CHAPTER 26
Artillery and Reconnaissance Support in III MAF

Marine Artillery Reshuffles—The Guns in the North
Mini-Tet and the Fall of Ngog Tavak and Kham Duc—Operations Drumfire II and Thor:
Guns Across the Border—Fire Base Tactics—Marine Reconnaissance Operations

Marine Artillery Reshuffles

While not beset by the doctrinal debates and inter- and intra-Service differences that characterized air support in 1968, Marine artillery also went through a period of trial and tribulation. At the beginning of the year, two Marine reinforced artillery regiments, the 11th and 12th Marines, supported the 1st and 3d Marine Divisions, respectively. The 11th Marines provided the artillery support for the 1st Marine Division at Da Nang while the 12th Marines supported the far-flung 3d Division. The 12th had batteries spread from Dong Ha, near the coast, westward to Khe Sanh, and south to Phu Bai. In effect, Marine artillery extended from the DMZ to south of Da Nang in support of Marine and allied infantry.

Containing about 120 pieces, not as large nor as spread out as the 12th Marines, Lieutenant Colonel Clayton V. Hendricks' 11th Marines, the 1st Marine Division artillery regiment had an equally daunting task. The 11th Marines controlled an impressive amount of firepower, ranging from 175mm guns to 4.2-inch mortars.* Lieutenant Colonel Hendricks had a largely expanded force including two U.S. Army 175mm gun batteries. While his 1st Battalion was attached to the 12th Marines,** he retained command of his other three battalions and was reinforced by several general support FMF separate units. These included the 3d 8-inch Howitzer Battery and the 3d 155mm Gun Battery. He also had attached to his command the 1st Armored Amphibian Company with its LVTH-6s, amphibian tractors equipped with a turret-mounted 105mm howitzer.1

Lieutenant Colonel Hendricks had a two-fold mission, which included both artillery support of the Marine infantry operations and the defense of the Da Nang Vital Area from ground attack as the commander of the Northern Sector Defense Command. While not facing the array of North Vietnamese artillery that the 12th Marines did along the DMZ and at Khe Sanh, the 11th Marines was engaged in a counter-battery campaign of its own against the very real rocket threat to the crowded Da Nang Airbase. With the introduction by the Communist forces of long-range 122mm and 140mm rockets in 1967 against the Da Nang base, the Marines countered with what they termed the "rocket belt," extending some 8,000 to 12,000 meters, about the outside range of the enemy missiles. Employing a centralized control system, the 11th Marines erected a series of artillery observation posts and deployed its artillery so that each part of the rocket belt was covered by at least two firing batteries. By the beginning of 1968, the regiment had reduced the average response time from the launch of an enemy rocket to answering fire from the American guns to about three minutes.2

*With the arrival of the 2d Battalion, 13th Marines with the 27th Marines at Da Nang in February, the 11th Marines also took operational control of this battalion. The 2d Battalion included 107mm howitzers, a 4.2-inch mortar tube mounted on the frame of the 75mm pack howitzer of World War II vintage.

**Colonel Robert C. V. Hughes, who as a lieutenant colonel in 1968 commanded the 1st Battalion, 11th Marines, noted that while the battalion was attached to the 12th Marines, it remained in direct support of the 1st Marines, a 1st Marine Division infantry regiment, also at the time under the operational control of the 3d Marine Division. In January 1968 it was at Quang Tri and then moved with the 1st Marines to Camp Evans, and then to Phu Bai. See Chapters 5–6. Hughes wrote, "We were never in ground contact with our rear echelon/admin support unit during the entire period." He declared that "Our primary source of spare parts was quite often the damaged and abandoned equipment encountered on our line of march." The 1st Battalion during this period consisted of "Hq Btry, A and B Batteries, Prov 155mm howitzer Btry; and a reduced 4.2 Mortar Btry." Col Robert C. V. Hughes, Comments on draft, n.d. [Jan95?] (Vietnam Comment File), hereafter Hughes Comments.

***See Chapter 6 for discussion of the rocket threat at Da Nang. Colonel George T. Balzer, who as a lieutenant colonel commanded the 3d Battalion, 11th Marines in early 1968, recalled that he had his command post on Hill 55, Nui Dat Son, south of Da Nang, together with his fire direction center, Battery K, 4th Battalion, 11th Marines, and his 4.2-inch Mortar Battery. He observed that the amount of coordination "necessary to deliver artillery fire into areas where friendly forces were constantly dueling with enemy forces is tremendous." The Marines at Da Nang manned a network of observation towers equipped with azimuth measuring instruments and maintained a list of accurately identified coordinates throughout the TAOR. With constant alerts and testing of the system, Balzer claimed that "utmost proficiency was
At night, the 3d 8-inch Howitzer Battery at Da Nang fires one of its self-propelled M55 8-inch howitzers, which had a maximum range of nearly 17,000 meters.
By late 1967, the 12th Marines had become the largest artillery regiment in the history of the Marine Corps. If one included the artillery at Khe Sanh, the

achieved and maintained. Once the Marines manning the tower obtained "an intersection of two, preferably three . . . bearing[s] . . ., the critical coordination of friendly forces and potential enemy locations would precede the initiation of counter-rocket fire." He stated that the "authority to initiate fire was delegated to battery commanders." His "Golf Battery, 3/11 on Hill 10, held the response record of less than fifteen seconds . . . ." According to Balzer, the towers identified enemy rockets about to be launched "just as Golf was prepared to fire [a] Harassing and Interdiction mission . . . ." After being loaded with 'high explosive projectiles and charge . . . [with] A minor adjustment to azimuth and quadrant, . . . the six howitzers were ready to fire in a direct fire mode." This incident resulted in the capture of the 122mm rocket launcher. Colonel Balzer observed that "the first rounds in a rocket attack are 'free' for the enemy. It is only for the subsequent rounds that counter-battery fire may be effective. Warning messages may be transmitted to potential target areas by the observers of rocket launchers. The observers note the angle of the flame trail and thereby exclude target areas which are not involved." He concluded, "coordination of friendly patrol schedules, definite times for occupation of specific areas, and continuous monitoring of same are all critical to ensure that counter-battery fire may be initiated safely. Time lost in determining which areas are free of friendly forces after a rocket attack has been launched gives the enemy additional time to complete his mission with impunity." Col George T. Balzer, Comments on draft, dtd 10Dec94 (Vietnam Comment File).

12th Marines had some 180 field pieces of mixed caliber ranging from the 175mm gun to the 4.2-inch mortar. Colonel Edwin S. Schick, Jr., the regimental commander, had under his operational control his four organic battalions, the 1st Battalions of both the 11th and 13th Marines; the 1st 8-inch Howitzer Battery; the 5th 155mm Gun Battery; two provisional 155mm howitzer batteries, and the 2d Platoon, 1st Armored Amphibian Company with its six LVTH-6s. In addition, he also had subordinate to him the U.S. Army 108th Field Artillery Group and the Marine 1st Field Artillery Group (1st FAG). The Army group functioned as the administrative and tactical headquarters for the Army 175mm gun and 105mm howitzer batteries attached to the Marine regiment while the 1st FAG performed a similar role for the Marine units. All told, as the year began, the 12th Marines controlled about 35 firing units positioned at 12 different locations spread from Khe Sanh to Phu Bai.

*Colonel Schick, a veteran of both World War II and Korea, observed in his comments that his entire career "has been supporting arms." He had assumed command of the 12th Marines in May 1967 and remarked on the wide dispersion of the 12th Marines which until early 1968 had its main headquarters with that of the division at Phu Bai. According to Schick the infantry often was unaware of the firepower
During January, with the perceived increasing threat in the north, the Marine artillery, like the infantry units, participated in Operation Checkers, the northward deployment of the Marine divisions. With the establishment of the 1st Marine Division Task Force X-Ray at Phu Bai and the relinquishment of units by the 3d Marine Division, there was a corresponding shuffling of Marine artillery between the two Marine divisions.* The idea was to concentrate the 12th Marines in northern Quang Tri and for the 11th Marines to cover both Quang Nam and Thua Thien Provinces.

In mid-January, Task Force X-Ray at Phu Bai and the 11th Marines assumed operational control of the 1st Field Artillery Group, now under Lieutenant Colonel John F. Barr. The 12th Marines also gave up operational control to Lieutenant Colonel Barr of the 1st 155mm Gun Battery and a provisional 155mm Howitzer Battery, both at Phu Bai. Lieutenant Colonel Hendricks also received the return of his 1st Battalion which remained in support of the 1st Marines at Phu Bai and deployed his 2d Battalion from An Hoa south of Da Nang to the Phu Loc sector northwest of the Hai Van Pass area in southern Thua Thien Province.

*See Chapter 6 also for the establishment of Task Force X-Ray.
A Marine M109 self-propelled 155mm howitzer at Phu Bai fires in support of Marine infantry.
The 155mm howitzer had a range of slightly more than 15,000 meters.

The Guns in the North

For the Marines at Khe Sanh, 21 January literally opened up with fireworks. While the Marine defenders repulsed several enemy assaults on hill outposts, enemy mortar and 122mm rocket bombardment exploded the main ammunition supply point on the base itself. About three or four rounds made a direct hit “and the ammunition cooked off for the next 48 hours.” Despite the destruction of nearly 11,000 rounds of ordnance, the number of casualties was surprisingly low, 14 Marines dead and 43 wounded. Hundreds of “hot duds” fell near the firing positions of three guns of Battery C, 1st Battalion, 13th Marines. One of the enemy rounds knocked out the artillery battalion’s generator for its field artillery digital automatic computer (FADAC), but the Marine artillerymen, relying on manually computed firing data, continued to return counter-battery fire at suspected NVA firing positions.

While the enemy bombardment resulted in a temporary shortage, resupply flights soon brought the Marine ammunition stockpile at Khe Sanh up to adequate levels. The American artillery, nevertheless, worked at some disadvantage. With some of the enemy’s large guns at Co Roc in Laos, some 15 kilometers to the west, just outside of the maximum range of the 105mm and 155mm howitzers of the 1st Battalion, 13th Marines at Khe Sanh and the U.S. Army 175mm guns at Camp Carroll, the North Vietnamese 122mm, 130mm, and 152mm howitzers

*See Chapter 8 for the attacks of the 2d NVA Division at Da Nang.
**Nearly 800 of the missions and 5,000 of the rounds were fired during the last few days of the operation. According to the 11th Marines in its February report, the artillery in support of the Hue battle had fired during the month 1,049 missions and 7,357 rounds as contrasted to the much higher figures contained in the March report which covered the period 1 February–2 March 1968. Interestingly enough, the March report on the number of enemy dead was about 200 less than the February report. 11th Mar Comd Cs, Feb and Mar 68.

***See Chapter 14 for the events of 21 January at Khe Sanh.
Marines of Battery W, 1st Battalion, 13th Marines at Khe Sanh are seen preparing to load a M114A 155mm howitzer. The M114A in contrast to the M109 is towed rather than self-propelled, but has the same range.

continued to shell the Marine base, unmolested by artillery counterfire.*

Still the enemy was in no position to make a final assault on the Marine base. Complemented by a massive air effort in Operation Niagara** ranging from B–52s to helicopters, Marine artillery supplemented by the Army 175mm guns kept the enemy at bay. In one of the more climactic moments, American sensors on 3–5 February indicated the possibility of a North Vietnamese regiment moving into an attack position. In coordination with supporting B–52 Arclight strikes, the American artillery including both the 1st Battalion, 13th Marines and four batteries of 175mm guns blasted the suspected North Vietnamese positions. While unable to confirm the extent of enemy casualties, U.S. intelligence officers believed that the heavy and accurate artillery fire (almost 2,000 rounds from the 1st Battalion, 13th Marines alone) prevented these troops from reinforcing the North Vietnamese attack on Hill 861A that occurred at the same time.***

While U.S. supporting arms failed to prevent the overrunning of the Special Forces Camp at Lang Vei south of Khe Sanh a few days later, Marine gunners still made a valiant effort. In their attempt to keep back the North Vietnamese attackers, the 105mm howitzers of the 1st Battalion, 13th Marines employed, perhaps for the first time in Vietnam, the still-secret Controlled Fragmentation Munitions (CoFraM), otherwise known as “Firecracker Munitions.” A CoFraM shell consisted of a number of small bomblets, which when ejected, spread over a wide area, with each bomblet exploding like a small grenade. It was considerably more lethal against troops in the open than the standard high explosive projectile. How effective the new munitions were at Lang Vei can only be a matter of conjecture.****

***The 1st Battalion, 13th Marines at Khe Sanh consisted of three 105mm howitzer batteries, a provisional 155mm howitzer (towed) battery, and a 4.2-inch mortar battery. See Chapter 14 about the question of the location of the enemy artillery pieces in Laos.

****See Chapter 23 for Operation Niagara.

**See Chapter 14 for Operation Niagara.

***See Chapter 14 for the account of the attack on Hill 861A.

****Lieutenant Colonel John A. Hennelly, who commanded the 1st Battalion, 13th Marines at Khe Sanh, stated that he fired only a few of the CoFraM rounds. He doubted very much their effectiveness. LtCol John A. Hennelly, Comments on draft, dtd 30ct94 (Vietnam Comment File). Colonel Edwin S. Schick, Jr., the 12th Marines commander, also emphasized the judicial use of the new munitions. Schick Comments. See Chapter 14 for further discussion of the use of CoFraM at Lang Vei. The 11th Marines at Da Nang fired their first CoFraM mission on 15 March 1968. On that date, the 1st Platoon, 3d 8” Howitzer Battery fired two rounds in support of a reconnaissance mission. An observer reported that the “munitions . . . covered an area 200 x 300 meters with excellent target coverage.” According to the report, it resulted in enemy killed and that the Communist troops “appeared to be surprised, shocked, and quite confused. Those who were not hit by fragments remained standing and immobile.” 11th Mar ComdC, Mar68, pp. 2–3.
Marines are seen stacking empty 105mm casings at Khe Sanh, indicative of the artillery support provided for the base. In the background, partially obscured by clouds, is Hill 950.

While Khe Sanh was the center of attention for MACV and the press, the war along the DMZ had not diminished. During January and February 1968, in addition to Khe Sanh, the 3d Marine Division had fought a series of heavy engagements ranging from the sector just north of Camp Carroll to the Cua Viet along the coast. During these two months, in support of all units, the 12th Marines fired a total of 411,644 rounds, 212,969 in January and 198,675 in February. The number in January represented a 12 percent increase over the previous month, and while February's total was six percent lower than January, it was still much higher than the December figure.* It was not until March that the 3d Marine Division artillery regiment reported a significant reduction in its fire support. In some 30,000 missions, only 20 percent of which were observed,** the 12th Marines expended nearly 190,000 rounds of all calibers as enemy activity exhibited a "reduction in aggressiveness." For this three-month period, the 12th Marines fired about 15 to 17 percent of its total rounds in support of the 26th Marines at Khe Sanh with the rest in support of the other regi-

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*There are differences between the total rounds reported fired in the 12th Marines reports and those of the division. While the figures are higher in the regimental reports, the ratios between the sources remain roughly the same. The totals listed above are based upon the reports in the 12th Marines command chronologies as they contain a breakdown of missions. The 3d Division reports only give totals and it is assumed that these did not include some of the categories listed by the regiment. See 12th Mar ComdCs and 3d MarDiv ComdCs, Dec67–Feb68.

**Lieutenant Colonel John A. Hennelly, the commander of the 1st Battalion, 13th Marines, explained that at Khe Sanh with both the infantry and artillery forward observers locked into defensive positions at both the base and the hill outposts, "there weren't many 'eyes' to handle observed fire missions." He mentioned, however, that when Marine aerial observers (AOs) were "on station . . . we could get a lot done, counter-battery and otherwise. Without Marine AOs we were in a hurt locker." According to Hennelly, the Air Force AOs were less effective: "They kept insisting that they were flying at tree top level—but I never saw any 10,000-foot trees over there." Hennelly Comments.
ments of the 3d Marine Division and in counter-battery fire along the eastern DMZ.*

By this period there had been a change in command relations in the north. MACV (Fwd) in early March became Provisional Corps Vietnam (Prov Corps) under Lieutenant General William B. Rosson and in a reversal of roles became a subordinate command of III MAF.** Under III MAF, Prov Corps was now responsible for the two northern provinces of I Corps and took under its operational control the two Army divisions there, the 1st Air Cavalry and the 101st Airborne, as well as the 3d Marine Division. With the concurrence of MACV and III MAF, General Rosson changed the designation for the Khe Sanh campaign from Operation Scotland to Operation Pegasus. In Pegasus, Rosson placed under the 1st Air Cavalry Division the 1st Marines, the 11th Engineers, and a Seabee battalion.*** This new operation resulted in the ending of the siege of Khe Sanh. On 8 April, Army cavalrymen linked up with elements of the 26th Marines and one week later Pegasus came to an end. The 1st Cavalry then deployed into the A Shau Valley in Operation Delaware, but left one brigade in the Khe Sanh sector under the operational control of the 3d Marine Division in Operation Scotland II.****

The change in command relations also affected the command structure of the artillery units in the north.

***Colonel Robert C. V. Hughes, who commanded the 1st Battalion, 11th Marines in 1968, related that his battalion continued to support the 1st Marines throughout this period. He recalled that his battalion received a field artillery digital automatic computer (FADAC) just prior to the Hue City battle. This permitted his Fire Direction Center to control the "fires of the varied caliber batteries" assigned to him ranging from 4.2-inch mortars to 155mm howitzers (towed). According to Hughes, his battalion kept the FADAC "in continuous operational control through all subsequent operations including Pegasus." When the 1st Marines relieved the 26th Marines at Khe Sanh, 1/11 relieved 1/13. Hughes wrote that "all of 1/11's rolling stock was turned over to 1/13 to permit their departure from Khe Sanh. All of 1/13's inoperative equipment had been pushed to the far side of the air strip along the cliff face. We were able to place all but one of the pieces back in service." Hughes Comments.

****See Chapters 13, 14, and 16 for Operations Pegasus, Delaware and Scotland II.

Provisional Corps took over direct control of the U.S. Army 108th Field Artillery Group and the Marine 1st 8-inch Howitzer Battery and 5th 155mm Gun Battery, which all had been subordinate to the 12th Marines. These units were responsible for "general support" and "reinforcing" fires of the 12th Marines, which remained under the 3d Marine Division.*****

The increasing deployment of both Marine and Army units to northern I Corps had already resulted in a much more complex coordination control of supporting arms. As early as the latter part of 1967, the 3d Marine Division had taken steps to automate further its fire support control systems. By March of 1968, the division had created in its fire support coordination center (FSCC), its staff agency for the coordination of all supporting arms, a fire support information center (FSIC). Using sophisticated computer techniques, the idea was to provide more realistic firing data that could be used in counter-battery fire and to refine the target list based upon previous fire missions and sightings. Limited computer memory and the use of a punch card stored data base, nevertheless, restricted "real time" information retrieval in the FSIC." ******

General Cushman recalled several years later that the fire coordination and artillery support in the north during 1967 and early 1968 was not all that he wished that it was. While not mentioning any specific incidents such as the unusual number of "friendly fire"
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incidents that occurred in the 3d Division during January 1968,* he related "a lot of Marines either weren't getting educated or had completely forgotten how . . . to set up a fire support coordination center and get it operating properly." He stated he "particularly noticed this up at Dong Ha. I noticed it, Westmoreland noticed it, gave me hell about Marines not knowing their business."**

General Cushman was not alone in his criticism. Brigadier General Louis Metzger, the 3d Marine Division assistant division commander in January 1968, later faulted U.S. artillery doctrine which called for firing artillery "at selected unobserved targets at certain intervals with the hope of catching the enemy at the point of impact or denying him movement." According to Metzger, this "was not very effective . . ." and resulted only in the "expenditure of large amounts of ammunition." While admitting that "massive fires may be useful in certain combat situations," they were "of uncertain value in many others."***

Still, by the end of March, the 12th Marines and the 3d Marine Division had taken several steps to improve artillery support. While acknowledging less enemy activity during the month, the author of the division's command chronology attributed a decrease of artillery ammunition expenditure more to "selective targeting and increased command emphasis on the judicious use of ammunition." In April, the division reported that it continued to place emphasis upon "the selection of the number of rounds and type fuze appropriate to the target under attack." Moreover, it claimed that the FSIC continued to "improve the accuracy and timeliness in reporting fire support information." During May, the 12th Marines drafted a new SOP (Standing Operational Procedure) for the 3d Division Fire Support Coordination Center that incorporated the changes in the combat situation and the establishment of the FSIC. By this time, the FSIC had largely expanded both the size and reliability of its data base.13

The month of May was a critical one for the 3d Division and its artillery. It marked the beginning of mobile operations in both western and eastern Quang Tri Province. In Operation Scotland II, the 3d Division Task Force Hotel would be moving into operational areas beyond the range of the guns at Khe Sanh and Ca Lu. The only solution was to build fire support bases for the artillery. In eastern Quang Tri, the month witnessed the successful repulse of a multi-battalion North Vietnamese force in the vicinity of Dong Ha, the main Marine base in the north. While the initial attack and fighting ended on 2 May in the Dai Do village sector, the North Vietnamese attempted a new offensive later in the month. Employing helicopter-borne cordon tactics, supplemented by artillery as well as close air support, Marine and attached Army infantry units drove the North Vietnamese troops back into the DMZ with heavy losses. In support of the May operations, the 12th Marines fired 330,000 rounds of mixed caliber, more than any previous month including the two months of Tet, January and February. In fact, the May total was only about 80,000 rounds short of the total of those two months.14

**Mini-Tet and the Fall of Ngog Tavak and Kham Duc

The enemy thrust in the north in May was part of a second phase "Tet" offensive, labeled as "Mini-Tet" by the American command. For the most part, this second offensive was hardly a replica of the first as far as the extent and breadth of the enemy actions. Except for the fighting in the north, a new assault on Saigon, and renewed pressure in the Central Highlands and along the Laotian border in southwestern I Corps, the enemy limited itself to attacks by fire and minor ground assaults. In the large Da Nang TAOR, the 1st Marine Division launched Allen Brook**** as a spoiling operation to prevent any consolidation of enemy forces in that sector. Still May was the bloodiest month of 1968 and for those Marine units involved in the heavier May engagements, they equalled any of the fighting up to that date. In the one major reversal for the allied forces during the enemy onslaught, the fall of the U.S. Special Forces camps at Ngog Tavak and Kham Duc, an artillery detachment from the 11th Marines, Battery D, 2d Battalion, 13th Marines, played a heroic role.

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*See Chapter 3.
**Colonel Schick, the 12th Marines commander, observed that while there were occasional problems with the artillery, General Cushman never indicated to him that the job was not being done and that he remained in his command slot for a full tour. Schick Comments.
***Colonel Peter J. Mulroney, who assumed command of the 12th Marines in July 1968, observed there are times when it is necessary to employ unobserved fires: "Harassing and Interdiction fires are an essential ingredient of a coordinated fire plan. While they don't have to be massive they [need to] be thorough." Col Peter J. Mulroney, Comments on draft, dtd 10Nov94 (Vietnam Comment Files).
****See Chapters 15 and 16 for the battle for Dong Ha and operations in Operation Scotland II.
*****See Chapter 17 for Operation Allen Brook.
From February through March, the 11th Marines with its 190 guns surpassed the size of the 12th Marines. Reinforced not only by the 1st Field Artillery Group and Army artillery in the Phu Bai sector, the regiment also obtained operational control of the 2d Battalion, 13th Marines. The latter battalion arrived with the 27th Marines as part of the February reinforcements approved by President Johnson.

As the enemy Tet attacks gradually subsided, the U.S. forces prepared to take the offensive. Towards the end of March, the 11th Marines lost operational control of several of the Army artillery units and the 1st Battalion, 11th Marines to the 1st Air Cavalry Division in preparation for that division’s Pegasus operations. At the same time, the artillery regiment at Da Nang in its own way took more aggressive actions. It continued to support the reconnaissance Stingray patrols and began to employ “Firecracker Munitions”. On 7 April, for example, the 1st Platoon, 3d 8-inch Howitzer Battery fired three CoFm rounds on about 80 VC in the open and killed over 50 of them according to the reconnaissance Marines who called in the mission. In another “Firecracker” mission, three weeks later, the 4th Battalion, 11th Marines claimed to have killed more than 60 enemy troops attempting to cross a river. Of the total 1,100 reported enemy dead in the 1st Marine Division area of operations for the month of April, the 11th Marines maintained that nearly half were the result of its artillery fire.

By the end of the month, the 1st Marine Division supported by the 11th Marines prepared for extensive offensive operations which would require more forward firing positions. The division planned to conduct two multi-battalion spoilers operations in May. In Operation Allen Brook, the 27th Marines planned to penetrate the Go Noi Island sector, while the 7th Marines and later the 26th Marines were to conduct Operation Mameluke Thrust in the Vu Gia River Valley near the U.S. Special Forces camp at Thuong Duc, about 25 miles southwest of Da Nang.

At the same time, American intelligence reported that North Vietnamese troops posed a threat to two other Special Forces camps Ngog Tavak and Kham Duc, about another 35 miles southwest of Thuong Duc. Situated near Laos in Quang Tin Province, the two outposts provided the allies the ability to monitor the North Vietnamese infiltration through the Ho Chi Minh Trail network across the border into South Vietnam. With the fall of Lang Vei near Khe Sanh earlier in the year, they remained the only Special Forces camps in I Corps near the trail.

With the increased likelihood that the North Vietnamese might attack, General Cushman, the III MAF commander and the senior I Corps advisor, decided to reinforce the bases. Army engineers had already started in early April to upgrade the runway at Kham Duc and to construct a radio navigation facility there. On 16 April, the 11th Marines alerted the 2d Battalion, 13th Marines to be prepared to send a 105mm howitzer detachment of two guns from Da Nang to Kham Duc. Thirteen days later, a fixed-wing transport ferried a platoon-sized detachment from Battery D of the battalion consisting of one officer and 43 enlisted men with two 105mm howitzers to the Kham Duc airfield. On 4 May, a Marine helicopter lifted the detachment together with its guns and equipment from Kham Duc to the satellite camp at Ngog Tavak, a distance of some five miles to the south. Sited on Hill 738 and within 10 miles of the Laotian border, the Marine artillerymen were in position to disrupt the movement of North Vietnamese troops along the nearby trails and avenues of approach.

Besides the Marines, Ngog Tavak, with its defenses dating back from the days of the French war against the Viet Minh, was home to a 113-man CIDG Mobile Strike Force Company. Serving with the Vietnamese irregulars were eight U.S. Army Special Forces advisors and three members of an Australian Army training team. For a brief period, even with the arrival of the Marines, the North Vietnamese left the camp relatively unmolested. This all changed in the early morning hours of 10 May. At 0240, the Marine detachment reported that Ngog Tavak was under attack from four directions. By 0330, under cover of B-40 rockets, grenades, mortars, and small arms, North Vietnamese regulars had breached the wire of the outside defenses. According to reports, some of the CIDG troops manning the outposts turned their weapons upon their compatriots and Americans in the compound. The Marine artillery gunners lowered their howitzers and fired directly into the onrushing North Vietnamese. Other members of the detachment grabbed whatever weapons were available and continued to fend off the attackers as best they could.

One Marine, Corporal Henry M. Schunck, rushed from the protective cover of his position near the command bunker to a more exposed, abandoned 4.2-inch mortar emplacement in the center of the compound.

*See Chapters 13 and 27 for the arrival of the 27th Marines.

**See Chapter 17 as well for discussion of Operation Mameluke Thrust.
Although wounded, Schunck single-handedly attempted to man the weapon. Unable to do so, he moved to the assistance of a more seriously wounded Marine who had tried to join him. Dragging the injured man to cover, he and another Marine moved to an 81mm mortar, which they continued to fire at the advancing enemy troops until running out of ammunition. Schunck was later awarded the Navy Cross.19

Another Navy Cross recipient from the same action at Ngog Tavak was Marine Lance Corporal Richard E. Conklin. Once the enemy attack began, Conklin grabbed a machine gun and opened up on approaching NVA troops. Frustrated in their attempts to reach the compound, the North Vietnamese returned concentrated automatic weapons fire and tried to knock out the Marine machine gun position with grenades. Conklin threw back several of the grenades and continued to fire his weapon until he collapsed from his wounds.20

Despite such heroics, the defense of Ngog Tavak was a hopeless cause. Both Marine First Lieutenant Robert L. Adams, the commander of the Marine detachment, and Army Captain Christopher J. Silva, the Special Forces commander, had sustained severe wounds. About 0800, under cover of the Marine howitzers and automatic weapons, Marine and Army helicopters took out the most severely wounded. Among them were Lieutenant Adams, Corporal Schunck, Lance Corporal Conklin, and 15 other Marines from the artillery detachment. An attempt to bring in reinforcements proved futile and resulted in the loss of two of the helicopters. Out of 105mm ammunition, the Marine gunners "spiked" the guns with thermite grenades to render them inoperative.* Led by the senior Australian advisor, the remaining defenders of Ngog Tavak, including 13 Marines of the detachment, abandoned the camp to the enemy. After a trek through the jungle for six miles, American helicopters evacuated the survivors to Kham Duc. Of the 43 Marines and 1 Navy corpsman who made up the artillery detachment, 13 were dead and 20 were wounded. Only 11 men escaped relatively unscathed. In January 1969, the Secretary of the Navy awarded the detachment of Battery D, 2d Battalion, 13th Marines the Meritorious Unit Commendation for its part in the defense of Ngog Tavak.21

The survivors of Ngog Tavak were not to find Kham Duc a safe haven. After overrunning the former, on the afternoon of 10 May, the North Vietnamese turned their attention to the latter camp. At first, after consultation with Generals Westmoreland and Abrams, General Cushman had decided to reinforce the camp and counter the North Vietnamese offensive there. Air Force fixed-wing transports and Marine and Army helicopters brought in the Americal Division's 2d Battalion, 1st Infantry from Chu Lai reinforced by an additional infantry company and supported by some Army artillery. By 11 May, Kham Duc had about a 1,500-man force, including both the U.S. Army and Vietnamese CIDG units in the camp itself and in the surrounding hill outposts. That night, however, the 2d NVA Division began to pick off these outposts.22

With concern about the obvious enemy strength and not wanting to deplete the limited allied forces at Da Nang, General Cushman began to have second thoughts about engaging the North Vietnamese so far out of range of any concentrated artillery. After listening to General Cushman brief the situation, General Abrams also had little desire for a protracted battle and agreed to a withdrawal. General Westmoreland approved the decision. Under an umbrella of American air support, Air Force transports and Marine and Army helicopters lifted out the last of the defenders on 12 May, abandoning Kham Duc to the Communists. The following day, some 60 B–52s participated in an Arclight strike, dropping some 12,000 tons upon the former allied camp. General Abrams termed the abandonment of Ngog Tavak and Kham Duc "a minor disaster." According to a former III MAF staff officer, CIDG camps existed only for the purposes of intercepting and detecting infiltration and when enemy "organized forces move against them—you're going to lose it." Brigadier General Jacob E. Glick, who was the III MAF operations officer at the time, later recalled "that the reporters and the press gave us a bad time about this and called it a 'defeat.'" According to Glick, however, "We considered that we were making the best decision in a tough situation and were saving people and conserving resources." The forward deployment of the two Marine 105mm howitzers proved to have little deterrence upon the North Vietnamese.23

*An American air strike at noon on the then-abandoned camp insured that the guns were indeed destroyed. The 11th Marines operations journal on 10 May contained the notation: "D/2/13 dropped two 105mm howitzers as result of combat loss at Ngok Tavak." S–5 Jnl entry, dtd 10May68, Anx C, 11th Mar ComdC, May68. See also S–4 Jnl entry, dtd 10May68, Encl 1, 2/13 ComdC, May68.

Operations Drumfire II and Thor—
Guns Across the Border

Despite the loss of the two CIDG camps, the enemy offensive by the end of May had more or less faltered.
In northern I Corps, the allies prepared to take the fight to the enemy in some of his former sanctuaries with massive new concentrations of supporting arms including both air and artillery. While American artillery had employed counter-battery campaigns across the DMZ from time to time, the NVA gun and rocket emplacements in Laos at Co Roc and other positions west of the Khe Sanh base, had remained relatively free from retaliation by the American guns.*

In mid-May, in support of Task Force Hotel’s expanding operations in western Quang Tri, Provisional Corps Vietnam authorized the 12th Marines to conduct what amounted to an artillery raid, code-named Drumfire II, against NVA logistic centers, gun emplacements, and suspected troop rendezvous sites. From 29 through 30 May, the 12th Marines moved a total of seven large artillery pieces, four 175mm guns and three 8-inch howitzers, from Thon Son Lam, C–2, and Ca Lu to new firing positions inside or just outside the Khe Sanh fire base. Arriving first, the 8-inch howitzers opened up shortly after midnight on 30 May at the enemy guns at Co Roc across the border in Laos.24

From 30 May through 1 June in Drumfire II, the American artillery fired a total of 158 missions (59 8-inch and 99 175mm) amounting to 1,825 rounds (1002 8-inch and 823 175mm) at enemy targets in the Laotian-South Vietnamese border region with mixed results. Bad weather during this period hampered the aerial observation over the region. Of the number of missions, only seven of the 175mm and five of the 8-inch missions were observed. Of the 175mm missions, air observers reported a total of three bunkers and two structures destroyed, one secondary fire, four road craters, and “excellent target coverage” on an enemy storage area. The results of the observed 8-inch fires were not spectacular either, with the possible exception of the bombardment of a North Vietnamese bunker complex west of Khe Sanh just inside the South Vietnam border that destroyed two of the bunkers with “outstanding coverage.”25**

Lieutenant Colonel Wilson A. Kluckman, who had just assumed command of the 12th Marines on 22 May and had moved a forward control headquarters to Khe Sanh for Drumfire II, recommended more such operations, but admitted to several shortcomings in the past instance. For one thing, he observed that proximity to nearby infantry security units determined the artillery firing locations rather than the best judgement of the artillery commander. Kluckman further suggested that weather forecasts “be a primary determining factor when selection of artillery raid time frames are established.” He further complained that “observation potential was far from realized.” Kluckman maintained that “despite detailed briefings and prior coordination, unfamiliarity with the terrain, poor weather, and lack of aggressiveness combined to significantly reduce the desired destruction.” Other problems included a failure to pre-position all of the 8-inch ammunition prior to D-Day which resulted in traffic congestion and in a delay of the battery to occupy its position. Kluckman also wanted a simpler convoy system that would have permitted the guns to move from their former positions to Khe Sanh in “a single artillery convoy with its own security elements.” He argued that the 3d Division system called for an exchange of infantry security at LZ Stud which resulted in a “five-hour delay for the transfer of responsibility.” Moreover one of the 8-inch howitzers became stuck on a bridge and had to return to its former position at Ca Lu. Despite the difficulties, Lieutenant Colonel Kluckman praised the overall fire support coordination and observed that the enemy failed to bring any effective counter-fire on the Marine big guns. He concluded that Drumfire II “verified the

*Colonel Robert C. V. Hughes, whose 1st Battalion, 11th Marines had relieved the 2d battalion, 13th Marines at Khe Sanh during Pegasus, recalled that 105 and 155mm howitzers’ range limitations “did not permit us to effectively attack the NVA gun positions on Co Roc.” Hughes stated, however, that the Marines improvised a counter-battery technique by employing the platoon of M–48 tanks at Khe Sanh. According to Hughes, the tank’s “90mm gun had a greater range than the howitzer [and] we could compute firing data for them in an indirect fire, artillery role. We pushed up inclined ramps with dozers to give the tank guns increased elevation and thus range.” According to Hughes, although this return fire was “not particularly accurate, due in part to distance of observers from the target, we were able to cause the enemy guns to discontinue firing on several occasions.” Hughes Comments. **While Operation Drumfire II may have had only limited success, it did provide a moral boost to the Marines at Khe Sanh. Colonel Hughes observed that the 8-inch howitzers were placed inside the Khe Sanh base “along the airstrip with the primary direction of fire directly across the flight line. BGend Carl Hoffman [Commanding General, Task Force Hotel] ... had a lasting impression of the first 8-inch mission (midnight 30 May), as it was fired directly over his bunker.” Hughes Comments. General Hoffman, himself, remembered that he thought “Drumfire II was terrific! After being blasted daily by NVA long-range artillery positioned at Co Roc, we thoroughly enjoyed watching our own long-range artillery, most of which had slipped up to Khe Sanh under cover of darkness, hitting pre-selected targets on Co Roc. My own morale soared as did that of the entire Task Force Hotel.” MajGen Carl W. Hoffman, Comments on draft, dtd 15Dec94 (Vietnam Comment File), hereafter Hoffman Comments. For further discussion of Drumfire II see Chapter 16 and for discussion of the enemy emplacements in Laos and the question of Co Roc, see Chapter 14.
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feasibility and desirability of the employment of heavy artillery units in forward firing positions for limited periods of time.26

About a month later, the 3d Marine Division artillery participated in a combined arms "raid" to silence the enemy guns across the eastern DMZ, especially in the Cap Mui Lay sector. Enemy gun emplacements in and north of the DMZ posed a credible artillery threat to American and South Vietnamese bases and positions in northeastern Quang Tri Province. Although employing brief sporadic volleys rather than a continuous bombardment, the North Vietnamese guns occasionally could disrupt U.S. operations and logistic activities. At 1615 on 20 June, for example, North Vietnamese gunners hit Dong Ha with six 152mm rounds which resulted in the destruction of the ammunition supply point there. Secondary explosions and fires continued throughout that night and the next day. In all, the enemy artillery caused the loss of 10,500 tons of Marine ammunition, about 20 days worth of supply.27

For more than a year, III MAF had undertaken several efforts to counter the enemy use of its relative sanctuary area in and north of the DMZ. Operations Highrise, Headshed, and Neutralize all involved variations of the same theme: air and artillery attacks on enemy firing positions in and north of the DMZ. These operations were frustrated by the enemy's formidable array of antiaircraft weapons north of the DMZ, which precluded both effective bombing and the air observation necessary for adjusting artillery fire and assessing its effects. In each of these operations, even concentrated efforts failed to produce any noticeable effect on the Communist gunners.

On 20 June, by coincidence, the same date of the enemy artillery attack on Dong Ha, General Westmoreland approved an earlier III MAF proposal for another major combined arms interdiction campaign against the DMZ sanctuary area. Codenamed Operation Thor after the Norse god of thunder, the plan called for a week-long supporting arms effort involving units of III MAF, Seventh Fleet, and Seventh Air Force in a joint attack on North Vietnamese artillery, air defense, and coastal batteries located in the Cap Mui Lay sector. This sector included the area extending north of the southern boundary of the DMZ about 15 kilometers to Cap Mui Lay and inland about 25 kilometers. The objectives were twofold: to destroy NVA antiaircraft and field and coastal artillery, and to facilitate further surveillance and continued attacks on targets in and north of the DMZ. The III MAF commander, Lieutenant General Cushman, hoped that success in this operation would preempt any NVA preparations for an autumn offensive, while at the same time ending the threat to forward III MAF bases and lines of communication.28

The concept of operations included four phases. In Phase I, the first two days, B−52s and attack aircraft would conduct heavy airstrikes to cover artillery units displacing forward to positions near the DMZ. Phases II and III, together lasting five days, were to include integrated attacks by air, artillery, and naval gunfire, first on targets in the coastal area, then expanding to the entire Cap Mui Lay sector. The events scheduled for Phase IV emphasized accomplishment of Operation Thor's second objective: the continued attack of targets in and north of the DMZ. In this last phase, most artillery units would withdraw to participate in other operations while observers would maintain surveillance of the area, directing the attack of reemerging targets. Phase IV, planned as an open-ended evolution, would continue indefinitely.29

The staggering firepower available for Operation Thor was commensurate with the magnitude of the task at hand. Thirteen batteries of artillery would participate, including the three 155mm batteries of Major Billy F. Stewart's 4th Battalion, 12th Marines, reinforced by Battery K, 4th Battalion, 13th Marines and the 1st 8-inch Battery. While these units temporarily came under the operational control of the U.S. Army's 108th Field Artillery Group for Operation Thor, all other 3d Marine Division artillery units stood ready to participate in the operation, if necessary.** The Seventh Fleet provided two cruisers and six destroyers, as well as 596 sorties of tactical air. The MACV planners allocated 861 Air Force sorties, including 210 B−52 strikes. The 1st Marine Aircraft Wing scheduled 540 sorties, including 65 photo reconnaissance and electronic warfare missions to be flown by Lieutenant Colonel Eric B. Parker's Marine Composite Reconnaissance Squadron (VMCJ) 1, which would provide surveillance of the DMZ throughout the operation. All III MAF units participating in the operation were under the control of Brigadier General Lawrence H. Caruthers, Jr., USA, who commanded Provisional

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*See Chapter 3 for discussion of the enemy gun positions in Cap Mui Lay.

Corps, Vietnam Artillery from his headquarters at Dong Ha.30

Provisional Corps, Vietnam published its order for Operation Thor on 24 June 1968, barely one week before D-Day. In order for the attack to proceed as planned, much remained to be done. While communications personnel from all participating organizations began establishing a network for command and control of the operation, engineers and surveyors began repair and construction efforts which would allow artillery units to displace forward to new firing positions along the Dyemark line. Marine logistic units also had to stockpile at forward ammunition supply points the large quantities of artillery and air-delivered ordnance required for the operation. Complicating this task was the 20 June 1968 explosion of the Dong Ha ammunition supply point which closed the Dong Ha Logistic Support Area for six days. In the interim, the Quang Tri ammunition supply point provided ordnance for Operation Thor. The Provisional Corps commander, Army Lieutenant General Richard G. Stilwell, later stated that "the execution of Thor so shortly after the huge loss of ammunition seemed out of place with known facts . . . ." and therefore created an element of surprise.31*

On D–3, VMCJ–1, along with units of the Seventh Air Force, began photo reconnaissance missions of the Cap Mui Lay sector. Based on the intelligence these missions produced, the staff of Provisional Corps, Vietnam prepared a target list and completed the plan. Operating from their bases at Da Nang and Chu Lai, on 1 July, the fixed-wing squadrons of the 1st Marine Aircraft Wing launched into clear skies for their first strikes of Operation Thor. Using intelligence assembled over the previous three days, Marine F–4s, A–4s, and A–6s rolled in on suspected and confirmed NVA positions in the Cap Mui Lay sector. At the same time, Air Force and Navy attack aircraft and Strategic Air Command B–52s pounded other targets while Seventh Fleet naval gunfire ships closed range along the North Vietnamese coast to engage Communist shore batteries. Apparently caught off guard by the large-scale attack, the enemy reacted sluggishly. U.S. aircraft encountered little opposition and the ships sailed to within 10 kilometers of the shoreline without being engaged by the normally active NVA coastal artillery.32

Meanwhile, the artillery units which were to play their part in the following phases of the operation moved swiftly into position. Five Marine self-propelled batteries, located in positions along Route 9 between Camp Carroll and Dong Ha, rapidly displaced closer to the DMZ. Some batteries moved north as far as 12 kilometers, greatly increasing their ability to reach targets in the Operation Thor area. The 30 howitzers provided by the 3d Marine Division represented about half of the total III MAF artillery effort committed to Operation Thor. An additional 31 heavy caliber weapons, including 20 long-range 175mm guns, came from U.S. Army units.33

Following the carefully planned phasing of the operation, air attacks dominated the first two days, although artillery units conducted a few fire missions. During this phase, 1st Marine Aircraft Wing crews flew 194 sorties in support of Operation Thor, contributing significantly to the total Phase I ordnance delivery of over 4,000 tons.34

On 3 July, with the number of attack sorties slightly reduced and the B–52 sorties cut to one-half of the Phase I level, III MAF artillery and Seventh Fleet naval gunfire ships joined the attack in earnest. Remarkably, the ships closed to within five kilometers of the North Vietnamese shore without a hint of NVA fire. Over 12,000 rounds of various calibers struck Communist positions in a single day.

In an effort to exploit the effects of the powerful combined arms attack, psychological operations personnel conducted an aerial drop of 28,000 leaflets over the Cap Mui Lay sector. The leaflets, intended to take advantage of the anticipated lowered morale of NVA troops subjected to continuous heavy bombardment in what had been considered a "safe" area, advised that "desertion, defection, dereliction offer the only alternative to certain death."35

The success of Operation Thor hinged on fire support coordination and target intelligence. The major challenge in fire support coordination was to engage
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each target with the proper mix of accurately delivered ordnance, while maximizing the potential of the units and weapons systems available. Also, since this was a joint operation on a grand scale, scores of aviation, artillery, and naval surface units representing four different Services, had to deliver their firepower into the same areas at the same time without interfering with one another.

Although no accidents or serious incidents occurred, the operation was not without problems in fire support coordination. For example, the manual target list maintained by Provisional Corps, Vietnam and the automated list maintained by Seventh Air Force were not compatible, so, fire support coordinators found it necessary to use both lists. This proved difficult and time consuming. Also, the requirement for a three-day lead time for Arclight strikes was a burden which diminished the effectiveness of the powerful B–52s by preventing their use against targets of opportunity.

Target intelligence presented two problems: target identification and damage assessment. Target identification came initially from photo imagery interpretation and was supplemented, after the start of the operation, by pilot debriefings and air observer reports. Accurate battle damage assessments were a critical part of the targeting process. Without them, planners could not determine whether the attacks achieved the desired effects, and hence, could not know whether a target should be engaged further or struck from the target list as destroyed. Post-mission pilot debriefings and observer reports provided the initial battle damage assessment. The photo reconnaissance missions flown by VMCJ–1 and Seventh Air Force units provided additional information.* Covering the entire Cap Mui Lay sector each day, these sorties provided target intelligence personnel information which, in some cases, led to the engagement of new relatively stationary targets less than eight hours after the mission.36

On the ground, other target intelligence agencies were at work. Artillery forward observers, operating from positions along the DMZ, identified and engaged some targets visually, providing their own damage assessments. Another target acquisition system used during Operation Thor was the three-station sound-ranging system installed in the northeastern portion of I Corps Tactical Zone. Modern technology also assisted the III MAF targeting effort. A system called “Firewatch,” installed at Con Thien and manned by artillerymen of the 12th Marines, combined night observation devices, a laser range finder, and an acoustical system to determine accurate range and direction. During Operation Thor, “Firewatch” detected 41 enemy targets. The 12th Marines also used five counter-mortar radar units, capable of detecting projectiles in flight and computing their point of origin. In addition, Battery F, 26th Field Artillery, a U. S. Army target acquisition unit, manned another six counter-mortar radars.37

Despite this all-out surveillance effort, only about one-third of the artillery, naval gunfire, and air missions reported to the 3d Marine Division Fire Support Information Center during the month of July 1968, which included the period of Operation Thor, involved human observation and first-hand reports. Only one-fifth of these observed missions reported any damage to the targets.38

Still, those participating in Operation Thor realized that the weight of firepower was having immediate effects. By 5 July, antiaircraft fire over the Cap Mui Lay sector was so light that O–1 aircraft carrying

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*Colonel Eric B. Parker, who commanded VMCJ–1 in 1968 at this time, recalled Thor later as an operation that “started and ended with a mosaic of the DMZ area covering several miles north of the DMZ. First for Target I.D., the last for BDA [bomb damage assessment].” He remembered his “continuing frustration with never being told what our efforts produced or, in other words, did our flights contribute in any way to the prosecution of the war effort. We got routine ‘atta boy’ which everyone got, but never heard to my recollection of any specific target being identified and subsequently destroyed.” Col Eric B. Parker, Comments on draft, dtd 13Dec94 (Vietnam Comment File).

**Sound-ranging bases employ a series of microphones spread over a known distance and wired to a central station. Each microphone, in turn, picks up the sound of an enemy gun firing and signals the central station. The sequence in which the microphones are activated and the time between activations are used to compute the direction to the enemy gun. A network of sound-ranging bases can provide intersecting directions to determine an enemy gun’s location. Compared with some other systems that were available in III MAF at the time, the sound-ranging bases were crude, but when used as one part of a large, redundant target acquisition network encompassing a variety of systems, they could conceivably provide the final bit of information needed to locate a Communist firing unit. Lieutenant General Louis Metzger, who as a brigadier general served as 3d Marine Division assistant division commander in 1967 and early 1968, noted that the sound-ranging system “was brought to Vietnam in 1967 in an attempt to locate the enemy artillery firing from north of the Ben Hai River into our bases. It was basically a World War II system that was intended to be used in a broadly held front. It was unsuited for a battle in which only certain strong points were held, which did not allow for its positioning along a line so that the enemy firing position could be triangulated.” LGen Louis Metzger, Comments on draft, dtd 17Oct94 (Vietnam Comment File).
Marine and U. S. Army air observers ventured north of the DMZ—an area previously accessible to them only at grave risk—to assist in adjusting fire and providing battle damage assessments. The damage to the NVA defenses was so great that even the vulnerable O–ls operated over the area for the rest of Operation Thor without sustaining any casualties, or indeed, receiving any hits.

The air observers reported that the Cap Mui Lay sector was a fortified area. Most villages consisted of a group of dug-in huts, with only their roofs above ground, connected by a series of trenches. Although rice was visible in the open in many villages, there was no evidence of farming activity, indicating that the enemy shipped in rice from other areas. Few personnel sightings occurred, but light antiaircraft fire came from several of the fortified villages. Fire missions directed against these villages often caused secondary explosions, indicating the storage of ammunition or fuel. There was every sign that the Cap Mui Lay sector was a military garrison area and that its villages were actually supply dumps or troop staging points.

During the final days of Operation Thor, III MAF artillery continued to pump an average of about 4,000 rounds per day into the target area, while naval gunfire added another 3,300 rounds per day. Air strikes totaled a further 2,400 tons of bombs, with 1st Marine Aircraft Wing crews flying 256 attack sorties. On the afternoon of 7 July, VMCF–1 flew the final photo reconnaissance mission of Operation Thor. The next morning, artillery units began withdrawing from the forward positions, while air and naval units resumed normal operations.

Operation Thor expended enormous quantities of ordnance. Attack aircraft delivered 3,207 tons of bombs, while B–52s dropped an additional 5,156 tons. III MAF artillery units fired 23,187 rounds of 155mm, 175mm, and 8-inch ammunition. Ships of the Seventh Fleet accounted for 19,022 rounds of 5-inch, 6-inch, and 8-inch naval gunfire. The human cost of this massive application of firepower was low. On the ground, one soldier was slightly wounded by NVA counterfire, while Marine, Navy, and Air Force aviation units flew more than 2,000 sorties with the loss of three aircraft destroyed and one crewman killed in action. Marine aviation units and artillery units sustained no losses.

In assessing the damage to the North Vietnamese in their former sanctuary area, the after-action report filed by XXIV Corps stated that "severe damage was inflicted upon the enemy." The report cited as evidence "the minimal and ineffective hostile fire from the Cap Mui Lay Sector in the thirty days subsequent to THOR and the continued ability of our observation aircraft to operate over that area."

Damage assessments included the destruction of 789 antiaircraft positions containing 63 weapons; 179 artillery positions containing 19 guns; 143 bunkers; 9 surface-to-air missile sites; and numerous trucks, sampans, structures, storage areas, and other miscellaneous targets. Pilots and observers noted 624 secondary explosions and fires. Unconfirmed reports of North Vietnamese killed totaled 125, but without the opportunity to send ground troops to investigate the area, the actual figure could not be determined. MACV noted:

Finally, there may well have been one contribution that could not then or perhaps at any later time be measured with assurance: If the enemy had intended using the CMLS [Cap Mui Lay Sector] as a staging point for staging a major infiltration program into the South, that possibility had been preempted. And the opportunity has always been one purpose of interdiction.

Following the completion of Operation Thor, Lieutenant General Richard E. Stilwell, commanding the newly redesignated XXIV Corps, pressed for continued overflight of the Cap Mui Lay sector by air observers and forward air controllers to sustain the success of the operation by daily engagement of recovering NVA targets, but this was not done. On 1 November 1968, all questions of how best to exploit the gains of Operation Thor became academic when, by order of President Johnson, all offensive operations against North Vietnam and the DMZ, including air strikes, artillery missions, and naval gunfire missions, were discontinued, except as necessary to retaliate to Communist attacks. Thus, the sanctuary was restored.

**Fire Base Tactics**

By July 1968 with the imminent abandonment of the Khe Sanh base, the 3d Marine Division had instituted a mobile concept of operations patterned to a large extent upon the 1st Air Cavalry. While not completely abandoning the Dyemarker strong points, Major General Raymond G. Davis, who assumed command of the 3d Marine Division in May, had each of them manned with as small a force as possible, usually not above company strength. Starting with the Task Force Hotel operations in western Quang Tri, the 3d Division began a series of wide-flung heli-
borne operations throughout the width and breath of the division area.*

A central component of the new tactical mode was the artillery fire base.** Where the infantry went, the artillery followed, thus always keeping the maneuver elements within a protective fire fan. Typically blasted out of jungle-covered hill tops, the new artillery fire bases were mutually supporting as well as providing supporting fires to the infantry units. By the end of the year, the 12th Marines artillery, with 13 fewer firing units, was operating out of 12 more “firebases” than in January. Of the 21 artillery sites, 7 contained 10 of the 22 firing units, and were accessible only by helicopter.***

*See Chapters 16, 18, 20 and 22 for a description of the 3d Marine Division mobile operations during the latter part of 1968.

**Colonel Edwin S. Schick, Jr., the former 12th Marines commander, remembered that sometime in May before he relinquished command of the regiment, he made a reconnaissance and plans for an artillery fire base. He briefed Major General Rathvon M.C. Tompkins, then commanding the 3d Marine Division, who approved the concept as long as General Davis concurred. Schick Comments.

***The establishment of these fire bases was a learning process for both the infantry and artillery units involved. Captain Matthew G. McTiernan, commander of Company I, 3d Battalion, 3d Marines, related some of the difficulties he encountered in late July 1968 when his company helped in the preparation of a landing zone for one of the bases. He recounted that the artillerymen were used to "large, well defended positions, [and] had some difficulty understanding why their infantry brothers were so exercised by their behavior. Their artillery SOP for establishing firing positions seemed, to the average Marine infantryman, to border on lunacy. It seemed the artillery lacked a certain appreciation for the fact that we were the middle of Indian country, on the outer edge of the Camp Carroll fire fan, with no nearby friendly units to call for assistance. The din was unnerving, shouts, loud banging, screaming, and other seemingly amplified noise carrying over the surrounding jungle in all directions. First the Company Gunnery Sergeant made contact with his counterpart, this effort lasting less than thirty minutes. Next the Company XO [executive officer] contacted his counterpart, again no relief from the din. Night was fast approaching, and India Company was convinced Ho himself knew of our location and strength. Finally, I called on the Battery Commander. This had the most promising, if not lasting effect. Not that the battery lacked discipline. Far from it, this was a proud, highly motivated unit. They simply did not appreciate the situation as we did. Night was almost upon us and it seemed evident that any NVA in the area probably knew we were up to something. It is my contention that if in fact there were NVA units in our area they were as astonished as we were about the unusual activity and probably thought it some kind of trick on our part. In any case, I instructed one of our L.P.’s [listening post] to toss a couple of grenades. This action had an equally astonishing effect. It was as if someone had turned off a loud radio. Complete, and from our point of view, blessed silence. Silence which descended over the position as did the night.” Capt Matthew G. McTiernan, Comments on draft, n.d. [Dec94] (Vietnam Comment File).

The dispersion of Lieutenant Colonel Joseph Scoppa, Jr.’s 2d Battalion, 12th Marines in December was typical of the deployment of the 3d Division’s artillery. In support of the 9th Marines Operation Dawson River in and west of the Ba Long Valley, Scoppa established his battalion command post on Fire Base Dick, about 5,000 meters south of Ba Long. Collocated with the 9th Marines command post, the artillery battalion kept in addition to its headquarters at Dick, one of its 105mm howitzer batteries, Battery E. At Firebase Barnett, about 5,000 meters southeast of Dick was another 105mm battery, Battery F. Then to the southwest and about 8,000 meters south of Dick, was Firebase Shiloh with two artillery batteries, Battery D, a 105mm howitzer battery, and the 1st Provisional 155mm Howitzer Battery equipped with three 155mm towed howitzers.**** Scoppa’s 4.2-inch mortar or Whiskey Battery was with the 1st Battalion, 9th Marines at the forward edge of the Battery D artillery fan. This in effect permitted the infantry battalion “to maneuver slightly further than the eight clicks [8,000 meters] that would normally govern the outer limits of its movement.”43

In the selection of the fire bases, Lieutenant Colonel Scoppa explained that the site must be within a specified range from other artillery positions for mutual support and consistent with “the scheme of maneuver of the infantry unit . . . .” In addition, the battalion commander stated that there were three other prerequisites: “the piece of ground must be of adequate size” to accommodate a battery of artillery; “it must be defensible by a platoon [of infantry]” or at most a reinforced platoon; and finally “capable of construction within 24 to 36 hours.” He observed that the Marines were now capable of placing a 105mm battery in an “area as narrow as 15–20 meters wide and 75 meters long.” Other fire bases such as Shiloh were large enough to hold both a 105mm battery and three additional 155mm towed howitzers.44

The artillery battalion commander provided the following description of Fire Base Dick. He stated that the Marines in November carved the base out in 24 hours on the “very crest of a 618-meter-high

****Major General Hoffman observed that in Task Force Hotel and 3d Marine Division offensive operations, “We favored the towed 155’s over the self-propelled 155’s because the former were helo-transportable and therefore could be employed in places and circumstances where the self-propelled models could not.” Hoffman Comments.
In building the base, Marine engineers blew off the top of the ridgeline and used bulldozers to dig the gun pits. The 105mm artillery battery there had a battery front of 75 meters. There were sheer drops to the rear and front, as well as to the left flank of the howitzers. For resupply, Dick depended entirely upon helicopters. The base was large enough to accommodate 2,000 rounds of 105mm ammunition. According to Scoppa, the Marines carefully monitored "the levels of units [of fire] on a fire base so that you can provide uninterrupted support to the infantry as required."45

This dependence upon air delivery of supplies required close coordination between the artillery and helicopters. First of all in establishing the landing zone on the fire base, the Marines attempted to place it on a piece of terrain "which is at perpendicular to the prevailing winds so that the helicopter can come in one smooth motion, drop his load, and proceed."

Above, Fire Support Base Dick near the Ba Long Valley is where Battery E, 2d Battalion, 12th Marines established a 105mm howitzer firing site. Below, a ground view of the Fire Support Base includes firing stakes and hooches made of empty ammunition boxes. An artillery tube can be faintly seen at the upper right of the fire base.

The top photo is from the 12th Mar ComdC, Dec68, and bottom is Department of Defense (USMC) Photo A801291.
Another factor involved the use of check fires when the helicopters arrived for resupply. Usually the battalion checked its fire “in order to give the helicopter the priority that it requires to drop its load and proceed.” On the other hand, when the artillery was “shooting on an active mission” in support of engaged infantry “the fires have priority and the helicopter must wait or return to base to resupply us at a later time.” There were complications also when the helicopters were resupplying ground troops or carrying out medical evacuations. Since the fire bases were usually on the high ground, the artillerymen fired their guns exclusively at a high angle, thereby the artillery trajectory did “not interfere continuously with the helicopter traffic” and permitted the clearance of “helicopter lanes beneath or below the max ordinates of the battery.”

The helicopters were important also in bringing the artillery units into position. Marine CH-46s and CH-53As could easily bring the 105mm howitzers into the rapidly expanding fire bases. Furthermore, Army Sky Crane CH-54s could lift into position the towed 155mm howitzers. As Lieutenant Colonel Scoppa related, the Marines needed to provide only about 48 hours advance notice to obtain the Army “bird” which could transport the towed 155mm howitzers from fire base to fire base.

In December 1968, the 2d Battalion, 12th Marines had three provisional 155mm batteries equipped with the towed howitzers attached to its command. While the 1st Provisional Battery was at Shiloh, the other two batteries were at Fire Base Cates and at Ca Lu. From these latter two bases, the 155mm howitzers provided protective fires for the northern and western edges of the 9th Marines area of operations.

According to Lieutenant Colonel Scoppa, the new mobility of the artillery had transformed the war in the north. He observed that his units on the fire bases took relatively little incoming and attributed this “to the fact that we do move into them quickly, we occupy them for a relatively short period of time, . . . and then move elsewhere.” Scoppa believed the enemy did not know how to cope with this rapid deployment: “We are now able to get into areas where he did not expect us to be able to come into, . . . in a matter of days span 16 clicks, sometimes 24 in three moves. Charlie [the Communist forces] cannot move out quite that fast. We get in with him where he is.”

Further south in the 1st Marine Division sector at the end of the year, the 11th Marines also began to experiment with the fire base concept. Since April, the Marine artillery had moved into forward artillery positions in support of the large operations such as Mameluke Thrust, Allen Brook, and Maui Peak. Yet for the most part, the 11th Marines did not have the assets and command arrangements to use the fire base concept on a large scale. With the departure of the 5th Marines from the Phu Loc sector and finally with the transfer of the 1st Field Artillery Group from Phu Bai to Da Nang, the 1st Marine Division was prepared to launch Operation Taylor Common in Base Area 112. Under 1st Marine Division Task Force Yankee in Taylor Common, Lieutenant Colonel Raymond B. Ingrando’s 1st Field Artillery Group directed an artillery force of two direct support artillery battalions and elements of other units, including 8-inch howitzers, 155mm guns, and 175mm guns. The idea was to build a series of fire support bases between the Arizona territory and the Laotian border to interdict any Communist forces in the enemy base area. The operation continued into
1969. The fire support base became an integral part of Marine Corps artillery employment and deployment for the remainder of the war.50

**Marine Reconnaissance Operations**

The more mobile Marine operations would also have an impact on the employment of Marine reconnaissance units. In 1968, the Marine reconnaissance units consisted of the 1st and 3d Reconnaissance Battalions and the 1st and 3d Force Reconnaissance Companies. The two reconnaissance battalions remained under the control of their respective parent divisions, the 1st with the 1st Marine Division and the 3d with the 3d Division. Each of the Force Reconnaissance companies were attached to one of the battalions, the 1st to the 1st Reconnaissance Battalion and the 3d to the 3d Battalion.

Since mid-1966, the two divisions employed their reconnaissance battalions in much the same way, basically as an extension of their supporting arms in “Stingray” patrols, thus bringing Marine firepower to bear deep in enemy territory. In Stingray operations, a small reconnaissance unit (usually a squad, although platoon-sized operations were not uncommon) moved to an objective area by helicopter and occupied a position on commanding terrain from which it could observe enemy activity. From their observation posts, the Marines watched for Viet Cong and North Vietnamese moving through the area. By maintaining a radio link to their headquarters, the Marines were able to engage lucrative targets with artillery fire and air strikes without revealing their position. This technique greatly extended the effectiveness of U.S. firepower by hitting the enemy in his own backyard. For example, the 1st Division credited its Stingray patrols in the Da Nang sector for disrupting the enemy main forces as they moved into attack positions just prior to Tet.51

Although the Stingray concept called for the patrols to remain clandestine, they went to the field prepared for the worst. A squad, accompanied by a corpsman and occasionally by an artillery forward observer, would take a considerable amount of equipment for the defense of their position.52 In addition to the squad’s own rifles, the standard equipment included M60 machine guns (occasionally, Marines even took M2 .50-caliber heavy machine guns and 60mm mortars), grenade launchers, Claymore mines, sniper rifles, as well as binoculars, spotting scopes, night vision devices, and, of course, radios. Such heavy firepower was virtually a necessity because the observation posts used by the patrols were, for the most part, somewhat developed as defensive positions with concertina wire, lightly constructed bunkers, and fighting holes. There were only so many pieces of commanding terrain and the patrols returned to these again and again.

Most patrols remained in position about four to six days, although some teams were out for as long as 10 or 11 days. On the other hand, helicopters might extract them much sooner than planned if the enemy detected the patrol. One team which paid the price

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*See Chapter 21 for Operation Taylor Common.

**See Chapter 8. Lieutenant Colonel Bromcan C. Stinemetz, who commanded the 1st Reconnaissance Battalion during this period, provided the following description of the experience of one patrol in a harbor site on the nose of Charlie Ridge west of Da Nang that overlooked a well-known trail on 30 January: “Suddenly a major force of NVA regulars, heavily armed, came marching single file down the trail heading in an easterly direction towards the Da Nang area. At the 1st Recon Battalion’s opcenter [operations center] came the whispered voice over the tacnet [tactical net] of the patrol’s radio operator relaying his leaders observation. ‘Ask them how far they are away,’ the battalion’s operations officer said. There was an agonizing wait as the operator relayed the request to his leader and waited for a response. Then in a barely audible whisper came: ‘the six [patrol commander] says they are within farting distance.’ The patrol leader stuck with his position for a good thirty minutes and then called artillery strikes on points further down the trail. The darkness and the dense vegetation prohibited any damage assessment, but in debriefings patrol members reported lots of screaming from the impact area.” Colonel Stinemetz attributed the success of Stingray in the 1st Division sector for the growth of the 1st Reconnaissance Battalion in 1967. By the latter part of the year, the four reconnaissance companies of the battalion were joined by an enlarged Company E which had an additional fourth platoon. With the introduction of the 26th Marines into country in 1967, Company B, 5th Reconnaissance Battalion, was attached to the battalion. Together with the 1st Force Reconnaissance Company, which had been under battalion control for some time, there were a total of seven reconnaissance companies, more than doubling the 1st Marine Division's capability to field patrols. According to Stinemetz, “at this stage the Recon Battalion was the largest battalion in the division. It had more rolling stock than a motor transport battalion and more communications equipment than the Communications Battalion.”

Col Bromcan C. Stinemetz, Comments on draft, dtd 2Nov94 (Vietnam Comment File), hereafter Stinemetz Comments. Lieutenant Colonel Donald R. Berg, who commanded the 3d Reconnaissance Battalion from July until December 1968, observed that the Stingray patrols usually varied from 8-12 men. He noted that “patrols preferred going short rather than have a new man added to the patrol.” In addition to the corpsman and depending up the situation, a doghandler and dog may be attached, as well as other specially skilled personnel such as a demolitions expert. According to Lieutenant Colonel Berg, one dog had two confirmed “KlAs” from Stingray actions. LtCol Donald R. Berg, Comments on draft, dtd 9Dec94 (Vietnam Comment File).
His face covered with camouflage paint, Marine PFC Robert L. Scheidel looks out upon a landing zone for his Stingray team from inside a Boeing Vertol CH-46 Sea Knight helicopter. Note the smoke canisters strapped to his chest.

for detection by the enemy was known as "Cayenne". On 30 May, Team "Cayenne" occupied a position on a narrow finger near the Song Thu Bon less than one kilometer north of the border between Quang Nam and Quang Tin provinces. The jungle surrounding the position had been burned away, revealing a gentle slope upwards to the north with steep drops to the south, east, and west. Five days and four nights passed without a single sighting of the enemy. At 2245, on 3 June, the Communists struck suddenly. A series of explosions rocked the observation post and, almost instantly, 40 Viet Cong overran the Marines' position. The 1st Reconnaissance Battalion lost contact with the team immediately following the initial report and called for help in the form of a Douglas AC-47 "Spooky."

"Spooky 11" arrived on station over Cayenne's position at 2340. At 2351, the patrol leader reestablished radio communications with the battalion headquarters and requested an emergency extraction for himself and his wounded corpsman. He reported that the other 13 Marines of Cayenne were either dead or missing. The 1st Reconnaissance Battalion called for the extraction as another AC-47 and a flareship responded to the call for help and arrived to support Cayenne.

Just over 50 minutes after the request, two Boeing Vertol CH-46 Sea Knight helicopters arrived, sup-

*The teams were distinguished from each other by their radio call signs, e.g. "Cayenne," "Elf Skin," "Auditor," and "Hanover Sue" to name but a few.

**The "Spooky," sometimes referred to as "Puff, the Magic Dragon," was an attack version of the venerable Douglas C-47 Skytrain cargo aircraft. Armed with Vulcan miniguns, "Spooky" was capable of placing 18,000 rounds of 7.62mm machine gun fire on a target in one minute.
ported by a pair of Bell UH–1E “Huey” gunships. With the flareship lighting the battlefield and the Hueys and AC–47s suppressing the enemy fire, the Sea Knights moved in to pick up the patrol leader and his corpsman, completing the extraction at 0209. Only a quarter of an hour later, Team Cayenne, thought to be destroyed by the enemy, suddenly came up on the radio. There were still six Marines alive, but wounded, on the hill. In the darkness and confusion of the sudden attack, the patrol leader had believed them lost. The rescue effort went back into motion, with two helicopter gunships arriving on station at 0254, closely followed by another pair of Sea Knights. By 0334, the six wounded men were on board the helicopters and on their way to Da Nang. One of these Marines later died of his wounds.

AC–47s remained on station over the abandoned position for the rest of the night, shooting at fleeting targets. As each gunship ran out of ammunition, another replaced it. At 0642, four CH–46s inserted a reaction force into the ruined position to search for additional survivors and to collect the remains of those who had died. The reaction force found seven dead Marines and one dead Viet Cong in and around the position.53

Fortunately, the experience of Team Cayenne was the exception to the rule. Most Stingray patrols occupied their positions, remained there for several days, and departed again without serious incident, sometimes without even sighting the enemy. There was even occasion for the grim humor that is prevalent in combat. First Lieutenant Philip D. Downey, leader of Team “Night Scholar” during an insert atop Loi Giang Mountain, three kilometers southwest of An Hoa, turned in this report of a sighting on 10 June:

> 20 VC with 10 bathing beauties. 10 women were bathing with 6 guards. Black PJs, khakis and towels; packs, rifles, and soap. Called [Fire] Mission, resulting in 3 VC KIA confirmed and 5 VC KIA probable. Unable to observe women after this due to bushes, but patrol felt the water frolics were over.54

Stingray patrols were capable of inflicting enemy casualties far out of proportion to their own size. Team “Elf Skin,” occupied a position on a narrow ridge overlooking the Arizona Territory and the Song Vu Gia from 10 June to 16 June.5* In this Communist-infested area, it recorded 25 separate enemy sightings which totalled 341 Viet Cong. From its concealed position, the team fired 24 artillery missions, for a reported tally of over 40 enemy dead.55

Two weeks later, a team known as “Parallel Bars,” took up a position at the peak of the dominant Hon Coc Mountain, six kilometers south of Go Noi Island. Just after noon on 25 June, it saw about 100 VC moving west along a narrow finger outside the hamlet of An Tam (1), just southwest of Go Noi Island. An artillery fire mission using “Firecracker” ammunition accounted for more than 30 reported enemy dead. A little over three hours later, another group of about 80 Communists moved west along the same finger, in the same direction. This group, too, appeared to be leaving Go Noi Island. The Marine patrol leader contacted an observation aircraft on station over the area and arranged for an airstrike, this time killing another 30 of the enemy. At 1855 the same day, Parallel Bars spotted another group of 16 Viet Cong, also moving west, 100 meters west of the previous sighting. Another “Firecracker” mission fell upon the enemy, but it was too dark for the team to observe the results. Incredibly, at 0800 the next morning, the team sighted a fourth group of 27 Viet Cong moving along the same finger, but about 900 meters further southwest than the first three groups. Parallel Bars called for fire still again, and reported killing five or more VC.56

Stingray patrols supported all major operations. Teams occupied positions in or near the area of operations and coordinated their activities with the responsible infantry unit. As an operation ebbed and flowed according to intelligence reports of the enemy’s activity, the Stingray patrols moved to new observation posts to maintain support of the infantry. Even while some teams were supporting major operations, others remained far beyond the TAOR of any friendly unit, directing artillery and airstrikes on Communist forces moving to and from their base areas. For 1968, III MAF claimed Stingray operations to have resulted in more than 3,800 enemy killed.57

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5*The “Arizona Territory” was the name commonly used by the Marines to describe the area northwest of An Hoa bounded by the Song Thu Bon, the Song Vu Gia, and the mountains south of Thuong Duc. **Colonel Stinemetz, who commanded the 1st Reconnaissance Battalion until July 1968, quoted the following reconnaissance statistics for the month of May: 149 patrols, 476 sightings, 59 contacts, 6,606 enemy sighted; 362 fire missions and 42 air strikes; 46 enemy KIA by small arms, 681 enemy by air and artillery. He stated that the Marines captured five weapons and took two prisoners. Marine casualties were 6 dead and 45 wounded. Stinemetz Comments. As with all statistics of enemy casualties and body counts, however, the historian and reader must take these as trends rather than absolutes. Colonel James W. Stemple, who commanded the 2d Battalion, 5th Marines in the latter half of 1968, recalled an incident in October when his battalion entered an area where reconnaissance teams had
Still there remained some question among infantry and reconnaissance Marines whether III MAF was making the best use of its reconnaissance assets. This was especially true in the 3d Marine Division. Lieutenant Colonel William D. Kent, the commander of the 3d Reconnaissance Battalion until early July 1968, several years later expressed his concerns that the reconnaissance patrols were “fighten” the NVA rather than “watching them,” thereby losing “a lot of long-range intelligence.” He believed there was an overreliance on radio intercepts and that the North Vietnamese “were smart enough not to talk.” Kent commented that this was especially true in the NVA offensive in the Dong Ha sector at the end of April and beginning of May. He believed the system awarded “pats on the back for KIAs,” but not for obtaining the elements of combat information.

Both Lieutenant Colonel Kent and Major General Davis, the former deputy commander Prov Corps and new 3d Marine Division commander, were influenced by the tactics of the 1st Air Cavalry Division. According to Lieutenant Colonel Kent, after the relief of Khe Sanh in mid-April, he began exchanging patrol leaders with the Army units and sending some of the reconnaissance Marines to the Army schools. According to its doctrine, the Air Cavalry employed rapid helicopter inserts of small reconnaissance teams of four to five men to explore a given terrain, often using decoy aircraft to keep any watching enemy forces off balance. Combining “Red” [usually gunships] and “White” [aero scout] teams, the Air Cavalry could make a rapid reconnaissance and either call in the “Blues” [the aero infantry] or move on elsewhere.

Lieutenant Colonel Kent observed, however, that the reconnaissance Marines also had things to teach their Army counterparts. According to Kent, the Marines taught them how to call in supporting arms, especially fixed-wing airstrikes, and, surprisingly enough, map reading. He stated that his patrol leaders explained to him that for the Air Cavalry, “land navigation was not a big thing . . . .” They told him that the Air Cavalry reconnaissance troops “didn’t have to read maps. They depended on the airplanes. There were airplanes up there all the time.”

In any event, encouraged by General Davis, the 3d Reconnaissance Battalion began, as Lieutenant Colonel Kent observed, to “loosen up” and do more “snoopen and poopen.” While still using 10-man Stingray teams, the battalion also started deploying

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**3D RECONNAISSANCE BATTALION**
**11 JULY 1968-12 DECEMBER 1968**

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* Includes 31 teams deployed in the field as of 12 December 1968

Chart provided by LtCol Donald R. Berg USMC (Ret).

Reported extensive enemy casualties killed by supporting arms.

When asked why his battalion had found so few enemy dead, he turned to his questioner and replied that he was “standing on top of what should have been 197 dead NVA.” Col James W. Stemple, Comments on draft n.d. [1995] (Vietnam Comment File).
smaller teams, about four to five men, very often out of artillery range. Using both walking patrols and helicopter inserts, these patrols were out to obtain information rather than fight. According to Colonel Alexander L. Michaux, the 3d Marine Division operations officer, these teams were sent out and told "not to call in fire or anything... Just find them and tell us where they [the NVA] are. We'll fix them with a battalion." Lieutenant Colonel Donald R. Berg, who relieved Lieutenant Colonel Kent in July as commander of the 3d Reconnaissance Battalion, noted that when he took over the battalion three of his companies were attached to other units. By mid-September, he had these three companies returned to his command and carrying out reconnaissance missions. In December 1968, General Davis observed that he had anywhere from 58 to 60 active reconnaissance teams with about 40 to 45 out in the field at any given time. Within artillery range, he employed the Stingray patrols while the smaller patrols, designated "key hole" missions,* operated usually further out with the mission of watching and reporting on enemy troop activity. Like the artillery firebases, the 1st Marine Division also adapted the 3d Division reconnaissance techniques in Operation Taylor Common at the end of the year.61

*Chaplain Ray W. Stubbe, who has written extensively on Marine operations at Khe Sanh and on Marine reconnaissance forces, observed that the keyhole missions were "a return to the original concept of the Force Recon Company of having 4-man patrols, very lightly equipped, with the mission only [emphasis in original] of gathering information, operating very deep in enemy controlled territory far beyond the artillery fan for support. (The original Force Recon concept was for 4-man patrols operating up to 300 miles inland). This is a very historical development of recon in Vietnam." LCdr Ray W. Stubbe, Comments on draft, dtd 28Nov94 (Vietnam Comment File).
CHAPTER 27
Manpower Policies and Realities

Personnel Turnover—The Quality Issue and Project 100,000—Training
The Search for Junior Leaders—Discipline—Morale—The Aviation Shortage
Filling the Ranks in Vietnam: Too Many Billets, Too Few Marines
The Deployment of Regimental Landing Team 27—Reserve Callup?
The Bloodiest Month, The Bloodiest Year—Foxhole Strength: Still Too Few Marines
The Return of RLT 27—The End of the Year—The Marine Corps and the Draft
The Marine Corps Transformed

In 1968, the Vietnam War dominated every aspect of Marine Corps manpower policy. Since the landing of the 9th Marine Expeditionary Brigade (9th MEB) in 1965, the overall strength of the Marine Corps had increased over 60 percent. More than a quarter of all Marines were in Vietnam; almost a third were deployed west of Guam (see Table 1).1 Marine Corps Commandant, General Leonard F. Chapman, Jr., later stated that by 1968, "there were just three kinds of Marines; there were those in Vietnam, those who had just come back from Vietnam, and those who were getting ready to go to Vietnam."2 Between March and September of 1968, 8 of the Marine Corps' 12 active infantry regiments were in Southeast Asia. In FMFPac only one regiment, the 28th Marines of the 5th Marine Division, remained uncommitted. This left three battalions in California, with none in Okinawa or Hawaii. On the east coast, most Marines in the 2d Marine Division were awaiting either their discharge or orders to Vietnam, while the individual battalions of the division's three regiments continued their customary deployments to the Mediterranean and Caribbean.

The dramatic growth of both its end strength and its overseas commitments compelled the Marine Corps to alter drastically many of its manpower policies. Between 1965 and 1969, the Marine Corps changed from an organization which encouraged long enlistments and stable units to one forced to rely on short-term Marines and high turnover within units. The Marine Corps Assistant Chief of Staff for Personnel (G-1), Brigadier General Jonas M. Platt, later related, "we had no choice with respect to short-term Marines and high turnover and both were a Hell of a necessary evil."3

Personnel Turnover

Before the Vietnam buildup, new recruits entered the Marine Corps on an enlistment of at least three years, with over four-fifths joining for four or more years.4 The Vietnam buildup that began in the fall of 1965 required a large influx of new recruits, forcing the Marine Corps temporarily to begin accepting men on two-year enlistments. Between November 1965 and

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*General Chapman was Commandant of the Marine Corps from 1 January 1968 to 31 December 1971.
May 1966 the Marine Corps also accepted 19,573 draftees. After this initial surge ended in October 1966, the Marine Corps returned to three- and four-year enlistments. This did not last long. Still faced with a manpower shortage, on 2 May 1967, Headquarters Marine Corps once again authorized two-year enlistments. To keep personnel turbulence to a minimum, the Commandant decreed that two-year contracts would constitute no more than 20 percent of all new enlistments. Between 1 July 1966 and 30 June 1967, only 16.9 percent of all enlistments were for two years, over half were for four years.

Manpower planners quickly found this high percentage of four-year enlistments a mixed blessing. The Marine Corps tried to ensure that no one would be involuntarily sent overseas for a second tour before spending at least 24 months in the United States. This meant that a Marine enlisted for four years would spend at least 4 months in initial training, normally followed by 13 months in Vietnam. After his required 24 months in the United States, he would have only 7 months left on his enlistment. Unless he reenlisted, this Marine would not have enough time left to serve a second Vietnam tour. This would not have been a problem if the Marine Corps’ authorized strength had included enough billets in the United States to provide a sufficient rotation base. It did not.

In December 1965, the Marine Corps requested a strength increase of 85,169 Marines to support operations in Vietnam. Secretary of Defense Robert S. McNamara approved this request in full. Between September 1966 and May 1968, the Marine Corps repeatedly requested further increases in its overall strength to provide a large enough rotation base for the rapidly growing forces in Vietnam (see Table 1). Under political pressure to keep military spending as low as possible, Secretary McNamara denied or drastically reduced every one of these requests.

By September 1966, the Marine Corps began to have difficulty sustaining its force level in Vietnam, and requested a further increase of 21,569 Marines to support operations in Southeast Asia and 12,827 Marines to improve the training flow of new recruits, for a total of 34,396. Secretary McNamara approved a strength increase of 14,464. In September 1967, the Marine Corps once again requested an increase in its end strength to support operations in Vietnam and to improve the readiness of units in the United States, this time for 19,293 Marines. The Defense Department approved an increase of 7,000 Marines.

In July 1967, General Platt described to his fellow general officers how the Marine Corps was caught between large commitments in Vietnam and an insufficient rotation base in the United States. As a solution, he proposed increasing the percentage of two-year enlistments. A typical two-year enlistee would spend five months in the United States before going overseas, serve a 13-month tour in Vietnam, and then spend “a largely useless 3 months in the rotation base.” General Platt suggested that the Marine Corps should let these two-year men leave the Marine Corps before their enlistment expired, and then recruit new men on two-year contracts to replace them. Thus, in a four-year period the Marine Corps would realize two Vietnam tours, instead of one, for a single place in its overall end strength authorization. While not proposing a set percentage, General Platt observed that the Marine Corps needed two-year enliees “in sizeable numbers to maintain the flow overseas.”

By late 1967 there were only a few first-term Marines left, aside from new recruits, who had not already served in Vietnam. In the combat arms and combat support fields, junior officers and staff NCOs were barely getting their required 24 months in the United States before returning to Vietnam. The only way to maintain the flow of replacements to Southeast Asia was to increase the number of new Marines. In
order to remain within the Marine Corps’ authorized strength, for every extra man arriving at a recruit depot, someone else had to be discharged early. To accomplish this, the Marine Corps reluctantly allowed Vietnam returnees to leave the Corps up to six months before the end of their enlistments. On 1 October 1967, the Marine Corps increased the acceptable quota of 2-year enlistments to 35 percent. In January 1968, the Marine Corps requested a strength increase of 10,300 to allow it to end the early release program. The Defense Department denied this request.

Faced with Secretary McNamara’s refusal to increase end strength, the Marine Corps turned to the alternative proposed by General Platt in July 1967. In January 1968, the Assistant Chief of Staff (G-1), Major General Raymond G. Davis, determined that “sizeable numbers” of two-year enlistments meant half of all enlistments. Through this and other measures, General Davis and his staff hoped to “increase personnel turnover in lower grades.” Between January 1968 and June 1969 just over half of all enlistments were for two years, excluding nearly 16,400 draftees who also served for two years.

The increased use of two-year enlistments did indeed serve to “increase personnel turnover.” In 1968, a third of enlisted Marines had less than one year service, as compared to less than a fifth for the period 1961-1964 (see Table 2). To compound the problem, in fiscal year 1968 over 280,000 Marines were ordered to a new duty station—almost one set of orders for every Marine.

Before 1965, the Marine Corps consciously fostered personnel stability: Marines tended to serve comparatively lengthy enlistments; a fairly small proportion of Marines entered or left the Corps in any given year; and Marines tended to serve with the same unit for long periods. By the beginning of 1968, the high level of personnel turnover generated by Vietnam made it unusual for any junior Marines to remain in the same unit for more than a year or in the Marine Corps for more than two years.

**The Quality Issue and Project 100,000**

Length of enlistment was not the only standard compromised in the Marine Corps’ effort to find enough new recruits to support the Vietnam deployment. The Marine Corps was also forced to lower the mental scores required for enlistment and to accept fewer high school graduates. Project 100,000 has received much of the blame for this decline. Secretary of Defense Robert S. McNamara launched this program in October 1966, directing the Services to take a set percentage of the new recruits from men scoring below the previous minimum acceptable scores on the entry tests. McNamara predicted that military training would provide these disadvantaged youths with skills that would greatly increase their opportunities in civilian life.

Project 100,000 required the Marine Corps to accept between a fifth and a quarter of its new recruits from men scoring in Mental Group IV on the Armed Forces Qualification Test, the lowest category legally allowed to serve. Half of these mental Group IV’s were “New Standards” men, men who would have been barred under the enlistment standards in effect in August 1966. From the start, the Marine Corps opposed Project 100,000 on the grounds that the quotas forced the Corps to turn away better qualified applicants.

While Secretary McNamara heralded Project 100,000 as a new departure and part of the “Great Society” program, the Selective Service System had already lowered its minimum mental standards a few

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months earlier in April 1966, in order to meet the demands of the Vietnam buildup. According to Thomas D. Morris, Assistant Secretary of Defense for Manpower in 1966, the high rejection rate for men in Mental Group IV created a serious problem when draft calls increased to support the Vietnam buildup. In his opinion, Project 100,000 would not have been implemented if the need for increased manpower had not existed, nor would it have been launched if it had been solely a social welfare program.

After Project 100,000 began, the Marine Corps undermined its contention that this program forced it to turn away better qualified recruits by consistently exceeding its quotas of both Mental Group IV's and New Standards men by considerable margins. In fact, the Marine Corps had already lowered enlistment standards in November 1965, well before Project 100,000. Indeed, between November 1965 and October 1966 the Marine Corps, while barring some non-high school graduates who still met the minimum standards for induction from enlisting, accepted high school graduates who scored too low on the entry tests to be drafted. This, combined with the fact that at the end of 1968 the Marine Corps was again forced to rely on the draft to fill its ranks, suggests that the Marine Corps could not in fact attract enough higher quality volunteers.

While the proportion of Mental Group IV's among new Marines increased, the proportion of high school graduates decreased. From the summer of 1965 to the summer of 1967, 65 percent of all new Marines had high school diplomas, 10 percent more than male civilians aged 18-19. In late 1967, while the proportion of civilian males graduating from high school remained fairly stable, the proportion of Marine recruits with diplomas declined. From July 1967 to June 1968 only 57.4 percent of new recruits possessed a diploma. This decline continued until fiscal year 1973, when only 49.6 percent of new male recruits had high school diplomas.*

Project 100,000 and the pressing need for new recruits forced the Marine Corps to lower its entry standards, but these standards remained considerably high-er than those in effect in either World War II or Korea. In World War II, men in Mental group IV were accepted without complaint or comment, and about 25-30 percent of enlisted Marines fell in this group. The Marine Corps did provide remedial instruction for the roughly 5-10 percent of Marines in Mental Group V** Men in Mental Group IV constituted 40.5 percent of all Marine male recruits during the Korean War. The Korean era Mental Group IVs included men who would have been excluded under Project 100,000. At the height of Project 100,000, between July 1968 and June 1969, 25.7 percent of all new Marines scored in Mental Group IV, with New Standards men comprising 13.8 percent of all recruits.*

From 1965 to 1968, the educational level and test scores of new Marines declined. This decline, however, did not necessarily translate into poor combat performance. Former Marine lieutenant Lewis B. Puller, Jr., related in his memoir that he had in his platoon one older man, called "Pappy" by his fellow Marines, who had entered the Marine Corps through Project 100,000. Puller noted that "Pappy" could keep up with the younger members of his machine gun team and they took care of him, although the Marine officer wondered how the man's skills with a machine gun "were going to help him earn a living after the Marine Corps." The quality of the leadership and training a Marine received counted for a great deal. As Lieutenant Colonel Howard Lovingood, who saw combat in Vietnam as both a senior enlisted man and company grade officer, recalled, "I looked on it as any other Marine leader would . . . you take the Marines and train them to the best of your ability and get on with the job." Unfortunately, the manpower demands of Vietnam forced the Marine Corps to devote less time to training its new recruits.

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*President Johnson introduced the term "Great Society" in a speech given in Ann Arbor, Michigan, 22 May 1964. The phrase soon came to refer to the numerous social welfare programs created by the Johnson administration.

**During 1968, the Marine Corps made three draft calls: in April for 4,000 men, May for 1,900 men, and December for 2,500 men. Starting in February 1969, the Marine Corps made a draft call every month, with the exception of July and August 1969, until February 1970.

***Although records of the exact mental group distribution of Marines are sketchy at best, Selective Service distributed men to all of the Services in roughly the same proportions. Even after President Roosevelt ended all voluntary enlistments beginning in February 1943, the Marine Corps managed to ensure a source of quality recruits by enlisting 17-year-olds into the Reserve and encouraging promising young men to volunteer for induction into the Marine Corps. The Army Air Corps also used these techniques, which probably kept the Army and Marine Corps' overall mental distribution fairly close. In World War II approximately 9 percent of all enlisted soldiers were in Mental Group V and 29 percent in Mental Group IV. Mental Group Vs did not serve in Korea or Vietnam, having been banned from service by law in 1948. Mark J. Eitelberg et al., Selectivity for Service: Aptitude and Education Criteria for Military Entry (Washington, D.C.: Office of the Assistant Secretary of Defense [Manpower, Installations, and Logistics], 1984) pp. 24-25.
**Training**

Before the Vietnam War, male Marines spent 80 days in recruit training, and then received four weeks of Individual Combat Training before their first assignment. Marines who did not go to a formal school, a group that included most Marines assigned to the ground combat arms, required a further 90 days of on-the-job training (OJT) before the Marine Corps considered them to be fully trained in their specialty. A new recruit was not supposed to be sent overseas until he had completed his OJT, more than six months after his first day of boot camp.

The Vietnam buildup quickly forced the Marine Corps to shorten its training pipeline. In September 1965, the Marine Corps reduced the time a new recruit spent in training before going overseas to four months, the minimum time required by law. Boot camp was reduced from 80 to 60 days; for all Marines save infantrymen, Individual Combat Training was reduced from four to two weeks; and OJT was replaced by a short period of formal instruction, usually lasting four weeks, called Basic Specialist Training. Infantrymen continued to receive four weeks of Individual Combat Training, but almost all of them spent only two weeks at their Basic Specialist Training. Finally, all lance corporals and below received 15 days Southeast Asia Orientation Training over a three-week period at Camp Pendleton’s Staging Battalion before leaving for Vietnam. In January 1968 recruit training was again reduced, to 56 days. This reduced total training time spent in training before going overseas to four months, the minimum time required by law. Boot camp was reduced from 80 to 60 days; for all Marines save infantrymen, Individual Combat Training was reduced from four to two weeks; and OJT was replaced by a short period of formal instruction, usually lasting four weeks, called Basic Specialist Training. Infantrymen continued to receive four weeks of Individual Combat Training, but almost all of them spent only two weeks at their Basic Specialist Training. Finally, all lance corporals and below received 15 days Southeast Asia Orientation Training over a three-week period at Camp Pendleton’s Staging Battalion before leaving for Vietnam. In January 1968 recruit training was again reduced, to 56 days. This reduced total training time

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*A Marine recruit platoon at Parris Island starts the day with a morning run in formation complete with platoon guidon. Despite the shortening of the training cycle, Marine recruit training still emphasized physical fitness.*

Department of Defense (USMC) Photo A602339
to exactly 17 weeks, more than 11 weeks shorter than the program in effect in August 1965.  

In many ways Basic Specialist Training proved to be a significant improvement over OJT. Not only was Basic Specialist Training faster than OJT, the Basic Specialist Training graduate was "as well trained or better trained than the Marine who previously spent 90 or more days in on-the-job training."  

Unfortunately, the efficiency of Basic Specialist Training came at a price. Before September 1965, a new Marine spent at least three months with his unit before deploying overseas, plenty of time for him and his squadmates to get to know each other and learn to work as a team. After that time, recruits rushed through a disorienting swirl of training programs and instructors, moving on before most of their superiors had time to learn much about them. Most new recruits joined their first permanent unit in Vietnam.  

While Basic Specialist Training proved a mixed blessing, the reduced length of recruit training and Individual Combat Training remained a necessary evil. In April 1968, the Commandant of the Marine Corps regarded the ideal training program to be 10 weeks for recruit training, 4 weeks for Individual Combat Training, and 4 weeks for Basic Specialist Training, a full month more than the program in effect at that time. A policy statement noted that the shortened training course was a temporary measure, and that the Marine Corps intends to return to a longer training period as soon as the international situation permits.  

The present length of training is the minimum time possible in an emergency situation to meet the objectives of recruit training.  

In the meantime, the Marine Corps relied on the leadership of its captains, lieutenants, sergeants, and corporals to compensate for the lowered standards, high turnover, and reduced training period.  

The Search for Junior Leaders  

As the Marine Corps grew, the numbers of junior officers and noncommissioned officers increased proportionately. This expanded body of company-level leaders faced the challenges of dealing with declining recruit quality, increased personnel turbulence, and combat.  

During the first years of the Vietnam War, the experience level of junior Marine officers actually increased. Following the practice of World War I, World War II, and Korea, the Marine Corps quickly expanded its junior officer corps by offering temporary commissions to senior noncommissioned officers. Between July 1965 and June 1967, the Marine Corps commissioned 4,059 warrant officers and senior enlisted as temporary second lieutenants. In July 1967, these officers constituted two-thirds of all ground and aviation-ground assignable lieutenants. By the beginning of 1968, over four-fifths of the ground first lieutenants were temporary officers.  

Between 1965 and 1968 the average length of commissioned service for Marine captains shrank from nine to six years, and for lieutenants from three to two years, but a large number of these officers had far more service than their pre-Vietnam peers. In fact, the temporary officers created an experience "hump" that slowly worked its way up in a bloc. On 31 December 1967, almost 60 percent of all first lieutenants had over 10 years of service, while the same was true for only 20 percent of captains. Only a quarter of captains were over 30 years old, while more than half of the first lieutenants were over 30 years old.  

The temporary officers provided the Marine Corps with capable junior officers during the initial Vietnam build-up, but this program was intended as a stop-gap, providing lieutenants only until the normal commissioning programs could meet the demand for officers. Unfortunately, after the temporary commissioning ended in June 1967, officer recruiting did not meet expectations. Anti-war sentiments on college campuses made it difficult to recruit qualified young men. As early as August 1967, the Commandant of the Marine Corps, General Wallace M. Greene, Jr., expressed his concern over the large number of candidates who quit the Officer Candidate's and Platoon Leader's Courses. Although the total numbers were small, the number of lieutenants commissioned from the NROTC program also declined dramatically in 1967. Only the introduction of the Enlisted Commissioning Program, which produced 410 lieutenants in fiscal year 1967 and 580 in fiscal year 1968, provided the Marine Corps its first significant numbers of first lieutenants in over 30 years.

*7Lieutenant Colonel Merrill L. Bartlett, who served in Vietnam as an intelligence officer, considered the temporary program "an unmitigated disaster! Certainly, we can recall temporary officers who were successful. At the same time, I can recall that most were simply SNCOs [staff noncommissioned officers] wearing bars." He observed that his field "was fertile dumping ground for these types." He personally served with several and provided the following harsh generalization: "Hardly any of them could write, most had alcohol problems, and many worked mostly on figuring out ways to get their tours shortened or to find soft billets in the rear." LtCol Merrill L. Bartlett, Comments on draft, did 8Nov94 (Vietnam Comment File), hereafter Bartlett Comments.
New Marine second lieutenants receive realistic field training at the Marine Corps Basic School at Quantico, Virginia. Most new Marine officers after their commissioning attended the Basic School.

1968, enabled the Marine Corps to meet its officer goals.33

The noncommissioned officers’ ranks expanded faster than the officers’ and the Marine Corps as a whole. Between 1965 and 1968 the number of sergeants increased 95 percent and the number of corporals increased 101 percent. The rapid promotions needed to fill these billets drastically reduced the average length of service for noncommissioned officers. In 1965, more than 60 percent of sergeants had more than 10 years service, while fewer than 8 percent had less than 6 years service. Almost 50 percent of corporals had more than four years of service and fewer than 15 percent had less than three years of service. In 1968, over 50 percent of all sergeants had less than four years service, and over 25 percent had less than three years. More than three-quarters of all corporals had less than three years of service, and over 95 percent had less than four. A large number of these young NCOs achieved their rank while on their first tour in Vietnam.

Despite their short service, the newly promoted NCOs of 1968 were not necessarily less qualified than their peers of 1965. While the earlier NCOs had more time in uniform, most had acquired all of their experience through peacetime service, whereas the young NCOs of the Vietnam era “gained a lot of experience at a very rapid rate and under combat conditions.”34

The loss of experience in the face of wartime demands was hardly new for the Marine Corps. In 1945, lieutenants averaged only one year of commissioned service, captains, two, and majors, three. By 30 June 1945, the enlisted ranks had increased over eight-fold since 30 June 1942 and almost 24 times above the Marine enlisted strength on 30 June 1939. By the end of the war, few enlisted Marines of any rank had more than four years of service, and one with more than six years service would have been a rarity. Unlike World
War II, however, during Vietnam the Marine Corps was unable to keep most of its junior officers and NCOs for more than one combat tour. Despite the Marine Corps' efforts to retain its newly promoted and combat-experienced leaders, as the war progressed a sizeable portion of the career enlisted force did not reenlist; only a tiny minority of first term Marines, both officer and enlisted, opted to remain in the Corps.

The retention of officers became a major problem by 1968. In 1964, 54 percent of Marine officers completing their obligated service remained on active duty at least one additional year. By 1967 this proportion had dropped to 42 percent.35 While regular officer retention remained close to the established goals, every month roughly 3 regular majors and 36 regular captains resigned their commissions. Unfortunately, regulars (excluding temporary officers) constituted just over a third of the company-grade officer ranks, and less than a fifth of the lieutenants. To meet its officer goals, the Marine Corps needed a sizeable number of Reserve officers to augment into the regular Marine Corps every year.

Before Vietnam, more Reserve officers applied for augmentation than the Marine Corps had room for, and the Marine Corps enjoyed the luxury of simply selecting the best qualified applicants. In fiscal year 1965, of 3,431 officers eligible for augmentation, 714 applied, approximately one out of every five eligible officers. The Marine Corps had room for 69.4 percent of the applicants, and accepted 66.8 percent of them. In FY 1966, while the number of eligible officers dipped to 2,380, only 314 applied for augmentation, slightly more than one out of every seven officers. The Marine Corps had room for every applicant, but only 88.5 percent were selected to become regulars.

This trend worsened as the war progressed. For every fiscal year from 1966 to 1969, the Marine Corps had more spaces than applicants for augmentation. In fiscal year 1968, fewer than one out of 14 eligible officers applied for augmentation. The 1968 augmentation board had a quota of 412, but only 240 officers applied. Of those 240 applicants, the board selected only 202, less than half its quota, apparently finding a shortage of officers preferable to retaining the other 38 officers. In fiscal year 1969, fewer than one out of 15 eligible officers applied for augmentation. Again the augmentation board was authorized to retain every one of the 198 applicants, but only 115 were considered fit to become regular officers.

In July 1969, Major General Platt explained to his fellow generals that the low selection rate most likely reflected the low quality of the applicants. General Platt also concluded that one of the major reasons for the poor retention record was the unwillingness of junior officers "to commit themselves to the prospect of repeated tours in Vietnam."36

General Platt's assessment probably also applied to the noncommissioned officer ranks. The Marine Corps had great difficulty keeping its NCOs. The reenlistment rate for first-term regulars,* who provided the bulk of the corporals and sergeants in this period, dropped from 16.3 percent for fiscal years 1965 and 1966 to 11.9 percent in fiscal year 1968 (see Table 3). Headquarters Marine Corps tried to stem the exodus, creating the Career Advisory Branch on 1 April 1968. This branch's sole concern was the management of a career advisory program intended to persuade more Marines to reenlist.37 Despite the efforts of the career advisors, reenlistments plummeted. In fiscal year 1969, only 7.4 percent of eligible first-term regulars reenlisted. Of every 100 first-term regulars leaving the Marine Corps, only 4.7 reenlisted or extended.

The situation was just as bad among the career regulars. Before 30 June 1966 almost 90 percent of all career Marines reenlisted. Between 1 July 1968 and 30 June 1969 this proportion dropped to less than 75 percent. The combat arms were hardest hit. In fiscal years 1965 and 1966, the reenlistment rate for career combat arms Marines was slightly higher than the average reenlistment rate for all career Marines. This trend ended in fiscal year 1967, when reenlistments for career combat arms Marines fell below the Marine Corps-wide average. By fiscal year 1969, combat arms career reenlistments ran almost 15 percentage points below the Marine Corps average; only 59.8 percent of eligible career combat arms Marines reenlisted.

*Regulars describes Marines who voluntarily enlisted in the Marine Corps, as opposed to draftees.
By relying on experienced NCOs with temporary commissions, rapidly trained lieutenants, and quickly promoted short-service NCOs to lead Marines in combat in Vietnam, the Marine Corps followed a familiar path. The same policies had been used in World War I, World War II, and Korea. Vietnam, however, differed from these conflicts in one crucial respect: during the Vietnam War, almost none of the newly trained and experienced officers and NCOs remained to lead Marines in combat for a second tour. By 1968, even the pre-war senior NCOs began to leave in alarming numbers. Rather than continually adding to its pool of combat-tested leaders, the Marine Corps had constantly to recreate it.

Discipline*

The exodus of young officers and NCOs also meant that the older mustang officers [officers with prior enlisted service] and pre-war career NCOs provided most of the continuity, experience, and senior leadership at the company level. This tended to exacerbate the differences between short-service Marines of all ranks and “lifers,” placing a further strain on the cohesion and discipline of small units.*** At the beginning of 1968, men on four-year enlistments still comprised the bulk of the Marines in Vietnam.*** As short-service Marines with minimum training arrived and career Marines left in increasing numbers, signs of declining combat discipline began to appear.

In April 1968 Major General Donn J. Robertson, the commanding general of the 1st Marine Division, tardy informed his subordinate commanders that it was “almost unbelievable to receive reports of incidents in which Marines while on patrol, have gone off and left members of the patrol.” General Robertson blamed leaders of all ranks for their failure to keep strict personnel accountability.38

In August, the new commanding general, Major General Carl A. Youngdale, again lectured the 1st Marine Division on basic discipline. This time the subject was accidental discharges. In all of 1967, the units of the 1st Division reported 200 accidental discharges, with 156 Marines wounded and 16 killed. By 18 August 1968, Marines in the division had already fired 218 accidental discharges, wounding 189 and killing 26. A division bulletin noted that every incident resulted from negligence.39 In October, the 1st Marine Division issued another bulletin addressing the same problem, noting that in September, 4 Marines died from accidental discharges, and another 18 were wounded.40 Yet another bulletin came out in March 1969. In 1968, Marines of the 1st Division committed 323 accidental discharges. These incidents killed 40 and wounded another 509 men, more than twice the number of casualties inflicted in 1967.41

As the year progressed offenses also increased, particularly drug offenses. In the first four months of 1968, military authorities investigated 160 Marines for marijuana use, compared to 142 for all of 1967. Marijuana use was heaviest in Vietnam and the West Coast.42 Still, in July 1968, a Marine staff paper prepared for the annual General Officers’ Symposium contained the observation that

While the presence of marijuana and drug users in the Marine Corps is a problem—even the use of drugs by one Marine must be considered a problem—the number of drug users in the Marine Corps is not considered alarming or threatening to the combat efficiency or the public image of the Marine Corps.43

Shortly after this symposium, the drug problem increased markedly. In the first six months of 1968 the 1st Marine Division’s Criminal Investigation Division opened a total of 17 investigations into the use of illegal drugs. In the last third of 1968 this divi-
sion opened an average of 24 investigations into drug offenses a month.*

By the end of 1968 Marine leaders realized that a problem even worse than illegal drug use had emerged: "fragging," the deliberate killing of officers and NCOs by their own men. Although small in absolute numbers, the knowledge that fraggings occurred often had a chilling effect on a leader's willingness to enforce discipline.**

More offenses naturally resulted in more prisoners, quickly overcrowding the limited brig space in Vietnam. Most Marine prisoners were confined at the III MAF brig in Da Nang, run by the 3d Military Police Battalion. This brig was built to house 200 prisoners.44 In May 1968, it housed 175 prisoners, but by August it held 298. According to the officer who kept the prisoner's records, "[t]he most common offenses were smoking marijuana, refusing to get a haircut, or refusing to go on a second combat operation after surviving the hell of their first."45 The prisoners tended to be poorly educated; about 30 percent were functional illiterates. At least a quarter had civilian judicial convictions.46 Although the prisoners as a group lacked a particular ideology, they all shared a general resentment of and hostility toward authority. Major Donald E. Milone, who later commanded the 3d MP Battalion, observed that most of the "brig population did not have formal charges presented to them, and they had been confined for over 30 days awaiting charges."47

On 16 August a scuffle between prisoners and guards escalated into a riot. The prisoners controlled the brig for two days, holding kangaroo courts and beating prisoners accused of collaborating with the guards. Finally, on the 18th, the brig guards, using tear gas, reclaimed control of the prison.***

In addition to disciplinary problems, racial incidents also started to attract command attention in the latter half of 1968, and Headquarters Marine Corps began to make an effort systematically to track racial incidents.48 In October, General Chapman asked Lieutenant General Buse, Commanding General FMFPac, to look into reports of racial trouble in III MAF, noting that this matter warranted "careful watching."49 Shortly after this request, racial incidents led Commander Linus B. Wensman, USN, commander of Camp Tiensha at Da Nang, to put the China Beach recreation area off limits to casual users.50 By July 1969, racial incidents had become serious enough to receive considerable attention at the annual General Officer's Symposium.****

While a growing problem, offenses and racial troubles tended to be confined to rear areas and did not have a serious impact on combat operations. Former corporal and squad leader Kenneth K. George recalled that:

[I]n the rear you get a lot of flak from the guys because they think that you are picking on them. When you are in the field and the second there is any kind of problem . . . the minute you open your mouth, they react and they react very quickly.51

**Morale**

In contrast to the discipline problem, which took a few years of fighting to appear, Marine leaders worked hard from the beginning to keep up morale. The

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*Colonel Poul F. Pederson, the III MAF G–1, noted that in 1968 the Marine command introduced "sniffing dogs . . . to catch drugs coming and going." According to Pederson, this program was put under the Provost Marshal, Lieutenant Colonel Joseph J. N. Gambardella, who also commanded the 3d MP Battalion. Col Poul F. Pederson, Comments on draft, n.d. [1994] (Vietnam Comment File), hereafter Pederson Comments.


***Two weeks later, a violent prison riot occurred at the U.S. Army's Long Binh brig. Prisoners controlled a portion of the brig for more than a month. For a more detailed description of the Da Nang brig riot, see Solis, Trial By Fire. Major Milone, who took over the 3d MP Battalion in September 1968, noted that during the three-day riot, "no prisoner or guard was seriously injured during this 3-day period. If the procedure for brig riots had been put into effect the Marine Corps would have had [as] violent a riot that occurred at the Army's Long Binh Brig. During the investigation [of the III MAF incident] the officer-in-charge was criticized for not shooting prisoners that did not obey guards commands and for not obeying the SOP. The investigation was dropped after the Long Binh riot when the Army went by a SOP." Maj Donald E. Milone, Comments on draft, n.d. [Dec94] (Vietnam Comment File).

****Colonel Maurice Rose, who relieved Colonel Pederson as III MAF G–1 in July 1968, noted that in the second half of 1968, "we set up a III MAF Watch Committee composed of G–1 Representatives which met monthly to discuss the situation in I Corps, report any problems, and recommend solutions if required." Col Maurice Rose, Comments on draft, did 25Nov94 (Vietnam Comment File), hereafter Rose Comments.
Marine Corps went to considerable trouble to make a Marine's time in Vietnam as tolerable as possible. Major General Carl W. Hoffman, who spent almost all of 1968 in Vietnam, recalled that "it was terribly important... that people had something to look forward to like a period of rest and recuperation." About halfway through their tour, every Marine rated an out-of-country Rest and Recuperation (R&R) trip. In every month of 1968, somewhere between 3,000 and 4,000 Marines flew to Hawaii, Australia, Japan, Thailand, or other Asian locales for a five-day respite. Marines could also enjoy shorter R&Rs in Vietnam, and every month a thousand or so spent extended liberties at the Navy's China Beach recreational facility near Da Nang.

The protracted nature of the Vietnam conflict led to the creation of large base camps. For troops in these Noted Comedian Bob Hope, with two members of his cast, entertains the troops during his annual Christmas show at Da Nang. The Marines and U.S. military in general tried to raise morale and relieve stress at the big base areas by providing such entertainment.

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...areas, the biggest enemy was boredom. To alleviate this problem, the Marine Corps tried to provide as many distractions as possible, and rear areas included numerous clubs, post exchanges, and air conditioning. Troops in the rear enjoyed many of the comforts of home, including "security, movies, free time, dry beds with clean sheets, mail and showers every day, radios and stereos, and plenty to eat and drink." From January to September 1968, the China Beach recreation area received no fewer than 15,000 and often well beyond 30,000 daily visitors from the Da Nang area. After the local Navy commander restricted the use of the facility to authorized patrons in October, the number of daily visitors dropped to around 5,000 a month.

Between operations, front-line Marines often returned to these rear areas. During these sojourns these men undoubtedly enjoyed the security and amenities offered by these bases, but they could also plainly see the stark contrast between their lives in the field and the much safer and more comfortable lives of headquarters and support personnel. Many combat Marines resented the soft life of rear area troops, although this resentment was often tempered by the desire to enjoy these benefits themselves.

At times the effort to make life as comfortable as possible became an end in itself. Major General Hoffman observed that

[Although there's nothing wrong with getting yourself as comfortable as possible, there is something wrong with getting so preoccupied with the creature comforts that you don't get on with the prosecution of the job at hand.]

The Marine Corps also sought to increase esprit by following Napoleon's maxim that "a soldier will fight long and hard for a bit of colored ribbon." Beginning in 1967, the Marine Corps began increasing the number of medals and ribbons awarded to Marines. At the General Officers Symposium in July 1968, Brigadier General Ronald R. Van Stockum, Retired, Deputy Senior Member, Navy Department Board of Decorations and Medals, *The disdain of frontline troops for rear area personnel is almost a universal part of military life. Combat troops typically invent derogatory terms to refer to non-combat men. In Vietnam, Marines usually used the term "pogue" and even more explicit derogatory language. Often support troops accept this disdain, acknowledging that the greater hardships and risks endured by combat men entitle them to deference from non-combat men. For a discussion of the relations of combat men and non-combat men in World War II, see Samuel A. Stouffer et al., The American Soldier (Princeton, New Jersey: Princeton University Press, 1949) 2 vols, v. 2, Ch. 6.*
informed his fellow generals that the Marine Corps presented proportionally far fewer decorations to its members than the other services. For instance, while the Marine Corps awarded 1 Bronze Star for every 20 Purple Hearts, the Army gave out equal numbers of each medal.

General Van Stockum felt that the Marine Corps needed to liberalize its standards. He argued that “a combat Marine . . . should return from Vietnam wearing some personal award.” He also advocated recognizing career officers and reserve officers likely to stay in the Marine Corps, and greater use of unit awards. General Van Stockum’s views were in keeping with the trend towards the creation of new awards in this period, including the Meritorious Unit Citation, Navy Achievement Medal, and Combat Action Ribbon.60*

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*The Navy Achievement Medal, intended to recognize meritorious performance by junior officers and enlisted Marines, was authorized on 17 July 1967. This award could be used to recognize meritorious service in combat (for which a “V” attachment was authorized), giving the Marine Corps an award junior to both the Bronze Star and the Navy Commendation Medal to award exceptional combat performance. This award replaced the Secretary of the Navy’s Commendation for Achievement; persons awarded this commendation after 1 May 1961 were authorized to wear the Navy Achievement medal. The Meritorious Unit Citation was created on 17 July 1967, and was intended to recognize units for exceptional performance not involving direct combat. The Combat Action Ribbon was introduced on 17 February 1969, and was awarded to individuals who participated in direct combat with the enemy. This award was also retroactively awarded to Marines who had served in direct combat since 1 March 1961.
Awards, creature comforts, and rest and recuperation trips undoubtedly improved the spirits of many Marines, but none of these outweighed the most important policy influencing morale: the 13-month tour in Vietnam. While an R&R might be eagerly anticipated or an award appreciated, the most important thing to almost every Marine was his rotation date. This policy also ensured that every unit rotated around a tenth of its total strength every month.

The individual replacement policy has been criticized by many, but the Marine Corps had little choice. The Marine Corps could not keep 80,000 Marines in Vietnam through unit rotation without tripling its overall strength. Nor was the policy an unmitigated evil. Predetermined tour lengths had a positive effect on morale. Unlike the soldier of World War II, who felt (with a great deal of justification) that his only hope of escape from combat lay in death, severe wounding, or the end of the war, the 13-month tour gave the Marine in Vietnam a realistic goal. The benefits generated by the set tour length probably outweighed the reluctance of "short-timers" to take risks. In any case, it is unlikely that many men could have lasted much more than a year in combat zones.

Navy doctors concluded that the policy of set tours significantly reduced the number of psychiatric casualties among Marines in Vietnam.\textsuperscript{62}

\textit{The Aviation Shortage}

As its Vietnam commitment increased, the Marine Corps could and did expand its ground forces fairly rapidly, albeit with growing pains. Unfortunately Marine aviation, which relied on a very long training pipeline, could not be expanded fast enough.

In fact, the Marine Corps suffered a shortage of pilots as early as the mid-1950s. Officers volunteering for flight training had to agree to remain on active duty well beyond the normal period of service, a daunting prospect for those not committed to a Marine Corps career. To alleviate this concern, the Marine Corps instituted a number of commissioning programs which allowed an officer to bypass the Basic School and go directly to flight school.\textsuperscript{64}

Well before 1955, the Marine Corps accepted a number of graduates from the Navy’s Naval Aviation Cadet (NavCad) pilot training program. These men went through flight training as cadets, and received their wings and commissions on the same day. After completion of flight training, they reported directly to a squadron. In 1955, the Marine Corps instituted the Aviation Officer Candidate Course, and by 1957 the Platoon Leader’s Class (Aviation) had been added. Upon completing brief training periods at Quantico, men in these programs received their commissions and reported directly to flight school. In 1959, the Marine Corps stopped accepting NavCad graduates and created the Marine Aviation Cadet Program (MarCad), which operated in the same manner as NavCad. As a result of these programs, by 1965 the majority of Marine naval aviators had not attended the Basic School.\textsuperscript{68}

With these new sources of aviators, the Marine Corps barely managed to meet its requirements for naval aviators. The Marine Corps’ expansion after the 9th MEB landed in Vietnam in March 1965 threatened these hard-won gains. In an effort to keep the disruption from rapid growth to a minimum, on 13 August 1965, the Commandant announced that the retirement and resignations of regular officers would be delayed for up to 12 months. This helped to prevent an immediate shortage of pilots. In the summer of 1966, the number of qualified aviators fell just 45 short of the authorized total of 4,284.\textsuperscript{70}

\textsuperscript{6}Colonel Paul F. Pederson, the III MAF G-1, observed that the 13-month tour “to the day was a single stable element.” He noted that as a general policy, “about two weeks prior to rotation the Marine would be sent to the rear with the gear.” Some believed that as the rotation date approached the Marine got anxious. If he remained in combat, he might be too aggressive or overly reluctant. In either case he could be a detriment to the unit.” Pederson Comments. General Chapman remarked that all manpower considerations were “driven by the 13-month tour decreed by DOD . . . .” Gen Leonard F. Chapman, Comments on draft, dtd 27Dec94 (Vietnam Comment File). In late 1965 III MAF instituted Operation Mixmaster, which transferred Marines among units to ensure that all Marines in a given unit would not rotate at the same time. See Shulimson and Johnson, \textit{U.S. Marines in Vietnam}, 1965, p. 117.

\textsuperscript{62}Navy doctors concluded that the policy of set tours significantly reduced the number of psychiatric casualties among Marines in Vietnam.\textsuperscript{62}

**Lieutenant Colonel Merrill L. Bartlett, an intelligence officer who served with the 13th Interrogation and Translation Team in Vietnam, related that he “considered extending for purely professional reasons. By then, I couldn’t imagine many officers who knew as much about the enemy order-of-battle or who could interrogate as well. I also realized that personally I had become calloused beyond belief; the death and destruction no longer bothered me. I recall spending the entire night in the intensive-care ward of the Naval hospital, interrogating a wounded NVA officer and seemingly oblivious to the horrible mutilation of the wounded Marines in the other beds. I can also remember interrogating POWs in the ARVN hospital in Da Nang amidst indescribable filth and suffering. By the end of my tour, sifting through the pockets of dead NVA or VC, searching for documents, no longer affected me. Perhaps it was time to return to the world.” Even so, the Marine Corps would have been better served and I would have served it better by remaining in-country rather than by protecting Camp Pendleton from a seaward invasion from whatever.” Bartlett Comments.
This comparatively rosy situation proved short-lived, and by autumn the Marine Corps suffered a severe shortage of naval aviators, particularly helicopter pilots. To alleviate this shortage, the Marine Corps resorted to a number of expedient personnel actions, including again involuntarily retaining aviation officers, using ground officers to fill aviation billets, and sharply reducing the number of naval aviators attending professional schools.*

Despite the Marine Corps’ efforts, the pilot shortage of 1966 persisted into 1968, making it impossible to man squadrons in Vietnam at their wartime strength; the Marine Corps could barely maintain the normal peacetime manning level.** Helicopter pilots still constituted the most critical shortage. In addition to fighting a war at peacetime strength, the pilots of the 1st MAW found themselves tasked to support Army and allied units in I Corps. By January 1968, despite the fact that the Commandant was under the impression that the III MAF “had everything it rated,” the 1st MAW found itself forced to standdown pilots, particularly helicopter pilots, to let them get some rest.***

June of 1968 found the Marine Corps still short roughly 850 naval aviators, a shortage that spilled over to Vietnam.† In July 1968, the 1st MAW calculated that it needed 703 helicopter pilots to meet its requirements. The manning level authorized 644 pilots; 606 were actually on board. Of these, only 552 were available for flight duty. In December 1968, the number of pilots in the 1st MAW finally reached the manning level, but only after the manning level was reduced to 581 pilots. The number of helicopter pilots in the 1st MAW available for flight duty remained at less than 80 percent of requirements into 1969.‡

The Naval Air Training Command, located at Pensacola, Florida, could not train enough Marine helicopter pilots to bring the units in Vietnam up to strength. In June of 1967, Marine officers destined to become fixed-wing pilots began reporting to Air Force bases for flight training. This freed Marine quotas at Pensacola which could be used to train helicopter pilots. The first 15 pilots graduated from this program in June 1968.

A similar program with the U.S. Army attacked the shortage of helicopter pilots directly. In January 1968, the first Marines arrived at Fort Rucker, Alabama, for rotary wing pilot training, with the first pilots graduating in October. Marine officers trained by the Army and the Air Force then reported to Marine training groups for further instruction, including shipboard landings, before qualifying as naval aviators. By June of 1969, 155 Marine officers had completed Air Force flight training and 150 had completed Army flight training. Even with these programs, in early 1969 the Marine Corps had to order a number of fixed-wing pilots to transition to helicopters to fill the cockpits in Vietnam.

In addition to the pilots, the Marine Corps had difficulty finding enough enlisted Marines to maintain and repair the aircraft in Vietnam. It took a long time to train a Marine in the skills needed to maintain aircraft, so the Marine Corps only assigned men on four-year enlistments to these specialties. This policy created a shortage of aviation maintenance Marines in the Western Pacific and an overage in the United States.

As with most other occupational fields, the Marine Corps needed to train large numbers of first-term Marines in aviation specialties to maintain the flow of replacements to Southeast Asia. Most of these men spent a year in training, and then a year in the Western Pacific. Unlike most other specialties, however, upon returning from overseas aviation Marines still had two years left on their enlistments. These Vietnam returnees created overages in the United States and counted against total strength, reducing the number of new recruits that could be enlisted and sent overseas.

Despite this problem, the Marine Corps managed to exceed the enlisted manning level for aviation units in Vietnam, although it still fell short of the adjusted table of organization (T/O). Unfortunately, aviation units had to detail many of their highly trained spe-

*For a discussion of the origins of the pilot shortage and the steps taken to correct this problem, see Shulimson, U.S. Marines in Vietnam 1966, p. 262.

**Tables of Organization (T/O) laid out the exact composition of every unit, showing every billet, and the rank and military occupational specialty for that billet. Ideally, in combat, every unit should have been up to T/O strength. Since this was not possible, the Manpower Division of Headquarters, Marine Corps set “manning levels” for units based on unit type and location. A unit with a manning level of 94 percent would only receive enough replacements to keep it at 94 percent of its T/O strength. Manning levels were adjusted based on a unit’s mission, the availability of Marines with the appropriate skills, and a unit’s location. Units in Vietnam generally had a higher manning level than other units.

Although Headquarters, Marine Corps tried to send enough replacements to each major unit to keep its subordinates up to their manning level, the final distribution of replacements rested with the field commanders. For further explanation, See Appendix.

†For a complete discussion of helicopter pilot availability and training during the Vietnam war, see Falls, Marines and Helicopters 1962–1973, Chapters 4, 11, and 12.
cialists to provide local security forces and to operate "clubs, messes, special services, exchanges, laundries, etc." Marines who were wounded, sick, or on R&R constituted a further drain. During the last half of 1968, these commitments and losses drove the flight-line strength of helicopter groups down to less than 80 percent of the provisional T/O. In the opinion of a board of III MAF officers, the lack of men, particularly skilled helicopter maintenance Marines, put helicopter maintenance "behind the power curve." 

Filling the Ranks in Vietnam: Too Many Billets, Too Few Marines

In the summer of 1967 the Department of Defense's Manning level for Vietnam, Program 4, called for 80,500 Marines. At the time, 79,000 Marines were actually in Vietnam or in a Special Landing Force (SLF). On 10 August 1967, the Secretary of Defense, Robert S. McNamara, tentatively approved Program 5, which set a goal of just over 82,000 Marines in Vietnam. McNamara officially approved Program 5 in October. If filled, this ceiling would still have left III MAF with over 6,000 unfilled billets. This point became moot as the Marine Corps could not even meet its authorized strength. The number of Marines in country declined from 79,337 on 30 April 1967 to 73,430 on 31 October 1967. This decline in strength largely resulted from a replacement shortage, administrative losses at the end of the year (particularly holiday leaves), and conversion from a tour lasting at least 13 full months in Vietnam to one lasting no more than 395 days from the day a Marine left the United States to the day he returned to the United States.

In order to correct this manpower shortage, the Commandant directed the commanding generals of Marine Corps Bases Camp Lejeune and Camp Pendleton to retain 1,000 non-infantry Marines a month in August and September as infantry replacements for Vietnam. Since these Marines received seven weeks of training, the first of them did not arrive in Vietnam until early October 1967. October also marked the beginning of the annual manpower surge. The Marine Corps normally experienced a recruit "surge" during the summer months, and the first of these summer recruits completed their mandatory four months initial training and became available for overseas assignment in early October.

On 10 November, Staging Battalion at Camp Pendleton went to a seven-day work week to handle the increased number of replacements. Five days later Headquarters, Marine Corps increased the normal replacement flow for the period from 23 November 1967 to 13 January 1968 by 3,135 Marines. This forced Staging Battalion to implement "Operation Kicker," shortening the number of training days from 15 to 12. On 6 January 1968, the last planeload of replacements trained under Operation Kicker left for Vietnam. With these added inputs, overall strength in Vietnam rose by over 4,500 through November and December.

Changes to Program 5 reduced the number of Marines authorized to be deployed to Vietnam for December 1967 and January 1968 to 81,500. According to the MACV strength report, by 31 December 1967, the total number of Marines in country or assigned to SLFs amounted to only 78,013. Still, III MAF found itself in the unusual situation of having 74,058 Marines on board to fill 72,526 authorized billets.

Unfortunately for III MAF the formal tables of organization did not provide for a number of vital billets, including the 1,097 Marines involved in the Combined Action Program. Despite the fact that III MAF was technically overstrength, the 23,778 Marines assigned to the 3d Division still left the division 62 Marines short of the number authorized. The 1st Marine Division, with 23,209 Marines, was 1,251 Marines short of its authorized strength. The average strength for infantry battalions in Vietnam was 1,188, only five Marines short of the T/O allowance of 1,193, but the infantry battalions of the 1st Marine Division averaged only 1,175 Marines. The two SLFs combined were 424 Marines short of their authorized strength of 3,900. Force Logistics Command contained 9,397 Marines, only 307 Marines short of its authorized strength. The 1st MAW had 15,308 Marines in Vietnam, 1,869 Marines more than its manning level, but still remained critically short of pilots and aircraft mechanics.


**Provisional T/Os covered the Combined Action Program, additional personnel for the III MAF headquarters, and other billets needed in Vietnam. Although technically these billets should have been filled, the Marine Corps' inability to man III MAF fully meant that these provisional billets were filled at the expense of other units. See Chapter 29 for further discussion about the manning of the Combined Action Program.
uary, with 74,313 Marines in III MAF. While the shortfall in the divisions continued, the average strength of infantry battalions remained relatively stable at 1,186 Marines. The shortage among the battalions of the 1st Marine Division disappeared, as their average strength rose to 1,193, exactly their authorized strength. Just before the beginning of the Tet offensive, infantry companies had an average of 207.5 Marines assigned, only 8.5 below their T/O allowance of 216. However, an average of 15.4 Marines were on R&R, in hospital, or otherwise absent, leaving just over 192 Marines present for duty. Since a number of Marines present on the unit diary were in fact occupied with a variety of tasks, the number of Marines available for operations was somewhat lower.

During January 1968, 539 Marines died or were missing in action and 2,126 wounded in action.90 For the month, III MAF reported that another 60 Marines were hospitalized for injuries or illness. While these casualties were heavy, especially compared to the light casualties suffered during October, November, and December 1967,* they only foreshadowed what was to prove the costliest year of the war for the Marine Corps.

On the night of 30-31 January 1968 the Tet Offensive began. Marine counterattacks, particularly in Hue City, made February 1968 costlier for the Marine Corps than any previous month of the war. In February, 691 Marines were killed and 4,197 wounded in action. While some battalions suffered terribly in this month, the high flow of replacements ensured that the average strength of infantry battalions fell only slightly, to 1,157. One of the hardest hit battalions, the 2d Battalion, 5th Marines, which suffered 65 killed and 421 wounded in the battle for Hue City, saw its average monthly strength drop only 111, from 1,152 in January to 1,041 in February. Many of the Marines carried on the rolls of this and other badly bloodied battalions, however, were recovering from wounds.

By the end of February, while the average number of Marines assigned to rifle companies had fallen by only 5.4 from late January to 202.1, the average number physically present dropped to 174.8. Again, some companies were particularly bad off; while most companies numbered somewhere between 190 and 210 total strength, Companies E and I of the 7th Marines had only 172 and 176 Marines, respectively, on their rolls. Still, all but 17 Company E Marines and 31 Company I Marines were with their company. At the end of February, the 3d Battalion, 1st Marines, an SLF battalion, was still recovering from heavy fighting in the Cua Viet sector, and the 1st Battalion, 5th Marines was still feeling the effects of the battle for Hue. Company I, 3d Battalion, 1st Marines showed 202 Marines on its rolls, but only 150 were actually with the company. Company A, 1st Battalion, 5th Marines carried a respectable 210 Marines on its rolls, only six shy of its T/O strength. However, about half, 109 Marines, were absent, most doubtless in hospitals.

The Deployment of Regimental Landing Team 27

The unexpected ferocity of the Tet offensive shook President Johnson. In the first days of February, while General Westmoreland felt that he had the situation in Vietnam under control, the President worried that a major reverse might still occur. President Johnson found the possibility of Khe Sanh falling particularly alarming. Although anxious to send additional troops to forestall the possibility of an embarrassing defeat, for political reasons Johnson could not send reinforcements to Vietnam without a clear request from Westmoreland. On 12 February, after repeated prompting from the Chairman of the Joint Chiefs of Staff, General Earle G. Wheeler, General Westmoreland finally requested a brigade from the 82d Airborne Division and half a Marine division.

Immediately after the receipt of Westmoreland's request, the Joint Chiefs of Staff recommended that the 82d Airborne Division and two-thirds of a Marine division/wing team should be readied for movement, and proposed also that enough Reserve units should be called up to reconstitute the strategic reserve before these additional troops left for Vietnam. President Johnson welcomed the opportunity to send reinforcements to Vietnam, but he had no desire to call up the Reserves. At a meeting at the White House later on the 12th, the Joint Chiefs "unanimously" agreed to send one brigade of the 82d Airborne Division and a Marine regimental landing team immediately to Vietnam. The President, however, directed them to study the issue of the Reserve call-up further.92

That night, the Joint Chiefs of Staff sent a message to the Commandant directing the movement of a reinforced regiment from the 5th Marine Division to Vietnam, with one battalion moving by sea and the other two by air. Air transport would begin by 14 February, and the entire regiment was to be in Vietnam by 26 February.93 The Commandant promptly directed Lieutenant General Victor H. Krulak, Commanding Gen-

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*Monthly deaths for this period averaged 240.3, peaking in December 1967, when 273 Marines died in Vietnam.
eral, Fleet Marine Force Pacific, to prepare Regimental Landing Team (RLT) 27 for deployment to Vietnam by the afternoon of 14 February.94

Battalion Landing Team (BLT) 1/27, commanded by Lieutenant Colonel John E. Greenwood, normally stationed in Hawaii, was already at sea, having embarked on board amphibious shipping for a four-month training deployment on 10 and 12 February. On 13 February, General Krulak simply canceled the training exercise and directed the battalion to steam directly to Da Nang. The change in destination caught the BLT unprepared. Not only was the BLT seriously understrength, with only an average of 119 Marines present in the rifle companies, but nearly 400 embarked Marines and sailors did not meet the criteria for assignment to Vietnam.

The first element of BLT 1/27, consisting of Companies C, D, and elements of Headquarters and Service Company, embarked on board the USS Vancouver (LPD 2), arrived in Da Nang on 23 February. Although the Joint Chiefs of Staff had directed the entire regiment to be in Vietnam by 26 February, the rest of BLT 1/27 could only move as fast as its ships could steam. Companies A, B, and other portions of Headquarters and Service Company, on board the USS Bexar (APA 237), arrived a day late on 27 February, while the last of Headquarters and Service Company arrived the next day on board the USS Washburn (AKA 108).* Upon arrival, the battalion immediately had to transfer all non-deployable Marines and sailors out of Vietnam. On 28 February, after this transfer, the rifle companies averaged just 87 Marines. This situation quickly improved as 400 replacements flown out from Camp Pendleton with the rest of RLT 27 joined the battalion.

The rest of the 27th Marines also had a difficult time. Colonel Adolph G. Schwenk, the commanding officer of the 27th Marines, received a verbal warning order on 12 February, but the official message ordering the regiment to deploy did not arrive until the next day. After some initial confusion over the deployability criteria, the regiment learned that 17-year olds, sole surviving sons, Marines returned from Vietnam under the twice/thrice wounded policy, officers and corporals and below within four months of their discharge date, enlisted Marines already ordered to WestPac, and officers in receipt of transfer orders would not deploy to Vietnam. Marines with one year or more of duty in the United States since their last tour in Southeast Asia were deployable, a major departure from the policy mandating two years between Vietnam tours.95**

Even with the reduction of the time between tours from two years to one, only 33 officers and 660 enlisted men out of a regiment of 2,160 met the deployment criteria. After combing the 5th Marine Division for every deployable Marine, the regiment still had a shortfall of 900 infantrymen. Lieutenant General Krulak cut this shortfall to 600 by administratively reducing the regiment's personnel strength objective from fully combat ready to marginally combat ready. He then decided that some 400 infantry billets could be filled by Marines with other specialties. Nearly 100 infantrymen waived a disqualifying factor and volunteered to deploy with the regiment, while 100 infantry replacements from Staging Battalion rounded out the units leaving from California. Another 200 replacements from Staging Battalion and 200 Marines called from FMFPac security forces, headquarters, and 9th MAB went to fill the 400-man shortfall in BLT 1/27. In just over a week, the regiment transferred out nearly 1,500 non-deployable Marines and sailors while simultaneously joining over 1,900 others to bring it up to strength. Units attached to the regiment to form an RLT added another 840 Marines and sailors.***

**Colonel Thomas P. O'Callaghan, who was the 5th Marine Division assistant operations officer at the time, remembered that the initial request for the 27th Marines came "from FMFPac in the clear over the phone. I pointed out to go to secure line and I would get G-3 and CG when they called back! This was done." Colonel O'Callaghan related that the criteria for deployment created "a mess, but the 5th Div couldn't make the move in time if we sorted everyone out before they left." Col Thomas P. O'Callaghan, Comments on draft, n.d. [Jan95) (Vietnam Comment File).

***Lieutenant Colonel Louis J. Bacher, who commanded the 2d Battalion, 27th Marines, remembered that on 12 February, Colonel Schwenk, the 27th Marines commander, called a conference and announced that the regiment was deploying to Vietnam with the 2d and 3d Battalions departing by air and with BLT 1/27 arriving by ship. Bacher recalled that the "first plane was scheduled to leave Marine Corps Air Station (MCAS) El Toro at noon" on the 14th. He stated that the 5th Marine Division staff did an incredible task of transferring out over 850 officers and men... not qualified for deployment and replacing them with those that were, in the two days prior to mount-out." Lieutenant Colonel Bacher had a new executive officer, S-1, S-2, S-3, and S-4 and three new company commanders. Lt Col Louis J. Bacher, Comments on draft, dtd 7May95 (Vietnam Comment File), hereafter Bacher Comments. Colonel Tillis J. Woodham, Jr., who commanded the 3d Battalion, 27th Marines, recalled that the priority for transfers of infantrymen into the 27th Marines went to the 2d Battalion which was scheduled to depart first. According to Woodham, "by the time it came to filling out 3/27, ... it became necessary to assign non-infantry MOS's [military occupational specialty] in large numbers. This resulted in a 'cooks, bakers, and candlestick makers' label to be tagged to the battalion. In reality this 'hardship' worked to the battalion's advantage and in Vietnam, the large numbers of cooks, mechanics, communicators, engineers, tankers, etc. with specialized skills other than infantry, paid off in tight places more than once. The old adage 'Every Marine a rifle man, first never was more true.'" Col Tillis J. Woodham, Jr., Comments on draft, dtd 7Dec94 (Vietnam Comment File).

*During the Vietnam War, BLT Headquarters and Service Companies included Marines and sailors attached from other units.
At 1335 local time, 14 February, less than 48 hours after the initial verbal warning had been given, the first planeload of men from RLT 27 left Marine Corps Air Station El Toro. The last planeload left just before midnight on 22 February. A total of 3,349 Marines and sailors from RLT 27 and supporting units flew from El Toro in those eight days. Another 1,956 men from units needed to support RLT 27 arrived in Vietnam by sea, with the last ship arriving on 12 March. Of the Marines deployed with the RLT, 973 were involuntarily ordered to their second tour in Vietnam after less than two years out of Southeast Asia. Most of the Marines went on their first orientation patrol the day after they arrived in Vietnam. By 1 March, every battalion of the 27th Marines had begun combat patrols around Da Nang.* Several years later then-Lieutenant General Schwenk remembered that the rapid deployment of the RLT "amazed General Westmoreland," who "just couldn't believe how we had gotten there."98**

The arrival of RLT 27 put 24 of the Marine Corps' 36 active infantry battalions in or off the shores of Vietnam. Before Tet, the Marine Corps had been barely able to sustain 21 battalions in country. The emergency deployment not only further strained the replacement system, but it also used up the next month's replacement pool to bring RLT 27 to a marginal strength level. On 3 May, as a result of Tet and the Pueblo incident, the Secretary of Defense authorized an increase in the Marine Corps' active strength of 9,700, bringing it to 311,600.99***

While helpful, this increase was not nearly large enough to sustain the level of Marine forces then currently in Vietnam.

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*For a discussion of operations by RLT 27 and subordinate units upon arrival in Vietnam, see Chapter 13.

**Lieutenant Colonel Louis J. Bacher related that his battalion the month before had conducted a mount-out exercise involving the USAF 63d Military Airlift Wing stationed at Norton Air Force Base, California. At that time, the Marine battalion staged at Marine Corps Air Station El Toro, California, where the troops boarded C-141 aircraft of the Air Force Wing which flew them to Naval Air Station (NAS), Fallon, Nevada. After a seven-day counterinsurgency exercise, the Air Force aircraft returned the Marine battalion to El Toro where it then motored back to its base at Camp Pendleton, California. According to Bacher, on 14 February, "the same C-141s and crews that had lifted us to NAS Fallon a short time ago were going to lift us to Da Nang. Fortunately we had loading plans and manifests which, with some minor and some major changes served us well." Bacher Comments.

***On 23 January 1968, the North Koreans seized the USS Pueblo (AGER 2).

****There are a number of excellent works on the impact of Tet and the debate it sparked within the Johnson Administration. The Pentagon Papers, IV, C. 6. c. is perhaps the most important source; perhaps the best treatment of the subject is Herbert Y. Schandler, The Unmaking of a President: Lyndon Johnson and Vietnam (Princeton, N.J.: Princeton University Press, 1977).
bring units to full strength by calling up Class III (non-
drill pay) Reservists.

Before Tet, the Marine Corps had only one plan in
the event of a Reserve mobilization: to activate the
entire IV MEF. On 4 March, the Secretary of Defense
proposed to send 22,000 reinforcements to Vietnam by
15 June, including IV MEF (-), consisting of 18,100
men. The Secretary of Defense’s proposal to activate
less than the entire Reserve structure caught the
Marine Corps unprepared, requiring frantic planning.
Creating a composite Marine Aircraft Group would
have undermined the readiness of the entire 4th MAW.
Task organization plans envisioned calling up detach-
ments of combat support and combat service support,
a move which would have left the Marine Corps open
to serious legal challenges. Political constraints ruled
out the call up of Class III Reservists, upon whom the
mobilization planners had relied to fill “gaping holes”
in activated Reserve units.

Up until the last minute, administration officials
considered calling up 26,000 Marine Reservists. On
13 March, President Johnson decided to send an addi-
tional 30,000 troops to Vietnam, but his troop list di-
d not include any Marine units. From 14 to 28 March,
administration officials contemplated various proposals
with even larger numbers of Reservists to be activated,
but still none of them included Marines. When the
President announced the callup of 62,000 Reservists
on 31 March, no Marines were activated.

*In mid-March 1968, Brigadier General Earl E. Anderson, the III
MAF Chief of Staff, observed in a personal letter that the Marine com-
nand had hoped at that time of obtaining another Marine and division
headquarters for Vietnam together with units associated with such an
increase. BGen E. E. Anderson ltr to MajGen Keith B. McCuscheon,
dtd 14Mar68, Encl, Gen Earl E. Anderson, Comments on draft, dtd
14Mar68 (Vietnam Comment File).

The Bloodiest Month, The Bloodiest Year

Although not as bad as February, casualties
remained high throughout March and April. In May
1968, 810 Marines died in Vietnam, making that
month the bloodiest of the war for the Marine Corps.
Another 3,812 Marines were wounded in action. The
first six months of 1968 proved the costliest of the war
for the Marine Corps, accounting for almost one quar-
ter of all Marine deaths during the Vietnam War.
In these months 3,339 Marines died, less than 500 short
of the 3,803 Marines killed in all of 1967. During this
period the 3d Marine Division averaged around 220
Marines killed and over 1,250 wounded a month,
while the 1st Marine Division suffered about 190
Marines killed and 1,450 wounded each month. The
casualty rate of the 3d Division remained fairly steady,
with a bad month in March, while the 1st Division suf-
f ered almost half of its casualties in February and May.

The high casualty rate concerned General Cushman,
who sent a message on 20 May, telling the command-
ders of the 1st and 3d Divisions that “we are suffering
too many Marine casualties—particularly KIA.” Gen-
eral Cushman attributed these excessive casualties to a
misplaced reliance on “do or die assaults” more appro-
priate for amphibious attacks. He provided a list of tact-
cical principles to reduce casualties, emphasizing fire-
power and supporting arms. Division commanders
were directed to school their officers from the division
to the company level in these principles. General Cush-
man concluded by saying:

[It is hard to soft pedal a generation of training in the
assault as required for establishment of a beachhead, but
it must repeat must be done if we are to fight and win
this war.]

Lieutenant General Krulak, Commanding General,
Fleet Marine Force Pacific, quickly responded to this
message. While agreeing that “there has been needless
loss of Marine lives” during the war, and that “we need
to do all we can to diminish the number of avoidable
white crosses,” General Krulak was troubled by the
implication that the war in Vietnam required a set of
tactical values different from those used in amphibious
assaults. While agreeing with most of the principles
espoused by General Cushman, he argued that “basic
tactical principles are immutable,” and that “there is
no evidence that those basic principles should in any
way be altered.”

General Cushman’s message also drew criticism
from General Chapman. The Commandant was “con-
vinced that in the main the offensive principles taught
to our Marines from Boot Camp to C&SC [Command
and Staff College] are sound.” Although endorsing
most of the tactical techniques espoused by General
Cushman, General Chapman worried that a “literal
interpretation” of General Cushman’s direction to
assault only by firepower “could lead to a derogation
and even the loss” of the Marine Corps’ traditional
“can do’ offensive spirit.”

Perhaps in response to General Cushman’s concerns,
Headquarters, Marine Corps directed that all majors
and lieutenant colonels bound for Vietnam, except for
recent graduates of professional schools, would receive
instruction on the use of helicopters and supporting
Marine Casualties in Southeast Asia, 1968.

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<tr>
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<td>1,359</td>
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<tr>
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<td>5,063</td>
<td>26</td>
<td>29,320</td>
<td>34,409</td>
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</table>

1 From MGySgt Lock file, compiled from records of the Vietnam War Memorial, May 1990. Killed includes all Marines who died in Southeast Asia or as a direct result of injuries suffered in Southeast Asia; Missing includes only those still officially considered missing as of May 1990.

2 From CMC Reference Notebook 1968; includes serious wounds resulting from accidents.

arms. The field grade officers course at Staging Battalion, which lasted only three days before 19 June, expanded to seven and a half days on 31 July. In October 1968, the Commanding General, Marine Corps Base, Camp Pendleton, recommended that infantry corporals and sergeants also receive two days of fire support training. This training began in January 1969.

Shortly after this flurry of concern, the casualty picture improved markedly, due not to Marine Corps action, but to the inaction of the North Vietnamese Army. In June, July, and August, the reluctance of North Vietnamese and Viet Cong units to engage in combat resulted in the casualty rate falling by a quarter. Throughout the rest of the year casualties in the 1st Division remained fairly steady, averaging approximately 120 dead and 1,000 wounded a month. In the 3d Division, casualties dropped dramatically in July, August, and September, averaging around 80 killed and less than 700 wounded, and then fell to about 30 dead and 250 wounded in the last three months of 1968. Over the course of the year, the 1st Division suffered somewhat more casualties than the 3d Division.

The types of casualties in the two divisions also differed greatly. The 3d Division was tied to the DMZ, and faced North Vietnamese irregulars supported by artillery. In contrast, the 1st Division fought a guerrilla war in the heavily populated coastal areas around Da Nang. Between 1 January 1968 and 31 May 1969, mortars, artillery, and rockets caused 47 percent of the 3d Division's casualties, while mines and boobytraps inflicted only 18.2 percent. The 1st Division experienced exactly the reverse, suffering only 17.9 percent of its casualties from indirect fire while mines and boobytraps accounted for 50.8 percent.

In 1968, the Marine Corps lost 5,063 killed or missing and 29,320 wounded, more than a third of all casualties during the entire war. Over half of all casualties had less than one year of service. Infantrymen accounted for over four-fifths of all casualties. While privates, privates first class, and lance corporals made up just above half of the total Marine Corps, they accounted for almost three-quarters of the casualties. Their average age was about 20 years and six months.

Foxhole Strength: Still Too Few Marines

The total number of Marines in Vietnam reached its wartime peak of 85,996 on 30 April 1968, with 85,402 of these Marines assigned to III MAF. This increase largely resulted from the deployment of RLT 27. The average strength of line battalions actually declined. The Marine Corps had already resorted to extraordinary efforts to maintain numbers in Vietnam in late 1967. The deployment of RLT 27 not only increased the number of replacements needed, it had also used up much of the March replacement pool to bring the deploying units up to strength. Manpower planners at Headquarters Marine Corps reacted by moving 300
infantry replacements from April into March and adding another 400 men to the scheduled replacements for April.\textsuperscript{116}

Despite these efforts, in the spring of 1968, the Marine Corps could not find enough replacements to keep up with the high rate of casualties and normal rotations. The Deputy Secretary of Defense approved a new manpower ceiling for Vietnam, Program 6, on 4 April, calling for the number of Marines in Vietnam to increase to 87,700 by 30 June 1968. Instead of rising to this goal, however, the number of Marines in Vietnam declined slowly, but steadily, through the spring of 1968.

Midsummer marked the nadir of manpower for the year. In June, infantry battalions averaged only 1,043 Marines. At the end of June, rifle companies averaged 179.6 Marines. An average of only 158.5 Marines was actually present, or 73.4 percent of the T/O strength. The 1st Marine Division continued to bear the brunt of the manpower shortage, averaging just 1,005 Marines in its infantry battalions in July.

Naturally, some companies were worse off than others. On any given day, sick call, working parties, and other routine requirements siphoned off a number of Marines counted as “present,” exacerbating the problem. In the early summer of 1968, senior officers returning from Vietnam spoke of the fighting strength of rifle companies averaging 120 men, and sometimes falling as low as 80 or 90 men.\textsuperscript{117}

*There were questions among the different commands as to what amounted to effective strength of rifle companies. For example, Major General Raymond G. Davis, then commanding general of the 3d Marine Division, did not want to count as effective, personnel who were on light duty or awaiting transportation for TAD (Temporary Attached Duty) or R&R (Rest and Recreation) leave, but were still in the company sector. III MAF disagreed and was backed up by FMFPac. See BGen E.E. Anderson ltr to LtGen W.J. Van Ryzin, dtd 11Sep68, Encl, Gen Earl E. Anderson, Comments on draft, dtd 18Dec94 (Vietnam Comment File). Colonel Pederson, the III MAF G-1, remembered that the term “foxhole strength” caused “a stir at various levels. The media reported what . . . [they] saw and in an inditing fashion reported that many were absent from the battlefield. When the story hit the streets reporters milked it with questions posed at SecNav, CMC, CGFMFPac. These officials shot messages to CGIIIMAF for information. By then several days had passed. The same unit observed in the first place was now up to strength (T/O manning level etc.) . . . [but now] further reduced by combat casualties, transfers, etc. Massaging numbers did not solve much. Commanders at all levels were aware of personnel shortages, some of which were caused by assigning ‘trigger pullers’ to base-type functions such as R&R and China Beach R&R, out of country R&R. Our Combined Action Platoons used up more trigger pullers. There seemed to be some variation in casualty reporting, some counted by operation and experienced difficulty in accuracy when reporting daily by unit.” Pederson Comments.

In contrast to the field units, the Marine Corps “got awfully heavy at [its] headquarters levels in Vietnam.”\textsuperscript{118} The personnel situation improved on each succeeding rung of the chain of command. Infantry battalion headquarters and service companies averaged 91.8 percent of the T/O allowance of 329 Marines; regimental headquarters companies, 94.9 percent of their authorized strength of 218; and division headquarters battalions, almost 150 percent of their T/O strength of 1,248 Marines. Taken together, the headquarters averages of III MAF and the two divisions amounted to 1,568 Marines, nearly half the shortfall among the infantry battalions in country.

Much of this overmanning could not be helped. The tables of organization for headquarters units did not provide for many crucial billets, such as instructors for sniper, NCO, engineer, and other vital in-country schools.\textsuperscript{119} Task forces placed a further drain on headquarters assets, particularly the creation of Task Force X-Ray in January 1968.\textsuperscript{120} Still, many Marines were assigned to headquarters units more as a matter of convenience than necessity. Whether combat requirement or unnecessary luxury, since the Marine Corps could never reach its programmed strength in Vietnam, every extra Marine in a headquarters unit in effect came out of an infantry squad.

This situation concerned both Lieutenant General Henry W. Buse, General Krulak’s replacement as Commanding General, Fleet Marine Force Pacific, and General Chapman, the Commandant of the Marine Corps. Between 15 and 18 July, General Buse held a manpower conference at his headquarters to address this and other problems. After the conference, General Buse reported to the Commandant that while he could not tell how much or how soon effective rifle company strength would improve, except for Marines with medical limitations and certain overriding requirements, all infantrymen were being assigned to infantry and reconnaissance units.\textsuperscript{121}

According to the MACV strength report, on 31 July 1968, III MAF included 82,871 Marines, 2,069 fewer than its authorized strength of 84,940. The two divisions combined, however, fell 4,130 below their authorized strength, and the SLF’s contained 164 Marines less than their manning levels called for. Much of the difference could be found in Combined Action groups, which included 1,951 Marines. As in January,
the divisions bore the brunt of the personnel shortage. The Force Logistic Command was only 227 Marines short of its authorized strength of 10,266, and the 1st MAW was only three Marines short of its authorized strength of 16,180.

Despite the large size of headquarters units, most Marines in Vietnam were "trigger-pullers." According to the MACV strength report for 31 July 1968, 44,522, or 53.7 percent, of the Marines in III MAF were assigned to infantry, artillery, tank, reconnaissance, amphibian tractor, or engineer battalions, battalion landing teams, or a Combined Action group.

At the end of July Lieutenant General Buse visited III MAF, devoting most of his time to the manpower problem. His visit convinced him that III MAF was taking vigorous steps to improve foxhole, flightline, and cockpit strength. Even so, he felt that III MAF needed more men, and recommended that Operation Kicker be reinstated at Staging Battalion to bring about an immediate improvement in the personnel readiness of III MAF. On 1 August, Staging Battalion complied with this request, maintaining the seven-day work week of Operation Kicker from 1 to 31 August. Between 20 August and 13 September, the battalion also reduced the schedule from 15 to 12 training days.

In August, the strength of infantry battalions increased somewhat, with the average strength rising to 1,072 Marines. The short-term steps taken by III MAF and Staging Battalion undoubtedly helped, but things were bound to improve around this time as the unusually large number of recruits joined from January through May, including over 5,000 draftees called in April and May, finally worked their way through the training pipeline and arrived in Vietnam.

**The Return of RLT 27**

RLT 27 left for Vietnam as an emergency measure, and was originally scheduled to spend only three months in country. This was quickly lengthened to six months, but the Defense Department realized that the Marine Corps could not sustain this force level and that an Army unit had to replace the regiment as soon as possible. On 13 March, President Johnson and his advisors set 15 July as the date for RLT 27 to begin returning to the United States. Twelve days later, the Army designated the 1st Brigade, 5th Infantry Division (Mechanized), located at Fort Carson, Colorado, to relieve the 27th Marines. After a schedule which included 13 training weeks, on 22 July, the first elements of the Army brigade departed for Vietnam. The last of the brigade arriving in country on 31 July. The brigade still needed a full month of in-country orientation training before it was ready to participate in major combat operations.

This meant that the 1st Brigade could not relieve the 27th Marines until the end of September, delaying the planned return of the regiment for over a month and creating serious manpower problems for the Marine Corps. On 15 June 1968, a key issue paper for the Commandant contained the estimate that if RLT 27 did not leave Vietnam by July, the Marine Corps could not sustain its forces in Vietnam without a Reserve call up, or a combination of shortening time between tours and increasing strength. About a week later, MACV formally asked III MAF exactly when the 27th Marines would leave Vietnam. General Cushman recommended that the 27th Marines not redeploy until after a relief in place could be effected. The 1st Brigade, 5th Infantry Division (Mechanized) would not be ready for combat until a month after its arrival in Vietnam. Since the proposed schedule actually involved having the brigade relieve the 1st Marines, which would in turn relieve the 27th Marines, General Cushman estimated that the earliest date the 27th Marines could leave Vietnam was 10 September.

General Abrams, who had relieved General Westmoreland as Commander USMACV in June, concurred with this recommendation. The proposed two-month postponement for the return of the 27th Marines prompted Paul H. Nitze, Deputy Secretary of Defense, to note on 19 July that "this delay will have adverse personnel implications for the Marine Corps." Secretary Nitze politely tasked General Wheeler to ask General Abrams to review his relief plan, stating that "[I]f feasible, the 27th RLT should be returned to the U.S. by 15 August." General Cushman insisted that RLT 27 could not be withdrawn before the replacement Army brigade became combat ready without "unacceptable risk." On 10 August, the Joint Chiefs of Staff approved the redeployment of RLT 27 between 10 and 15 September.

*Charles F. Baird, Under Secretary of the Navy, noted that the delay in RLT 27's return resulted from the Army brigade's need for 30 days' training after arrival in Vietnam before it began combat operations. He unfavorably contrasted this with the record of RLT 27, which "took its place in the Da Nang TAOR a day after it arrived" when it deployed to Vietnam in February. Charles F. Baird, Memorandum for the Assistant Secretary of Defense (Systems Analyses), Subj: RLT 27: return of, dtd 16Jul68, cab JJ, RLT Redeployment File.*
In August, the 27th Marines had an average strength of over 3,500 Marines and sailors. Only those Marines close to the end of their enlistments or those who had originally deployed with less than two years in the United States would actually leave Vietnam with the regiment. Of the over 5,000 Marines and sailors deployed with RLT 27 in February, some 1,500 had already reached the end of their enlistments or become casualties and returned to the United States. Only 800 of the remaining men met the return criteria. Under Operation Mixmaster, the rest of the Marines and sailors in the 27th Marines and attached units transferred to other commands to complete their tours in Vietnam. Public announcements by the Marine Corps made it clear that most of the Marines were staying in Vietnam and that the return of RLT 27 did not represent the beginning of a withdrawal from Vietnam.

On 12 September, the first planeload of returning Marines left for Okinawa. On 16 September, the last of 699 Marines and sailors from RLT 27 arrived in California, and on 17 September the last group of the 101 returnees from BLT 1/27 arrived in Hawaii. Nearly 400 Marines from other units who had completed a full tour in Vietnam returned with the regiment.

The End of the Year

The redistribution of men from the 27th Marines brought about a dramatic improvement in the manpower situation. In October, infantry battalions in Vietnam carried an average of 1,183 Marines on their rolls, only 10 Marines below their T/O strength. These gains proved shortlived, for the departure of the 27th Marines marked the beginning of a slow but steady reduction in the number of Marines in III MAF. The Defense Department Program 6 strength authorization set the total number of American servicemen in Vietnam at 549,500. Deputy Secretary of Defense Nitze made it clear that this number represented an upper limit not to be exceeded. To stay within this limit while adding Army and Air Force units, the Defense Department reduced the Marine Corps’ Vietnam troop ceiling to 82,100 for September, falling to 81,600 by December.

Both General Cushman and General Buse vigorously opposed the new Program 6 limits. To reduce Marine strength to the proposed level some Marine units would have to leave Vietnam, although the Defense Department had no plans to reduce the commitments of the remaining units. More importantly, the proposed Defense Department manning levels not only did not allow for the previously approved strength overages needed to support the extended operations in Vietnam, but they also failed to authorize enough Marines to man all units at their T/O strength.

In late September and early October the staffs of Headquarters, Marine Corps; III MAF; Fleet Marine Force Pacific; and the Defense Department debated exactly which units would be withdrawn or cut, with the attention focusing on amphibian tractor, aviation support, reconnaissance, and headquarters units. No units were actually withdrawn, and on 21 November the Deputy Secretary of Defense ruled out the redeployment of any units since this might have a negative impact on the Paris Peace talks. At the same time he denied any increases in the Marine Corps’ Southeast Asia allowance.

In early November, General Cushman complained that his efforts to stay within the Program 6 ceiling had already led to a shortage of experienced officers and decline in foxhole strength. This problem was exacerbated by the lack of replacements. In contrast to the normal “summer surge” at the recruit depots, the number of new recruits joined between July and September fell well below the level of the previous summer, it did not even reach the level met during the first six months of 1968. The fall replacement flow was unable to keep the battalions up to strength. By December, the average strength of infantry battalions had fallen to 1,136 Marines. Rifle companies averaged 197.9 Marines on their rolls, of whom 178.5 were actually present. The division headquarters battalions were still relatively well off, with well over half again as many Marines as their tables of organization called for. The strength of III MAF’s headquarters had grown by over 300 Marines since July. On 31 December there were 79,960 Marines in III
Marine Corps Non-Prior Service Enlisted Accessions

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*This is the number of draftees called for, not the number of draftees actually joined in a given month. Due to the workings of Selective Service, none of the calls were completely filled, while the Marine Corps received a few draftees in months in which it did not make a call. The Marine Corps accepted 145 draftees in 1967, 7,702 in 1968, and 12,872 in 1969.

Source: Annual Report of Qualitative Distribution of Military Manpower; Selected Manpower Statistics.

MAF and the SLFs, and another 468 other Marines in various assignments in Vietnam, over 1,000 short of the number authorized by Program 6.138*

The only way to maintain the flow of replacements to Vietnam was to further increase the number of new recruits. In December 1968, the Marine Corps made a draft call, and made further calls in 9 of the next 12 months.

The Marine Corps and the Draft.

Traditionally, the Marine Corps took great pride in the fact that every Marine had voluntarily enlisted. Well before the Vietnam War, senior Marine officers recognized that the Marine Corps indirectly benefited from the draft by recruiting draft-motivated volunteers.139 The rapid expansion of the Marine Corps in late 1965 and early 1966 forced the Marine Corps to turn to Selective Service to find enough recruits to fill the ranks. The Marine Corps made four draft calls between November 1965 and March 1966, accepting 19,636 draftees in fiscal year 1966. As soon as possible, however, the Marine Corps returned to its traditional reliance on voluntary enlistments. The Marine Corps did not make another draft call until April 1968, after the Tet offensive, followed by a second call in May. The next call came in December 1968, inaugurating a steady reliance on the draft until February 1970, well after Marine forces had begun withdrawing from Vietnam.**

Ostensibly, the increased reliance on the draft reflected in part a need to "smooth out" the traditionally large summer volunteer recruit cohorts to ensure an even flow of replacements for Vietnam.140 For most of the months in 1969 in which draft calls were made, however, the total number of new recruits was actually lower than that for the same month in 1968 (see chart). To accommodate the large flow of replacements needed, the Marine Corps requested an end strength for fiscal year 1969 of 320,700. The Assistant Secretary of Defense (Systems Analysis), Dr. Alain C. Enthoven, disagreed with Headquarters, Marine Corps' estimates, trimming over 10,000 spaces off the allowance for the

*The average strength of III MAF appeared to fluctuate from month to month. According to Colonel Maurice Rose, who became the III MAF G-1 in July 1968, he recalled receiving "almost daily calls from MACV telling me to get down to our authorized strength. It got to the point that I was making nightly calls to the G-1s of subordinate commands to determine strength." He remembered that sometime in September or October, III MAF sent a message to FMFPac "stating the urgency of the situation." Rose Comments.

Southeast Asia surge and 4,500 off the transient allowance to come up with a figure of 304,500.\textsuperscript{14} The Department of Defense eventually relented, but not by much: the active-duty strength of the Marine Corps reached its Vietnam War peak on 31 March 1969, at 314,917. Even two-year enlistments proved too long to maintain the flow of replacements within this end strength, and the Marine Corps embarked on another round of early releases. During 1969 almost 70,000 Marines accepted “early-outs,” well over half of all enlisted separations.

\textit{The Marine Corps Transformed}

By the end of 1968, the demands of the Vietnam War seemed to have pushed the Marine Corps manpower system as far as it could go. In 1965, The Marine Corps took only volunteers on long enlistments, invested in lengthy training, and fostered personnel stability in units. While these policies were “inefficient,” in that they did not produce the maximum number of riflemen, they were effective, producing exceptionally combat-ready units. By the end of 1968 this had changed. As the need to fill foxholes in Vietnam grew, and with no hope of the oft-requested and much needed increases in end strength, the Marine Corps reluctantly became an “efficient” organization, concentrating on producing the maximum number of riflemen for duty in Southeast Asia. The Marine Corps turned to short enlistments (with early outs, often as little as 18 months), short training programs, high personnel turnover, and eventually draftees, to meet the needs of III MAF. Yet, even with these efforts, the Marine Corps still did not have the resources to meet its authorized strength in Vietnam.
CHAPTER 28

Backing Up The Troops

A Division of Responsibility—Naval Logistic Support—Marine Engineers—The FLC Continues to Cope

A Division of Responsibility

By the beginning of 1968, III MAF had hopes that its major logistical problems were over. The unexpected problems with the new M16 rifles during the past year not only delayed the conversion from the older M14 rifles, but also required the modification of all of the M16s. Compounding the difficulties for III MAF logisticians were the grounding of the CH-46s,* personnel shortages, combat losses, accidents, and continuing threat of enemy rocket and artillery bombardment of Marine supply and ammunition points. Still, by January 1968, Brigadier General Harry C. Olson, Commanding General, Force Logistic Command (FLC), had taken several steps to alleviate the situation. He had implemented an M16 repair program that was moving at an accelerating pace. Moreover, the FLC had realigned its command structure to meet new deployments, had created new facilities, and had attained a relatively full logistic pipeline.

At Da Nang, General Olson had established the headquarters of the FLC/1st Force Service Regiment together with a supply battalion and maintenance battalion. Additional elements of the FLC at Da Nang were the 1st and 3rd Military Police Battalions, the 5th Communication Battalion,** and the 7th Motor Transport Battalion. The FLC complex at Da Nang provided the logistic support for both the 1st Marine Division and the Korean Marine Brigade.

Two reinforced service battalions, the 1st and 3rd, made up the major field elements of the FLC. The 3d Service Battalion which was redesignated Force Logistic Support Group (FLSG) Alpha at Phu Bai maintained subunits at Khe Sanh and Camp Evans. In mid-January, with the arrival of U.S. Army units into Thua Thien, FLSG Alpha temporarily supported elements of the Army’s 1st Cavalry Division and 101st Airborne Division. On 29 January, the Army assumed responsibility for its own logistic support at Camp Evans and the Marine logistic unit there then augmented the Marine subunit at Khe Sanh. FLSG Alpha retained responsibility for the 1st Marine Division Task Force X-Ray elements, newly arrived in the Phu Bai and Phu Loc areas. At Dong Ha, in the 3d Marine Division sector, FLSG Bravo, based upon the 1st Service Battalion, remained responsible for the logistic support of the division units along the DMZ and at Quang Tri.*** During January 1968, III MAF supported 49,000 troops north of the Hai Van Pass, requiring about 2,000 short tons of supplies per day.1

To support the fuel needs of the augmented forces arriving in northern I Corps, the FLC had completed construction in January of a 3,000-barrel capacity steel fuel tank near the Hue LCU ramp in the city.**** Unfortunately, on 2 February, during the enemy attack on Hue, rockets slammed into the fuel farm, destroying 110,000 gallons of JP-4 jet aviation gas. While the enemy offensive forced the allies to close the LCU ramp and the fuel farm temporarily, the FLC had the facility back in operation by mid-February.

Elsewhere during their Tet offensive, the Communist forces struck at other Marine logistic targets. At Da Nang, like all other III MAF units, the FLC Marines were on full alert. The two military police battalions, the 1st and 3d MP Battalions, assisted the Marine infantry and local ARVN units in turning back the enemy offensive for the allies to close the LCU ramp and the fuel farm temporarily, the FLC had the facility back in operation by mid-February.

***FLSG Bravo also maintained a supply company at Chu Lai in Quang Tin Province to provide logistic support for the Marine aviation units that remained based there. Colonel Rex O. Dillow, the III MAF G-4 or logistics officer, noted that with the relocation of units there were constant requests for materials and engineers to build hospitals, headquarters buildings, and permanent structures at the new locations. He declared that the generators practically required armed guards because of their limited availability. Col Rex O. Dillow, Comments on draft, dtd 10Nov94 (Vietnam Comment File), hereafter Dillow Comments.

****The allies maintained LCU ramps at both Hue and at Dong Ha because LCUs were the largest craft which could negotiate the Perfume and Cua Viet Rivers, respectively, due to silting problems in both rivers.

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*See Chapter 25 relative to the problem with helicopters.

**In addition to the 5th Communication Battalion in Vietnam there was the 7th Communication Battalion directly under the 1st Marine Division. The Wing had under its command Marine Wing Communications Squadron 1 (MWCS—1) and directly under III MAF was Sub—Unit 1, 1st Radio Battalion which at the beginning of the year was at Khe Sanh.

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the aborted enemy attack on the I Corps headquarters compound.* While a few rockets landed nearby during the offensive, the FLC complex at Red Beach remained relatively unscathed.

The Marine logistic facilities at Chu Lai did not fare as well. On 31 January, an enemy rocket struck the FLSG Bravo ammunition dump, causing the destruction of 649 tons of bombs and 26 tons of bulk explosives. Scattered unexploded ordnance proved to be troublesome for many weeks after the attack. According to the FLSG Bravo Supply Company monthly report: "... thousands of 500-pound bombs buried in the sand. These bombs have been blown from their pallets and are being excavated, palletized, and issued." According to Marine accounting, the cost of the munitions destroyed by the attack amounted to $2,215,358.52.

The greatest damage of the enemy offensive was to the Marine lines of communication.** Through January and February, the NVA and VC attacked river convoys on the Cua Viet and Perfume Rivers and successfully interdicted Route 1 at several points. In fact during February, the Marines halted all truck convoys north from Hue to the DMZ. Observing that "logistics was the key" to countering the NVA offensive in the north, General Westmoreland, the MACV commander, stressed in a message to Army General Earle G. Wheeler, the Chairman of the Joint Chiefs, and Admiral Sharp, CinCPac, "this means opening Highway 1."4

It would not be until the beginning of March, however, that the roads would be open again in the north. Even then, as an Army historian noted, "interdiction continued—mining, demolition of bridges, road cratering, and ambushes."5 Still on a typical day during this period, 14 LCUs would be either loading cargo or enroute from Da Nang to northern I Corps together with truck convoys from Da Nang to Phu Bai and from Phu Bai to Dong Ha. From its outset, the enemy offensive, as the Marine command noted in a mid-year report, was aimed "against our supply lines."6

During this interval, the FLC assumed the additional responsibility for the preponderance of support for the 1st Air Cavalry and 101st Airborne Divisions as they deployed into northern I Corps. With the tactical units arriving ahead of the Army support units, the FLC provided both divisions interim assistance with food, fuel, and ammunition. Within 10 weeks, both FLSG Alpha at Phu Bai and Bravo at Dong Ha became responsible for 90,000 U.S. personnel of all Services, nearly double the number in early January. On 19 February, Brigadier General Earl E. Anderson, the III MAF Chief of Staff, wrote in some exasperation, "Our logistic problems have become immense ... Yet, in spite of our pleas to slow down the introduction of troops because of the tenuousness of our land, air, and water LOCs [lines of communication], the four stars in Saigon merely wave their hands and release dispatches directing the units to move."***

Despite Anderson’s misgivings, the FLC’s central control of assets and its capability to move critical items to combat units rapidly enabled the Marine logistics to cope with the situation under the most difficult of circumstances. To help the Marines, on 26 February 1968, the U.S. Army established the U.S. Army Support Command Da Nang (Provisional) to

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*See Chapter 8.

**See Chapters 7–13. Colonel Rex O. Dillow, the III MAF G-4, recalled that his section created a Transportation Control Center (TCC) that operated similar to a tactical logistic group in an amphibious operation in order to determine priorities over limited resources. While headed by an officer in the G-4 section, the TCC included representatives from the III MAF G-3 section; the U.S. Seventh Air Force Tactical Air Liaison section; the U.S. Army 1st Logistical Command; the FLC, and the Naval Support Activity. Dillow Comments and Draft of III MAF report on Logistics for General Officers’ Symposium, Jul 68, n.d. [Jun68], Encl, Dillow Comments.

***According to Army historian Joel Meyerson, "The decision to shift troops north at a rate that exceeded the capability to create a supply base for their support... reflected the gravity of the situation." He went on to state: "To develop combat power quickly, the four-stars in Saigon chose manpower over logistics, taking a calculated risk. But time, they believed was of the essence." Joel D. Meyerson, Chief, Operational History Branch, CMH, Comments on draft, dtd 6Dec94 (Vietnam Comment File), hereafter Meyerson Comments.
provide both logistical support and direction for Army units. This command sent out subordinate logistic task forces to both the 101st Airborne and 1st Cavalry Divisions. The FLC logistic field units, FLSG A and FLSG B, at Phu Bai and Dong Ha, respectively, continued to provide rations to the Army units in the northern two provinces, however, until the Army logistic units became self-sustaining.8

*Colonel Dillow, the III MAF G-4, praised the efforts of two Army generals in assisting the Marine logisticians to cope with the situation. These were Brigadier General Henry A. Rasmussen, USA, the USMACV J-4, and Brigadier General George H. McBride, USA, the Commanding General, U.S. Army Support Command, Da Nang. According to Dillow, "here we had the largest field force ever commanded by a Marine Corps headquarters, with multi-division Army and Marine Corps forces depending upon support from U.S. Air Force, Navy, Marine and Army units. Despite the rapid buildup, difficulties from long and tenuous lines of communication and adverse weather, logistic support was steady throughout." Dillow Comments. In letters of appreciation to the two Army generals, General Cushman, the III MAF commander, recognized their efforts. He credited Rasmussen with providing "guidance and impetus" to logistic planning which made it "possible to promptly deploy support forces and commence operations in support of much larger reinforcements than had been expected, but which were moved to Northern I Corps on very short notice and committed to action immediately upon arrival." Copy of CGIIIIMAF Ltr to ComUSMACV, Subj: Contributions to III MAF by BGen Henry A. Rasmussen, n.d. [Jul68], Encl, Dillow Comments. In his letter to General McBride, Cushman observed that the Army general directed the ‘phasing in’ of some 52 U.S. Army logistical support units of about 7,000 total personnel. CGIIIIMAF Ltr to ComUSMACV, Subj: Performance of duty by BGen George H. McBride., n.d. [USA], n.d. [Jul68], Encl, Dillow Comments.

Through heroic efforts, III MAF was able to maintain a satisfactory logistic stock level. For example in February, Marine helicopters alone lifted 7,724 tons of cargo, attaining their highest monthly tonnage, despite low ceilings, rain, fog, and basically miserable flying conditions.9 The following random statistics for the period January through April illustrate in part the massive effort by the Marine logisticians of the FLC:

In January, FLSG Bravo issued 362,100 C—Rations, brought 1,747,504 pounds of ice, transported 11,213 tons of supplies over a total of 58,161 truck miles and issued 4,227.3 tons of ammunition.10

During February, FLC processed 23,442 transients, processed 87,000 requisitions, baked 860,692 pounds of bread, and air delivered a daily average of 143 tons of supplies to Khe Sanh Combat Base.11

During March, FLSG Alpha issued more than 1,743,000 gallons of various types of fuel.12

The FLC laundry units processed 201,000 pounds of laundry in the month of April, and its ammunition company handled 55,415 tons of ammunition, a daily average of more than 1,800 tons.13

Specifically during this period, the Marine command arranged for the helicopter delivery under extreme weather conditions of 300 short tons daily from ships off the coast to U.S. shore facilities, as well as the air drop of 200 short tons daily to 1st Air Cavalry units in the Camp Evans sector. "Rough Rider" truck convoys from Da Nang north through the Hai Van Pass involved 10,471 Marine and U.S. Army vehicles.14

An overview of the FLC compound near Red Beach at Da Nang. The sprawling FLC now supported a III MAF command that numbered more than 100,000 soldiers, sailors, and Marines in January 1968 and would soon expand further.
Once the heavy Army logistic units arrived they were able to ease the burden on the Marines. Representatives of III MAF; the FLC; MACV; U.S. Army Vietnam; 1st Logistical Command; U.S. Army Support Command, Da Nang (Provisional); and Naval Support Activity, Da Nang, mutually agreed on the division of support. Marine Corps and Army dumps would provide common item support, Class I (Rations), Class III (Petroleum), and Class V (Ammunition) to both Army and Marine units. The respective Service logistic facility would furnish Class II (General Supply items) and Class IV (Special Items). With this understanding, FLSG Alpha became responsible for common item support for all III MAF units, both Marine and Army in the Phu Bai sector. The Army’s new Prov Corps 26th General Support Group at Quang Tri assumed the same responsibility for those units located south of Quang Tri and north of Hue. FLSG Bravo continued to provide support for those units in the Dong Ha and DMZ sector. By March 1968, the supply requirements for U.S. forces in northern I Corps had reached 3,000 short tons per day. Colonel Rex O. Dillow, the III MAF G-4, later observed, “the rapid buildup in requirements, and the effects of enemy action and adverse weather, presented perhaps the biggest threat of curtailing tactical operations during the Tet offensive.”

During this critical period, the Naval Support Activity, Da Nang; the Army’s 1st Logistical Command; Army Support Command, Da Nang; and the FLC cooperated to move the supplies where they were most needed. In March, they opened a LOTS (Logistics Over the Shore) Facility at Thon My Thuy. The Army positioned a task force of over 1,000 men from its 159th Transportation Battalion, with six attached companies, at this site (Wunder Beach) to facilitate the movement of supplies.* A Seabee-built 8.6-mile road from Route 1 near Hai Lang, tied this installation into the major road network in northern I Corps. As an Army historian commented, “even then Wunder Beach was no rose garden: The Hai Lang Road remained subject to heavy mining, and was sometimes seeded with metal objects to impede clearance.”

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*Colonel Dillow, the III MAF G-4, remembered that in February 1968, General Cushman directed him to ask the Seventh Fleet for a Navy pontoon causeway unit then stationed in Japan to “be brought to Da Nang Harbor. This required considerable effort by the Navy; several ships were required to move the causeway sections. They objected, pointing out that in all probability a causeway, if installed could not be kept in place for any appreciable time due to the winds and tides during the monsoon season. However, General Cushman insisted, stating that we may have to take a calculated risk and install it despite the odds. It was therefore available when the drawdown of supplies in NICTZ [Northern I Corps Tactical Zone] necessitated its installation.”

Dillow Comments. Army historian Joel Meyerson quoted the following from a 1st Logistical Command Operational Report, Lessons Learned for the period: “The Navy was asked to find the best location for the establishment of a LOTS site. After studying the problem, the Navy concluded that it was impractical to establish such an operation and that the results would be minimal. . . . In spite of this conclusion, the Army, faced with the need to support two divisions, proceeded to establish Wunder Beach . . . .” Meyerson Comments. Colonel Dilllow recalled that “installing the causeway in the high winds and heavy seas of the monsoon season was no small task, although it was kept in place once installed. Installation was often interrupted.” According to Dillow, the Army unit operating the facility “had been commanded by an officer named Wunder. They referred to themselves as ‘Wunder’s Wonders.’ They asked us if they could name the facility Wunder Beach, which was readily approved (although to the consternation of a few Marine Corps officers).” Dillow Comments. The U.S. Army 159th Transportation Battalion was actually commanded by Lieutenant Colonel Charles H. Sunder. The men of the battalion called themselves Sunder’s Wonders and with a slight play of words, the LOTS facility was named Wunder Beach. LtGen Willard Pearson, USA, The War in the Northern Provinces, 1966–1968, Vietnam Studies (Washington, D.C. Dept of the Army, 1975), p. 61.
facility, nevertheless, remained open until the northeast monsoon would make operations there too dangerous.* From 6 March until its closing at the end of the summer, more than 100,000 short tons moved across Wunder Beach.16

At the end of March, General Creighton W. Abrams, Westmoreland's deputy, extolled the logistic efforts of all of the Services, with perhaps a left-handed compliment for the Navy:

The Marines and the Army are working together realistically without any vestige of Service pride interfering with service to the common effort. The Navy show positive signs of moving out as the others clearly have. I am encouraged and gratified at what has been done, with clearly more to come from these men who have thrown off the fetters of conventionality and gotten with the job.

He concluded: "The logisticians have thus far accomplished the impossible by supporting the reinforcements dumped into the northern area so precipitously."17

**Naval Logistic Support**

Despite Abram's rather lukewarm praise for the naval efforts, it was the Navy logistic system that provided the fundamental support for III MAF including the Army forces in I Corps. The Marine Corps traditionally had relied upon the Navy for medical support, for extensive and heavy construction efforts, and for the administrative and logistic tasks involved with an advanced naval base. Vietnam was not to be any different. In July 1965, the Navy had established the Naval Support Activity (NSA), Da Nang, which by January 1968 under Rear Admiral Paul L. Lacy, had become "the Navy's largest overseas logistic command," consisting of 10,000 officers and men.18

The Navy command structure made for some wrinkles in the U.S. I Corps organizational charts. Originally, NSA, Da Nang was under the commanding general, III MAF, who at the time was also the MACV Naval Component commander, but this changed in 1966 with the establishment of U.S. Naval Forces, Vietnam, directly under General Westmoreland. In its command history, the NSA, Da Nang reported that it came under the operational control of U.S. Naval Forces, Vietnam, under the command of Commander, Service Force, U.S. Pacific Fleet, "less operational control," and finally under the "military control" of III MAF. For all practical purposes, however, the NSA in I Corps remained a component part of III MAF.19

From his headquarters building in downtown Da Nang, nicknamed the "White Elephant" after its white decor and decorative elephant friezes, Admiral Lacy controlled the beach and port logistic activities for U.S. forces throughout I Corps. By January 1968, he had a small fleet of over 100 lighterage craft including LCM 8s (landing craft, mechanized), LCM 6s, and LCU (landing craft, utility) to move cargo from sea-going vessels in the crowded harbors into the ports and onto the beaches. Ashore, Lacy's command warehoused supplies, established supply points, assembled amphibious fuel pipe lines, and provided fuel storage bladders in support of both the Marines and Army in I Corps.20

While Da Nang was the hub of port activity in I Corps, the NSA, Da Nang established smaller detachments to assist the offloading and to provide for immediate shore storage facilities elsewhere in I Corps. By 1968, NSA Da Nang had three main port detachments deployed outside of Da Nang: one at Chu Lai, south of Da Nang, the site of a Marine air base and headquarters of the U.S. Army Americal Division; the second at Tan My near the Co Tu causeway at the mouth of the Perfume River; and the third at the Cua Viet Port Facility, which supported allied forces in the DMZ sector. Later in the year, NSA, Da Nang relinquished the Army for port logistic support of the 11th Light Infantry Brigade of the Americal Division at Sa Hue, which then became the southernmost supply point in I Corps. Each of these port detachments became a microcosm of the larger NSA, Da Nang, and each commander had the authority to establish direct liaison with the commands he supported in his sector. At the height of the U.S. buildup in northern I Corps in mid-1968, NSA, Da Nang with its subordinate detachments were controlling on a monthly average more than 350,000 tons of cargo for approximately 200,000 troops in the corps area.21

The 1968 Tet offensive brought home the reliance that the allied forces placed upon their water-borne lines of communication. With most of the main roads cut, the only means of resupply was by air or by water. Given the relatively small amount of material and equipment that could be airlifted, the Army and Marine forces in northern I Corps were entirely depen-

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*At a III MAF logistics conference in May 1968 chaired by Army Major General Richard G. Stilwell, then the Deputy CG III MAF, Army, the conference estimated the continuing support that would be required in northern I Corps. At the meeting there was a general consensus that "Wunder Beach should be abandoned, since both the road and the area . . . [would] be impassable" during the upcoming monsoon season. III MAF, Memo for the Record, Subj: III MAF Logistics Conference, dtd 15May68, Encl Dillow Comments.
dent upon keeping open the vital waterways, especially the Cua Viet and the Perfume River. This necessitated the extensive convoying of the various river craft including LCUs, LCMs, and barges bringing supplies into the embattled city of Hue on the Perfume River and, further north, up the Cua Viet from the port facility to the 3d Marine Division’s main base at Dong Ha in Quang Tri Province.

While the river clearing and convoy system was a closely coordinated effort employing both air and ground forces, the Navy’s “brown water” fleet played an important role. Since the previous year, Task Force 116, the U.S. Navy, Vietnam’s River Patrol Force, had kept River Section 521 at Tan My where the section had established its headquarters on a floating barge complex. Thus at the breakout of the Tet offensive and assault upon Hue, the section was in position to support the flow of water-borne supplies up the Perfume River. With its mainstay consisting of four-man crew PBRs (patrol river boats) powered by Jacuzzi jet pumps and capable of maneuvering at speeds of 25 to 29 knots and equipped with surface radar, four machine guns, and a grenade launcher, the Navy unit cleared the waterway to Hue. Smaller boat detachments operating on the Cua Viet also kept that passage open. For its participation in the Tet offensive, River Section 521 received the Presidential Unit Citation.22

Given the importance of these riverine operations in the fight for Hue and the Cua Viet, Rear Admiral Kenneth L. Veth, the commander of U. S. Naval Forces, Vietnam, together with General Cushman, decided to establish a separate Navy river task force directly under the operational control of III MAF in northern I Corps.* On 24 February, Veth assigned Navy Captain Gerald W. Smith as commander of the new task force, designated Task Force Clearwater. Smith originally established his headquarters at Tan My, but then on the 29th moved his mobile base to the Cua Viet Port Facility. Through the course of the year, Task Force Clearwater would consist of armored river “monitors,” PBRs, PACV (Patrol Air Cushioned Vehicles), minesweeping craft, and other diverse watercraft. Among its attached personnel were Marines from the 3d Marine Division’s 1st Searchlight Battery and soldiers from the U. S. Army’s 63d Signal Battalion. Organized eventually into two river groups, the Hue River Security Group and the Dong Ha/Cua Viet Security Group, Task Force Clearwater protected and kept open the two major water routes in the north—the Cua Viet and the Perfume Rivers.23

One area in which the Navy retained prime responsibility was medical support for the Marine command. Navy doctors and medical personnel manned the battalion and squadron level aid stations. At an even lower echelon, Navy corpsman were assigned to Marine infantry units down to the platoon level. Navy doctors commanded the 1st and 3d Medical Battalions which supported respectively the 1st and 3d Marine Divisions. These battalions ran the intermediate medical facilities at Dong Ha, Phu Bai, and Da Nang, reinforced by the 1st Hospital Company and 1st, 3d, and 11th Dental companies.**

In addition to these medical organizations, NSA, Da Nang maintained a 750-bed hospital at Da Nang, the equivalent of a general hospital. Finally during 1968, two Navy hospital ships, the Repose (AH 16) and the Sanctuary (AH 17), remained off the coast each with a capacity of 350 beds that could be doubled if needed, and within a 30-minute helicopter flight from shore.24 According to statistics maintained by the Marine Corps, out of 100 Marines that were wounded, 44 were treated in the field and returned to duty, while 56 were admitted to a hospital. Of those admitted to a hospital, only nine would remain in county and the rest would be evacuated. Approximately 7 percent would receive disability discharges, 5.5 percent would require long-term care, but a remarkably low percentage, 1.5, would die of their wounds.25

In one other area, heavy engineering and construction support, the Navy greatly supplemented Marine capabilities. Since the spring of 1965 when Navy mobile construction battalions (NMCB), popularly known as Seabees, helped to build the airfield at Chu Lai, the Navy augmented the Marine engineering effort in Vietnam. By January 1968, the Navy had established the 3d Naval Construction Brigade, under Rear Admiral Robert R. Wooding, which while under the operational control of Naval Forces, Vietnam, made its headquarters at Da Nang. Under his control, were two naval construction regiments in I Corps, the 30th at Da Nang, which directed the Seabee construction efforts there, and the 32d at Phu Bai, which coordinated those projects in the northern two

*III MAF eventually delegated operational control of Task Force Clearwater to Provisional Corps, Vietnam (later XXIV Corps), when that command was established in the northern two provinces of I Corps in March 1968. See Chapter 13.

**During the siege of Khe Sanh, a detachment from Company C, 3d Medical Battalion, better known as “Charlie Med,” operated the dispensary there.
Navy doctors and corpsmen from Company C ("Charlie Med"), 3d Medical Battalion, wearing helmets and flak jackets, conduct an emergency operation on a wounded helicopter pilot at the Khe Sanh dispensary. Most wounded were evacuated out of Khe Sanh as soon as possible.

Despite the supplementing efforts of the Seabees and Army engineering units, the Marine command depended upon its own resources for its basic engineering requirements. Throughout 1968, the Marines had five engineering battalions in-country to provide both combat engineering and general construction support. In the north, the 3d Marine Division had Lieutenant Colonel Jack W. Perrin's 3d Engineer Battalion in direct combat support, while the 1st Engineer Battalion, under Lieutenant Colonel Logan Cassedy, came under the 1st Marine Division at Da Nang. In addition, III MAF had three heavy engineering battalions to accomplish those tasks beyond the scope of the division engineers. Attached to the 1st Marine Division were both Lieutenant Colonel Ray Funderburk's 7th Engineering Battalion, which operated out of its cantonment, Camp Love at Da Nang, and Lieutenant Colonel Horacio E. Perea's 9th Engineer Battalion, which worked out of Chu Lai. The 11th Engineer Battalion, under Lieutenant Colonel Victor A. Perry, reinforced the 3d Engineer Battalion along the DMZ.

In the 3d Marine Division sector in early 1968, the 11th Engineer Battalion remained committed to the DMZ barrier project while the 3d Engineer Battalion was involved with the usual division engineering tasks. With its headquarters at Phu Bai, the 3d Battalion supported the division's regimental bases from Khe Sanh to Dong Ha with task-organized engineer detachments. In its January report, the battalion observed that the "primary work performed was mine sweeping, demolitions, and bunker construction." Much of the
3d Battalion's activity was involved in road sweeps, keeping open the main lines of communication among Camp Carroll, Dong Ha, Quang Tri, Camp Evans and Phu Bai. By the end of January, the battalion had conducted over 300 mine sweeps, averaging nearly 38,456 meters per day.27

At Da Nang, Lieutenant Colonel Cassedy's 1st Battalion performed much the same engineering role for the 1st Marine Division. Here, the mine-clearing mission took on even more importance given the VC emphasis on surprise explosive devices or boobytraps. In fact, in January, the engineers suffered almost all of their casualties in accomplishing this mission, seven out of the eight killed and 15 out of the 18 wounded. Like the 3d Battalion in the north, the 1st Battalion was spread out in support of its division's various regiments. At the beginning of the month, Cassedy's headquarters, Company C, and Company B were at Da Nang in support of the 7th Marines and 5th Marines respectively. With the formation of Task Force X-Ray in mid-January, Company B joined the 5th Marines at Phu Bai. The 1st Battalion's Company A stayed with the 1st Marines throughout the month, first at Quang Tri, then at Phu Bai.28

The enemy Tet offensive at the end of January and through most of February would impact on the engineers as much as on any of the III MAF units. In the struggle for Hue, engineer detachments from both Companies A and B, 1st Engineer Battalion accompanied the Marine infantry in the retaking of the city. The engineers built a pontoon bridge to replace the destroyed An Cuu Bridge over the Phu Cam Canal so that much-needed supplies could flow again into the city. Together with the reinforcing Army engineers and Seabees, the Marine engineer battalions worked to reconstruct the blown bridges, culverts, and highway cuts along the main lines of communication in I Corps, especially along Highway 1, the main north-south artery. Finally, by 2 March 1968, Route 1 was open from Da Nang to Dong Ha.29

During the relief of Khe Sanh in Operation Pegasus, the Marine engineers again played a vital role. Beginning in mid-March, Lieutenant Colonel Perry's 11th Engineer Battalion, together with Seabees and Army engineers, began the building of Landing Zone Stud at Ca Lu, the jumping-off point for the 1st Air Cavalry Division. While the Air Cavalry leapedfrogged towards Khe Sanh, the 1st Marines slogged forward along Route 9 with the 11th Engineers clearing the path for them. In the advance, the engineers constructed 11 bridges and made 18 culvert bypasses along the road.30

The engineers had as large a role in the abandonment of Khe Sanh as they had in its relief. Company A, 1st Engineer Battalion, which had accompanied the 1st Marines in the relief of Khe Sanh, reported that its most significant accomplishment was the closing of the base. Beginning on 18 June and ending in early July, the engineers destroyed or buried 95 bunkers and more than 2,770 meters of trenchline. Using over 2,100 pounds of TNT, the engineers exploded unexpended ammunition and caved in the former Marine defenses. What equipment they could not carry out, they demolished or buried so that it could not be used against allied forces in the future.31

In the north after the enemy Tet and Mini-Tet offensives and the closing of Khe Sanh, both the 11th Engineer Battalion and the 3d Engineer Battalion took on new missions as the 3d Marine Division took the offensive. While the 11th Engineer Battalion still continued to have a limited responsibility for the barrier, the battalion confined most of this effort to some minor road and bunker construction.* For the most part, the 11th Engineers took on the task of establishing the permanent fire bases for the division. By July, it had transformed LZ Stud near Ca Lu into Fire Support Base Vandegrift. Given the emphasis of the new commander of the 3d Marine Division, Major General Raymond G. Davis, upon mobile helicopter tactics, the construction of permanent and semi-permanent fire support bases became the major responsibilities of both engineer battalions in the north. In a remarkably short time, employing explosives, helicopter-portable bulldozers, and chain saws, the engineers denuded and flattened entire mountain tops and transformed them into fortified gun positions so that Marine artillery could keep the fast-moving infantry within supporting range.

In the Da Nang area, the 1st Engineer Battalion inaugurated in the spring a series of clearing operations in support of the 1st Marine Division. Beginning in April, the engineers in support of the 7th Marines in the western sector began Operation Woodpecker, "designed to eliminate known or potential enemy rocket launching and ambush sites." After clearing

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*After the initial enemy offensives in January and February, almost all construction of the barrier ended for all practical purposes. Planning for the barrier and some limited construction continued, however, under the Codename Duel Blade. On 22 October 1968, General Abrams, now the MACV commander, ordered the halt of all planning and construction for the project. Before all work came to a stop, the engineers had implanted three sensor fields in the eastern portion of the DMZ, south of the Ben Hai River. See Chapter 22.
Top, a truck convoy is about to roll across the new Khe Gio Bridge on Route 9 north of Camp Carroll just constructed by the 11th Engineer Battalion. Below, an 11th Engineer Battalion bulldozer pulls out a M48 tank stuck in a stream bed during Operation Pegasus on the road between Ca Lu and Khe Sanh.

Both photos are from the Abel Collection.
over four million square meters in the 7th Marines sector, the 1st Battalion in June moved into the Go Noi Island area and joined the 27th Marines in Operation Allen Brook. Clearing over two million meters from June through August with bulldozers, tractors equipped with rime plows, and even tanks with dozer blades, the Marine engineers, once the civilian population was evacuated, literally razed the Go Noi.\* With the completion of the Go Noi project, the battalion continued with further clearing operations, Operation Woodpecker II and III, in the area west of the Yen River, and after September, in the 1st Marines sector along the coast.32

The Marines at Da Nang also experimented with a barrier project aimed at keeping enemy rocketeers from bombarding the Marine base. Beginning in May, the 7th Engineer Battalion started putting down a single-apron barbed wire fence along the outer edges of the so-called Da Nang Rocket Belt, a semi-circle centering on the airfield and extending out to the extreme range of the enemy 122mm and 144mm rockets. By June, the 1st Marine Division completed the initial plans for the project. The original concept called for a 500-meter-wide cleared strip of land consisting of two parallel barbed wire fences, concertina wire entanglements, observation towers, and minefields. Beginning in earnest on 2 July, the 7th Engineers completed the initial phase of the project in the 7th Marines sector, clearing more than 15,000 meters by 23 August. The task involved more than 37,000 man-hours, including mine sweeps, security, equipment operators, and averaging two 25-man platoons from the engineers and an equal number of personnel from the supported units. Beginning in September, but hampered by flooding and heavy rains, the engineers continued with Phase II into December. Although the 7th Engineer Battalion would end on 12 December the laying of the two parallel barbed wire fences, the project would remain unfinished at the end of the year. It would not be until the following March that the Marines would renew their emphasis and begin anew the barrier effort.33

By the end of 1968, the Marine engineers together with the Navy Seabees and Army engineers had accomplished almost minor miracles in the restoration

\*See Chapter 17.
Marines from the 3d Engineer Battalion construct bunkers on LZ Cates, a new fire support base for the 2d Battalion, 4th Marines. The fire support bases were part of the new emphasis on helicopter-mobile operations by both Marine divisions at the end of the year.

The FLC Continues to Cope

Even with the end of the initial Tet offensives enemy gunners continued to threaten III MAF stockpiles. While few attacks were as spectacular as the one on 21 January at Khe Sanh,* both conventional enemy artillery in the DMZ and Laos and large-caliber rockets struck at facilities at Khe Sanh, Dong Ha, and Cua Viet. In the rest of I Corps, enemy rockets throughout the year continued to fall upon Marine base areas with their large storage facilities. Despite the best efforts of Marine ground and air combat units to prevent them, these attacks by fire were relatively cost effective as the enemy with limited resources could cause extensive damage. One of the worst incidents occurred on 10 March, when enemy artillery hit the Cua Viet Facility, blowing up the ammunition dump. The resulting explosions destroyed the mess hall and 64 10,000-gallon fuel bladders, caused American casualties of 1 dead and 22 wounded, and knocked out communications for 30 hours. Even at the end of the month, more than 40 percent of the damaged equipment and buildings remained unrepaired.34

From mid-April through 14 May, the enemy gunners enjoyed a series of minor successes in the north

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*See Chapter 29.

**See Chapter 14.
from Khe Sanh to the Cua Viet. On 11 April, they rocketed the Cua Viet fuel farm, destroying 40,000 gallons of gas. Five days later, rockets fell on the Khe Sanh base demolishing 300,000 rounds of small arms ammunition and 2,705 propellant charges for 155mm ammunition. Finally, on 14 May, Communist artillery shelling resulted in the blowing up of the Dong Ha ammunition supply point and the loss of 150 tons of munitions of all types.

The Cua Viet and Dong Ha facilities remained favorite targets. Less than a month after the Dong Ha bombardment, 13 June, the NVA artillery fired 61 rounds into Camp Kistler at the mouth of the Cua Viet River. This time the shells hit the FLSG Bravo fuel dump and set fire to 16 10,000-gallon fuel bladders containing 104,000 gallons of petroleum. A week later, the North Vietnamese gunners turned their attention to Dong Ha, once more blowing up the Dong Ha ammunition dump with the loss this time of 8,500 tons of munitions. Five days later, they hit the Cua Viet fuel farm again. This time more than 187,000 gallons of gasoline and jet fuel went up in flames, resulting in the destruction of 17 of the 10,000-gallon fuel bladders and associated pumping equipment.

While relatively quiet during July, the NVA struck the Dong Ha facility again in August. While missing the ammunition dump, some 55 enemy rounds damaged some 19 buildings, destroyed 6 vehicles, and killed 2 Marines and wounded 3 others. Finally on 30 October, just before the so-called neutralization of the DMZ agreed to at Paris, the enemy hit Dong Ha once more. Forty-eight 130mm rounds fell on the base, killing one Marine, wounding another, and causing damage to buildings and vehicles. This was to be the last major attack on Marine facilities in the north during the year.

Marine logisticians also had to be concerned about the elements as well as enemy artillery capability. In many respects, weather patterns were more predictable and the FLC could make some preparations for the fall monsoon season. Still, monsoon storms could hit suddenly and create havoc. On 5 September, Typhoon Bess swept across the South China Sea with the center of its impact area just north of Da Nang. With 60-knot winds and 20 inches of rain, the storm caused landslides closing Route 1 in the Hai Van Pass sector and submerged Liberty Bridge in the An Hoa area south of the Marine base. Even as the storm abated the rain continued, resulting in more flooding and restricting movement of supplies and troops. By the end of September, almost all construction projects were at a standstill. Route 1 and the various secondary roads were in bad condition. The water and winds had damaged the LCU ramps at Tan My and Hue as well as the Tan-My-Quang Tri pipeline. The Marines estimated that Bess would cost them the equivalent of 7,000 man-hours to make the needed repairs to the various lines of communication and installations.

Although the worst of the damage was over, the weather provided little relief for the FLC in October. Twelve inches of rain fell at Dong Ha on the 14th and 15th, followed by 15 inches at Da Nang in the next two days. Route 1 south of Camp Evans was once more under water as was the Tan My causeway. Bridges on Route 1 required reinforcement. Still the Marine logisticians were able to cope with the situation. Based on past experience with the monsoons, they had stockpiled the most-needed supplies at forward positions. Operations throughout the period continued and the bad weather proved to be more of a nuisance than an impediment.

During this period, the FLC had resolved the M16 rifle situation. By mid-July, the FLC had obtained enough of the modified M16 rifles, known as the M16A1 to equip both the 1st and 3d Marine Divisions. As a result of extensive investigations of charges that the M16 was prone to jamming, the FLC had implemented in late 1967 a program designed to replace the original barrel/sight assembly of the rifles with a chromed chamber assembly. The new assembly reduced chamber friction and facilitated extraction of the 5.56mm ammunition with its "ball propellant" which had caused most of the difficulty. By the end of September, the FLC had completed the retrofit and replacement of the old M16s for both Marine divisions and their attachments. In October, the new rifles were issued to the Marines of the FLC and the 1st MAW and the following month to the Korean Marines. By November, the FLC had about completed the conversion of the remaining 9,100 rifles and established a reserve. In all, under the retrofit program, the FLC had handled more than 61,100 rifles.

Despite the occasional reduction in Marine stockpiles caused by such programs as the M16 retrofit pro-

*The ball propellant was a spherical grain powder in the 5.56 ammunition which speeded up the cyclic rate of the rifle beyond its design rate and also "fouled the chamber and bore." Moody, Donnelly, and Shore, "Backing Up the Troops," Chap 22, pp. 23–23A.
A Marine truck convoy winds its way along Route 9, now open between Dong Ha and Vandegrift Combat Base. The Motor Transportation Coordination Center, located at Dong Ha and operated by FLSG Bravo, controlled Marine truck convoys in the north.

gram, enemy actions, and monsoon rains, they were relatively minor when compared to the sheer volume of supplies and services provided by the FLC. By mid-year, the FLC had grown to 490 officers and 9,908 enlisted men and had made several adjustments. In July, the FLC established a logistic support unit at Fire Support Base (FSB) Stud to support Task Force Hotel after the evacuation of the Khe Sanh base. Stud, later named FSB Vandergrift, became the main combat support base for operations in western Quang Tri. In the Da Nang sector, two logistic support units, LSU 1 at An Hoa and LSU 2 on Hill 55, provided the logistic support for the Go Noi Island campaigns south of the Ky Lam Rivers. In December 1968, the FLC was supporting 10 major operations as well as the day to day operations of III MAF units. For the year, the FLC had filled a staggering 420,976 requisitions, nearly 90,000 more than the previous year.39

At the end of the year, Brigadier General James A. Feeley, Jr., who on 26 October had relieved General Olson as commander of the FLC, had some reason for satisfaction. The road net in I Corps was in good condition and Marine truck convoys were moving with relative ease through most of I Corps. For the most part, the Marine supply “pipeline” was in relatively good order and the Army had taken over much of the logistic burden in northern I Corps. At Phu Bai, FLSG Alpha continued to transfer most of its activities to the Army’s 26th General Support Group. The plan was to consolidate FLSG Alpha at Da Nang, which would permit more flexibility. While a difficult year for the Marine logisticians, they had persevered.