CERTISSA DEL

(SEDTLANDIE). South of KRE Son

DALLISSALIED

PREFACE

In the combat environment of rapidly changing situations, and of day-to-day operations that capture interest and attention to the exclusion of the "old news" of yesterday's actions, there is a tendency to forget, ignore or fail to examine experience recently gained. Thus, it cannot be profitably applied to future undertakings.

Task Force Hotel, commanded by Brigadier General C.W. HOFFMAN, USMC, was charged with developing plans for an operation in Scotland II area of operations to the south of Khe Sanh Base, an area which had not been previously penetrated by major combat units. The size and duration of the operation were deliberately flexible. Although objectives were prescribed, the execution and scheme of maneuver were to be dependent upon the enemy's reactions. To gain the capability of projecting combat units into distant objectives required assaults and subsequent supply support totally dependent on helicopters. It was also necessary for artillery fire support bases to be selected, seized, developed and utilized to extend the umbrella of artillery fire in conjunction with extensive use of fixed wing air support.

To insure that the experience of this unique operation (which at times involved two regiments -- seven infantry battalions -- 21/2 105mm plus one 155mm batteries lifted to hill top fire bases) was not lost, I requested that a critique of this campaign be held. General HOFFMAN, his staff, the commanders and their staffs from the 1st and 4th Marines, and Brigadier General HILL, Assistant Wing Commander, 1st MAW, all contributed to a most worthwhile presentation and exchange of information. The critique was held at LZ Stud on 25 June, within six days of the termination of the operation. It is noteworthy that during the critique LZ Stud received 48 rounds of incoming rockets -- which while imparting only minor damage to the logistic area did serve as an unexpected motivating factor. The results of the critique are consolidated here in booklet form so that the lessons learned will not be limited to those present at the critique. They will be incorporated into planning and execution of future operations.





TABLE OF CONTENTS

Pre	face	: Commanding General 3d Marine Division	i			
	ning ce H	remarks by Commanding General, Task otel	1-2			
I	OPERATIONS					
	A.	Planning				
	В.	Phase I				
	C.	Phase II				
	D.	Problems and Lessons Learned				
	Com	Comments by 1st Marines (-)(Rein)				
	Com	ments by 4th Marines (-)(Rein)				
II	INTELLIGENCE					
	A.	Collection and Analysis				
	В.	Allocation of Intelligence Tasks				
	C.	1. APD Missions				
		2. IR and SLAR				
		3. Photo Coverage				
		4. Night Photo Missions				
		5. Photo Mosaics				
	C.	Prisoners and Captured Equipment				
	D_{\bullet}	Enemy Documents				
	E.	Enemy Material				
	F.	Aerial Observation				
	G.	Recon				
	н.	Recon Lessons Learned				
	I.	Reports IIMCLASSIFIED				

J. Arclights

Comments by 1st Marines (-) (Rein)

Comments by 4th Marines (-) (Rein)

Problems and Lessons Learned

III LOGISTICS

27-42

- A. Helicopter Resupply Procedures and Techniques
- B. Medical Evacuation of Personnel
- C. Surface Resupply
- D. Adequacy of Class V Lifted to Various Positions
- E. Lead Time Requirements for Air Lifted Resupply

Comments by 1st Marines (-) (Rein)

Comments by 4th Marines (-) (Rein)

IV ATR OPERATIONS

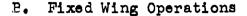
43-53

Introduction: Assistant Wing Commander

- A. Helicopter Operations
 - 1. Summary
 - Logistic Resupply
 - a. Cargo Slings and Nets
 - b. Communications
 - c. Allocation of Priorities
 - 3. Tactical Assault
 - 4. Miscellaneous
 - 5. Lessons Learned







- 1. Summary
- 2. Problems and Solutions
- 3. Lessons Learned

Comments by 1st Marines (-) (Rein)

Comments by 4th Marines (-) (Rein)

V ARTILLERY/FSC

54-60

- A. Artillery Support in Multiple Landing Zones.
- B. Counter Battery Requirements
- C. Air/Artillery Fire Support Coordination
- D. Lessons Learned

Comments by 1st Marines (-)(Rein)

Comments by 4th Marines (-) (Rein)

VI COMMUNICATIONS

61-69

- A. Summary
- B. Problems and Solutions

Comments by 1st Marines (-) (Rein)

Comments by 4th Marines (-) (Rein)

VII SUMMARY: CG 3D MARDIV

70-76



SCOPE OF OPERATION (CG TASK FORCE HOTEL)

The enemy's pattern of activity during the month of May focused repeatedly on the area south of Route 9, particularly that segment between Bong Kho and Ku Bac. The pattern took shape from a variety of intelligence inputs and from a series of spirited engagements fought between 1st Marines' elements and determined enemy units that came from the south toward Route 9. The enemy paid dearly for these exploratory efforts, losing several hundred soldiers within sight of Route 9. These bitter actions also produced solid proof that the enemy had introduced at least one new regiment in the Khe Sanh area -- the 102d Regiment of the 308th Division. This fresh unit added to the old resident 304th Division brought enemy infentry strength to at least 12 battalions. Further, it looked as if the full dozen might be deployed south of Route 9.

Obviously the enemy commander intended to choke off Route 9, isolate Khe Sanh, again make the base a sandbag island in a hostile sea. Just as surely, we had to upset the enemy's calculations, throw him off balance, chop up his forces.

To this end, Task Force Hotel directed the 1st
Marines to prepare a concept for a multi-battalion
action designed to get behind the enemy and destroy him.
The 1st Marines concept called for helicopter assaults
by two battalions about 6,000 meters south of Route 9.
The 1st Marines named the Landing Zones Robin and Loon,
these being dominant terrain from which assault battalions
could move northward against a block provided by a third
participating battalion. We later dubbed this phase of
the action "Robin North".

Even as this concept took shape, CG 3d Marine Division focused additional attention on a new enemy road leading from Laos across the far southern extremity of the Scotland II area of operations. This incomplete road deserved exploration and inspection to determine its exact trace, capacity and use. Such a search promised to find defense forces, construction troops and valuable caches. Task Force Hotel directed the 4th Marines to develop a concept for this penetration of the deep south, a phase subsequently called Robin South. Everyone recognized that Robin South would require establishment of advanced fire bases from which to project artillery support of our helo-borne forces. Robin and Loon seemed logical sites for such fire bases.



The lith Marines established 15 objectives in the Robin South area. These provided suitable alternative targets for battalion assaults with final choices depending on later intelligence and on enemy reactions to our incursion.

Forces available to Task Force Hotel included seven and one-half infantry battalions supported by 6 105mm howitzer batteries, 2 155mm howitzer batteries, an 8 inch howitzer plateon and a 175mm gun plateon.

The Task Force also enjoyed a high priority on helicopter and fixed wing assets.

Task Force Hotel allocated a preponderance of resources to the 1st Marines for the Robin North action and to the 4th Marines for the Robin South action.

Among the many challenges we faced in a campaign of this magnitude, one loomed much larger than the others. I refer to the challenge of sustaining a widely dispersed task force in an active combat environment exclusively by helicopters. If we could meet this challenge, we believed we could take the others in stride. For we knew at the outset, and we confirmed during the action, that a Marine infantry battalion -- adequately supported -- can operate successfully anywhere in South Vietnam.

We launched Robin North on 2 June and concluded Robin South 17 days later. During the course of the action, our choice of Loon as a site for a fire support base proved unfortunate since enemy artillery from CoRoc quickly registered on it and chased us out. This development required us to select a new fire base, and Torch later proved a sound choice.

The Robin North and South actions, though far from being perfect in planning or execution, deserve to be judged as tactically, logistically and psychologically successful. This critique will indicate why we feel justified in this evaluation and will identify as many shortcomings and suggested corrective measures as possible. As usual, we find it much easier to identify the shortcomings of others rather than those of ourselves.



".... helo insertions of multiple companies and battalions over wide areas supported by artillery batteries from newly established fire support bases, all in rugged mountainous terrain characterized daily operations."

OPNS

I OPERATIONS

My comments will address the planning, the execution of Robin North, execution of Robin South, tactics/techniques used, air/ground coordination, artillery fire bases, problems encountered and some lessons learned.

A. Planning

The over-all concept of the multi-battalion operation south of KSB was based on two thoughts:

- (1) That the objective area selected was occupied in strength, and that the E-W road was a major infiltration route.
- (2) That by moving in heliborne attack into targets far south of KSB we would trap the enemy.

The plan developed by CG TF Hotel was two phased, with the 1st Marines conducting Robin North and the 4th Marines conducting Robin South. The concept visualized two infantry battalions helilifted into separate LZ's then pushing north into blocking positions established by another battalion. A fourth battalion was earmarked as reserve.

This concept was turned over to 1st Marines to work out the scheme of maneuver and plan for fire support.

After the 1st Marines seized the two LZ's and prior to their pushing north, the plan called for one company from the 4th Marines to helilift into each of the same LZ's, and develop them into fire bases for subsequent 4th Marines offensive operations. The initial concept for Robin South called for 3 battalions to be helilifted into LZ's near the enemy road. This concept was turned over to the 4th Marines to develop the scheme of maneuver and plan for fire support.

The schematic identifies the objective area, the 1st Marines zone of action, the firebases planned, and the 4th Marines zone of action.

B. Robin North

After an extensive prep on LZ Robin (XD 911334) by artillery, CAS, TPQ's, and a nearby arclight, 1/1 landed at 021200H June 1968, unopposed. CO 1st Marines decided to land 2/4 on LZ Robin due to inability of aircraft to



burn the wet elephant grass on LZ Loon. Elements of 2/3 were already in blocking positions in the vicinity of XD 874382. On D+1 after added prep, 2/4 helilifted into LZ Loon (XD 876334) but the lift was halted twice due to enemy fire. After dropping the first wave, helicopters received fire from the north. Later, troops in the LZ fire. Heavy A/S and artillery were began receiving S/A called in to neutralize the area. A warning of what was to come occurred at 1345H, when 7 rounds of unknown type artillery fire impacted in the LZ from a westerly origin. The following day, D+2, F/2/4 in LZ Loon, was attacked by an estimated company of NVA. The NVA left 34 KIA's on the field. B/1/1, moving from LZ Robin, secured obj #1 unopposed. On D+3, 5 arclights were dropped south of LZ's Loon and Robin. C/1/1, moving on obj #5, started a fight with an estimated platoon. They pulled back to use air and artillery, planning to assault it on D+4 after additional prep fires. C and D/1/4, still securing LZ Loon, protected engineer efforts developing the fire-base. C/1/4 received artillery fire from CoRoc on D+3 resulting in 9 KIA and 3 WIA (Evac). It appeared then that Loon's exposed slopes might be untenable. Subsem quent action on Loon will be covered later. On D+4, 2/4 took obj #6 and 1/1 took obj #5 unopposed. On D+6, 2/4 was helilifted into obj #8 (XD 864361). 2/4 suffered 29 WIA (Evac) on this objective from artillery fire; they killed 7 NVA. On D+7, elements of 2/4 on objective #8 were attacked by an NVA battalion. Results of this action were 12 NVA/KIA, friendly casualties were 7 KIA and 41 WIA (Evac). On D+8, 2/4 continued searching the vicinity of obj #8 and on D+9 was helilifted into obj #10, landing unopposed after a prep. On 12 June, Phase I was concluded with 92 NVA/KIA and 3 POW's. Friendly casualties were 16 KIA and 130 WIA (Evac). 2/4 moved to KSB as 4th Marines reserve; 1/1 moved to hill positions to make 3/4 available to 4th Marines.

C. Robin South

D-Day for Robin South, 6 June, was D+4 of the basic operation. C and D/1/4 near LZ Loon received an attack from an NVA battalion. After the ground attack had subsided, the two companies received heavy artillery from CoRoc. In the afternoon it was decided the position was untenable, since engineer equipment could not freely move about and stocks of arty ammo would offer too lucrative a target. All personnel were withdrawn by 1900H. An Army bulldozer and backhoe were left in the zone as were eight bodies previously staged for evacuation. Heavy S/A fire was directed at helicopters lifting out



the units, resulting in one CH-46 being shot down with 11 aboard. Overall results were 24 friendly KIA's and 37 WIA (Evac). Enemy losses were 154 NVA/KIA. The same day, D-Day (D+4), 3/9 was helilifted into an area southeast of obj #3 (XD 942292) one kilometer from Laos, killed 1 NVA and captured 5 road workers. On D+1 (D+5), 1/4 was helilifted into obj #2 (XD 905280) and received some light sniper fire. 3/9 searching towards obj #3, killed 2 NVA and captured 4, suffering 1 Marine KIA and 1 WIA (Evac). On D+1 (D+5), 1/4 was helilifted from LZ Stud into the vicinity of XD 911279, to develop a new firebase for support of the 4th Marines deeper moves south. The new firebase was designated Torch. On D+2 (D+6), 1/4 and 3/9 searched their respective A0's finding evidence of continued road work and many bunkers and fighting holes, evidently used by laborers and soldiers. On D+3 (D+7), C/1/12 was helilifted into LZ Torch from LZ Robin. On this date, 1/4 and 3/9 continued to search their areas. On D+4 (D+8), 3/9 captured 7 POW's and elements of 1/4 found a large cultivated field with potatoes and other crops. On D+5 (D+9), A/1/4 and C/1/12 at LZ Torch, (XD 911278), received a heavy ground attack from an estimated NVA company. The attack commenced at 0215H, supported by mortars. After receiving sporadic fire all day, the contact ended at 2130H. Results were 28 NVA/KIA, friendlies were 14 KIA and 113 WIA (Evac). Majority of casualties were caused by mortar fire striking the bald hill. After a heavy prep with 8 inch howitzers, plus TPQ's, 3/4 landed and commenced to search toward obj #4, going opcon to 4th Marines on liftoff. Arclights requested on this area were not received but a substantial CAS and TPQ prep was conducted. 3/4 searched the area and made contact with small units of NVA; subsequent contacts consisted of small arms fire fights. On D+6 (D+10), T/1/11 was helilifted from KSB to LZ Robin. 3/9, continuing to search their area, found a cache at XD 925304, consisting of 400 lbs clothing, rain gear, 20 pairs of jungle boots, 250 lbs rice, 150 1bs TNT, 1000 feet Det cord and assorted engineering tools. Near XD 928298 3/9 also found a large culvert and approximately 300 lbs of TNT. They used 250 lbs of it to blow the culvert and 50 lbs to blow a hole in the road. On D+7 (D+11), 3/4 killed 2 NVA; 3/9 captured 3 POW's while continuing a search in the OA. On D+8 (D+12), 2/4 went opcon to the 4th Marines by way of a heliborne attack into obj #10 (XD 847237), in the vicinity of the E-W road. They captured a Russian 12 ton truck and a motor driven are welder which were destroyed since it was not tactically sound for the unit to loiter as long as it was required for heavy helos to arrive. 3/9, at



XD 904255, found 12 graves with 1 NVA in each. They also found, alongside the road, 500 bunkers, and 400 lbs of ammonium nitrate. A stone bridge at XD 897260 was blown with captured explosives. On D+9 (D+13), 3/4, in the vicinity of obj #14, after being helilifted from the Lang Hole area on 12 June, received a predawn attack by an estimated NVA battalion. At 1530H, 3/4 policed up the battlefield and counted 186 NVA/KIA, and 7 POW's. They lost 16 KIA, 1 MIA, and 58 WIA (Evac). 2/4, searching their area, found a multi-battalion harbor site, a 6 wheeled, 5 ton truck, containing heavy repair equipment and a two ton truck with a machine shop mounted on the back. They also killed 6 NVA with artillery fire and evacuated the vehicles.

On D+10 (D+14), 3/4, operating near XD 880267, found 21 NVA/KIA. 3/9 found a hospital site at XD 902252 consisting of two large bunkers with operating tables and considerable evidence of recent casualties. On D+11 (D+ 15), 3/9 (-) and C/1/4 returned to LZ Loon, recovered the bodies, the two pieces of Army equipment, located and searched the CH-46 wreckage, evacuating all bodies and equipment without friendly losses. On D+12 (D+16), 3/4 was attacked by an NVA force of battalion or larger. At 1330H, they searched the battlefield and found 130 NVA/KIA. Friendly losses were 11 KIA and 30 WIA (Evac). Total results for Robin South were: 604 NVA/KIA, 48 POW/detainees; friendly losses were: 77 KIA, 286 WIA (Evac) and 20 WIANE. During Robin South, contact frequently occurred in the pre-dawn hours. Large quantities of equipment, clothing, and construction materials were captured. The enemy road had been developed extensively in certain sections. All installations and sites found were destroyed. Damage to the road included two bridges blown(at XD 916292 and XD 899280). four culverts blown (at XD 928297, XD 902234, XD 901232, and XD 899280), cratering by shaped charges at six locations (XD 880225, XD 927290, XD 907227, XD 908228, XD 909226, and XD 928296), 25 meters of rock slid), 25 meters of rock slide (at XD 901236), one road crossing destroyed (at XD 872227), and craters in the road caused by a long string of snakeye bombs.

Tactics/Techniques Employed

The basic tactics were to employ the vertical envelopment of Marine Corps doctrine and for all battalions to maintain flexibility. The mission of finding, fixing, and killing the enemy stressed the use of supporting arms as the best method of breaking a



tenacious enemy prior to assault. During the operation a substantial reconnaissance effort was exerted. UHIE gunships from VMO-6 provided air recon capability. Army helos of A Troop, 1st of the 9th, 1st AirCavDiv, aided in Robin North. They reported each morning to TFH G-2 and received a brief. After completing morning missions, they returned for debrief, and then briefed on their afternoon mission returning around 1700 to again be debriefed. The ground reconnaissance capability was provided by 3d Force Recon, who proved invaluable. On one occasion, a standard four man team was inserted deep in the Scotland II AO, near the Laotian border, to determine enemy presence and LZ availability of obj #10. They accomplished their mission by not only locating one LZ but also finding a second LZ offering defilade from CoRoc. A substantial psyops effort was mounted before and during the operation using both loudspeakers and leaflet drops. Good coverage was reported by troops in the field, but we did not receive the immediate results we had anticipated, since only two Hoi Chanh's were taken. A residual impact no doubt continues. During the helilifts, aircraft laid smoke to screen enemy observation.

The operation reaffirmed that Marine Corps tactics are sound and the air/ground team has the mobility to exploit the enemy's slowness to react.

Air and Ground Coordination

Helo operations require planning down to the most minute detail. Therefore, prior to helilifts, we conducted briefs with face to face planning by the squadron and bn. leaders involved. Where possible the VMO-6 recon pilots also participated, and on one occasion it was possible for the keyhole recon patrol leader, extracted a few hours earlier from the objective area, to participate. This joint planning by pilots and troop commanders assures safety, speed, and unity of effort.

Selection of Fire Support Bases

In selecting a fire support base to be supported by helicopters, many aspects are governed by the capabilities of the choppers. The site must accommodate large transport helos, be suitable for the emplacement of artillery pieces, and accept large quantities of Class V. If possible, it should be in defilade from known or suspected enemy artillery positions. In selecting our two initial

UNCLASSIFIED

firebases, they met most criteria with the exception of LZ Loon which offered slopes to enemy artillery positions at CoRoc. (vic XD 741317).

Problems Encountered/Lessons Learned

- 1. One of the first problems encountered was moving troops into the objective area, while still conducting Drumfire II, (a massive artillery raid on CoRoc by 175mm in LZ Hawk). This was solved by scheduling choppers around the gun target line. It was noted that the concussion from 175mm guns blew the windows out of CH-46s landing near the battery.
- 2. Provide adequate forces for mass and shock. Solution: man the hill positions around Khe Sanh with scaled down forces and maintain active recon measures.
- 3. Avoid sending large numbers of helos to units not participating in the operation. Solution: stockpile sufficient supplies to sustain the hill positions during the operation, so a minimum amount of resupply would be required.
- 4. The scheduling and receipt of arclights proved disappointing. It had been planned to drop three strings of arclights in an east to west axis, each supporting successive moves southward. 13 were requested by CG 3d MarDiv and 43 were requested by CG TF Hotel. Not-withstanding active interest by CG PCV, only 16 were received. Lesson learned: priorities in SE Asia may preempt scheduled arclights; therefore the success of an operation should never depend on delivery of arclights. When scheduled, the schedule is inflexible.
- 5. There was tremendous reliance on aerial observers for delivery of both artillery fires and air strikes. When struggling through elephant grass to get one's bearings, an A.O. is invaluable. When good vantage points are gained however, maximum use should be made of artillery FO's and forward air controllers. This releases A.O.'s for counterbattery and V. R. work, maintains the skills of the ground units in adjusting and controlling their own fires and permits the Commander to dictate the rate and type of firepower brought to bear.



UNITS EMPLOYED

PHASE I (ROBIN NORTH)

INFAUTRY	ARTILLERY	AIR		
lst Marines	T/1/11*	1st Marine Aircraft Wing (CAS).		
1/1	1/3/12	Helo support from VMO-6,		
2/4	B/1/12	MAG-36, and MAG-39 and		
2/3	A/1/11	hooks/cranes of 1st AirCavDiv.		
1/3 (-)	W/1/11	From D-1 until D+4, an air		
	G/3/12	recon capability was provided		
	Plt lst 8" How Btry	by A Troop, 1st of the 9th,		
	B/2/94 (USA)	lst AirCavDiv. Fixed wing		
		strikes by 1st MAW and some		
	L/4/12	USAF and USN a/c.		
		* 6 Towed 155mm How		

PHASE II (ROBIN SOUTH)

4th Marines	A/1/12	Same	as	above
1/4	C/1/12			
3/4	T/1/11*			
1/3 (-)	Plt F/2/12			
3/9	Plt lst 8"			
2/4	Plt A/1/94			

* 6 Towed 155mm How



COMMENTS BY 1ST MARINES (-) (REIN)

OPERATIONS

1. Planning. Following the receipt of a verbal warning order on 25 May 68 from CG, Task Force Hotel to plan an offensive operation in the area generally south of Route 9 within the Scotland II Area of Operations, 1st Marines prepared a concept of operations for a helicopterborne assault with one battalion and a subsequent attack by this battalion towards a battalion blocking force positioned immediately south of Route 9. On 26 May, this concept was submitted to the Commanding General Task Force Hotel, approval received, and detailed planning commenced. Plans included not only the tactical scheme of maneuver but the redisposition of forces in defense of Khe Sanh Base to free the forces necessary to execute the assigned mission.

Late on 26 May, 1st Marines Frag Order 88-68 was issued setting forth the requirements of movement of forces throughout the Combat Bases and Combat Outposts surrounding Khe Sanh Base to free one battalion for the operation. The blocking battalion was assigned the mission to establish a mobile block in addition to continuing its normal assigned responsibility for the security of Route 9.

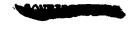
On 29 May, the operation was expanded by the Commanding General to a four battalion operation, two helicopterborne battalions, one blocking battalion, and one reserve battalion. The reserve battalion remained under the control of Task Force Hotel to be committed as required. In response to this increase in forces, 1st Marines Frag Order 89-68 was issued on 29 May 68.

A change in the scheme of maneuver now called for two battalions to be helilifted on D-Day, one to LZ Robin and the second to follow into LZ Loon. Both would attack north towards the blocking force.

D-Day was ultimately delayed from 30 May to 2 June due to the insufficient preparation of the landing zones caused by extremely wet vegetation and the delay in receiving one of the maneuver battalions as a result of heavy commitment in another area of the 3d Division AO.

2. Tactics Employed. The tactics employed by the 1st Marines generally followed the basic doctrine of heli-





copter assaults. However, terrain difference in the two battalion's zones of action required a slightly different method of attack. Initially, due to the inability to properly prepare LZ Loon, both battalions were landed in LZ Robin. On D plus one, prep of Loon was completed, and as originally planned, one battalion conducted a helicopterborne assault into LZ Loon. As has been pointed out by the G-3 of Task Force Hotel, Loon soon became the object of attention by the gunners of CoRoc and its value was questionable. As a tactical landing zone to be seized and abandoned as the attack progressed, however, it presented no difficulties.

The assault into each of these landing zones was planned to be preceded by three days of extensive air and artillery prep. The delay in D-Day extended this period to five days and included both extensive use of artillery and air, CAS, TPQ's and arclights. As also has been stressed, the arclight support was considerably less than requested with 1st Marines receiving five prior to D-Day, all in the vicinity of LZ Robin. Intelligence targets and proposed objectives were also included in the extensive five day prep fires of artillery and direct air support.

The maneuver of the two battalions was characterized by the absence of significant contact as well as employment of slightly different tactics for each. The battalion attacking from Robin advanced entirely overland as the terrain from the landing zone to the blocking force was one large ridge decreasing in elevation from Robin to Route 9.

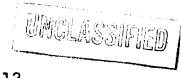
The battalion at Loon, however, was forced to attack cross compartment and a series of tactical helilifts were utilized to move the unit to each successive objective.

- 3. Type of Units. Only infantry battalions reinforced with combat engineers, helicopter support teams, and scout sniper teams were employed in this operation. Of course, all the artillery assets of the Regiment and the Task Force were employed to their fullest extent as well as any available air. The Reconnaissance assets of Task Force Hotel were employed along the flanks of the objective area.
- 4. Air and Ground Coordination. The abundance of current and active targets in Scotland II area of operations has resulted in the Regimental and Battalion FSCC's, FAC's



and forward observers gaining valuable experience in coordinated use of air and artillery. No difficulties were experienced during the operation. At one time although only two to three thousand meters separated the three battalions, air and artillery were coordinated to such an extent to allow full support of each during the same time.

- 5. Lessons Learned. Although 1st Marines had little contact with enemy forces during the operation, two important lessons were derived from the overall results.
- a. The delay in the execution of the initial D-Day which occurred after the extensive prep had begun resulted in a total of five days prep. Five days of prep fires is excessive in that it obviously indicates intentions to the enemy force and allows him sufficient time to withdraw to safe areas. The concept of two or three days of heavy prep in a larger objective area is excellent particularly in an area such as Scotland II where heavy bunker complexes are prevalent. Once the area prep has commenced it must be continued to be of any value at all, but any excessively long delay in beginning the operation jeopardizes the opportunity to exploit the benefits of the fire support. D-Day, therefore, must be considered less flexible in an operation where heavy prep fires and air support are employed over a long period whereas helicopterborne operations utilizing short preps can be adjusted without consequence.
- b. Although somewhat of an administrative burden, the policy of staging 106 Recoilless Rifles to be helilifted nightly into defensive positions is an extremely valuable asset. During this operation each battalion staged 106 Recoilless Rifles with crews at their rear CP's and had them delivered to the final positions prior to dark. As necessary these weapons were returned to the rear during the day to await the final night positions. In some cases they were retained at Battalion Command Posts to support the attacking companies. The value of this weapon in the field far excels the administrative burden resulting from daily helilifts. This fact was significantly illustrated when one battalion made extensive use of the "Bee Hive" capability of the 106 to assist in repelling a well coordinated NVA night attack.



COMMENTS BY 4TH MARINES (-) (REIN)

OPERATIONS

1. The concept for Robin South was a multi-battalion, 3 step operation utilizing fire support bases and heliborne assault deep into enemy territory. The assigned missions were to locate and destroy enemy elements within the AO; to locate enemy supply caches and engineer equipment; and to interdict the enemy road within the AO.

Step I was the activity of 3/9 and 1/4 in the vicinity of LZ Torch and that portion of the road extending to the northwest.

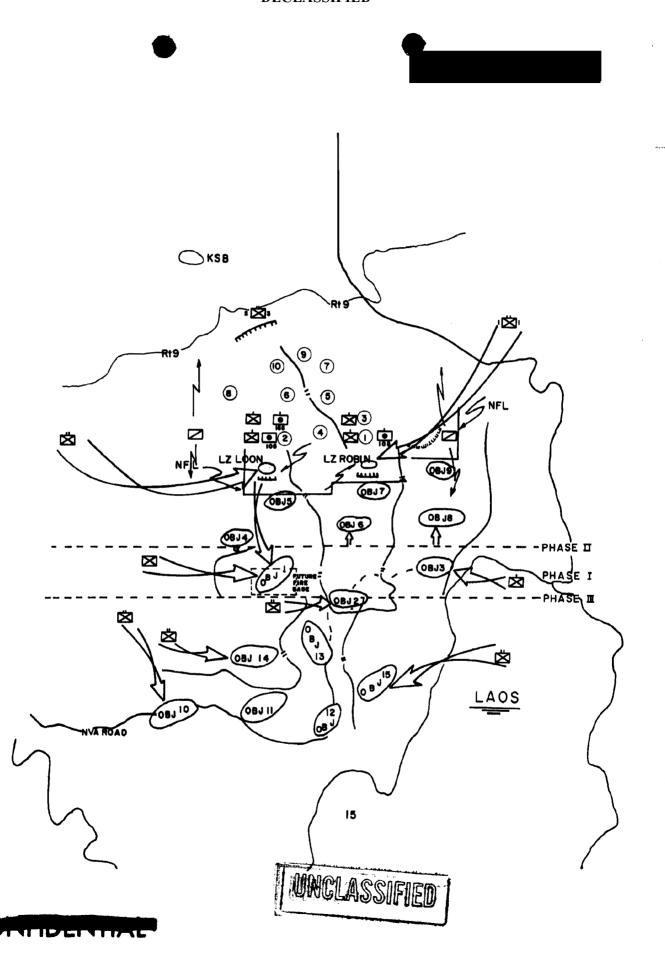
Step I¹ was considerably reduced as compared to the original concept and involved only 3/4 landing south of Lang Hole. It had been planned to make a quick strike towards the enemy supply cache area but when the battalion was landed approximately 1200 meters to the south a small contact developed and the push north into Lang Hole became an impossibility within the desired time frame.

- 2. Consequently, after 1½ days 3/4 was helilifted into objective 14 to trigger Step III. It is significant to note that this decision proved especially profitable as 3/4 killed nearly 350 enemy in this objective area in two major actions. 3/9 moved overland -- another departure from the original plan calling for helilift towards objective 15 and subsequently operated along the road, working in a southerly direction towards an advancing 2/4.
- 3. 2/4 was landed just southeast of objective 10 and moved along the axis of the road. Heavy brush and bamboo somewhat restricted designed movement and limited the battalion to the area adjacent to the road. On the 17th 2/4 did run company sized patrols 3,000 meters south of the road.
- 4. The statistics of the operation have been made a matter of record and are indicative of significant damage done to enemy forces. It is significant that the entire road within the AO was covered and that over 40 cuts were made by engineers and infantrymen, utilizing various methods including extensive use of enemy explosives.

UNCLASSIFIE

- 5. Once again it was evident that the low ground was the enemy operating area and it was in this type terrain that the majority of caches, equipment and prisoners were located.
- 6. It was also again obvious that continuous movement is necessary to confuse, disrupt, and eventually fix the enemy. The fact that he chose to task organize a force to attack 3/4 when it was already light in the early morning attests to his confusion and inability to predict what the Marines next maneuver might be.
- 7. A particular bright spot in the operation was the smooth execution of all assault landings. Detailed planning conferences with both the Battalion and Squadron Commanders present were held prior to each lift. The coordination of heavy artillery and fixed wing prep and choice of exact LZ's were discussed and V/R's were conducted. Detailed planning and adequate briefing of all participants were prime factors contributing to the success of these landings and consequently to the success of the entire operation.
- 8. The mobile fire support base system was highly effective in providing artillery support for all maneuver battalions. Although the Robin North portion of the operation could be supported from existing static artillery positions at Khe Sanh Base and LZ Hawk, the southernmost objective of Robin South was 20KM from these positions. The progressive establishment of fire support bases southward in the objective area at LZ's Robin and Torch extended the direct support artillery fan to cover the entire maneuver area in and beyond all objectives.





".... units policing the battlefield for documents and material provide a source for otherwise uncollectable information."

I N T

II INTELLIGENCE

A. COLLECTION AND ANALYSIS

- 1. All available collection means were employed during the 2-18 June period and provided invaluable data to analyze the magnitude of enemy forces opposing friendly forces in the Scotland II AO.
- The best example of correlating the various sources of information was the manner in which the 102nd Regiment and then the 88th Regiment of the 308th NVA Division were identified. The two Hoi Chanh's who surrendered to Marine units at Khe Sanh on 31 May and 1 June were the first indications of new forces being introduced into the Khe Sanh area. Previous comments on enemy contacts from friendly units suggested that these enemy units were either replacements or in fact new units because their conduct was marked by their shouting slogans and extreme aggressiveness. Subsequent police of the battlefield revealed substantiating documents and information to confirm the presence of new enemy forces. Of significant importance was the introduction of luminous unit identification tags for night movement. Two different patterns of tags were found and confirmed the presence of two of the three infantry regiments of the 308th Division.

B. ALLOCATION OF TASKS

- 1. The various sources and collection means that will be covered are as follows:
 - (a) Airborne collection devices
 - (1) Airborne personnel detector
 - (2) IR and SLAR
 - (3) Photography
 - (b) Prisoners
 - (c) Captured documents and material
 - (d) Aerial observation
 - (e) Ground reconnaissance
 - (f) Sensors



2. Airborne collection devices:

- (a) Airborne Personnel Detector. On 30 May two APD missions were requested from the 3d Marine Division and the missions were scheduled. The APD helicopter flew the first of these missions but the helicopter developed mechanical problems and the second mission was aborted. Three additional APD missions were requested. On a 5 June mission heavy enemy ground fire killed the APD operator and damaged the APD helicopter. In effect the APD was out of action for the entire operation.
- (b) IR and SLAR. On 3 June Task Force Hotel submitted a new IR and SLAR mission for coverage of the Scotland II AO. Liaison with 3d Marine Division resulted in cancellation of the old IR and SLAR targets and formulation of a new plan for coverage. During the period of the operation 4 IR and 14 SLAR reports were received. Targets were passed to FSCC and the respective regiments. Ninety per cent of the 3d Marine Division IR and SLAR assets were shifted to the Scotland II AO.

(c) Aerial Photography.

- (1) Task Force Hotel submitted five photo requests; one included a request of 13 different mosaics. Available photography was delivered to the regiments. Complete photo coverage of the Scotland II AO was not available in the 3d Marine Division photo library. Only two photo missions requesting photography were delivered during the operation, one of which was pinpoint photos taken by an AO and delivered within 72 hours of receipt of the request.
- (2) As invaluable as the mosaics would be to unit commanders as a map substitute, the time frame was much too condensed to permit a request to be processed in time to be delivered to the requesting unit. The short planning period did not permit a sufficient lead time to obtain the requested photo missions. If photo mosaics of the entire 3d Marine Division AO were on hand at a higher headquarters, specific areas requested could be photographed and forwarded. In most cases, mosaics made of photographs even three months old would still be acceptable.
- (3) One night photo was requested along Route 9 between Lang Vei and the Laotian border to determine whether or not this is an enemy LOC. No



readout has been furnished Task Force Hotel as of this date.

3. Prisoners

- (a) Both friendly regiments had their own ITT sub-teams. A sub-team from the 3d ITT supported the 1st Marines, and a sub-team from the 17th ITT supported the 4th Marines. These units are to be commended for providing timely and accurate interrogations. Information from these reports was immediately passed on to concerned units. Follow-up interrogations were provided by the 7th ITT at DONG HA.
- (b) The enemy prisoners and returnees provided invaluable information that held the key to identifying recently introduced enemy units. First the 102d Regiment, then the 88th Regiment and finally the 36th Regiment of the 308th NVA Division, were identified by PWs. 11 prisoners were captured from the 83rd Engineer Regiment. These prisoners had knowledge of their own unit as well as other unit dispositions, combat efficiency, state of morale, status of supplies and their unit's missions.
- (c) The wide separation of units and the periodic non-availability of aircraft complicated the evacuation of prisoners. Problems were encountered in escorting prisoners to KSB for initial interrogation and also in further escort to the Division collection point at Dong Ha. Capturing units provided escorts for PW's to KSB. In some instances escorts understandably returned to their parent units as soon as the prisoners were delivered to Khe Sanh. Upon completion of interrogation, difficulties were encountered in finding further escorts to Dong Ha. Likewise this headquarters was not kept adequately informed as to the disposition of prisoners by capturing units. In one instance three PW's were reportedly sent to "D" Med in Dong Ha. Subsequently they were reported to have been turned over to ARVN channels. An untimely delay was encountered in interrogation because the capturing unit did not notify this headquarters as to the correct disposition of the three prisoners.

4. Captured Documents and Material

(a) During the conduct of this portion of the operation, 12 batches of documents were captured totalling more than 532 pages. While the bulk of the documents found were of negligible value, important intelligence





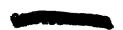
was gained from spot reports as well as complete translations. The 38th Regiment was mentioned in one of the documents found after a police of the battlefield. This was the first document found in this area to substantiate the 38th Regiment presence in the KS area. Also the presence of the 36th Regiment in the KS area was substantiated by captured documents.

- (b) One problem encountered was the failure to properly tag captured documents. The DTG, coordinates, capturing unit and circumstances of capture must be included on all captured documents. In some instances documents were not tagged at all causing an increase in the administrative communication burden to the command and a lapse of time in evaluating and disseminating the information. In one case, personnel of the capturing unit wrote and marked directly on the captured documents causing confusion as to the original content.
- (c) Aside from capturing the normal weapons and items of individual equipment, three vehicles were captured. A truck and motor driven arc welder were destroyed in place; however, another truck with an elaborate machine shop mounted on its bed was evacuated to KSB where it was reassembled.

5. Aerial Observation

- (a) Aerial recon support for the operation was initially provided by Alpha Troop, 1st of the 9th until assumed by VMO-6 employing two gunships. Pre-flight briefing and post-flight debriefing were performed at Khe Sanh twice daily. It is desirable to have the same AO conduct VR of the same area daily in order to more readily note changes related to enemy activity and locate new targets. This was not accomplished due to the lack of AO's at division and other priorities. The same pilots were used daily and pilot participation in the debrief complemented the AO's debrief and compensated for not having the same AO. Each mission flown reported new targets which were fed to FSCC immediately after debrief.
- (b) On June 16, the mission flown by the AO was a route recon of the new road and to confirm reported information as to the length, width, number and location of bridge, culverts, fills and corduroy sections. A message reporting specific data on the road was sent to 3d Marine Division.





6. Ground Reconnaissance

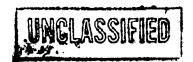
- (a) Third Force Recon Company conducted 12 patrols during this period. Six patrols were conducted north of Route 9 permitting an economy of friendly forces occupying the hill positions. It was their particular mission to act as a screening force for infiltration to KSB and the surrounding hill positions.
- (b) Of the six patrols south of Route 9, there were 3 priority extracts and one emergency extract. Two patrols were delayed because of weather. One patrol was aborted due to non-availability of aircraft. Another mission was aborted due to ground fire received during the approach to the LZ.

7. Sensors

- (a) The sensor program in the Scotland II AO proved to be an essential part of the G-2 Intelligence Collection Program. Sensor readings were used to plan:
 - (1) Photo missions
 - (2) IR and SLAR missions
 - (3) APD missions
- (4) Reconnaissance Zones, both ground and aerial.

In addition, sensor readings were used to detect early warning of enemy infiltration and acquire targets.

- (b) During Robin South operations, 4 recon patrols were planned in the Scotland AO based on sensor activations.
- (c) Detection of enemy infiltration was limited to early warning and oriented to the west and northwest, with only 2 strings seeded to the south. More strings would have facilitated targeting of enemy movements and detecting his movements within the immediate KS area. 16 hand emplaced sensors were seeded by 3d Force Recon teams to augment the aerial delivered devices.
- C. REPORTS. Permission was granted to the 4th Marines to submit handwritten INTSUMs so as not to tie up the TACT NET. Likewise timely receipt of the 1st Marines INTSUM was noted. Information for the Task Force INTSUM



was obtained by COC Spot Reports. Although this resulted in a few delayed entries it proved quite workable in producing timely INTSUMS. Hard copies of the TFH daily INTSUM were delivered to the 1st and 4th Marines.

D. LESSONS LEARNED.

- 1. Photograph requirements should be levied as early as possible in the planning stages to insure delivery.
- 2. An operation of this magnitude necessitates the establishment of a Task Force Collection Point for PWs.
- 3. A MP detachment attached to Task Force Headquarters will be required to provide security for the Task Force PW collection compound and to properly escort PW's to the division collection point.
- 4. Friendly units policing the battlefield for documents and material provide a source for otherwise uncollectable information.
- 5. Use of sensor readouts proved to be an aid in planning tasks for other collection assets.
- 6. Helicopters should make fake inserts prior to and after actual insertion of recon teams and should stay in close proximity to insertion point until team reports that they are secure. Aircraft should not remain over the zone for an extended period of time and thus compromise of recon team's position.
- 7. Fixed wing aircraft such as flareships and Spooky can be utilized as a radio relay when AO's are not available, as was done when Knife Boy Recon Patrol lost communications.



COMMENTS BY 1ST MARINES (-) (REIN)

INTELLIGENCE

1. Collection and Analysis.

- A. Augmented by ITT, regiment has an excellent capability to collect and analyze combat intelligence. In the operation just completed, POW's and documents:
- (1) Provided Order of Battle information on the 308th Division not available from any other intelligence source at any level.
- (2) Revealed that the 308th Division was specifically oriented for night operations.
- (3) Indicated that elements of the 308th were targeted against U.S. personnel landed in LZ's as a specific mission separate from any larger NVA objectives in the area.
- (4) Suggested that the average NVA trooper was aware of artillery support available to his unit if required. Certainly the value of ITT support to regiments and battalions was confirmed more fully in this operation.

B. Photography.

- (1) Timely photography to the Robin North portion of the operation was not available.
- (2) In the absence of adequate photography, the provision of more helicopters for VR by battalion and company commanders is mandatory.
- (3) IR and SLAR were extremely useful in indicating the depth of enemy dispositions in the immediate area of interest. It should be noted that in addition to the immediate area of operation, First Marines retained a residual responsibility for the rest of the Scotland II AO. IR and SLAR were requested and obtained, allowing us to cover our "back door", so to speak.
- C. APD was of no value in the Robin North area. A mission west of Khe Sanh Base in this period, however, provided useful target information in an area where our defenses had been somewhat thinned to make resources available on operation.



- D. HLZ's: Available listings of HLZ's in the Scotland II AO are meager. No HLZ's in the Robin North portion of the AO were listed. No aerial photography was available. Accordingly, map analysis, aerial observer's and commander's VR were necessary for LZ selections, and extensive LZ prep was required. The development of a more comprehensive HLZ listing is obviously essential.
- E. Weather forecasts are an important aspect of the intelligence collection effort. We need an agency tasked not only with collection, but also timely dissemination of the information.

2. Sensor Devices:

- A. While not of direct value to the operation, sensor devices throughout the Scotland II AO permitted some surveillance of areas to which troops were not committed.
- B. At present, lead time for emplacement of sensor devices would preclude their employment during operations as rapidly conceived and executed as this one. The imagination, however, is stimulated by the possibility of future sensor assets being earmarked for support of such operations and available for employment on short notice.
- C. Retention of PPS's, NOD's etc. on hill positions rather than their introduction into the operation was opted to add to the surveillance capability of the thinned-out lines of the static positions.
- 3. Lessons Learned. POW's and observation of enemy operating methods indicated that NVA observe helicopter movements carefully. Helicopter supported positions are then closely reconnoitered, and subsequently are attacked. The attacks generally come at night. Those which have come as late as dawn were probably launched at that time because the approach march took longer than anticipated. Firebases should expect to be attacked within 36 hours of insertion. NVA artillery is a fact of life in the Scotland AO and should be expected at any position which remains fixed for 24 hours or more. reaction forces can be introduced into the area of the night attacks so that contact can be maintained a heavy toll of the enemy can be expected. The NVA battalion must break contact within a few hours because of its relatively meager ammo/supply. Some means of reacting



to maintain contact once joined will inevitably lead to heavy NVA losses. The danger of ambush during such pursuit must of course be considered.



DECLASSIFIED

COMMENTS BY 1ST MARINES (-) (REIN)

PERSONNEL

- Casualty Reporting. Normal casualty reporting procedures are suited to air mobile operations with the provision that special attention must be paid to the accounting for KIA in view of the rapid movement which characterizes this type operation. Identification statements should be accomplished on the spot if at all possible and enclosed in the body bag because of the difficulty of subsequently locating and transporting witnesses. In other operations the evacuation chain can be fairly well fixed. However, in this type operation, because of the rapid movement and the necessity to make maximum use of available helicopter assets, the normal evacuation chain may be bypassed in favor of "any appropriate facility." It is therefore recommended that units provide for liaison personnel to be present at all facilities to which casualties might be evacuated. As with any rapid moving situation where units make a succession of helicopter movements, positive control over personnel in the form of "head counts" and musters by name is mandatory. A positive means of reporting all personnel "not present" at the end of each day, and each helicopter movement, to the unit rear, is a must to permit matching with information flowing in the casualty reporting chain.
- 2. Replacements. Air mobile operations are generally planned for a fixed number of days. In view of the rapid movement involved and predictable time frame, unit, rather than individual replacement, appears more desirable if the force posture permits. In any event, individual replacements should be made only in critical billets since assimilation of new personnel in a moving, constant contact situation can weaken rather than strengthen unit effectiveness.



COMMENTS BY 4TH MARINES (-) (REIN)

INTELLIGENCE

- 1. Delay in Submission of Intsums. The tactical net was in constant use and as a result it was decided to pass lengthy intsums by personal delivery basis. As such intsums are merely summaries of prior spot reports, it is felt this arrangement facilitated radio communications and created no secondary problems.
- 2. POW's. It is noted that a Montagnard translation capability was not available though the Regimental Headquarters had two assigned interpreters and an attached ITT team. With respect to the evacuation of captured personnel from Battalions or from the Regimental Command Post after interrogation, it was never felt that this matter was within control of the regiment.
- 3. Document Passage. Delivery of documents and captured weapons to aircrew personnel is considered to be a most insecure method of effecting passage. In one specific instance weapons and documents were passed to a crewman for delivery to Khe Sanh. The documents, less the captured weapons, were delivered at Dong Ha. It is felt that couriers must be used even though this may deprive the sending unit of their services for several days.
- 4. Continuing Intelligence Acquisition. Robin South demonstrated the extreme desirability of making helicopters available to tactical units for local air reconnaissance and intelligence acquisition flights. There was a distinct scarcity of this support at company and battalion level.
- 5. Radio Monitoring. The results obtained by 3d Bn, 4th Marines in intercepting low level traffic in the field is worthy of particular comment and deserving of note.



".... an average of nearly 400,000 pounds of cargo was delivered to 14 locations daily. This was accomplished by 6 to 10 CH-46 and 1 to 3 CH-53 logistic aircraft."

L 0

III LOGISTICS

A. HELICOPTER RESUPPLY PROCEDURES AND TECHNIQUES

Helicopter resupply operations during the early stages of Scotland II consisted of providing all classes of supply to one regiment (1st Marines) with units in the field and manning fixed hill positions. Included in this effort was the resupply of Khe Sanh Base and it's tenant units. Source of supply for classes I, III, IV and V was LSU, LZ Stud. Class II source was FLSG-B, Dong Ha. In accomplishing this a daily average of 200,000 pounds of cargo was lifted by CH-46 and 2 CH-53 aircraft made available for logistic flights.

The introduction of a second regiment, the 4th Marines, into the operation placed a severe strain on the capability of the LSA, LZ Stud. Resupply efforts increased to a point where, during the height of the operation, an average of nearly 400,000 pounds of cargo was delivered to 14 locations daily. This was accomplished by 6 to 10 CH-46 and 1 to 3 CH-53 logistic aircraft. During this peak period an average of 137 resupply lifts were made daily.

As previously stated, the resupply of 2 regiments from LSA, LZ Stud severely strained that unit's capability and problems in coordination between the using regiments and the LSA arose. This problem area was solved by establishing a Task Force Hotel liaison officer at LZ Stud to coordinate the units, the LSA, and to work in conjunction with the Division Logistics representative. This rapidly smoothed operations and aided in realizing the maximum benefit of the facility and the support available. In addition, Task Force Hotel established a procedure whereby the two regiments submitted their lift requirements in pounds to the Task Force Hotel G-4, who in turn fragged sufficient aircraft to move the cargo. This resulted in more effective use of available helicopter assets.

A significant problem, even more serious than the lack of sufficient helicopters, was acute and continuous shortage of cargo nets, especially those for the CH-53 aircraft. This problem, while never completely solved, was eased considerably by sending one logistic CH-46 on a net sweep at the start of each flying day and by regularly reminding the helicopter support teams to expedite the return of nets and slings. A record keeping system established by the Task Force Liaison

Officer at LZ Stud made possible quick identification of the position retaining the most nets and expedited their recovery.

Dominant lesson learned was that conducting helo-resupply of two regiments whose units are widely separated throughout the AO requires a coordinator/liaison officer from the senior headquarters. This was demonstrated by the increased efficiency of helo-resupply after the assignment of a Task Force representative at LZ Stud.

B. MEDICAL EVACUATION OF PERSONNEL

Evacuation of casualties was accomplished by helicopter directly from the field to Co "D", 3d Medical Bn at Dong Ha in accordance with established procedures. Those cases requiring stabilization were evacuated to the 1st Marines regimental aid station at Khe Sanh and later transferred to Dong Ha.

On only one occasion did a problem within this area arise. The 1st Bn, 4th Marines heavy enemy contact at LZ Loon resulted in the evacuation of casualties in considerable number. to Khe Sanh Base. This was caused by the unusually large number of personnel requiring evacuation in a short period of time, the distance to Dong Ha with resulting loss of helicopters and the fact that an emergency extract of 2 companies was being carried out concurrently. Provisions had been made for casualties requiring stabilization to be evacuated to the aid station at LZ Stud in the event Khe Sanh was under enemy fire.

C. SURFACE RESUPPLY

Resupply of Khe Sanh Base by surface during Robin North and Robin South consisted of 4 convoys to LZ Stud and back in the same day, and one convoy from LZ Stud. These convoys, averaging 26 trucks each, were not considered to be a success, although they did augment helo resupply operations. Factors contributing to this lack of success were the shortage of vehicles available for cargo hauling, enemy interdiction of Route 9, and the effect of weather on the MSR.

The Motor Transport situation of the 1st Marines and tenant units of Khe Sanh Base was such that the maximum number of vehicles capable of traversing the MSR never exceeded thirty. The high deadline rate of vehicles was



due to the shortage of 2nd Echelon spare parts, the lack of an accessible 3rd Echelon maintenance facility and combat damage.

Resupply by convoy rapidly reached the point of diminishing returns. A convoy of 26 vehicles required, at a minimum, six to eight trucks for security, and the pay load of the cargo hauling vehicles did not justify the personnel risk and commitment, the detailed arrangement of security forces, and exposure to enemy action of existing Motor Transport assets.

Dominant lesson learned was that to derive maximum benefit from surface resupply, adequate Motor Transport must be available and relatively free movement on the MSR must be insured.

D. ADEQUACY OF CLASS V LIFTED TO VARIOUS POSITIONS

Class V lifted to the various positions was sufficient throughout the operation. However, artillery ammunition at Khe Sanh became critically low on several occasions. This situation was rectified by fixed wing airlift by Air Force C-130 aircraft.

At the start of the operation, emphasis was placed on the build up of class V stocks on the hill positions. These positions were built up to and maintained at 5 DOA or more throughout the operation.

Firebases were stocked with a prepositioned package of artillery ammunition prior to the arrival of the guns. This provided the batteries ready ammunition for fire missions and reduced the resupply requirements. Resupply was routine, requiring only sufficient input to maintain the level of the prepositioned package.

E. LEAD TIME REQUIREMENTS FOR AIRLIFTED RESUPPLY

Lead time requirements for helilift resupply presented no problems. The aircraft were fragged in the afternoon for the following day's lift.

Fixed wing resupply of Khe Sanh Base required too long a lead time. A message request for resupply of artillery ammunition received no response for nearly a week. This delay resulted in a combat emergency delivery by speed off load of fixed wing aircraft. We considered this length of time between request and delivery to be unsatisfactory.

COMMENTS BY 1ST MARINES (-) (REIN)

LOGISTICS

1. Helo Resupply Procedures and Techniques. The LSA concept is well suited to airmobile concept operations. However, positive communications from the using unit to the LSA or to a central logistics control must be assured, since "on position" inventories cannot be allowed to grow so large as to become a retrograde problem if the unit is to be shifted to a new position. Conversly the requirement to keep "on position" inventories small, places a "quick reaction" resupply requirement on the LSA, and this can only be met with positive communications.

In calculating the requirements for nets to support an operation it is felt that in the future these requirements be calculated with a 50% allowance for time lost in recovering them out of resupply points. Also, since resupply to the same location during operations of this nature will be the exception rather than the rule, the scheduling of separate lifts to collect nets would appear to be worthy of consideration in future operations.

- 2. <u>Medical Evacuation of Personnel</u>. Medical evacuation of personnel during this portion of Scotland II was light from the 1st Marines AO and posed no unusual problems.
- 3. Surface Resupply. Surface resupply had been a secondary means of resupply to LZ Hawk and Khe Sanh Base prior to the commencement of this phase of the operation and continued as such until the abandonment of convoys after the ambush of 9 June.
- 4. Adequacy of Class V. Class V will always be a problem in air mobile operations. It is doubtful that in any multiple operations with artillery fire bases established off land lines of communication, helicopter assets will be available to meet all Class V resupply demands. At the commencement of the 2-18 June phase of Scotland II CH-46 and CH-53 lifts of Class V to LZ Hawk and Khe Sanh were averaging approximately 190,000 lbs per day. This adequately maintained Class V stocks at these positions. With the establishment of additional firebases in the southern sector of the AO, this rate of resupply was slowed to approximately half the former rate as helicopters and nets were diverted to support the additional firebases. Class V stocks rapidly



diminished under the impact of less resupply and increased firing activity in response to the operations. Class V requirements were met in this instance by an emergency fixed wing lift of 105mm and 155mm to Khe Sanh with part of the 105mm then being taken to LZ Hawk by trucks. From this experience it is recommended that alternate methods of resupply of Class V to established firebases be included in future plans for airmobile operations.

5. Lead Time Requirements for Airlifted Resupply.

Lead time requirements for air lifted resupply were primarily affected by the need for positive communications, as covered at the start of this portion of the brief.

COMMENTS BY LITH MARINES (-) (REIN)

LOGISTICS

- 1. From 8-18 June the 4th Marines moved 1,574,190 lbs of supplies by helicopters in support of operation Robin South. CH-46 and CH-53 A/C were employed on the 8th, 9th, 10th, 11th and 16th of June. A total of 133,540 lbs of pre-staged supplies requested by the 4th Marines were not moved. This was caused by an absence of A/C for a portion of time during each day. This absence usually occurred during the period 1230-1400. The procedure of assigning A/C to work the LSA and not for particular missions was the most advantageous to the logistical effort and was directly responsible for moving the vast amount of supplies that were required in the course of this operation.
- 2. As artillery was extensively employed, the pre-staging of Class V for these units at LZ's Robin and Torch was a definite advantage. These units consumed 927,718 lbs of Class V in support of the operations. The opening of LZ's Robin and Torch to CH-53's was a definite factor in keeping these units adequately supplied.
- 3. A continuing problem of A/C dropping supplies into the wrong zone, and the return of nets to the LSA, could best be solved by the A/C checking in with the 14 of the Regt. The pilots would then be turned over to the Bn to procure supplies. The Bn 14 would turn the A/C over to the HST in the zone, who in turn would direct the load to a particular area within the zone. Upon the A/C releasing its load, it in turn would pick up the old nets and return them in addition to other equipment or men to the LSA. This can best be accomplished if the pilots are in contact with the HST/14's. Along these lines it is advantageous to each unit to have trained HST personnel. As Shore Party Bn does not have the resources to support this, the units will have to designate/train their own teams.
- 4. The lack of Class II and medical supplies at LZ Stud caused a time lag in the response to requests by wing units. This was not a big problem during this operation but could become a major factor if the operation were for a period substantially longer than Robin South. The area of most concern was in batteries and weapon cleaning gear.

5. The requirement for lightweight water containers was once again pointed out in the course of this operation. The six gallon plastic container, when available, enables the receiving unit to move after they have been resupplied with water. When resupplied with water cans, the unit is anchored to its immediate area until the empty cans are evacuated.

DECLASSIFIED

".... a battalion can be helolifted to an objective within a 10 mile radius in from 2½ to 3 hours - utilizing 8 CH-46D aircraft."

AIR

HEADQUARTERS 1st Marine Aircraft Wing Auxiliary Headquarters Quang Tri Combat Base FPO San Francisco 96602

24 June 1968

From: Assistant Wing Commander

To: Commanding General, Third Marine Division (REIN)

Subj: Critique of Operations Scotland, Phase I, II

and III

Ref: (a) 3d Div Memo of 18 June 1968

1. In compliance with reference (a) the following is submitted:

- a. Item: Communications
- (1) Problem: The assigned FM frequencies are congested because of administrative traffic being passed on the air net.

Recommendation: That all administrative traffic be passed on administrative nets.

(2) <u>Problem:</u> Units do not monitor the assigned frequencies.

Recommendation: Ensure that units are advised of helo resupply times and that the nets are guarded in accordance with the Communication Plan. The greatest area in need of improvement is with Artillery Units.

(3) Problem: Secure communications requirements to avert transmitting vital information to the enemy on troop disposition, strength, tactical plans, resupply information, etc.

Recommendation: That troop lifts not be briefed in the air, (e.g. move from LZ Robin to Loon), and that communications between the DASC, S-3 and S-4 to the LSA and other agencies not divulge the size and nature of lifts until secure communications can be established between these units.

DECLASSIFIED

(4) Problem: Tactical units were not always alert on communications nets or did not always have nets working when helo operations were inbound to their zones.

Recommendation: That the LSA and Tactical Units in LZ's maintain close liaison and alertness when movement is being initiated in and out of LZ's.

(5) Problem: Land line communications between the DASC-LSA; between the Khe Sanh DASC/ASRT and Dong Ha DASC/ASRT; between DASC and TADC; between DASC and supporting helo groups were not satisfactory.

Recommendation: That real time secure communications be established as a matter of urgent priority between the above units to ensure effective helo control and utilization.

(6) Problem: Development of a communication plan for multi-bn helo operations.

Recommendation: That for operations of this magnitude, where a large amount of air and ground communications will be utilized, a detailed communications plan should be worked out and published in advance.

b. Item: DASC Operations

(1) Problem: Accurate and timely SAVAPLANE information was not always broadcast. This appeared to result from a lack of coordination between the FDC and Khe Sanh DASC. Many times the first notification that the helicopters had of artillery firing was when the guns fired or the rounds detonated beneath or near the helo. Communications with the DASC frequently revealed that the DASC had no knowledge of the artillery.

Recommendation: Closer coordination between the DASC and the FDC be institued so that all SAVAPLANE information will be accurate and timely. In this regard, it is also mandatory that whenever possible, the FDC and DASC be co-located back to back.

(2) Problem: The DASC is an air control agency only of the lst MAW; responsive to the lst MAW TADC for air control of helos and fixed wing aircraft. The DASC cannot assume operations control over aircraft or give directions to aircraft except as provided by competent authority, e.g. CG TF Hotel or his authorized represent-

ative.

Recommendation: That the authorized representative of the ground force coordinating the operation have a helo-fragger (officer) from the S-3 office available in the DASC to provide directions and instructions to the HD of the DASC on employment and utilization of helos fragged to the ground force commander. The foregoing also applies to employment of a fixed wing (officer) for fixed wing aircraft employment.

(3) Problem: The Khe Sanh DASC was not capable of performing all the necessary functions of a brigade size operations.

Recommendation: In a brigade, multi-bn size operation requiring employment of an inordinate number of aircraft, the DASC must conduct certain planning before the operations begins to ensure that it has the complete capability in comm and personnel to handle all air operations efficiently and effectively.

c. Item: LSA

(1) Problem: LSA too small. Helos discharging or embarking passengers prevented cargo pickups and when cargo hookups were in progress, they prevented staging and preparation of additional supplies.

Recommendation: That all LSA's be established with the idea of accommodating passenger and cargo traffic simultaneously. It is expected that a zone of 600' X 250' would be adequate.

(2) Problem: A shortage of nets and slings for CH-53 helicopters substantially constricted the flow of supplies from the LSA.

Recommendation: That additional slings and nets be procured. That units in the field be provided an organized plan for net retrieval.

(3) Problem: The LSA radio net was overloaded. One common frequency for the LSA, HST and DASC, caused gross overloading of the assigned frequency.

Recommendation: That the LSA be given a separate frequency to utilize for LSA operations.

(4) Problem: Over fragging helos to LSA when equipment/supplies are not available or ready for pickup.

Recommendation: That S-3 or the helo fragger in the DASC maintain contact with the LSA and the Helo Group(s) and only dispatch helos to the LSA when lifts are available for movement.

(5) <u>Problem:</u> More efficient and effective organization, training and operations by helicopter support teams (HST's) is urgently required.

Recommendation: That HST's be organized, trained, equipped and conduct operations in accordance with Marine Corps doctrine outlined in FMFM 4-3. (Implementation of this recommendation is one of the vital keys to our future success in helo operations).

(6) <u>Problem</u>: Close liaison and good, rapid communications were required with the DASC, helo fragger, S-4 etc.

Recommendation: That a senior officer, well versed in LSA operations be placed in charge of the LSA and maintain hourly contact with the above agencies. Further, that these officers conduct close liaison and planning before the operation to ensure that all vital elements of the plan for effective helo operations can be assured.

(7) Problem: Effective retrival of helo slings and nets from LZ's to the LSA.

Recommendation: That the OIC, LSA develop a plan for control of all nets and slings. This plan to include the ways and means of returning slings and nets rapidly from LZ's to the LSA for early pre-staging of external loads.

(8) Problem: Proper stowage of water cans or open cargo for external lifts.

Recommendation: Many external lifts of water were lost enroute to LZ's due to improper stowage of the water cans for net pickup. Leak proof cans must be used or the current metal water cans must be stacked on pallets for external pickup so the cans do not tilt on pickup and water is not lost enroute to the LZ.



(9) Problem: Requirements for resupply by helo.

Recommendation: That supported units make their resupply by helo known the day before or early on the day of resupply so the supplies can be staged early and moved during the day and prior to late in the evening or at night. Many emergency night resupply problems could be avoided, and more efficient utilization of helicopters could be obtained. This is the key to efficient and effective resupply operations by helo:

(1) Supported Unit: State requirements

early to the LSA.

(2) LSA: Prestage rapidly and advise the DASC.

(3) DASC: Direct Helo's to LSA

for movement.

(4) LSA: Rapid retrieval of nets and slings.

d. Item: Landing Zones and sites are not adequately supervised.

(1) Problem: Landing Zones are not being policed of debris to prevent damage to the helicopter when a landing is attempted. Whether the debris is caused by accumulated trash or the material left even from the breaking down of the pallets, a constant program of policing the area must be maintained.

Recommendation: That supervisory personnel insure that the LZ's are maintained in proper police.

(2) Problem: LZ Directors and landing sites are seldom marked and are extremely hard to identify.

Recommendation: That directors be specifically identified by a colored shirt or an air panel wrapped around them and that sites be marked with panels. Hand signals should be utilized as prescribed in FMFM 3-3.

(3) Problem: Congested LZ's were commonplace due to the amount of supplies being hauled in, and the slowness of the HST in clearing out the previous lifts.

Recommendation: That if the HST is operating in a minimum size LZ, every effort be made to clear out

the previous lifts ASAP.

(4) Problem: Personnel loitering in the helicopter approach and departure routes and in the landing site. In the case of a dropped pallet or an aircraft malfunction necessitating immediate landing, personnel are unnecessarily exposing themselves to injury or death. Unnecessary delay results in the landing when personnel obstruct the landing sites.

Recommendation: That all personnel be re-briefed on the potential hazards of being underneath the helicopter flight path.

e. Helo Groups and Squadrons Operations

(1) Problem: An operation order for this operation was not received by the Helicopter Group.

Recommendation: That the supporting helicopter group be included in the distribution list for the Operation Order.

(2) Problem: Lack of brief on operations plans and scheme of maneuver for participating aviation units.

Recommendation: That the supporting group maintain close liaison with the supported force and ensure that plans and operations are known and passed to all concerned.

(3) Problem: Primary and alternate refueling points were not always near the LSA or area of operations.

Recommendation: That the primary refueling point be maintained by the supporting helo groups near the LSA or area of operations.

(4) Problem: Effective utilization of available helicopters.

Recommendation: That before fragging for helicopters, detailed planning and analysis of lift requirements be made. Close management of the helo assets throughout the day must be assured to obtain effective utilization of helos. That helos not be fragged for missions that can be accomplished effectively by motor vehicle or foot movement.

(5) Problem: Replacement of "down" helos.



Recommendation: That flight leaders notify the supporting helo groups immediately and request a replacement helo be launched to replace the "down" helo in the flight.

(6) Problem: Control of helos fragged to the supported unit.

Recommendation: That flight leaders not check out of the area of operations and return to base unless specifically authorized by the helo fragger in the DASC.

(7) Problem: Use of the helo haven.

Recommendation: That once troops are committed to an operation which can only be supported by helos, consideration be given to using the helo haven and ensuring that a minimum number of helos will be available the next day for continued operations.

(8) Problem: Requirement for planning and prebriefing of helo assaults.

Recommendation: That before a helo assault is conducted, the battalion CO, helo flight leader, UHLE gun leader, TAC(A), S-2, path finders, etc. assemble for a briefing of the lift. That where possible recent photos of the LZ's be utilized and that the battalion CO and helo flight leader personally recon the LZ's. That primary and alternate approach and retirement routes and LZ's be decided.

(9) <u>Problem:</u> Aerial recon of the objective and operating area to obtain enemy installations and movement.

Recommendation: That a firm aerial recon plan be initiated in coordination with the S-2. This plan to ensure the best available and current intelligence on enemy disposition before helo assaults, and detect enemy movements throughout the area of helo operations.

(10) <u>Problem</u>: Responsiveness of helos from the SLF.

Recommendation: That liaison be initiated with the SLF by the supporting helo unit to ensure responsiveness of the helos from the SLF.

(11) Problem: Helicopter loading of 10 men in a



pickup zone exceeded the limitations established by the pilots as to passengers or weight of cargo for the CH-46A. This constitutes a dangerous safety-to-flight situation.

Recommendation: That the loading units be made aware that the number of passengers and/or weight given by the pilot is the maximum that can be safely embarked.

- f. Planning Requirements for Helo Assets.
- (1) Problem: Early, detailed planning requirements.

Recommendation: That when multi-battalion size helo operations are to be conducted, advance planning be conducted to determine the fessibility of helo support and to determine if the helicopter assets will be available from III MAF allocations.

- g. Compliance with III MAF Aircraft Allocations.
- (1) Problem: 1st MAW capability to meet stated helo requirements.

Recommendation: That once III MAF helo allocations have been made for an operation, the 1st MAW helo resources be made available to meet these obligations.

- h. Fixed Wing Operations.
 - (1) Problem: Insufficiency of Ol aircraft.

Recommendation: That the 1st MAW expedite action to provide additional Ol aircraft in support of the 3d MarDiv.

(2) Problem: Optimum suppressive fires for road recon and helo assault escort.

Recommendation: That greater use be made of the TAHF and AH aircraft with forward firing ordnance in the helo escort and road recon role.

(3) Problem: Maximum safety in use of CAS with friendly troops.

Recommendation: FAC's and pilots exercise greater precautions in use of CAS when at or near the vicinity of friendly troops to avoid the unfortunate incident that occurred during this operation.



- i. Summary. This was a useful and productive operation, the first all-helicopter operation of its size in Vietnam. Many of the mistakes made in this operation have been made before in developing our Marine Corps helo assault doctrine. They would not have been made this time with more detailed and coordinated planning and closer adherence to our established doctrine. While this operation was highly successful, much lost motion was experienced. In future operations of this nature we can and must:
 - (1)Plan more effectively.
 - Follow established doctrine.

With the foregoing accomplishments future operations will be more successful and productive.

IV AIR OPERATIONS

A. HELICOPTER OPERATIONS

1. Sunmary

During Operation Scotland II supporting helicopters transported 6,164,374 pounds of cargo and 18, 767 combat troops. Daily averages were 334,940 pounds of cargo and 963 combat troops.

The logistic support was accomplished by 4 to 10 CH-46D helicopters and 1 to 3 CH-53 helicopters daily. The resupply loads were staged at LZ Stud and transported externally to the various company and battalion positions throughout the AO.

Four H-34 aircraft were utilized for medevac and utility missions. When available, 2 aircraft were assigned in direct support of each regiment.

UHIE gunships were utilized to escort the resupply aircraft to the drop zones and to provide cover for convoys traveling Route 9 between Khe Sanh and LZ Stud.

Tactical assault missions were fragged according to the size of the assault unit, distance to the LZ, characteristics of the LZ and minimum first wave requirements. The number of transport aircraft utilized on tactical assaults ranged from 4 to 12. Assault missions were escorted by UH1E gunships.

Visual airborne reconnaissance was provided by a flight of 2 UH1E gunships with an AO on board. They were assigned specific recon tasks on a daily basis at the direction of the Task Force G-2.

Insertions and extractions of Division recon teams were performed during the period.

2. Logistic Resupply

a. An inadequate supply of cargo nets and helicopter slings was on hand to permit efficient and expeditious flow of resupply from the LSA at Stud. An attendant problem was the difficulty encountered in retrieving the nets and slings from the supported elements. The problem was partially alleviated by sending helicopters on frequent "net sweeps" and by continually directing ground unit attention toward freeing their nets and



preparing them for return by any available helicopter. This action did not completely solve the problem, however, and the fact remains that a considerable amount of valuable helicopter time was lost as a result.

b. Communications: Logistic resupply was conducted on the 1st Marines LZ common frequency. LSA control (Dagmar B), all 12th Marine units and all aircraft working resupply were communicating on this net. The result was delay and confusion due to the badly over-crowded net. At the outset of the operation an attempt was made at dividing the LSA into 2 separate factions, i.e. an adjacent but separate LSA for each regiment. This alleviates the comm problem but it was judged an unacceptable solution from a logistic standpoint. The solution to this problem lies in providing the LSA with an air/ground radio capability on a frequency separate from that of any supported element.

c. There was insufficient consideration given to priority of cargo transported from the LSA, resulting in the generation of "emergency" resupply requests. The water and combat essential ammunition and other critical supplies should be the first to be transported so that in the event of inclement weather or lack of helicopter availability the supported units would not immediately be in an emergency status.

3. Tactical Assault

The tactical assaults for the most part went smoothly. It can only be re-emphasized that a briefing of the assault element commanders with the helicopter transport flight leader and the gunship leader is the key to a successful heliborne assault. Time factors in the pace of this operation made these briefings difficult to organize, however the benefits far outweigh the inconvenience.

With the 4th Marines regiment headquarters located at LZ Robin many difficulties were encountered in supporting these operations due primarily to lack of adequate communications. The commander and key members of his staff had to be transported back and forth from Khe Sanh on an almost daily basis. The program to gain maximum utilization from the helicopters does not readily absorb requests for responsive and timely transportation in and about the AO. As a consequence, the 4th Marines commander and staff lost many valuable hours waiting for helicopter transportation.

An inadequate number of aircraft were available for CLC, VR and admin runs for each unit. This situation was further aggravated by late/non arrival of the H-34s fragged for this purpose. Admittedly, H-34s are a poor platform for VR, but UHIE (slick) aircraft in the number required simply do not exist. To utilize CH-46s for administrative and utility missions is inconsistent with proper aircraft utilization.

The provisioning of adequate secure communication channels would permit more effective representation at the Task Force Headquarters by the liaison officer assigned and would be appropriate resolution to this problem.

Attendant to the foregoing is the fact that the regiments were sometimes late in submitting their requests for helicopter support to the Task Force. This causes a chain of delay which finally results in the supporting unit (MAG-35) receiving the commitment at a very late hour - not affording them the opportunity to make alternate arrangements if they do not have the assets immediately on hand to fulfill the request.

Late arrival of aircraft occurs only rarely when the aircraft have been requested sufficiently in advance and when assets are readily available. Unforseen circumstances such as aircraft reverting to "down" status prior to take off, or delays encountered in a preceding mission are, for the most part, unavoidable. Every effort is directed toward keeping these delays at a minimum. (It is my personal opinion that the number of times aircraft are late for a mission is roughly equal to the number of times the supported unit is not ready when the aircraft arrive. I reiterate, this is a personal opinion - undoubtedly shaded by some degree of bias.)

4. Miscellaneous:

a. Savaplanes: Considering the number of aircraft operating at any given time in the AO the problem of providing saveaplane information looms large. It appears that pilots have come to rely on the DASC as the source of complete S.A.P. information and were continually reporting fire in areas cleared by DASC. DASC were able to maintain S.A.P. information provided by 1st Marines on land line communications, but 4th Marines - not being collocated had to provide S.A.P. in their A.O. directly to the aircraft. It is most desirable that complete S.A.P. information be made available through one agency.

- b. Reconnaissance. The problem with recon support occurs when the teams request emergency extractions. This comes to pass with unseemly regularity. Aircraft to perform the extraction are taken from the most readily available assets on hand. This causes a loss of 2 gunships and 2 CH-46s for at least an hour. Obviously the limited air assets will not permit establishment of a standby capability solely for the purpose of recon extracts. Therefore, it appears this problem will be minimized only in direct poportion to the minimizations of employing recon teams in the field.
- c. Landing Zone Police. On several occasions helicopter pilots reported to the DASC that various landing zones were in a poor state of police and that flying debris was becoming an increasing hazard to flight in and around the zones. Preliminary indications are that flying debris was at best a contributing factor to the helicopter crash which occurred on 19 June at LZ Turkey. In any case it is imperative that religious attention and close command supervision be directed toward eliminating this extremely hazardous condition.

5. Lessons Learned

- a. That the magnitude and pace of this operation often times taxed helicopter assets to the point that none were left for contingencies which could have arisen from heavy contact.
- b. That a requirement exists for the supported elements to have adequate representation/communications with the Task Force staff.
- c. That 2 regiments cannot be logistically supported with 120 CH-46 nets and 35 CH-53 nets without frequent and costly delays in order to return nets and slings to the LSA.
- d. That police of landing zones must be enforced to prevent damage to aircraft and injury to both flight crews and troops on the ground.
- e. That thorough and timely briefing with assault element leaders and flight leaders ensures a smooth and efficient operation.
- f. Finally from this operation it was learned that a battalion can be helolifted to an objective within a 10 mile radius in from 2½ to 3 hours utilizing 8

CH-46 aircraft. Also that to sustain a pace of l battalion lift per day and to resupply all participating units almost exclusively by helicopter requires an average of 18 CH-46s, 2 CH-53s and 6 UHIE gunships per day.

It is anticipated that the helicopter utilization data developed in Scotland II will prove an accurate planning guide for future operations of a similar nature.

B. FIXED WING OPERATIONS

1. Summary

A total of 1,118 CAS sorties were flown in support of operations expending 1740.5 tons of ordnance. TPQ operations both day and night totalled 235 sorties expending 438.9 tons of ordnance. BDA by A/O reports follows:

KBA	94	Structures	8
Secondary explosions	64	AW	21
Fires	5	AAA	6
Mortars	17	Fighting holes	33
RRTS	6	Bridges	3
Bunkers	380	Roadcuts	14
Trench	130M	Caves	2
Arty	2		

Fixed wing commitments were met with a 70% weekly frag that varied very little and specific daily requirements that totaled 30% of TF Hotel air allocation. Any commitments not covered by the weekly and daily frags were filled by scrambles from hot pad assets at DaNang and Chu Lai. There were only few instances of air not available when hot pads were depleted and those for only 30 minutes at maximum. The filling of air requirements from hot pad assets actually makes the single manager concept appear to be satisfactory. The best day of the operation totaled 106 sorties which is slightly more than 4 flights per hour for a 12 hour period. The maximum capacity was never reached.

The only changes required to accomplish the mission was close scrutiny of the daily and weekly frag when received. Depending on the weather, amount of contact and type of ordnance required, the scramble flights, both numbers and times, could almost be predicted.

2. Problems and Solutions

a. Late requests for preplanned air required constant phone calls from TF to Div to Wing to readjust requirements. Weekly frag remained the same, daily frag was required at Division by 1200.

Solution (a). Late requests for air support were changed by phone calls or if too late for that they were covered by hot pad scrambles.

b. Efficient use of fixed wing aircraft during operations is directly related to the availability of observation aircraft. This applies especially to Marine Fingerprint aircraft and observers when troops are in close contact. The amount of controllers airborne is directly related to the amount of fixed wing sorties that can be effectively used during combat operations. Observer aircraft over the CoRoc area was also a continuous problem. They were requested everyday for all daylight hours, however, very seldom were they on station continuously. All operations within Scotland II AO were continuously under threat from heavy artillery at CoRoc without any retaliating means except air strikes.

Solution (b). Fingerprint A/C did outstanding work in supporting entire operation. Working with as little as 3 A/C during some periods there was always at least one AO on station during daylight. Prior to particular operations commencing "Fingerprint" A/C would land and pick up overlay and brief of pending operation enabling them to be thoroughly familiar with operations.

The CoRoc problem remains continuous in nature. The reluctance of the enemy to expose his artillery positions in presence of observation aircraft makes it imperative that such A/C be continuously stationed in that area. No dependable coverage was experienced during the operation. Normally the day began without coverage and a LL call to 1st MAW TADC requesting coverage.

c. Close proximity of units at times presented coordination problems. Simultaneous air strikes in close proximity and normal artillery support for units in

UNCLASSIFIED

contact required close coordination with FSCC. Due to physical separation of FSCC and DASC this did present a problem at times.

Solution (c). Close proximity of operations required close coordination with G-3 to preclude simultaneous operations by regiments. Sequential operations were worked out and coordination problems were reduced. Future plans are for FSCC and DASC to be colocated which will reduce arty coordination problems.

3. Lessons Learned

- a. Coordination, briefing and adequate planning time is required for a smooth execution of plans. Some phases of the operation seemed to depend more on an element of luck than skill in their execution.
- b. Early arrival of air on station proved profitable after night attacks. If troops in close contact at first light, gunships used in close while fixed wing begin closing off retreat routes and working towards the friendlies.
- c. When units not in actual contact, and advancing, most efficient use of fixed wing was to attack probable bunker complex's AW sites, and mortar positions in front of troops. If sufficient air was used in this manner, enemy had little time to prepare for coordinated night attack.

COMMENTS BY 1ST MARINES (-) (REIN)

AIR OPERATIONS

- 1. HELICOPTER UTILIZATION. Intra-regimental passenger and supply movement during this operation presented a problem. The logistic helicopters were properly programmed by the Shore Party and therefore were not responsive to regimental requirements. The solution to this problem would be to schedule a section of CH-46's as regimental working aircraft at a specified time daily. The requirement for a C and C aircraft, responsive to the regimental commander, is another must for airmobile operations. This aircraft should be available at all times and would be used for C and C, VR, terrain analysis and other needs vital to the planning and execution of helicopterborne operations. While the aircraft would be controlled by the regimental commander, it would also be responsive to the needs of the battalion commander for the purposes.
- 2. HELICOPTER AVAILABILITY. Based on the assets available, helicopter availability was generally outstanding and is a tribute to the pilots and maintenance crews of MAG-39. The problem encountered was UH-34 time on station during the initial phase of the operation, due to the requirement to refuel at Dong Ha or Quang Tri. The establishment of an AvGas TAFDS at LZ Stud alleviated this problem. This brings up an important helicopter utilization factor. The early installation of a TAFDS in close proximity to the LSA should be a must in the planning for future operations. In addition, the LSA should be established as far forward as practicable.
- 3. TYPES OF HELOS FOR SPECIFIC MISSIONS. The CH-46D appears to be an ideal assault aircraft. In lifts over an appreciable distance some thought should be given to moving the troops to a nearby secure LZ by CH-53 and transferring them to CH-46's for the final assault phase. The UH-34 aircraft, while satisfactory for light cargo and passenger shuttle, is otherwise unsuitable for VR and C and C missions due to its limited visibility and pilot to passenger communications. The UH-1E appears to be ideally suited to this mission.
- 4. VISUAL RECONNAISSANCE AIRCRAFT. Although VMO-6 did an outstanding job in filling VR mission requirements from their limited pilot and aircraft assets, we feel that a minimum requirement exists for three aircraft on station in an operation of this size. One aircraft to



work for each maneuvering regiment to observe its rear, flanks and front and to prep future objectives. The third aircraft would recon the rocket and arty belt and interdict enemy lines of communication.

5. FIXED WING. While the single management system has managed to fill the bill with respect to quantity of sorties requested, it has not been responsive to requests for specific ordnance which vary in accordance with rapidly changing tactical and meteorological conditions.

6. <u>LESSONS LEARNED</u>.

a. There is a necessity for greater coordination between air and ground commanders prior to assaults. Initially, the ground commander should take a VR with a qualified helo representative to select tentative LZ's. This will give the ground commander better insight into the problems he may encounter in moving from the LZ area and would allow the air representative to make an intelligent estimate of LZ construction requirements, approach and retirement lanes and number of aircraft to be effectively utilized. Once the LZ's are constructed another VR should be made by the ground commander, the TAC(A) and the helo commander. At this time tactics would be discussed and actual landing sites picked. This overfly should be followed by a thorough briefing for communication and control procedures.

b. We found the most effective LZ prep to be an air prep followed by an artillery prep just prior to L Hour. This allows the gunship TAC(A) to control the air prep on and around the LZ and still provides for sufficient time for refuelling prior to his covering the assault. Placing the artillery prep last provides flexibility in that it can be shortened or extended at will to meet a flux in L Hour. The TAC(A) can cut off the artillery at will when he is ready to put the first wave into the zone. We utilize a final volley of willie peter or smoke to provide a visual signal that the final salvo has been fired. In addition a positive cease fire, tubes clear is given over the radio.



COMMENTS BY 4TH MARINES (-) (REIN)

AIR OPERATIONS

1. Item! Helicopter approach and retirement corridors should be designated and disseminated provided the ground scheme of maneuver will permit.

Discussion: The designation and use of corridors, dependent on aircraft checking in with the senior TACP, will preclude unnecessary curtailment of artillery fires and provide for optimum control of transient aircraft. Corridors do present definite air target areas; however, the increase in positive control, and safety of aircraft from friendly fires would seem to outweigh this disadvantage.

2. Item: All aircraft must check into and out of the operating area with the senior TACP in the AO.

Discussion: In many cases aircraft informed by DASC to contact the regimental TACP for clearance into the area, arrived at various LZ's well within the AO, without obtaining clearance. This endangered aircraft and caused numerous artillery check fires.

3. Item: Each battalion operating in the field should be provided with a discreet FM frequency for LZ control and a secondary TACP frequency for special operations (helo lifts, air strikes, etc.).

Discussion: The present procedure of assigning one common regimental/battalion TACP frequency for all air operations within the regiment, including the HST's at various LZ's, creates an unusable garbled net.

4. Item: Aircraft commanders of logistic lift aircraft must know specifically what their cargo is and the unit identification of user.

Discussion: In some cases cargo was delivered to various LZ's partly because it was ammunition, but the wrong calibre, or food but the wrong unit. If specifics of cargo composition and unit identification are passed to the regimental TACP by aircraft entering the AO, orderly handoff to the battalions can be effected.

5. Item: Regimental TACP's should work directly the area DASC.

Discussion: The generation of an intermediate

communication relay position net physically located within the DASC creates unavoidable delays in responsiveness. Higher command and control might well be accomplished by monitoring of the DASC/regimental net without termination short of the DASC.

6. Item: Visual reconnaissance overflights were scarce to not obtainable.

<u>Discussion</u>: The regimental commander went without VR overflights on numerous desired occasions. Battalion and company level overflights were not available. Two CH-34 type aircraft should be provided the regiment daily for VR purposes.

7. Item: Sufficient helicopter transport must be provided to accomplish resupply during daylight hours.

Discussion: On one occasion it became necessary to continue resupply operations during the late evening in order to complete normal priority water, ammo and food delivery that had not been completed during the day. The total days logistic resupply was of the same priority but due to the quantity and disposition of various using units, overtaxed available air transport units, necessitating nite resupply.

8. Final Item: During Phase II of Scotland II 1,119,750 of CAS and 257,250 of TPQ ordnance was dropped (better than 1 and 1 million) by 425 sorties of fixed wing A/C. Air accounted for 72 KBA's On the 14th of June, 87 CAS/TQP sorties were flown in support of one regiment - a record number.



".... for a fire base to survive, preoccupation construction must be accomplished."

F R T C C

V ARTILLERY/FSC

ARTILLERY SUPPORT IN MULTIPLE LANDING ZONES. support available to maneuver elements eperating from multiple landing zones is greatly increased by the positioning of artillery in these zones and operating under the firebase concept. The first problem to be addressed in this area involves the timely reconnaissance and selection of these positions, which must be accomplished by the artillery battery/battalion commander well in advance of occupation. Visual reconnaissance by artillery personnel in conjunction with the infantry commander enables both to become familiar with key terrain and perimeter defense problems in advance of the assault and occupation. Discussion of the tactics and techniques of establishing fire support bases and the subsequent support of multiple landing zones and infantry operations, is an area which belongs to the unit commanders who participated in the operation.

COUNTER-BATTERY REQUIREMENTS. Counter-battery efforts have been virtually ineffective. Throughout the "seige" of January - March, and in subsequent operations of Scotland II, the NVA have presented a highly effective counter-surveillance screen utilizing camouflage, frequent movement and anti-aircraft fires to deny observation in Laos. Experience gained during operations since January has shown that observation posts, crater analysis. photo reconnaissance and detailed map inspection of likely positions have failed to uncover NVA artillery locations. Our best weapon against the artillery threat continues to be constant aerial surveillance of the area southwest of CoRoc Mountain. General DAVIS and General HOFFMAN are acutely aware of the shortage of observation aircraft in this regard. To augment our rather meager observation assets, we have requested Air Force FAC's to remain on station and assist us in locating enemy artillery. It has been shown that the presence of observers is not in itself enough to detect hostile artillery, however, much can be done to assist our A0's.

There were numerous reports of active artillery received from maneuvering units throughout the operation. Only in a few cases, however, were these reports accompanied by azimuths or general directions. The cry of "artillery from CoRoc" does little to augment the data on suspected enemy positions held by the FSCC. However, azimuths from FO's or infantry commanders combined with azimuths from crater analysis at Khe Sanh Base will provide intersections which considerably narrow the areas

of suspected activity. Units in the field must provide continuous updated information on suspected enemy artillery locations. This information, when combined with known data from other sources will greatly assist the counter-battery effort, and reduce casualties. During forthcoming operations, all FO's and LZ security personnel should be instructed on flash and sound techniques for locating enemy artillery. The 12th Marines Counter-battery Information Center can assist in this respect. During the last six months, voluminous data has been collected from every source currently available in the northern I Corps area that pertains to hostile artillery. Flash bases have been established the southern DMZ, and counter-mortar radars strategically placed at fixed installations.

C. AIR/ARTILLERY FIRE SUPPORT COORDINATION. If one lesson was learned during Scotland I, it was that air and artillery could be employed simultaneously in the attack of targets providing proper fire support coordination procedures were followed. During subsequent operations in Scotland II, these procedures continued to work effectively. For example, a helo approach and retirement lane was effectively used by aircraft servicing LZ Robin and LZ Torch since helos were passed east of firebase Hawk and continued southeastward of the Hawk-to-target gun target lines.

Likewise, 175mm guns continued missions without checkfire by careful attention to their maximum ordinate and the altitude/course of TPQ aircraft which were safely passed at 18,000 feet for preplanned strikes without loss of 175mm gun support.

To assist the FSCC in performing its mission, direct communications with 3d Marine Division FSCC and 9th Marines FSCC were installed. In addition an artillery position map, a TRQ map and a Master Savaplane map were maintained. The FSCC received very timely requests from both regiments. This greatly facilitated the planning of the general support artillery and TPQ's. TPQ's and artillery fires can be combined or used in conjunction with one another to maximize fire support at a given time and place. This was proven time and time again.

D. LESSONS LEARNED

1. Requests for helicopter support of advanced artillery firebases must be made well in advance of

anticipated operations and must include details of HST coordination, number of personnel involved, number of external lifts and other details required for complete coordination.

- 2. The employment of extensive camouflage and anti-aircraft in defense of enemy artillery positions require constant surveillance on the part of all personnel. The presence of aerial observers is in itself a great deterrent to hostile artillery.
- 3. Crater analysis and azimuths from units in the field provide valuable information, which combined with data held by the FSCC and G-2, assists in the location of enemy artillery positions.
- 4. Experienced artillery observers operating with Air Force forward air controllers provide a valuable means of locating and attacking hostile artillery and rocket positions.
- 5. The establishment of restrictive fire plans, helicopter approach and retirement lanes, and other positive control measures should be utilized whenever possible. These measures, if promulgated to air and ground fire support agencies in advance, would positively solve almost all of the fire support coordination problems which existed during Scotland II.
- 6. The complexity of fire support coordination is increased as units operate in radio fringe areas. Fire support must be coordinated on the lowest level possible to insure troop and aircraft safety. The Regimental and Battalion FSCC's are best suited to perform this task, and must be given a larger share of this responsibility.
- 7. Final clearance for air and artillery missions rests with the supported infantry unit. Priorities for prep fires, TPQ's, and H&I fires must be established by the ground commander. Final clearance authority must rest with the FSCC.



COMMENTS BY 1ST MARINES (-) (REIN)

ARTILLERY/FSC

- 1. SUPPORT IN MULTIPLE LZ OPERATIONS. Assaults into LZ's Robin and Loon were preceded by 5 days of air and artillery strikes on all known or suspected targets which might affect operations in and around the LZ's. D Day preparation included fixed wing air strikes from L minus 90 to L minus 30, artillery preparation from L minus 30 to L hour, and suppressive fires on suspected artillery positions and suspected OP's from L hour to completion of the lift. This method had proved effective in this operation.
- 2. ESTABLISHMENT OF FIRE SUPPORT BASES. The selection of fire support bases was not applicable to the 1st Marines for this operation as the deepest penetration was to the initial LZ's which were within the fire capability of existing artillery positions.
- COUNTER BATTERY REQUIREMENTS. The limited effectiveness of target acquisition means for counter-battery fire continued to be a problem in this operation as it has on previous operations in the Khe Sanh area. Even with air observers, either Marines or Air Force, on station when incoming was being received, they have, with few exceptions, been unable to spot enemy artillery positions. Ground observation has also been ineffective, being limited to sightings of smoke drifting over the rim of CoRoc ridge or to rough azimuths to the sound of weapons firing. Increased efforts at crater analysis have thus far produced no confirmed targets. Continuing efforts are being made to improve our target acquisition capability. In the meantime, we will continue to base counter-battery targeting (except for direct sightings) on a combination of crater analysis and terrain analysis in the target area.
- 4. AIR/ARTILLERY FIRE SUPPORT COORDINATION. Standard fire support coordination procedures were utilized within the regiment and no major problems encountered. Heavy helicopter traffic into and out of LZ's Robin and Torch did cause an occasional delay in missions fired from LZ Hawk to the south. This delay was not excessive and no contact or line missions were affected. The abundance of current and active targets in the Scotland II area of operations has resulted in the Regimental and Battalion FSCC's, FAC's, and forward observers gaining valuable experience in the coordinated use of air and artillery.





As a result of this experience no difficulties were encountered during the operation, although, at times, only two to three thousand meters separated the battalions. Air and artillery were coordinated to permit maximum use of the capabilities of each during the same period.

- 5. LESSONS LEARNED. There were no new lessons learned during this operation, but several were re-emphasized.
- a. Adequate preparation of LZ and operation area with supporting arms paves the way for the infantry units making the assault.
- b. Every available means must be utilized to acquire counter-battery targets.
- c. Standard fire support coordination procedures work well when the personnel employing them have some coordinating experience under their belts.



COMMENTS BY 4TH MARINES (-) (REIN) ARTILLERY/FSCC

- 1. Artillery fire support from multiple firebases was not unique in itself, the uniqueness was the method by which the firebases (LZ's) were established totally by helo. The major lesson learned was that for a firebase to survive, preoccupation construction must be accomplished. This is of particular importance if the firebase is within enemy artillery range. No difficulties relative to the establishment or operations of the firebase were encountered that were not solved on the ground at the time by the commanders involved.
- 2. During multi-regiment operations with more than one direct support artillery battalion participating, a need exists for a common artillery headquarters for operational control of artillery units. The FSCC is not staffed for nor is it the appropriate agency to handle such things as requests for reinforcing fires. During the operation, the necessity for the FSCC to, in fact, function as tactical FDC caused a loss in responsiveness, which would have been greater if it were not for the personal attention given to this area by the fire support coordinator of Task Force Hotel and the commanders involved.
- 3. In that all the counter-battery assets were retained under either 3d MarDiv or Task Force Hotel control. no comment can be made relative to the effectiveness of the counter-battery program. Air/artillery fire support coordination experienced no difficulties that were of such magnitude as to at any time deny the infantry adequate fire from some source. The difficulties encountered would be minimized with a closer adherence to basic doctrine, i.e. stricter control of the use of helo approach and retirement lanes, directing fixed wing attacks perpendicular to the gun target lines. Artillery averaged six hours per day in "check fire" due to air. "Check fires" will never be eliminated completely, but this amount of time can be reduced. It is with pride that it is noted of the 13,381 105mm rounds and 2,103 155mm rounds heli-lifted in and fired from the two firebases, not one round fired resulted in a friendly casualty. Fire support from deep inserted firebases is no different in its application than any other, except in the method of insertion and the total reliance on the helo for its massive logistic needs. Close and continuous command attention must be given to the logistics situation, especially as relates to Class V, if success is to be realized.



DECLASSIFIED

l. Again this operation pointed out most vividly that aggressive application of basic doctrine relative to fire support, be it gunnery, fire support and coordination, or close air support will produce results.



DECLASSIFIED

".... artillery communication of the Regiment became totally saturated with the increased number of infantry battalions and direct support batteries during the latter stages of Phase I."

OMM

VI COMMUNICATIONS

A. SUMMARY

During the conduct of the recent operations Task Force Hotel was co-located with the 1st Marine Regiment. All communications to the 1st Marines was via land line telephone.

That communication which was established with the 4th Marines was on the whole satisfactory. Communications consisted of one source radio circuit. It is questionable as to whether or not that was a sufficient amount of communications. On all future operations in addition to a secure voice circuit, there will be at least four channel radio relay to each of the regiments from the Task Force.

B. PROBLEMS AND SOLUTIONS

1. Overcrowding of the Landing Zone Common Net

Problem. During the latter stages of Robin South, it became apparent that the Landing Zone Common Net of the 1st Marines was heavily overcrowded.

Solution. The 4th Marines were advised to start using their own LZ common net. During this period, however, the 4th Marines were in contact, and the issue was not pressed, as the operation was scheduled to finish up in a matter of three days after this problem became obvious.

Lesson Learned. The above problem was due to the fact that most of the battalions of the 4th Marines passed thru and were opcon to the 1st Marines, as they were committed to the Scotland II AO. As part of the 1st Marines they used the 1st Marines LZ Common Net. Subsequently as the battalions were phased over to the 4th Marines, they continued to use the established and functioning LZ Common of the 1st Marines for resupply, helo opns, etc.

Recommended Future Action. That in future operations, where battalions phase from OpCon of one regiment to another, those battalions will be directed to some up on the LZ Common of the regiment they are chopped to.



2. Initiating a Task Force FSCC Radio Net

Problem. During the recent operations the Task Force FSCC became convinced that monitoring the Fire Direction nets of supporting artillery battalions was less than an optimum method of coordinating fire support.

Solution. The Task Force is setting up a FSCC net to better coordinate supporting fires of the Task Force.

Lesson Learned. That it is much better for the Task Force to have a coordination net that coordinates, rather than monitors, the technical and tactical Fire Direction nets of the supporting artillery battalions.

Recommended Future Action. In all future operations the Task Force Hotel FSCC will have a Task Force FSCC net, in lieu of monitoring the artillery battalions' Fire Direction Nets.

3. Additional Equipment for an Artillery Battalion FDC

Problem. During the early stages of the operation Robin North it became apparent that the FDC of 1/11 lacked radio equipment. The snortage was caused by additional batteries from the 12th Marines being assigned to 1/11. The critical area was that 1/11 did not have enough radio assets to monitor the conduct of fire nets of the additional batteries.

Solution. Additional radios were borrowed from 3d MarDiv.

Lesson Learned. When it becomes known that a unit will be monitoring more than the usual number of radio nets, then additional assets should be procured prior to the commencement of the operation.

Recommended Future Action. Obtain additional equipment prior to the operation beginning.

4. Violations of Voice Communication Security. During all stages of the operations, a lack of voice communication security was noted. This problem was particularly evident on the air ground nets.

Solution. A real solution has not yet been



DECLASSIFIED

found. However, a message as sent to all units to remind them of voice communication security. (See CG TFH 110940Z Jun 68).

Lesson Learned. That valuable tactical information can be obtained by listening to our radio nets.

Recommended Future Action. Thorough indoctrination of all radio users on voice communication security, particularly just prior to operations.



COMMENTS BY 1ST MARINES (-) (REIN)

COMMUNICATIONS

1. SPECIAL PROCEDURES. The communications of the 1st Marines during Phase I of the Scotland II Campaign consisted of two main systems, namely one for the assaulting battalions and one for the area security and blocking battalions. The former required an all portable and highly mobile capability, while the fixed and semi-fixed battalions utilized additional heavier transportable equipment to provide telephone and secure speech radio communications. Up to six infantry battalions were under the operational control of the regiment during the conduct of the operation, which required a slight expansion of the communication system plus particular attention being given to radio net discipline. Special techniques employed that have become routine within the 1st Marines for heliborne assaults were use of the TACP Local Secondary frequency for the Helicopter assault Radio Net, and a separate LZ Common intended to be used exclusively within the regiment for resupply at all HST locations down to the company level. Additionally, the TACP Local Secondary frequency was utilized to provide a backup TACP net when the action became heavy in several of the battalion areas of operation. Extensive ground controlled close air strikes were employed, utilizing the new test UHF radio, the AN/PRC-93, for communication with the strike aircraft. To ensure positive communication throughout the duration of the operation, each battalion was required to carry a minimum of two RC-292 antennas and pay particular attention to the communication aspects of terrain in the selection of their CP locations.

2. COMMUNICATION PROBLEMS ENCOUNTERED DURING THE OPERATION WERE:

a. Poor communication security on voice radio nets, primarily on the TACP Local and LZ Common. Valuable tactical information was divulged in conversations between ground stations, air observers, and the resupply helicopters. The regiment issued a cautionary message to all 1st Marine units, and requested TF Hotel to inform the Airwing of the problem so as to minimize compromise of tactical information by air observers and helicopter pilots. TF Hotel then issued a message to both regiments, info 1st Wing in an attempt to stem the flow of sensitive tactical information over voice radio circuits. Additional improvement can still be obtained by proper indoctrination of pilots and aerial observers working with the regiment.

INCLASSIFIED

- b. Congested Air-Support Nets. Upon the entry of the 4th Marines into the Scotland II AO, several of the 4th Marines battalions who had been under the operational control of the 1st Marines continued to use the 1st Marines LZ Common Net, and occasionally the TACP Local Net. This caused confusion and congestion on the 1st Marines nets. The solution, of course, is to provide each regiment engaged in operations requiring extensive air support, frequencies enough to permit operation of the additional nets utilized by 1st Marines, as discussed earlier.
- c. Artillery Communications. The artillery communication of the regiment became totally saturated with the increased number of infantry battalions and direct support batteries during the latter stages of Phase I. It is essential that each infantry battalion engaged have a clear Battery Conduct of Fire Net. This problem was ultimately solved when Task Force Hotel provided the artillery battalion additional radios sufficient so that each battalion engaged could have its own Battery Conduct of Fire Net.

3. LESSONS LEARNED

- a. Aerial observers and pilots participating in an operation should be pre-briefed on the tactical situation, friendly disposition of troops, and current operational plans. This then precludes the necessity for discussing these matters in the clear over voice radio circuits.
- b. When engaged in an operation requiring extensive air support, two additional radio nets are necessary for the conduct of the operation: These are named, within the 1st Marine Regiment, the Helicopter Force Assault Net and the Landing Zone Common Net.



COMMENTS BY 4TH MARINES (-) (REIN)

COMMUNICATIONS

- 1. Planning Guidance for the operation was to travel as light as possible and yet carry out the assigned mission of the regiment. Radio communications was declared as the primary means of communication. A total of 6 infant. y and air nets were established which included a KY=: capability on the tactical nets.
- 2. The availability of CH-53 helicopters to move the AN/MRC 110 radio jeep and power supply for the KY-8 covered was very critical. The delay in moving the AN/MRC-110 from Khe Sanh to LZ Robin for almost two days caused some difficulty in initially maintaining a covered capability on the one (1) TF Hotel tactical net. If a covered capability is directed, the lifting of the AN/MRC-110 and the fuel resupply of this vehicle should receive a high priority. In one case it took 2 days before a resupply of fuel was received.
- 3. A division wide call sign and frequency change, promulgated without the knowledge of some of the units, caused undue problems during the last day of the operation It is recommended that division wide Call Sign and Frequency changes be made before or after any large operation. In one case a unit was in heavy contact with the enemy and could not change.
- 4. One unit had some difficulty in establishing direct communications with the regiment due to the non-availability of long range antennas (RC-292). It is recommended that all units insure that their plans call for all necessary communication equipment to carry out their assigned mission.
- 5. Voice Radio Relay equipment would have eliminated a considerable amount of the traffic that went out over tactical circuits.

It is recommended that the new multiple equipment associated with the AN/PRC-25 be made available as soon as possible. This component is easily transportable, battery-operated and is less cumbersome than the AN/MRC-62 and the AN IRC-27 radio relay equipment.

6. All battalions under the operational control of the lst Marines remained on the lst Marines Landing Zone Common Net.



DECLASSIFIED

It is recommended that all regiments be assigned a separate frequency for usage on a Regimental LZ Common Net, this frequency to be other than the TACP frequency.



ADDENDUM:

Comments by Commanding Officer 4th Marines

1. Rather than try to cover all items across the board, I will confine my remarks to the following subjects:

Fire Base

Intelligence

Tactics

The Parent Regiment

- 2. FIRE BASE. "Robin South" confirmed that fire base techniques are well within the operational scope of the Marine Corps, both conceptually and doctrinally. There are, of course, modifications which must be made in our operations and logistics. The latter points up the need for "prepackaging" of supplies and equipment earmarked for the fire base. Standard units of materials need to be staged, to include hand tools, field fortifications, bunker materials and other items standard to this type of operation. Small dozers and backhoes, helicopter transportable, should be included in the Marine Corps inventory to eliminate reliance on Army lift. Experience will improve our ability to manage the fire base concept. "Robin South" gave us a running start.
- 3. INTELLIGENCE. There never seemed to be a systematic application of intelligence means at anytime during the operation. As a commander I felt frustrated in any attempt to base tactical decisions on hard intelligence. Fast readouts of photo, SLAR, IR, and sensors were not available. POW's were long delayed in the evacuation chain, resulting in their information being of little except historical value. VR for commanders at all levels was nearly non existent. Timeliness must be the key to future intelligence gathering in future operations of this type. While it is easy to fault intelligence as being too little and too late, a definite and special need for improvement is apparent at all levels of command.
- 4. TACTICS. Except for fire bases, the tactics employed in "Robin South" are similar to those used successfully in operations by the 4th Marines against the 27th Independent Regiment southeast of Camp Carroll. Two basic principles are: keep on the move, and make full use of supporting fires.



5. THE PARENT REGIMENT. To my knowledge, this was the first opportunity for the 4th Marines to operate as a "Regiment" in the last 18 months. An indefinable but inherent sense of pride and esprit seems to develop when the regiment operates as an entity. The separate parts add up to the greater whole. This is, of course, true of other regiments too. The long range application of this practice can result in greater efficiency and standardization. It is known that this is the intent division wide - and I hope it comes to pass.

6. LOGISTICS. For "logistics" read "helicopters", for in this type of operation there is no substitute or alternative. Much has been said today about the helicopter in its supporting role. My general observation is that it excelled in the surge effort but sometimes fell short on the routine efforts. In summary, the entire effort was a fine display of air-ground teamwork.



SUMMARY BY MAJOR GENERAL DAVIS

I consider the critique just held an essential part of the operation. I shall confine my remarks primarily to its impact on future operations.

The point of sufficient planning time was emphasized by many. Recognizing the advantages of lengthy planning time, we must also understand that operations must retain maximum flexibility, reacting swiftly to a detected or developing enemy situation. Normally, extensive planning time will be the exception rather than the rule. We must develop SOP's for this type of operation and support; when the opportunity presents itself to hit the enemy hard, we must be ready to deploy and operate with a minimum of "paper preparation."

As we develop and refine techniques for these operations, our constant goal must be to improve our efficiency. I have already observed this objective being achieved in the latter stages of the just completed operation. Basically, we must strive to get the job done better with fewer assets.

Our concept is sound in view of current enemy tactics. We do not want to be in a position to attack uphill against a well dug-in, well camouflaged enemy who, under these conditions, could hold up and inflict casualties on up to one of our battalions with one of his platoons. Instead we must follow closely on the heels of heavy LZ preparatory fires, insert our helicopterborne force on or near the tops of hills and attack down these hills along multiple routes. On several occasions this practice caused the enemy to vacate positions that would have been extremely difficult and costly to assault.

I had and still have misgivings about certain of our capabilities to conduct operations of this sort. An ability to make a close air reconnaissance of our area of operations in order to select the best possible LZ's, free from significant enemy presence and enemy observed fires, and free from physical obstacles is absolutely mandatory. We must avoid situations where our troop-loaded helicopters are first to test the route and the LZ. We must have one responsible officer able to say confidently based on scouting operations that the LZ is clear, and that there is a safe way in and out for the helicopters. Who that officer is to be -- possibly a VMO Commander -- has yet to be determined.



Another area for improvement is in the development of the fire support bases. Jurrently we don't move quickly enough in readying these bases for the artillery batteries. Engineering development requires heavy equipment -- which is helicopter transportable. Gun pits plus portable bunkers for command and control and overhead cover for infantry and artillery troops are needed, all within the first day. Ammunition storage must be defiladed and dispersed. The artillery should be in place and firing by dark on D-Day. We must continue to rely on the Army helicopter "crane" particularly in the high altitude mountainous areas, for the insertion of heavy engineer equipment and medium artillery.

Delay in troop landing following preparation fires and delay in establishing fire support bases sacrifices our most valuable commodity in operations of this sort: Shock Effect! We must develop and standardize techniques and procedures that insure the rapid and efficient concentration of men and materials to fully exploit our technological advantages over the enemy.

Looking forward to new but similar operations, I add these random comments:

- (1) Efforts are being made through command channels to insure a greater responsiveness of arclights (massive air activities) which complement the scheme of maneuver. Progress is being made.
- (2) In view of the current enemy situation and considering his limited capabilities, we can afford to be bold. There is no need to withhold a reserve battalion in each regiment -- all battalions can be committed. We have the ability to extract the forces least engaged and employ them where needed. In an unusual situation, forces can be requested from outside our AO. The more units initially employed the greater our shock action on the enemy and reduction of his routes of escape.
- (3) Commanders must pay particular attention to the location of friendly artillery and the ability to detect and counter enemy artillery. Can our artillery be emplaced at existing static positions prior to the operation? Where does artillery have to be inserted? Will the 4.2 inch mortar battery, with its mobility and comparatively minimal site development requirement, do the support job for us in selected fire support bases? Or, will we require the range capability of 105mm or 155mm

batteries? Can artillery be on a flank to minimize coordination problems with helicopters? Has countermortar radar been requested to scan danger areas? Do we have adequate on-station aerial surveillance? Are we using the latest of our available detection devices (sound systems, Mithras Fire Watch)?

Looking back on the Scotland II June campaign, I consider it a magnificient success. The air and ground effort was truly outstanding -- both elements being especially responsive to short notice employment. I commend Gen HOFFMAN and his staff, the commanders and staffs of the 1st and 4th Marines, Gen HILL and the 1st MAW, the artillery units from the 12th Marines and all other participants for their contribution to the success of this operation. Thank you also for your preparation and presentation of this critique. Due to this exchange of information, I know subsequent operations will be even better.



HEADQUARTERS 3d Harine Division (Rein) FMF FPO San Francisco 96602

3/LRB/wlk 18 June 68

DIVISION MEMORANDUM

From: Commanding General

To: Distribution List (Special)

Subj: Critique of Scotland II Campaign

Encl: (1) Critique Schedule

- 1. Purpose. To conduct a critique on the Scotland II Campaign in order to profit by experience gained and to thereby improve techniques for future operations. Specifically, to present and discuss lessons learned during the past operation, to identify problem areas and strong points, to further develop procedures and techniques for air mobile operations, and to facilitate an interchange of information.
- 2. Background. From 2-18 June, TF Hotel conducted operations south of Route #9 in the Scotland II Campaign involving extensive helicopter troop lift, the establishment of forward fire support bases, and the logistical support of up to two regiments conducting simultaneous operations.

3. Action.

- a. Commanding General, Task Force Hotel, his staff and representatives from regiments that were in the operation are requested to participate in the critique generally covering the topics and following the schedule outlined in enclosure (1).
- b. Representatives of the Commanding General, 1st MAW are requested to participate in the critique as outlined in enclosure (1).
- c. The time and place of the critique will be announced by separate message.
- d. It is requested that briefers prepare written versions of presentations for consolidation and subsequent publication.





4. Self-Cancellation. 30

30 June 1968

Colonel, U.S. Marine Corps Deputy Chief of Staff (Plans)

DISTRIBUTION:

Each Person or Staff Billet Cited in Enclosure (1).



CRITIQUE SCHEDULE

Deputy C/S (Plans): Critique Coordinator 0900-0905 Introduction 0905-0915 CG, TF Hotel Scope of Operation 0915-0925 TF Hotel Staff Operations: Planning; Tactics Employed; Use of Forces; Size; Type Units; Air and Ground Coordination; Selection of Fire Support Bases. 0925-0935 Regt Comment: 1st and 4th Marines: Operations 0935-0950 TF Hotel Staff Intelligence: Collection and Analysis; Allocation of Tasks; Reconnaissance; Processing of Information; Speed, Timeliness and Application of Intelligence by Operating Units; Use of AO Assets; POW. Document and Material Exploitations; Use and Availability of Sensor Devices. 0950-1000 Regt Comment: 1st and 4th Marines: Intelligence TF Hotel Staff Personnel: 1000-1005 Casualty Reporting; Replacements 1005-1010 1st and 4th Marines: Regt Comment: Personnel 1010-1025 TF Hotel Staff Logistics: Helo Resupply Procedures and Techniques; Medical Evacuation of Personnel; Surface Resupply (including security); Adequacy of Class V Lifted to Various Positions: Lead Time Requirements for

Enclosure (1)



Airlifted Resupply.

DECLASSIFIED

1025 - 1035	Regt Comment: 1st and 4th Marines: Logistics
1035-1045	Break
1045 -105 5	AWC, 1st MAW Scope of Air Operations
1055-1110	TF Hotel Staff Air Operations: Helicopter Utilization; Helicopter Availability; Types of Helicopters for Specific Missions; VR Aircraft; Fixed Wing.
1110-1120	Regt Comment: lst and 4th Marines: Air Operations
1120-1130	TF Hotel Staff/12th Marines Artillery/FSC: Support in Multiple LZ Operations; Establishment of Fire Support Bases; Counter- battery Require- ments; Air/Arty Fire Support Coordination.
1130 -1 140	Regt Comment: 1st and 4th Marines: Artillery/FSC
1140-1145	TF Hotel Staff Communications: Problems/Solutions
1145-1150	Regt Comment: 1st and 4th Marines: Communications
1150-1215	Division Staff: Question, Answer, Discussion: G-1, G-2, G-3, G-4, AirO, FSCC, CEO.
Additional	attendees invited: COs and S-3s of 3d and 9th Marines, COs of separate Bns, 3d MarDiv.

Enclosure (1)

