases, some Air Force EF-111s with them. But we *always* had a Marine EA-6B up there. They did do a magnificent job. But they didn't try anything fancy. Just good, brute noise shut the Iraqis down.

Proceedings: Did the EA-6Bs jam close to the front lines? Do we need some jamming capability in helicopters?

Moore: Every time the artillery guys went on an artillery raid, we went up there and supported them with the EA-6B against counter-battery fire. We tracked every radar that could possibly be on the battlefield and passed that information on. When the 1st Division fired--and they did some great artillery work--we had an EA-6B constantly on station alerting that guy. We had high-speed antiradiation missile [HARM] shooters to take the radar down, and we put that thing together very well. The EA-6Bs are scarce assets; we had only 12 of them.

Do we need to put jammers into helicopters for the close-in battle? I don't think we do. I think as long as we keep the focus on making sure that the EA-6B is a Marine air-ground task force asset, and the air guy will get down and talk to the ground guy to determine what he needs, I think we're in good shape in that area.

Proceedings: What were the rules of engagement? How did Marines operate with all those attack helicopters at night? Did the Marine Corps use any different procedures?

Moore: Unfortunately, we have at least two cases where we believe the Marine Corps had blue-on-blue engagements. One air-to-ground for sure, and there may be another, a HARM shot, that we're still investigating. In any scenario, one such encounter is unacceptable to any commander. But you need to understand the battlefield.

We put enormous time and energy into the blue-on-blue, both air and ground. It's to everybody's credit that we had no blue-on-blue air engagements, let alone midair collisions. I've got to tell you, we had enormous numbers of airplanes running around up there. From my own experience, I can tell you it was busy.

But the battlefield was such that people lost situational awareness. When they did that, then we had trouble and the system broke down, unfortunately.

Proceedings: Were you under positive control when dropping within so many meters of the friendlies? Were people cleared in to hunt for the enemy?

Moore: Of all the missions we had, the one I am aware of is where an A-6 hit an artillery group that was coming south; the A-6 pilot and bombardier-navigator just missed that they were south of Kuwait and not north. You say, "Hell, that's pretty easy to tell." But when you're making the final attack, you've got the radar narrowed down. He really thought he was about eight miles from where he was. That's a very unfortunate thing. He just lost situational awareness. He was eight miles from where he really should have been, and he was south of the border instead of north of the border.

But the rest were all positive control. Here's what we did in the 3d Marine Aircraft Wing. Every hour on the hour we got hold of our liaison guys for the 1st and 2d Division and found out exactly where they were. We put a flash message out on the wire, and we called each one of the groups and told them where everybody was. Most important, for any outside stuff, such as pilots reporting that they saw tanks north of this line (and they were our tanks), we tried to mark them as best we could with panels and everything else.

What we've got to do now is work out some systems--identification friend or foe [IFF], flashing lights, beacons--to make sure that we can identify troops on the ground.

Proceedings: Were you supporting units other than the Marine Corps?

Moore: On G-Day we flew more close air support missions than anybody else in theater. We were only about ten missions short of the Air Force on the second day of the war.

We supported primarily at that time the 1st and 2d Divisions, and on occasion we would send guys over to help the Saudis on our right flank. So, in essence, we were supporting those three. What we did, we built an air command and control system that put two airplanes in the stack every seven-and-a-half minutes. Marines, as you know, try to husband assets, and we tried to make sure that they were quickly catapulted forward to one of the two divisions. If they couldn't use them, we handed them off to the OV-10s for short battlefield interdiction, and if they couldn't use them, we'd catapult them forward.

We could turn up the wick, and we did on the last day of the war. We turned up so that eight airplanes showed up every 15 minutes and we ran them through that system. If we got Air Force or Navy airplanes in the system, we said, "Okay, you go to this forward point and you go here, there, everywhere." We built the system and we rehearsed it before we started the air campaign and everybody was familiar with it. Most important, we briefed everybody: every battalion commander, every company commander, the A-10 squadrons, the Aegis cruisers, the AWACS. Everybody was briefed on the total plan, what the 1st Division was going to do, what the 2d Division was going to do, what I was going to do, how support would flow.

Proceedings: I believe the Marine Corps lost five AV-8Bs. Four, I was told, were to infrared (IR) missiles; one was at the time undetermined. Of course, the Harrier has the nozzles there under the wing, instead of tail feathers, so if it takes a hit, it's in a tough place. How about the vulnerability of the Harrier?

Moore: First, we did not lose five; we lost four, and the 4th Marine Expeditionary Brigade, which was under the Naval Commander, Central Command control, lost one on the last day. You're right, four of them were hit by shoulder-fired IR missiles. The cause of one of the losses is undetermined, but I think that probably was also shoulder-fired. You have the hydraulics, the fuel,

the wing, the engine, the controls, everything in the nozzle area. There are some things we need to do to a lot of our airplanes, and we need to diffuse the Harrier's heat source. We have done that on the helos before, so it's not a hard thing to do. We need to increase the IR flare capability in all of our airplanes.

But to get back to the real question, there is some work we have to do in the Harrier. It is not a fragile airplane. We turned that thing in excess of two to four times a day for almost the whole campaign, so it really stayed up. I got exactly what I wanted out of it. We did a lot of forward basing with it and the F/A-18. Half the AV-8B sorties stopped at Tanajib instead of going back to Aziz, where the Harriers were based, and half the F/A-18 sorties came back and stopped at Jubayl instead of going all the way back to Shaik Isa. So we used a lot of concepts. I'm very happy with the Harriers' performance, but we've got some work to do.

Proceedings: We heard that you had all these staffs and you had to meld them together; that at one time there were extra colonels and generals. Was it a problem?

Moore: On the wing level, I went out very light. I took four people. That's what I ended up on the desert with, and I stayed with that for about two weeks and then slowly started bringing out people. I still had a wing to run back at El Toro. I probably stayed too small, too long, and it hurt me a little because I had to run my people a bit. But still, the whole wing headquarters never exceeded about 125 people. So I stayed very small.

The MEF headquarters, by the very nature of what they had to do, probably got bigger than General Boomer would like.

But on my side, the only trouble I had was standing up MAG-13, getting the right Harrier expertise out there, and getting Colonel John Bioty [the group commander] some staff. That took a little longer than we thought because they started this old troop-strength ceilings that we had in Vietnam. But that all went away in November and December, 1990.

Proceedings: What took most of your time?

Moore: This business on ordnance probably didn't take as much of my time as much as worrying about it every inch of the way. In everything I did, the sustainability of the force bothered me. As the air campaign started, the ground guys still had 38 days to work out their ground campaign, and I was one of the key players. So we spent an awful lot of time going up and sitting down with the divisions, sitting down with the MEF, and going through their ground concept of operations, how they were going to do the amphibious planning, etc. That didn't surprise me, but it took lots of my time--time not available for me to be in the Tactical Air Control Center (TACC), for example.

Proceedings: How about the Harriers coming off the boat? Did you control them in any way or just coordinate?

Moore: No. We had talked to them; we brought them ashore; we had rehearsed with them; and as they came ashore, they came into our command-and-control system. So they were completely in our control system; we had plans for supporting any amphibious landing and for bringing them into our system as soon as they came ashore. As you know, the whole 5th MEB did come ashore, and portions of the 4th MEB came ashore. I got a helo squadron out of them, a very valuable Cobra squadron--HMLA-269.

Proceedings: Have you recommended any key changes for training or equipment? Could you comment on some of the things that you think we need to change as a result of what you saw out there?

Moore: Marine Air Weapons and Tactics Squadron-1, of course, sent almost all its instructors to me. They were a major portion of the targeting cells, the operations department, liaison, command and control, and air intelligence.

Proceedings: They weren't just there studying the war--they were actually part of your staff?

Moore: They were out there really helping me and on my staff. They did start piecing together how to train and how to do business later on. They helped me an enormous amount in the air command-and-control area.

Proceedings: How about night flying? Were you ready for it?

Moore: We trained constantly. We're not as good at night as we think we are, and that means everybody--Marine Corps, Air Force, Navy, Army. You've heard these guys say, "We live at night . . . we're the Ninjas at night," and all this other stuff. Well, I've got to tell you, we're not as good as we think we are.

Every night when the sun went down, I sat there and I spent a lot of hours in the TACC. When that sun would go down, I'd cringe, because some of your assets are weaker players at night than others. I double-cycled the A-6s, which we'd been doing for years in exercises; they would go out with a load of bombs or whatever, come back, and we'd just load them back up again without ever shutting them down. We did a lot of laser work to get the A-10s and Harriers and F-18s in there, but I've got to tell you, I was a happy camper every day when the sun came up.

All those systems have some limitations, and they are not as good as the good old eyeball during the daytime. We can get a lot better at night. That's one of the things that I would push very hard.

Communications is another area that we've got to get a lot better on. We got ourselves caught a little bit when the Marine Corps was going to a new system, but I don't think there's any commander out there that doesn't have a major communications gripe.

Joint communications is another area we've got to grow in--but good old communications. We've got to stop this fancy stuff and the very expensive stuff. We've got to get down to some basics. I told my guys, "I just want to talk to all the commanders, and all the rest of the guys can use that same node." We built redundancy into the system. Luckily, it stayed up. I was never out of communications for long with anybody I needed to talk to--somehow, some way, I could get to them.

Proceedings: Did the aircraft use secure voice with the ground units, or were they in the clear?

Moore: We did use a lot of secure communications. Almost constant secure communications in the CAP world, and at the Direct Air Support Center and TACC, and the control agencies. But we realized early on that the Iraqis were not ten feet tall. In some cases, we were being so cute, with all these changing frequencies and call signs, that we were outdancing ourselves. We said, "Okay. We are going to lock-down frequencies, call signs, and all this stuff for a lot of days in a row." For example, the ground campaign, we locked-down all this. We didn't change. We used the same call signs so you knew Playboy-something or-other was an EA-6B. The other thing we decided was to stop getting so cute in the close air support arena; once we got to that final controller, we went in the clear. If that guy is smart enough to move out from underneath that bomb in the last four minutes, then we're fighting the wrong guy. But most important is having clear and reliable communications. The communications in the desert was stretched to its maximum. We kept it simple, and that really paid off.

Proceedings: We haven't talked about the troops much. What impressed you the most?

Moore: As the media guys came out and talked to them, most of the comments that I got were, "We cannot believe that Private Doe came on the air and he was bright . . . she was intelligent. Boy, did they come across well." They are smart, they know what to do, they know how to do it, and they are dedicated.

Major General Myatt commanded the 1st Marine Division. In this interview, General Myatt comments on a number of subjects, including the integration of Marine air and ground forces during the 1st Marine Division's drive to Kuwait City, and the division's efforts to solve the problem of friendly fire casualties.

The 1st Marine Division in the Attack

interview with Major General J. M. Myatt, USMC

U.S. Naval Institute Proceedings, November 1991

Proceedings: You had barely assumed command of the division when you went to war. How well did you know your individual commanders?

Myatt: When we got into Desert Storm, I knew all but one of the regimental commanders very well. One had worked for me on a previous assignment, and I had known another for years. I also knew General [William M.] Keys, who commanded the 2d Marine Division, and two of his regimental commanders. When Marines go to war, it seems as if everybody knows each other.

Proceedings: How did you deploy your division initially?

Myatt: We were capped at 14,500 Marines for Desert Shield. We were there to defend Saudi Arabia's economic center of gravity, as well as the Central Command's center of gravity, in the sense that both the Jubayl and Dammam port complexes and the airfields that supported them were vital to our forces.

Proceedings: I asked General [John] Hopkins when he was ready to defend and he said 25 August.

Myatt: His brigade would have been something to contend with. I have to tell you that they would have been in there earlier, or could have been, if the decision had been made to deploy the MPF early enough, but that decision was not made, as I recall, until Friday, 10 August.

Proceedings: When did you get to Saudi Arabia?

Myatt: I got there on 25 August.

Proceedings: How was your intelligence support when you first went in? What did you depend on?

Myatt: Everybody's shooting himself in the foot over the intelligence. It's a difference in what you need and what you want. I guess you're never going to get everything you want. That we've been training people to deal with uncertainty is the right focus. It wasn't all bad that we painted him to be ten feet tall, because we prepared our Marines to fight somebody ten feet tall.

Proceedings: When you got over there, the 7th Marine Expeditionary Brigade [MEB] was in position and the 1st MEB was arriving. How did you fit the units back into the division?

Myatt: We got additional forces, such as the 1st Battalion, Sixth Marine Regiment, a tank company, an assault amphibian vehicle platoon from Okinawa, an artillery battery from Okinawa, and we just melded all the ground combat element portions into the 1st Marine Division.

Proceedings: How about setting up ranges and training?

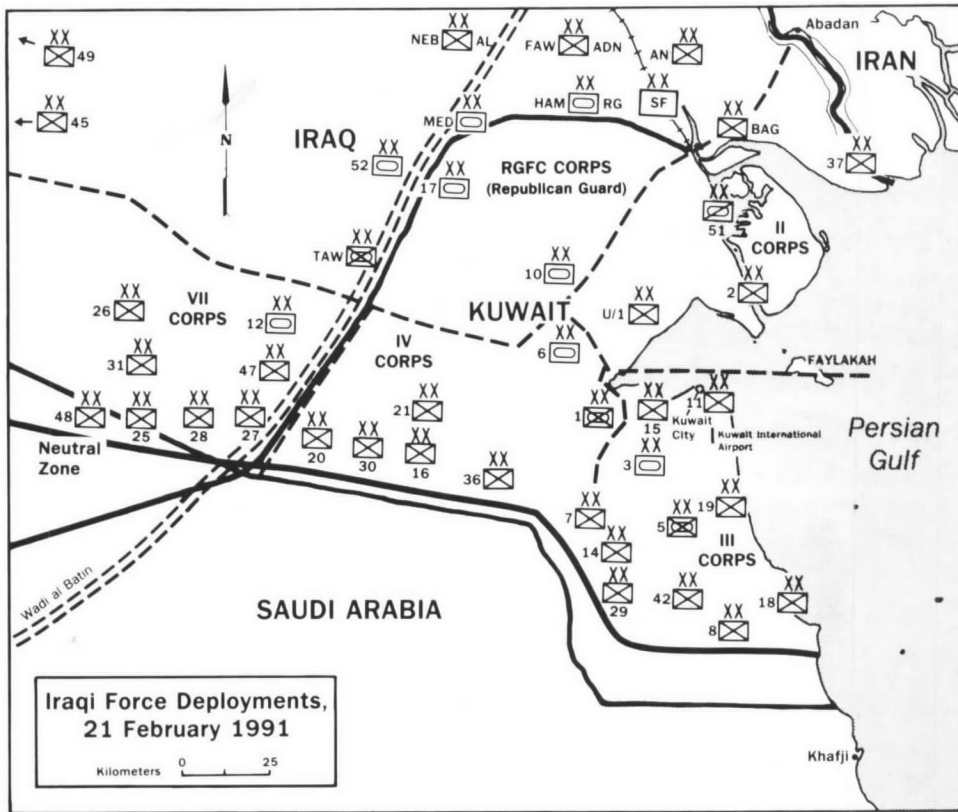
Myatt: In dealing with the Saudis initially, it didn't look as if we'd ever be able to live-fire our weapons. But the M60A1 tanks that we got from the MPS ships were new, and had never been fired before. First, we had to test-fire those tanks and second, we had to become familiar with the discarding-sabot ammunition that our Marines had never been allowed to fire. By 16 September, I believe, we had fired our weapons on Leatherneck Range.

Because this went well, we then made progress in obtaining permission to fire live ammunition in Saudi Arabia at what I consider a remarkable pace, knowing that we were asking to fire into areas where the bedouins moved camels and sheep.

Proceedings: Are these ranges now off-limits because of unexploded ordnance?

Myatt: The ranges in Saudi Arabia were shut down at the conclusion of the training phase. After Desert Storm, we policed up all the unexpended ordnance and blew it in place. Theoretically those places are now clean.

We were fortunate that the British 7th Armored Brigade brought a very experienced 40-man training section with them when they joined us in October. They set up a combined-arms range that was finished by January--Devil Dog Dragoon Range--where we maneuvered while firing artillery and bringing in air strikes. What we were working on, of course, was the breaching of the obstacle belts as supported by air and artillery.



Proceedings: What other kinds of training did you do?

Myatt: We had several sand-table drills. We started each of the processes with a complete intelligence preparation of the battlefield [IPB] exercise, where we went through the applicable templates. When we got the IPB process going--and it's almost a continuous process as long as the enemy situation changes--then we had a series of map exercises, staff exercises, and sand-table drills.

The sand-table drills were conducted frequently, and the biggest one we had was on G-5, I believe, that included all my commanders and their staffs. We used a huge sand-table, probably 40 meters by 40 meters, where we actually had put in the obstacle belts. General [Royal] Moore, commanding the 3d Marine Aircraft Wing, was there with his group and squadron commanders, as was the Direct Support Group commander, Colonel Alex Powell and his commanders and staff. We actually went through each phase of the battle and the decision points that we saw, where we would have to make decisions based on what happened. We have all this on videotape.

Among things you'll see [on the videotape] is General Moore modifying how he's going to support the division based on this sand-table briefing, where each of the commanders briefed what he intended to do in certain situations. We were concerned about speed and building momentum going north to get through

those two obstacle belts, because the worst thing that could happen would be to get trapped between them. We knew that more than 700 Iraqi artillery pieces could range us while we were going through the obstacle belt.

We knew that if we got hit by artillery between the obstacle belts, especially chemical rounds, they could really hurt us. We also knew that our artillery was going to be out-ranged because the first and second belts were about 18 kilometers apart. So we had to create lanes in those obstacles to move the artillery through to support the breach of the second obstacle belt. Here's where General Moore instructed his F/A-18D fast forward air controllers (Fast-FACs) on what to do on the Quickfire radio channel if we took incoming artillery rounds in the two belts. We had AN/TPQ-36 counter-battery radars, set to locate the Iraqi firing positions, linked directly with the Fast-FACs, who in turn directed attack aircraft onto the target. Of course our own artillery was also tied into this net.

Proceedings: Were aircraft on airborne alert when you attacked?

Myatt: Absolutely. Between 0600 and 1400 on that first day, we had 42 instances of incoming artillery that we handled this way. The TPQ-36 picked up the source grid, and we were able to use our artillery, or the 2d Division's artillery--the 10th Marines--to attack 24 of the 42 targets. The remainder were attacked by Marine AV-8B aircraft within a few minutes of the artillery fire being detected. I am very proud of that air-ground coordination.

Proceedings: Did you have AH-1 Cobras with you, working with your battalions or companies?

Myatt: We had Cobra support, but we believe that the Cobras are most effective when they're used *en masse*. We had Task Force Cunningham, which could range from 40 AH-1W Cobras plus Harriers down to whatever size you wanted. But we tried to avoid putting out a section [two AH-1Ws] here and a section there and piece-mealing the Cobras. We wanted to use the aviation combat element as a maneuver element.

Proceedings: Did you ever have as many as 40 aircraft on a particular operation?

Myatt: I think that when we were counter-attacked on G+1, we had virtually all the Cobras working with us. We were counterattacked by a brigade of armor against Task Force Papa Bear and a brigade of armored infantry.

Proceedings: What about OV-10 support?

Myatt: The OV-10s initially went forward and then [Lieutenant Colonel] Cliff Acree was shot down. They really weren't very much of a player for us after that. I believe the Cobras and the Fast-FACs were much more effective.

Proceedings: How about at night? We've heard that some units relied on the OV-10Ds with forward-looking infrared [FLIR] systems or F/A-18Ds with a FLIR--General Moore said it was usually the F/A-18Ds that came up with intelligence at night.

Myatt: It was the F/A-18D, because the OV-10s, being so vulnerable, stood back so far south of the fire support coordination line [FSCL]. I don't believe they were players after about five days into the air campaign.

Proceedings: Did you use them for airborne radio relay?

Myatt: We thought that they could do that. There's supposed to be an automatic retransmission capability. It never worked for the UHF frequencies, and was spotty for the VHF frequencies.

Proceedings: Were pilot reports a good source of intelligence?

Myatt: Yes. The pilots actually became so familiar with what I would call the MEF zone of action after they had been flying over it for three weeks, that they were able to sit down with my commanders and talk about what they had seen and what we were going to face. That is much more valuable to me than any kind of written report. The paperwork would have overwhelmed us, so the personal contact--when General Moore would send his folks out--was invaluable.

I remember he sent a couple of Harrier guys out, because the Harriers were put in direct support of the 1st Marine Division, while the F/A-18s supported the 2d Marine Division for the operation. Of course the F/A-18Ds supported both divisions. There is no substitute for the pilots actually coming down and talking to my folks. That ought to be standard operating procedure.

Proceedings: What was Task Force Troy?

Myatt: A lot of people talked about how the plan changed over the course of time. I said nobody ought to be apologizing for that, because the enemy situation changes, and so you have to update your estimate of the situation.

We tried to deceive the Iraqis and create a lot of ambiguity as to where and when we were coming. Task Force Troy was the deception task force put together under General Tom Draude's [the 1st Division's assistant commander] tutelage, and he actually worked for the MEF--he was the brains behind this. At one point, we were going to put them up in what we call the Elbow, where the Kuwait-Saudi Arabian border changes from a north--south to a more westerly direction. That's the closest point to Kuwait City, by the way, a very sensitive area to the Iraqis, and we knew that.

As the plan changed, we would move Troy around for what we called the ambiguity phase. There was a whole series of ambiguity operations, including

probably a dozen combined-arms raids into Kuwait. Tom understands deception--that is, whatever you do has to be believable.

Proceedings: He mentioned that he had some very innovative reserve officers working for him.

Myatt: In fact, we took this ad hoc group that Tom assigned to Lieutenant Colonel Charles Kershaw, and they came up with a lot of ideas on how to trick the enemy--and everybody agrees that tricking the enemy is a good thing to do.

Seabees built mock-up tanks. They built mock-up M198 155mm. artillery pieces out of lumber and put them under camouflage nets. Then the Task Force would put together an actual force of tanks and artillery, supported by EA-6Bs and some security elements, and conduct a combined-arms raid into Kuwait. I don't believe the Iraqis knew what we had there, but we knew that some of the observation posts could see our decoys.

Proceedings: Did General Draude have any dedicated forces?

Myatt: He had a very small cadre of tanks, artillery pieces, some security infantry, and a company of light armored vehicles. Tom arranged for helicopters supporting either the 1st or 2d Division to stop in at Troy, making it look like a division. He also used radio transmissions to mimic actual nets.

Proceedings: Did you use electronic warfare units?

Myatt: The Radio Battalion was very effective. We ought to get more LAV-mounted mobile electronic warfare support systems, in my opinion. They did a good job. Of course, they're most effective in a passive mode, and they have to be passive for a while to know what the situation is. The Iraqis were very, very active for the first three weeks after 17 January [when the air campaign began] with their own electronic warfare capability. They were able to impact on what we were doing.

Proceedings: General Moore mentioned that the air wing pushed for standard call signs and frequencies, rather than changing daily. How did that work?

Myatt: It worked. If you've got secure radio nets, why do you have to change all the time? We simplified the process. We went to plain name call signs. Everybody knew Tom Draude was Sage, my G-3 was Silver, his operations officer was Coach, Carl Fulford was Ripper, John Admire was Taro with the 3d Marines, and Jim Fulks, who had one of the infiltration rigs, was Grizzly.

Proceedings: Did you have reserve units in your division?

Myatt: Yes. We had the 1st Battalion, 25th Marines [1/25], one of the most can-do outfits I've ever seen. Of course, you can't expect them to start out on

the battalion level at the same level of proficiency as a regular battalion, but they came on strong. They came in right after Christmas. I think it was 27 December.

Proceedings: How about reserve artillery batteries?

Myatt: They arrived about the same time. We had Hotel and India Batteries from the 3d Battalion, 14th Marines. Hotel Battery on G+1 used direct fire to destroy a tank and an Iraqi rocket-launching system that was about 800 meters from their position.

Proceedings: The role of the reserves is a major issue. Is it easier for a regular division such as yours to accept smaller units rather than larger ones?

Myatt: It worked well. A lot of the Marines who were in these batteries had not been off active duty all that long, and the remainder--the majority of them, I think--were college students. We pulled a lot of people out of colleges to do this. They were superb. Many of them are in the PLC [Platoon Leader Candidate] program, and I suspect you'll see them as officers.

Proceedings: What about getting ready to breach the mine fields? General Schwarzkopf certainly gave both Marine divisions high marks for that.

Myatt: Of course, we had built up the obstacle belts to be more than they really were. We didn't have a very good picture of what they really looked like until I sent in reconnaissance teams; [General] Bill Keys also did that.

I had reconnaissance teams in there for three days to look at the first obstacle belt. When they came out, we had a much better picture of what they were. There was a high density of mines in there, and there were mines of all kinds--Italian, Soviet--it was a hodgepodge. You could almost see the boundary of a brigade or a boundary between divisions based on particular portions of the obstacle belt--the better the division, the better the obstacle belt; the less disciplined the division, the less sophisticated the obstacle belt. We could see the mines from the ground, because either they didn't bury them or over time they didn't maintain them. The wind had blown the sand off the top of them.

Proceedings: How effective was your mine-clearing capability?

Myatt: We had what we needed in terms of the explosive line charges. The difficulty was that some of the mines cannot be exploded by a sympathetic detonation; these must be mechanically breached. Some of the equipment came in late. We put the track-width mine plows on our tanks, and we installed the threeshot line charges on our AAV-7 assault amphibians. I mechanized the 1st Combat Engineer Battalion with AAV-7s and split the battalion into two obstacle-clearing detachments to support Task Force Ripper and Task Force

Papa Bear. This gave the combat engineers the ability to haul their own line charges and it gave them the mobility they needed on that particular battlefield.

Proceedings: What units were in these Task Forces?

Myatt: Task Force Ripper had the 1st Battalion, 5th Marines [1/5], 1/7, the 3d Tank Battalion, and Headquarters 7th Marines. Task Force Papa Bear consisted of 1/1, 3/9, and the 1st Tank Battalion. Task Force Grizzly had 2/7, 3/7, and Headquarters 4th Marines. We gave them names because it was easier for a guy from 2/7 to identify with Task Force Grizzly than to identify with the 4th Marines.

Proceedings: Did the remotely piloted vehicles [RPVS] provide intelligence? How else did you employ them?

Myatt: The RPVs were in direct support of the division when we went into the campaign. They're just super. It was the most timely information that we received--I'm a big fan. We found out--rediscovered, I guess, since we should have known--that you can adjust artillery fire with RPVs. The air wing put a remote receive station inside a Huey so they could see what was out in front of them when they were deploying the Cobras. We used a Pioneer RPV as a spotter for the naval gunfire when the 16-inch guns were firing on Kuwait International Airport.

Proceedings: What happened as you pressed forward? You got through the minefields. How did your weapons work?

Myatt: The weapons all worked, and we've got to draw the right lessons from this. We didn't have to fire TOW missiles over water on this particular battlefield. It was undulating terrain, and the Iraqis were very clever on reverse-slope defenses with decoys, but everything we had worked.

The thermal night sight for our light armored vehicles proved instrumental to our weapon effectiveness. When General [Alfred] Gray [the Commandant of the Marine Corps] visited us at Christmas, he saw what a problem we had because our LAVs lacked thermal night sights. He went back to the United States, got the engineers at [Marine Corps Logistics Base] Albany, Georgia, working on the project, and by the end of January we had thermal night sights on our LAVs.

Proceedings: You mention LAVs. Did you lose any Marines to air strikes because of misidentification?

Myatt: I lost 14 Marines to friendly fire. Thirteen of the 14 were killed prior to G-Day. Eleven of those 13 were killed on 29 January.

Proceedings: Could you describe what happened?

Myatt: It happened when the Iraqis attacked out of the southernmost and southwest corner of Kuwait and Saudi Arabia. They came out with 50 tanks and they were met there by the 1st and 3d LAI Battalions--Task Force Shepherd. That night, in the course of the battle--and recognize that there were a lot of vehicles on the battlefield--an LAV was hit by a Maverick missile fired by an A-10. I lost seven Marines. The other LAV we lost was hit by a TOW missile from another LAV up close to the border. So that was a true fratricide issue, too.

Proceedings: Did you see anything that showed some promise for the future, to help the shooters identify what they are shooting at?

Myatt: No. The problem was identified early on. In fact, the MEF sent messages back Stateside in October saying, "See if R&D [research and development] can do anything." We tried several things. Some of them worked, but they almost worked too well. On top of each of the vehicles, of course, we had the air panels, but those don't help at night.

When we went into the ground campaign, we had infrared beacons that were pointed directly up, so that if you were wearing night-vision goggles flying your aircraft, you could pick out our vehicles. The problem was that Iraqis with night-vision goggles could also pick them out because the beacon tended to silhouette the vehicle. They were so bright, there was an aura of light that was following our vehicles around. After the first night, our people turned them off.

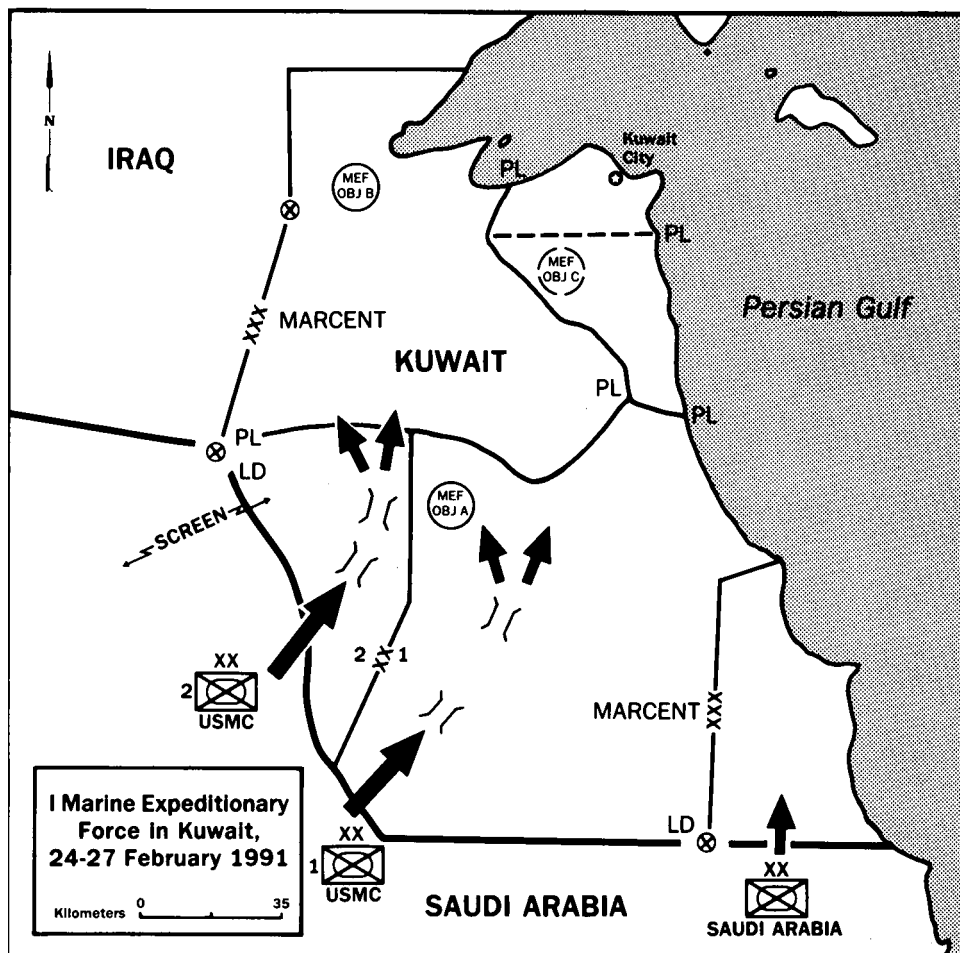
Proceedings: The danger seems to be from direct-fire weapons at night. Did your Marines have any close calls from artillery?

Myatt: We had cases where the friendly artillery came close to our folks, but we had no casualties. We were always able to shut it down quick enough.

To have two divisions attack abreast the way we did, with no instances of friendly fire between us--even though we had units cross in front of each other--is a tribute to the performance and situational awareness of the young company commanders and platoon commanders. They were coordinating and talking with each other. The coordination between the 10th and 11th Marines [artillery regiments] was superb.

Proceedings: How useful was the global positioning system [GPS]? Did you feel you knew where you were most of the time?

Myatt: We did have some GPS and we had the position locating and reporting system [PLRS]. I had a lot of people that doubted the PLRS capability; when the war was over, we had a lot of PLRS fans. You can program the system to



tell you when you go over a boundary, for example, even when it would be impossible to define the boundary with terrain features. Where PLRS would go out, GPS would fill the gap; of course, there are times during the day when GPS is not effective. But it was still important.

With that kind of capability, you can give somebody almost a north-south grid line as a boundary, rather than a piece of terrain, and they'll be able to know where they are and coordinate it at the company level.

Proceedings: Describe the tank battle at the airfield.

Myatt: Up there it was kind of interesting, because you couldn't see. For six months, we had watched the winds. The wind had come out of the northwest all the six months previously, and there were times, no longer than 12 hours, where as a front passed through the wind would shift around and then come back out of a predominant direction of northwest. When we began the campaign in our area, the wind, for four straight days, was out of the southeast, so it

pushed the smoke from the burning wellheads in the Iraqis' faces; they simply couldn't see us.

On G+2, as we were moving north, talking with Carl Fulford there at Task Force Ripper, he could see from 40 to 150 meters in most cases--it varied. It was like three total eclipses. We had to use flashlights to be able to read the maps at noon. It might clear up a little bit more than that in certain areas.

But we were moving forward and couldn't see well on G+2, and Carl Fulford started engaging T-72 tanks 15 minutes after he moved out; that's the first time we had encountered T-72s. Until then it had always been the T-55s and T-62s. That's when I knew that he was running into the Iraqi 3d Armored Division, and he pretty much fought that 3d Armored Division all the way north, and he needed some help.

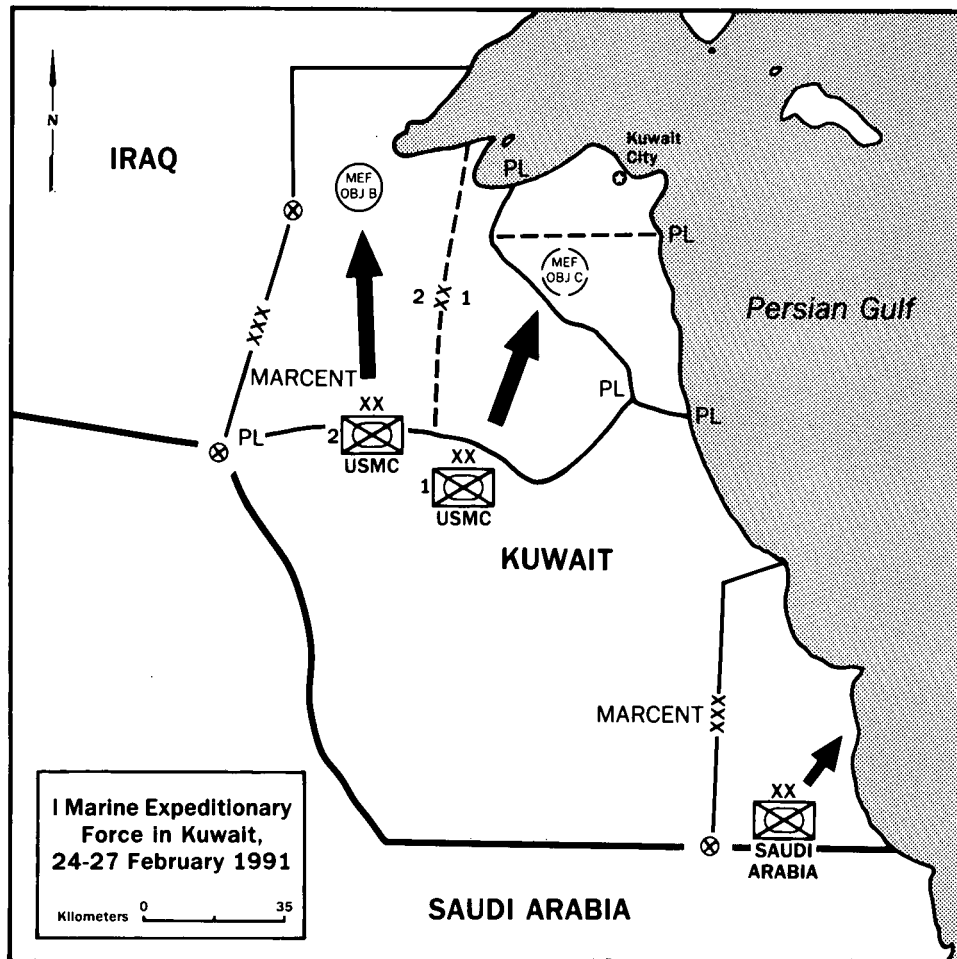
Lieutenant Colonel Mike Kurth, who had HMLA-369, had managed to acquire, even before we left the States, a forward looking infrared capability, as well as a laser designator that he mounted in two Hueys. It allowed him to designate and see from a Huey and guide his Cobras in. So here's Carl engaging the 3d Armored Division and needing some help, and you've got Mike Kurth flying from the area south of all the smoke, in a Huey, guiding a division of helicopters under three big high-tension wire systems, flying under them, going up north to support Task Force Ripper. He could see using the FLIR and designate for the Cobras to fire their Hellfire missiles. He then turned them south, guided them out, and brought in another division of Cobras. That's how it worked there.

Proceedings: General Moore mentioned that you like Cobras.

Myatt: We were counterattacked at my command post by an Iraqi mechanized infantry brigade. Cobras were actually over my CP, firing TOWs at the BTR-60s and the BMPs of that Iraqi brigade. It's kind of humorous now. The radio operators rolled up the sides of the tent up so that they could actually see what the action was--about 300 meters from my CP. We had a light armored infantry company working with the Cobras, what I call Task Force Cunningham, just like they had trained to do for the last previous six months. It was great to see how it all worked.

Proceedings: Were any Marines walking at all? Was everybody riding in something?

Myatt: I had two regiments on foot. These two regiments started infiltrating into Kuwait on G-2, so by the time the ground war started, we already had two regiments 18 and 20 kilometers inside Kuwait. General Schwarzkopf called General Boomer and said, "I've got to be careful here. Don't do anything irreversible. The President's offered Saddam one more chance to get out by noon." Of course, noon in Washington, D.C., was 2000 in Saudi Arabia, and General Boomer and I laughed. We said, "It's not irreversible, because we can bring them back out."



Then we started moving Task Forces Grizzly and Taro through the first obstacle belt. They were on foot; when they finished that mission, they had to walk a long way. I moved Task Force Grizzly by truck in to clear Jaber airfield, which was MEF objective Alpha, so that I didn't have to tie up our mechanized assets. I moved Task Force Taro, which had infiltrated on the right flank, by truck all the way up to Kuwait International Airport on the morning of G + 3 so that they could clear all the buildings and the airport. They probably captured another 150 Iraqis hiding inside with all the weapons. Taro is what you'd call the lucky plant of Hawaii. It turned out to be a good name for them.

Proceedings: What happened at the airfield?

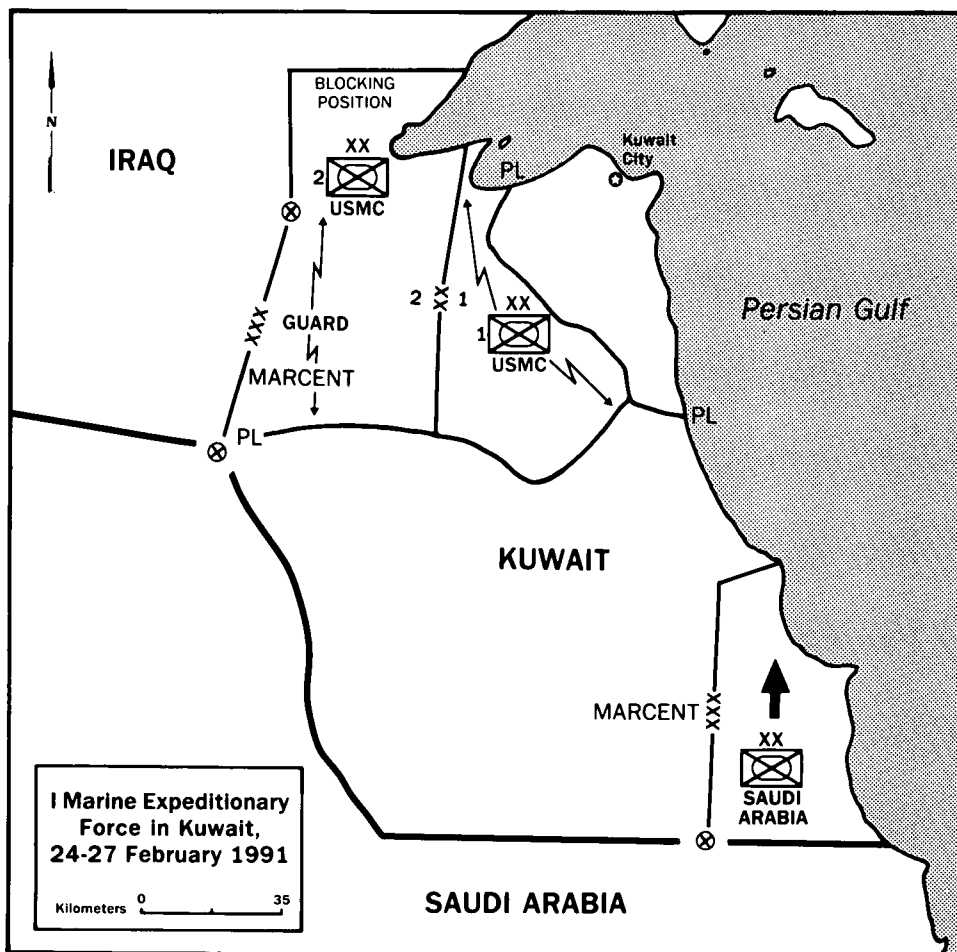
Myatt: We had Task Force Ripper, the division's focus of effort, in the lead, more or less on the divisional left flank and tied in with the 2d Division's right flank. They were heading north to seal off the western-most exits out of Kuwait

City by Kuwait International Airport. We had to move Task Force Papa Bear, which was the division reserve, up adjacent to Task Force Ripper as Ripper started getting heavily engaged with the 3d Armored Division.

By the evening of G+2, we had sealed off Kuwait International Airport. Task Force Shepherd--the 1st and 3d Light Armored Infantry Battalions--then went around to the right of the airport after midnight and sealed it off on the east side. They took their LAVs inside the airfield about 0430 and secured it--without going into the buildings--by daylight. That's when we brought up Task Force Taro. They were right there to go on into those buildings and clear them. We used infantry for that.

Proceedings: How long into the attack were you still concerned that they were going to hit you with chemical weapons?

Myatt: We had the Fox vehicle, a chemical detector, and it kept going off. I still have Marines who are convinced that we did get some mustard gas used on



us, but the false alarms were probably triggered by the heavy smoke from the oil fires. We were not sure even after the cease-fire that the Iraqis might not do something dumb to try to pay us back for what had been for them a very embarrassing situation.

Proceedings: What concerned you most out there?

Myatt: I think the thing that we were most concerned with was preparing to breach the obstacles, because we couldn't find in our history where anybody had gone through the kinds of obstacles that we expected. That the obstacles weren't as sophisticated as we expected was a blessing. We worried about those obstacles, getting through and building speed and trying to get in behind the Iraqis.

I told my folks: "We're not going to fight anybody we don't have to fight." We wanted always to try to find a flank someplace, to get in behind them. We wanted to use that period from the beginning of the air campaign until we started the ground campaign as the time to start attacking their will. The 3d Marine Aircraft Wing air is what did it for us going into Kuwait, not JFACC [Joint Force Air (component commander)].

That was a key part of it, but I also believe the combined arms raids that we conducted was a part of it, and--about 25 January--we hurt a brigade headquarters of the Iraqis so badly with our artillery that it prompted a counter-attack. That included the one that went into Khafji on the morning of 30 January.

The night of the Khafji battle, there were really three attacks. One was the battalion of tanks that came out of Kuwait through Umm Hujul, which hit us. The second one was a smaller-size force that came out of the Al Wafra down into Saudi Arabia and hit the 2d Division. The third was the brigade that went into Khafji unopposed because the Coalition forces did not have anything up that far forward, except for some of our reconnaissance teams.

So here we have Colonel Turki, who commanded the Saudi Arabian King Abdul Aziz Brigade, and a major from the Omani forces who were meeting at a place called Long Rifle, a checkpoint. John Admire walked in and they were discussing whether or not they would counterattack the Iraqis. John Admire told them that we still had two recon teams in there and that we would support them with air and artillery and whatever had to be done. Colonel Turki turned to him and said, "That's enough for me." So they conducted an initial probe with a planned withdrawal to ascertain the enemy dispositions. Then they conducted a very successful counterattack.

We knew that the Iraqis weren't as good as everybody had portrayed them to be at that point. John Admire knew those two commanders, and there's no substitute for knowing who you're going to fight with.

Proceedings: So based on Admire's support, they said, "We're ready to go?"

Myatt: Yes, I think it's because with each of those brigades we also had supporting liaison teams and Air-Naval Gunfire Liaison teams [ANGLICO]. We all knew each other. The Coalition business isn't just common procedures; more

important is you've got the interface with your liaison teams. I think ANGLICO is a key element in that. Cross-training, where we had Marines going up and training those Saudi folks in artillery, engineering, mine warfare-that was important too.

Proceedings: What made things work for you?

Myatt: I rank it in this order: people, ideas, and equipment. We've got really bright people and they've got a lot of ideas, and they're trying to make equipment work. If you look at a PRC-77 radio, technically it's supposed to communicate about 3.5 kilometers; our high-powered gear on the vehicle mounts is supposed to go up to 20 kilometers. We were stretching, from the first element of my division to the rear, about 100 kilometers. We were able to communicate because of the ideas people had. Putting a division Marine aboard the airborne direct air support center the whole time allowed us communicate, as did a lot of effort on setting up relays. You don't always have to be able to talk to somebody if they know what has to be done, and they can keep quiet unless they really have a problem.

Yes, technology worked and equipment worked, but a lot of the equipment couldn't accommodate what we needed done. But people had the ideas that made it work. A young warrant officer and a sergeant designed what is called a fascine, and we made our own and mounted them on our AAVs.

I would temper the technology thing. It's ideas that make the equipment work. I'll give you another example--Quickfire, a non-doctrinal communications net. We put an air officer with the 11th Marine Artillery Regiment to set up the nets from the TPQ-36 fire-finder radars right to the FastFACs. If we had not done that--and used the normal doctrinal procedures through regiment, division, etc.--we'd never have gotten the job done.

Proceedings: There's been a lot of talk about maneuver warfare in the last 10 or 15 years. Has this affected the Marine Corps?

Myatt: I don't really like the term. I think we ought to talk about fighting smart. If you focus first on the enemy and decide that you're not going to meet them head on, you're going to try to find a flank or get behind them--because once you're behind somebody, by and large, most people will quit--then fighting smart is what FMFM-1 talks about. Fighting smart is what a lot of people have been saying all along, which to me makes sense, rather than just, "Well, there are a lot of forces there. Let's just attack. "I say attack, but attack from a position of advantage.

So I think that's what General Gray was after, and I think that's what our lieutenants are trained to do, that's what most of our captains are trained to do. We have some people in more senior grades who want to put a label on it and say they don't want any part of it because it's new. I think that it's, "Lead, follow, or get the hell out of the way." I think we all need to concentrate on fighting smart.

Proceedings: How important do you consider the concept of the "commander's intent?"

Myatt: I think that's the whole business of fighting smart. That applies both to garrison as well as what we saw in Desert Storm. If people know what your vision is, what you intend to happen, then they will take the initiative. It doesn't make any difference if they're in communications with you or not.

Proceedings: Has any particular lesson stuck with you?

Myatt: I think that we need to look very carefully at the Marine air command and control system--what works and what doesn't--and what we invest in it. Some very innovative things were done over there with how we give a direct air support center [DASC] capability to both the divisions. They put an air support element for people right in my CP. There was none of this remote stuff, where people were separated. I would like to see us break down some barriers here, and decide what our Marine air command and control system from the DASC point of view is going to look like in the future.

They had liaison teams right down with the regiments. It works, and I'd just like to see us explore that.

Proceedings: Is there anything that we've missed that you really wanted to talk about?

Myatt: I think what we can't dismiss is the level of effort put into the defenses along the beaches by the Iraqis. I have to tell you that they were concerned from day one about a threat from the sea. When you get down and you look at the really fine engineering effort that was done on defense of the beaches and defense in-depth against an attack coming from the sea, it tied up at least six of the 11 Iraqi divisions that were facing I MEF. I would say probably 40% to 50% of the Iraqi artillery pieces were pointed to the east in defense of this perceived real threat--an attack from the Gulf. There were literally hundreds of antiaircraft weapon systems laid in a direct-fire mode from Saudi Arabia all the way up way above Kuwait City to defend against the amphibious threat.

So when people start agonizing over "There was no amphibious assault," you must remember that what amphibious forces did accomplish was magnificent. There are four kinds of amphibious operations, and our forces afloat did demonstrations and they did raids. They played a very key role, and I think it saved a lot of Marine lives.

Major General Keys commanded the 2d Marine Division. With the U.S. Army's Tiger Brigade attached, the 2d Division packed more combat power than any other division in Marine Corps history. In this interview, General Keys discusses the experience of the 2d Marine Division in the Persian Gulf conflict, including the last minute decision to have the 2d Division create its own breach through the Iraqi defenses.

Rolling With the 2d Marine Division

interview with Lieutenant General William M. Keys, USMC

U.S. Naval Institute Proceedings, November 1991

Proceedings: The Marine Corps bases on the West Coast started emptying out almost immediately, once the balloon went up. What was going on at Camp Lejeune?

Keys: Everyone was tracking the situation, and some units were getting ready to go. Initially, all that mounted out was the 4th MEB [Marine Expeditionary Brigade], which was in process of loading out for Norway, to conduct an annual NATO exercise in the Teamwork series. After a little reconfiguring, they deployed to the Indian Ocean.

The ground combat element of the 4th MEB was the 2d Marine Regiment, which left me with two infantry regiments--the 6th Marines and 8th Marines. Since it was quite possibly headed for combat, we let the 4th MEB go out a lot heavier than we should have--particularly in the combat service support elements. I guess we figured that someday we'd link up out there, but I never saw the 2d Marines again, for the duration of Desert Shield and Desert Storm. In the meantime they were floating around with assets that the rest of us would need when the time arrived for us to mount out. There's a lesson in there somewhere.

Between August and December, we tried to track developments in Southwest Asia through situation reports and intelligence briefs. We received several warning orders that were later canceled: first, to send another regiment; next, to mount out another MEB, this one designated to marry up with gear carried into the theater of operations by an MPS [Maritime Prepositioning Ships] squadron. Late in November, we got the word that the entire 2d Marine Division would go over there and fight under command of I MEF [Marine Expeditionary Force], which in effect would become a corps-level command.

When we received the mount-out order, I still had the two active-duty regiments--the 6th Marines and the 8th Marines. The rest of the 2d Division was filled out with reserves, about 4,000 of them. We filled up our holes and

added an extra Reserve tank battalion. We had a comprehensive individual training program for each reservist: rifle range, gas mask, Code of Conduct--the whole works. At the same time, we were giving the same training to the reservists who were destined to join the 1st Marine Division, already deployed to Southwest Asia. We put about 15,000 reservists through this program in roughly one month. Camp Lejeune looked like it must have looked during World War II, with Marines reporting at all hours of the day and night, finding temporary billeting in a tent or barracks, then starting out the first thing next morning to train for combat.

We began flying the 2d Division to Saudi Arabia around 12 December. The shipping for our heavy gear and supplies (one MPS squadron plus 18 break-bulk ships) had begun sailing around the last of November and continued through December. All our gear had arrived by the middle of January; all the troops were there by year's end.

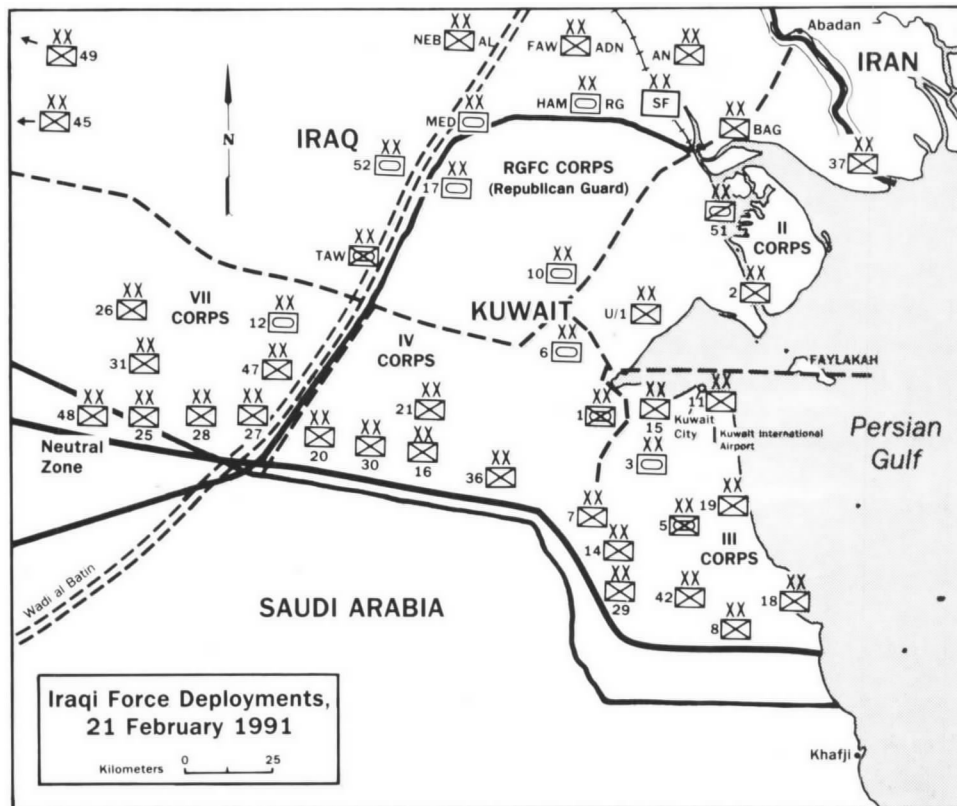
Proceedings: Then you got some reinforcements in Saudi Arabia, didn't you?

Keys: We took operational control of a U.S. Army tank brigade--the "Tiger Brigade" [1st Brigade, 2nd Armored Division]. They came fully equipped with M-1 tanks and were a first-class outfit. They had been together as a unit for about two years, and had been through the National Training Center [the Army's stateside equivalent of the Marine Air-Ground Combat Center in the Mojave Desert]. Their commander and officers really knew their stuff.

We spent the first few days getting to know each other, getting briefed on each other's procedures. That was much less of a problem than you might think. We go to their schools; they go to our schools. A lot of our training and doctrine is the same. Before long, we were one tight division. Right at the beginning, I told the Tiger Brigade that they were my third regiment, and would be treated the same as the other two. This made a great difference to them and paid off greatly later. Those Army tankers now wear the 2d Marine Division patch on their right sleeves--to signify their service with the Marines in combat. At the time we assumed operational control, they were located about 80 miles away, in a relatively good training area. I saw no point in moving them closer, so they stayed there until the first week in January and conducted their own training exercises. We'd go down there to observe and to coordinate some things with them that I wanted to do.

Proceedings: When did you begin moving toward your eventual attack positions?

Keys: About 28 December, the first elements of the division moved north. I wanted to move units into the field as soon as they got their equipment, and get on with some serious training. We moved into a place called the Triangle area--which was in fact a triangle, lying between three hard-topped roads--about 50 miles north of Al Jubayl. Within two weeks, the entire division was up at the Triangle.



We built a training range that could handle all the weapons of a mechanized and armored assault force, and we developed a complex of obstacles for use in training for breaching operations. In addition to their other work, every unit went through a standard syllabus that took about five training days. About the middle of January, we moved northwest to the left of the 1st Marine Division, about 12 miles below the border with Kuwait. We stayed there about two weeks, and--as we did everywhere we stopped--we kept on training. This is where we had our first significant contact with Iraqi forces. Some of our light armored vehicles had a skirmish with Iraqi tanks along the border and killed five, as I recall.

Proceedings: What were the Iraqis doing at this time? Were they trying to run any probes, any reconnaissance missions?

Keys: They would come up to the border at night, and if they did anything beyond that, it didn't go very deep. It was the same with us. CentCom didn't want anybody in the I MEF sector launching combat-reconnaissance missions into Kuwait at this point. The concern was starting the ground war early.

Proceedings: What was your scheme of maneuver at this time?

Keys: Our plans changed as circumstances changed. About the first week of February, General [Walter E.] Boomer [Commanding General, I Marine Expeditionary Force] approved a plan that called for the 1st Marine Division to conduct the breaching operation. The 2d Division would pass through the 1st Division's lines and become the exploitation force. At the time, we were driven to the one-division breach concept of operations because we didn't seem to have enough heavy breaching equipment to support two divisions.

There were many, many problems associated with this plan. For one, it was difficult to get the two divisions together for training and rehearsing. When we finally did some passage-of-lines rehearsing, it did not go well. Since both divisions were heavily mechanized, we might have had a column of vehicles stretching back 30 miles, just getting lined up for the attack. I personally did not care for this plan, but would have supported it if we were driven to it by the lack of breaching equipment.

But by 7 or 8 February, some additional equipment from the Israelis and the U.S. Army had arrived. In addition, my Tiger Brigade had some built-in breaching capability, and knew how to use it--in fact, they gave us a lot of help in planning the entire assault. So I went to General Boomer and asked him to consider my alternative plan. He agreed, and I showed him what I wanted to do. It was rather radical. It called for moving the 2d Division another 80 miles to the northwest and breaching right through one of the Iraqi oil fields. The field we picked was supposedly one of the worst, because of heavy concentrations of hydrogen gas. But we had two or three Kuwaiti resistance fighters with us, and one--who had worked in that field--said that we could probably get through it. If things got too bad, we could always use our gas masks. They were not the most effective filtering devices for hydrogen, but they would do in a crunch.

As I presented this plan to General Boomer, I related my confidence in my subordinate unit commanders and the Marines and soldiers of the 2d Division and I guess it showed through--because he approved the plan (pending General Schwarzkopf's approval). This brought about a major change in the I MEF concept of operations.

Proceedings: It also brought about a major change in the logistical support concept, didn't it?

Keys: It sure did. Brigadier General [C.C.] Chuck Krulak [commanding the Direct Support Command] was there, and General Boomer asked him if he could support the new plan. Chuck said he could, but not from his current location. So in two weeks he carved out a massive logistical support area in the desert, where he was able to support both divisions. I just want to add this about General Krulak and his Direct Support Command. They were right up there with us the entire way, and we owe a large part of our success in the attack to Chuck Krulak as an individual and to the superb performers in his command.

Next, General [H. Norman] Schwarzkopf [Commanding General, the Central Command] came down. We briefed him and he said the plan sounded good. So we were cleared for action. As another aside, I think General Schwarzkopf was a superlative commander--a commander's commander. You could just tell that he knew what he was doing. He instilled a lot of confidence in his general officers. I have a lot of respect for the man as an individual, a soldier, and a commander.

Proceedings: What happened next?

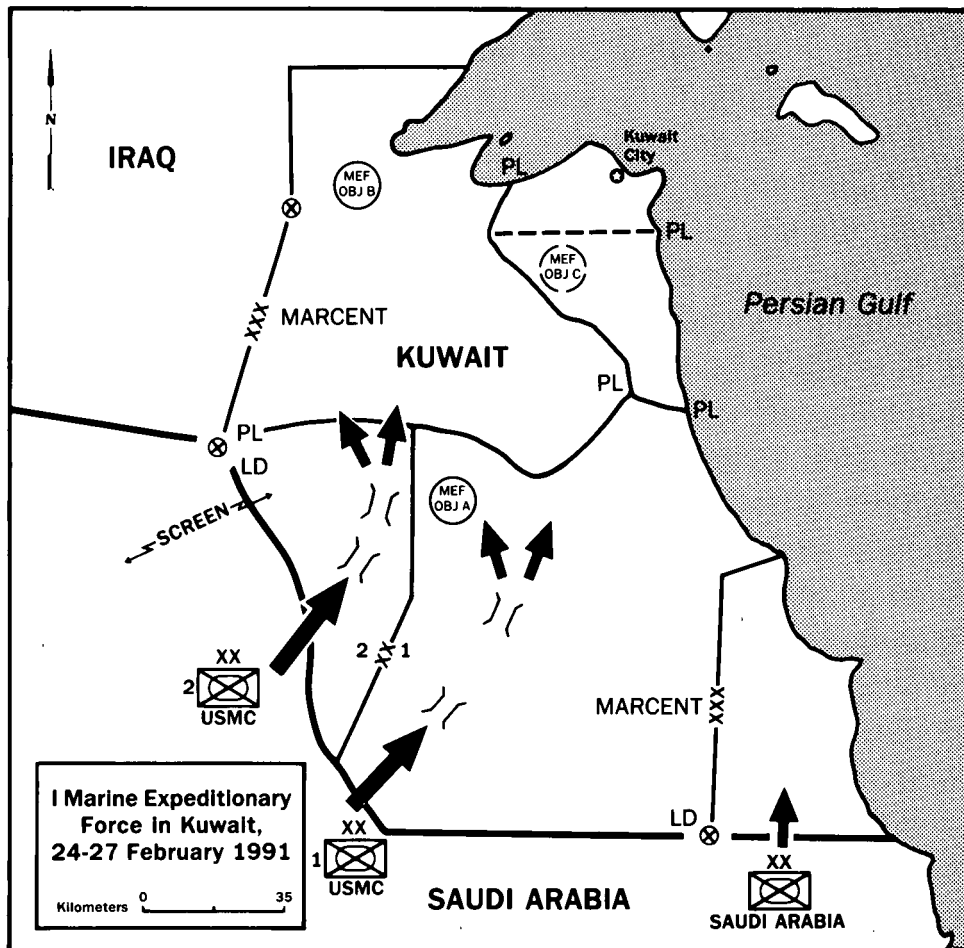
Keys: I directed the 6th Marine Regiment to prepare to conduct the breach. We would do a one-regiment breach, with each battalion, in turn, cutting two lanes through the barrier. We moved the 6th Marines into a sterile area and started to construct an exact replica of the barrier line that we would have to breach. We gathered all the intelligence we could on the area. We sent people back to CentCom headquarters, and we even sent the Division Engineer back to the Defense Intelligence Agency in Washington, D.C., for anything they could find. From photos and imagery we developed a schematic map with a scale of 1:25,000.

The Division Engineers did a superb job of building a barrier to scale, in a short time. Then their commanding officer, Colonel Larry Livingston, Commanding Officer of the 6th Marines, took his units through, battalion by battalion. After one week of training, he reported that he was ready to go. I can't say enough about the way he put it all together.

Next, we moved everybody some 80 miles to the breach area. Our moves over there were mostly self-moves. I had an extra truck company attached to the division, and a total of 672 trucks at my disposal--and I needed every one of them. At times when I needed more, I could rely on our Force Service Support Group and even contracted civilian trucks--but as we got closer to the war, the civilian trucks got less dependable. My point is that--especially in the desert--you need trucks and logistical vehicles to accomplish your mission, and the only vehicles you can count on in every situation are the ones that actually belong to you.

Proceedings: Once you got near the breach site, how did you organize your forces for the attack?

Keys: I put the division in a laydown site, in the order they would go into the assault. The 6th Marines were right in front of the area to be breached. The second unit through would be the Tiger Brigade, followed by the 8th Marines. I sent the Army tank brigade second--to lead the exploitation forces--because they were totally equipped with night-vision devices. The Marines were limited in this regard, but every soldier had what he needed and every Army vehicle had what it needed, and it was the best gear on the market. They truly had an exceptional night-fighting capability, and it made a difference. My thinking was that if the initial penetration by the 6th Marines went slowly, and dragged into



late afternoon or evening, the Tiger Brigade could move up and complete the breach during hours of darkness.

My overall aim was to push as much combat power as possible through those two breach lanes, as quickly as possible. Going into the assault, the 2d Marine Division had a strength of about 20,500, with 257 tanks, including 185 M-1s. It was probably the heaviest Marine division--with the most combat power--ever to take the field.

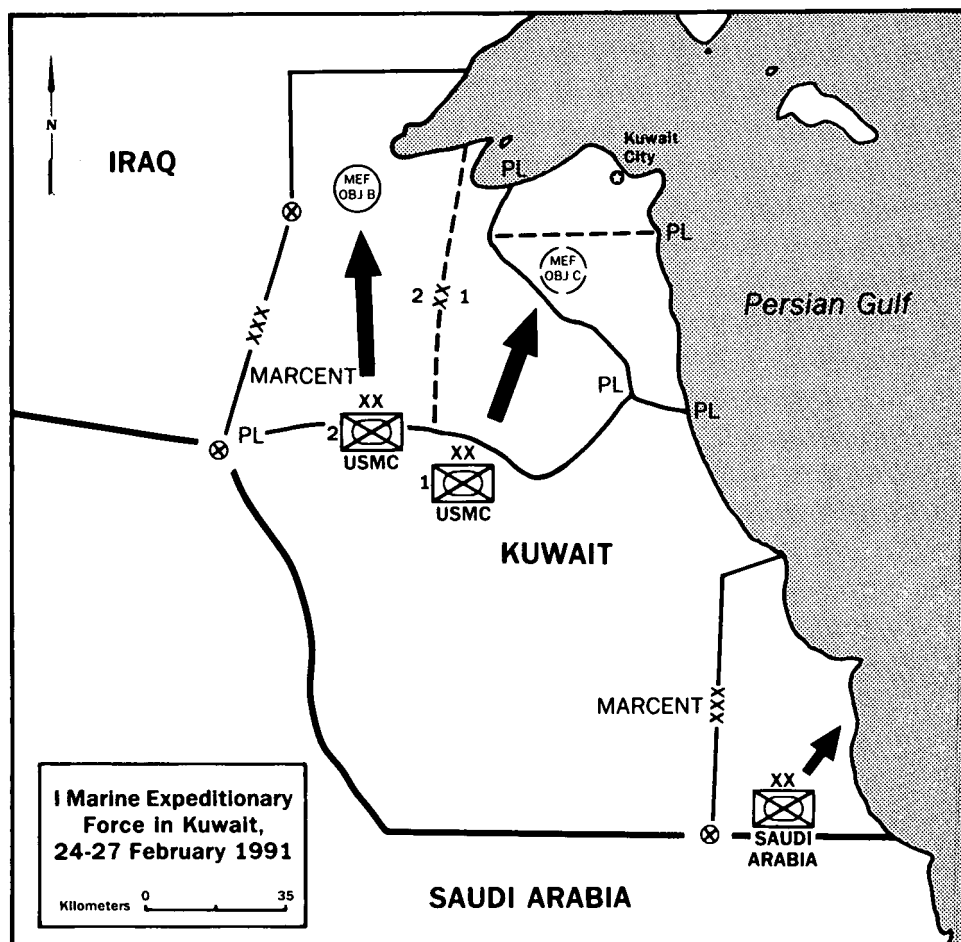
The assault was scheduled for 22 February. General Schwarzkopf asked if we'd be ready to go. I said, "Yes. I'd like to have more time, but I'll be ready to go into the assault then, if that's the date."

He said, "What I'm more concerned about is the weather."

We delayed the assault for two days, waiting for better weather. The weather just got worse. So we put our heads down and kicked off the assault

on 24 February, even though the weather was still rotten. The night before, we had made 18 cuts in the berm line with artillery, so we were ready for a fast start. But the morning fog was so dense that we couldn't see 100 yards ahead. With visibility that bad, we couldn't count on much in the way of close air support—but we punched on through. Contrary to some reports, the Iraqis were still there, waiting for us. They fired about 300 rounds of artillery as we worked to breach the minefields, but they had no forward observers to coax the fire on target, so we could discount the prospect of heavy casualties from their shots in the dark. Aside from mines, Iraqi artillery had been my major concern, so I felt early on that we were off to a good start.

We punched on through the barrier, and by the evening of the first day all of the 6th Marines, the Tiger Brigade, and four battalions of artillery had moved through the breach. The following morning, I brought the 8th Marines through,



and we prepared to continue the attack that afternoon with the Tiger Brigade on the left, the 6th Marines in the center, and the 8th Marines on the right. Light armored vehicles, which had entered Kuwait early (CentCom's policy had changed late in the game), performed scouting and reconnaissance missions on the left flank, while units from the division's reconnaissance battalion screened the right flank.

I need to digress again. The light armored vehicles, in their first combat test with the Marines, really proved their worth--shooting and moving, shooting and moving. They killed more Iraqi tanks than we realized at first, and they took the first Iraqi prisoners. An Iraqi general we captured on the second day told us that he misidentified the first infiltration of light armored vehicles as the main armored attack, even though we had planned it as more of a diversionary attack.

Intelligence sources told us that we would probably come into contact with the 80th Iraqi Tank Brigade, their operational reserve force, attacking into our center. But large-scale attacks never materialized, and we now think that the 80th Brigade was just folded back into the Iraqi 5th Mechanized Division, which both the 1st and 2d Marine Divisions eventually chopped to pieces.

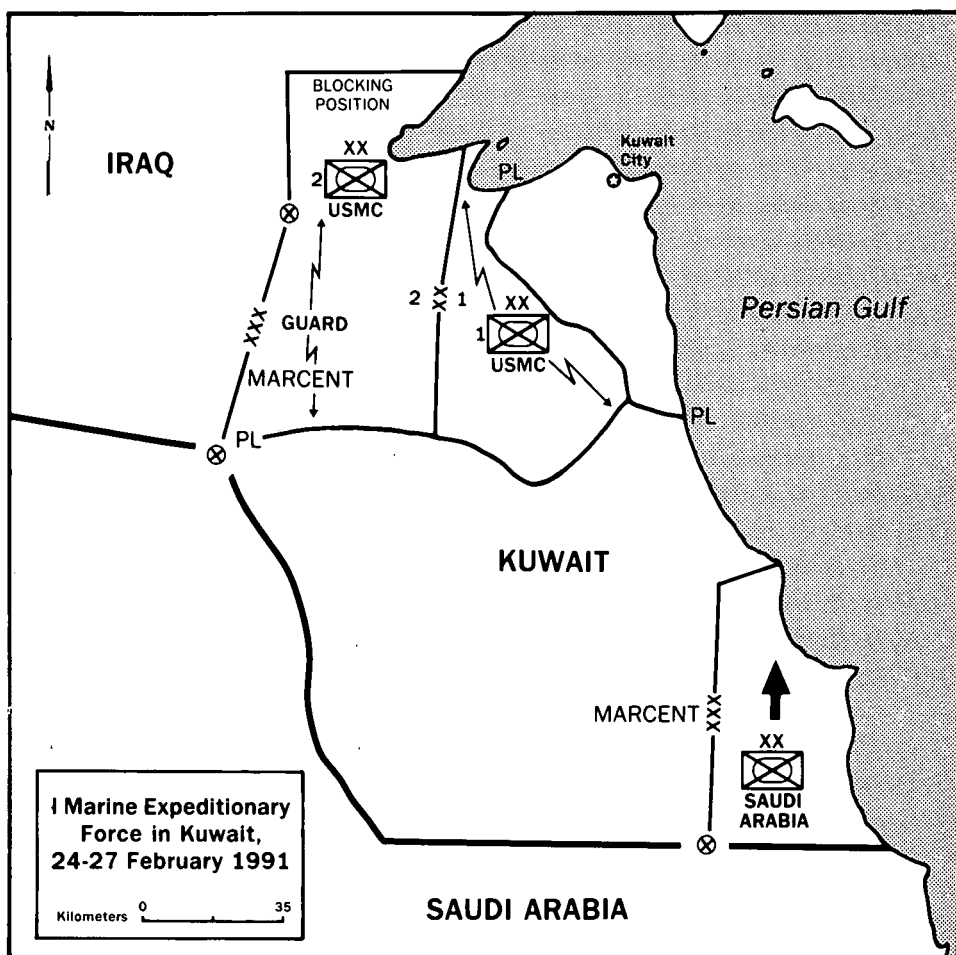
We captured 5,000 Iraqi prisoners the first day. They would take us under fire. We would return fire with effect--killing a few--and then they would just quit. That proved to be the pattern for the entire 100-hour war. Once we took them under heavy fire, they'd fire a few more rounds, then quit.

On the morning of the third day, General Boomer cleared me to drive on Kuwait City, using the Tiger Brigade to envelop to the west, sealing off an area called Al Jahar. Around 1000 that morning, I called in my subordinate commanders to give them mission-type orders. I didn't give them much time to prepare, but they still managed to jump off around noontime. When we got within ten miles of Kuwait City, I cut the Tiger Brigade loose to envelop to the left. They sealed a major intersection on the escape route to Iraq, and trapped thousands of fleeing Iraqis. By the evening of the third day, we were poised to enter the city the next morning. In the morning, the word came down: "Don't go."

The Coalition forces from the region had been selected to enter Kuwait City. The following evening, we met with them at Al Jahar, to coordinate the passage of lines. We held onto a line called the Six-Ring Road; they passed through our lines and entered the city. That was the plan all along.

Proceedings: What about the timing of the cease-fire?

Keys: I think it probably came at the right time. At least it seemed that way when the word came down. In retrospect, it is clear that we could have done a lot more damage to the Iraqi forces if we had pressed on more quickly. It now appears that they started bugging out of Kuwait as soon as we crossed the southern border. But at the time it would not have made sense to expose our forces to counterattacks by overextending ourselves, under the assumption that



the enemy would never fight. That's how it looked at division level, anyway. Overall, I tend to agree with the President: If we had pursued the retreating forces into Iraq, we'd still be in Iraq now--and would probably be there for the next hundred years. We didn't manage to nail the major culprit in all of this, but we did what we had set out to do.

Proceedings: A few questions still linger, after the war. How effective was your intelligence support?

Keys: At the strategic level, it was fine. But we did not get enough tactical intelligence--front-line battle intelligence. The RPV [remotely piloted vehicle] worked very well, but we needed many more of them, plus systems to disseminate their information to all units that needed it. In my opinion, the RPV is going to be our best tactical intelligence-gathering vehicle in the future, and we need to develop that program.

Our electronic warfare assets--for example, the Radio Battalion--worked very well. We also received a lot of information from Marine aviation. They'd fly a mission, and when they got back they'd immediately call the division's combat operations center to report whatever they saw. That was close to real-time intelligence support.

I guess that our biggest overall intelligence shortcoming was in building Saddam Hussein and his forces into a monster that just wasn't there. Going into the battle, this made us more gunshy than we should have been. Certainly, the Iraqis had more equipment and capability than any force we've ever faced. But the fighting spirit just was not there. The individual foot-soldiers were badly abused by their leaders--not necessarily their military leaders, but their government--and low morale was the result. I think their senior military leaders knew what they were doing. After we seized Kuwait City, we uncovered several sand tables depicting their defenses that were incredibly detailed. They were fully prepared for us. They had thousands of weapons and millions of rounds of small-arms and tank ammunition--so they could have put up one hell of a fight if they had wanted to. Their defensive areas were well organized, and had they chosen to put their hearts into it, we would have had a real fight on our hands.

I guess it all boils down to the fact that the individual Iraqi soldier did not measure up to, say, the North Vietnamese soldier. The Iraqis were not ready to die for what they believed in--whatever that was.

And that's it in a nutshell.

Brigadier General Krulak commanded the 2d Force Service Support Group, based in Camp Lejeune, North Carolina, when Desert Shield began. In Saudi Arabia, this unit and the 1st Force Service Support Group pooled their resources into a single logistical support effort. General Krulak commanded the Direct Support Command, which was responsible for the direct logistical support of frontline units.

A War of Logistics

interview with Brigadier General Charles C. Krulak, USMC

U.S. Naval Institute Proceedings, November 1991

Proceedings: When did you start to crank things up for the move?

Krulak: In the fall of 1990, the word came down to prepare for a rotation of forces in Saudi Arabia. We would be relieving the 1st FSSG, which had begun to arrive there in August and had stood up its headquarters early in September. We began to run a series of command-post exercises, to simulate the laydown of the 1st FSSG forces in Southwest Asia. As I began to place my people on the map, the way [Brigadier General] Jim Brabham had his situated on the ground, I decided that if a rotation of forces was ordered, I'd try to take my entire FSSG. Jim had taken a slice of his headquarters from the 1st FSSG in Camp Pendleton and placed it on top of two composited brigade service support groups that had entered Saudi Arabia with the 7th and 1st Marine Expeditionary Brigades. He and his people were doing a superb job, but as we continued to run our command-post exercises it became obvious that if we shifted to offensive operations, we would need the more extensive command-and-control capability of a full FSSG. When the word came that we were going to reinforce the 1st FSSG--and not replace it by rotation--I stuck to the same concept of going to Southwest Asia with a full FSSG.

Once we got there, we established ourselves as a Direct Support Command, with the 1st FSSG assuming the general support role. Jim Brabham, who was senior to me, became the senior Marine logistician in country. Just before Christmas, Lieutenant General [Walter E.] Boomer directed me to locate a place up north where we could start putting in a logistic support area, big enough to support a division-sized breach of the Iraqi barriers and minefields along the southern border of Kuwait. I went north and found a place called Kibrit, about 50 kilometers inland from Al Mish'ab. It was an old, abandoned runway--very desolate. After I reported my find to General Boomer, he gave me the go-ahead to set up a combat service support area, with seven days of ammo and supplies to support the attack. I sent up my big earth-moving equipment, and by 2 February 1991 Kibrit was ready to go. It had a big fuel farm, the largest

ammunition supply point in Marine Corps history, and all the supplies I MEF needed for the attack into Kuwait.

Proceedings: Seven days for a Marine division--that's a lot of ammunition. . .

Krulak: In this case, we're talking about seven days for two Marine divisions, plus the Army's armored Tiger Brigade, which was operating with the 2d Marine Division. Those forces generate a very large ammunition requirement, which made this staging operation one heck of a gamble on General Boomer's part. Why? Because we were staging our ammo far forward of any Marine ground forces. But General Boomer wanted to ensure that he had his support up where it would do him some good when the push into Kuwait began. At the time we started to build up Kibrit, the 1st and 2d Marine Divisions were some 100 kilometers south of us. They did not come north until late January 1991. North of Kibrit, all we had was a screening force of Saudis and Qatars. At the time of the Iraqi move on the abandoned coastal town of Khafji, we were still the northernmost Marines in town, although Major General [William M.] Keys and the 2d Marine Division were by then only ten miles or so to our south-west.

The Iraqi attack on Khafji was three-pronged, and we were in danger of being attacked. I took every bit of ground defense I had and put it around the ammo dump. I felt that I could lose everything but the ammo. If we lost that, our offensive capability would cease to exist. I called General Keys and he sent up some reinforcements from the Tiger Brigade, who screened us for the next few days while the Khafji fight was going on. Those were interesting times, as the Chinese might say. [EDITOR'S NOTE: "May you live in interesting times" is regarded by the Chinese as a curse.]

Proceedings: So the Kibrit gamble paid off . . .

Krulak: The whole support problem was simple, as long as we were at Kibrit. It was only 50 kilometers from the coast--handy for ammunition resupply. In addition, it had its own water source--a well of its own. But things changed. For the logisticians, the war didn't begin on G-Day--24 February--with the start of the ground assault; it really began about three weeks earlier, when General Boomer decided to breach the Iraqi defenses in two places with two Marine divisions, instead of a single breach with one division.

On or about 4 February, I went to see General Keys. I had been his assistant division commander at one time, so it was no big deal--I just dropped by. Entering his tent, I saw General Boomer, as well. They were looking intently at a map.

General Boomer looked up at me and asked, "What would you think of a two-division breach?"

Well, I had thought about that possibility a lot, as had most of the general officers out there. I went through the laundry list of reasons to do it: complicating the enemy's defensive problem by attacking on two fronts; avoiding a

passage of lines, especially if the sole breaching attack bogged down; making better use of supporting arms--all of the things Marines think about. But I wasn't telling General Boomer anything he didn't already know. He looked at me and said, "Yes, I agree and we're thinking about doing it."

Then he said, "And I'm thinking about doing it here." He put his hand on the map--not on the southern part, but the western part--maybe 150 kilometers northwest of Kibrit. Then he said, "Can you support that?" [EDITOR'S NOTE: About 40 years earlier, Brigadier General Krulak's father, then the G-3 (Operations) Officer of the Fleet Marine Force, Pacific, was asked whether the Marines could provide a division to reinforce embattled forces in Korea, as requested by General Douglas MacArthur. Then-Colonel (later Lieutenant General Victor Krulak let his faith in the Marines override the discouraging numbers then at his disposal, and said that the Corps could support. Within three months, the 1st Marine Division, with two of its three regiments comprised mostly of reservists, landed at Inchon and changed the course of the war.]

I thought to myself, "I'm not sure I can support that!" But what I said was, "I know I can't support that from Kibrit. I need to find another location for the combat service support area."

"Okay, go look for another place," General Boomer said.

I went back to my staff and they went out and looked. They came back and said, "There's a location called the Gravel Plains, about nine miles west of the Kuwait border, which would be perfect to support General Boomer's scheme of maneuver," they said.



We had our new spot. I named it Al Khanjar--the dagger. We started building this miracle in the desert on 6 February and had it completed by 0100 on 20 February. Al Khanjar encompassed 11,280 acres--just think of it. The ammunition supply point alone covered 780 acres, with 151 separate cells for ammunition stowage--protected by some 24 miles of berm. One stray artillery round wouldn't burn up the whole works, as happened more than once in Vietnam. We also had 5,000,000 gallons of fuel on deck at Al Khanjar, the largest fuel point the Marine Corps had ever seen. We also had 1,000,000 gallons of water stowed there--as well as the third-largest Navy hospital in the world, in terms of operating rooms. In deference to Iraqi artillery capabilities, all of this was dug in--none of it was above ground.

During those 14 days, the 8th Motor Transport Battalion drove more than a million miles. Back at Camp Lejeune, 8th Motors drives roughly half a million miles a year. During those two weeks, the engines of the trucks, the bulldozers, the road graders, and other key vehicles were never turned off. We just replaced the drivers. Despite the heavy equipment operating tempo, our equipment readiness rate for the period remained above 94%.

Proceedings: No overheating?

Krulak: No. It was just amazing. And during this time frame, we were also assisting the SeaBees in building Khanjar International Airport (in reality, two C-130 airstrips), and helping the air wing build Lonesome Dove, a large helicopter support facility. We also built the Khanjar Expressway, a four-lane superhighway through the desert, running from the breach sites through both division areas, and back to Khanjar. At the end of those two weeks, we had 15 days of supply at Khanjar, three days with each of the direct support groups, and a day with each of the mobile combat service support detachments--in addition to whatever the divisions were carrying themselves.

I'm not a logistician by trade, so I set this up from a infantryman's viewpoint: "How would a division commander want to be resupplied?"

The answer was fairly obvious. If I shot a bullet, I'd want to reach back and have someone hand another bullet to me, so I could stay on the line. I wouldn't like having to drop my rifle and leave the firing line, in order to go back and get another bullet. I wouldn't even want to take the time to ask for another bullet; it should just show up automatically. What that implies, of course, is that the guy who supplies me the bullet and the guy who eventually brings up more bullets for him to give to me both must be able to keep up with me, the bullet-shooter. The intent was that the user would never experience any loss of capability. It was a total "push" system.

Proceedings: As opposed to a "pull" system, where the user has to request resupply . . .

Krulak: Total push. Nobody requested anything. Each regiment of the 2d Marine Division had its own mobile combat service support detachment, with

a day's worth of all classes of supply, moving right along with it. Each task force in the 1st Marine Division had the same setup. If a machine gun went down, we wouldn't keep the gunner waiting while we tried to fix it; we'd just pull a replacement off the rack of machine guns the detachment carried, and hand it to that gunner. The same thing would apply if we lost a wire-guided missile launcher or a light armored vehicle. We had detachments from the maintenance battalion up forward, and they would begin repairing equipment immediately, but no one had to wait while they worked. This responsiveness of the combat service support system was something new--and it worked.

Proceedings: Was your medical support geared to work far forward, in the same way?

Krulak: We had surgical support--trauma specialists--right up with the mobile combat service support detachments. They could sort casualties out and perform immediate lifesaving procedures--the same as regular surgeons, only more capable. Then, with the direct support groups, right up there on the border, we had the casualty collecting and clearing companies in place. Behind them, we had the trauma centers--at Al Khanjar, Kibrit, and Al Mish'ab.

We thought that if we were going to take a lot of casualties, it would be during the early stages of the breaching operations, so we kept our surgical support teams up close to the advancing units and planned for overland evacuation of casualties to the rear. As things turned out, we had relatively few casualties and helicopters could in fact fly over the battlefield, so we loaded our medevacs at a forward landing zone--just like Vietnam--and overflew the border medical facilities to take the casualties directly back to Al Khanjar. It wasn't that far--you could actually see the border from Al Khanjar.

We were set up to handle a worst-case situation. Each of the mobile support detachments had a collecting and clearing company mounted on trucks. If we started taking casualties, we could have driven up there and set up operating rooms right next to the battle. Everything was mobile and ready to go. Thank God we didn't have to use that capability.

Proceedings: Desert Storm was probably the first time since World War I that Marines faced the possibility of mass casualties from chemical or biological attacks. How did that affect the way you set things up?

Krulak: It played a major role. It required us to stage a lot more water, because that's what we were going to use for decontamination. We brought up as many water-carrying vehicles as we could. They weren't all tanker trucks; they were anything that could carry containers of water. All the mobile support detachments had decon water with them, as did the collecting and clearing companies and the hospitals. Wherever we set up to treat casualties we had decontamination water nearby. If you bring a contaminated casualty into an operating room, you wipe out that OR--and we just couldn't have that.

Also preparing for the worst case, we had the surgeons, wearing individual protective clothing, practice dealing with contaminated casualties.

Proceedings: How did the combat service support troops hold up under the high tempo of operations?

Krulak: They did fine. The infantrymen--and I'm one--train in specific tactics for specific missions that have a beginning and an end. But every day is the same for a wrench-turner. He might be working on hard stand back at Camp Lejeune or in the sand of Saudi Arabia, but he still turns that wrench the same way every day. So getting our guys up to speed for their combat service support jobs in the desert was relatively easy compared, say, to training and equipping the 1st and 2d Marine Divisions to make those historic breaches of the Iraqi barriers and minefields.

For us, the really different thing was that nobody had ever mounted out a full force service support group before. Most thought it couldn't be done. But we deployed as a full FSSG to Al Jubayl, moved to Al Mish'ab, from there to Kibrit, from there to Al Khanjar, and then on to Al Jaber, in Kuwait. Then we rolled back to Al Khanjar, then to Kibrit, then to Al Mish'ab, and finally back to Al Jubayl. The whole shooting match--the whole damned FSSG. That is something to accomplish!

Proceedings: Back at Camp Lejeune, the FSSG would have its share of female Marines, doing everything from punching typewriters to running heavy earth-moving equipment. As you moved farther and farther forward in a combat environment, did you have to make allowances for the females, and leave them in the rear?

Krulak: We took all of them with us. They were magnificent. The first Marine out of the 2d FSSG to be recommended for a Bronze Star medal was a woman. My G-1 [personnel officer] was a female lieutenant colonel; my G-2 [intelligence officer] was a female major. The noncommissioned officer in charge of our communications center was a woman; 50% of the communications watch sections were women. We had female platoon commanders. After dark on the first day of the ground attack, ten of my female truck drivers went through the breach to bring back enemy prisoners, so they actually cleared the breach ahead of some of our hard-charging infantry units. I had a couple hundred female Marines up north with me, and none of them ever shied away from anything. None of them went home on emergency leave--zero! None of them got pregnant in Southwest Asia--zero! The women, as well as the Marine Corps Reservists, did a truly phenomenal job.

I'm a firm believer in the capabilities of our female Marines to perform under pressure. I'm not saying that they should be infantrymen, but there is a role for them in combat--certainly in the combat service support arena. They did a great job.

Proceedings: Is there a question I didn't ask that you would like to answer?

Krulak: I've been an infantry officer for 26 of my 27 years in the Marine Corps. But as a temporary logistician, I have never been prouder of any group of men and women than my FSSG. Nobody who was not there will ever know what it took to build the support area at Al Khanjar. General Boomer had never seen anything like it. It was so big that you could not see from one end to the other; it faded into the horizon. And the Marines who put that together in two weeks didn't stop to rest on their oars; they went through the breach with the combat units and continued to do their thing.

You can talk all you want about the air and ground campaigns, and--God bless them--those warriors did a magnificent job. I'd never begin to take anything from them. Ten years from now, however, when historians and strategists and tacticians study the Gulf War--what they will study most carefully will be the logistics. This was a war of logistics.

Brigadier General Admire commanded the 3d Marines during the Persian Gulf conflict. In this, the second of two articles, General Admire describes training and fighting with Arab allies during Desert Shield, emphasizing the importance of close personal relationships between allies in coalition warfare. "Task Force Taro" is an allusion to an edible plant common in Hawaii, the home port of the 3d Marines.

The 3d Marines in Desert Storm

By Brigadier General John H. Admire

Marine Corps Gazette, September 1991

When the 3d Marines deployed to Saudi Arabia in mid-to-late August 1990, they immediately displaced to base camps and forward defensive positions. A rear area was established at Ra's Al Ghar, which was a Saudi Marine recruit training facility south of Jubail. This created unique opportunities for the Hawaii Marines. This association with fellow Marines provided the 3d Marines with the training areas and ranges needed to conduct weapons firing and field training. Initially, ordnance restrictions and training area constraints delayed field exercises for most American forces. But the bond of cooperation between Saudi and American Marines enabled us to begin a cross-training program that eventually expanded considerably.

MajGen James M. Myatt, commanding general, 1st Marine Division, encouraged and directed the 3d Marines to become the division's focal point for cross-training initiatives with the Arab Coalition forces. (See author's article in *MCG*; Aug91.) Consequently, in October 1990 the regiment, which became known as Task Force Taro, began training with the Saudi Arabian King Abdul Aziz Brigade. The Saudi brigade was located on the Saudi and Kuwaiti border and training with them allowed us to operate on terrain in which we would later conduct combat operations.

From October through December the 3d Marines rotated company (-) reinforced units of 150-200 U.S. Marines forward to train with the Saudis. These 8- to 10-day training periods focused on the complete spectrum of military subjects: tactics, weapons, leadership, and maintenance, among others. We were very conscious and careful, however, to present the cross-training as a mutually supporting and reciprocal effort. We acknowledged the Saudi expertise in desert tactics and asked them to teach desert survival, desert navigation, and desert tracking classes. Throughout the next three months the exchange of tactical knowledge and procedures enhanced the capabilities of both forces. In the process, however, a significantly more vital relationship began developing. Arab and American friendships emerged founded on the common bond of the brotherhood of arms.

A unique camaraderie developed as a natural result of the challenges and sacrifices of desert life. American Marines were invited into Saudi Bedouin tents for meals and began to experience Arab culture and hospitality. Marines hosted Arab Coalition Forces during our traditional Marine Corps Birthday Ceremony and acquainted Arabs with the heritage of our Corps. The friendships grew into a special trust and confidence between Arabs and Americans and became the foundation for future battlefield success.

In January 1991, partially because of the Task Force Taro and the Saudi brigade relationship, the 3d Marines displaced forward to Al Mish'ab. The area had been previously an exclusively Arab sector for combat forces. Nonetheless, because of this special rapport, Task Force Taro became the northernmost forward-deployed Marine combat force in Saudi Arabia.

At this phase in the deployment, the 1st Marine Division and its combat forces were located approximately 80 to 100 kilometers south and to the rear of Task Force Taro. Therefore, we adopted the concept that if the war were to suddenly be initiated by the enemy, Task Force Taro would fight with and alongside Arab Coalition Forces instead of the 1st Marine Division. Consequently, cross-training with the Arab Coalitions Forces expanded and intensified. Positioned in the midst of Saudi Army, Marine, and National Guard Forces, as well as Qatari, Pakistani, Moroccan, Bangladeshi, and later the Afghan "Freedom Fighters" (the *Mujahadin*), Task Force Taro began training daily with coalition units.

The Task Force's primary mission was to plan and prepare for helicopter-borne assaults as the 1st Marine Division's helo assault force. But once committed the regiment's tasks would focus on defeating Iraqi armor/mech counterattack forces. Therefore, as a basic infantry force with mobile anti-armor assets limited to TOWs and heavy machineguns, antitank tactics became critical to Task Force Taro. We had no access to American armor/mech assets; the Arabs had the only antiarmor assets in the area. Task Force Taro provided the helicopters and Arabs provided the tanks for helo assault and infantry-versus-tank classes, respectively. These cooperative training programs further strengthened the bonds of professional and personal friendships and contributed significantly to preparations for the approaching war.

On 17 January 1991 the allied air campaign was initiated. In response, the Iraqi Army conducted supporting arms attacks into Saudi Arabia. As the most forward-deployed U.S. combat unit, Task Force Taro became the first American unit to receive Iraqi artillery, rocket, and missile fire. As a counter to the Iraqi threat, however, Task Force Taro initiated the first ground-oriented attacks against Iraqi positions in Kuwait by conducting an artillery raid on 20-21 January. (See "Artillery in the Desert, 1991: Report #1" MCG, Apr91, for more details on raids of this type.) Arab Coalition Force observers were invited to participate and subsequent American Marine instruction and rehearsals with the Arabs prepared them for the conduct of similar raids. Thereafter, artillery raids and border skirmishes were conducted randomly and frequently.

In retaliation for American and Arab artillery raids, the Iraqi Army attacked Saudi Arabia. The Iraqis conducted two coordinated attacks during 29-31

January. To the west an Iraqi assault was defeated by the 1st Light Armor Infantry (LAI) Battalion. To the east the Iraqis attacked and seized the coastal town of Khafji. The town had been evacuated and abandoned by the Saudis because of its close proximity to the border and the frequent enemy artillery barrages into the city. The sustainment of civilian casualties was unnecessary and Khafji's citizens were temporarily relocated to safety. Tactically, the town was undefended, with a defensive line established to the south of the city. This created a buffer zone between the Iraqis and the Americans and Arabs in which any Iraqi advance could be engaged by supporting arms fire. In essence, Khafji became a trap, and the Iraqis fell for it.

Prior to sunset on the day the Iraqis captured Khafji, we conferred with Arab Coalition Force leaders to develop plans for a counterattack. We advised Col Turki, the Saudi brigade commander, and the Qatari commanders of proposed actions, explaining that two Task Force Taro reconnaissance teams had remained in Khafji to continue their intelligence collection tasks and engage the Iraqis with artillery fire and air strikes. We offered that the Marine recon teams could remain undetected for 36-48 hours, but that thereafter their positions would probably be compromised.

For me, the Battle of Khafji involved one of the most difficult decisions I've ever had to make. As a Marine, as a leader of Marines, one waits a career for such an opportunity to execute a major counterattack, to recapture an enemy-seized objective, to validate months of arduous training and preparations in actual combat. It truly was the opportunity of a lifetime for a Marine. I believed in my Marines, and I was confident in our capabilities. But it was also an opportunity for us as Americans to demonstrate our belief, our trust, our confidence in the Arab Coalition Forces.

Therefore, with MajGen Myatt's concurrence and support, we deferred to the Arab Forces. We encouraged them to be the main attack. We accepted the secondary role as the supporting force. Khafji was in the Arab area of operations, and for us to preempt the Arabs with an American dominated attack would have been, at least in my opinion, counterproductive to the four months of cross-training we had accomplished with the Arab Coalition Forces. Khafji, therefore, was truly an Arab victory. It was a difficult decision to defer to the Arab Forces, but it was the right decision. The Battle of Khafji was a tactical victory for the Arabs; it was a strategic victory for the Americans.

Task Force Taro planning initiatives focused on the Saudi and Qatar forces conducting the main attack with their armor and mech forces. Concurrently, American Marines would support the assault with antiarmor weapons systems and infantry security forces as well as air-naval gunfire liaison teams. But, more important, Task Force Taro would provide the supporting arms fire, primarily artillery, as well as the critical air support.

The plan agreed to, Col Turki ordered the attack. Within hours the Saudis and Qataris, with American Marine support, executed a night probing attack to determine Iraqi Army unit dispositions and reactions within Khafji. Then, after a planned withdrawal and the finalization of the plan, we counterattacked and within 6 to 12 hours routed the Iraqi units in Khafji, recaptured the city, and

safely recovered the American Marine recon teams. In the process, over 600 Iraqi enemy prisoners of war (EPWs) were captured and over 90 Iraqi tanks and armored personnel carriers were destroyed.

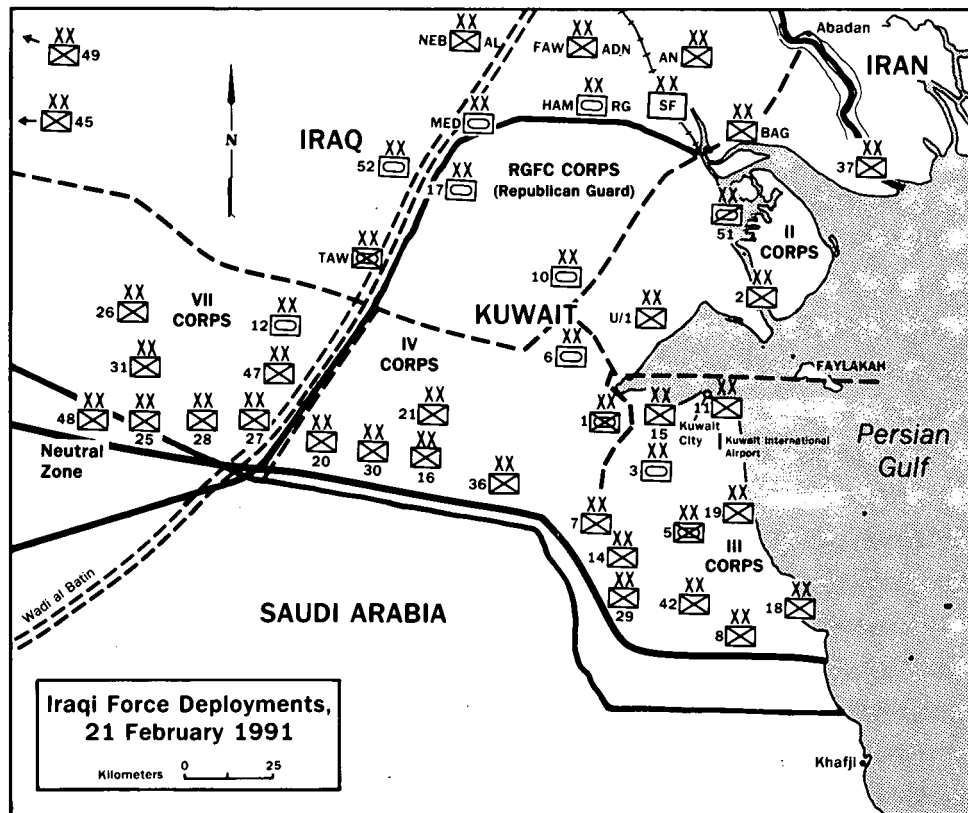
The statistics, however, were secondary to the true consequences of the Battle of Khafji. To understand its true meaning, one must appreciate the preceding circumstances and situations. At the time Col Turki courageously announced, "We attack," the Iraqi Army was the fourth largest army in the world. It was reported to be the most combat tested, experienced military in the world as a result of its eight-year war with Iran. Furthermore, in the vicinity of Khafji, intelligence analysts estimated the Iraqis had approximately four to six times the number of tanks we had and six to eight times the artillery pieces.

Meanwhile the Saudi military had minimal experience in conventional battles in modern times, especially ones with the technical and sophisticated weapons on today's modern battlefield. Similarly, the Qataris, to our knowledge, had never deployed from their sovereign borders to participate in combat. It truly was a situation of David versus Goliath. But in the Arab Coalition Forces' slingshot was the support of the American Marines. The mutual trust and confidence among the respective forces ensured a crushing Iraqi defeat and a crucial American and Arab victory. From that point on there was absolutely no question regarding the courage and conviction of the Arab Coalition Forces.

There were other consequences of the Battle of Khafji as well. First, the confidence and morale of the Arab Coalition Forces were enhanced immeasurably. Second, we concluded that the Iraqi Army had no resolve. We advised Gen Myatt that if we hit the Iraqis hard and fast they would quit--and quit early. We surmised that the Iraqis had no desire to stand toe to toe and engage in a slug-fest with a dedicated opponent. Consequently, Gen Myatt decided to pull battalions off the line and to assign them the principal task of EPW collection and control. This would contribute to a rapid and unimpeded attack by Marine forces and free them from anticipated administrative and logistical burdens. Third, the Arab Coalition Forces requested a major modification to the ground campaign scheme of maneuver. It was this third consequence that proved critical to the subsequent assault into Kuwait and Iraq.

Previously, the ground scheme of maneuver called for U.S. Marines to attack north in the eastern and central portion of Kuwait. The U.S. Army and British and French forces would also attack north from positions to the west. Meanwhile, the majority of the Arab Coalition Forces would follow in trace of the attacking Americans and Europeans. The American Marines would then encircle Kuwait City and secure all entrances and exits to the city. At this point the Arab Forces would conduct a passage of lines and clear the city by house-to-house and door-to-door fighting.

But after the Battle of Khafji victory, the Arab command advocated that they attack as equal partners with the American and multinational forces. The Arabs acknowledged that if the Americans were to breach the formidable Iraqi defenses, they too would assault the barriers and attack on line with the Marines. Therefore, this proposal resulted in the Arab Coalition Forces, primarily Saudi and Qatari, attacking north in the eastern avenue of approach centered on the



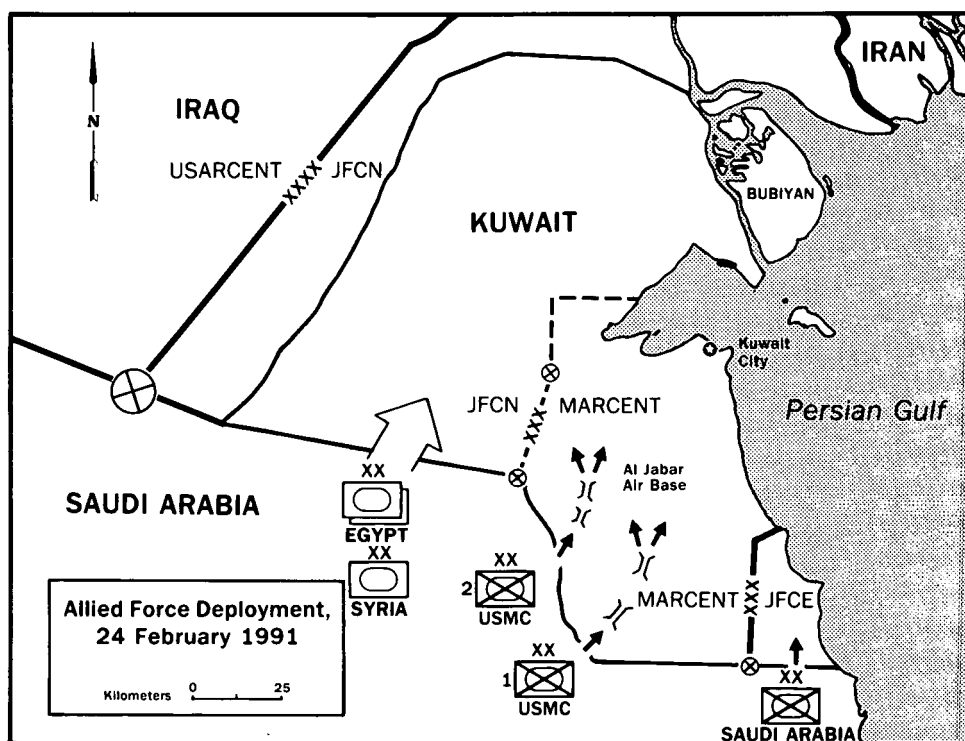
coastal road. The American Marines-the 1st and 2d Marine Divisions-shifted their attack to the west and were now able to concentrate their forces for a rapid and massed assault directly toward Kuwait International Airport. Furthermore, the U.S. Army and European forces, supported by Egyptian and Syrian forces, displaced farther to the west to conduct what Gen Norman Schwarzkopf, USA, Commander-in-Chief, Central Command, termed the "Hail Mary" or end-around flank attack. This classic maneuver warfare tactic surprised the Iraqi Army and contributed to an incredulously rapid attainment of established political and military objectives. The genesis of this final alignment was the cross-training with Arab Forces, the friendships and trust and confidence that developed, and the combined operations that characterized the Battle of Khafji. The consequences of the Battle of Khafji were truly pivotal.

As the Kuwait and Iraq assault plans were prepared for execution, Task Force Taro received orders to displace approximately 100 kilometers to the west to rejoin the 1st Marine Division for the first time in almost two months. Prior to executing the movement, Task Force Taro Marines bid farewell to their Arab comrades in arms. A letter was personally delivered to Col Turki from MajGen Myatt, congratulating him for the superb Khafji victory and thanking him for assisting in the recovery of the two Marine recon teams.

On 19-21 February 1991, Task Force Taro displaced from Al Mish'ab to assembly areas from which to launch the attack into Kuwait. In the course of

displacement we received a new mission as an infiltration force to secure the 1st Marine Division's right flank. Previously, the Task Force had trained in virtually every conceivable mission, but the infiltration task was never a focus. Although we had from our other training an appreciation of how the infiltration task might contribute to the main attack forces--Task Force Ripper and Task Force Papa Bear--the new mission was somewhat of a psychological shock to Task Force Taro. We were encouraged by MajGen Myatt's confidence in assigning us such a critical task with minimum notice and accepted our supporting attack role with the understanding that we would have no armor, no assault amphibious vehicles, no major mechanical or explosive breaching assets. We would simply infiltrate at night on foot, with bayonets and rifles as our principal weapons.

The evening of 22 February we crossed the border into Kuwait on foot to attack positions south of the Iraqi defensive barrier. Throughout the daylight hours of 23 February we remained undetected in harbor sites and prepared for the infiltration. Then, the evening of 23 February, crawling on hands and knees, Task Force Taro infiltration forces penetrated the substantial Iraqi minefields, barbed-wire obstacles, tank traps, and earthen berms. By sunrise the lead elements had penetrated the barrier and initiated the clearing and proofing of three vehicle lanes for follow-on forces.



The success of the infiltration mission by Task Force Taro and Task Force Grizzly, on the division's right and left flanks, respectively, had significant impact. We penetrated the Iraqi defenses, surprised the enemy forces, operated behind enemy lines to distract the enemy's attention from the main assault, and secured the flanks from anticipated Iraqi armor/mech counterattacks. The confidence and morale of the main assault forces were enhanced significantly with the knowledge that the attack had been successfully initiated and was proceeding as planned.

Thereafter, the main assault task forces executed the primary breach on the Iraqi first defensive barrier. We had anticipated that the Iraqis would defend relatively lightly at the first barrier, but would defend in strength at the second barrier. Consequently, we deduced that once we had penetrated the first barrier and were consolidating to attack the second barrier, the division's advance would be vulnerable to Iraqi artillery fire and armor/mech counterattacks. The enemy's numerical superiority in armor and artillery assets rendered it imperative that the attack proceed with utmost speed between the two barriers. The rapid and continuous attack was dependent upon Marine close air support to neutralize Iraqi massed armor counterattacks and supporting arms fires.

Unfortunately, the prevailing northeasterly thunderstorm winds and the massive smoke clouds from the approximately 600 oil wells that had been exploded and ignited by the Iraqis reduced ground visibility to about 100 meters and neutralized the crucial Marine air support. As if by divine intervention, however, approximately one hour prior to the required decision time for the execution or delay of the attack on the second barrier, the winds shifted from the south and clouds disappeared and the skies cleared. The attack continued as planned. The second barrier was assaulted and secured.

On 25 February, Task Force Taro conducted the only Marine helicopterborne assault of the war. Assaulting into the flaming inferno of the Burgan oilfields, Task Force Taro elements expanded the security and screen of the division's right flank. Then on 26 February, the task force executed an all-night movement to attack positions south of Kuwait International Airport. At sunrise on 27 February, in trace of the 1st LAI Battalion, Task Force Taro secured the airport and the Marine Corps' final objective of the war. A cease-fire was proclaimed on 28 February and negotiations were initiated for Iraqi compliance with the United Nations resolutions as a prelude to peace.

This article has focused almost entirely on the Hawaii Marines, Task Force Taro. The victory on the Arabian Peninsula was achieved by the contributions of all our Nation's Military Services as well as the Arab and multinational forces. It was a joint and combined effort. We are appreciative of the contributions of all concerned and proud to have played our small part in the ultimate outcome.

Captain Padilla served as a weapons and sensors officer with Marine All Weather Fighter Attack Squadron 121, which flew the F/A-18D Hornet during Desert Storm. In this brief article, Captain Padilla describes his squadron's preparations for war and the techniques used in combat.

F/A-18Ds Go to War

by Captain Rueben A. Padilla, USMC

U.S. Naval Institute Proceedings, August 1991

Marine All-Weather Fighter-Attack Squadron 121 began trading in its A-6Es for two-seat night-attack F/A-18Ds on 27 April 1990 at home base in California, and left for Saudi Arabia on 7 January 1991--five days later, six aircraft and 118 Marines were at Shaik Isa air base in Bahrain.

By the end of January the whole squadron was there--12 F/A-18Ds and 204 Marines, including 34 pilots and WSOs (weapons and sensors officers).

A lot happened before we got to the Middle East. The new aircraft arrived at a rate of two per month and we trained constantly. The aircraft has many capabilities and missions, some of which are:

- > Air-to-air
- > Air-to-ground
- > Night attack
- > Combined arms control and coordination
- > Reconnaissance

In July 1990, the squadron was preparing to send a six-plane detachment to Turkey to participate in Exercise Display Determination and was scheduled to send a detachment to Naval Air Station Fallon, Nevada, in early August to prepare for the exercise. On 2 August Saddam Hussein invaded Kuwait; two days latter the detachment flew up to Fallon--and on 9 August was recalled to El Toro.

Aircrew training became paramount as small detachments deployed to MCAS Yuma, Arizona, to take advantage of the desert terrain. Crews began intensive night operations, with lunar illumination cycles determining deployment schedules. The squadron trained 18 pilots and WSOs to employ the nightattack Hornet's weapons systems, and the crews concentrated on deep air support missions, flying low-level routes, and attacking targets throughout the desert.

Target tactics varied from low-level weapons deliveries to the Hornet high-popup maneuver--a low-level run-in, an afterburner climb to roll-in altitude, and a 45 degrees dive attack. All of these missions were conducted using Catseye night-vision goggles, and--when they were available--forward-looking

infrared systems (FLIR) for navigation. In the Middle East, both navigation and targeting FLIRs were available.

The squadron became fully operational in September 1990 and conducted two full squadron deployments during October and November to Yuma and Nellis Air Force Base, Nevada.

When the call came to deploy to the Middle East, we were assigned a primary mission of combined arms control and coordination--specifically, the squadron flew tactical air coordinator (airborne) [TACA] and forward air controller (airborne [FAC(A)] missions. This included spotting for artillery and naval gunfire. The services sometimes use slightly different terms to describe similar functions, but the squadron's mission is best described as that of a fast FAC, as distinct from the turboprop-powered OV-10DS.

High speed was our best defense against infrared (IR) surface-to-air missiles (SAMs) while high-speed antiradiation missiles (HARM) carried by escort Hornets suppressed radar-guided SAMs. In addition, EA-6Bs provided standoff jamming support for all aircraft in the Kuwait theater of operations.

Our squadron was largely involved in preparing the battlefield and supporting ground units in the battle to retake Kuwait. The U.S. Central Command established kill zones in which we operated. These zones, squares of terrain about 15 miles on a side, were used as limits for aircraft operating within them. Each zone had an alpha-numeric designation but these rapidly gave way to geographical references--the golf course, the Pentagon, the ice cube tray, and arty (artillery) road--as the aircrews became familiar with the area.

Armed with kill-zone charts, 2.75-inch rockets and white phosphorous warheads, and 20-mm. ammunition, we flew our first mission into southern Kuwait on 18 January.

Aircrews launched and proceeded directly to a Marine Corps KC-130 tanker to top off with fuel before heading into their assigned area. Prebriefed targets were reconnoitered to determine which were active, and then the F/A-18Ds marked the targets for the strike aircraft. Priorities--in order--were: artillery and rocket launchers, armor, troops, and trench lines. FAC aircraft remained on station for about 30 minutes, working as many as 21 strike aircraft during that time.

After the first period, FACs cycled back to the tanker and then returned to their assigned area for another 30 minutes before heading home. Typical target areas were more than 200 miles from Bahrain.

We used high-altitude tactics during the early part of the war identifying targets through 7- and 10-power binoculars. Secondary explosions after initial strike aircraft runs often confirmed active Iraqi positions.

Aircrews flew around the clock, using night-vision goggles when required. On the night of 29 January, when Iraqi forces moved south toward Khafji and other Coalition positions, fast FACs used goggles to provide accurate marks for a section of A-6Es to lay a string of Rockeye antiarmor submunitions across a column of advancing Iraqi armor, and stop it dead in its tracks. Marines on the ground then captured the Iraqi forces.

During the 100-hour ground campaign, the fast FACs roamed ahead of advancing Coalition forces and continued to mark targets for a wide variety of strike aircraft. What had once been no-man's land--Al Wafra, Al Jabar, arty road--quickly turned into friendly territory. It was a combined arms effort.

The artillery raid has received little attention in recent years, rating only the most cursory mention in schools and manuals. Yet, during Desert Storm, the artillery raid proved to be one of the artillery's most important missions, and almost the only form of ground combat between 16 January and 24 February. In this article Lieutenant Colonel Sachtleben describes how the 5th Battalion, 11th Marines, which he commanded, prepared for and executed artillery raids.

Artillery Raids in Southwestern Kuwait

by Lieutenant Colonel James L. Sachtleben, USMC

Field Artillery, October 1991

During early January 1991, the commanding general of I Marine Expeditionary Force (I MEF) decided that ground forces would be involved in pre-G-Day operations to deceive and disrupt Iraqi forces operating in the defensive belts along the southwestern Saudi-Kuwaiti border. As the 1st Marine Division analyzed its portion of this mission, the artillery raid seemed tailor-made for the situation. It allowed for surprise, maximum destruction of enemy equipment and a certain psychological impact on the Iraqi troops. If conducted from Saudi Arabia, we could accomplish all this without the political ramifications of having ground forces conduct cross-border operations before G-Day.

Forces

As the 1st Division Commander discussed the mission with the commanding officer of the 11th Marines (the division's artillery regiment), it became apparent that the logical unit for the raid mission was the 5th Battalion, 11th Marines (5/11), the division's general support (GS) battalion.

This was true for two reasons. First, as the GS battalion, 5/11 had more positioning flexibility than the direct support (DS) battalions that had to remain in a position to provide fires for their supported maneuver task forces. Secondly, 5/11 had an M109 battery. At this point, because we still respected the Iraqi counterfire capability, it seemed wise to employ the M109 battery because of its overhead protection, on-board ammunition storage and rapid displacement capability.

The battalion had completed the transition from self propelled (SP) to towed in June 1990. However, the conversion of the battalion's associated prepositioned equipment aboard the maritime prepositioning ships (MPS) squadrons wasn't complete. Therefore, 5/11 had two batteries of M198s (155-mm, towed howitzers) one battery of M109A3s (155-mm, SP) and one battery of M110A1s (203-mm) in SWA.

The division commander asked me to analyze the mission in detail and determine what external assets we'd need. Rather than trust a "paper analysis," we ran through some practice missions to determine what our needs would be.

Security for the raid force became the most obvious. Fortunately, Task Force (TF) Shepherd, composed of elements of the 1st and 3d Light Armored Infantry (LAI) Battalions was already screening in our proposed operating area. TF Shepherd provided a company for security and a very close relationship developed. The commanding officer of Company B of TF Shepherd was integrated into the planning effort early-on and provided invaluable assistance both during planning and execution of the raids. This close association was to prove valuable later on as 5/11 supported TF Shepherd during a pre-G-Day Iraqi spoiling attack and, again, during the attack into Kuwait.

We also needed help moving our SP howitzers over the long distances from the battalion's position area to the final raid assembly area. Reliable navigational aids were a must. We'd be operating well outside the position, location and reporting system's (PLRS') range, and accurate information was critical.

We asked for an electronic warfare surveillance capability to pick up any enemy radio traffic that might indicate the Iraqis had detected our movement or were about to fire on us. On-call, fixedwing air support also seemed to be a good idea in case we ran into trouble. The 1st Marine Division G2 offered remotely piloted vehicle (RPV) support to both locate raid targets and to confirm their final positions as late as possible before firing.

It was apparent that these raids would truly be a combined-arms effort. The final task organization for the raid force is depicted in Figure 1.

Raid Force Task Organization of 5/11

Raid Force

Two Batteries 5/11*

Company B, TF Shepherd (LAI)

Detachment, 3d Assault Amphibian Battalion

Detachment, Motor Transport Battalion, 1st FSSG (HETs)

Detachment, Communications Company, 1st Marine Division (GPS and SATCOM)

Detachment, 1st Radio Battalion, 1st Surveillance, Reconnaissance and Intelligence Group (Mobile Electronic Warfare Surveillance)

Supporting Forces

On-Call Fixed Wing Air Support (Close Air and Electronic Warfare Support)

On-Call MEDEVAC Helicopters

*Assignments rotated between the four firing batteries of the battalion.

Figure 1

Training

After receiving a warning order from the 11th Marines Commander, Sierra Battery began training for the raid mission. Because we had yet to receive a specific target for the first raid, the battery only had my commander's intent: be prepared to move under an LAI screen during hours of darkness to a point within one or two kilometers of the Kuwaiti border, fire approximately 15 rounds per howitzer at a high-value target and withdraw when rounds are complete. Some restrictions applied: no lights would be used—no vehicle blackout lights, flashlights or collimator lights; VHF radio silence was imposed; no advance party would be used; no soft-skinned vehicles would go forward of the final assembly area; and speed was essential.

Battery S honed skills to perfection, and soon it was occupying in complete darkness in less than half the Marine Corps combat readiness evaluation (MCCRE) time standard for daylight occupation. In addition, the battery employed several innovative techniques.

Positioning

Because we wanted no soft-skinned vehicles, we looked for a substitute for the high-mobility multipurpose wheeled vehicle (HMMWV)-mounted position and azimuth determining system (PADS). We chose the hand-held Rockwell global positioning system (GPS), an expensive but totally reliable system. We drew it and an operator from 1st Division's communications company. Normally used to survey PLRS master stations, it provided 10-meter accuracy and tracked up to 16 navigational satellites. It never failed to provide positioning data.

A reliable navigational aid was critical in helping the raid force move into position in the darkness. Just imagine the challenge of navigating across as much as 25 miles of trackless desert on a moonless night with your ultimate destination within one or two kilometers of enemy territory. The reliability of the Rockwell GPS was worth the price. We could have used cheaper, more readily available GPS models, but they occasionally suffered outages due to bad satellite "health" or signals interference. We simply couldn't take the chance.

Directional Control

With its 10-meter accuracy, the Rockwell GPS was good enough for establishing battery location but not good enough for establishing an accurate known direction for laying the battery. So the battery trained for two methods of lay. The first option, if stars were visible, was celestial. If there were no visible stars, the battery laid magnetically.

Celestial skills were honed to perfection. A computer program was used to determine azimuths to easily identifiable stars. In a few days, the battery was establishing directional control in less than one minute, and accuracy, when compared to PADS, checked within one mil. The battery used the magnetic

method of lay as a backup to celestial when stars were obscured by clouds or oil smoke. We established a declination station using PADS at the final assembly area to ensure that aiming circles were as accurate as possible.

Because speed was essential, howitzers were positioned in very close proximity to each other, expediting the laying process. This also simplified control and provided a good, tight position, making it easier for the LAI company to provide security.

Security

Company B of TF Shepherd provided a screen from the final assembly area to the firing point and cover while the battery was in position. The night vision and superb weapons capabilities of the light armored vehicle (LAV) were invaluable. They spotted enemy movement and provided covering fires as the battery withdrew after its first raid. Additional security was provided by the .50 caliber and MK19 machineguns mounted on the M109s.

Providing another layer of security and adding to the combined-arms nature of the raids was fixed-wing aviation from the 3d Marine Aircraft Wing. Under control of Company B's forward air controller (FAC), EA-6B Prowlers jammed Iraqi ground surveillance radars as soon as the raid force entered a radar capabilities fan and continued jamming until the raid was completed. F/A-18, AV-8B and A-6E strike aircraft were on call to provide support if the raid force ran into trouble and to attack certain targets in coordination with the artillery when it was appropriate. The F/A-18s were exceptionally valuable in a later raid as we refined concepts and devised more innovative methods.

Meteorological Support

We needed accurate meteorological data if our fires were to be effective. It would have been very simple to "fly a Met" balloon in the position area near Al Qaraah before the raid force departed, but the accuracy would have been poor for two reasons. Some of the raids were conducted as far as 70 kilometers from Al Qaraah, and the raid force often departed as early as eight hours before the scheduled firing times. The separation in both time and distance would have rendered the Met useless.

The solution was for the raid force to take the meteorological data system (MDS) as far as the final assembly area, usually 10 to 15 kilometers from the planned firing point. In the assembly area, MDS set up and ran a Met, and delivered the data to the battery fire direction centers (FDCs) before they departed for the firing points.

The only problem we encountered with Met was one instance when the MDS tracking frequency was jammed as a Met balloon was being flown, causing us to lose the top three lines of Met data. We confirmed the jamming was coming from the Iraqis and devised procedures to work through the jamming should it happen again. We weren't jammed again on a raid, but interference with Met frequencies was a common occurrence in several Marine Corps artillery units.

Communications

The raid force used only limited communications. Checkpoints were reported and emergency messages, such as mission abort codes, were the only traffic passed. Because of the very long distance involved, the raid force commander's only link to higher headquarters was via satellite communications (SATCOM) to the division forward command post (CP), initially some 75 miles away. SATCOM was used to report the occurrence of key events on the execution checklist (see Figure 2) and to confirm target location just before the force departed the final assembly area.

Sample Artillery Raid Execution Checklist of 5/11

Codeword	Event
Apple	Raid Force arrives in Assembly Area
Orange	Raid Force at Firing Position
Peach	Target Confirmed
Cherry	Commencing Attack
Grape	Withdrawing Raid Force
Banana	Mission Complete; Returning to Battalion Position Area
Chicken Hawk	Mission Abort

Figure 2

Command and Control

When we added a second firing battery to the raid force, we also added a command element to control the activities of the two-battery force. The command element had to be very small and light. It consisted of the battalion commander or executive officer as the raid force commander, a driver, the battalion sergeant major (doubling as radio operator and navigator) and the SATCOM radio operator. The command element led the raid force to the final assembly area and reported, as necessary, to the division forward CP via SATCOM.

All raids were well-rehearsed and timeliness were established, based on detailed time and distance studies. Radio transmissions from the command element to the raid force were seldom needed. All required actions were executed on the established timeline, and radios were used only by exception. This detailed planning proved to be the key to success.

Logistics

The raid force carried only essential items, including only enough artillery ammunition for one mission. Medical evacuation (MEDEVAC) helicopters were on strip alert. Two assault amphibian vehicles (AAVS) were part of the raid force; one carried the FDC, and one was a MEDEVAC vehicle.

To reduce the chance of breakdown, the raid force used heavy equipment transporters (HETs) to move the tracked vehicles from the initial battalion position in the vicinity of Al Qaraah to the final assembly area. The 1st Force Service Support Group (1st FSSG) provided the HETs, and although their operators weren't specifically trained for such a tactical mission, they performed very well.

Special care had to be taken, however, because some of the tractors were commercial vehicles provided by the Saudis. They had no blackout systems, so the raid force had to disconnect electrical wires to prevent the inadvertent illumination of a brake light or the honking of a horn at a time when the enemy could detect it.

On 18 January, 5/11 moved from its position 30 kilometers south of Safaniya, Saudi Arabia, to the vicinity of Al Qaraah (see Figure 3). Al Qaraah was to later become quite a busy place, occupied by most of 1st Division and a sizeable combat service support detachment. However, when 5/11 first arrived, there were only empty revetments built by Seabees in anticipation of the coming "population explosion." We were very glad to see the revetments because of the security they provided. At the time, there were no other units in the vicinity except TF Shepherd, which was screening to the north. The remainder of the division was still at least 75 miles to the southeast.

We settled into the revetments, made liaison with TF Shepherd and waited for our first mission. It came on 23 January.

The Raids

Raid 1: The Police Post at Qalamat

The target was an Iraqi infantry brigade CP near Al Manaqish. To range the targets, the battery had to be near the border, in this case, very close to the Kuwaiti border police post at Qalamat, which was occupied by Iraqi troops. Because of the possible threat from the police post, Battery Q (MI98) was added to the raid force to fire on enemy positions closest to Battery S.

After midnight, both batteries moved out under LAI screen for their firing points. Battery Q stopped, laid the howitzers and waited for Battery S to occupy its position near the berm that marked the border. Battery S started firing as soon as possible after arriving in position. The first rounds went down range at 0053, just seconds off the time estimated in the plan. Battery Q fired as soon as it saw Battery S's muzzle flashes. A 5/11 forward observer posted on top of the berm spotted enemy activity at another location and quickly shifted Battery Q's fires.

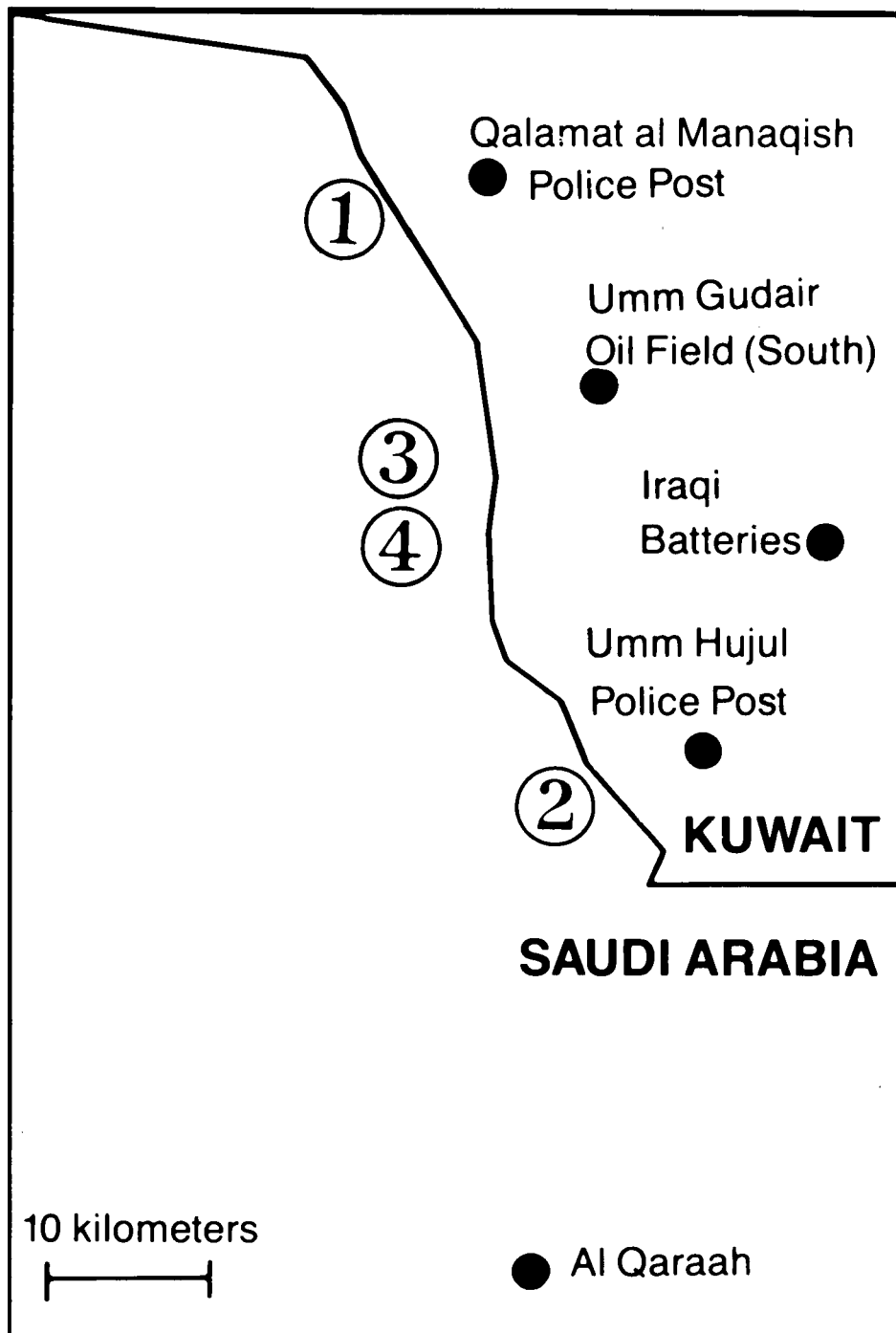


Figure 3: Batteries of 5/11 participated in four artillery raids to help deceive Iraqis as to the location of IMEF's intended attack into Kuwait. The very successful raids also demoralized the Iraqi forces in the defensive belts along the Kuwaiti border.

A very unlucky group of Iraqis had just driven into the target area when Battery Q's rounds impacted on the second target. The dual-purpose improved conventional munitions (DPICM) destroyed three vehicles and caused two others to disperse very rapidly. One hapless Iraqi drove across the border into Saudi Arabia and into Company B's machinegun fire. We couldn't believe the success we were having but decided to cut it short when mortar rounds started falling on the friendly side of the berm near Battery S. We shifted Battery Q's fires to a third target, a suspected D-30 battery, and as S Battery withdrew, the FAC with B Company called in a pair of F/A-18s with Rockeye bombs on the brigade CP and the police post just for added security.

We had agreed early-on that enemy incoming would be cause to abort the mission, at the battery commander's discretion. The assets were too valuable and the ground war hadn't even started yet; we could raid again another day.

Raid 2: Police Post at Umm Hujul

This was really not an artillery raid but an LAI raid with artillery in direct support, or as it came to be known, the "drive-by shooting." The same division fragmentary order that established the 5/11 as the raid force also tasked 5/11 to be prepared to support TF Shepherd in any raids it might execute. The raid on the police post at Umm Hujul was such a raid.

Considerable Iraqi activity had been noted near the police post, and the raid was intended to disrupt enemy activity, spoil his intelligence-gathering efforts and discourage any further buildup in the area. The concept was very simple. TF Shepherd slipped up to the border and fired on the police post with mortar and 25-mm cannons while 5/11 isolated the objective area by firing on an enemy position behind a low ridgeline just to the east of the post. The police post and adjacent positions were heavily damaged, and the raid force received no return fire from the Iraqis.

Raid 3: SIGINT Near Umm Gudair

Iraqi signals intelligence (SIGINT) and ground surveillance radars in the vicinity of the Umm Gudair oil field were the target of this raid. Battery T, the M110A2 battery, and Battery Q, an M198 battery, had the mission. We needed DPICM for these targets, but one was outside the range of the M109 and M198. The 22,500-meter range of 8-inch DPICM, as compared to the 17,500 meters of the M109 and M198, proved invaluable here as well as later in the ground campaign.

I was a little concerned about the M110A2 as a raiding piece. Its slower rate of fire and longer emplacement times meant the battery would be in position longer and, thus, at a greater risk from counterfire. However, the larger payload of the 8-inch as compared to the 155-mm DPICM meant the battery could fire fewer rounds and achieve equal or greater effects. Also, by this time, we started to question the Iraqi counterfire capability.

We had taken mortar rounds on the first raid, but there was no evidence the Iraqis could find us with anything other than forward observers in frontline infantry units who could spot our muzzle flashes. We trusted the EA-6Bs to handle the Iraqi ground surveillance and counterbattery radars, and they obviously did. But why were the Iraqis so ineffective with the sound-ranging systems that were supposed to be so good? We weren't sure, but our confidence was growing. We decided to fight the urge to stay and shoot all night and continued to "shoot and scoot." The real ground war was still days away, and we couldn't afford to risk assets needed later.

Raid 4: Iraqi Batteries

This one appeared to be the most effective—it was a true combined-arms effort. The targets were two Iraqi artillery batteries. Two M198 batteries (Q and R) conducted the raid, again moving into position under an LAI screen. The idea was to stay in position longer than on previous raids, fire more rounds and see if we could draw some Iraqi counterfire for the F/A-18s to attack. We did no electronic jamming with the EA6Bs. This time we wanted the Iraqi ground surveillance and counterbattery radars to find us.

It was a calculated risk, but we had analyzed the enemy artillery in the area and were pretty sure he couldn't range us with his systems. We were firing rocket assisted projectiles (RAP), giving us greater standoff distance and reducing his chances of ranging us.

The plan worked *beautifully*. Shortly after our rounds impacted, we saw his artillery lighting up in counterfire. It appeared to be rockets, and we assumed it to be Astros multiple rocket launchers (MRLs). The airborne FAC spotted the flashes immediately, and within seconds, the Iraqi racketeers were visited by a pair of screaming F/A-18s delivering Rockeye. Because of the flat terrain, we could see the Rockeye impacts from our battery positions. It was heartwarming, especially knowing that the targets the Rocketeyes were hitting had been trying to put rockets on us.

After 10 February, we stood down from the raid mission and rejoined the rest of the 1st Division, moving into Al Qaraah and making final preparations for the attack into Kuwait. The raids had been very demanding on both personnel and equipment, and we needed at least a short rest.

Results of the Raids

The goals of the raids were to deceive the enemy as to the location of the coming attack and destroy the morale of the Iraqi forces in the defensive belts along the border. In the context of the very successful attack into Kuwait, the raids accomplished their goals. Although the raids were a small part of the overall deception plan, they can't be gauged by the amount of damage they inflicted on the enemy. The raid force appeared in the middle of the night and fired from positions the enemy had every right to believe were unoccupied. This had to shake his confidence in his intelligence capabilities.

Target surveillance by RPVs and other assets showed the raid fires, with rare exception, to be very accurate. While the Iraqi target acquisition capability grew more suspect, their frontline troops were being subjected to fires that were accurate to a degree they couldn't comprehend.

The coordinated counterfire effort between artillery and aviation displayed in the fourth raid undoubtedly had a demoralizing effect on Iraqi artillerymen.

Was it partially responsible for the complete inability of the Iraqis to mount a counterfire threat or to mass fires later during the attack into Kuwait? This question can only generate speculation, of course, but put yourself in the place of the Iraqi rocketeers: they fired a counterbattery volley in response to our artillery fires, and within seconds of their first and only volley, they were hit by very effective aviation ordnance. Their morale *undoubtedly* suffered.

It'll remain difficult to quantitatively measure the effects of these artillery raids. But there's no doubt that during Operation Desert Storm the previously insignificant artillery raid became a very significant combat multiplier.

Major Huddleston was the Executive Officer, 3d Battalion, 3d Marines during Desert Storm. In this letter, he recounts his impressions of the first few days of the war.

The Opening of DESERT STORM: From the Frontlines

by Major Craig Huddleston

Marine Corps Gazette, April 1991

Welcome to Operation DESERT STORM. Not much time for a long letter, but I'll give you some thoughts. There is such a thing as "fog of war." We've already been up and down our alert ladder many times. "They're attacking," "They're not," "We're attacking," "We're not" "Gas, Gas, Gas!" "All clear." Lots of information coming in, most of it false.

The start of the operation caught us by total surprise. We were told 25 January or sometime around then would be the kickoff. Here is the sequence of events from my point of view during the opening hours of DESERT STORM:

- 2210 (17Jan): I had just lain down to go to sleep. News reports say air is winning war.
- 2215: WHAM--WHAM, WHAM, WHAM! Time to go to work.
- 2217: Arrive at COC (combat operations center). STA (surveillance and target acquisition platoon), observation post Dragons, and 81s all report incoming. Several air bursts, no casualties. Regiment wants to know what's up.
- 2230: TOW section reports 20 to 25 vehicles in column moving south on main supply route. "What type?" "BTR-60s." Expletive.
- 2245: Regiment orders stand-to to repel ground and sea attacks. A-10s on station, attacking. Heavy AAA (antiaircraft artillery), ZSU, and SA-6 fire observed.
- 2330: Vehicles identified as Saudi.
- 0220: (18Jan): Stand-down.
- 0250: WHAM, WHAM-BOOM. More rockets. Company F, 1st Battalion, 12th Marines reports airburst over battery position. "Gas, Gas, Gas!" Expletive. Several people observe Scud-Patriot intercept.
- 0300: Monitors out.
- 0340: Reports state no agents detected.
- 0600: Sun comes up. Hot chow. Sent out crater analysis.
- 1545: Air alert. Scuds launched.
- 1600: All clear.

- 1640: Report of 8 to 10 vehicles moving south--3 tanks. Stand-to ordered.
- 1710: "All clear." Vehicles identified as friendly.
- 1830: Marine leaving head yells, "Incoming, take cover!" Look up to see multiple rocket trails. Expletive. We get down. Thirty impact well west of us. OV-10 and recon observe launch, roll A-6s in, but nothing there.
- 2100: Try to sleep, but we go on air or Scud alert five times during night.
- 0800 (19Jan): Ordered to rehearse TRAP (tactical recovery of aircraft, equipment, personnel). No hot chow, but mail arrives in morning.
- 0900: Write this letter. Think about changing skivvies.

The press is giving accurate, if somewhat inflated, info. They've got about 10 percent of this story.

The air guys are doing a great job. The Iraqis have not quit, however. At least at the tactical level. They fight back with what they've got.

Constant OV-10s, remotely piloted vehicles, and other air overhead. Noise of bomb impacts 24 hours a day.

Capt Murray W. Chapman got first blood for us, assisting on a close air support mission against Iraqi medium rocket launchers (MRLs). OV-10 controlled, four A-10s attacked to silence the MRLs, temporarily. (A-10s were on station five minutes after we called for them.)

We're all very tired. Trying to get sleep is hard with various alerts (air, Scud, artillery, terrorist ground attack) being given every two hours or so.

Troops, are handling all this quite well. We've been pretty scared sometimes, but we're responding well.

Before the war, it was neat being the northernmost U.S. unit (excepting recon and other intelligence units, etc.). How we'd be glad for a rear area security mission.

A 300mm rocket makes a crater 12 feet in diameter and 3 feet deep. They have a spectacular signature at night, both during launch and impact. The launcher can displace in seconds after launch. We've had trouble killing them, but they're not too accurate.

We need a good E-tool. The shovel has been our best friend so far.

Biggest problem has been identification, friend or foe, on the ground. Too many vehicles look like the ones Iraq uses, especially at night. We've had some very anxious moments when things start moving.

No apparent concern in Qatar or Saudi armies about Israeli reaction to Scud attacks. We've all taken fire from Iraqi artillery and rockets and know who the enemy is. Closest Qatar unit really mad; they lost field mess to first rocket attack!

Gotta go. Very busy times. We're all okay so far. I'll send more when I get a chance. Semper Fi.

Earlier in this anthology, Molly Moore described the war from the perspective of the commanding general's headquarters. In these articles, Moore takes us to the opposite extreme, showing what the war was like for the individual Marine.

Out Front at the Front: Marines Brace for Task of Clearing Mines

By Molly Moore

The Washington Post, 19 February 1991

WITH U.S. FORCES, Northern Saudi Arabia, Feb. 18--One night soon, Marine Lance Cpl. Stephen Mitchell, 20, expects to drive a 26-ton mine-breaching personnel carrier across the Kuwaiti border and into a sandy sea of buried mines.

"I'll be one of the first ones across the line," said the lanky Washington, D.C., native, unconsciously fingering, the two metal crosses that hang from a silver chain around his neck—one sent by his mother, the other by his aunt. "Sometimes I sit and wonder, and try to picture in my mind what it will be like."

All too frequently the picture is horrifying.

"In training, there is always one little thing that will go wrong," he said with a shudder. "It gets you down. Will it happen in combat? It's real hard, real hard."

When the traveling chaplain, or Mitchell's buddies who sleep with him inside the hulking metal vehicle dubbed "The Big Red One," can't console him, Mitchell relieves the pressures on his mind by "going to the paper and pen and writing it down."

Often he mails his deepest thoughts to his girlfriend. He has pasted her picture inside the personnel carrier that will push his team of mine breachers ahead to clear the way for the American tanks and infantry units that will battle Iraqi forces.

For many of the thousands of American troops now moving into their final positions across the northern Saudi Arabian desert, within sight of the nightly allied bombing raids against Iraqi forces, the easiest mental escape from the formidable task that lies before them is simply avoiding the issue.

"Most people don't talk about what happens when we go in," said Navy medical technician Douglas Smith, 35, of Baltimore, a reservist on the crew of a mine-plowing tank who will serve as a medic if his crewmates are injured.

"They speculate about when we will go home. They don't talk about that gray area in between."

Instead, they lose themselves in long card games. They gaze across the flat Saudi desert now covered with the green fuzz of sparse winter grass, and fantasize about showers they haven't had for more than a month and hot meals they left behind weeks ago.

They wiggle into sleeping bags on the cramped floors of personnel carriers and in tiny tank turrets, and dream of soft mattresses and wives and girlfriends half a globe away.

But mostly they work, struggling to keep aging equipment operating in the gritty sand of the desert, miles from the nearest stocks of spare parts and supplies.

"We are constantly, constantly repairing the tank," said Sgt. Nelson Carter, 25, a reservist from Knoxville, Tenn., the senior non-commissioned officer for one team of 11 specially designed tanks.

Both the men and the machines of these mine-breaching teams have been patched together from different bases across the United States for a one-time mission: to slice through the minefields that lie between allied troops and the deeply entrenched Iraqi forces across the border.

They have stuffed amphibious personnel carriers designed for beach assaults with the explosives needed to blast mines from the sand, and they have tacked toothy plows and bulldozer blades to the front of M-60 tanks.

"The manpower came from wherever they could grab them," said Smith, whose original team included a cook, a welder, two heavy-equipment operators and a group of Marines usually assigned to rounding up drunken sailors on shore leave and returning them to their ships.

But in two months, they have trained and equipped potent mine-breaching teams armed with linecharges that will be fired to detonate mines and create lanes through them.

Smith, a medical technician in a Baltimore hospital before he was summoned to active duty late last year, has dubbed his M-80 minescooper "Genesis"--as in "the beginning. the first one through." Genesis has become home to a tight-knit crew of four.

The team members have begun hoarding food--military issue as well as cans of fruit juice, loaves of bread, cookies, sugar and canned meats. It is enough food, according to the crew, to feed the four for a month if supply lines are cut.

What they don't need to eat they plan to use for barter. Because their unit has been culled from several others and finds itself at the bottom of most equipment-requisition lists, its members have refined their trading skills. They swapped an ice cooler for the wrenches needed to fix the tank, and they gave one of their tool boxes in return for batteries.

"We've had to fight for everything," Smith said. "We almost stole the tanks off the ships in order to get them."

It is the camaraderie forged among these fighting men that helps drive them during the long hours of waiting through cold, damp nights and hot, windy days.

"If we can't do our job, no one else can," said Mitchell, referring to the tanks and infantry that will follow his unit into battle.

Many of the Marines have turned to religion, superstition and good luck charms to give them the mental boost to face those jobs.

Cpl. Robert Stacy, 23, of New York City, has clipped two large safety pins in a crude cross on the front of his desert-tan Marine hat: "it is a sign of the cross--or I can use it to fix my clothes when things start getting ripped up."

The crew of an amphibious personnel carrier dubbed "Blaze of Glory" has strung a plastic Bart Simpson doll on a string between two rear antenna. A tape of "Bart Sings the Blues" blares from inside.

For Mitchell, who joined the Marine Corps almost two years ago to escape his Northwest D.C. neighborhood and travel the world, his greatest fantasy now is returning to his hometown for a bar-hopping spree through Georgetown and a welcome-home parade down Pennsylvania Avenue.

He rubbed the cross his mom mailed him--a nickel with a cross cut into its center. "With this, I can't go wrong."

1st Day of War: 'As Scary as You Can Get'

by Molly Moore

The Washington Post, 17 February 1991

WITH U.S. FORCES near Kuwait City: For a Marine grunt fresh out of boot camp and infantry training, clearing Iraqi trenches with nothing more than an M-16 rifle and hand grenades on the first day of war "was scary as you could get."

The first time Iraqi artillery rounds rained on his infantry unit, 20-year-old Pfc. Martin Santos hugged the ground. And when the skirmish was over, he was the first member of his team back inside the tracked armored personnel carrier.

"We just sat there, holding our weapons saying, 'I'm alive, you're alive-are you okay?'" recalled the Palm Beach, Fla., native, who arrived in Saudi Arabia two days before the air war started Jan. 17 and just days after he had finished basic infantry training.

By the second day of war, however, Santos was recognizing the same fear in the faces of hundreds of Iraqi prisoners he was tasked with policing.

"The first ones I saw were afraid," add Santos. "They had pictures of their kids. You would see a tear coming out of their eyes. They'd make motions like they were washing their hands of war and say, 'I'm done.'"

As Staff Sgt Julien Pierre, 37, leaped out of his armored vehicle with team members and began raking Iraqi trenches with gunfire, frightened Iraqis quickly began surrendering. "It was really a confidence boost," he said.

Other Iraqis put up more resistance.

"Not everybody was giving up--some needed encouragement," said Capt. Ray Griggs, commander of the 6th Regiment Charlie company, adding that many Iraqi infantry troops "got shredded by shrapnel."

When the infantry troops spotted one Iraqi soldier who was holding a radio handset to his ear as he called in artillery raids against advancing Americans, they quickly shot him.

On the second day of combat, the company looked across the horizon to see a platoon of Iraqi soldiers marching toward them in step, carrying a mammoth white flag "We just pointed them south," said Griggs.

If It Didn't Have A White Flag, We Shot It

by Molly Moore

The Washington Post, 17 March 1991

JUBAIL, Saudi Arabia: Lt. William Delaney's first view of war turned his stomach. He pulled up to the first Iraqi minefield inside Kuwait at dawn three Sundays ago just in time to see tanks behind his platoon firing on American military trucks to his left. He watched in horror and anger as the vehicles exploded and burned.

"That almost made me physically sick," said the 26-year-old tank platoon leader from Bethesda. "Here we were just starting out, and we were already killing our own troops. Friendly vehicles were hit and burning, and that was the start of the whole thing."

Although Delaney would later learn no one died in the incident, it verified his deepest fear as he led the first allied tanks into Kuwait: "I was prepared to lose some guys very special to me."

As the tanks spearheading Marine Task Force Ripper rumbled forward, Delaney's men spotted the first Iraqi tanks.

"They knew we were coming. We didn't wait to get closer. We destroyed them--in all, our company got 15 tanks. It was unbelievable. Tanks blew up with tremendous explosions. Turrets flipped off. There would be 15 to 20 more explosions as ammo cooked off. Everybody in my platoon got a tank kill. There were dead bodies all over the place."

As the first day of war progressed, "We just destroyed everything in front of us," said Delaney. "If it didn't have a white flag, we shot it--trucks, vehicles, bunkers."

"Marines were trying to kill each other to get to these guys. . . . Then the ground opened up and those guys came out of bunkers--dancing, skipping, singing with their thumbs up. All some had was white toilet paper to surrender. Everytime you saw a POW you were relieved. It was one less guy we would kill or would kill us."

At the end of the first day of combat, troops who had tried to restrain their jubilation on the radio all day collected around their tanks and "traded our feeble war stories," according to Delaney.

As dawn of the second day broke, "Morale was high," Delaney said. "We thought the first day we went through the [Iraqi front lines]. Now we were getting to the good stuff."

Instead, said Delaney, "It was like a road march. . . . One lonely BMP [armored personnel carrier] opened up on our rear. One guy [Marine] opened up with a machine gun." American armored personnel carriers "came from every direction. We were climbing all over ourselves to get a shot at this one guy."

"We were very afraid of getting friendly fire. A tank exploded on the left--somebody had shot from behind." Delaney said he barked into the radio, "Sir, tell them we've got friendlies up here!"

On the dawn of the third day, the tank crews awoke at their encampment to see Kuwait City just ahead. "It felt like the test hadn't started. We expected it to be hard. On a combat scale of 1 to 10, it was a 1."

The Marines also found themselves surrounded by hundreds of deserted Iraqi bunkers and fortifications.

"We went in the bunkers. They had taken everything--cheap stereos, aerobic exercise books. And ominous things like women's underwear--it made you wonder what was the story behind it."

For Delaney, he had accomplished the mission he had anguished over in dozens of heartfelt letters to his father over the previous months: "If I'd lost any of my men, I'd really be hurt. I'd taken these men around the world. They were my responsibility."

The Kurds are a distinct ethnic minority living in the mountains of Northern Iraq, Northwestern Iran and Southern Turkey. For years, the Iraqi government has subjected these people to a deliberate policy of oppression and genocide. Colonel Jones commanded the 24th Marine Expeditionary Unit (Special Operations Capable), the principal Marine component of the allied effort to provide humanitarian relief to the Kurds in the wake of Desert Storm.

Operation PROVIDE COMFORT: Humanitarian and Security Assistance in Northern Iraq

by Colonel James L. Jones

Marine Corps Gazette, November 1991

Hoping to take advantage of the allies victory over Iraq in DESERT STORM, dissident factions within Iraq seized on the moment to launch a courageous, but unsuccessful attempt to topple Saddam Hussein from power this past March. In the aftermath of his army's defeat, Saddam Hussein unleashed the still-capable remnants of his battered force against the Kurdish population of northern Iraq, triggering a desperate human exodus towards sanctuaries in the bordering nations of Turkey, Iran, and to a lesser extent, Syria.

As the media of the world focused on the developing human tragedy of the Kurdish people fleeing by the hundreds of thousands before a vengeful Iraqi Army, worldwide outrage galvanized allied coalition support. From the moment the decision was made to air drop supplies to the fleeing refugees on 7 April, it was clear that there was yet another chapter to be written about DESERT SHIELD/DESERT STORM. It would become known as PROVIDE COMFORT.

As the situation unfolded during March and early April, the Kurds' flight ended in the mountains of southern Turkey, where an estimated 500,000 refugees were massed, having been pushed over the border and herded into so-called "sanctuaries" by Turkish forces. To the east and south, an estimated 1.3 million Kurdish refugees huddled in similar camps along the Iranian border. The fate of this group has yet to be determined.

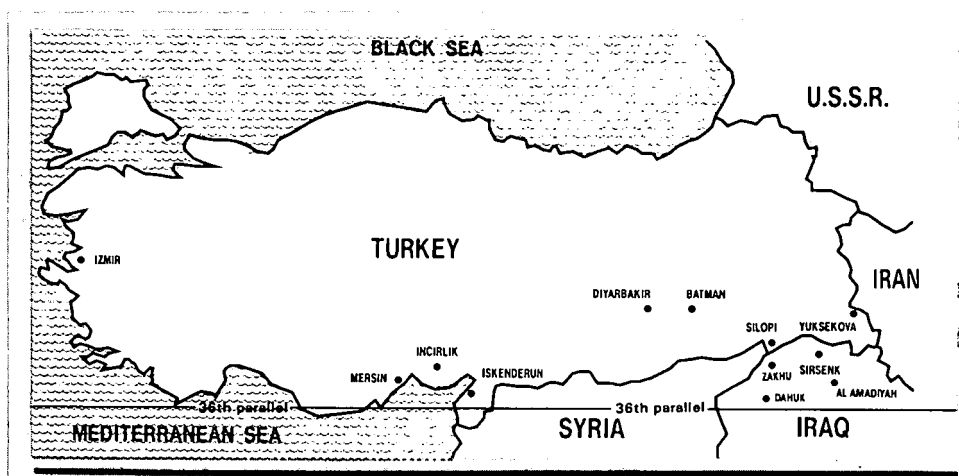
It was during the last few days of March that BGen Richard Potter, USA, was ordered to insert his 10th Special Forces Group into the refugee camps. At this time there were 12 such camps with an average population of approximately 45,000. Conservative estimates had approximately 600 people dying of exposure, malnutrition, and disease daily. In this area of the world, March is still a winter month and many camps abutted snow-capped peaks. The many trails from Iraq were littered with abandoned possessions that no longer served any utility--broken-down cars, appliances, family heirlooms, furniture, suitcases that had become too heavy to carry, and tragically, people who were unable to

withstand the rigors of the march and simply stopped walking, waiting for the cold to end their suffering.

Within days of its insertion, the 10th Special Forces Group organized and identified camps and drop zones, provided medical assistance as needed, and made plans for security requirements. The 10th Special Forces Group formed the first element of what became Joint Task Force Alpha (JTF-A), whose principal mission was resupply of the Kurdish refugees. JTF-A was based in Incirlik, Turkey, along with the headquarters for Combined Task Force (CTF) PROVIDE COMFORT, initially commanded by MGen James Jamerson, USAF, and subsequently by LtGen John M. Shalikashvili, USA.

On 9 April, the 24th Special Operations Capable Marine Expeditionary Unit (MEU(SOC)) was into its third month of a planned six-month Mediterranean deployment when the call went out to respond to the rapidly developing situation in northern Iraq. Embarked aboard the USS *Guadalcanal* (LPH 7), USS *Austin* (LPD 4), and USS *Charleston* (LKA 113), the 24th MEU(SOC) was in the midst of a landing operation in Sardinia, Italy, when the commander, U.S. Sixth Fleet, ordered the amphibious ready group to begin backload, depart the waters of the western Mediterranean, and proceed to the port of Iskenderun, Turkey, for duty with CTF PROVIDE COMFORT. The backload was completed the next morning and the three ships arrived on station on 13 April. The following morning, the 24th MEU(SOC) and Amphibious Squadron 8 (PhibRon-8), commanded by Capt Dean Turner, USN, reported to MGen Jamerson and his deputy, BGen Anthony C. Zinni.

The mission was clear. The 24th MEU(SOC) was to establish a forward support base at Silopi, Turkey, from which helicopters could begin to carry supplies to refugee camps in the mountains. Implied in the mission was the establishment of a forward arming and refueling point (FARP) and a Marine air control detachment to run the airfield. By 15 April, HMM-264, the aviation combat element of the 24th MEU(SOC), had displaced itself 450 miles inland, set up its base, and had begun its humanitarian mission with 23 helicopters in support of BGen Potter and JTF-A (see "Into a Sea of Refugees" insert). During the following two weeks the Squadron would deliver over 1 million pounds of relief supplies and fly in excess of 1,000 hours without mishap.



Rapidly changing events revealed that the entire 24th MEU(SOC) would be required ashore in short time. Within a few days, the unit was operating out of Silopi, Turkey, preparing to be part of the security force that was to enter northern Iraq. On 19 April, Marines provided the security element for a meeting between LtGen Shalikashvili and an Iraqi delegation at the Habur Bridge border crossing in Iraq. At that meeting, Iraqi representatives were informed that coalition forces intended to enter Iraq on 20 April; the mission was to be humanitarian; there was no intent to engage Iraqi forces; Iraqi forces were to offer no resistance; and a Military Coordination Committee would be formed for the purpose of maintaining direct communication with both Kurdish and Iraqi authorities.

While plans to cross the border to the west of the city of Zakhu were being finalized on 19 April, allied coalition forces received instructions from their respective governments to proceed towards the Turkish-Iraqi border. CTF PROVIDE COMFORT responded to the orders of the Supreme Allied Commander Europe, Gen John R. Galvin, USA, the unified commander in Germany who had cognizance over all operations in the area, to proceed into northern Iraq and establish security zones to expedite the safe transfer of refugees from their mountain havens to the countryside they had originated from. LtGen Shalikashvili quickly activated Joint Task Force-Bravo (JTF-B), which would be responsible for this part of the mission. Its focus would be to neutralize the Iraqi Army in the northern region of Iraq and implement a plan to reintroduce 500,000 Kurdish refugees back into that country.

The problem for JTF-B was in creating conditions in Iraq that would entice the refugees to return voluntarily to the region. Climatic conditions are such that there are only two seasons in the region-winter and summer. Coalition forces were already witnessing winter's last gasp. Soon the mountain streams, which were the main source of water for many of the refugees, would dry up under the intense heat of summer. For obvious reasons, it was critical that the refugees be out of the hills before this occurred.

On 17 April, MajGen Jay M. Garner, USA, arrived in Silopi from his post as deputy commanding general, V Corps, in Germany, with the lead element of what was to become the JTF-B staff. At the outset his troop list consisted of the 24th MEU(SOC), which was given the task of conducting a heliborne assault into a valley to the east of Zakhu on the morning of 20 April. Overhead U.S. Air Force A-10s, F-15s, and F-16s provided air cover, while the Iraqi Army watched precariously from the high ground surrounding Zakhu. Previously inserted force reconnaissance Marines and Navy SEALs had established observation posts along the main avenues of approach and key terrain around the city. Assault helicopters were deployed carrying Marines from Battalion Landing Team 2/8 (BLT 2/8), commanded by LtCol Tony L. Corwin, to designated zones near the city. Reports from the recon units confirmed the presence of a significant number of Iraqi reinforcements billeted near the MEU command element. Consequently, LtCol Corwin sent emissaries to the Iraqi positions with clear instructions concerning the movements he expected the Iraqi Army to make in withdrawing from the region and the city of Zakhu. As a demonstra-

tion of humanitarian intent Marines erected 12 refugee tents before nightfall on 20 April in what was to ultimately become one of the largest resettlement camps ever built. Patience and firmness paid off within a few days as the Iraqi Army issued orders to withdraw. By nightfall on 23 April, Marines occupied the key positions and road network around the city.

MajGen Garner and his JTF-B staff were headquartered along with the command element of the 24th MEU(SOC) in the deserted headquarters of the Iraqi 44th Infantry Division. Garner immediately directed the bridge and road leading from the border to Zakhu to be opened for traffic. This was particularly significant as the Habur Bridge at the border would become the only means by which surface convoys could pass from Turkey into Iraq.

On 22 April, LtCol Jonathan Thompson, commanding officer, 45th Commando, Royal Marines (United Kingdom), and LtCol Cees Van Egmond, 1st Air Combat Group, Royal Netherlands Marines, reported for duty to MajGen Garner, who placed both units under the tactical control of the 24th MEU(SOC). With a total force of 3,400 Marines from three nations, MajGen Garner lost no time in developing a plan to rid Zakhu of Iraqi oppression.

Zakhu, a city of 150,000 under normal times, was a ghost town when coalition forces arrived there on 20 April. Fewer than 2,000 inhabitants remained. Those missing were still in the mountain camps of southern Turkey. Their homes had been looted and vandalized by the Iraqi Army, which continued pillaging local towns and villages as it retreated south.

Despite agreeing to withdraw his army, Saddam was not about to surrender Zakhu without a last effort to retain control of the city. He did so by ordering 300 "policemen" into Zakhu to maintain law and order and protect coalition forces from Kurdish rebels. Clearly, the few residents left in Zakhu were still being terrorized. Something had to be done.

Col Richard Naab, USA, the recently assigned head of the Military Coordination Committee, met daily with BGen Danoun Nashwan of the Iraqi Army to explain coalition intent and expectations. After several meetings, a demarche was drafted and released on 24 April. Its key points are listed below:

Iraqi armed forces will continue to withdraw to a point 30 kilometers in all directions from Zakhu (in other words, out of artillery range).

Iraqi police will be immediately withdrawn from Zakhu.

Iraq will be allowed no more than 50 uniformed policemen in Zakhu at any one time. They would have to be indigenous to the region, carry only one pistol, and display coalition force identification badges at all times.

On 26 April coalition forces will enter Zakhu for the purpose of verifying compliance and would begin to regularly patrol the city.

Coalition forces will establish a security zone complete with checkpoints within a 30-kilometer radius around Zakhu. No weapons other than those of coalition forces will be permitted in the zone.

No members of the Iraqi Army will be permitted in the security zone--in or out of uniform--without approval from the Military Coordination Committee.

Shortly after the issuing of this demarche, the Iraqi police were observed boarding buses headed south. While the full impact of the demarche was being studied by the Iraqis, LtGen Shalikashvili and MajGen Garner lost no time in directing the 24th MEU(SOC) to establish this security zone, which it was thought would permit the Kurds to consider coming out of the mountains without fear.

During the hours of darkness on 25 April, BLT 2/8 cordoned off the city from the south, east, and north, while Dutch Marines sealed off the western approaches and ensured the integrity of the bridges at the border. British Royal Marines from 45th Commando, having just arrived from Northern Ireland, were tasked with patrolling the streets of Zakhu, sending what few Iraqis remained scurrying for an escape route. By nightfall on 26 April, Zakhu enjoyed its first taste of freedom.

During this time, the resupply effort continued. On 26 April alone, HMM-264 delivered 24.5 tons of relief supplies to the refugees. They were soon augmented by helicopter assets from other coalition forces that had begun to arrive in the area, making operational the Combined Service Command (CSC) at Silopi, Turkey. Other reinforcements were forthcoming as well. On the morning of 27 April, the 3d Battalion, 325th (3/325) Airborne Combat Team, commanded by LtCol John Abizaid, was placed under the tactical control of the 24th MEU. The 18th Engineer Brigade, commanded by Col Steven Windsor, USA, reinforced by Naval Mobile Construction Battalion 133 (SeaBees), also arrived during this same timeframe, providing much needed relief for the Sailors and Marines of the 24th MEU(SOC) who, alone, had raised 1,100 tents in 10 days.

Another capability of critical importance throughout PROVIDE COMFORT was the presence of the U.S. State Department Disaster Assistance Relief Team headed by Fred Cuny, a former Marine. This team was critical in helping coordinate the actions of the many multinational government and nongovernmental organizations that played a role in the operation. Bolstered by years of expertise in such matters, Cuny was invaluable in prosecuting a humanitarian campaign that ultimately relocated 500,000 Kurds in 60 days.

24th MEU(SOC)'s MEU Service Support Group (MSSG-24), commanded by LtCol Richard T. Kohl, also showed its mettle early on by installing a reverse osmosis water purification unit and establishing medical/dental civic action projects in Zakhu. Almost overnight, the local hospital sprang to operating capability. Coalition engineers sought to restore electricity and water to a city that had been without for months. Stores slowly reopened and people once again took to the streets. (see "Pushing Logistics to the Limit" insert). These

initiatives were key in convincing the citizens of Zakhu that this was an army, perhaps the first in memory, that only meant them goodwill.

It didn't take long for the message to reach the mountains. Local community leaders and Pesh Merge chiefs began arriving in Zakhu to verify for themselves the changes underway and to give proper guidance to their people in the mountains. The allies referred to Zakhu and its growing refugee camp to the east as the coalition security zone. As the demarche noted, it was to be free of visible weapons, rules which were meant to apply to Kurds as well as the Iraqi Army.

At first, only a trickle of refugees dared to leave the camps to begin the trip back to Zakhu. Soon, however, as news of a secure city inside Iraq spread to the mountains, many residents slowly began to return to their former homes. A large number of refugees, however, still refused to budge from their hilltop havens. They were waiting to see what coalition forces would do next.

As Zakhu was being repopulated, coalition leaders decided that the next move should be to the east. Already, British and French forces had probed in that direction and plans to extend the zone eastward were put into effect. First, 45th Commando pushed to the town of Batufa, a small but strategically important city, then onto the airfield at Sirsenk, another important objective, and finally to the city of Al Amadiyah, a veritable fortress dating back some 3,000 years; this became the eastern limit of what was referred to as the British sector under the 3d Commando Brigade, commanded by BGen A.M. Keeling, OBE. Again, the instruction to the Iraqis via the Military Coordination Committee was clear and unequivocal--back off and let us do our job. Compliance occurred shortly thereafter.

One area that received special consideration was Saddam Hussein's palace complex, which was a series of partially completed mansions intended for use by Iraq's elite. These modern structures, erected on choice properties, were guarded by elements of the Iraqi army. Iraqi negotiators did not want coalition forces to take possession of these properties and an agreement was reached that allowed Iraq to retain control of the palaces, maintain a small numerically controlled security force on the grounds, and that coalition forces would not enter the properties.

Of far greater value to coalition forces, however, was the airfield at Sirsenk. The airfield was a DESERT STORM-damaged runway, which, when repaired, could accommodate C-130 aircraft. The airfield was being looked at as the key supply point for JTF-B in northern Iraq. Soldiers, Sailors, and Airmen worked feverishly for six days to repair the damaged runway. By 14 May, the airfield was operational, and a key logistical forward base in Iraq had been established.

Another key element in PROVIDE COMFORT's logistical network involved Marines and Sailors from the 3d Force Service Support Group (FSSG), which was based with III Marine Expeditionary Force on Okinawa. Early in the operation it became apparent that additional skills resident in the landing support battalion of an FSSG would be needed. Consequently, a request was sent from CTF headquarters asking for two companies to meet combat service support requirements. As the flow of relief supplies grew, the need for this unit became

greater. In response, Contingency Marine Air-Ground Task Force 1-91 (CMAGTF 1-91), under the command of LtCol Robert L. Bailey, was formed and flown in theater from Okinawa, setting up initially at Silopi. CMAGTF 1-91 organized CSS detachments that were spread out over the entire CTF operating area. Throughout the operation, CMAGTF 1-91's element remained headquartered in Silopi, providing combat service support detachments to various nodes in the relief supply network that had been established.

The expansion of our security zone, however, was still incomplete. Coalition forces continued to press eastward, beyond Al Amadiyah. French forces, under the command of BGen Xavier Prevost, pushed out to the town of Suri, which was to become the easternmost point of advance for the allies. The famous 8th Regiment Parachutiste d'Infanterie de Marine, reinforced with medical and humanitarian capabilities (not to mention a field bakery capable of producing 20,000 loafs of bread per day), formed the centerpiece of the French sector.

By this time, the skies of northern Iraq were becoming crowded. French Pumas, British Sea Kings and Gazelles, Dutch Alouettes, Italian and Spanish Hueys, Spanish CH-47s, and American transport, cargo, and attack helicopters of every type and variety contributed heavily to the humanitarian and security missions. The 4th Brigade of the 3d Infantry Division, commanded by Col Butch Whitehead, USA, reported for duty on 26 April. This maneuver element gave Gen Garner the "eyes" he needed--day and night--to see exactly what the Iraqi Army was up to in the south. To this day, these units still patrol the skies of the coalition zone, reminding both Kurds and Iraqis that there will be no repeat of last winter's human tragedy.

By 10 May 1991, the coalition security zone, from east to west, was 160 kilometers in length and was secured by the physical presence of allied forces. This was an important point for the Kurds who maintained that they would only return to those areas that were physically occupied by coalition forces. As dramatic as it was, the expansion of the zone to the east did not have the desired effect of launching a human exodus from the camps back into Iraq. By now, however, the reason was becoming clear. The majority of refugees in Turkey came from the city of Dahuk, the provincial capital located 40 kilometers south of the allies security zone. Kurds were willing to use resettlement camps as temporary way stations en route to their former homes, but they were unwilling to accept these camps as a permanent solution. Thus, moving towards this city became the key to resolving the refugee problem in southern Turkey where approximately 350,000 refugees still remained.

In early May, overflights of Dahuk revealed that the city was abandoned except for elements of the Iraqi Army. During normal times, Dahuk is a bustling city of 350,000, modern by contrast to most other villages or cities in the security zone. Two major roads intersect just west of the city, one going to Zaku, the other towards Al Amadiyah. Built for the efficient movement of Iraq's army, these roadways were also the economic lifeline of the region.

The remaining refugees in the mountains were getting restless, waiting and watching for any sign that coalition forces would move south. On the 12th of

May, perhaps celebrating their new found freedom, 1,500 Kurds demonstrated in Zakhu calling for allies to move towards the city of Dahuk.

Soon after, JTF-B ordered the 24th MEU(SOC), reinforced by the 3d Battalion, 325th Regiment Airborne Combat Team, to move south and establish checkpoints to the west and east of the city at the edge of the allied security zone (see "BLT 2/8 Moves South" insert). Ongoing negotiations between the Iraqis and the Military Coordination Committee resulted in an agreement that would allow humanitarian and logistical forces to enter the city along with United Nations (U.N.) forces and nongovernment organizations. Combat forces were to advance no further beyond their present positions. In return, Iraq agreed to withdraw all armed forces and secret police from Dahuk and take up new positions 15 kilometers to the south of the city. On 20 May, a small convoy of coalition vehicles entered Dahuk and established a forward command post in an empty hotel in the heart of the city. The security zone now extended 160 kilometers east to west and 60 kilometers north to south below the Turkish-Iraqi border.

Although there was considerable doubt as to whether this would be enough to attract refugees from the camps, the presence of an airborne combat team to the east of Dahuk and BLT 2/8 to the west, the patrols of the 18th Military Police Brigade throughout JTF-B's main supply routes, the increasing capabilities of Italian and Spanish forces around Zakhu, and the presence of British, Dutch, and French forces nearby, all seemed to convince Kurdish leaders that the time was right to repopulate the security zone. Thousands of Kurds began leaving their temporary shelters heading for Dahuk.

All available transportation was used during this movement. Many refugees walked, but once on the roads and footpaths, they helped one another using cars, mule-driven carts, buses, tractors, motorcycles--whatever could be found. Coalition forces sent teams of mechanics and fuel trucks into the mountains to provide assistance to those attempting to return home. Intermediary way stations were set up by civil affairs units under the command of Col John Easton, USMCR, JTF-B's chief of staff, to provide food, water, and medical assistance at various points along the journey.

By 25 May, the movement of refugees reached its peak. 55,200 refugees sought temporary refuge in what had become three camps in the valley east of Zakhu. The activity was feverish, but incredibly well controlled. People who had never dreamed of an operation of this magnitude were thrust together to make critical decisions. They overcame language, cultural, and ethnic barriers. Nongovernmental workers from all parts of the world joined with military forces to make this effort successful. Even U.N. representatives joined in the race against time to get the Kurdish people out of the mountains. By 2 June, the U.N. had taken over the administration of both refugee camps from coalition forces, which by this time numbered over 13,000 personnel.

At the 90-day mark, it was clear that coalition objectives were achieved. Kurdish refugees were out of the mountains and either back in their villages of origin, on their way there, or in camps built by coalition forces. In the Mediterranean, the USS *Theodore Roosevelt* (CVN 71), which had flown air

cover over northern Iraq for much of PROVIDE COMFORT, was relieved on station by the USS *Forrestal* (CV 59). At Silopi, Turkey, the Combined Support Command, under the direction of BGen Hal Burch, USA, was now functioning as the logistical pivot for all supplies flowing into Iraq.

On 8 June, JTF-A was deactivated and BGen Potter's troops began their retrograde out of Turkey. On 12 June, the Civil Affairs Command was also deactivated.

The remaining days of coalition presence in northern Iraq were devoted to continuing to stabilize the region and reassuring Kurdish leaders that although coalition forces would soon be leaving, this act would not signify a change in the resolve of the allied forces to support the Kurdish people. It was also a period of planning for the allies, who were now tasked with retrograding their forces and material from northern Iraq. At this time the unannounced date for coalition forces to be out of Iraq was 15 July. A second demarche was drawn up and presented to the Iraqi government outlining the type of conduct coalition forces expected of Iraq in the future. In essence, its terms were as follows:

Iraqi fixed- and rotary-wing aircraft were not to fly north of the 36th parallel, which is approximately 60 kilometers south of Dahuk.

The Iraqi Army and secret police were not to enter the security zone.

A coalition ground combat force, composed of forces representing several nations, would be maintained across the border in Silopi, Turkey.

Coalition aircraft, both fixed- and rotary-wing, would continue to patrol the skies above the security zone.

The Military Coordination Committee would continue to monitor the security zone and Iraqi compliance of the terms of the demarche.

In the ensuing days, coalition forces continued their drawdown. On the morning of 15 July, Marines from BLT 2/8 along with paratroopers from 3/325 Airborne Combat Team were the last combat elements to withdraw from northern Iraq. In the early afternoon, the American flag was lowered for the last time at JFT-B headquarters at Zakhu. Minutes later, U.S. military leaders, who had entered Iraq on 20 April, walked across the bridge over the Habur River, leaving Iraq for the last time. Two Air Force F-16s followed by two A-10s made low passes over the bridge as the group made its way across the bridge. On 19 July, the 24th MEU(SOC), now back aboard amphibious shipping watched as the city of Iskenderun and the Turkish horizon slipped into the sea. After a six-month deployment, it too was finally on its way home.

The author wishes to thank SSgt Lee J. Tibbets for his assistance in preparing this article.

Into a Sea of Refugees: HMM-264

by LtCol Joseph A. Byrtus, Jr.

Small camp sites dotted the countryside below as the aircraft followed the steep valley northeastward. From 500 feet above ground level, the camp at Isikveren was overwhelming with 80,000 starving and freezing people tightly congregated on the steep mountain side in a patchwork of garish blue, white, and orange tents. A pall of smoke from thousands of small cooking fires hung perhaps 20 feet above the camp in a thin, neat layer. Because every square foot of land suitable for landing was occupied by refugees, the Super Stallions had to land one at a time in one of the few level areas not blocked by the tall, defoliated trees that dotted the camp. As the lead aircraft transitioned to landing from a high hover, a landing zone was cleared below as people ran from the rotor wash, followed by their tents and meager belongings. Once safely on deck, the crew inside the aircraft attempted to unload as rapidly as possible so that the next aircraft could land. Initially, the crowd was kept back by the rotor wash of the aircraft.

Within moments, however, the crowd surrounding the CH-53E had doubled or tripled in size. As the first pallet was pushed from the ramp, a crowd of 10,000 or more rushed the aircraft from all sides in a desperate dash for food and water. Fearing the results of a mob scene at the rear of his aircraft, the aircraft commander lifted into a low hover and slowly air-taxied its way forward, temporarily blowing the Kurds back and clearing an area below the aircraft for the remaining pallets to fall. The second and third aircraft followed the first's lead and delivered their loads from a low hover too. Once this was accomplished all three helos departed the refugee camp and headed back to Silopi to recover the MEU commanding officer and his ground combat commander for the return trip to the USS *Guadalcanal*. The return flight, however, was diverted to Incerlik, Turkey, for the evening as reduced visibility precluded a return to the USS *Guadalcanal*.

BLT 2/8 Moves South

by LtCol Tony L. Corwin

The beginning of May began as busy as the last two weeks of April. Companies E and F were each tasked to provide one rifle platoon with either a combined antiarmor team or a fast attack vehicle team attached to replace allied forces controlling roadblocks to the west and south of the city, as these forces prepared to move east. Company G was tasked with providing a platoon for security purposes at the Zakhu hospital. Our light armored infantry (LAI)

platoon continued its reconnaissance along the southern portion of our main supply route. The heavy LAI section, consisting of two 25mm light armored vehicles (LAV-25s), an antitank variant (LAV-AT), a logistical variant (LAV-L), and the 105mm howitzer platoon from H Battery, was attached to the 3d Royal Marine Commando Brigade to conduct operations in the central and eastern areas of northern Iraq.

As negotiations over the size of the security zone continued between CTF PROVIDE COMFORT and Iraqi officials, coalition forces focused their attention on expanding the security zone to the east and south. The 3d Commando, with the 3d Battalion, 325th Regiment Airborne Combat Team attached, and the Dutch Royal Marines were assigned an area of responsibility to the east while the BLT prepared to move south.

On the morning of 4 May, a platoon from Company E relieved Company F at the southern roadblock, allowing it to begin its movement southward. Company F was mounted in assault amphibious vehicles and reinforced by one LAI section and two combined antiarmor teams, with an 81mm mortar platoon and H Battery providing direct fire support.

Each time the Company moved forward, it forced an Iraqi company ahead of it to withdraw. Roadblocks were also established along the route to prevent any unauthorized movement north toward Zakhu.

After reaching its final destination, an area five kilometers northwest of Summayl, Company G was inserted by helicopter to strengthen Company F's position. With sufficient forces forward and a safe zone cleared north to Zakhu, BLT 2/8's command element and Company H moved south on 9 May to Muqbal where they established a fire support base.

This pushed logistics to the limit. Both military and commercial vehicles had to be employed to keep supplies moving from Zakhu to Muqbal. To lessen this strain, the BLT employed a number of civilian refuelers, but primarily made use of Battery H's organic five-ton truck assets.

While this consolidation of forces continued in the Muqbal area, plans were developed for an unopposed and opposed seizure of Dahuk, depending on what circumstances dictated. Although Iraqi forces remained outside the 30-kilometer buffer they agreed on regarding Zakhu, their continued presence in the region was still somewhat of a destabilizing factor. When the decision was made that BLT 2/8 would push on towards Dahuk, it was assigned the 29th British Commando artillery battalion and an Italian special forces company. The British artillery battalion significantly enhanced the BLT's indirect fire support capability with 3 firing batteries, each with 6 lightweight 105mm howitzers with ranges extending from 15 to 30 kilometers. The Italian special forces company that the BLT received operated and trained with our reconnaissance and scout sniper platoons. By incorporating the Italians into our operations this way, we were capable of maintaining an active reconnaissance and surveillance presence around Dahuk at all times.

The BLT remained at the Muqbal fire support base from 9 May to 15 June, while the city of Dahuk was being resettled by the Kurds. To provide the companies relief from static defensive duty, a rotation system was established to

move units every six days from the forward checkpoint back to Zakhu and Muqbal for rear area and perimeter security duty. Companies rotating to Muqbal were afforded the opportunity to partake in live fire exercises, squad-size patrols, and in organized athletic events.

During the last weeks of May, the BLT initiated planning for a phased retrograde of all units back to Iskenderun, Turkey. On 1 June, Company H was the first unit to leave Muqbal. The company was tasked with providing security for equipment and cargo at the port facility and assist in the washdown of BLT vehicles. For the next two weeks selected equipment, vehicles, and personnel retrograded to Iskenderun via Silopi. On 15 June, responsibility for the BLT sector was transitioned to Italian forces, and the remaining combat elements of the BLT retrograded to Silopi. BLT 2/8's mission was complete.

Pushing Logistics to the Limit: MSSG-24

by LtCol Richard T. Kohl

Initially, MSSG-24 established a combat service support detachment to the forward support base it had previously set up at Silopi, Turkey, by mid April. The task to assist displaced civilians was right up MSSG-24's alley. The unit possessed organic motor transport, supply, medical, dental, and engineer detachments that could easily task organize for such operations, while simultaneously providing logistics sustainment for the MEU. From the forward support base, logistics requirements were moved via helicopter and tactical vehicle convoy, to logistics control points located in the rear of forward-deployed units. Replenishment of depleted stocks from the continental United States (CONUS) and intratheater sources was continuous.

Throughout the operation, MSSG-24 provided direct support for 24th MEU(SOC) and all the other allied forces in JTF-B at one time or another. This was due to the fact that most other units involved in PROVIDE COMFORT did not come with an organic logistical support capability built into them, as the 24th MEU(SOC) did. As a consequence, the 15 days of logistics sustainability that Marine doctrine requires an MSSG to prepare for clearly stretched capabilities to the limit as it had to operate continuously in a combat-intense environment without much assistance for approximately two to three weeks and support more units than normally expected to support. The MSSG (-) for this operation consisted of 251 Marines and Sailors located more than 450 miles from the port of Iskenderun. This is believed to be the furthest inland an entire MSSG has ever been established.

Captain Holcomb served with the 2d Battalion, 7th Marines, in the Persian Gulf. In the fall of 1990, he received a letter from Mrs Ann Dyer's third-grade class at Montague School in Santa Clara, California. Mrs Dyer's students asked Captain Holcomb a number of questions about Desert Shield in particular and war in general. This letter is Captain Holcomb's answer to those questions.

Why We Fought

by Captain Grant K. Holcomb, USMC

Marine Corps Gazette, April 1991

It was wonderful to get your letters. I cannot thank you enough for your concern. I hope to answer all of your many questions. You are our future; it is important that you know what is happening in Saudi Arabia, Kuwait and Iraq. This must never happen again.

I will start by answering your toughest question first: "Have you started a war yet?" I am here to stop a war, not start it. Your letters remind me well of why I am here. You were free to write what you wanted, send it around the world without it being stopped, and you never have to worry about being threatened for what you wrote. A child cannot do that in Iraq and can no longer do that in Kuwait. Far worse than the loss of freedoms is the total loss of value of a human life. To the leaders of Iraq, death is as much a part of government business as garbage collection. This is a hard thing to ask of you, but briefly imagine living every second of your life in fear of being killed. You are so lucky to be safe and free in America.

I am here in Saudi Arabia to protect this country from Saddam Hussein, the leader of Iraq. He became their leader by killing many people. The Iraqi people had no choice in the matter, they have no vote or other say in their government like we do. Saddam Hussein needs large sums of money to stay in power. He seeks the power of controlling everyone around him. To get the money he needs he must have more control over the world's oil supply. He sent his army into Kuwait to take its oil and money. He would control one-half of the world's oil supply if he could also take Saudi Arabia's oil with his army.

Saddam Hussein is more evil than I can possibly describe in writing. He started by killing his own brother at age 10. He has killed entire cities of his own people with poison gas. He has more people killed weekly in Iraq and Kuwait than are in your classroom as you read this letter. When his army went into Kuwait, they killed far more people everyday than are in your entire school.

What should the United States do now? There are some very hard questions to answer about how to deal with a murderer. The best way I know how to answer this is to try to answer the following questions:

1. Should the United States let Iraq destroy other nations?
2. Should the United States let Iraq inflate the price of oil or let it cut oil off from nations it does not like?

When Iraq destroyed Kuwait, great numbers of people were, and are still, killed. The taking of human life is the toughest subject there is to discuss. I am an officer in the United States Marine Corps. My personal belief is that the preservation of human life is the absolute most important value. As a Marine, part of the most successful war fighting forces in the world's and United States' 200-year history, this value may seem a contradiction. Just like a police officer breaks the speed limit to catch a speeder, I may be forced to kill a killer. All the wishing, hoping, praying, and protesting by anyone does not change the fact that Saddam Hussein considers murder an acceptable act. If someone was in your classroom trying to kill you, I would stop them. I would do so even if it meant I had to die in the process. Your lives are that valuable to me, and I do not even know you. I do not know the children of Kuwait either. Are their lives any less valuable than your own? No, they are not. All lives are of equal value. This presents a problem. What about Saddam Hussein's life?

I am so close to where Saddam Hussein's army is killing people that I could be there in the time it takes for you to read this letter. I constantly think about justifying his death. My own possible death makes me very sensitive to how precious life is. I would like some day to have a son or daughter in Mrs. Dyer's classroom. How do I justify being here? Imagine a large shark. To a shark, it is not a murderer. It does what it must to stay alive. It does not think it has done anything wrong when it hurts a person. Sharks have their place in the world; you must respect them when in their domain. However, what if you found a shark in your swimming pool? Would you invite your friends over to come swimming and have them eaten? You have the power to protect your friends. Saddam Hussein is a shark in the world's swimming pool. Unfortunately, and against our strongest value, removing the shark from the pool will kill it.

To answer your second question, you must understand the role oil plays in your world. If I could snap fingers and make everything disappear that either directly or indirectly needed oil for it to exist, you would be sitting naked in the dirt. I am not here in Saudi Arabia representing American oil companies; I am here by choice to protect lives. However, I understand the direct impact oil has on human life. It keeps us warm, fed, housed, and free to move. Its uses in producing electricity, heat, lubrication, medicine, and plastics affect everyone directly everyday. Those few Americans who protest my being here forget very quickly. Without oil they could not drive to where they protest or get their opinion on TV, radio, or paper without the oil to provide power to do so. If the price of oil gets too high, they cannot then afford to even express their

opinion. No one could afford to hear it either. Ask Mrs. Dyer what a hypocrite is.

If Saddam Hussein controlled most of the world's oil, imagine the power he would have. Look at what he has done to his own people. Children near your age are forced to carry machineguns and fight. Since Russia is going through great changes, the United States is the only country in the world with a military force strong enough to stop his plan of controlling the oil. There are many countries that do not have the money to buy enough oil if it gets too expensive. Already, countries that need oil for heating during the winter have many freezing deaths, mostly children. Do we let Saddam Hussein indirectly kill people all over the world? No, we do not! I am a Marine, and I will stop Saddam Hussein. You can be very proud of your Marines, Soldiers, Sailors and Airmen who are here in Saudi Arabia. We know what we have to do, the risks to our lives, and how important to the people of the world that we be successful.

Now that I hope I have answered your hardest question, I will answer the rest of them. Several of you wrote, "Is it hot?" I am from Florida and thought 95 degrees at the beach was hot. Since I got here 59 days ago the average temperature has been 115 degrees with the high being 120 degrees. At first it was unbearable. It is like looking into the oven to see what is for dinner, but it stays that hot all the time. Since my unit is from Twentynine Palms, CA, my Marines already know how to survive in the desert. You must force yourself to drink large quantities of water, even if your stomach hurts. Just like a car dies when its radiator leaks out its cooling water, so do humans. I consider myself a professional, and I put a great deal of pride into what I do, but the heat makes you slow and hesitant to work hard. We were forced to sleep all day and work all night to keep from killing anyone. Now we are all so used to working in 115 degrees that 90 degrees feels like winter is just around the corner. It is now starting to get very cold at night and soon it will be freezing at night. They will be issuing winter clothing and sleeping bags to us soon. All the Marines here really appreciate how wonderful America is now that we have been here so long.

Many of you asked where I sleep. I sleep right on the sand. I recently got a 1/2-inch-thick air mat in the mail that I sleep on. Since there is nothing but soft sand where we are, I do not worry much about rocks in my back. We have no tents, and since it does not rain here, we do not need them. However, I have woken up recently wet from the dew that forms at night. Things dry up in minutes when the sun comes up. I actually sleep very well and have gotten quite used to the ground. I do miss my pillow though; my neck hurts when I wake up. If you see pictures of tents in Time magazine, remember I am a Marine. The Army has much more money for tents, cots, and other such comforts. Besides, me and my Marines are doing fine and would rather spend taxpayers' money on more weapons than unnecessary personal comforts.

You asked in your letters if there were lots of people, houses, stores, and hotels. Since my Marines are not allowed to associate with or use Saudi facilities, we really never see anyone. For hundreds of miles in every direction, there is nothing but rolling sand. I have driven through three cities that

look just like ours to include Kentucky Fried Chicken, Hardees, etc. I have seen signs for a Holiday Inn. The Saudis own and live in homes like ours.

We occasionally see a herd of camels led by Bedouin tribesmen. They live all over the desert here. They also herd sheep, which eat the very short grassy shrubs that grow every 10 feet or so in the sand. The Bedouins are a very rugged, proud people. They have been extremely supportive and appreciative of us being here. We have gone out of our way to be respectful of their culture. This is their home, and we are only temporary guests.

You asked if there were bees, lizards, and other bugs here. Absolutely, yes! There are so many scorpions here and we regularly have Marines get stung. There is a black scorpion that grows to several inches in length. I keep one in a can that is so big it can hold a saltine cracker in its claws while it eats it. (I did not know scorpions ate crackers.) The scorpions are very dangerous because their poison is so strong. There are at least six types of poisonous snakes. We have caught a cobra, two horned vipers, and another type of viper since we got here. They like to hide in our uniforms when we take them off. The ants are amazing here; they are strong, fast, and eat anything.

There is also a giant black beetle, but it is harmless. I woke up last night because one crawled across my chest. The beetles like to get into our food. They can chew their way through cardboard. There is a very large lizard out here, about two feet long, that digs very deep holes in the ground. We rarely see them. We thought there were no rats until we caught one running across the sand trying to steal a package of Lifesavers. I have not experienced any mosquitoes, but the flies are terrible. They are afraid of nothing and like to get into your mouth. We have all learned to check our clothes, boots and packs for scorpions and snakes and have learned to survive with our new "friends."

I have to tell one story about SSgt Gonzalez, who works for me. We had driven to a new position at night so the Iraqi army would have a hard time knowing where we were. When we were through setting up our operations center he sat down and leaned back to rest. A six-inch scorpion stung him in the hand. He said the pain was instantaneous and in a short time he started to lose the feeling in his arm and shoulder. We immediately radioed for a helicopter to fly him to the Marine Corps hospital. The helicopter was five hours late picking him up. It almost ran out of gas and had to land. After it refueled, it crashed seconds after it took off again. No one was badly hurt. A truck finally picked him up at the crash site and rushed him to the hospital. While the truck was driving, the back blew off and almost threw him on the highway. When he finally got to the hospital, it turns out he was also sick, from food poisoning. Since the hospital had just been set up, the new doctors did not know the best way to treat a scorpion sting. It may sound horrible, but we laughed for days-if none of that could kill the staff sergeant, Saddam Hussein surely could not either!

One of you asked if I wear Army boots. Absolutely not. I am a Marine, and I wear combat boots. The boots may look the same to the casual observer, but it is what is inside them that makes the difference. The Marine Corps has never lost a major battle in its 214-year history. I am confident that if Saddam

Hussein forces us to fight him, he will see that the Marine Corps is to war what Michael Jordan is to basketball.

Many of you asked me what I eat. We are issued three times a day a small rectangular, heavy, green plastic bag called a meal-ready-to-eat (MRE). The MREs come in a case of 12. Each case has the same 12 meals: diced turkey, ham slices, pork patty, beef patty, beef stew, chicken a la king, frankfurters, chicken loaf, meat balls with BBQ sauce, beef slices and BBQ diced with gravy. Each package has crackers, peanut butter or cheese, cake, salt, pepper, sugar, coffee, gum, matches, toilet paper, and a candy bar. Some meals have beans in tomato sauce or applesauce. The ones we eat were made in 1985. I have lost 20 pounds since I got here, so that should tell you something about how good it tastes. Some evenings trucks come with hot food, but to be honest, many of the meals we have eaten, we have not been able to give a name. Some type of meat with noodles and sauce. I really miss McDonald's and my wife's great cooking. For the first time in my 31 years of living, I wish I had a plate of vegetables. I would eat a giant bowl of green beans, broccoli, or corn if I could get it. I also miss fresh salads. I have to stop; this is making me very hungry.

One of you asked if I like my job and if I was having fun. I have to be very honest. There have been a few occasions where I have never been happier (only a few, however). As an officer I really love working with my Marines, I care very much for my men. I show them respect, keep them informed, and do my best to protect them. When they go out of their way to show me they appreciate and respect me, it makes it all worthwhile. Everyone wants to feel they have value and that their existence makes a difference. I feel that way now. I have been a Marine since I was 17 years old, and now I make decisions that affect the lives of 900 men. I love being in charge and leading strong, well-trained, very disciplined warriors. My country needs me, and my job makes me feel important.

Many of you ask what I do. I am a senior captain in a Marine Corps infantry battalion. An infantry battalion is made up of five companies with roughly 900 Marines total. We are a ground fighting force, meaning we do not have tanks, artillery (cannons), or aircraft. These weapons do, however, come under our control in combat. My position would put me between the principal and a senior teacher if your school was a battalion. The principal would tell me what he or she wanted and I would carry out those instructions by directing the teachers. As the assistant operations officer, I have 14 Marines who work directly for me. Most of my time is spent planning combat missions. Another job I have is senior watch officer for the battalion's combat operations center. In that role, after directed by my commanding officer or operations officer, I either directly or indirectly control and monitor the actions of the battalion's Marines, and the tanks, artillery, aircraft, or other weapons that come under our control. When not rehearsing combat missions, I supervise the battalion's training to get my Marines ready. The best part of my job is when I get to train Marines. I have taken 300 Marines out to teach them how to shoot machine-guns. I teach a hand-to-hand combat class a few times a week to get my Ma-

rines even more prepared for that time when they may be forced to fight. Some days are very, very slow, and the only thing we do is clean our weapons, write letters, and exercise. Then we will go day and night for up to five days without any sleep rehearsing a possible combat mission. We even use our own Marines as the enemy to make it as realistic as we can. We are ready for Saddam Hussein.

One of you asked how I was. First of all, thank you for asking. I feel great peace in my heart that I am doing the right thing. From the comments from my bosses and my Marines, I am confident I am ready to lead my Marines into combat. I have lost a lot of weight and no longer exercise like I want, so I feel I should do more to stay strong. That is one of the reasons I started a hand-to-hand combat class. I do not get much sleep each day, so I am always a little tired. Because I am tired of the same food, I am always a little hungry. I have had only one shower in 30 days, so I am very, very dirty. Your parents would not dare let me in their house. I smell so bad. My clothes are so dirty they stand up without a hanger. We have enough water for drinking and shaving, not showers. I am used to the heat. The real problem that I have is that I miss my best friend, my wife Joan. I love her so very much. I miss talking to her and holding her. God blessed me with a very special partner, and it is tough being so far away. I can't even make a phone call from where I am. Getting a letter from her gives me new energy and strength. The people of America should send mail and packages to the wives and girlfriends of the Marines, not Marines. They are the ones left alone with the pain of our absence.

I would like to end this letter by answering one last question. "Are you scared?" Many years ago when I was first a Marine, I would say yes. I have been all over the world for the past 11 years. I have seen several of my closest friends killed. I have held dead Marines in my arms, and I have survived several very close calls. When I am home in the United States, every minute is precious to me. I smile every second because I know I live in the most beautiful, free, and powerful country in the world. I am not scared right now. I am not afraid to die for what I believe in. There are a lot of people in this world who would do anything to destroy the United States. As long as they know there are strong, dedicated leaders in the United States who will do everything it takes to protect our society, we are safe. I have freely accepted my part in assuming that responsibility. There is no room for fear. If we are to keep our country great we must all be responsible citizens. Give more than you take from others. Care for everyone around you. Get involved in your government. Keep the environment clean so it will last. Stop the waste of our resources. We can stop being dependent on oil if we use coal properly or switch to hydrogen and solar energy. It starts with you, our children. God bless you. *Semper fidelis.*

During the Vietnam War the public watched videotape of the previous days action; during Desert Storm viewers around the world watched antiaircraft fire over Baghdad, Scud missile attacks, and the liberation of Kuwait City live via satellite hookups. Colonel Shotwell was the public affairs officer for I Marine Expeditionary Force during the Persian Gulf Conflict. In this article, he describes how the Marine Corps cooperated with the media.

The Fourth Estate as a Force Multiplier

by Colonel John M. Shotwell

Marine Corps Gazette, July 1991

Major commands at Camp Pendleton turn over just about every summer with varying degrees of attention from the news media. But the change of command scheduled for 8 August 1990, was expected to draw more media interest than normal. LtGen Walter E. Boomer was to assume command of I Marine Expeditionary Force (MEF), as well as Marine Corps Base Camp Pendleton. The Commandant of the Marine Corps (CMC), Gen A.M. Gray, was flying in as guest of honor and had agreed to a news conference that afternoon.

We researched and briefed the Commandant on the topics the media were likely to throw his way--a recent force reduction of civilian workers, hazardous waste disposal, freeway and airport proposals, and other persistent environmental and encroachment issues. But the one question all the journalists asked in one way or another was the one Gen Gray couldn't address at the time, even though he knew the answer--Were Camp Pendleton Marines going to the Gulf?

Six days earlier, when Saddam Hussein raped Kuwait, he set in motion a chain of events that seized the world's attention and held it fast. For the next several months every national leader, as well as just about every American family, would monitor each detail of the crisis through the news media. Perhaps no other event in world history has received as much public and media attention over a comparable time period.

The Marines from I MEF were very much in the eye of this typhoon of publicity throughout the crisis. During DESERT SHIELD and DESERT STORM, Marines would be featured frequently on all four television networks, would grace the covers of the major news magazines, and would figure prominently nearly every day on the front pages of America's newspapers.

Throughout the operation, correspondents frequently visited our area of responsibility, observed our training and buildup, and often remained overnight with our units. And during offensive operations a large pool of reporters literally lived with Marines for several weeks and crossed into Kuwait with them on G-day. They required logistical support, sometimes got in the way during

training, and presented a potential threat to operational security. But by telling the Marine Corps story to an audience voracious for news from the front they helped build and maintain the support of the American public.

The Adversary Relationship-Traditional and Healthy

The media coverage of the Vietnam War left a legacy of bitterness and mistrust between the press and the military. I often compare the process of trying to get the two institutions together with mating a wildcat and a pit bull. Public affairs officers can get bloodied in the process, but if we're successful, the progeny can be pretty interesting.

As the Head of the Media Branch at Headquarters Marine Corps during 1985-88, I was responsible for setting up military-media seminars at the Command and Staff College and Amphibious Warfare School. Typically these sessions included keynote speakers from the mainstream news media and panel discussions with members of the Pentagon press corps. I never ceased to be amazed at the fingerpointing antipathy that was often aroused and at the depth of suspicion that surfaced during discussions of media coverage of combat operations. Officers who'd never once had to confront either a reporter or an armed opponent blamed the media for losing the war for us in Vietnam, impugned their morals, and maligned their loyalties.

Retired Marine lieutenant general and former *New York Times* reporter Bernard E. Trainor has seen this adversary relationship from both sides. Last December he wrote in *Parameters*,

Today's officer corps carries as part of its cultural baggage a loathing for the press. . . . Like racism, anti-Semitism, and all forms of bigotry, it is irrational but nonetheless real. The credo of the military seems to have become 'duty, honor, country, and hate the media.'

Getting our officers to like the press was never a goal of these seminars. A certain amount of mutual wariness is probably healthy. What we tried to convey to the operators was the importance of planning for the presence of civilian reporters in the ranks. Whether they like it or not, commanders will have to deal with news media on the battlefield.

Falling Into the Media Pool

In 1983 military commanders effectively banned the media from the Grenada invasion. The press reacted with such loud righteous indignation, all but accusing the Pentagon of using the Bill of Rights for toilet paper, that the Department of Defense (DOD) formed a commission to study the issue. The Sidle Panel, composed of officers and representatives of the national news media, came up with a proposal that neither side particularly liked but both begrudgingly accepted.

The plan called for the Pentagon to fly a pool of about a dozen journalists to a combat zone prior to hostilities actually commencing, if possible. DOD drilled this plan with varying degrees of success over the next several years. Then in late 1989 the United States invaded Panama. The press pool was delayed for many hours while the world monitored the drama through Pentagon briefings and reports from journalists trapped in hotels. Once again the media howled like a scorned mistress.

The Pentagon had more time to get its act together when DESERT SHIELD began to unfold in August 1990. It helped that we deployed to a country that excluded news media as a matter of national policy. The Saudis, who normally don't permit media into their tightly guarded society, eventually did grant visas to a DOD-controlled media pool. By mid-August the world was watching American Service members sweating on tarmacs and loading docks somewhere in Saudi Arabia.

Within a few weeks the flood gates were opened and war correspondents, some seasoned but many green, poured into the country by the hundreds. We didn't know it at the time, but Marines would be on center stage of the world's biggest arena for five months before a single shot would be fired. And when you're in the spotlight, you might as well dance.

Wartime Public Affairs Themes

Not that the Marines who arrived in Saudi Arabia in mid-August were in a mood to pirouette. At the Jubail commercial port, the tension was thicker than the humidity as commanders struggled to offload vast quantities of weapons and equipment and field their units for combat. Troops sweltered in blistering metal warehouses waiting to move out. The threat of chemical warfare, terrorism, and heat stroke combined to add an edge to the anxieties that normally accompany a combat deployment. The last thing any of the commanders wanted to deal with at this time was a gaggle of journalists.

Most of the reporters, photographers, technicians, and producers followed the operation from the U.S. Central Command (CentCom) Joint Information Bureau (JIB) in Dhahran. The posh Dhahran International Hotel, with its cascading indoor fountains, sumptuous buffets, and preening doormen seemed a universe away from Marine Corps positions in the Saudi sands. The ubiquitous blue hemispheres seen so frequently as a backdrop behind television news reporters broadcasting from Saudi Arabia, and thought by many American viewers to be domes of a mosque, were in fact the cabanas at the Dhahran International swimming pool.

The media set up their news bureaus and satellite dishes at the International and haggled with JIB officers in their efforts to see U.S. forces and interview commanders and troops. The public affairs annex to CentCom's DESERT SHIELD operations order, published 14 August 1990, encouraged commanders to provide access to news media within the bounds of operational security (opsec) and outlined the media pool support guidelines. The guidance had little immediate impact on Marine Corps forces, who were too busy preparing for

imminent armed conflict to place much priority on media access. As a result, media access to Marines was somewhat limited during the first few days our forces were in Saudi Arabia. Many Americans following the crisis through the media at the time wondered: Where are our Marines? One of the people asking that question was Gen A. M. Gray.

LtGen Boomer released a message to his subordinate commanders on 21 August to encourage more news media access to Marines participating in DESERT SHIELD. It read, in part:

Operation DESERT SHIELD and related current events have captured worldwide attention and are the subject of intense news media scrutiny. CMC desires maximum media coverage of USMC (Marine Corps) participation within the bounds of opsec. This operation can demonstrate to Americans the flexibility, deployability, sustainability, and combat power of the Marine Corps and our combined arms capabilities. . . .

The long-term success of DESERT SHIELD depends in great measure on support of the American people. The news media are the tools through which we can tell Americans about the dedication, motivation, and sacrifices of their Marines. Commanders should include public affairs requirements in their operational planning to ensure that the accomplishments of our Marines are reported to the public.

Though DESERT SHIELD was only a couple of weeks old at the time, the message articulated the public affairs themes that persisted throughout our deployment:

Public support is vital to the success of the operation.

We gain and maintain that support by showing the public what their Marines are accomplishing.

The only way to show Marines to the American public is through the news media.

Public affairs should be incorporated into operational planning.

With these themes as a foundation, we began setting up as many news media visits as were feasible without interfering with operations and training. Our philosophy was simple. We were proud of our Marines and what they were doing in DESERT SHIELD, and we wanted to show them off. As long as we could give reporters the opportunity to spend time with our hard-charging Marines, who were the best advertisements for the Corps, the more likely we

were to receive positive news media coverage. To the extent possible, we tried to coincide media visits with training events. Live fire exercises were especially popular with photographers and camera crews looking for exciting visuals. Overnight stays with Marine units were actively sought after by reporters who wanted a taste of life with Marines in the desert.

These early reports of Marines in DESERT SHIELD were uniformly positive, given the tense situation. By the second week in September both Tom Brokaw and Dan Rather had broadcast highly favorable segments from Marine positions in Saudi Arabia for their nightly newscasts. CBS's Bob Simon had profiled 7th Marine Expeditionary Brigade commander MajGen John I. Hopkins. The public reaction to these accounts was astounding. We were showered with "Any Marine" mail from much of America.

An Atmosphere of Openness

LtGen Boomer set the tone for openness by availing himself to reporters from the first week he was in Saudi Arabia. Before the deployment ended, he had subjected himself to more than 40 lengthy interviews with a wide variety of media. One of his remarks in a *Newsweek* interview was later incorporated by President Bush into his address to the nation on 16 January 1991 following the commencement of DESERT STORM. The general's subordinate commanders followed suit and were frequently quoted in the national and international press.

After a honeymoon of gushing accounts of Marines in our first month in the Gulf, we began to sense that some reporters were looking for chinks in the armor. Our public affairs escorts reported that the media was beginning to ask more negative questions. Some Marines were responding with complaints about the heat, the uncertainty, the slow mail, and the lack of amenities. As the novelty of our presence in Saudi Arabia faded, and the threat of immediate hostilities diminished, these imperfections became news.

LtGen Boomer, in a message to his senior commanders on 11 September, described his pride in "the esprit, determination, and patriotism that have been demonstrated by the young warriors" featured in news media reports. As he went on:

. . . As our stay here lengthens I anticipate the news media interest will continue. I encourage commanders to accommodate members of the press corps in coordination with the public affairs office. . . . Your Marines and Sailors should be encouraged to discuss their day-to-day duties, routine tasks, and living conditions. In many cases these news media reports are our only link with friends, relatives, and supporters back home.

As your Marines are briefed prior to hosting news media, remind them that the shortage of amenities that may inconvenience them are a direct result of a rapid deployment into a potentially hostile zone that required

prioritization of shipment for food, water, weapons, and ammo. This will remain an austere deployment, but a concerted effort is underway to improve mail delivery, establish systems for delivering news and information, provide spare parts, and enhance living conditions with health and comfort items. Off-hand comments about these shortages, when broadcast/published in news media, focus undue attention on problems that we're working very hard to resolve. You should not muzzle your Marines, but they should be reminded that these discomforts and inconveniences, while sometimes foremost in their minds, play a backseat to the importance of accomplishing our mission, of doing what has to be done for as long as we have to be here.

The message seemed to have had some impact. Media accounts centering on such complaints were rare, and they were about the only negative reports about Marines throughout the deployment. When media did direct attention toward gripes, our commanders, to their credit, were more focused on resolving the source of the complaints than on lashing out at the media. There were a few commanders that reacted to negative comments in media reports by wanting to ban reporters from their ranks. But these were the exceptions. As the months wore on, a phenomenon developed none of us public affairs officers really expected. Some of our commanders actually began to enjoy having reporters around. In many cases they were the only Americans that our Marines and Sailors saw throughout the deployment. They brought news from home. Friendships and relationships developed between the journalists and the troops they covered. Perhaps more significantly, Marines grew accustomed to having journalists in their midst, and this paid dividends later on as we prepared to take the media through the breach.

Sensitivities and Propaganda

As DESERT SHIELD wore on, we became increasingly aware that Western media reports were being closely monitored in Jeddah, Baghdad, Amman, Tel Aviv, and, of course, Washington. On the one hand, our mandate for media access provided us with a means to tell Iraq and the rest of the world that we meant business and that we were capable of carrying through with the President's goals. We were showing that our weapons worked as advertised and our Marines were tough and unintimidated.

But a miscue with the press could turn into a propaganda coup for Iraq. For example, we steered reporters away from filming or photographing the practice of Christian or Jewish worship by U.S. military forces in Saudi Arabia. The Saudis granted us the privilege of observing our religious practices in their holy land so long as we didn't flaunt it. Had media routinely trained their cameras on our Marines bowing before a chaplain on the sacred Arabian sands, it would

have given Saddam fuel to ridicule the Keeper of the Two Holy Mosques in the eyes of the rest of the Arab world.

Disregard of other host nation sensitivities could cause similar repercussions in Arab eyes. We'd permitted media coverage of intramural touch football games at the King Abdul Aziz military facility soccer field with positive feedback. But when one of those games pitted the Wrecking Crew against the Desert Foxes, the CNN report, though a light-hearted account, created a public affairs nightmare. Those were all-women teams. The spectacle of females grappling in gym attire in a country that normally drapes its women in black from head to toe shocked and offended the Saudis. "Televising such matters on an international TV broadcast has negative results," advised the Saudi Eastern Area Commander in a letter to the Marine Central (MarCent) commander, "which might be utilized by the enemy to accompany opposing propaganda against the Kingdom of Saudi Arabia." There were, in fact, reports that Saddam had obtained a copy of the CNN segment and showed it repeatedly on Iraqi television to illustrate the decadent depths to which the guardians of Mecca had plummeted. About a month later the BBC reported an address by Saddam in which he belittled American forces by telling his troops that they would be fighting "women in shorts." We can only surmise as to the psychological impact of that statement on the morale of the Iraqi soldiers.

In spite of our best efforts to educate our troops, a minute percentage of our people failed to understand or appreciate Arab sensitivities. Unfortunately, some Americans chose to demonstrate their ignorance or intolerance around reporters, who sometimes printed their off-hand derogatory comments. A spate of such reports (based on remarks by U.S. troops) compelled LtGen Boomer to send another message to his commanders in early November 1990 emphasizing the importance of leadership in averting such comments:

. . . In the absence of significant developments in the deployment, news media will tend to report derogatory comments by individual U.S. Service members as indicators of negative trends that do not exist. Such reports mislead the American public, play into the hands of vocal opponents of U.S. foreign policy, and provide a source of potentially damaging propaganda for Iraq.

I want to encourage commanders to continue to host news media and allow their access to troops, and I do not wish to constrain the right of Marines and Sailors to speak their minds. However, if they choose the news media to air their gripes, it indicates to me that problems exist that are not being adequately addressed through the chain of command. Your Marines and Sailors are aware that this is not a perfect world, that this deployment will never feature all the comforts of home, that sacrifices will have to be made. They need to be aware that off-hand derogatory comments can impact U.S. public

opinion and degrade the degree of public support we currently enjoy. Your troops can, better than anyone, tell the Marine Corps story in DESERT SHIELD. I request that you simply share my concern with them. They will know what to do.

There were still occasional media reports based on petty grievances by Marines after that message was released, but for the most part they were overshadowed by unfolding events. As November passed, the Marine Corps birthday, exercise IMMINENT THUNDER, President Bush's visit and Thanksgiving observances all provided the media with plenty to report about.

Girding the Media for Combat

By January 1991 the press contingent at the Dhahran International Hotel numbered close to 1,000. All felt they were entitled to free access to the battlefield during combat operations. Assistant Secretary of Defense for Public Affairs, Pete Williams, in conjunction with public affairs officers from CENTCOM and the component commands, developed a system to limit media access to small groups of reporters who could share their stories, film, and videotape with other reporters. These pools would be positioned with forward-based ground units and remain with those units for the duration of the war.

The system was doomed for failure, at least in the minds of the media establishment, who complained loudly about being deprived of its First Amendment rights. They trotted out venerable Walter Cronkite, who testified before Congress that the military "has the responsibility of giving all the information it possibly can to the press, and the press has every right, to the point of insolence, to demand this."

That insolence created resentment among the American public who were aroused more by the arrogance of some correspondents than the substance of their reports. In a Times Mirror poll 78 percent of those surveyed believed the military was telling the public as much as it could under the circumstances and was not hiding the bad news. More than half even expressed a concern that the military wasn't exercising enough control over war reporting. In a Time/CNN poll nearly 80 percent of adults surveyed said they were getting enough information about the war, and almost 90 percent supported some censorship of the press under the circumstances.

"There's an irreconcilable conflict," said former television newsman Marvin Kalb in an article in Time magazine. He went on to add:

The press has not only a right but a responsibility to press for as much information as possible. And it is the government's responsibility to give only that information it feels will not be injurious to American troops on the line.

Safeguards and Ground Rules

In our view the pool system was the only practical way to preposition reporters with forward-based units as correspondents in the ground war without jeopardizing the success of the operation or endangering the lives of Marines and Sailors. The Pentagon developed ground rules as safeguards, using as a basis guidelines handed down to correspondents in conflicts going back to World War II. While reporters chaffed at these rules, they weren't much different than those with which their predecessors had to contend at Normandy and Iwo Jima. They were simply designed to prevent the enemy from learning in a news report our specific troop strengths and locations, our weaknesses, and our intentions.

Far more vexing to reporters than the ground rules, which governed the content of media dispatches, was the requirement that each press report undergo a security review at the source. The phrase, "cleared by Pentagon censors" began cropping up on DESERT STORM reports. One could almost envision a draconian group of officers in green eyeshades gleefully cutting and pasting the pool reports. The ersatz "censors"--staff noncommissioned officers and junior officers who served as pool escorts--were, in fact, very constrained in what they could recommend for removal from media reports.

The security review process prohibited any subsequent staffing of media materials through intermediate commands. If an escort officer couldn't convince a journalist that his story violated one of the ground rules, he had to "flag" the report, which would be jointly reviewed at the Dhahran JIB by military pool coordinators and media representatives. If they couldn't agree that the offending portions should be deleted, the report had to be forwarded to the Pentagon, where once again military officers and civilian journalists would try to strike some accord over the report's contents.

This tightly controlled appeal process protected the journalists from arbitrary deletion of information. But it also discouraged the escort officers from initiating confrontations over valid security concerns. The system helped avoid blatant opsec violations by individual reporters, but still allowed some information to be released that could be used by enemy intelligence who could compile the pool reports from across the front and study the cumulative information. In a letter in early February to the Dhahran JIB director, I complained that the process placed our escorts at an unfair disadvantage. As I noted in the letter;

. . . I support the concept of security at the source for pool reporting, but I don't think it's realistic to expect that all journalists will willingly omit portions of their reports solely in response to the persuasive powers of our escort officers. Some reporters simply can't grasp how the factual information they wish to include in their stories can be of value to the enemy and potentially endanger American lives. I believe that the JIB has been too liberal in allowing publication/broadcast of

reports flagged for possible ground rules violations. As a result, our pool journalists are getting bolder in incorporation of operational information in their reports, and our escort officers are increasingly reluctant to flag the material. I realize the JIB and the Pentagon are sensitive to charges of censorship. I think we're much better off erring on the side of censorship than gambling with operational security.

The problem with this approach was that far too few reports were being contested and "flagged" up to higher authorities. This was clearly evident during DESERT STORM when only five pool reports were submitted to the Pentagon for resolution, and just one of those was changed before being cleared for release.

K-Day to G-Day: Filtering the Pool

Just prior to K-day (what the locals called President Bush's 15 January ultimatum date), the Marines and the Army each received an 18-member media pool. We divided ours among the two divisions and the 1st Force Service Support Group/Direct Support Command.

Because air strikes dominated the early phases of DESERT STORM, special trips for "quick reaction pools" of six to seven journalists were set up through the 3d Marine Aircraft Wing Public Affairs Office to our air bases in Saudi Arabia and Bahrain. Meanwhile, those reporters attached to ground units filed reports on the preparation for the land attack, artillery raids, mine breaching exercises, and logistical buildup.

Post-war media reviews critical of the pool system have frequently cited the Khafji engagement as an example of failure to effectively employ pools to cover combat. This accusation is inexplicable since we were successful in taking our pools to Khafji on the first and subsequent days of the Iraqi incursion there. Among media that filed reports on the Khafji battle from the outset included NBC-TV, CBS Radio, the Washington Post, the London Telegraph, and United Press International. Photographers from Reuters, Time, and the Associated Press recorded the action visually with images that were widely used by news magazines and wire services. The critical reports may have stemmed from our initial restrictions in limiting media to the forward edge of Marine Corps positions outside the city, which at the time was defended by Arab coalition forces that did not want media in their sector. When our escorts were cleared to take reporters into the Saudi sector, they were turned away by Iraqi mortar fire.

By G-day (24 February) our pool with ground units had swelled to more than 30 members. All four major television networks, the three wire services, the major news magazines, and several leading newspapers were then represented in the Marine Corps pool. They were poised along the front with our task

forces, regimental combat teams, and forward command elements to cross the breach at first light as we attacked into Kuwait.

Media logistics

At that point, the biggest concern to I MEF's public affairs officers was delivering media pool products several hundred kilometers from the battlefield in Kuwait to the distribution point in Dhahran with the immediacy with which today's media are accustomed. We knew that dedicated helos would not be an option, at least initially, in the high-threat environment we faced during the early stages of the attack. Instead, we devised a system that exploited existing logistical channels to return the video, film, and print articles to the rear. We strategically placed about a dozen people as couriers at key points in the resupply chain. This allowed our couriers to piggyback aboard medevacs, fuel trucks, and ammo wagons returning from the battlefield to rear areas where other Marines were waiting to rush them by air or ground to Jubail or Dhahran.

Much of the time we were also able to exploit the MEF's electronic mail system. Print journalists composed their reports on their laptops and filed them on discs that we in turn loaded onto tactical computers that transmitted the documents via the electronic mail system's satellite link to terminals in the I MEF Rear headquarters at Jubail. They were then immediately faxed by the public affairs office there to Dhahran for dissemination to an eagerly awaiting mob of media.

Problems

Two days before the ground war was scheduled to commence, I asked the CentCom Public Affairs Office whether there would be any embargo of media pool products. "Do we want Saddam to find out about the assault over CNN?" I asked. I was also mindful that our media pool reports could easily upstage any official pronouncement concerning the ground war that might be made at the seat of government. I was told not to expect an embargo. Nevertheless, at about the time Marines were beginning to traverse the breach with media in tow, we received a flash message from the Pentagon directing us to hold all media products at forward staging areas. At about the same time, Secretary of Defense Dick Cheney announced a blackout on all war news. Although his announcement stated that all sensitive reports would be withheld from the public for at least 48 hours, the embargo was lifted later that day. But initial media reports were held up for several more hours while they were reviewed in Dhahran and Riyadh.

The pool reporters were enraged and their escorts exasperated by these delays, but they were short-lived. By the time most Americans were getting out of bed on 24 February, the pool reports were beginning to reach them through the media. There were other delays during the campaign, due in part to the rapid advancement of our divisions, which outran our system for returning the pool products.

Report Card

While the media panned the pool system in early reviews, it was generous in its acclaim for Marine public affairs officers. The reports coming out of our pools were so uniformly positive that some correspondents cooling their heels in Dhahran refused to use them. Some of our pool journalists were even accused by their colleagues of being coopted by the Marines.

Those Americans who pay attention to such details began to notice that Marines were getting a disproportionate share of the war's publicity. One reader of the New York Daily News even wrote a letter to the editor complaining about a pro-Marine Corps media bias. As his letter read,

Most of the war coverage centered around the actions of the Marines. They did no more or less than the Army to bring about the victorious conclusion of Operation DESERT STORM. President Harry Truman once said the U.S. Marines have the best public relations team and I think he was right.

Accolades for the public affairs officer notwithstanding, much of the credit for any success of the media coverage of Marines in the Gulf must go to individual unit commanders for their hospitality and candor in dealing with reporters and to young Marines in the desert, who never failed to impress journalists with their intelligence, toughness, and courage. But the Marine Corps' apparatus for accommodating reporters in combat or in any situation in which hostilities were imminent was archaic to nonexistent. Some examples:

Our system for transmitting print reports via electronic mail and fax was jerry-built at best. We need to institute a means for more rapid return of media pool products through satellite transmission. Delays in transmitting media pool products for technological reasons just reduce our opportunity to tell our story. As we found in Southwest Asia, media that aren't in pools won't wait long for these reports. They'll go off on their own with their own satellite dishes and report whatever they can find. If we can't afford the hardware, we should at least let the pools bring their own. But we lose a measure of security control if they use their own gear.

We need to ensure that our public affairs officers have the tactical transportation they require to move media and their products around the battlefield. Our media pool transportation problems in the Gulf were exacerbated by the vastness of our area of responsibility. In some cases we had to force the media to bring their own wheels. Their rented four wheel drive vehicles worked okay in the desert, but may not fare so well in other terrain or in areas where gasoline is not readily available.

We were never able to obtain secure communications support for our media escorts. Forcing them to transit the battlefield and rear areas, particularly at night, without secure radios is just plain foolish.

In most cases we should require that journalists bring their own commercially available 782 gear to enable them to live for extended periods of time in an expeditionary environment. At the same time, we need to be prepared to provide them adequate shelter and items such as nuclear, biological, and chemical (NBC) equipment that would not be practicable for them to purchase. Reporters don't usually expect VIP treatment, but as a matter of courtesy, they shouldn't be relegated to living conditions inferior to those of the Marines they're assigned to cover.

Throughout the Gulf War most pool reporters were under pressure, either actual or perceived, from their editors/producers to file stories every day, if not several times a day. We simply can't get them all to where the action is on a daily basis. At its best, the pool system was designed to have media prepositioned with commands that are expected to move forward during combat and remain with those units until hostilities break out. We should make every effort, as security and logistics permit, to get some reporters to any combat action or other newsworthy event as soon as possible. But they shouldn't expect us to shuttle them all over our area of responsibility every time there's some activity they want to report. Pool participants need to understand that movement among command sectors requires close coordination and careful control. We won't just pile them into a vehicle and haul them to every hot spot. To do so would be capricious and hazardous.

A reporter's rush to file can often lead to unbalanced, inaccurate reporting. The closer that correspondents get to the front, the narrower their perspective, both physically and psychologically. Reporters are likely, and understandably, going to make judgments about a battle in which they participate based on what they experience and observe, but their conclusions may not be an accurate assessment of the tactical situation. In their zeal to file a report about some exciting action to make deadline, they may not take the time to talk to a senior commander or staff officer who can place their observations into the overall context of the battle. These distorted reports, when placed into worldwide circulation, can play into the hands of enemy propagandists. In the Gulf War we were able to balance those reports by placing journalists with the command elements of the divisions and some of the regiments where they could be periodically briefed by commanders and senior operators on the bigger picture.

Our escort officers were frequently caught in the middle when pool members had conflicting needs. We tried to be sensitive to the diverse requirements among print and visual media and their various deadline constraints, but our escort officers shouldn't have to arbitrate among journalists when they don't agree. In future instances of prolonged media pool coverage of combat

operations, perhaps we should compel the journalists to elect their own team leaders to referee internal disputes.

Summarizing

Even with all these limitations and drawbacks, I believe the pool system is the only way military leaders can integrate the media into their operational units during combat. The alternative--letting a battalion's worth of media roam at will across the front--would be chaotic, counterproductive, and dangerous. While some media pundits may not agree, I think that the American public was well served by the reports that came from correspondents who lived with Marines in Saudi Arabia and advanced with them into Kuwait.

"Whatever else the press arrangements in the Persian Gulf may have been," wrote Pete Williams in the *Washington Post*,

they were a good-faith effort on the part of the military to be as fair as possible to the large number of reporters on the scene, to get as many reporters as possible out with troops during a highly mobile, modern ground war and to allow as much freedom in reporting as possible, while still preventing the enemy from knowing what we were up to.

The media, as a group, have whined a lot (with seemingly little sympathy from the American public) about their perceived lack of access to military operations in the Gulf War. Our experiences with journalists who spent time with Marines during DESERT SHIELD and DESERT STORM, however, were almost uniformly positive. Some lacked the military background we'd like to see in a war correspondent, but they were eager to learn. For the most part they treated our Marines, from the lowest-ranking grunts to the commanding generals, with respect. They put up with wretched field conditions during all extremes of weather and were willing to risk their lives in combat to get their stories. Particularly noteworthy for their insightful, sometimes compassionate accounts of Marines during the operation were Kirk Spitzer, Gannett Newspapers; Molly Moore, *Washington Post*; Colin Nickerson, *Boston Globe*; Otto Kreisher, Copley News Service; Bob Simon and Dan Rather, CBS News; Denis Gray, Associated Press; Ray Wilkinson, *Newsweek*; Marc Dulmage, CNN; Charles Platiau and Jeff Franks, Reuters; Jim Michaels, *San Diego Tribune*; and Linda Patillo, ABC-News. A tip of the Kevlar goes to these combat correspondents and many of their colleagues for their courage and professionalism.

Any impact of news media coverage on the outcome of military conflicts is a matter for conjecture. The U.S. troops in the Gulf enjoyed an unprecedented degree of public support, indeed, adoration for their service in DESERT SHIELD/DESERT STORM. Most correspondents who spent time with Marines in the operation filed glowing accounts. It isn't unreasonable to postulate that

this media coverage heightened public appreciation, which in turn became a force multiplier that kept spirits soaring and honed our determination to overwhelm the enemy and liberate Kuwait. In any case, our public affairs officers can take pride in the part they played in engineering the words and images that were effective weapons against the enemy's lies and hypocrisy; words and images that added some thunder and lightning to what our actual weaponry had already started during DESERT STORM.

Marine Corps Forces in the Persian Gulf Region, February 1991

(As shown in the Operations Summary prepared by Current Operations Branch, HQMC, for February 1991)

I Marine Expeditionary Force

Commanding General

LtGen Walter E. Boomer

Command Element

- Headquarters & Service Company, I MEF (-) (Reinforced)
- 1st Surveillance, Reconnaissance, and Intelligence Group (-) (Reinforced)
- 1st Radio Battalion (-) (Reinforced)
- 3d Civil Affairs Group (Reinforced), U.S. Army
- 403d Civil Affairs Co, U.S. Army (Operational Control)
- 3d Naval Construction Regiment
 - Naval Mobile Construction Battalion 24
 - Naval Mobile Construction Battalion 5
 - Naval Mobile Construction Battalion 74
 - Naval Mobile Construction Battalion 40

Ground Combat Element

1st Marine Division (-) (Reinforced)

Commanding General

MajGen James M. Myatt

- Headquarters Battalion (-)
- 1st Marines (-) (Reinforced) (Task Force Papa Bear)
 - 1st Battalion, 1st Marines
 - 3d Battalion, 9th Marines
 - 1st Tank Battalion
 - Company B, 3d Assault Amphibian Battalion
 - Company C, 3d Assault Amphibian Battalion
- 3d Marines (-) (Reinforced) (Task Force Taro)
 - 1st Battalion, 3d Marines
 - 2d Battalion, 3d Marines
 - 3d Battalion, 3d Marines
- 4th Marines (-) (Reinforced) (Task Force Grizzly)
 - 2d Battalion, 7th Marines
 - 3d Battalion, 7th Marines
- 7th Marines (-) (Reinforced) (Task Force Ripper)
 - 1st Battalion, 7th Marines

1st Battalion, 5th Marines
1st Combat Engineer Battalion
3d Tank Battalion
11th Marines (-) (Reinforced)
1st Battalion, 11th Marines
3d Battalion, 11th Marines
5th Battalion, 11th Marines
1st Battalion, 12th Marines
3d Battalion, 12th Marines
1st Light Armored Infantry Battalion (-) (Reinforced) (Task Force Shepherd)
3d Assault Amphibian Battalion (-) (Reinforced)
1st Reconnaissance Battalion (-) (Reinforced)

2d Marine Division (-) (Reinforced)

Commanding General

MajGen William M. Keys

Headquarters Battalion (-) (Reinforced)
6th Marines (-) (Reinforced)
1st Battalion, 6th Marines
3d Battalion, 6th Marines
1st Battalion, 8th Marines
2d Battalion, 2d Marines
Task Force Breach Alpha
8th Marines (-) (Reinforced)
2d Battalion, 4th Marines
3d Battalion, 23d Marines
Task Force Breach Bravo
Company B, 4th Assault Amphibian Battalion
Company F, 2d Light Armored Infantry Battalion
10th Marines (-) (Reinforced)
2d Battalion, 10th Marines
3d Battalion, 10th Marines
5th Battalion, 10th Marines
2d Battalion, 12th Marines
2d Light Armored Infantry Battalion (-) (Reinforced)
2d Tank Battalion (-) (Reinforced)
8th Tank Battalion (-) (Reinforced)
2d Assault Amphibian Battalion (-) (Reinforced)
2d Combat Engineer Battalion (-) (Reinforced)
2d Reconnaissance Battalion (-) (Reinforced)
1st Brigade, 2d Armored Division (Tiger Brigade), U.S. Army
1st Battalion, 67th Armor Regiment
3d Battalion, 67th Armor Regiment
3d Battalion, 41st Mechanized Infantry Regiment
1st Battalion, 3d Field Artillery Regiment
Air Defence Artillery Platoon
Combat Service Support Element
502d Forward Support Battalion
one company, 1st Battalion, 17th Engineers

one platoon, 1st Battalion, 502d Military Police Regiment
Signal Platoon
Chemical Platoon

Air Combat Element

3d Marine Aircraft Wing

Commanding General

MajGen Royal N. Moore Jr.

Marine Wing Headquarters Squadron 3 (MWHS-3) (-)

Marine Aircraft Group 11

Marine Aviation Logistics Squadron 11 (MALS-11) (Forward)

Marine All Weather Fighter Attack Squadron 121 (VMFA (AW)-121)

Marine Fighter Attack Squadron 212 (VMFA-212)

Marine Fighter Attack Squadron 232 (VMFA-232)

Marine Fighter Attack Squadron 235 (VMFA-235)

Marine Fighter Attack Squadron 314 (VMFA-314)

Marine Fighter Attack Squadron 333 (VMFA-333)

Marine Fighter Attack Squadron 451 (VMFA-451)

Marine All Weather Attack Squadron 224 (VMA(AW)-224)

Marine All Weather Attack Squadron 533 (VMA(AW)-533)

Marine Tactical Electronic Warfare Squadron 2 (VMAQ-2)

Marine Aerial Refueler Transport Squadron 252 (VMGR-252) (-)

Marine Aerial Refueler Transport Squadron 352 (VMGR-352) (-)

Detachment, Marine Aerial Refueler Transport Squadron 452 (VMGR-452)

Marine Aircraft Group 13

Marine Aviation Logistics Squadron 13 (MALS-13) (Forward)

Marine Attack Squadron 231 (VMA-231)

Marine Attack Squadron 311 (VMA-311)

Marine Attack Squadron 542 (VMA-542)

Detachment B, Marine Attack Squadron 513 (VMA-513)

Marine Observation Squadron 1 (VMO-1)

Marine Observation Squadron 2 (VMO-2) (-)

Marine Aircraft Group 16

Marine Aviation Logistics Squadron 16 (MALS-16) (Forward)

Marine Medium Helicopter Squadron 161 (HMM-161)

Marine Medium Helicopter Squadron 165 (HMM-165)

Marine Light Attack Helicopter Squadron 367 (HMLA-367)

Marine Light Attack Helicopter Squadron 369 (HMLA-369)

Marine Heavy Helicopter Squadron 462 (HMH-462)

Marine Heavy Helicopter Squadron 463 (HMH-463)

Marine Heavy Helicopter Squadron 465 (HMH-465)

Marine Heavy Helicopter Squadron 466 (HMH-466) (-)

Marine Aircraft Group 26

Marine Aviation Logistics Squadron 26 (MALS-26) (Forward)

Marine Medium Helicopter Squadron 261 (HMM-261)

Marine Medium Helicopter Squadron 266 (HMM-266)

Marine Medium Helicopter Squadron 774 (HMM-774)

Marine Heavy Helicopter Squadron 464 (HMH-464) (-)

Marine Heavy Helicopter Squadron 362 (HMH-362)
 Detachment A, Marine Heavy Helicopter Squadron 772 (HMH-772)
 Marine Attack Helicopter Squadron 775 (HMA-775)
 Marine Light Helicopter Squadron 767 (HML-767)
 Marine Air Control Group 38
 Headquarters & Headquarters Squadron 38 (H&HS-38)
 Marine Air Control Squadron 2 (MACS-2)
 Marine Air Traffic Control Squadron 38 (MATCS-38) (-)
 Marine Air Support Squadron 3 (MASS-3)
 Marine Wing Communications Squadron 38 (MWCS-38) (-)
 2d Light Antiaircraft Missile Battalion
 3d Light Antiaircraft Missile Battalion
 2d Low Altitude Air Defence Battalion (-)
 3d Low Altitude Air Defence Battalion (-)
 Marine Wing Support Group 37
 Headquarters & Headquarters Squadron 37 (H&HS-37)
 Marine Wing Support Squadron 174 (MWSS-174)
 Marine Wing Support Squadron 271 (MWSS-271)
 Marine Wing Support Squadron 273 (MWSS-273)
 Marine Wing Support Squadron 373 (MWSS-373)
 Marine Wing Support Squadron 374 (MWSS-374)

Combat Service Support Element

1st Force Service Support Group (-) (Reinforced)

Commanding General

BGen James A. Brabham Jr.

Headquarters and Service Battalion (-)
 General Support Group 1
 Combat Service Support Detachment 131
 Combat Service Support Detachment 132
 2d Supply Battalion (-) (Reinforced)
 2d Maintenance Battalion (-) (Reinforced)
 6th Motor Transport Battalion (-) (Reinforced)
 1st Landing Support Battalion (-) (Reinforced)
 1st Dental Battalion
 General Support Group 2
 7th Motor Transport Battalion (-) (Reinforced)
 2d Landing Support Battalion (-)
 1st Medical Battalion (-)
 Combat Service Support Detachment 91 (Enemy Prisoners of War)

DIRECT SUPPORT COMMAND

Commanding General

BGen Charles C. Krulak

Headquarters and Service Battalion (-), 2d FSSG
 7th Engineer Support Battalion (-) (Reinforced)

8th Engineer Support Battalion (-) (Reinforced)
8th Motor Transport Battalion (-) (Reinforced)
2d Medical Battalion (-) (Reinforced)
2d Dental Battalion (-)
Direct Support Group 1
 Combat Service Support Detachment 10
 Mobile Combat Service Support Detachment 11 (Regimental Combat Team-1)
 Mobile Combat Service Support Detachment 17 (Regimental Combat Team-7)
Direct Support Group 2
 Mobile Combat Service Support Detachment 26
 Mobile Combat Service Support Detachment 28
Rear Area Security
 24th Marines (-)
 2d Battalion, 24th Marines
 3d Battalion, 24th Marines

Marine Forces Afloat

4th Marine Expeditionary Brigade

Commanding General

MajGen Harry W. Jenkins Jr.

Command Element

Headquarters and Service Co, 4th MEB

Ground Combat Element

Regimental Landing Team 2
 Headquarters Company, 2d Marines
 1st Battalion, 2d Marines
 3d Battalion, 2d Marines
 1st Battalion, 10th Marines
 2d Light Armored Infantry Battalion (-)
 Company A, 2d Assault Amphibian Battalion
 Company A, 2d Tank Battalion
 Company A (-), 2d Reconnaissance Battalion
 Detachment, Truck Company, Headquarters Battalion, 2d Marine Division

Air Combat Element

Marine Aircraft Group 40
 Marine Attack Squadron 331 (VMA-331)
 Marine Medium Helicopter Squadron 263 (HMM-263)
 Marine Medium Helicopter Squadron 365 (HMM-365)
 Marine Heavy Helicopter Squadron 461 (HMH-461)
 Marine Light Attack Helicopter Squadron 299 (HMLA-269) (-)
 Marine Aviation Logistics Squadron 14 (MALS-14)
 Headquarters and Headquarters Squadron 28 (H&HS-28) (-)

Marine Air Control Squadron 6 (MACS-6) (-)
 Marine Wing Communications Squadron 28 (MWCS-28) (-)
 Detachment B, Marine Air Support Squadron 1 (MASS-1)
 A Battery, 2d Low Altitude Air Defense Battalion
 Marine Wing Support Squadron 274 (MWSS-274)

Combat Service Support Element

Brigade Service Support Element 4

5th Marine Expeditionary Brigade

Commanding General

BGen Peter J. Rowe

Command Element

Headquarters and Service Company, 5th MEB
 Surveillance, Reconnaissance, and Intelligence Support Group 5

Ground Combat Element

Regimental Landing Team 5
 Headquarters Company, 5th Marines
 2d Battalion, 5th Marines
 3d Battalion, 5th Marines
 3d Battalion, 1st Marines
 2d Battalion, 11th Marines (-) (Reinforced)
 Company D, 1st Light Armored Infantry Battalion
 Company B, 1st Combat Engineer Battalion (Reinforced)
 Company A, 4th Tank Battalion (Reinforced)
 Antitank Platoon, 23d Marines
 Company A, 4th Assault Amphibian Battalion (Reinforced)
 Company B, 1st Reconnaissance Battalion (Reinforced)

Air Combat Element

Marine Aircraft Group 50
 Headquarters, Marine Aircraft Group 50
 Detachment, Marine Air Control Group 38 (MACG-38)
 Detachment, Marine Air Control Squadron 7 (MACS-7)
 Detachment C, Marine Air Support Squadron 6 (MASS-6) (Direct Air Support Center)
 A Battery, 3d Low Altitude Air Defense Battalion (-) (Reinforced)
 Detachment, Marine Aviation Logistics Squadron 16 (MALS-16)
 Detachment, Marine Aviation Logistics Squadron 39 (MALS-39)
 Detachment, Marine Aviation Logistics Squadron 13 (MALS-13)
 Detachment, Marine Aviation Logistics Squadron 24 (MALS-24)
 Detachment, Marine Wing Headquarters Squadron 3 (MWHS-3)
 Detachment, Marine Wing Weapons Unit 3 (MWWU-3)

Detachment, Marine Wing Support Squadron (MWSS) (rotary wing)
Detachment, Marine Wing Support Squadron (MWSS) (fixed wing)
Marine Medium Helicopter Squadron 268 (HMM-268)
Marine Medium Helicopter Squadron 265 (HMM-265)
Detachment, Marine Heavy Helicopter Squadron 466 (HMH-466)
Marine Light Attack Helicopter Squadron 169 (HMLA-169) (-)
Marine Attack Helicopter Squadron 773 (HMA-773)

Combat Service Support Element

Brigade Service Support Group 5
Detachment, Headquarters & Service Battalion, 1st FSSG
Detachment, 1st Landing Support Battalion (Reinforced)
Detachment, Communications Company
Detachment, 7th Motor Transport Battalion
Detachment, Medical Battalion (includes dental detachment)
Detachment, 7th Engineer Support Battalion
Detachment, 1st Supply Battalion
Detachment, 1st Maintenance Battalion

13th Marine Expeditionary Unit (Special Operations Capable)

Commanding Officer	Col John E. Rhodes
Battalion Landing Team 1/4	
Marine Medium Helicopter Squadron 164 (HMM-164) (Reinforced)	
MEU Service Support Group 13	

Persian Gulf War Chronology

August 1990 - June 1991

1990

7 August--President Bush ordered U.S. military aircraft and troops to Saudi Arabia as part of a multinational force to defend that country against possible Iraqi invasion. The Persian Gulf crisis was triggered on 2 August when Iraqi President Saddam Hussein invaded neighboring Kuwait with overwhelming forces and subsequently positioned assault elements on the Saudi-Kuwait border. On 6 August, the United Nations Security Council approved a total trade ban against Iraq. A major deployment, the largest since the Vietnam War, was started for Operation Desert Shield that included major units from all four services.

8 August--Major General Walter E. Boomer was promoted to the grade of lieutenant general and assigned as Commanding General of I Marine Expeditionary Force.

15 August--Headquarters, U.S. Marine Corps announced the commitment of 45,000 troops to the Persian Gulf area. This deployment consisted of elements of the I Marine Expeditionary Force including units from 1st Marine Division and 1st Force Service Support Group (FSSG), 3d Marine Aircraft Wing (MAW), and 7th Marine Expeditionary Brigade (MEB). Also en route were elements of the 4th MEB including units from 2d Marine Division, 2d FSSG, and 2d MAW. On arrival in Saudi Arabia, the 7th MEB linked up with Maritime Pre-Positioning Ship Squadron 2 (MPS-2), dispatched from its normal anchorage at Diego Garcia in the Indian Ocean. The five-ship squadron contained 7th MEB's equipment and enough supplies to sustain the 16,500-person force for 30 days.

22 August--President Bush ordered the first mobilization of U.S. military reserves in 20 years and declared the call-up "essential to completing our mission" of thwarting Iraqi aggression in the Persian Gulf. Most of those summoned to active duty in the initial mobilization were Army reservists.

24 August--The U.S. Embassy in Kuwait was ordered closed. Marine security guards were with the approximately 100 U.S. officials and citizens transferred to the U.S. Embassy in Baghdad by the Iraqi government. They were among an estimated 1,000 Americans being held hostage in Iraq.

11 September--President Bush spoke to a joint session of Congress and adamantly set forth the U.S. objectives in the Persian Gulf: Iraq must withdraw from Kuwait completely, Kuwait's legitimate government must be restored, the security and stability of the Persian Gulf must be assured, and American citizens must be protected. The remarkable buildup of U.S. and allied military forces in Saudi Arabia and the Persian Gulf area and the blockade of Iraq continued at full pace amid renewed statements of determination on both sides.

26 September--General Alfred M. Gray, Commandant of the Marine Corps, addressed a detachment of Marines in Saudi Arabia while touring Marine positions there and meeting with officials from Persian Gulf nations. He talked about a variety of topics ranging from relations with Arab countries to unit rotations, and challenged Marines to continue to do their jobs in the best way they know how. It was the first visit to Southwest Asia during Operation Desert Shield for the Commandant who was accompanied by Sergeant Major of the Marine Corps David W. Sommers.

8 October--The first fatal Marine accident in Operation Desert Shield claimed the lives of eight men when two UH-1N Huey helicopters crashed into the North Arabian Sea during a night training mission. The Marines were assigned to Marine Medium Helicopter Squadron 164 for deployment.

10 October--The first unit-sized activation of Marine reservists came when Marines from Combat Service Support Detachment 40 reported to Marine Corps Air Station, Kaneohe, Hawaii. The mission of the unit was to maintain and refurbish equipment left behind by 1st Marine Expeditionary Brigade as it deployed to Saudi Arabia to marry up with its pre-positioned equipment aboard Maritime Prepositioning Ship 3.

8 November--President Bush announced that he planned to add more than 200,000 U.S. troops to those already deployed in Operation Desert Shield in the Persian Gulf area. When completed, this deployment doubled the number of Marines in the objective area, adding II Marine Expeditionary Force units from the Corps' east coast bases and the 5th Marine Expeditionary Brigade from California.

13 November--A second involuntary call-up of selected Marine Corps Reserve units began. Marines from 20 units of the 4th Marine Division and the 4th Marine Aircraft Wing reported to the 5th Marine Expeditionary Brigade at Camp Pendleton, California, for redeployment training.

14 November--Defense Secretary Richard Cheney authorized the call-up of 72,500 more National Guard and Reserve troops in support of Operation Desert Shield. Added to authority already granted, the action raised the number of Army, Navy, Air Force, and Marine Corps selected reservists who could be on

active duty at the same time to 125,000. The call-up ceiling for the Marine Corps was 15,000.

15-21 November--About 100 miles south of the Kuwait border, American and Saudi Arabian military forces participated in Exercise Imminent Thunder. The exercise included an amphibious landing by more than 1,000 Marines of the 4th Marine Expeditionary Brigade and tested the military's ability to command, control, and coordinate air and ground forces. It included air-to-air mock fighter combat and close air support of ground forces. At the same time, only 25 miles south of Kuwait, another 1,000 Marines from the 1st Marine Expeditionary Brigade conducted field exercises ashore.

16 November--Admiral Frank B. Kelso II, Chief of Naval Operations, announced that ships would remain in the Middle East longer than the six-month limit established for Navy deployments. The decision of November 8th to send nearly 200,000 more troops to the Persian Gulf not only scuttled Defense Department plans to start rotating personnel home from the desert, but also bumped the subject of troop rotation off the Pentagon's list of priorities.

22 November--President Bush addressed U.S. Marines, sailors, and British soldiers during his visit to Saudi Arabia. Standing before a crowd of more than 3,000 front-line forces, the president reaffirmed his resolve to see Iraqi strongman Saddam Hussein ousted from Kuwait. The President and Mrs. Bush then joined the Marines for a traditional Thanksgiving Day meal.

3 December--The Marine Corps was granted a new call-up ceiling of 23,000 reservists when Defense Secretary Richard Cheney gave the military departments authority to call-up 63,000 additional members of the National Guard and Reserves in support of Operation Desert Shield. Added to authority already granted, this action raised the number of Army, Navy, Air Force, and Marine Corps selected reservists who could be on active duty at the same time to 188,000.

10 December--More than 24,000 Marines of the II Marine Expeditionary Force mustered on the parade ground at Camp Lejeune, North Carolina, for a pre-deployment review by the Commandant of the Marine Corps and the Commander in Chief, Atlantic Fleet in the largest formation of Marines in modern history. Commanded by Lieutenant General Carl E. Mundy, Jr., the units included the 2d Marine Division, 2d Marine Aircraft Wing, 2d Force Service Support Group, and the 2d Surveillance Reconnaissance and Intelligence Group. The units deployed to Southwest Asia in support of Operation Desert Shield through the month of December.

18 December--Rollout ceremonies for the Corps' new M1A1 tank were held at the General Dynamics Land Systems Division in Warren, Michigan. The M1A1 "common tank" was outfitted to Marine Corps specifications with such features

as ship tiedowns, a deep water fording capability, and position locating and reporting system capability. The tank replaced the aging M60A1. The 2d Tank Battalion based at Camp Lejeune, North Carolina, used the new tank in the Persian Gulf while other tank battalions operated M60A1s.

22 December--Secretary of Defense Richard B. Cheney visited the 1st Marine Division combat operations center in Saudi Arabia. He and Chairman of the Joint Chiefs of Staff, General Colin L. Powell, were on a five-day trip to the Middle East where they met with deployed commanders, sailors, soldiers, airmen and Marines aboard ship and in the sands of Saudi Arabia. They expressed their support for the 300,000 men and women serving in the Persian Gulf area.

27 December--Company A from Marine Barracks, Washington, D.C., the oldest post of the Marine Corps, departed for Camp Lejeune, North Carolina, to join elements of the 2d Marine Division deploying for Operation Desert Shield. Marines from the barracks were last deployed in 1906 when a detachment was assigned to the expeditionary battalions sent to Cuba for pacification duty.

1991

1 January--The strength of active duty U.S. Armed Forces was 2,340,354 of which 197,764 were Marines. By mid-month, almost half of the Corps' active duty strength in the Persian Gulf area.

12 January--After three days of solemn, often eloquent debate, Congress voted President Bush the authority to go to war against Iraq. The Authorization for Use of Military Force Against Iraq Resolution allowed the U.S. to use all necessary means against Iraq if it did not withdraw from Kuwait by midnight, January 15th. It was the first time since August 7, 1964, when the Gulf of Tonkin Resolution was adopted, that Congress had voted directly for offensive military action.

15 January--The V Marine Expeditionary Force (MEF) was activated to assume missions and tasks assigned to I MEF prior to its deployment to Southwest Asia. V MEF was to form, train, and deploy units to reinforce and replace those employed in the Persian Gulf area.

16 January--Operation Desert Shield became Operation Desert Storm as forces of the allied coalition launched an all-out air assault against targets in Iraq and occupied Kuwait in an effort to liberate Kuwait and enforce the resolutions of the United Nations Security Council. Overall, in the theater of operation there were more than 415,000 U.S. troops and over 265,000 allied troops in the coalition.

21 January--Baghdad aired footage of captured allied airmen that included five Americans, two Britons, an Italian, and a Kuwaiti who appeared in their uniforms and spoke stiffly. Several of the prisoners had swollen, bruised faces. Marine prisoners were identified as Lieutenant Colonel Clifford M. Acree and Chief Warrant Officer Guy L. Hunter. Their OV-10 Bronco was shot down over southern Kuwait on 18 January.

29 January--The first serious ground fighting of Operation Desert Storm broke out when Iraqi troops mounted an attack into Saudi Arabia along a 40-mile front. Company and battalion-sized Iraqi units centered their efforts on Khafji, a deserted port city, six miles south of the border. Saudi and Qatari troops, supported by artillery and attack helicopters from the 1st Marine Division and aircraft from the anti-Iraq coalition, recaptured the town two days later. The fighting produced the first ground casualties of the war; 11 Marines were killed when their light armored vehicles were destroyed in a clash with Iraqi armored forces.

5 February--The Secretary of the Navy authorized the involuntary recall of up to 2,000 retired Marines who had completed at least 20 years of active duty and who were under the age of 60. According to ALMAR 33/91, the retirees were to be retained on active duty for as long as deemed necessary.

13 February--As of this date, the allied air forces had flown more than 65,000 sorties in Iraq and Kuwait, with a total of 28 planes lost in combat--19 from the United States and nine from allied forces. Of the 19 U.S. planes, four were Marine Corps aircraft--three AV-8B Harriers and 1 OV-10 Bronco. Marine artillery units, using 155mm towed and 8-inch self-propelled howitzers staged a series of nighttime artillery raids over the heavily defended border of Kuwait.

13, 16 February--The Marine Corps ordered an additional 1,758 Selected Marine Corps Reservists to active duty on these dates. The total number of Selected Marine Corps Reserves called up during Operations Desert Storm and Desert Shield was brought up to 24,703. With the advent of war in the Persian Gulf, President Bush authorized the Secretary of Defense to expand the callup of Marine reservists to include the Individual Ready Reserve. At the same time, the Marine Corps Reserve mobilization ceiling of 23,000 was hiked to 44,000.

14 February--As of this date, the active duty end strength of the Marine Corps was 200,248 including reservists on active duty. It was the first time active duty end strength exceeded 200,000 since fiscal year 1971.

15 February--Captain Jonathan R. Edwards of Grand Rapids, Michigan, was the first Marine casualty of the Persian Gulf war to be buried at Arlington National Cemetery. He was killed on 2 February when the AH-1 Cobra helicopter he was flying crashed in the desert. Major Eugene McCarthy of Brooklyn, New York, also died in the crash.

15 February--Allied commanders estimated that 30 percent of Iraq's armor, 35 percent of its artillery, and 27 percent of its other armored vehicles in the Kuwaiti theater of operations had been destroyed by this date.

24 February--The I Marine Expeditionary Force and coalition forces began a ground assault on Iraqi defenses in the final chapter of Operation Desert Storm. Located just south of the Kuwaiti border along the Persian Gulf, the 2d Marine Division and the 1st Marine Division with its four main task forces--Ripper, Papa Bear, Taro, and Grizzly--stormed into the teeth of Iraqi defenses and convinced the defenders that it was the main effort of attack. Meanwhile, heavily armored allied forces attacked the Iraqi defenses in Iraq from behind. At the same time, Marine units of the 4th and 5th Marine Expeditionary Brigades afloat in the Persian Gulf pinned down large numbers of Iraqi troops who expected an amphibious assault. In 100 hours, U.S. and allied forces defeated the Iraqi Army.

28 February--Operation Desert Storm ended when the cease-fire declared by President George Bush went into effect. I Marine Expeditionary Force had a strength of 92,990 making Operation Desert Storm the largest Marine Corps operation in history. A total of 23 Marines were killed in action or later died of wounds from the time the air war was launched on January 16th until the cease-fire took effect 43 days later.

10 March--Five Marine prisoners of war were among the 21 POWs who arrived at Andrews Air Force Base, Washington, D.C. The Marine POWs were freed on March 5th and were transported from Iraq by an International Red Cross aircraft. They were: Lieutenant Colonel Clifford M. Acree, Major Joseph J. Small III, Captain Michael C. Berryman, Captain Russell A.C. Sanborn, and Warrant Officer Guy L. Hunter. The POWs were met by Secretary of Defense Richard Cheney and Chairman of the Joint Chiefs of Staff General Colin Powell. Also greeted by their families and thousands of other well-wishers, the POWs were then taken to the National Naval Medical Center, Bethesda, Maryland.

12 March--President Bush signed an executive order establishing a Southwest Asia Service Medal for members of the U.S. Armed Forces who participated in Operations Desert Shield and Desert Storm. The medal, designed by the Institute of Heraldry, depicted a desert and sea landscape on the front side with tanks, armored personnel carriers, helicopters, ships, and fixed-wing aircraft. It was suspended from a sand-colored ribbon incorporating the colors of the United States and Kuwaiti flags: red, white, blue, green, and black.

14 March--Euphoria in Kuwait rose with the return of the newly-liberated country's emir, Sheikh Jaber Ahmad Al-Sabah, after a seven-month exile. The emir's return brought hopes for democracy from the Kuwaiti people who endured Iraqi occupation.

14 March--Five Marines and two Navy prisoners of war, who returned to the U.S. four days earlier, participated in a press conference at the Bethesda Naval Hospital. Appearing sharp and confident, they fielded numerous questions from the press on the details of their capture and experiences as prisoners.

16 March--The Commandant of the Marine Corps, General Alfred M. Gray, presented the Prisoner of War Medal to the five Marine POWs from the Persian Gulf. The ceremony took place at the Bethesda Naval Hospital.

6 April--President George Bush signed into law a Persian Gulf personnel benefits bill that increased imminent-danger pay, family separation allowance, group life insurance coverage, education assistance, child care, and family education and support services. The Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991 authorized \$15 billion for Persian Gulf operations, \$400 million for benefits for service members, and \$225 million for veterans' assistance.

15-18 April--Thousands of sailors and Marines were welcomed home by cheering crowds as they returned to their homeports from deployment to the Persian Gulf. Included were more than 7,500 Marines of the 4th Marine Expeditionary Brigade who arrived at Morehead City, North Carolina, and Marines of the 13th Marine Expeditionary Unit who arrived at Camp Pendleton, California.

24 April--Five Marines who performed heroic acts in the Persian Gulf received Silver Star medals in ceremonies held at Camp Pendleton, California. Lieutenant General Walter E. Boomer, Commanding General of the I Marine Expeditionary Force, presented the medals to: Staff Sergeant Daniel A. Kur, Sergeant Gordon T. Gregory, and Corporals Bryan R. Freeman, Michael S. Kilpatrick, and Bryan K. Zickefoose.

24 April--The I Marine Expeditionary Force (MEF) was welcomed home from Operation Desert Storm during ceremonies at Camp Pendleton, California. At the same time V MEF, activated in January to assume the missions and tasks assigned to the deployed I MEF, deactivated.

8 June--Operation Welcome Home paid tribute to every service member who went to Southwest Asia in support of Operations Desert Shield and Desert Storm. Some 1,800 Marines with 14 pieces of major equipment and 19 aircraft participated in the Desert Storm National Victory Parade in Washington, D.C. that was led by General H. Norman Schwarzkopf, Commander of the U.S. Central Command and Desert Storm forces. Marines from the I Marine Expeditionary Force and all its major subordinate commands marched in the parade reviewed by the Commander in Chief, President George Bush. In addition to the parade, Marines manned over 30 pieces of equipment on display

for public viewing on the Mall in Washington. Two days later, over 1,700 Marines including about 650 reservists, marched down Broadway in New York City's ticker-tape parade.

Selected Annotated Bibliography

Entries in boldface type are reprinted in this anthology

BGen John H. Admire, USMC. "The 3d Marines in Desert Shield." *Marine Corps Gazette*, Aug91, pp. 81-84.

The commanding officer of the 3d Marines outlines the environmental, training, and cultural obstacles faced by Marines deployed to Saudi Arabia during Desert Shield. BGen Admire particularly emphasizes the assistance provided by the Saudi Arabian military, which greatly improved the Marines' adaptation to the desert while also helping to build a sense of cooperation and mutual respect between the Marines and Saudi Arabians.

BGen John H. Admire, USMC. "The 3d Marines in Desert Storm." *Marine Corps Gazette*, Sept91, pp. 67-71.

The author recounts the role of the 3d Marines and Task Force Taro in the Battle of Khafji and liberation of Kuwait during Operation Desert Storm.

LtCol Charles L. Armstrong, USMC. "Early Observations on Desert Shield." *Marine Corps Gazette*, Jan91, pp. 34-36.

Observations on Desert Shield regarding Marine Corps performance and the inter-service command system, the concept of maritime prepositioning forces, and the need for more balanced force structure.

VAdm Stanley R. Arthur, USN. "Desert Storm at Sea." *U.S. Naval Institute Proceedings*, May91, pp. 82-87.

The author reviews the events of Operation Desert Storm at sea as the air campaign commenced, and provides observations on the overall performance of the Navy/Marine Corps team.

RAdm Brent Baker, USN. "Desert Shield/Storm; the War of Words and Images." *Naval War College Review*, Autumn 1991, pp. 59-65.

An analysis of the military-media relationship during Operation Desert Shield/Desert Storm.

Capt Tom D. Barna, USMC. "MPF Offload: No Longer a Paper Tiger." *Marine Corps Gazette*, Nov91, pp. 40-41.

The article discusses the success of the maritime prepositioning force concept in Operation Desert Shield, as well as lessons to be learned from its implementation.

Capt Lyle G. Bien, USN. "From the Strike Cell." *U.S. Naval Institute Proceedings*, Jun91, pp. 38-60.

An assessment of American military strategy, readiness, technology, and performance in Operation Desert Storm, particularly in the air campaign.

LtGen Walter E. Boomer, USMC. "Special Trust and Confidence Among the Trailbreakers." *U.S. Naval Institute Proceedings*, Nov91, pp. 47-50.

An interview with the commanding officer of the I Marine Expeditionary Force in which he recounts the actions of Marine forces during Operation Desert Shield/Desert Storm, and gives an analysis of the performance of the maritime repositioning ships, compositing, and communications systems.

LtGen Walter E. Boomer, USMC. "Words of Encouragement." *Marine Corps Gazette*, Nov91, pp. 66.

This message was delivered by LtGen Boomer to the Marines and sailors of I Marine Expeditionary Force just before the allied attack into Kuwait.

Capt Paul E. Bowen, USMCR. "Create a Fighting Staff." *Marine Corps Gazette*, Nov91, pp. 52-53.

The author calls for a more satisfactory response to staffing requirements at high level Marine headquarters, using the I Marine Expeditionary Force in Desert Storm as an example.

BGen James A. Brabham, USMC. "Training, Education Were the Keys." *U.S. Naval Institute Proceedings*, Nov91, pp. 51-54.

The former commanding general of the 1st Force Service Support Group reviews the stages of the buildup during Operation Desert Shield, and recounts his strategies for the unit's participation in Operation Desert Shield/Desert Storm.

LCdr Michael C. Braunbeck, USN. "Front Line Lessons." *U.S. Naval Institute Proceedings*, May91, pp. 90-91.

A review of several lessons to be learned by the Navy/Marine Corps team from its performance in Operation Desert Shield/Desert Storm.

LtCol Robert D. Brown, USMCR. "Mobilizing the Individual Ready Reserve." *Marine Corps Gazette*, Sept91, pp. 43-44.

The officer in charge at the Marine Corps Mobilization Station in Dallas summarizes the mobilization of the Individual Ready Reserve for deployment to the Persian Gulf as conducted by Marine Corps Mobilization Stations across the country.

Maj Kenneth R. Bunning, USMC. "The Corps' Potable Water Capability." *Marine Corps Gazette*, Dec90, pp. 45-49.

Maj Kenneth Bunning assesses the Marine Corps' manufacture and provision of potable water, focusing on the problem of supplying potable water to Marines serving in Middle Eastern deserts.

Capt John L. Byron, USN. "Learning the Lessons." *U.S. Naval Institute Proceedings*, May91, pp. 101.

The commanding officer of the Naval Ordnance Test Unit gives nine procedures with which the Navy and Marine Corps can best learn lessons from Operation Desert Shield/Desert Storm.

LtCol Mark F. Cancian, USMCR. "Marine Corps Reserve Forces in Southwest Asia." *Marine Corps Gazette*, Sep91, pp. 35-36.

An analysis of the strengths and weaknesses of the mobilization system of the Marine Corps Reserve Forces during Operation Desert Shield/Desert Storm.

Louis G. Caporale. "Marine Corps Historical Notes from the Gulf War." *Marine Corps Gazette*, Dec91, pp. 44-46.

The author gives a summary of the performance and historical firsts of Marine Corps forces in Operation Desert Storm.

Capt John D. Cimock, USMCR. "Reserve Engineers Activated for War." *Marine Corps Gazette*, Sept91, pp. 45-46.

Capt Cimock reviews the impressive performance of the 1st Platoon, 4th Bridge Company, 6th Engineer Support Battalion, a Reserve unit from

Battle Creek, Michigan, activated for service during Operation Desert Shield. He also offers suggestions to improve the efficiency of the Reserve mobilization process.

Lt David M. Claborn, MSC, USN. "Pest Control in the Desert." *Marine Corps Gazette*, Aug91, pp. 56-58.

Lt Claborn, a medical entomologist at the Navy Disease Vector Ecology and Control Center, describes the health threats posed by insects in the desert regions of the Persian Gulf, and outlines basic procedures that can be used by Marines to protect themselves from these threats.

John M. Collins. "Options in the Middle East." *U.S. Naval Institute Proceedings*, Oct90, pp. 119-122.

A presentation of policy options available to the U.S. and Allied countries, and to Iraq, in the Middle East crisis.

Capt Norman L. Cooling, USMC. "LAI in the MEU(SOC)." *Marine Corps Gazette*, Aug91, pp. 20-24.

The author assesses the value of Light Armored Infantry to Special Operations Capable Marine Expeditionary Units, and discusses a number of possible missions for these Marines.

Col Harvey F. Crouch, Jr., USMC. "But What if We'd Had the Osprey?" *Marine Corps Gazette*, Sept91, pp. 81-87.

Col Crouch argues that Marine air units would have been much more effective during Desert Shield/Desert Storm if the V-22 Osprey aircraft had been substituted for CH-53D and CH-46E helicopters.

LtGen John H. Cushman, USA (Ret). "Command and Control in the Coalition." *U.S. Naval Institute Proceedings*, May91, pp. 74-80.

An analysis of the command and control of coalition military forces in the Persian Gulf at the political, strategic, operational, and tactical levels.

1stLt Francis L. Donovan, USMC. "Innovations to Aid Mechanized Operations." *Marine Corps Gazette*, Dec91, pp. 48-50.

The former platoon leader of the heavy machinegun platoon in the 3d Battalion, 9th Marines, explains two new concepts for scout platoons and fire support vehicles which evolved during Operation Desert Storm.

VAdm Robert F. Dunn, USN (Ret). "Early Gulf War Lessons." *U.S. Naval Institute Proceedings*, Mar91, pp. 25.

Some early general lessons to be learned from the performance of U.S. military forces in Operation Desert Storm.

VAdm Robert F. Dunn, USN (Ret). "After the Storm." *U.S. Naval Institute Proceedings*, Jun91, pp. 60-61.

The former Assistant Chief of Naval Operations, Air Warfare (OP-05) assesses the overall strengths and weaknesses of the Navy/Marine Corps team in Operation Desert Shield/Desert Storm.

David Eshel. "Fighting Under Desert Conditions." *Marine Corps Gazette*, Nov90, pp. 40-44.

The author, a retired officer in the Israeli Defence Force, explores the difficulties posed to U.S. Forces by desert conditions and climate in the Persian Gulf region.

LtCol David Evans, USMC (Ret). "From the Gulf." *U.S. Naval Institute Proceedings*, Jan91, pp. 77-80.

The military affairs editor for the *Chicago Tribune* presents the opinions and views of U.S. officers and officials he interviewed while visiting the Persian Gulf.

LtCol David Evans, USMC (Ret). "With the Army and the Air Force." *U.S. Naval Institute Proceedings*, Jun91, pp. 62-64.

The author recounts the major actions and operations performed by the Army and the Air Force in Operation Desert Storm, as well as opinions of officers in these services he interviewed.

Cdr Frank Evans, USN. "*Princeton* Leaves the War." *U.S. Naval Institute Proceedings*, Jul91, pp. 70-72.

The author, a media officer with the U.S. Central Command, describes the actions taken after the USS *Princeton* (CG-59) struck a mine in the Persian Gulf, which culminated with it leaving the war zone.

Col Norman G. Ewers, USMC (Ret). "A Conversation with LtGen Royal N. Moore, Jr." *Marine Corps Gazette*, Oct91, pp. 44-49.

In this interview, the most senior Marine Corps aviator in the Persian Gulf describes the role air combat played in supporting the operations of the I Marine Expeditionary Force.

Lt C. Douglas Forcino, MSC, USN. "Marines *Can* Beat the Heat." *Marine Corps Gazette*, Jan91, pp. 40-41.

The author discusses the obstacles facing Marines deployed in hot climates, and techniques to combat these obstacles.

Norman Friedman. "The Air Campaign." *U.S. Naval Institute Proceedings*, Apr91, pp. 49-50.

An assessment of the aircraft and technology, as well as the identification friend or foe (IFF) system used in the air campaign in Operation Desert Storm.

Norman Friedman. "The Seaward Flank." *U.S. Naval Institute Proceedings*, Jul91, pp. 81-83.

An abridged excerpt from the author's book *Desert Victory: The War for Kuwait*, giving examples of the effective use of seapower in Operation Desert Shield/Desert Storm.

Andrew E. Gibson and Cdr Jacob L. Shuford, USN. "Desert Shield and Strategic Sealift." *Naval War College Review*, Spring 1991, pp. 6-18.

This article, by a professor and student from the Naval War College, presents an evaluation of the effectiveness of sealift during Desert Shield.

Maj E. J. Green, USMC. "Desert Storm." *U.S. Naval Institute Proceedings*, Dec91, pp. 75-78.

A look at the strengths and weaknesses of the Marine Corps' combat medical evacuation system during Operation Desert Shield/Desert Storm.

LtCol Bill Green, USMC, et al. "Two Steps Ahead." *U.S. Naval Institute Proceedings*, May91, pp. 97-99.

The authors describe the role of the Marine Corps Combat Development Center's Warfighting Center in Operation Desert Shield/Desert Storm, as well as its current activities analyzing lessons learned.

Col William H. Harris, USMC. "A Word to All of Us Remain-Behind Marines." *Marine Corps Gazette*, Apr91, pp. 51-52.

The commanding officer of the Blount Island Command, Jacksonville, Florida, offers his opinions and advice concerning the situation of Marines who were not deployed to the Persian Gulf.

Col William H. Harris, USMC. "MPF Loadout Completed." *Marine Corps Gazette*, Nov91, pp. 36-39.

A photo essay and summary of the loadout completed by the Marine maritime pre-positioning force squadrons, and maritime pre-positioning force reconstruction.

Col William H. Harris, USMC. "MPF Reconstitution." *Marine Corps Gazette*, Nov91, pp. 34-35.

The author describes the reestablishment of the Marine maritime prepositioning forces after Operation Desert Shield/Desert Storm.

LtCol Henry T. Hayden, USMC, and LtCol G. I. Wilson, USMC. "The Tail That Wags the Dog." *U.S. Naval Institute Proceedings*, Oct90, pp. 51-59.

The authors emphasize the importance of logistics in meeting the demands of desert warfare.

CWO2 Brian K. Herbert, USMC, and CWO2 Daniel P. McFerrin, USMC. "Improving Ammunition Support." *Marine Corps Gazette*, Oct91, pp. 39-40.

The authors offer suggestions for improvement within the Marine Corps ammunition supply system based on their experiences in Operation Desert Storm.

Cdr William F. Hickman, USN. "Confrontation in the Gulf: Unintended Consequences." *Naval War College Review*, Winter 1991, pp. 49-61.

The former commanding officer of the USS *John A. Moore* (FFG 19) assesses the consequences of Saddam Hussein's invasion of Kuwait, and U.S. objectives and policy in the Gulf region.

Maj F. G. Hoffman, USMCR. "First Impressions about the Persian Gulf Crisis: an Example of Enduring Realities." *Marine Corps Gazette*, Feb91, pp. 28-30.

The author discusses some preliminary lessons to be learned from the Persian Gulf concerning Marine force structure and planning, strategic mobility, and Reserve implementation.

Adm James R. Hogg, USN. "Judging Our Success." *U.S. Naval Institute Proceedings*, May91, pp. 100.

The former commanding officer of the Seventh Fleet acknowledges the importance of intelligence procedures, flexibility in military operations, technologically advanced weapons, the Special Forces, and the participation of motivated volunteer troops to the success of Operation Desert Shield/Desert Storm.

Capt Grant K. Holcomb, USMC. "Why We Fought." *Marine Corps Gazette*, Apr91, pp. 44-51.

Capt Holcomb of the 2d Battalion, 7th Marines, replies to Ann Dyer's third grade class at the Montague School in Santa Clara, California, and explains the causes of the war, as well as his own role and reasons for serving in Operation Desert Shield/Desert Storm.

RAdm W. J. Holland, USN (Ret). "Put the Brass on the Tube!" *U.S. Naval Institute Proceedings*, Apr91, pp. 48.

The author discusses the impact of a number of technological innovations in command, control, and communications. He argues that the advent of worldwide, instantaneous television coverage has increased the need for senior officers to use this medium to speak directly to the public.

MajGen John I. Hopkins, USMC. "This Was No Drill." *U.S. Naval Institute Proceedings*, Nov91, pp. 58-62.

The commanding officer of the 7th Marine Expeditionary Brigade reviews the procedures used by the brigade, and gives his analysis of the concept of troop employment and the effectiveness of intelligence in Operation Desert Shield/Desert Storm.

RAdm Charles F. Horne III, USN (Ret). "Mine Warfare Is With Us And Will Be With Us." *U.S. Naval Institute Proceedings*, Jul91, pp. 63.

The former commanding officer of the U.S. Navy Mine Warfare Command emphasizes the importance of addressing the mine warfare threat to U.S. ships in the Persian Gulf during Operation Desert Shield/Desert Storm, and suggests possible measures to be taken by the Navy and the U.S. government to improve mine warfare strategy.

Maj Craig S. Huddleston, USMC. "Commentary on Desert Shield." *Marine Corps Gazette*, Jan91, pp. 32-33.

Excerpts from a letter written by the executive officer of the 3d Battalion, 3d Marines, evaluating a number of areas including the Maritime prepositioning force/maritime prepositioning ships concept and intelligence during Operation Desert Shield/Desert Storm.

Maj Craig Huddleston, USMC. "The Opening of Desert Storm: From the Front Lines." *Marine Corps Gazette*, Apr91, pp. 52-53.

A letter describing the experience of the 3d Battalion, 3d Marines, during the first days of Operation Desert Storm.

Maj Ernest S. Jones, USMC. "MPS and Desert Storm." *Marine Corps Gazette*, Aug91, pp. 47-50.

The author provides a historical sketch of the Blount Island Command, Jacksonville, Florida, and the Maritime Prepositioning Force, and describes Blount Island Command's efforts to load MPF ships in support of Operation Desert Shield.

Col James L. Jones, USMC. "Operation Provide Comfort: Humanitarian and Security Assistance in Northern Iraq." *Marine Corps Gazette*, Nov91, pp. 99-107.

The commanding officer of the 24th Marine Expeditionary Unit (Special Operations Capable) describes the events leading to Operation Provide Comfort, and the role played by his command units in that operation.

LtGen Thomas W. Kelly, USA (Ret). "Interview." *U.S. Naval Institute Proceedings*, Sept91, pp. 76-80.

An interview held with LtGen Thomas W. Kelly, the former Director of Operations for Joint Chiefs of Staff, in which he describes his experiences as a briefing officer for Pentagon press conferences during Operation Desert Shield/Desert Storm.

LtGen William M. Keys, USMC. "Rolling With the 2d Marine Division." *U.S. Naval Institute Proceedings*, Nov91, pp. 77-80.

An interview with the former commanding officer of the 2d Marine Division. LtGen Keys summarizes the division's actions from its initial deployment through its attack into Kuwait.

BGen Charles C. Krulak, USMC. "CSS in the Desert." *Marine Corps Gazette*, Oct91, pp. 22-25.

The commanding officer of the Direct Support Command describes how the decision for a two-division front for the initial I MEF attack was reached, and the rapid creation of a massive supply base at Al Khanjar to support the 2d Marine Division's assault.

BGen Charles C. Krulak, USMC. "A War of Logistics." *U.S. Naval Institute Proceedings*, Nov91, pp. 55-57.

In this interview, BGen Krulak reviews the deployment of the 2d Force Service Support Group to Saudi Arabia, and the problems involved in establishing a combat service support area first at Kibrit, and then at Al Khanjar.

Capt S. D. Landersman, USN (Ret). "Will Hussein Use Gas?" *U.S. Naval Institute Proceedings*, Feb91, pp. 84-87.

The author gives a brief history of the use of chemical warfare in world conflicts, and an analysis of the chemical and biological warfare capacity of Iraq. He doubts that Saddam Hussein will employ this capacity against U.S. Forces.

VAdm William P. Lawrence, USN (Ret). "Interview." *U.S. Naval Institute Proceedings*, Mar91, pp. 30-31.

A former prisoner of war speculates on the status and experience of American prisoners of war in Operation Desert Shield/Desert Storm.

LtCol Patrick R. Lederer, USMC. "A Few Thoughts on Compositing." *Marine Corps Gazette*, Sep91, pp. 48-49.

The plans officer for the 5th Marine Expeditionary Brigade discusses the concept of compositing forces, based on his own observations and also from a 5th Marine Expeditionary Brigade professional development seminar on compositing.

Capt Dale L. Lehenbauer, USMC. "Navigation Technology in the Persian Gulf." *Marine Corps Gazette*, Aug91, pp. 90-91.

The author analyzes the effectiveness of the Global Positioning System and the Position Location Reporting Systems based upon his experience with the 3d Battalion, 3d Marines, in Operation Desert Shield/Desert Storm.

Capt. J. E. Liebmann, USN (Ret.) "The Cost of Things." *U.S. Naval Institute Proceedings*, Jan91, pp. 81-82.

An assessment of the factors involved in calculating the costs of the commitment of U.S. forces for Operation Desert Shield/Desert Storm, emphasizing the need for greater clarity when defining exactly what constitutes a "cost."

Capt James M. Martin, USNR (Ret). "We Still Haven't Learned." *U.S. Naval Institute Proceedings*, Jul91, pp. 64-68.

The author discusses the threat posed by mine warfare to the U.S. Navy. Using examples drawn from Operation Desert Shield/Desert Storm, he offers suggestions for improving mine countermeasures through improved intelligence and a better promotion system for mine warfare specialists.

Greg E. Mathieson. "Interview." *U.S. Naval Institute Proceedings*, Mar91, pp. 33-34.

An interview conducted with Greg E. Mathieson, a photographer on assignment in the Persian Gulf, who recounts his experiences while photographing U.S. Forces in action during Operation Desert Shield/Desert Storm.

Capt James J. Maxwell, USMCR. "LAI: Impressions from SWA." *Marine Corps Gazette*, Aug91, pp. 18-19.

Capt Maxwell offers suggestions for improvements in the weapons systems of Light Armored Vehicles to increase their value to Light Armored Infantry units. He bases his suggestions on his observations of operations in Kuwait.

LtCol Andrew F. Mazzara, USMC. "Artillery in the Desert, 1991, Report #1." *Marine Corps Gazette*, Apr91, pp. 53-55.

The commanding officer of the 5th Battalion, 10th Marines, evaluates various artillery systems, including selfpropelled howitzers and the Global Positioning System, based upon the experience of his battalion in Operation Desert Shield/Desert Storm.

LtCol Andrew F. Mazzara, USMC. "Supporting Arms in the Storm." *U.S. Naval Institute Proceedings*, Nov91, pp. 41-45.

The author evaluates several areas of fire support based on the experience of Marine Corps units during the ground campaign of Operation Desert Storm.

Capt Richard C. McMonagle, USMC, et al. "The Company Command AAV." *Marine Corps Gazette*, Dec91, pp. 51-53.

The authors describe how they set up an AAVP7A1 assault amphibious vehicle as a company command vehicle during Desert Shield/Desert Storm.

VAdm Joseph Metcalf III, USN (Ret). "The Last Great Air Battle." *U.S. Naval Institute Proceedings*, Mar91, pp. 26.

Vice Admiral Metcalf compares the Navy's use of Cruise missiles with its use of aircraft during the air campaign in Operation Desert Storm.

Mark Meyer. "Going Up to Big Al." *U.S. Naval Institute Proceedings*, Jul91, pp. 77-79.

An interview with Navy F-14 pilot Lt James Kuhn and naval flight officer LCdr David Parsons in which they recount a reconnaissance mission during Operation Desert Storm that provided photographs used to evaluate the bomb damage of an Iraqi nuclear weapons manufacturing plant in Al Qaim.

RAdm Riley D. Mixson, USN. "Where We Must Do Better." *U.S. Naval Institute Proceedings*, Aug91, pp. 38-39.

The commanding officer of Carrier Group Two during Operation Desert Shield/Desert Storm commends the performance of naval forces in strike warfare and in the air campaign, and in communications and intelligence. He offers five suggestions for an even better performance in the future.

Maj John E. Montemayor, USMC, and Capt Stephen G. LeBlanc, USMC. "CH-53Es in the Desert." *Marine Corps Gazette*, Aug91, pp. 42-43.

The authors evaluate the CH-53E helicopters used by the Marines in Operation Desert Storm, considering the navigational systems, armor for vital components, and the ability to fire to the front. They provide suggestions for further upgrading and improvement in these areas based

upon their own experiences with the aircraft while serving with Marine Medium Helicopter Squadron 464.

LtGen Royal N. Moore, Jr., USMC. "Marine Air: There When Needed." *U.S. Naval Institute Proceedings*, Nov91, pp. 63-70.

LtGen Moore commanded the air combat element of I MEF during Desert Shield/Desert Storm, the 3d Marine Aircraft Wing. In this interview, he reviews the successful performance of Marine air units in Operation Desert Storm. He also reviews the coordination of these air units with those of the Navy and the Air Force.

MajGen J. M. Myatt, USMC. "The 1st Marine Division in the Attack." *U.S. Naval Institute Proceedings*, Nov91, pp. 71-76.

An interview with General Myatt, the commanding officer of the 1st Marine Division, in which he describes the deployment, training, and readiness of his division in Saudi Arabia, and also reviews the tank battle in which the 1st Division captured the airfield outside of Kuwait City.

Cdr W. H. Nelson, USN. "What's the Answer for the Gulf?" *U.S. Naval Institute Proceedings*, Dec90, pp. 32-37.

A maritime strategist with experience in the Chief of Naval Operations Office of Strategic Concepts (OP-603) and at the Naval War College examines the geopolitical situation in the Persian Gulf region and its implications for United States policy. Cdr Nelson argues that American interests can be best served by a strong maritime presence, including substantial Marine Corps forces.

Capt Douglas M. Norton, USN. "Sealift: Keystone of Support." *U.S. Naval Institute Proceedings*, May91, pp. 42-49.

A narrative description of the efforts of the Military Sealift Command and the Strategic Sealift Force to deploy equipment and forces to the Persian Gulf during Operation Desert Shield. Capt Norton argues that the United States needs to improve its strategic sealift capability, particularly the Ready Reserve Force and the U.S. Merchant Marine.

1stLt John F. O'Connor, USMC. "Current Staffing Policies Need Review." *Marine Corps Gazette*, Nov91, pp. 54-55.

1stLt O'Connor examines the use of augmentees to fill gaps in the T/O of deploying units, based on his experience with Marine Wing Support Squadron 372 during the Persian Gulf War.

LtCol John A. O'Donovan, USMC. "Combat Service Support During Desert Shield and Desert Storm: From Kibrit to Kuwait." *Marine Corps Gazette*, Oct91, pp. 26-31.

The author describes the task organization of combat service support elements within the Marine expeditionary force and brigades during Operation Desert Shield, and their employment in support of combat operations, focusing on the experience of the 2d Force Service Support Group.

Col Jeremiah O'Leary, USMC (Ret). "Desert Memories Etched in Sand." *Marine Corps Gazette*, Nov90, pp. 42-43.

The author presents several lessons regarding warfare in desert conditions learned during Marine Corps training exercises in the Mojave Desert in Twentynine Palms, California and Saudi Arabia in 1973, many of which were not applied during Desert Shield.

Capt R. A. Padilla, USMC. "F/A-18Ds Go To War." *U.S. Naval Institute Proceedings*, Aug91, pp. 40.

Capt Padilla, a member of Marine All Weather Fighter Attack Squadron 121, describes how the new F/A-18D aircraft was incorporated into the squadron's training exercises before deployment to the Gulf region. He also reviews the squadron's use of the F/A-18D in battlefield preparation and ground support in Operation Desert Storm.

Michael A. Palmer. "The Navy Did Its Job." *U.S. Naval Institute Proceedings*, May 1991, pp. 88-93.

The author outlines the Navy's participation in Operation Desert Storm, and reviews the vital roles played by the Navy in both the air and ground campaigns, through seabased air power, combat support, and amphibious operations.

LtCol T. W. Parker, USMC. "Operation Sharp Edge." *U.S. Naval Institute Proceedings*, May 1991, pp. 103-106.

The executive officer of the 22d Marine Expeditionary Unit (Special Operations Capable) reviews the unit's participation, along with other Marine and naval forces, in Operation Sharp Edge to protect American citizens and interests in Liberia during a civil war. He reviews his unit's performance and suggests some lessons to be learned from the experience.

Col W. Hays Parks, USMCR. "Rules of Engagement: No More Vietnams." *U.S. Naval Institute Proceedings*, Mar91, pp. 27-28.

The author contrasts the 1965-68 Rolling Thunder bombing campaign in North Vietnam to the planning and management of the air campaign at the beginning of Desert Storm. He concludes that the only real similarity between the American situation in Vietnam and recent situations in the Gulf War was enemy treatment of United States and allied prisoners of war.

Capt J.H. Patton, Jr., USN (Ret). "More Gulf War Lessons." *U.S. Naval Institute Proceedings*, Apr91, pp. 52.

Captain Patton presents several more lessons to be learned from the experience of U.S. forces in the Persian Gulf War. A major lesson is the importance of stealth technology, as shown by the success of stealth weapons in Operation Desert Shield/Desert Storm. He also relates weapons systems to their costs, and examines the similarities between desert warfare and naval warfare.

LCdr Michael N. Pocalyko, USN. "Desert Shield: The First Lessons Learned." *U.S. Naval Institute Proceedings*, Oct90, pp. 58-59.

A political-military analyst in the Secretary of the Navy's Office of Program Appraisal presents nine key principals of national military strategy highlighted by the early phases of Operation Desert Shield.

Col Alfred J. Ponnwitz, USMC. "Survivability and Southwest Asia." *Marine Corps Gazette*, Aug91, pp. 36-37.

The author examines the problem of battlefield survivability, as defined in his August 1989 *Marine Corps Gazette* article, "Understanding Survivability." Col Ponnwitz concludes that despite the impressive successes of Operation Desert Shield, the Marine Corps must continue to strive to improve battlefield survivability.

Col John R. Pope, USMC. "U.S. Marines in Operation Desert Storm." *Marine Corps Gazette*, Jul91, pp. 63-69.

The author summarizes Marine Corps participation in both the air and the ground campaigns during Operation Desert Storm, from the initial reconnaissance and repositioning of forces to the liberation of Kuwait.

LtCol Paul F. Pugh, USMC. "Operational Art and Amphibious Warfare." *Marine Corps Gazette*, Jul91, pp. 81-85.

LtCol Pugh discusses the operational level of war, and shows how the inherent flexibility of amphibious forces make them ideally suited for a wide range of missions at the operational level.

LCdr A. G. Rankin, RAN, and Lt R. G. Smith, RAN. "Australian Divers Clear Mines." *U.S. Naval Institute Proceedings*, Jul91, pp. 74.

The authors, mine warfare and clearance diving specialists in the Royal Australian Navy, briefly describe the efforts of Clearance Diving Team Three, RAN, during Operation Desert Storm, including preparation for amphibious operations.

Maj N. E. Reynolds, USMCR. "TDG #91-2: Rifle Company Defends in the Desert." *Marine Corps Gazette*, Feb91, pp. 37.

A Tactical Decision game in which the reader is tasked with developing a plan and writing an order for a reinforced rifle company which must defend against a mechanized opponent in a desert region.

Maj. N. E. Reynolds, USMCR et al, "Solutions to TDG #91-2." *Marine Corps Gazette*, Apr91, pp. 70-73.

Contains three different solutions submitted for Tactical Decision Game #91-2.

George Rodrique and Robert Ruby. "Taking Down the Oil Platforms." *U.S. Naval Institute Proceedings*, Apr91, pp. 53.

Two reporters reassess the action taken on January 18, 1991 by the guided missile frigate USS *Nicholas* (FFG 47) and her helicopters which resulted in the capture of Iraqi POWs and the Dorra oilfield off the coast of Kuwait.

Col John C. Scharfen, USMC, (Ret). "The U.S. Marine Corps In 1990." *U.S. Naval Institute Proceedings*, May91, pp. 134-140.

A review of important issues and events affecting the U.S. Marine Corps in 1990, including aviation, sealift, the Maritime Prepositioning Force, roles and missions, operations and exercises, concepts and doctrine, training and education, and manpower.

Gen Norman Schwarzkopf, USA. "A Tribute to the Navy-Marine Corps Team." *U.S. Naval Institute Proceedings*, Aug91, pp. 44.

An excerpt from a speech made by the Commanding General, U.S. Central Command to the U.S. Naval Academy graduating class of 1991. Gen Schwarzkopf praises the admirable performance of U.S. Navy and Marine Corps forces in Operation Desert Shield/Desert Storm.

Col Donald R. Salvage, USMC. "Operation Sea Angel: Bangladesh Disaster Relief." *Marine Corps Gazette*, Nov91, pp. 89-97.

Col Salvage commanded Battalion Landing Team 3/5 during Operation Sea Angel, the United States effort to provide humanitarian assistance to Bangladesh after that country was devastated by a typhoon. In this article, he describes how his command adapted their normal organization and techniques to accomplish their humanitarian mission.

Col John M. Shotwell, USMC. "The Fourth Estate as a Force Multiplier." *Marine Corps Gazette*, Jul91, pp. 71-79.

Col Shotwell was the public affairs officer for I MEF during the Persian Gulf conflict. He examines the relationship between the Marine Corps forces and the American news media throughout Operation Desert Shield/Desert Storm. Col Shotwell argues that if properly handled, media coverage can be an asset.

BGen Edwin H. Simmons, USMC (Ret). "Getting Marines to the Gulf." *U.S. Naval Institute Proceedings*, May91, pp. 50-64.

The Director of Marine Corps History and Museums puts the deployment of U.S. Marines to the Persian Gulf into its historical context, and reviews in detail the deployment of Marine Corps units to the Persian Gulf up to 15 January 1991.

BGen Edwin H. Simmons, USMC (Ret). "Getting the Job Done." *U.S. Naval Institute Proceedings*, May91, pp. 94-96.

A summary of the role of U.S. Marine forces in Operation Desert Storm.

Capt Arthur M. Smith, MC, USNR, and Col Craig H. Llewellyn, MC, USA, (Ret). "Caring for Our Casualties." *U.S. Naval Institute Proceedings*, Dec91, pp. 72-78.

The authors emphasize the need for selectivity in creating combat medical facilities to care for both the seriously and the less seriously

wounded servicemen. They also stress the need for light surgical and medical facilities stationed far forward to care for the less seriously wounded rather than medical evacuation in order to ensure that as many men as possible are returned to duty. The authors use historical examples from previous wars to illustrate their points.

Cdr Thomas C. Stewart, USNR. "No Gentleman Fliers: a Reservist Looks at the Gulf War and Beyond." *U.S. Naval Institute Proceedings*, Dec91, pp. 91-92.

The commanding officer of Attack Squadron 0686 (VA-0686) reviews the training his reserve unit undertook to maintain readiness and how this training paid off in the successful performance of his unit during Operation Desert Shield/Desert Storm. He also used his squadron as an example of the capability of the Naval Air Reserve and reserve units at large to perform well in combat situations.

VAdm James B. Stockdale, USN, (Ret). "POWs: Silence Is Not Golden." *U.S. Naval Institute Proceedings*, Mar91, pp. 29-30.

VAdm Stockdale analyzes the probable present situations of U.S. prisoners of war in Iraq, relating them to his own experiences as an American prisoner during the Vietnam War. He emphasizes the need for prisoners of war to remain stubborn in their resistance against the enemy, to avoid diminishing their sense of honor by refusing to comply with the enemy as much as possible, and to find ways to actively resist their captors.

Maj David W. Szelowski, USMCR. "Iraq's Defense of Kuwait and the Battle of Kursk." *Marine Corps Gazette*, Jan91, pp. 37-39.

The author compares Iraqi defensive preparations in Kuwait during Desert Shield to the Soviet defensive preparations prior to the Battle of Kursk in 1943. Based on this comparison Maj Szelowski offers four courses of action U.S. forces could take to counteract these defense measures.

RAdm J. D. Taylor, USN. "Flights of the Intruders." *U.S. Naval Institute Proceedings*, Mar91, pp. 32.

Writing during the Persian Gulf War, Admiral Taylor contrasts the movie *Flight of the Intruder*, set during Vietnam, with the realities of the air war in Desert Storm. He commends the movie for the accuracy of its portrayal of pilots in combat.

Maj John A. Toolan, Jr., USMC. "Set Condition '1 Alpha' for LCAC Operations." *Marine Corps Gazette*, Aug91, pp. 40-41.

By the Officer in Charge of the 2d Light Armored Infantry Battalion's 4th Marine Expeditionary Brigade detachment. He describes the role of landing craft air cushion (LCACs) in Desert Storm and the lessons learned for future landing plans, crew training, and load stabilization.

LtGen Bernard E. Trainor, USMC (Ret). "On the Gulf War." *Marine Corps Gazette*, Nov91, p.68.

LtGen Trainor writes about how a leader prepares his troops for combat, of the words he chooses, the tone of his message, and of how his words affect his troops as they prepare to meet the enemy.

Maj John E. Valliere, USAF. "Stop Quibbling: Win the War." *U.S. Naval Institute Proceedings*, Dec90, pp. 38-43.

Written while he was a student at Marine Corps Command and Staff College, a C-130 pilot calls for co-operation and understanding among the services and for a concentration on learning how to give the joint commander the means to win in wartime.

Fregattenkapitan Raimund Wallner, German Navy. "Where Were the Germans?" *U.S. Naval Institute Proceedings*, Jun91, pp. 67-68.

By the Deputy Commanding officer of Submarine Squadron 1, German Navy, homeported in Kiel. He reminds his readers that Germany was prevented by its constitution from sending troops to Southwest Asia and was therefore limited to providing financial support and military hardware. He explains that constitutional changes in the newly unified Germany will permit more German response should the day come for any future United Nations actions.

John R. Whiting. "War-Live!" *U.S. Naval Institute Proceedings*, Aug91, pp. 64-66.

Mr. Whiting offers over thirty observations on the role of the media during the Persian Gulf war.

Capt Alan B. Will, USMC. "Supply Support During Desert Storm: A Field Perspective." *Marine Corps Gazette*, Oct91, pp. 42-43.

Capt Will examines some of the shortcomings of the Marine Corps supply system exposed during the Persian Gulf War, and suggests ways that these problems can be eliminated in the future.

1stLt Anthony A. Winicki, USMCR. "The Marine Combined Arms Raid." *Marine Corps Gazette*, Dec91, pp. 54-55.

1stLt Winicki served with the 3d Light Armored Infantry (LAI) Battalion. He describes a number of uses for light armored infantry as part of a combined arms raid, including the ability of the light armored vehicle to designate targets and coordinate supporting arms.

Col John A. Woodhead III, USMC. "Reorganization of the Force Service Support Group." *Marine Corps Gazette*, Nov91, pp. 37-38.

Col Woodhead, chief of staff of the 2d Force Service Support Group (FSSG), argues that experience in SouthWest Asia shows that the present functional arrangement of the FSSG will provide the responsiveness the Corps will need to meet future contingencies.

Col Michael D. Wyly, USMC. "TDG 90-9: The Infantry Company in the Desert." *Marine Corps Gazette*, Dec90, pp. 32-33.

A tactical decision game in which the reader must develop a plan for a reinforced rifle company to defend against an armored attack.

Col Michael D. Wyly, USMC, and Maj Thomas X. Hammes, USMC. "Solutions to TDG #90-9." *Marine Corps Gazette*, Feb91, pp. 31-36.

Solutions to the tactical problem posed above. This exercise was based on the historical experience of Rommel's Afrika Korps in the desert, which used infantry to both protect its own tanks and destroy British armor.

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The device reproduced on the back cover is the oldest military insignia in continuous use in the United States. It first appeared, as shown here, on Marine Corps buttons adopted in 1804. With the stars changed to five points this device has continued on Marine Corps buttons to the present day.

