# PART IV WINDING UP AND WINDING DOWN

#### CHAPTER 10

# Allied Strategic and Redeployment Plans for 1971

Military and Pacification Plans for 1971 – Final Plans for Redeployment and the MAB A New Commander for III MAF – Military Situation in Quang Nam and Military Region 1, Early 1971

Military and Pacification Plans for 1971

Late in 1970, as U.S. and South Vietnamese staffs prepared their plans for the following year, the Southeast Asian war gave evidence of simultaneous deescalation and escalation. Within South Vietnam itself, the level of combat was declining as the allies concentrated on pacification, the Americans withdrew, and the Communists reverted to guerrilla warfare. On the other hand, the U.S. and ARVN sweep of the enemy's Cambodian bases, continuing ARVN operations and growing internal war in Cambodia, and increasingly heavy American air attacks on the Ho Chi Minh Trail in Laos pointed toward an expanded allied effort to wreck the Communists' cross-border bases, thereby reducing the enemy's ability to reintensify the war in South Vietnam.

The allied Combined Campaign Plan for 1971, promulgated on 31 October 1970 by the South Vietnamese, American, and allied commanders, reflected the changing trends of the war. Generally, the plan restated the allied strategy of the previous year, with increased emphasis on the RVNAF's assuming the tasks hitherto performed by the redeploying Americans, who would continue and accelerate their withdrawal. Under the plan, the ARVN and allied regular units were to operate primarily against main forces and base areas, and the ARVN in addition were to attack Communist forces in "authorized areas," i.e. Cambodia and Laos. The plan restated the established mission of the Regional and Popular Forces, People's Self Defense Force, and national police, assigning them to protect populated areas and support pacification.

Allied forces were to measure their progress during the year in terms of nine objectives: participation in the 1971 pacification campaign; improvement of the RVNAF "to achieve a maximum state of combat effectiveness"; employment of the RVNAF according to its assigned missions and capabilities; the infliction of "more losses on the enemy than he can replace"; denial to the enemy of the use of base areas and logistic systems within South Vietnam and adjacent countries; restoration and protection of roads and railways in South Vietnam; keeping food and other resources

out of Communist hands; increasing intelligence and counterintelligence efforts; and neutralization of the Viet Cong Infrastructure "to the maximum extent possible."

The XXIV Corps/MR 1 Combined Campaign Plan, promulgated on 29 December 1970, closely followed the national plan. It placed great emphasis on continuing U.S. redeployments and on improvement and modernization of the South Vietnamese forces so that they could "become self sufficient and capable of assuming the entire responsibility for the conduct of the war." The plan called for increased allied efforts to protect the people and control resources, "particularly at night"; continued training of ARVN, RFs, and PFs; and the provision of "responsive" support to province chiefs in their struggle to wipe out the VCI. Having experiened considerable success during 1970 in eliminating the VCI in Quang Nam, the plan called for the allies to intensify this effort while anticipating the enemy's increased attempts to reestablish his depleted military and political infrastructure at the hamlet and village level. The local plan also reiterated the assignment of missions to regulars, RFs, and PFs made in the national plan. In a variant on earlier plans, the XXIV Corps/MR 1 plan declared that the Regional Forces were to be employed under direction of the province chiefs in offensive operations against enemy provincial or local units. Only in the "most compelling cases" were RFs to be given static defense assignments. The 1971 plan also restated the Area Security Concept of the 1970 plan, under which each province was divided into heavily populated and relatively peaceful Secure Areas and Consolidation Zones controlled by the province chief, and more thinly populated and enemy-infested Clearing Zones and Border Surveillance Zones under ARVN or allied tactical unit commanders.2

The most significant new element in both national and regional military plans was a change in the definition of the role of U.S. units from conducting operations on their own to supporting and assisting South Vietnamese forces. This change was closely related to the Area Security Concept. On 1 January 1971, allied units ceased to have Tactical Areas of Responsibility

(TAORs). Instead, they received Tactical Areas of Interest (TAOIs), which normally encompassed about the same terrain as their old TAORs. Only ARVN commands now would have TAORs, and they would be responsible for assigning Areas of Operation (AOs) to allied units, usually in Clearing or Border Surveillance Zones.

This meant that in I Corps/MR 1, the TAOR commander became Lieutenant General Lam, while XX-IV Corps had a TAOI which included all of the military region. Each subordinate command under XXIV Corps received a TAOI consisting of its former TAOR. III MAF's TAOI, for example, continued to be Quang Nam Province. Marine units would defend and patrol more or less where they had defended and patrolled before, but now within AOs granted by Quang Da Special Zone. This change involved more of an alteration of terminology and staff procedures than of dayto-day field operations, thus giving expression to the primacy of South Vietnamese responsibility for the conduct of the war. The change also forced ARVN headquarters to assume more of the burden of planning and directing operations.3

Soon after the issuance of the military plans, the South Vietnamese government, on 7 January 1971, issued its pacification and development plan for the new year. Breaking with past practice, the government called the document its "Community Defense and Local Development Plan" for 1971. This change of name was intended to dramatize the government's contention that, since most of the South Vietnamese people now lived under government control, "pacification" had been largely completed and the country now should emphasize development.

Instead of the Eight Objectives of the 1970 plan, the 1971 plan had only three: Self-Defense, Self-Government, and Self-Development. Each title, as in past plans, embraced a number of continuing programs. Self-Defense included efforts to improve village security, with the goal of having 95 percent of the people living in A or B hamlets by the end of the year. This goal also continued attempts to improve the national police and embraced the Chieu Hoi Program and the Phoenix/Phung Hoang effort, which in 1970 neutralized 2,437 VCI in Quang Nam, representing an estimated 40 percent of the enemy agents in the province. Self-Government covered training programs for local officials, encouragement of popular self-help organizations, and a campaign to instill in the South Vietnamese people an "increased awareness of the meaning of democracy." Under Self-Development were grouped such programs as land reform, aid to refugees and war victims, and activities to improve agriculture and fisheries and help villages develop their own economies, all aimed "at committing all the people to the effort of developing the economy and the society so that progress toward self-sufficiency could be obtained." MACV endorsed the new pacification plan, instructing subordinate U.S. commanders to give "full support" to its implementation.4

## Final Plans for Redeployment and the MAB

During the last months of 1970, the staffs of III MAF and its subordinate commands continued to be preoccupied with planning for additional redeployments and for the organization and activation of the 3d Marine Amphibious Brigade. The two problems continued to be closely linked. Removal of all Marines from redeployment Increment V (Keystone Robin Bravo) had forced postponement of the activation of the MAB, initially scheduled for early fall. Instead, activation now was to occur after completion of Increment VI (Keystone Robin Charlie), which was to begin on 1 January 1971 and include the 12,400 Marines originally slated for Robin Bravo. III MAF now expected the MAB, which would consist of the Marines remaining after Robin Charlie, to begin operations in late April 1971.

Both the organization and the overall mission of the MAB had taken shape by autumn 1970, after almost a year of discussion, although there were still unresolved problems concerning exact composition. The brigade, with a total strength of about 12,600 Marines, was to have a ground component built around the 1st Marines and an air element consisting of an as yet undetermined mixture of aircraft types. III MAF planners were working on the assumption that the brigade, when activated, would have the general mission of protecting the Da Nang area. They were uncertain, however, how large the MAB TAOR\* was to be. XXIV Corps had not yet stated definitely whether American or other allied units would be sent to Quang Nam to augment the dwindling Marine forces. The MAF and division staffs, accordingly, had to base their plans for MAB ground operations on the assumption that the brigade might have to defend the entire 1st Marine Division TAOR.5

<sup>\*</sup>The change in terminology from TAOR to TAOI had not yet been made, and until January 1971, Americans continued to talk about TAORs.

In Washington during the autumn, the Marine Corps came under pressure in the Joint Chiefs of Staff to keep the 3d MAB in Vietnam longer than originally planned. The question of the length of the brigade's stay in the country arose in connection with plans for the Transitional Support Force (TSF), which would remain in Vietnam after most U.S. troops had withdrawn. This force was to provide combat and combat service support to the South Vietnamese until they achieved complete military self-sufficiency, or until the war ended, whichever happened first. The TSF would consist of about 255,000 U.S. Army, Navy, and Air Force personnel, including nine Army infantry brigades. As had happened during the planning for Keystone Robin Alpha, the Army reported to the Joint Chiefs of Staff in late October that shortages of men and money might prevent it from furnishing those nine brigades without reducing its forces elsewhere. The Joint Chiefs, in an effort to relieve the Army without reducing the TSF, then suggested to the Services, and to MACV and CinCPac, substitution of the 3d MAB for one of the Army brigades and its supporting units. This substitution, if made, could keep the Marine brigade in Vietnam until the end of Fiscal Year 1972, 30 June 1972, as much as a year beyond its intended departure date of 30 June 1971.

The proposal met strong objections from the Marine Corps, which pointed out that its budgets and manpower planning were based on continuing the previously established rate of redeployment. Keeping the MAB in Vietnam for an extra year would force reduction of other Marine Corps capabilities. Admiral John S. McCain, Jr., CinCPac, also objected. He stated that retention of the MAB in Vietnam would delay reestablishment of the projected Pacific reserve of two full Marine division-wing teams, one based in Okinawa, Japan, and Hawaii and the other in California.<sup>6</sup>

General Abrams passed the proposal on to Lieutenant General Sutherland, the XXIV Corps commander. On 9 November, Sutherland urged that the MAB not be included in the Transitional Support Force. While expressing his "complete confidence and professional admiration" for the Marines, he pointed out that communications and command problems would result from retaining a Marine Service component command that late in the redeployment process and that, if retained, the MAB would require additional Army logistic support. Sutherland also noted that a Marine brigade was larger by about 4,000 men

than a typical Army brigade and included an air as well as a ground element. Keeping the MAB would force additional reductions in the other Service components to compensate for the Marine aviation personnel. In spite of all these objections, the possibility of adding the MAB to the TSF remained open until the last days of 1970, because MACV and CinCPac, while reluctant to have the Marine brigade, would accept it rather than reduce the total strength of the transitional force.

With the issue of retaining the MAB and the question of the size of the MAB TAOR still unresolved, General Abrams on 3 November directed III MAF, with the other U.S. Service commands, to submit its list of units to be withdrawn in Increment VI. Of the 60,000 Americans to be withdrawn in this increment, III MAF, as planned earlier, was to furnish 12,400, one regimental landing team with aviation and support units.9

The MACV request for a definitive troop list for Increment VI forced III MAF to make an immediate and final decision on the composition of the 3d MAB, since by process of elimination the redeployment troop list would consist of the units not wanted in the brigade. Accordingly, on 5 November, Lieutenant General McCutcheon held a conference of commanders and staff officers of the wing, division, and Force Logistic Command. He informed the assembled officers that, with the MACV demand for a troop list in hand, "the time had come for a decision on the structure of the MAB." By this time, the III MAF staff had developed seven different possible organizations for the MAB. Most of these included varying reductions of the fixed-wing aviation element, to allow retention of all or a portion of a fourth infantry battalion. Two of the alternatives called for an increase in total MAB strength to 13,600 to make room for both a fixed-wing air group and the additional infantry.10

At the 5 November conference, McCutcheon announced his selection of Alternative Six. As originally drafted, this plan increased the brigade to 13,600 men to permit retention of two jet squadrons and the 1st Battalion, 5th Marines. McCutcheon, however, decided to eliminate the jet squadrons and their air group, MAG-11, leaving a MAB of 12,600 with four full infantry battalions, a military police battalion, and a strong helicopter group, but no fixed-wing aviation except a detachment of OV-10s. The III MAF commander explained that he expected the operating life of the MAB to be short and believed, as he had since

late July, that the brigade would need extra infantry to defend Da Nang more than it would need the jet squadrons and their controlling MAG. Many of the missions flown by the jets, he pointed out, would be in support of non-Marine forces, and the administrative and support units required by the squadrons would absorb too much of the brigade's authorized manpower.

Major General Armstrong, the 1st MAW commander, and Major General Widdecke, the 1st Division commander, both concurred in McCutcheon's decision to eliminate the fixed-wing air units. Armstrong said that "MAG-11 [fixed wing] would be a real problem to redeploy concurrently with MAG-16 [helicopters] in a 60-day period [the expected length of time the MAB would be operating]." General Widdecke observed that McCutcheon's proposed organization would be sufficient for 60 days, but thought that if the brigade remained in Vietnam longer than that, it should have its own fixed-wing support. Both Widdecke and his assistant division commander, Brigadier General Edwin H. Simmons, also expressed concern for the "political" and doctrinal implications of forming a MAB that was not a fully balanced airground command.11

McCutcheon transmitted his proposed MAB organization to Lieutenant General Jones, commander of FMFPac, on the 5th, with a Keystone Robin Charlie troop list derived from it. The list included only two battalions of the 5th Marines, but all the remaining jet squadrons, with the headquarters and support units of MAG-11. McCutcheon repeated to Jones his belief in keeping the MAB strong in infantry while getting rid of aircraft that would impose a heavy logistic and administrative burden and, given the expected mission of the brigade, were not likely to be required for support. McCutcheon stated that artillery and helicopter gunships could provide adequate firepower for most probable contingencies and that in the unlikely event fixed-wing assistance were needed, the U.S. Air Force could furnish it.12

On 7 November, Lieutenant General Jones sent McCutcheon's proposal on to HQMC. Jones endorsed the III MAF commander's plan to eliminate the fixed-wing component of the MAB, with the qualification that if the brigade were included in the Transitional Support Force it would need its own jets. The Commandant, General Chapman, rejected the III MAF plan. Chapman informed FMFPac that the MAB should be organized so that it could remain opera-

tional for a long period, since the Joint Chiefs of Staff still were considering inclusion of the MAB in the TSF. Also, Chapman pointed out, combat could intensify between the first of the year and the departure of the last Marines. Hence, the Commandant ordered that at least two jet squadrons be included in the MAB, so that it would constitute a complete air-ground team prepared for all contingencies.

Accordingly, McCutcheon then adopted another of the alternative brigade organizations developed by his staff. Under this plan, the 1st Battalion, 5th Marines was dropped from the MAB, and MAG-11, with one squadron of A-4s and one of A-6s, put back in. On 8 November, McCutcheon sent MACV his troop list for Increment VI, reflecting this revision of his plan for the MAB. The list included all of the 5th Marines; the 2d Battalion, 11th Marines; four helicopter squadrons; one jet squadron; and a proportional assortment of supporting units. The major air and ground units were to begin standing down from combat in mid-February.<sup>13</sup>

While the composition of the MAB was being determined, the 1st Marine Division staff, under the direction of General Simmons, was completing a proposed concept of operations for the brigade. General Simmons, a combat veteran of World War II and Korea, had been G-3 of III MAF and then commander of the 9th Marines during 1965 and 1966. After a tour at Headquarters as Deputy Fiscal Director of the Marine Corps, he returned to Vietnam in July 1970, with the dual role of assistant division commander and commander-designate of the 3d MAB. For MAB planning, Simmons acted as an advisor to General McCutcheon on overall brigade matters and also advised General Widdecke on 1st Marine Division plans for the ground element of the MAB.<sup>14</sup>

On 11 November, Simmons submitted his proposed plan to General Widdecke. The concept of operations was based on the assumption that the brigade would have to defend the entire 1st Marine Division TAOR and that a decision would not be made "until the eleventh hour" on whether the MAB would be included in the TSF. The division planners also assumed that no major new ARVN or allied units would be sent to Quang Nam to replace the Marines.

Under the proposed concept of operations, the brigade was to keep one infantry battalion in the Que Sons, probably based at Baldy. Of the remaining two battalions of the 1st Marines, one would operate west of Da Nang and the other south of the city and air-



Department of Defense Photo (USMC) A800156 LtGen Donn J. Robertson visits Combined Action Marines. Gen Robertson relieved the ailing LtGen Keith B. McCutheon as Commanding General, III MAF.

field. In order to cover the area with fewer Marines, the battalions would have to operate in what the plan called "a highly mobile expeditionary mode." Ideally, each battalion would have only one permanent base to be defended and would keep two of its companies continually in the field while a third acted as a helicopter-borne quick reaction force and the fourth, resting after a period in the field, would protect the battalion base. The battalions would use tactics similar to those already being employed by the 5th Marines, combining reconnaissance and infantry patrols with heliborne QRFs, artillery, and air strikes. In the Rocket Belt, increased reconnaissance activity and use of aerial observers would have to replace much of the saturation infantry patrolling done by Marines, but in view of the apparent weakness of the enemy and of the improvement of the Regional and Popular Forces, the division planners considered this an acceptable risk. The whole plan was designed:

. . . to optimize the performance of the ground element of the MAB in the event of an extended stay and continued responsibility for the present area of operations, in other

words, the extreme case. However, the concept is adaptable to a smaller AO and will, by lightening the logistic load, expedite the early departure of the brigade if such eventuates.<sup>15</sup>

The success of the operating concept for the MAB would be greatly influenced by the ability of the South Vietnamese to compensate for reduced Marine presence and patrolling with intensified operations of their own. During 1970 the CAPs had focused on training their Vietnamese counterparts to operate independently and aggressively.<sup>16</sup>

Major General Widdecke approved the plan and on 14 November passed it on to Lieutenant General McCutcheon. McCutcheon delayed his response while he tried to obtain from XXIV Corps a firm statement of the Army's intentions on reinforcing Quang Nam. By late November, he had received definite information from XXIV Corps that the MAB would be relieved of responsibility for the 5th Marines' area of operation when that regiment redeployed and that another American or allied force would move into the Que Sons. With this assurance finally in hand, McCutcheon, on 28 November, approved the division's proposed MAB concept of operation. He directed, however, that "planning should be based on [the] assumption [that the] MAB AO will be the current 1st Mar[ine] Div[ision] AO, less 5th Mar[ines] AO . . . . 17

Late in December, the Joint Chiefs of Staff removed the second uncertainty clouding plans for the MAB by deciding that it would not require the brigade for the Transitional Support Force. This permitted the Marines to plan on redeploying the brigade by 30 June 1971. By the end of the year, the MAF, division, and wing staffs were well into the complicated process of working out stand-down and redeployment schedules for both Increment VI and Increment VII. They also were establishing detailed procedures for activating the MAB headquarters by transferring key members of the MAF, division, and wing staffs.<sup>18</sup>

The decision to have the last Marines out of Vietnam by the end of June 1971 meant that the 3d MAB really would never function as an operational command. Its principal task would be redeploying its subordinate units, some of which were scheduled to stand down almost as soon as the MAB was activated. This fact, and the administrative problems likely to attend the last phase of redeployment, raised a question in the mind of Major General Armstrong, the 1st MAW commander, about the desirability of establishing a MAB at all.

On 15 December, Armstrong, in temporary command of III MAF after McCutcheon's unexpected early departure for health reasons, sent a message to Lieutenant General Jones. Armstrong pointed out to the commander of FMFPac that if the MAB were to leave Vietnam by 30 June, "Increment Seven stand-down will, in fact, merge with and overlap Increment Six, with two air groups to be redeployed in the final increment, aviation problems would predominate during the MAB's short lifespan." Armstrong declared that solution of many of these problems would require dealings with the Seventh Air Force, which had partial control of Marine fixed-wing squadrons under the single-management system. He also questioned whether a brigade headquarters under a one-star general could effectively represent Marine interests in these circumstances. He suggested, therefore, that instead of the MAB, a reduced III MAF Headquarters under a major general, or preferably a lieutenant general, remain until 30 June.

Lieutenant General Jones adopted Armstrong's proposal. Jones suggested on 22 December that a small III MAF (Rear) stay in Vietnam instead of the brigade, with a major general in command. By the end of the year, III MAF had developed a table of organization for such a headquarters, to be staffed by 112 Marine and 6 Navy officers and 195 Marine and 5 Navy enlisted men.<sup>19</sup>

In mid-January 1971, General Chapman brought this planning to an abrupt end. On a visit to the Pacific which included stops at FMFPac and III MAF, the Commandant directed that the original program be adhered to and that 3d MAB be activated after the MAF, wing, and division redeployed. With Chapman's decision, the much-planned and often-postponed brigade was at last assured at least a short period of existence.<sup>20</sup>

#### A New Commander for III MAF

In late October 1970, General Chapman announced plans to replace Lieutenant General McCutcheon as commander of III MAF with Major General Donn J. Robertson, then serving at Headquarters as Director of the Marine Corps Reserve. The change of command was to take place around 1 January 1971, after the Senate had confirmed Robertson's promotion to lieutenat general. In mid-November, General McCutcheon, after consultation with MACV, XXIV Corps, and FMFPac, set 2 January as the date for the transfer, after which McCutcheon would leave immediately for Washington. There, he was to be promoted to gener-

al and succeed General Lewis W. Walt as Assistant Commandant of the Marine Corps.<sup>21</sup>

McCutcheon's failing health disrupted these plans and forced an earlier change of command. Before coming out to III MAF the year before, McCutcheon had undergone extensive surgery for cancer. Seemingly recovered, he had been able to assume command in Vietnam and carry out his duties. But, as McCutcheon's predecessor at III MAF, Lieutenant General Nickerson, later put it, "Sooner or later it wasn't all gone and it got him."<sup>22</sup>

During November, McCutcheon came down with a persistent mild fever. "It doesn't amount to a whale of a lot," he wrote to a friend, "but it keeps me pretty well locked up in the quarters and prevents me from getting around the countryside, which is really what I love to do." McCutcheon finally went on board the hospital ship USS Sanctuary (AH 17) for tests. The results indicated that his cancer might be flaring up again. On 11 December, after returning from the Sanctuary, McCutcheon called together his general officers and told them that, on the doctors' recommendation, he would be leaving on the 13th for Washington to enter Bethesda Naval Hospital for additional tests. General Simmons recalled the departure:

His plane left at 0755 on Sunday the 13th. It was a fine bright morning with a fresh breeze blowing. General McCutcheon had asked that there be no departure ceremony, but there was no preventing a spontaneous, sincere send-off. Always slight, he looked gaunt and tired as he shook hands and said goodbye.\*23

After General McCutcheon's departure, Major General Alan J. Armstrong, commander of the 1st MAW, took over temporarily as acting commander of III MAF. Lieutenant General Robertson, following hasty Senate confirmation of his new rank, hurried his move to Vietnam and reached Da Nang on 23 December. He took command on the 24th. Robertson, a North Dakotan who had earned the Navy Cross on Iwo Jima, was already familiar with the III MAF TAOR, having commanded the 1st Marine Division in the same area from June 1967 through June 1968. This experience, combined with a close acquaintanceship with General Abrams, which had developed during his earlier Vietnam tour, allowed Robertson to take

<sup>\*</sup>The new tests indicated that the cancer had revived. Too ill to assume his post as Assistant Commandant, McCutcheon was placed on the retired list on 1 July 1971 with the rank of general. He died of cancer on 13 July 1971.



Department of Defense Photo (USMC) A373799

Troops from the 1st Battalion, 5th Marines wait for helicopters to take them from their old base in the Que Son Mountains to Hill 34 near Da Nang; as the battalion began standing down for redeployment. Part of the old defenses can be seen in the background.

charge easily in spite of his rushed assumption of command.<sup>24</sup>

Military Situation in Quang Nam and Military Region 1, Early 1971

Lieutenant General Robertson assumed command of a force less than half the size of the III MAF Mc-Cutcheon had taken over 10 months earlier. III MAF, which had contained almost 60,000 men in early 1970, in January 1971 included about 24,700 Marines and about 1,000 Navy personnel. Major General Widdecke's 1st Marine Division had only two of its infantry regiments, the 1st and 5th Marines, and roughly two-thirds of its artillery regiment, the 11th Marines, about 12,000 troops in all, with which to protect Da Nang and scour the Que Son Mountains. The 1st Marine Aircraft Wing, under Major General Armstrong, consisted of one fixed-wing group, Colonel Albert C.

Pommerenk's MAG-11, based at Da Nang, and one helicopter group, MAG-16 under Colonel Lewis C. Street III, operating from Marble Mountain. The 6,100 Marines of the wing flew and maintained a total of 74 fixed-wing aircraft and 111 helicopters. Force Logistic Command, under Brigadier General James R. Jones, had shrunk to some 3,800 officers and men, most of them engaged in preparing for the redeployment of additional troops and equipment. Lieutenant Colonel John J. Tolnay's 2d Combined Action Group, with about 600 Marines, continued its hamlet defense activities throughout much of Quang Nam, operating with 34 combined action platoons in January and February.<sup>25</sup>

As their numbers decreased, the Marines were turnning more and more of the responsibility for defending Quang Nam over to the province's South Vietnamese RFs and PFs. On 1 January 1971, the Vietnamese RFs and PFs.

namese Joint General Staff redesignated Quang Da Special Zone, the controlling ARVN headquarters in Quang Nam, as the 1st Mobile Brigade Task Force and gave the task force operational control of the 51st Infantry Regiment, the three-battalion 1st Ranger Group, a squadron from the 1st Armored Brigade, and the 78th and 79th Border Ranger Defense Battalions. The latter were the Civilian Irregular Defense Groups at Nong Son and Thuong Duc, redesignated and incorporated into the regular army. The 1st Task Force also received a new commander, Colonel Nguyen Trong Luat, former assistant division commander of the 2d ARVN Division.\* This redesignation of QDSZ represented another step in the effort, long sponsored and aided by III MAF, to develop an effective tactical headquarters for all the ARVN troops in Quang Nam. As 1971 began, the 51st Regiment, the principal ground unit of the 1st Task Force, had its battalions in the field around An Hoa and Hills 37 and 55. The Rangers and the armored squadron, still regarded as part of the I Corps reserve, continued to spend most of their time in camp around Da Nang.26

Like Quang Da Special Zone, the 1st Task Force had operational control of the RFs and PFs in Quang Nam, control which it exercised through the province and Da Nang city authorities. The Regional Forces in early 1971 numbered about 7,800 effectives in 54 operational companies, and the Popular Forces about 6,400 men in 202 separate platoons. This was about the maximum militia strength which the province could maintain. Hence, the South Vietnamese authorities planned no additional units for the coming year. They would concentrate instead on bringing the existing ones to full strength.\*\* The RFs and PFs were now acquiring their own artillery, under a nationwide program begun during 1970. By 6 January 1971, three RF platoons of 105mm howitzers, with their own sec-

<sup>\*\*</sup>The actual strength of the RFs and PFs in the field often was much below their authorized strength. In Quang Nam in March 1971, for instance, these were the authorized and actual numbers:

	Authorized	Present for Duty
RF	8,644	7,820
PF	7.070	6.417

<sup>-</sup>CG XXIV Corps msg to PSAs of Quang Nam and Quang Ngai, dtd 4May71, Box 25, Fldr 26, RG 319 (72A6443), FRC, Suitland, Md.

tor headquarters and fire direction center, had deployed in Quang Nam. The province PSDF continued to display much promise and some real strength, with about 13,500 armed members in the field at the beginning of the year. To improve the training of the militia and for better coordination of village defense, Quang Nam Province and the 1st Task Force were planning to subdivide each district into several areas of operation, each under a RF company commander. The company commander would be responsible for training the PFs and PSDF within his AO and would have operational control of them "on a mission required basis."<sup>27</sup>

Lieutenant General Robertson, as he took over his new command, found Quang Nam seemingly much more peaceful and secure than it had been during his earlier tour with the 1st Marine Division. He observed:

I really was going right back home. I was going back to the same area that I was familiar with . . . . I recognized progress in the war, favorable progress . . . . Not as many enemy forces around. They really had pulled away from that area considerably. More work being done in the fields . . . . It just seemed to me to be a feeling of more security in the hamlets and villages around that area . . . . Security wise the people were cooperating . . . . . <sup>28</sup>

While the relative quiescence of the enemy in Quang Nam was a fact, Marines differed in their assessments of what it meant. The more optimistic observers argued that the North Vietnamese and Viet Cong, short of men and supplies, and suffering from declining discipline and morale, simply were not capable of much beyond occasional terrorism and hit-andrun attacks. Some Marines also assumed another cause of declining activity was the flood in October-November which temporarily disrupted VC/NVA command and control networks and lines of communication, much as it had done with the allies in Quang Nam. Others, including Major John S. Grinalds, S-2 of the 1st Marines, felt that the Communists were following a calculated strategy. Grinalds believed that the Viet Cong and North Vietnamese wanted the U.S. withdrawal to proceed on schedule. The enemy would engage in enough military activity, for example firing rockets at Da Nang, to keep both Vietnamese civilians and the American public aware that the war was still going on; but they would not make attacks of sufficient strength to constitute a serious threat to allied forces and justify slowing down the removal of American troops. Grinalds expected the enemy to bide their time, building up their supply stockpiles, and recruit

<sup>\*</sup>Colonel Nguyen Van Thien, who had done much to build QDSZ into an effective tactical headquarters, had been killed in a plane crash in August 1970, and was finally replaced by Colonel Phan Hoa Hiep. On 1 January 1971, Hiep went to Saigon to command the Armor Corps and Luat succeeded him as commander, 1st Task Force.

more guerrillas and VCI members, while they weakened civilian confidence in the South Vietnamese Government by continued terrorism and propaganda. Then, as Grinalds put it, "in July, when we finally stepped out, they could come in with their main force units and either act politically or militarily to . . . control the area."<sup>29</sup>

The enemy throughout I Corps appeared to be committed to low-intensity warfare through terrorism and small hit-and-run attacks. Early in 1971, Lieutenant General Sutherland, the XXIV Corps commander, described the situation for the new commanding general of the 101st Airborne Division:

There has been a marked change in the enemy's strategy and tactics during the past year. Logistical problems and allied firepower, among other things, have made maneuvering of large enemy troop units impractical, if not impossible, and have caused emphasis to be shifted in the main to small unit and guerrilla tactics. Enemy units generally seek to avoid contact, . . . until they perceive a condition wherein a FWMAF [Free World Military Armed Forces] unit or instal-

lation becomes careless and vulnerable. Then they strike quickly and fade away again. Rarely will an enemy unit stand and fight, even against a small opposing force . . . 30

As always, the Demilitarized Zone seemed to allied commanders to be the one area where the enemy could most easily shift suddenly from guerrilla tactics to large-unit warfare. As 1971 began, reports from a variety of intelligence sources indicated that the North Vietnamese might be planning to do just that. The enemy was moving more troops, weapons, and supplies into their Laotian base areas north and west of the DMZ, in easy reach of Quang Tri and Thua Thien, the two vulnerable northern provinces of MR 1. In response to these indications of a possible enemy offensive, by the start of the new year, MACV and XXIV Corps had begun planning a preemptive attack on the Laotian base areas. These plans, about which III MAF as yet knew nothing, were to culminate in one of the largest, most controversial allied offensives of the war.31

#### CHAPTER 11

# Marines in Operation Lam Son 719

The Preemptive Strike: Lam Son 719—Marine Fixed Wing Air Support and the ASRT Marine Helicopters Over Laos—Marine Trucks on Route 9—Diversion Off Vinh—Results of Lam Son 719

The Preemptive Strike: Lam Son 719

During late 1970, the evidence that the North Vietnamese were preparing for a major offensive in northern Military Region 1 became increasingly persuasive. U.S. aerial reconnaissance recorded a growing movement of men and vehicles down the Ho Chi Minh Trail network into the Laotian base areas north and west of the Demilitarized Zone. Pilots flying bombing missions over the trail encountered reinforced antiaircraft defenses. Reports from agents and prisoner interrogations contained frequent mention of a large-scale attack sometime between the beginning of the new year and the middle of the summer.<sup>1</sup>

These signs of a coming Communist offensive spurred MACV to revive plans made earlier in the war for an attack into Laos from northwest Quang Tri Province. Beginning in 1966, General William C. Westmoreland, then ComUSMACV, had had his staff develop a series of plans for an American and ARVN offensive, possibly in cooperation with Laotian or Thai forces, to block the Ho Chi Minh Trail where it skirted the western end of the DMZ. In spite of repeated requests Westmoreland never received permission to carry out these plans.<sup>2</sup>

Late in 1970, General Abrams, Westmoreland's former deputy and successor, proposed a raid into Laos, both to forestall the threatened North Vietnamese offensive and to disrupt the enemy's supply system while more U.S. troops redeployed. Precedent for cross-border operations had been set with the incursion into Cambodia and, early in January 1971, Washington agreed to a limited preemptive strike. On 7 January, under direction from MACV, small planning groups from I Corps and XXIV Corps, working in tight secrecy, began developing a detailed concept of operations. General Abrams approved this plan on 16 January.

Following General Abram's approval, planning for the operation proceeded with continued secrecy. Colonel Verle E. Ludwig, whose boss at the time was Army Colonel Bob Leonard, the MACV Information Officer, recalled that Leonard sold Abrams on the idea that the "story should be embargoed for the press." To serve as another layer of deception as the planning continued, "the MACV staff (and others) devised code names for places in Laos, to make it appear that the operation was only going into the Khe Sanh and A Shau Valley areas." Ludwig himself was "never cut in on the fact that the operation actually was going over into Laos" despite his having to give "a daily briefing to the press at the press billet in downtown Saigon . . . . "4

The plan called for a four-phase operation, codenamed Lam Son 719. I Corps was to direct most of the ground campaign while XXIV Corps commanded all the U.S. forces involved and controlled the fixedwing and helicopter air support on which the whole offensive would depend. In Phase One, to begin on 30 January and be completed by 7 February, elements of the American 1st Brigade, 5th Infantry Division (Mechanized) and the 101st Airborne Division were to reopen and secure Route 9, the main east-west road through Quang Tri, from its junction with Route 1 at Dong Ha, west to the Laotian border. The XXIV Corps units would occupy the site of the former Marine base at Khe Sanh, unoccupied since 1968, as the forward supply base for the offensive.

In Phase Two, from 7 February to 6 March, elements of the 1st ARVN Division and 1st Armored Brigade, reinforced from the national strategic reserve by the 1st Airborne Division and the newly formed Vietnamese Marine Division, would move through the American units into Laos. The ARVN units were to drive westward to Tchepone, a major Ho Chi Minh Trail junction 30 miles inside Laos, destroying enemy troops and supply dumps as they advanced. The armored brigade would proceed along Route 9, while the airborne division and the 1st Division, by heliborne assaults, were to establish a series of fire bases on high ground to protect the road. In this and the later phases of the operation, the Americans would furnish air, artillery, and logistic support. In accord with general restrictions imposed by the U.S. Congress, however, no American advisors or other personnel were to accompany Vietnamese ground units into Laos, although Americans could fly support and rescue missions across the border. Additionally, American Marine advisors with the Vietnamese Marine Corps, who were trained aerial observers, were on board command and control Hueys during daylight hours.

During Phase Three, which was to last from 7 to 9 March, the ARVN troops would sweep their areas of operation, thoroughly wrecking the trail system and supply caches. Then, in Phase Four, they were to withdraw eastward into South Vietnam, either directly down Route 9 or southeastward through the enemy's base areas in the Da Krong and A Shau Valleys. The choice of withdrawal route would depend on circumstances at that time. Whichever route was chosen, the operation would end on or about 6 April.

III MAF took no part in the planning for Lam Son 719 and received no information about it until a few days before D-Day. Between 25 and 30 January, Lieutenant General Sutherland personally briefed Lieutenant General Robertson on the impending offensive and outlined III MAF's part in it. Remembering the meeting years later, Robertson said that Sutherland "apologized for not briefing me during the early planning phase, but was not to tell anyone, other than his key staff officers, about the operation." Sutherland directed Robertson to furnish Marine air support, both fixed-wing and helicopter, and to increase Marine patrols along Route 1 in Quang Nam, particularly where the highway, important for supply of the operation, crossed Hai Van Pass. Later, on 6 February, as transport difficulties hindered the offensive, Sutherland requested and received a reinforced Marine truck company to help move supplies from Dong Ha to the logistic support areas at FSB Vandegrift and at Khe Sanh.<sup>6</sup>

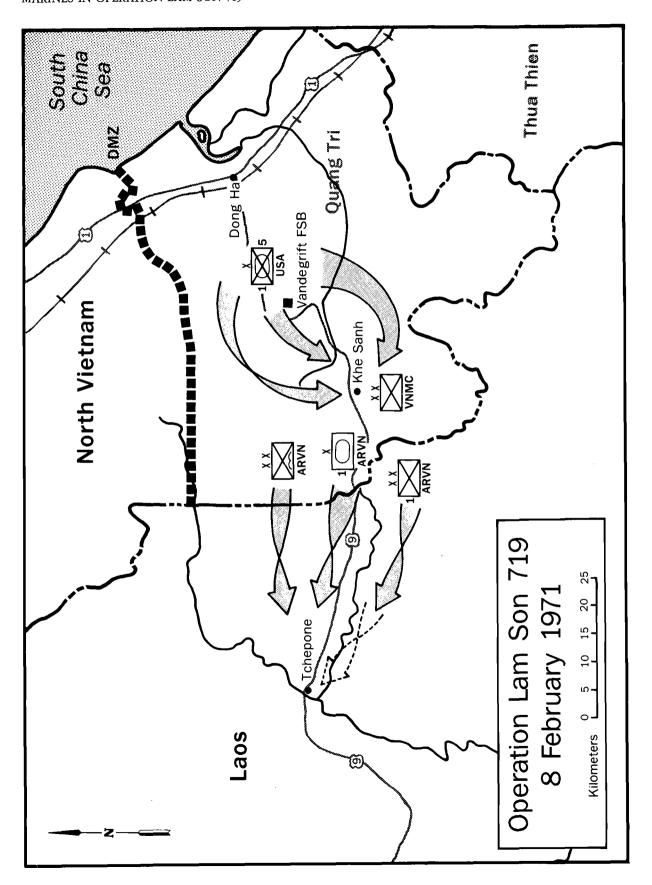
Phase One of Lam Son 719 began on schedule.7 On 29 January, Lieutenant General Lam established his I Corps forward command post at Dong Ha and General Sutherland set up XXIV Corps Forward Headquarters at Quang Tri. The following day, in what the Americans called Operation Dewey Canyon II, elements of the 1st Brigade, 5th Infantry Division (Mechanized) advanced from FSB Vandegrift along Route 9 toward Khe Sanh and the Laotian border. The U.S. troops met only light, scattered resistance. Behind the combat units, U.S. Army engineers rebuilt bridges and culverts on Route 9 and prepared the long unused highway for truck traffic. Artillery and support units moved into Khe Sanh and began reestablishing an airstrip capable of receiving Air Force C-130 transports. The ARVN 1st Armored Brigade, 1st Airborne Division, and 1st Infantry Division moved up under cover of the American advance and concentrated around Khe Sanh for the move into Laos while U.S. helicopters and trucks brought in fuel, ammunition, and supplies.

Although the objectives of the operation in Laos were concealed for as long as possible, leaks of information did occur. South Vietnamese Major General

Aerial view of Route 9 near Khe Sanh. This narrow road meandered through the difficult mountain passages and provided excellent cover and concealment for enemy ambushes. Throughout the 1968 siege aerial resupply was the only means of reprovision.



Courtesy of Capt Chalmers R. Hood, Jr., USMC



Nguyen Duy Hinh said that press speculation was aroused when, during the preparatory period of the operation, reporters were not allowed into the Quang Tri area. He became convinced that press leaks eliminated the possible advantages of surprise. Looking back on the operation, Marine Major John G. Miller, an advisor with the Vietnamese Marines during Lam Son 719, related "Late in the operation we learned that there had been a direct leak out of [General] Lam's CP across the DMZ. An ARVN captain and his wife were caught passing plans . . . to the NVA."8

On 8 February, the ARVN 1st Armored Brigade advanced into Laos along Route 9 to begin Phase Two of the offensive. U.S. helicopters deployed six battalions of the 1st Airborne and 1st Infantry Divisions to set up firebases flanking the highway. The infantry went in south of Route 9 and the airborne, reinforced by a ranger group, took positions north of the road. Two more battalions landed by helicopter further west to link up with the advancing tanks. Meanwhile, the XXIV Corps units around Khe Sanh continued to build up their logistic base while patrolling to protect Route 9 within South Vietnam.

During their first few days in Laos, the South Vietnamese troops encountered only small groups of enemy as they pushed westward toward Tchepone. North Vietnamese reaction, however, soon strengthened. By 18 February, the South Vietnamese were in contact with NVA in company and battalion strength. Heavy fighting erupted as determined North Vietnamese, supported by mortars, artillery, and tanks, assaulted the firebases protecting the flanks of the advance. On the 19th, 400-500 North Vietnamese overran the 39th Ranger Battalion north of the highway, inflicting losses of 178 men killed or missing and 148 wounded. A week later, tank-led NVA troops stormed FSB Delta, an airborne position. Other South Vietnamese firebases held out, aided by U.S. helicopter gunships, jets, and B-52s. The American positions at Khe Sanh came under sporadic mortar and rocket attack.

The North Vietnamese, for once departing from their usual evasive tactics, had decided to defy U.S. and ARVN firepower and stand and fight for their vital supply line. Reinforcing more rapidly than allied planners had anticipated, the enemy committed elements of five divisions, including an estimated 12 infantry regiments, two artillery regiments, and at least one armored regiment during the battle along Route 9. The NVA used aggressive, well conceived tactics against the ARVN firebases. Their infantry moved in

close to the defenders to prevent the use of American air support. From concealed positions, NVA mortars and artillery kept up steady bombardment, and at some places tanks fired point blank into ARVN positions. Machine gun and mortar fire met each helicopter attempting to bring in reinforcements and supplies or to evacuate wounded.\*

Under increasing pressure, the South Vietnamese frontline troops, with some exceptions, defended their positions tenaciously. Their artillery, supplemented by U.S. artillery and air support, including dozens of B-52 strikes, inflicted severe losses on the North Vietnamese. In spite of pressure on their flanks, the South Vietnamese continued to push westward, both on the ground and by helicopter. South of Route 9, battalions of the Vietnamese Marine Division took over a portion of the 1st ARVN Infantry Division's sector, allowing elements of the latter unit to make a brief token occupation of Tchepone. By 6 March, the planned end of Phase Two, the South Vietnamese had temporarily blocked the main supply routes of the Ho Chi Minh Trail and had captured or destroyed large caches of arms, ammunition, and supplies.

While Operation Lam Son 719 had moved forward on schedule in the face of heavy opposition, the test of conducting a large-scale, contested invasion revealed a number of ARVN deficiencies. The 1st Armored Brigade had made a disappointing showing. It had failed to advance as speedily as planned, partly as a result of the poor condition of Route 9 in Laos and partly because of hesitant leadership. Several times, the armored brigade ignored requests for support from other hard-pressed South Vietnamese units. The I Corps and division commanders and staffs, inexperienced in directing an operation of this size and complexity, gradually lost control of the developing battle. For Vietnamese Marine units, control deteriorated at night when American Marine advisors were not airborne in command and control Hueys supporting their Vietnamese counterparts in Laos. Compounding command and control problems, the Airborne and Marine division commanders, who were only under General Lam's authority for Lam Son 719, were accused of frequently disregarding orders from

<sup>\*</sup>Lieutenant Colonel Marshall N. Carter, an advisor with the Vietnamese Marine Corps at the time, recalled that in addition to heavy mortar and machine gun fire, "there was an abundance of sophisticated antiaircraft weapons—some apparently radar-directed." LtCol Marshall N. Carter, Comments on draft ms, 28Mar83 (Vietnam Comment File).

I Corps.\* Inevitably, coordination of U.S. air and artillery support for South Vietnamese units proved difficult, especially since there were no American advisory or liaison personnel with the ARVN in Laos.9

Even with these developing problems, the allies decided to extend Phase Three from the planned two days to more than a week. From 7 to 16 March, the South Vietnamese battalions swept their operating areas north and south of Route 9 with the intention of capturing or destroying as much enemy material as possible. North Vietnamese resistance slackened temporarily; on the 14th, however, after two days of bad weather had limited allied air operations, the NVA renewed artillery and ground attacks on several key firebases, while at the same time increasing harassment of Khe Sanh and FSB Vandegrift.

On 17 March, the ARVN began Phase Four, the withdrawal phase of the operation. The armored brigade started pulling back eastward along Route 9, and the flanking divisions began evacuating their fire-bases by helicopter. At this point, the uncertain ARVN command system lost control of the operation. In spite of warnings and remonstrations from MACV and XXIV Corps, the South Vietnamese, foreshadowing the mistakes that were to contribute to their final debacle in 1975, attemped to withdraw too quickly with inadequate advance planning and coordination. 10 The

result, for some units, was a near rout. The 1st Armored Brigade, its flank protection prematurely removed, ran into a series of NVA ambushes on Route 9 in which it lost or abandoned 60 percent of its tanks and half of its armored personnel carriers before straggling back into South Vietnam. The infantry, Airborne, and Marine divisions,\* under continuous machine gun, mortar, and artillery fire, managed to extricate themselves from their positions, but they left behind many casualties and much equipment, including 96 artillery pieces. Recalling the withdrawal of Vietnamese Marine Corps units, Major John G. Miller noted that only the artillery units failed to perform well under pressure: "The VNMC artillery, which had grown lax under the benign shooting conditions of the Delta, was incapable of mastering the intricacies of computing map data, high-angle fire, etc. That is one reason the VNMC infantry commanders were often loath to bring it (artillery fire) closer than 1000 meters to friendlies . . . The infantry battalions were generally better led and gave a better account of themselves." U.S. aircraft had to attack many of the abandoned vehicles and guns to keep them out of enemy hands. By 6 April, the last South Vietnamese troops had left Laos.11

Marine Fixed Wing Air Support and the ASRT

Throughout Lam Son 719, Lieutenant General Robertson closely followed the progress of the battle. Robertson, who enjoyed a close working relationship with General Sutherland, regularly visited both XXIV Corps Forward and I Corps Headquarters, to confer with Sutherland and with Lieutenant General Lam on the offensive as a whole and on III MAF support of it. The III MAF commander explained that "it was certainly close enough that I had an interest in it and in turn, if I'm going to be number two [U.S.] commander [in MR 1], you never know what's going to happen . . . ."

Early in March, and again early in April, Robert-

<sup>\*</sup>Brigadier General Alexander P. McMillan, who was acting Senior Marine Advisor (SMA) during two weeks of Lam Son 719, later disagreed with the contention that orders were frequently disobeyed, saying, "I can recall no specific instance of this . . . " Alluding to the troubled politics of South Vietnam, where military commanders were often directly or indirectly enmeshed in politics, the SMA, Brigadier General Francis W. Tief, then a colonel, years later noted another reason for the apparent friction between the VNMC and General Lam: "General Lam constantly felt CMC [Commandant] VNMC was being groomed to relieve him as CG I Corps. Lieutenant General Khang was extremely careful not to enhance this feeling." Colonel John Miller, at the time a major, who advised the operations section of the VNMC in the combat operations center at Khe Sanh during the operation, said he saw one act of disobedience, the VNMC refusal to occupy Co Roc, an imposing mountain in Laos overlooking Khe Sanh: "... after Colonel Tief had returned to Khe Sanh and Colonel McMillan had gone back to Saigon . . . Colonel Lan had pulled all troops off Co Roc [occupied by less than a platoon], despite General Lam's direct order to defend that key terrain feature. Co Roc would have been a death trap for defending units about brigade strength." Miller added that "Lam was in a turbulent emotional state early on-after his chief of staff (and best friend) was killed in a helicopter crash." BGen Alexander P. McMillan, Comments on draft ms, 19Apr83; BGen Francis W. Tief, Comments on draft ms, 13Apr83; Col John G. Miller, Comments on draft ms, 19Apr83 (Vietnam Comment File).

<sup>\*</sup>Colonel Miller, then at Khe Sanh, recalled the stress caused by the NVA counterattack: "One brigade commander, Col Thong (Brigade 147) cracked under the strain and was eased out of his command. During one 24-hour period, Colonel Lan (the division commander) went into virtual seclusion and Colonel Tief [the Senior Marine Advisor] was in effect calling the shots and keeping higher headquarters informed while trying to coax Lan out of his shell. We were all perplexed by this unexpected behavior from Lan." Col John G. Miller, Comments on draft ms, 19Apr83 (Vietnam Comment File). For more information on VNMC participation in Lam Son 719 see Chapter 21.

son temporarily commanded XXIV Corps during General Sutherland's absence. Robertson recalled:

learned in a hurry that people, they'll work together and if you're all a bunch of professionals things go well. We never had any snags when I was commanding. I got full support from that staff up there. I knew many of them because of my close relationship with XXIV Corps. There used to be some surprised looks when there'd be visitors come in . . that . . . walked in and [found] a Marine commanding an Army corps. 12

Beginning on 31 January, jets from the 1st MAW—A-4Es of VMA-311, A-6As of VMA(AW)-225, and F-4Bs of VMFA-115—flew repeated missions in support of the ARVN units in Laos. Like the Navy and Air Force planes engaged in the operation, the Marine jets received target assignments from the Seventh Air Force, which had overall charge of fixed-wing support for the offensive.\* During February, 1st MAW aircraft flew a total of 509 sorties\*\* in support of Lam Son 719, dropping over 1,180 tons of ordnance.<sup>13</sup>

Marine pilots flying in support of Lam Son 719 attacked targets rarely encountered up to this point in the war—enemy tanks. On 27 February, for example, a flight of A-4E Skyhawks from VMA-311 led by Colonel Albert C. Pommerenk, commander of MAG-11, and by the squadron commander, Lieutenant Colonel Jerome T. Hagen, was diverted from a preplanned bombing mission to aid the besieged South Vietnamese defenders of Fire Support Base 31, eight miles inside Laos. Arriving over the battle area, the Marine aviators spotted five North Vietnamese light tanks, Russian-built PT-76s, moving up to support infantry who were already attacking the firebase.

One tank, on a hilltop, was engaging the defenders at close range, while four others were climbing the hill to join it. ARVN artillery silenced the firing tank, and the Marines dove on the other four PT-76s, which turned around and started downhill toward a road. On the road, two of the tanks turned northward and the other two turned southward. Colonel Pommerenk released his bombs just ahead of the two southbound tanks, cratering the road and halting them. Lieutenant Colonel Hagen then made a bomb run on the tanks. "They knew I was coming," he recalled later, "They raised their cannons and fired at my aircraft." Hagen's bombs wrecked both tanks. The Marines then turned their attention to the other two PT-76s and destroyed one. The sole survivor escaped by driving off the road into the jungle, where the Marines lost sight of it.14

During March and the first part of April, Marine aircraft continued their support of Lam Son 719. By the time the last South Vietnamese had left Laos, the 1st MAW jets had flown almost 950 sorties and expended over 2,600 tons of ordnance, with no loss of aircraft. They received credit for destroying 5 tanks, 16 trucks, 9 crew-served weapons, 87 bunkers, and 6 ammunition caches, killing 6 enemy soldiers, and touching off 248 secondary explosions. This Marine effort, significant though it was, represented only a small part of the massive allied air support given Lam Son 719. The U.S. Air Force, for instance, flew more than 9,000 tactical sorties during the operation and dropped over 14,000 tons of ordnance at a cost of seven aircraft destroyed. B-52s from Guam and Thailand conducted 615 strikes, and South Vietnamese and Australian aircraft also carried out missions in Laos.15

Besides contributing aircraft to support Lam Son 719, III MAF provided a vital air control facility. Lam Son 719 took place during the northeast monsoon, which brought frequent rain and fog to northern South Vietnam. On most days during the operation, low-lying fog persisted until noon, and by midafternoon, a mixture of clouds and dust and smoke from the fighting veiled the battlefield. To conduct continuous air operations at night and during the bad weather, the allies relied on a mobile air support radar team (ASRT), specially developed by the Marine Corps for rapid deployment across the beach in an amphibious assault. Using the AN-TPQ-10 radar and a computer system, an ASRT could guide aircraft to an established target in fog, rain, or darkness.\*

<sup>\*</sup>The Seventh Air Force had a Direct Air Support Center (DASC) located with XXIV Corps Forward Headquarters at Quang Tri. This DASC received support requests from U.S. liaison officers at the ARVN division headquarters, which remained in South Vietnam, and from Air Force forward air controllers (FACs) in the skies over Laos. The FACs usually had English-speaking Vietnamese soldiers riding with them—a not always effective attempt to overcome the language barrier between the units on the ground and the American aircraft overhead. From the Quang Tri DASC, support requests went to Seventh Air Force Operations, which, under the single-management system then in effect, ordered missions by aircraft of all Services. A Seventh Air Force Airborne Battlefield Command and Control Center (ABCCC), a specially equipped transport plane, orbited over the battlefield to direct strike aircraft when they reached the battle area. MACV ComdHist 71, II, Anx E, pp. 21-22

<sup>\*\*</sup>A sortie is one mission flown by one aircraft; 1st MAW jets regularly had flown in raids against the Ho Chi Minh Trail before Lam Son 719. See Chapter 15.

<sup>\*</sup>For more detail on the ASRT and its operations, see Chapter 16.



Courtesy of Col John G. Miller, Jr., USMC (Ret)

An aerial view of the Vietnamese Marine Corps base at Khe Sanh, an I Corps forward operating base looking towards Laos. Co Roc looms in the far background. As in 1968 enemy observers positioned on Co Roc directed artillery fire to disrupt troop concentrations.

As Lam Son 719 began, Marine Air Support Squadron (MASS) 3, a subordinate unit of the 1st MAW, had three air support radar teams deployed in MR 1, at Da Nang, FSB Birmingham near Hue, and at Quang Tri. On 18 February, the Quang Tri ASRT was directed to prepare for displacement to Khe Sanh, where it would help support Lam Son 719. The following day, a 1st MAW truck convoy left Da Nang for Quang Tri to help the team pack its equipment; other Marines at Khe Sanh selected a site for the ASRT installation about one-half mile west of the newly reopened airfield. From this position, the ASRT, which could control aircraft anywhere within a 50-mile radius, could direct strikes throughout the Laotian battlefield. Preparation of the site for the team's arrival began on the 20th.

The Quang Tri ASRT was commanded by Captain Golden C. Kirkland, Jr., and consisted of Marine radar technicians from MASS-3 reinforced with communications personnel and a security platoon from Headquarters and Headquarters Support Squadron (H&HS) 18. At 1800 on 22 February, the team received orders to cease operations and begin movement to Khe Sanh. The unit had its electronic equipment dismantled and packed by 0630 the next morning, when the first Marine CH-53s arrived to begin airlifting the unit 25 miles westward to its new position. At 1430 the last

load of equipment touched down at Khe Sanh, and within an hour Captain Kirkland's Marines had the system assembled, checked, and functioning. By 1801, the ASRT was directing Air Force, Navy, and Marine air strikes. The entire movement, from the order to pack up at Quang Tri to resumption of operations at Khe Sanh, had taken less than a day.

From 23 February until 31 March, when it returned to Quang Tri, the Khe Sanh ASRT remained in constant operation except for a 10-minute shutdown caused by a power failure. The team directed 960 sorties by U.S., Vietnamese, and Australian planes. After 31 March, the team continued to control strikes in Lam Son 719\* from Quang Tri until the operation ended.<sup>17</sup>

Marine OV-10As from VMO-2 were also active during Lam Son 719. At the beginning of the operation, XXIV Corps used these versatile observation craft to plant 25 strings of electronic sensors\* on the approaches to Khe Sanh. The sensors were used, as others had been during the 1968 siege, to provide early warning of ground activity and spot targets for the artillery. On 1 March, the OV-10As planted 10 additional sensor strings to help protect Route 9 within South Vietnam. Air Force planes conducted all sensor drops inside Laos.<sup>18</sup>

<sup>\*</sup>For additional detail on sensors and their use, see Chapter 15.

#### Marine Helicopters Over Laos

Of all the Marine aviators who participated in Lam Son 719, the helicopter pilots and crews of HMH-463 and HML-367 came under the heaviest enemy fire and played the most indispensable role. Operation Lam Son 719 was founded on the U.S.-developed tactics of leap-frogging troops and artillery into a series of fire support bases. Since the South Vietnamese Air Force could not begin to meet the helicopter requirements of an operation of this size, the U.S. Army was ordered to furnish almost all of the helicopter transport. The Army, however, possessed few helicopters powerful enough to lift very heavy loads, such as 14,000-pound 155mm howitzers and 17,000-pound D-4 bulldozers, into firebases many of which were up to 2,000 feet above sea level. Furthermore, when the offensive began, completion of the airfield at Khe Sanh was delayed, disrupting plans to stock the forward supply base by flying in cargoes on Air Force C-130s. This meant that vital supplies, in particular helicopter fuel, had to be brought in by truck and helicopter, creating an additional requirement for heavy rotary-wing freight carriers.19

While the Army lacked cargo helicopters suited to the requirements of Lam Son 719, the Marines had them: the 18 Sikorsky CH-53D Sea Stallions of Lieutenant Colonel Robert R. Leisy's HMH-463. The CH-53s, the largest helicopters in the Marine Corps, had been developed for ship-to-shore movement of the heaviest equipment. Able to lift external loads of as much as 18,000 pounds, they routinely moved 155mm howitzers and bulldozers, as well as massive quantities of supplies and downed smaller helicopters.

Late in January, as planning for Lam Son 719 was nearing completion, XXIV Corps directed III MAF to support the operation with aircraft from HMH-463. With Marine helicopters about to be committed, Lieutenant General Robertson and the wing commander, Major General Armstrong, suggested to Lieutenant General Sutherland that the Marines also furnish their own escorting gunships. Robertson later declared that "this is the way Marines functioned. If we're going to send a 53 out there where there's a lot of fire, we'll cover it with our own aircraft . . . . "20 Sutherland readily agreed to this proposal. HML-367, commanded by Lieutenant Colonel Clifford E. Reese and equipped with AH-1G Cobra gunships, received the escort assignment.

Lieutenant Colonel Leisy at once put his CH-53 pilots and crews to work preparing for the Laotian oper-

ation. He especially emphasized practice in lifting heavy loads into and out of high-altitude landing zones. During the last week of January, eight crews from HMH-463 spent part of each day picking up a 15,000-pound block of cement, flying it to the 2,000-foot peak of Monkey Mountain, the rugged peninsula northeast of Da Nang, landing it there, and then bringing it back to Marble Mountain. After they had mastered the basic technique, the Marine aviators practiced with 155mm howitzers, the artillery pieces they were to lift in Laos.<sup>21</sup>

Actual squadron operations began on 30 January, when four Sea Stallions hauled heavy equipment for the 101st Airborne Division to staging areas near Quang Tri. These flights continued on 31 January and on 3 and 5 February. On 6 February, as preparations for the assault into Laos neared completion, eight CH-53Ds escorted by six AH-1Gs made 34 lifts of Army guns, supplies, and fuel to Khe Sanh from Camp Carroll. The following day, the Marines established their own forward operating base at Landing Zone Kilo, two miles south of the Khe Sanh airfield. At Kilo, helicopters flown up daily from Marble Mountain would land to receive orders and take on cargo for missions into Laos. On 8 February, eight Sea Stallions made HMH-463's first out-of-country flight of the operation. They carried ARVN guns, ammunition, and engineering equipment from LZ Kilo to Fire Support Base Hotel, just across the Laotian border. From then on, the big helicopters ventured daily further and further into Laos with their loads of howitzers, artillery rounds, bulldozers, and supplies for new firebases.22

As the offensive continued through February and into March, Marine helicopter operations fell into a pattern. Each day at 0800, usually four CH-53Ds and four AH-1Gs took off from Marble Mountain and flew to LZ Kilo. There, the pilots were briefed on their assignments, picked up cargoes, and took off for Laos. After each mission, the CH-53Ds and gunships returned to LZ Kilo to refuel, rearm, and receive new orders.

The Marine aircraft, like the Army helicopters involved in Lam Son 719, were under the operational control of the 101st Airborne Division's organic aviation unit, the 101st Combat Aviation Group. The group headquarters received support requirements from XXIV Corps and issued mission orders to Army and Marine helicopters. At Landing Zone Kilo, Major Rocco F. Valluzzi, S-1 of HMH-463, was the Marine Air Coordination Officer. Valluzzi, a veteran of more

than 200 missions in CH-53s, briefed pilots, maintained communications with his helicopters, and directed Army crews in preparing loads for the CH-53s.<sup>23</sup>

Mission assignments became a matter of dispute between III MAF and XXIV Corps as the operation developed. Initially, the CH-53s had been brought in to carry unusually heavy pieces of artillery and equipment, but as the battle expanded, the Marines often found themselves flying in general support of the South Vietnamese, hauling all sorts of supplies and occasionally troops in the face of steadily increasing enemy antiaircraft fire. The Marines believed that many of these missions were not urgent enough to require endangering the valuable heavy helicopters, or could be carried out by smaller craft. At the request of Major General Armstrong, Lieutenant General Robertson, during one of his periods as acting commander of XXIV Corps, convinced the Army authorities to make more discriminating use of the CH-53s. According to Robertson:

As the offensive moved westward into Laos, so did the Marine helicopters. By late March, the CH-53Ds and accompanying Cobras were flying as far as FSB Sophia II near Tchepone, over 30 miles from the South Vietnamese border. Working mostly in support of the ARVN 1st Division, the Sea Stallions armed, supplied, and reinforced a succession of South Vietnamese firebases. Often, as planned, they lifted bulldozers and 155mm howitzers.

Marine helicopter crews flying into Laos had to contend with inevitable poor visibility and North Vietnamese fire. As the fighting spread across the mountains between Tchepone and the South Vietnamese border, clouds of dust and smoke from the battle reduced visibility around the fire bases. Rotor wash from the helicopters further stirred up and mixed the man-made fog of battle, which thickened the monsoon overcast.<sup>25</sup>

North Vietnamese antiaircraft weapons were many and well-served. The advancing allied ground troops



Courtesy of Col John G. Miller, USMC (Ret) A U.S. Army Boeing Vertol CH-47 resupply helicopter hovers at Khe Sanh, while a U.S. Marine advisor is about to hook up the container to the aircraft.

had overrun or forced removal of most of the heavier antiaircraft guns, but the NVA had an abundance of light antiaircraft guns and continually mortared firebases and landing zones. Lieutenant Colonel Thomas S. Reap, who succeeded Leisy in command of HMH-463 on 5 March, reported:

Helicopters were subject to constant . . . NVA small arms and .50-caliber machine gun fire. Tracers from 23mm antiaircraft guns were visible, and air bursts from 37mm and 57mm guns were a daily occurence. We even had reports from ground observers that the choppers were taking direct fire from tanks.<sup>26</sup>

Marines involved in Lam Son 719 found that the Army method of controlling helicopters, which was less centralized than that of the Marine Corps, increased the danger from enemy ground fire. The Army had no system for rapidly informing its helicopter units of the location of NVA antiaircraft positions as they

were spotted by aerial reconnaissance or by helicopters flying missions. This made it impossible to plan routes of approach to landing zones to avoid the heaviest enemy fire. According to Major General Armstrong:

In spite of the continuous fire encountered, only one HMH-463 aircraft was lost during the missions in Laos. This loss occurred late in the afternoon of 23 February as a flight of four CH-53Ds was lifting 155mm howitzers out of FSB Hotel II. The position, eight miles inside Laos and south of Route 9, was under heavy North Vietnamese attack, and the South Vietnamese had decided to evacuate it and establish another firebase nearby. Enemy machine guns and mortars were firing at the landing zone as the Marine helicopters came in. In the fading light, clouds and smoke restricted the pilots' view of the area.

While escorting Cobras strafed and rocketed enemy gun positions, the helicopters made several trips in and out of Hotel II, removing a number of howitzers. At dusk, as a CH-53D piloted by the flight leader, Major Michael J. Wasko, Jr., the squadron S-3, hovered to hook on another artillery piece, several mortar shells exploded nearby, damaging the helicopter and injuring Wasko's copilot. The crippled CH-53 settled to the ground inside the firebase. Another CH-53, flown by Captain Robert F. Wemheuer, hovered for several minutes, dangerously exposed in the fire-swept LZ, while three crew members from Wasko's helicopter attached themselves to its extraction ladder. Then Wemheuer's craft safely flew off with the rescued Marines. Major Wasko remained behind to assist the injured copilot, until both men were picked up by an Army UH-1.28

The damaged CH-53D remained in the firebase. Its size and weight prevented it from being lifted out by another helicopter. On the 25th, Captain Henry J. Cipolla, a maintenance officer with HMH-463, and Gunnery Sergeant Ronald S. Severson, a flight line chief, volunteered to go in and inspect the downed craft. Although the position was under enemy fire, the two Marines worked their way from a nearby land-

ing zone to the CH-53D. They found that it could not be repaired where it was; it had 500-700 shrapnel holes in rotors, engines, and fuselage and major airframe damage. Cipolla and Severson stripped the hulk of weapons and coding equipment and made their way back to their landing zone, where they helped evacuate four wounded ARVN soldiers before boarding a helicopter themselves. Eventually, U.S. air strikes had to destroy the wreck to keep it out of enemy hands.<sup>29</sup>

Wasko's was the only Marine aircraft shot down during Lam Son 719,\* although the squadron later counted a total of over 80 bullet and shrapnel holes in 18 CH-53s. Marines gave much credit for this low rate of loss to the gunships of HML-367. The AH-1G Cobras escorted every CH-53 flight into Laos. They led the transports into the landing zones, spotted friendly and enemy positions, and then attacked the NVA antiaircraft guns and mortars with machine guns, automatic grenade launchers, and 2.75-inch rockets. When the enemy were too close to ARVN firebases to permit actual attacks, the Cobra pilots often made dummy strafing runs to distract enemy gunners from the CH-53Ds, or maneuvered their gunships between the NVA positions and the transports. During the month of February alone, the Cobras expended 847 rockets, 5,605 40mm grenades, and 20,750 rounds of machine gun ammunition in support of Lam Son 719. In spite of the dangers of their mission, no Cobras were shot down during the offensive, although one suffered electrical system failure over Laos and just managed to limp back to a safe landing zone.30

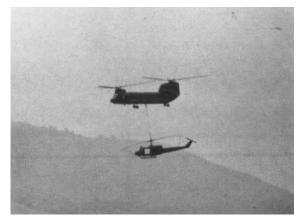
Beginning on 2 March, the AH-1Gs of HML-367 were joined by four new Bell AH-1J "Sea Cobra" gunships. These twin-engined helicopters, armed with a three-barrelled 20mm cannon, as well as machine guns and rockets, had been sent to Vietnam for combat evaluation. Temporarily attached to HML-367, the Sea Cobras regularly escorted the CH-53Ds. Marine aviators welcomed their additional firepower and appreciated the greater safety provided by their two jet engines. As Major General Armstrong put it, "It made people feel a hell of a lot better to be flying a twinengine Cobra into Laos than a single-engine Cobra.......31

<sup>\*</sup>Earlier, on 18 February, another CH-53 exploded in the air and crashed northeast of Hue/Phu Bai while returning to Marble Mountain from support of Lam Son 719. The entire crew of five and two passengers were killed. CG III MAF msg to CG XXIV Corps, dtd 18 Feb 71; III MAF Spot Rpt, dtd 18Feb71, both in III MAF Jnl & Msg File, 19-28Feb71.

Besides the protection offered by the Cobras and Sea Cobras, the performance of the CH-53Ds themselves kept losses down. Major Myrddyn E. Edwards, executive officer of HMH-463, declared that "Our biggest advantage was the helicopter's power-we would get in and out fast."32 The CH-53D demonstrated its capabilities on 11 March during a movement of 155mm howitzers from Fire Support Base Hotel to another ARVN FSB four miles away. An aircraft flown by First Lieutenant Larry J. Larson came in to drop off supplies and pick up one of the howitzers from the landing zone. Hotel was 1,500 feet above sea level and on this occasion wind was gusting to 40-50 miles per hour. Under enemy fire as usual, Larson hooked up the howitzer and lifted off. As he did so, a .50 caliber machine gun bullet hit one of his engines. Larson had to shut down the damaged engine, but he was still able to carry the howitzer to a landing zone 1,000 meters from Hotel, place the artillery piece safely on the ground, and fly back to Marble Mountain.33

During the last half of March, Marine helicopter activity in Lam Son 719 declined. The decline occurred partly because the offensive was nearly ended and because after 11 March General Robertson insisted that CH-53s be confined more strictly to heavy lifts. During most of February and the first half of March, four CH-53s normally made a total of 20-40 lifts per day from LZ Kilo. Between 11 and 18 March, the daily number of aircraft was reduced to three and then to two, making two to seven lifts. Activity increased again as HMH-463 assisted the ARVN withdrawal. On 23 March, three aircraft made 11 lifts and on 27 March,

A U.S. Army CH-47 helicopter is shown bringing back from Laos a disabled Huey helicopter, hit by North Vietnamese gunfire in Operation Lam Son 719. Courtesy of Col John G. Miller, USMC (Ret)



the last day of operations in Laos for HMH-463, four CH-53Ds made 10 lifts.<sup>34</sup>

The CH-53Ds of HMH-463 flew 2,992 sorties in support of Lam Son 719. They carried over 6,500 tons of cargo and 2,500 passengers. Demonstrating their great lift capabilities, the big helicopters placed 15 eight-ton loads, 22 seven-and-one-half-ton loads, 62 seven-ton loads, and 209 six-and-one-half-ton loads in landing zones above 2,000 feet in altitude. Escorting gunships completed 1,899 sorties. Compared to the Army's total of 45,828 helicopter sorties in Laos and 118,614 in South Vietnam in support of the offensive, with 601 helicopters damaged and 102 destroyed, the Marine contribution seemed modest; the Marine helicopters, nevertheless, had furnished a specialized capability which the other Services could not provide.<sup>35</sup>

#### Marine Trucks on Route 9

Within South Vietnam, Route 9 was the principal supply line for the over 40,000 troops involved in Lam Son 719. The U.S. Army Support Command (Da Nang) established a base support area for the offensive near Quang Tri and two forward support areas (FSAs): FSA-1 at FSB Vandegrift and FSA-2 at Khe Sanh. These forward bases were to be stocked by air and by supplies trucked via Route 9. The delay in opening the Khe Sanh airstrip, besides creating a need for more helicopters in the first days of the offensive, also led to a search for more trucks. Once again, XXIV Corps turned to III MAF for support.

On 6 February, XXIV Corps directed III MAF to furnish trucks and heavy-duty forklifts to support Lam Son 719 for about one week. Not wanting to send a piecemeal transportation element, Lieutenant General Robertson decided to send a complete transportation unit, a reinforced Marine truck company tailored to perform the mission required by XXIV Corps.<sup>36</sup> Robertson explained:

... I said [to Lieutenant General Sutherland], "You tell me what your mission is and what you want me to help you with. I've got the drivers, I've got the organization and we'll do it for you." He said, "Great." So, we discussed the size of our elements and we ended up giving him a truck company reinforced. I provided all my people, the organization, commanding officer and the whole works and we merely chopped them over to their operation[al] control. . . . This is the way we functioned when we had elements go in. I don't believe in piecemealing and I wanted to make sure that we had Marines in command . . . . 37

Late on the 6th, the 1st Marine Division, at the instruction of III MAF, selected Company C of the 11th

Motor Transport Battalion to support Lam Son 719. The truck company, commanded by First Lieutenant Michael A. Humm, was reinforced with Marines from other truck companies and from the 1st Engineer Battalion, the 1st Shore Party Battalion, Force Logistic Command, the 1st Marine Division Headquarters Battalion, and the 1st MAW. The company had an assortment of specialized vehicles attached to it, including low-bed tractor-trailors and 10 heavy-duty forklifts, each capable of carrying loads of up to 6,000 pounds over rough terrain.<sup>38</sup>

Company C left Da Nang for Quang Tri at 0500 on 7 February with 46 vehicles and four Marine officers and 79 enlisted men.<sup>39</sup> With aerial observers overhead, the convoy rolled up Route 1 in two segments, or "serials." At Phu Bai, halfway to Quang Tri, the convoy's Army military police escort diverted the Marine trucks to Tan My Ramp, a deep-water port east of Hue to which ships were bringing supplies for Lam Son 719. The Marines took on a load of northbound freight and then headed for Quang Tri, where they were to join an Army convoy to finish the trip to FSB Vandegrift, their base of operations.

Company C reached Quang Tri late on the afternoon of the 7th. There, Lieutenant Humm reported to the commander of the 39th U.S. Army Transportation Battalion, which had operational control of the Marine unit, and was briefed on his mission. The Army planned for the Marine truck company to use Vandegrift (FSA-1) as a freight transfer point. The heavy low-bed trailor trucks were to make daily runs from Vandegrift east over the paved portion of Route 9 to the junction with Route 1 at Dong Ha and then down to Tan My to pick up cargo from the ships and return. At Vandegrift, this freight would be loaded on the company's M54 medium five-ton trucks. These smaller, more maneuverable vehicles would make the haul out to Khe Sanh over the unpaved, hastily improved, section of Route 9. The forklifts initially were to be sent to Khe Sanh and Vandegrift.

As part of a large Army truck convoy, Company C left Quang Tri at 2330 and headed westward out Route 9. At 0100 on the 8th, just south of the Rockpile, the convoy was ambushed. The NVA opened fire, destroying two Army 5,000-gallon fuel trucks and a gun truck, killing one soldier, and wounding 10 others. The Marines, who suffered no losses in either men or vehicles, helped fight off the enemy, and the convoy continued on to Vandegrift. The trucks rolled into FSA-1 at 0730.

The same day they arrived at Vandegrift, the Marines of Company C sent out their first truck convoys, 17 vehicles to Khe Sanh and 12 low-bed tractor-trailers to Tan My. The company quickly established its command post, troop billets, maintenance area, and first aid station, all protected by prepared fighting positions and barbed wire entanglements. Soon after settling in at Vandegrift, the company was reinforced by two Marine 5,000-gallon fuel tankers, sent from Da Nang to replace the Army tankers destroyed in the ambush on Route 9. Recalling the speed with which the reinforced truck company was organized and dispatched from Da Nang to Vandegrift, General Robertson said, "you talk about Marines really turning to! But this is the way we functioned." 40

From 9 to 14 February, Company C daily sent 14 to 20 trucks to Khe Sanh, and, on every day but the 11th, it dispatched 10-12 trucks to Tan My. Each contingent of Marine trucks bound for Khe Sanh travelled with an Army truck convoy, but in keeping with General Robertson's guidance, as a separate unit under a Marine commanding officer responsible to the Army convoy commander. On their round trips to Tan My, the tractor-trailers ran as independent Marine convoys.

The Marine truckers encountered frequent enemy sniping along Route 9 between Vandegrift and Khe Sanh, as well as rocket and mortar attacks at FSB Vandegrift. On 10 February, the North Vietnamese fired 15-20 122mm rockets at the firebase, which inflicted minor damage on several Marine trailers. Six more rockets exploded near a Khe Sanh-bound convoy the next day, killing four Army soldiers and wounding one soldier and one Marine. The Marine, only slightly injured, was Company C's only casualty of the operation. Enemy rockets landed near the company area again on the 13th but did no damage. On the roads, in spite of frequent sniper and mortar fire, Marine trucks suffered no combat losses; but two five-ton M54s were damaged in accidents. Both trucks were recovered and brought back to Da Nang.

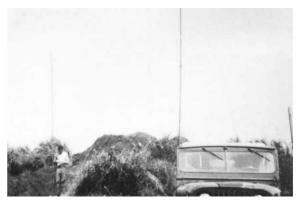
On 14 February, Company C received orders to prepare for return to III MAF. An 11-vehicle relief convoy from the 11th Motor Transport Battalion left Da Nang for Vandegrift the same day to bring up additional heavy forklifts, as well as wreckers to recover the disabled trucks. This convoy reached Company C late on the 14th. At 0930 on the 15th, the company departed FSB Vandegrift for Da Nang at 1730. During their short time in Lam Son 719, Company C's trucks drove

30,717 miles under combat conditions. They carried 1,050 tons of supplies and conducted 15 convoys in eight days.<sup>42</sup>

When the truck company left, a 13-man forklift detachment from Company C, 1st Shore Party Battalion, with Captain Merrill T. Morton as officer in charge, remained at Khe Sanh and Vandegrift. Morton's Marines, with 10 forklifts, were reinforced with two more forklifts and three Marines, brought up by the relieving convoy, on the 15th. With their powerful machines, especially designed to move freight over rough ground, the Marines helped the Army's 26th Support Group to unload trucks and aircraft at the two forward supply bases. Initially divided between Khe Sanh and Vandegrift, the entire detachment was concentrated at Khe Sanh on 21 February and worked there through the end of March. In 52 days of activity, the Marine forklift operators moved over 56,000 tons of supplies.43

Marine communicators also operated at Khe Sanh and Vandegrift during Lam Son 719. The Radio/Supporting Arms Platoon, Communications Company, Headquarters Battalion, 1st Marine Division had the mission of keeping both the truck company and wing elements in contact with their parent headquarters in Da Nang. Because Communications Company was standing down for redeployment, it was augmented by Marines of Communications Support Company. According to the platoon commander of Radio/Supporting Arms Platoon, First Lieutenant Ronald C. Hood III, III MAF "wanted a direct Marineonly link back to the rear . . . , to make sure that Marine commanders could talk with Marine commanders over Marine equipment," and to assure quick transmission of emergency requests for resupply or equipment replacement.

Throughout the operation, the platoon maintained a six-man team with two radio jeeps in northern Quang Tri. A Marine CH-53 flew the radio team and its equipment to Quang Tri City on 7 February to meet the Company C truck convoy. The Marines activated their long-distance radio on the 8th. They operated from Vandegrift initially, keeping the truck company in contact with the 11th Motor Transport Battalion CP and also supplementing the communications of the road convoys. After the trucks returned to Da Nang, the radio teams moved to Khe Sanh to better support 1st MAW elements at LZ Kilo. Lieutenant Hood rotated his men in the north periodically, to give all of them experience in this type of operation. The Ma-



Courtesy of Capt Chalmers R. Hood, Jr., USMC A member of the Radio/Supporting Arms Platoon, Communications Company reinstalls a radio antenna that was knocked down by enemy artillery fire.

rine communicators came under sporadic mortar fire at Vandegrift; in fact, the enemy mortar units appeared to be adjusting fire on the Marines' 50-foot high antennas. According to Lieutenant Hood, who spent much time with his troops along Route 9, "Every time there was some kind of bombardment, you could see the rounds coming in and out on the antennas"; but the Marine communicators suffered no casualties or major equipment damage during their nearly two months in Lam Son 719. On 21 March, they ceased operations at Khe Sanh and returned to Da Nang, where their parent battalion was standing down for redeployment.<sup>44</sup>

#### Diversion Off Vinh

When allied commanders began planning for Lam Son 719 late in 1970, they considered the initiation of diversionary operations to distract North Vietnamese attention and, it was hoped, North Vietnamese forces from the actual objective area. Admiral John S. McCain, Jr., Commander in Chief, Pacific, took the initiative in this aspect of the planning. On 31 December, he sent General Abrams a detailed proposal for an amphibious feint against southern North Vietnam. McCain suggested that the U.S. set up a joint amphibious task force headquarters at Subic Bay in the Philippines and that U.S. and South Vietnamese forces conduct all the preliminary rehearsals, ship and troop movements, reconnaissance, and even air strikes and shore raids that would precede an actual invasion. McCain wanted to use both American and Vietnamese air and naval units for this purpose, as well as elements of the Vietnamese Marine Corps.45

On 7 January, General Abrams approved the diversion plan, in principle, but declared that he could spare neither U.S. nor RVNAF forces to carry it out. McCain, therefore, decided to use the amphibious ready group of the Seventh Fleet to conduct a more modest diversion, a simulated helicopter-borne raid on the North Vietnamese coast by a U.S. Marine battalion.\*48

The task of conducting the diversion was assigned to the Seventh Fleet's Amphibious Ready Group (ARG) Alpha, Task Group (TG) 76.4, and to the 31st Marine Amphibious Unit (MAU). Until 1969, the MAU, which consisted of an infantry battalion landing team (BIT) and a composite helicopter squadron, had been known as the Special Landing Force (SLF) and regularly employed in operations in South Vietnam. With the redeployment to Okinawa of the 3d Marine Division, from which the BIT was drawn, the MAU, as it was now designated, could not reenter Vietnam without special permission from the Joint Chiefs of Staff, but it could cruise anywhere on the high seas, including the seas off the coast of Vietnam.\*\*

At the end of January 1971, the 31st MAU, commanded by Colonel Lawrence A. Marousek, consisted of Lieutenant Colonel Francis X. Frey's Battalion Landing Team 3/9\*\*\* and HMM-165, under Lieutenant Colonel Herbert M. Herther. The composite helicopter squadron contained UH-1Es and CH-53s as well as its usual CH-46s.47

On 1 February, the 31st MAU, then at Subic Bay in the Philippines, was ordered to embark on the amphibious ready group's ships\*\*\*\* and sail for Da

Nang. The Marines finished loading at 0130 on the 2d and the ships steamed out of Subic Bay at 0800. While at sea, the task group received its instructions for the diversion off North Vietnam. The 31st MAU and the amphibious ready group staffs began joint detailed planning for the operation. The ARG arrived at the Southern Holding Area off Da Nang on the 4th.48

From 5-10 February, the task group remained at sea near Da Nang, preparing for its mission. By the 7th, the staffs of the 31st MAU and BIT 3/9 had completed plans for the diversion which was to be a helicopterborne raid on the airfield at Vinh, about 150 miles north of the Demilitarized Zone. The Marines prepared a full operation plan for an attack by two companies of BLT 3/9. The companies were to go ashore by helicopter, seize and demolish the airfield, and withdraw to the ships within 24 hours. The operation order prepared jointly by the Marine and Navy staffs, included all the usual annexes for air and naval gunfire support, communications, logistics, and intelligence and provided elaborate procedures for withdrawing the raiding companies by boat, if helicopters could not extract them.49

After completing the plans, the MAU conducted a communications exercise in rehearsing the planned feint. It also landed 4,000 pounds of explosives and detonating equipment furnished by III MAF and arranged with the 1st MAW to furnish Cobra gunships to reinforce HMM-165 if necessary. The gunships were to remain on call at Da Nang, ready to fly on board the USS *Iwo Jima* (LPH 2) on short notice.<sup>50</sup>

On 11 February, Task Group 76.4 headed north from Da Nang into the Gulf of Tonkin. Few of the Marines on board knew the actual purpose of their mission. In HMM-165, for example, only the commanding officer and his executive and operations officers had been fully briefed on the plan, and even they were not told that it was a feint until long after sailing. Until then, Lieutenant Colonel Jon R. Robson, the executive officer, recalled, "we . . . firmly believed that we might have to go in and try and take Vinh with a battalion of Marines." Marines in both the squadron and the battalion realized that they were preparing for an amphibious raid of some sort, and as the ships steamed steadily northward hour after hour, they realized that the objective would be somewhere in North Vietnam. Both air and ground Marines, therefore, readied themselves for their parts of the mission "with all the fears and anxieties . . . of actually going in and performing the mission as briefed, as little as it was

<sup>\*</sup>On 3 February, Lieutenant General Sutherland, the XXIV Corps Commander, also proposed to MACV an elaborate diversion plan, again involving amphibious forces; this plan was set aside in favor of the CincPac plan, which then was already being implemented. Sutherland msg to Gen Abrams, dtd 3Feb71, and Abrams msg to Sutherland, dtd 4Feb71, copies in MCHC.

<sup>\*\*</sup>For extended discussion of the organization and operations of the MAU in 1970-1971, see Chapter 21.

<sup>\*\*\*</sup>BLT 3/9 was made up of the entire 3d Battalion, 9th Marines, with the following units attached: Battery F, 2d Battalion, 12th Marines; 1st Platoon, Company D, 3d Reconnaissance Battalion; 2d Platoon, Company B, 1st AmTrac Battalion; 1st Platoon, Company A, 3d Shore Party Battalion; 2d Platoon, Company A, 3d Motor Transport Battalion; 2d Platoon, Company B, 3d Tank Battalion; 3d Platoon, Company A, 3d Engineer Battalion; 2d Platoon, Company B, 3d Medical Battalion; and detachments from the 3d Service Battalion and 3d Dental Company.

<sup>\*\*\*\*</sup>The vessels of the ARG were: USS Tulare (LKA 112), USS Iwo Jima (LPH-2), USS Cleveland (LPD-7), and USS Westchester County (LST 1167).

briefed." The BLT issued ammunition and organized the landing companies into helicopter teams.<sup>51</sup>

The amphibious task group arrived at a point 50 miles east of Vinh on the 12th. From then through 6 March, in cooperation with two carriers and their escort vessels, the 31st MAU conducted daily rehearsals for the raid while the ships conducted maneuvers and communications exercises.<sup>52</sup> Each day, HMM-165's helicopters went through the motions of loading troops, without actually emplaning them. Then they flew in toward the coast to a prearranged point just outside the 12-mile limit of North Vietnam's territorial waters where they often descended at the end of their shoreward run to make the enemy think that they were going in under the NVA radar screen. At a predeterminded check point they reversed course and flew back to the carrier. Meanwhile, the BLT conducted communications exercises and shipboard drills, including familiarization firing.

According to Major William J. Sambito, squadron operations officer during the diversion:

The actual launching itself was done by putting some of the [helicopters] on the Cleveland [LPD-7] and the remainder of them came off the LPH. And we had two launchings, or the deck was spotted twice, and we'd launch and rendezvous the first wave, and then . . . launch the second wave and join up with as many planes as we could get off in two launches and head in, and we'd be under HDC control, which would give us a time hack, and at the end of that time unless we'd received further word we'd make a . . . 180 [degree turn] and just come directly back to the ships. And we did that once in the morning about eight o'clock . . . and then . . . some days we did it in the afternoon also . . . . We'd try to break up the routine a little bit to create a little bit more confusion. 53

Lieutenant Colonel Robson declared that if the North Vietnamese "had a Landing Force Manual out there, they could have seen exactly what we were doing." The ships engaged in the communications and electronics activity that would have accompanied an actual assault, and jets from the carriers continually flew missions as though providing cover for a raid. Throughout, "we tried everything in the world to make them think that we were really going to do something every day we launched."

The diversion attracted much enemy attention and caused some troop redeployments. The ships reported increasingly intense surveillance by enemy radar, and North Vietnamese reconnaissance aircraft frequently probed the task group's own radar screens. Toward the end of the operations, the 31st MAU

received reports the NVA ground formations were moving northward toward Vinh from the DMZ.\*

A trawler from the USSR continually shadowed the American ships. "During a routine man overboard drill," recalled Navy Captain Tracy H. Wilder, commander of the amphibious task group, "a dummy was thrown overboard from the *Iwo Jima*. As she circled to retrieve it, the trawler darted in ahead to investigate. Upon sighting the dummy, she cleared the area allowing *Iwo Jima* to complete the exercise." The trawler later approached the task group to send a "Happy Washington's Birthday" blinker message.<sup>54</sup>

Raid rehearsals continued until 7 March, with no casualties or unusual incidents. Indeed, Major Sambito remembered the operation as "very boring, very unexciting, except for the tension that a few of us had." BLT 3/9's Marines had been afloat for 54 days by the end of February, with only three days ashore at Subic. The battalion made special efforts to combat boredom through training activities, a shipboard newsletter, informal talk sessions, competitions, and talent contests. On the 7th, Task Group 76.4 sailed from the Gulf of Tonkin for Okinawa, bringing the diversion to an end.

## Results of Lam Son 719

The effects of Lam Son 719 on the course of the war are difficult to assess, as was true of so many operations in Vietnam. Both sides suffered severely. South Vietnamese casualties amounted to 1.549 men killed. 5,483 wounded, and 651 missing. U.S. forces involved in the operation reported 215 killed, 1,149 wounded, and 38 missing. ARVN equipment losses included 298 vehicles, 54 tanks, 1,516 radios, and 31 bulldozers. Of the ARVN units most heavily engaged, U.S. advisors reported after the battle that the Airborne Division had lost 40 percent of its key officers and NCOs and that the 1st Armored Brigade was only "marginally combat effective due to personnel and equipment shortages." The American advisors rated the 1st Division and the Marine Division more favorably, declaring them still combat effective after withdrawal from Laos, although these formations, also, had taken severe casualties.

<sup>\*</sup>A propagandistic North Vietnamese history of Iam Son 719, published in 1971, took this diversion with apparent seriousness, declaring that "Mention should also be made of the direct participation of the 7th Fleet, which . . . kept North Vietnam under constant threat of invasion by several thousand Marines on board American ships cruising off the Vietnamese shore." From Khe Sanh to Chepone (Hanoi: Foreign Languages Publishing House, 1971), p. 22.

According to allied estimates, the North Vietnamese, who had massed their forces to attack in the face of superior supporting arms, had lost at least 13,000 soldiers killed. Allied troops claimed to have captured or destroyed 5,170 individual and 1,963 crewserved weapons, 2,001 trucks, 106 tanks, and more than 20,000 tons of ammunition, not counting ammunition the North Vietnamese had expended in the fighting. In addition, the enemy had lost about 90,000 gallons of fuel and lubricants and 1,250 tons of food.<sup>55</sup>

Allied commanders believed that Lam Son 719 had thrown the enemy off balance strategically. Temporarily, at least, the offensive disrupted the southward movement of North Vietnamese troops and supplies; it forced the Communists to commit men and material to the Laos compaign that otherwise would have gone to South Vietnam. Rebuilding and restocking of the base areas between Tchepone and the Vietnamese border would occupy the enemy for most of the 1971 dry season, thereby assuring postponement of any immediate major offensive, and causing a reduced level of enemy activity in MR 1 for most of the year. Prophetically, as it turned out, the MACV command history for 1971 stated that "Lam Son 719 might even have forestalled any major offensive until the spring of 1972."56

In Lam Son 719, for the first time, the South Vietnamese conducted a multi-division offensive without the assistance of U.S. advisors; most command and control responsibility fell upon the ARVN commanders and their staffs. While the ARVN performance had been uneven, most U.S. commanders insisted that the overall results gave encouraging evidence that the Vietnamese were learning how to fight their own war.

Lieutenant General Sutherland, the XXIV Corps commander, acknowledged some major ARVN shortcomings, including "a lack of effective long-range planning by higher level staffs, a serious disregard for communications security, a general lack of a sense of supply discipline, and a failure to delegate authority to subordinates." Nevertheless, he pointed out that "without U.S. advisors" and without the possibility of reinforcement or direct support by U.S. ground combat forces, the ARVN had "carried the war into an enemy controlled area, far removed from the familiar confines of their normal areas of operation . . . ." Sutherland concluded:

The forces that participated in Lam Son 719 proved that the Republic of Vietnam possess[es] a viable military organization that is significantly more capable, cohesive and better led than the military organization that existed . . . only three years ago. The overall results of Lam Son 719 indicate that Vietnamization is progressing well in MR 1 . . . . 57

Even in such optimistic assessments, nevertheless, U.S. commanders had to acknowledge one disturbing fact: the ARVN had depended heavily on American helicopter and fixed-wing air support at every stage of the Laotian offensive, both to launch the attack in the first place and then to rescue the South Vietnamese from the worst consequences of their own military deficiencies. The South Vietnamese Armed Forces had yet to prove that, by themselves, they could defeat the North Vietnamese Army in a major conventional battle. Vietnamization, whatever progress could be reported, remained an unequal contest between the slow pace of RVNAF improvement and the inexorably quickening pace of American withdrawal.

#### CHAPTER 12

# Last Operations of III MAF, January-March 1971

Plans for the Army Takeover of Quang Nam – Operations in Quang Nam, January-February 1971 Keystone Robin Charlie Begins – The Pacification Effort Diminishes – The Enemy Grows Bolder

Plans for the Army Takeover of Quang Nam

As 1971 began, planning for the removal of most of the remaining Marines from Vietnam was far advanced. The sixth and last segment of the 150,000-man redeployment ordered by President Nixon on 2 April 1970, codenamed Keystone Robin Charlie, was to begin early in February. This withdrawal would take out 12,400 Marines, including the 5th Marines, III MAF, 1st Marine Division, and 1st Marine Aircraft Wing Headquarters. The Marines left in Quang Nam then were to constitute the 3d Marine Amphibious Brigade, the organization and composition of which had been exhaustively debated and refined during the past year. Marines expected the life of the MAB to be short and that the brigade would probably redeploy during late April, May, and June.

MAF, division, and wing staffs now concentrated on two interlocked and important questions: how to extract the redeploying Marines from combat without abruptly reducing pressure on the enemy, and what allied force would replace III MAF in Quang Nam. XXIV Corps plans for Quang Nam had changed repeatedly during the fall of 1970, as MACV debated whether to include either or both the 101st Airborne Division and the Americal Division in the early 1971 redeployments. By mid-October, tentative Army plans called for both divisions to remain until well after the last Marines had withdrawn and for the Americal Division at some point to move one of its brigades into the Da Nang area while the other two continued operations in Quang Tin and Quang Ngai Provinces. As 1970 ended, the identity of the brigade which was to relieve the Marines and the exact timing of its deployment to Quang Nam still had not been settled.1

Generals McCutcheon and Robertson continually pressed XXIV Corps for decisions on these latter points to guide III MAF's withdrawal planning. Robertson recalled:

... I'd go to XXIV Corps and say to my good friend, [Lieutenant General] Sutherland, "What are your plans? Who are you going to put up there? Even if they are not firm, give me an idea. We've got to start talking with your people..." Until you get the two commanders involved, eyeball to eyeball, and unless their staffs start working, ... you don't

really solve these . . . things . . . . The lead time [in redeployment planning] was tremendous and we kept pushing for it . . . . <sup>2</sup>

Most of the answers the Marines needed came on 26 January at a conference of staff officers of III MAF, XXIV Corps, the 23d (Americal) Division, and the 196th Light Infantry Brigade.<sup>3</sup> At this conference, the Army representatives confirmed that the 23d Division would extend its TAOI to cover Quang Nam as the Marines left, and that one of the division's three brigades, the 196th, would take over defense of the province. Elements of this brigade, which was operating in Quang Tin, had entered Quang Nam late in 1970 for Operations Tulare Falls I and II. Until late January 1971, an infantry battalion from the brigade with supporting artillery had maneuvered in Antenna Valley west of the 5th Marines' Imperial Lake area.<sup>4</sup>

Under the XXIV Corps/23d Division plan, the 3d MAB would not have to try to protect all of Quang Nam. Instead, the 196th Brigade was to occupy the province in three stages, and the Marines' TAOI would contract as their strength declined. The takeover was scheduled to begin on 13 April, as the Marines completed their Keystone Robin Charlie redeployments and activated the 3d MAB. On that date, the 196th Brigade was to assume responsibility for all of Quang Nam south of the Vu Gia/Song Thu Bon line. Two weeks later, on 1 May, most of the ground combat units of the 3d MAB would stand down, and the 196th Brigade would begin occupying the area west and north of Da Nang. The Marines at the same time would withdraw to a still more restricted TAOI encompassing only Hoa Vang District, which immediately surrounded the city of Da Nang and the airfield. On 7 May, in the third and final phase of the transfer of responsibility, the Army brigade was to take over Hoa Vang and the Da Nang Vital Area. The 3d MAB, all elements of which would have ceased combat operations, then was to complete redeployment preparations protected by the 196th Brigade.

The Army representatives at the conference said that they expected to begin moving headquarters and support elements of the 196th Brigade into cantonments in the Da Nang area, which by about 23 April would have been wholly or partially vacated by withdrawing Marine units. Decisions on deployment of their battalions in the field would await further study of the tactical situation. The 23d Division would definitely not occupy LZ Baldy or Firebases Ross and Ryder, which therefore would either be turned over to the ARVN or destroyed. Army and Marine representatives agreed on the desirability of early direct consultation between the 1st Marine Division and the 196th Brigade to work out the many details of the transfer of facilities and defense responsibilities. The III MAF G-3, Colonel Charles H. Ludden, who was present at the conference, promptly authorized such contacts by the 1st Marine Division.

Besides preparing to move the 196th Brigade into Quang Nam, XXIV Corps, assisted by III MAF, tried to persuade the 2d ROKMC Brigade to expand its TAOI permanently to include the eastern Que Sons, where the Koreans had previously conducted occasional operations. The Korean commander, Brigadier General Lee Dong Yong, encouraged by General Robertson in "Marine to Marine" consultations, initially responded favorably to this suggestion. Lee's Korean superiors in Saigon, however, were more cautious. Under their instructions Lee eventually agreed to only a modest enlargement of his territory in the lowlands, although his troops continued to make brief forays into the eastern Que Sons.<sup>5</sup>

With the identity of the relieving force and the general schedule for its arrival settled, Major General Widdecke on 4 February proposed a detailed plan to III MAF for the first stage of redeployment plans. The objective was to keep up continuous operations throughout the division TAOI, even as troop strength diminished. Under Widdecke's proposal, the rearrangement of forces was to begin on 13 February, when the 5th Marines would extract its 3d Battalion from Operation Imperial Lake and move it to Hill 34 to prepare for departure. The 11th Marines, at the same time, would begin withdrawing its 2d Battalion, the 5th Marines' direct support artillery unit, from combat. From 13 February to 3 March, the 5th Marines was to defend Baldy and continue Imperial Lake with its 2d Battalion, supported by batteries from the 1st Battalion, 11th Marines, which would occupy firebases in the Que Sons. The 5th Marines' regimental headquarters and 2d Battalion were to stand down on or about 3 March. Another infantry unit, to be determined later, would then replace the 2d Battalion in Imperial Lake. On 8 February, after III MAF approved this plan, the division issued orders for its execution.6

A week after the division issued this first redeployment order, on 17 February, General Abrams confirmed long-standing Marine expectations that withdrawal of the 3d MAB would follow hard on the heels of its formation. On the 17th, the MACV commander directed his subordinate commands to furnish detailed troop lists for a projected withdrawal of 29,000 men, to be carried out between 1 May and 30 June. This redeployment would be necessary to bring American strength in Vietnam down from the 284,000 men who would be left after completion of Keytsone Robin Charlie to 255,000, the ceiling established by the Joint Chiefs of Staff for the period after 1 July 1971. Abrams set the Marine share of this redeployment at 12.700 men, in effect the entire 3d MAB. Marine plans for the sixth withdrawal increment, therefore, would merge with those for the seventh increment and for Army assumption of the III MAF TAOI.7

On 18 February, the Americal Division, in response to orders from XXIV Corps, issued its concept of operations for taking over Quang Nam. Under it, the 196th Brigade, consisting of four infantry battalions, reinforced by an armored cavalry squadron and an air cavalry troop, would start its redeployment northward on 13 April. A battalion each of 105mm and 155mm howitzers and two helicopter companies were to accompany the brigade. On the 13th, one of the Army infantry battalions, with supporting artillery, would begin operations at Hill 510 in the Que Sons. Ten days later, rear elements of the infantry battalions, artillery and support units, and the brigade headquarters were to occupy the cantonments of the 1st and 11th Marines, the 1st Reconnaissance Battalion, and other Marine organizations on Division Ridge. The helicopter companies and the air cavalry troop would establish themselves at Marble Mountain. Combat elements of the other three infantry battalions and the armored cavalry squadron were to enter Quang Nam on or about 1 May. The cavalry was to deploy in the Arizona Territory northwest of An Hoa. One of the infantry battalions would be located on Charlie Ridge, while the other two began operations deep in the mountains west and northwest of Da Nang.8

The 196th Brigade's tactical plans departed drastically from the Marines' defense system, with its elaborate network of permanent base camps, firebases, and observation posts and its emphasis on saturation patrolling of the Rocket Belt and the populated lowlands. Indeed, the Army planners showed little interest in the Marines' system and appeared to doubt its effectiveness. According to Lieutenant General

Robertson, the Army staff officers "couldn't quite visualize how the rockets would every now and then fall in Da Nang airfield [with] the Marines patrolling . . . the way they had used to . . . ."9

The Army brigade, therefore, founded its tactical plan on "a mobile concept with no fixed fire support bases." Essentially this meant garrisoning permanently only the cluster of rear installations behind Division Ridge and Hill 65, which would serve as an artillery position, and leaving most patrolling of the Rocket Belt to the South Vietnamese. The Army infantry and armored cavalry, instead of relieving the Marines in place, were to deploy deep in the mountains and the Arizona Territory, outside the usual III MAF AOs. There, the Army troops would conduct continuous search and destroy operations aimed at intercepting enemy forces well away from Da Nang. Marines familiar with the defense problems in Quang Nam had private doubts about the validity of this strategy, but they could not dictate another Service's methods of operation.10

## Operations in Quang Nam, January-February 1971

The pattern of war in Quang Nam showed little change during the first months of 1971. III MAF now estimated total North Vietnamese and Viet Cong strength in the province at about 13,900 men; the 1st Marine Division estimate was lower, about 9,000 effectives. Whatever the Communists' actual numbers. all allied intelligence agencies agreed that combat losses, combined with a reduced flow of replacements from North Vietnam and local recruiting difficulties, were reducing enemy forces in both quantity and quality. Casualties among military leaders and VCI had disrupted enemy command and control. The autumn floods and storms had destroyed many cached supplies and resulted in the deaths of perhaps 1,000 NVA and VC from hunger and exposure. Prisoners and Hoi Chanhs continued to report deteriorating morale, and even occasional mass refusals to fight, among both main forces and guerrillas.11

Nevertheless, as Colonel Edward A. Timmes, the 1st Marine Division Assistant G-2, pointed out, the enemy still constituted:

... a force in being ... that not only can give us contacts but more important ... can make influence upon our population. For example, if [the enemy] throws three rockets once a month, and they do not even hit the airfield, it still achieves his purpose. He has let everybody know, within sight and sound, or even where they see the Marines running around because of this ... that he can still make

these attacks. Whether successful or not, he still achieves a large portion of his goal . . . . 12

Communist tactics during early 1971 conformed to Colonel Timmes' expectations. Avoiding Marine units, the enemy concentrated on harassment of ARVN, RF, and PF positions by occasional attacks by fire and small ground assaults and maintained steady terrorist pressure on GVN officials and civilians through terrorism.

As in previous years, enemy offensive activity usually occurred during three-to-six-day "high points" coinciding with periods of moonless nights. Most of these upsurges of aggressiveness during the first weeks of 1971 were part of the enemy's K-800 Spring Offensive. Throughout January, the allies detected increasing infiltration of small NVA and VC main force detachments into the lowlands from mountain base areas. Increased infiltration was normally a harbinger of intensified Communist activity generally characterized by attacks by fire with limited ground follow-up. From the night of 31 January to 1 February, the expected offensive began with a series of nearly simultaneous mortar and ground attacks on CUPP and militia units. The enemy also fired eight 122mm rockets at Da Nang airfield. Three of the rockets failed to explode; the others set fire to a 50,000-gallon fuel dump, slightly damaged two Marine KC-130s, killed a Vietnamese woman, and wounded two U.S. Navy men. The KC-130s, which were parked near the blazing fuel tanks, would have been destroyed except for the courage of five enlisted Marines from Sub-Unit 1 of Marine Aerial Refueler Transport Squadron 152 and MABS-11. These Marines braved intense heat and danger of explosions to tow the big planes to safety.13

The K-800 Campaign continued through February with flurries of small-scale attacks. On 21 February, the enemy hit Da Nang with eight more 122mm rockets which destroyed a C-130 transport. The same night, seven more rockets landed on Hill 55, wounding one Marine. Four more rockets struck the hill three days later, but exploded harmlessly outside the perimeter. After a month of activity, the results of the K-800 Campiagn in allied casualties and material losses were minor compared to the scale and cost of the NVA and VC effort. Nevertheless, the III MAF intelligence section reported that the offensive "was successful in that the enemy was able to demonstrate his continued presence to the civilian population despite allied deterrent operations." 14

Deterrent operations were continuous and extensive. Throughout January and February, the South

Vietnamese regulars, RFs, and PFs in Quang Nam, supported by III MAF and South Korean Marines, attempted to forestall enemy attacks by attacks of their own and to continue wearing down Communist military and political strength. The ARVN 1st Task Force on 19 January ended its Operation Hoang Dieu 101, a province-wide campaign of saturation patrolling in the lowlands that had begun on 17 December. In the month-long effort, the South Vietnamese and cooperating U.S. and Korean Marine units claimed to have killed 538 North Vietnamese and Viet Cong and to have captured 87 prisoners and 171 weapons. Another 45 enemy had surrendered under the Chieu Hoi program. After a pause during the Tet holidays, the 1st Task Force on 3 February initiated Operation Hoang Dieu 103, again emphasizing continuous patrols and ambushes around populated areas to block infiltration and kill or capture guerrillas and members of the VCI. This effort involved most of the province RFs and PFs, while the 51st ARVN Regiment, the principal infantry element of the 1st Task Force, deployed its four battalions around Hill 55 and An Hoa.15

Around Hoi An, the Republic of Korea 2d Marine Brigade maintained security within its own TAOI. The brigade, expanding on the effort begun late in the previous year, also conducted Operation Golden Dragon II in the northeastern Que Sons from 4-21 January. During this period, elements from four infantry battalions and a reconnaissance unit searched and patrolled a sector of the mountains. The Koreans had little contact, reporting only one enemy killed and four weapons captured.<sup>18</sup>

Units of the 1st Marine Division continued to patrol the Rocket Belt and to sweep the enemy base areas in the Que Son Mountains. To disrupt enemy preparations for an offensive, the division, in cooperation with the 1st Marine Aircraft Wing, conducted a series of air and artillery attacks on Base Area 112 in the mountains west of An Hoa. Aircraft of the wing and 175mm guns of the division poured tons of bombs and napalm and hundreds of artillery rounds on suspected headquarters, base camps, and supply caches. On the basis of aerial photography and observation of damage, targets were either struck again or removed from the list as unprofitable and replaced by others. By this continuing effort, Marine commanders hoped to prevent enemy use of the base area without committing allied ground forces.17

Colonel Paul X. Kelley's 1st Marines continued its defense of the approaches to Da Nang, with the 3d



Marine Corps Historical Collection A Marine cautiously crosses a makeshift bridge near Charlie Ridge in Upshur Stream. This was one of the last of extended Marine operations in Vietnam.

Battalion covering the area north and northwest of the city, the 1st Battalion blocking the infiltration routes from Charlie Ridge and guarding the Thuong Duc corridor, and the 2d Battalion patrolling the Viet Cong-infested countryside south of Da Nang. Company M of the regiment carried on the Combined Unit Pacification Program in hamlets throughout the 1st Marines' TAOI.

Each battalion continued the now well-established regimen of constant day and night patrols and ambushes and cordon and search operations, and conducted occasional company or battalion-size maneuvers. Enemy activity in the regiment's area of responsibility increased slightly as the K-800 Campaign began, but combat remained small-scale and sporadic. Most of the enemy encountered by Kelley's

Marines were local Viet Cong or members of the infrastructure. As had been true for the past year, mines and boobytraps caused a large proportion of the regiment's casualties, although the Marines now were finding and disarming a monthly average of 75 percent of the mines they encountered.<sup>18</sup>

On 3 January, the 1st Marines reorganized its Quick Reaction Force (QRF). A regimental order of that date required each battalion, in rotation, to furnish one rifle company to serve, usually for 15 days, as the 1st Marines' QRF. One platoon of the QRF company, under operational control of the regiment, would be billetted at the 1st Marines' CP on Division Ridge ready for deployment by helicopter anywhere in the regimental TAOI on 15 minutes notice. The rest of the company was to be prepared to reinforce the QRF platoon by helicopter within one hour of an alert. An aircraft package for the QRF of one UH-1E, three CH-46s, and two AH-1Gs would stand by at Marble Mountain. The principal mission of the QRF was to reinforce reconnaissance units and exploit intelligence reports.19

During January, the 1st Marines employed its QRF four times, twice in response to current information, once to protect a downed Army helicopter, and once to assist a reconnaissance team engaging the enemy. The following month, the quick reaction platoon twice worked with infantry companies in surprise sweeps and searches of suspected enemy headquarters and base areas. None of these reactions resulted in significant contact.<sup>20</sup>

In mid-January, in response to reports of the enemy buildup for the K-800 Campaign, the 1st Marines intensified efforts to prevent rocket launchings against Da Nang. On 13 January, and again after the offensive had begun, on 8 and 22 February, the regiment directed its battalions to concentrate patrolling on previously used rocket launching sites and frequently travelled infiltration routes from Charlie Ridge toward the lowlands. Early in February, the 1st Battalion, 1st Marines was temporarily reinforced by Companies A and C of the 5th Marines for antirocket activities. The 1st MAW increased aerial surveillance of the Rocket Belt, and the 11th Marines redeployed its Integrated Observation Devices (IODs) for better coverage of potential enemy firing positions.<sup>21</sup>

Supplementing these regular antirocket measures, the 1st Marines began a preemptive search and destroy operation on western Charlie Ridge. In this operation, patterned on Imperial Lake, the 1st Marines employed continuous reconnaissance and infantry patrolling and concentrated air and artillery attacks in an effort to locate elements of the 575th NVA Artillery/Rocket Battalion and to prevent the NVA and VC from using the Charlie Ridge base area to prepare for attacks against Da Nang.

The operation, codenamed Upshur Stream, began on 11 January under the control of Lieutenant Colonel Robert P. Rose's 1st Battalion, 1st Marines. On the 11th, a platoon of Company D was inserted by helicopter on Hill 383, about five miles northeast of Thuong Duc. The platoon secured the hill as a patrol base for teams from the 1st Reconnaissance Battalion which were searching the surrounding rough, jungle-covered terrain. Two days later, at 1300, a 1st Battalion command group, with Company B of the 1st Battalion, landed from helicopters on Hill 383. The infantry took over the search of the area, relieving the reconnaissance teams. On the 15th, two 4.2-inch mortars and crews from the 1st Battalion, 11th Marines were lifted to Hill 383 by helicopter to furnish fire support. The Marines systematically patrolled the hills until 23 January. They found a few abandoned base camps and small caches of weapons, ammunition, food, and equipment. Many of the weapons they captured were rusty and long-unused. The Marines found no major rocket storage areas or enemy troops.

Most of the Marine casualties in the operation occurred on 20 and 21 January. As a platoon of Company B was patrolling about two miles west of Hill 383 on the 20th, the point man set off a boobytrap made from a can filled with C-4 explosive. The blast injured four Marines. A second C-4 can boobytrap blew up as the platoon was securing a landing zone for a medical evacuation helicopter wounding another four men. The helicopter arrived to pick up the casualties, and as it settled into the landing zone, its rotor wash detonated four additional mines and wounded three more Marines. Company B's misfortunes culminated the next day, when a CH-46D from HMM-463 crashed and burned while landing at the company's position. Four Marines, a Navy corpsman, and a Kit Carson Scout died in the wreck; 16 other Marines were injured, 10 seriously.22

On 20 January, the division ordered the 1st Marines to extend Upshur Stream indefinitely as a combined reconnaissance-artillery-infantry campaign. The new phase of the operation began with a concentrated artillery attack by the 1st Battalion, 11th Marines. On the 21st, four self-propelled 155mm howitzers of the

battalion moved from the Northern Artillery Cantonment to Hill 65, and two 105mm howitzers were lifted by helicopter to Hill 270. Just after midnight on the morning of the 22d, these weapons, supported by Battery A, 1st Battalion, 11th Marines also on Hill 65, and by a platoon of the 3d 8-inch Howitzer Battery on Hill 10 opened fire. Their target was an area of suspected enemy base camps and rocket and supply caches about three miles north of Hill 383.

During the artillery attack on 23 January, the 1st Battalion command group, the two infantry companies, and the mortar detachment left Hill 383 by helicopter. One infantry platoon stayed behind on the hill to protect a patrol base for reconnaissance teams, which resumed patrolling of the mountains. The artillery attack went on until 20 February, saturating the target area with 15,620 155mm, 105mm, and 8-inch rounds. After the bombardment ended, Upshur Stream continued primarily as a reconnaissance effort

Marines of Company E, 2d Battalion, 5th Marines probe a ridgeline in the Que Son Mountains southwest of Da Nang in Operation Imperial Lake.

Department of the Defense Photo (USMC) A373775



around Hill 383 and also in the area which had been worked over by the artillery. By the end of February, 15 teams from the 1st Reconnaissance Battalion had participated in the operation, with an average of three deployed on Charlie Ridge at one time. The reconnaissance Marines had killed one enemy, wounded two, and directed artillery fire which killed two more, but they had made no contacts or discoveries large enough to justify recommitting the infantry or the QRF.<sup>23</sup> Marine units had detained 30 suspects and captured 31 weapons by 28 February. With prevailing contacts scant and of limited size, and because recon teams continued to produce little evidence of enemy whereabouts, Operation Upshur Stream was concluded on 29 March.

On 29 January, as Operation Lam Son 719 began, the 1st Marines was assigned responsibility for guarding Route 1 where the highway, the only land route between the U.S. Army Support Command at Da Nang and northern MR 1, twists through Hai Van Pass. The TAOI of Lieutenant Colonel Marc A. Moore's 3d Battalion included the pass. Moore deployed his Company K, just back from Upshur Stream, to reinforce the Regional Force troops along the highway. The company placed Marines in static defense positions at bridges and culverts and cooperated with Regional Force units by patrolling the hills overlooking the road. On 2, 3, and 4 February, 20 or 30 NVA and VC, often taking advantage of fog and low clouds for protection against allied air support, harassed Marine positions and passing convoys through attacks by fire. The Marines returned fire and, when the weather permitted, called in helicopter gunships. One Company K Marine was seriously wounded in these skirmishes. Sweeping Marines and RFs found no Communist dead or weapons.

In mid-February, Company L of Moore's battalion relieved Company K. On 21 and 22 February, this company, too, came under attack by small enemy groups. During the morning of the 26th, five-10 Communists managed to fire RPGs and small arms at a northbound Army convoy, disabling a jeep and a five-ton tractor and setting a truck on fire. The 3d Platoon of Company L and soldiers from the convoy drove off the NVA and VC with no casualties to either side.<sup>24</sup>

During January and February the 5th Marines continued to sweep the Que Son Mountains during Operation Imperial Lake. They also protected the hamlets and villages around LZ Baldy and FSB Ross. The 2d Battalion, based at Baldy, and the 3d Battalion, oper-

ating from Ross, each deployed a forward command group and an average of two companies at a time in the Que Sons. The remaining companies of these battalions patrolled and ambushed in the lowlands. Still under operational control of the division, the 1st Battalion, 5th Marines rotated its companies between Imperial Lake and defense of Division Ridge.

Late in January, the Communists' K-800 Campaign intruded in the 5th Marines' AO in the form of more frequent small-scale ground probes and attacks by fire. The enemy, following their usual strategy, concentrated on Regional and Popular Force outposts, CUPP units. bridges, refugee settlements, and district towns. They seemed to be massing strength in the lowlands, and intelligence reports indicated that main force and North Vietnamese soldiers were reinforcing local guerrilla units. On the other hand, the number of enemy in the Que Son Mountains declined. The elusive Front 4 Forward Headquarters, long hunted by the Marines in Imperial Lake, showed no signs of activity. Most units controlled by Front 4 had moved either into the lowlands or to other base areas in the hills farther west.25

Imperial Lake continued to involve the largest portion of the 5th Marines' strength. At the beginning of January, all three of the regiment's battalions had command groups and infantry companies deployed in the Que Sons. On 8 January, the 1st Battalion, on orders from the division, withdrew its forward command group and one of its two companies in Imperial Lake to Hill 34, leaving one company in the Que Sons under the operational control of the 2d Battalion. From then until the end of February, the 1st Battalion rotated its companies, one at a time, in and out of Imperial Lake.<sup>26</sup>

The partial withdrawal of the 1st Battalion left five infantry companies with two battalion command groups to carry on the operation. Lieutenant Colonel Thomas M. Hamlin's 2d Battalion, with two of its own companies and one from the 1st Battalion, operated around Hill 510, about five miles northwest of Firebase Ross. Three miles east of Hamlin's CP on Hill 510, the 3d Battalion, under Lieutenant Colonel Herschel L. Johnson, Jr., deployed two companies around Hill 381. West and southwest of the infantry, six or seven teams from the 1st Reconnaissance Battalion, continually patrolled the more remote parts of the Que Sons. This deployment of troops continued until 13 February. Then, beginning the 1st Marine Division redeployment plan, the 2d Battalion command

group relieved that of the 3d on Hill 381 and took charge of the operation, initially with Companies K and L of the 3d Battalion attached. Two days later, Companies K and L left for Hill 34, their battalion's stand-down point. The 2d Battalion, with two of its own companies and one from the 1st Battalion, continued Operation Imperial Lake for the rest of the month. At the same time that the 3d Battalion withdrew from Imperial Lake, the 1st Battalion, 11th Marines moved four 105mm howitzers, two 155mm howitzers, and six 107mm mortars into the Que Sons. These artillery elements replaced batteries of the 2d Battalion, 11th Marines which were standing down.<sup>27</sup>

Marines patrolling the Que Sons continued to have brief firefights with groups, usually of six or fewer North Vietnamese and Viet Cong. The largest contact of early 1971 occurred on the afternoon of 25 January. Marines of the 2d Platoon of Company L, 3d Battalion, 5th Marines, searching an area two and onehalf miles northeast of FSB Ross, heard voices and movement south of their position. A squad sent to investigate spotted 10 enemy soldiers walking toward them along a trail. The Marines caught the NVA and VC off guard and killed nine of them while suffering no casualties themselves. The 2d Platoon Marines also captured an AK-47, a 9mm pistol, a North Vietnamese flag, and an assortment of abandoned equipment and supplies, including about a pound of marijuana. As they swept the area of the fight, the Marines came under small arms fire, and when they returned to the scene of the initial contact, they found that five of the dead North Vietnamese had been dragged away.28

Marine patrols combing the hills continued to uncover enemy cave complexes. They usually blew the caves up or contaminated them with crystallized CS riot gas. The Marines found caches of enemy supplies and weapons and encountered scattered enemy. During January, for example, Company H of the 2d Battalion, besides killing three Communists, ferreted out and captured over 10,000 rounds of .50-caliber and 7.62mm ammunition, 495 pounds of food, and 1 crew-served and 3 individual weapons.29 Other companies on the operation made similar finds. In the first two months of 1971, 1st Marine Division units involved in Imperial Lake accounted for 85 enemy dead and captured 41 weapons. Marine casualties amounted to one killed and 37 wounded. More important than the number of NVA and VC casualties produced was the persistent disruption of this strategic Communist base

area. In the words of Major General Widdecke, Marine saturation patrolling "effectively restricts enemy movement through the Que Son M[ountains] and denies them access to the D[a Nang] V[ital] A[rea] and adjacent lowlands."<sup>30</sup>

In spite of the emphasis placed on Imperial Lake, the 5th Marines' CUPP unit, Company G under Captain Robert O. Tilley, did more fighting and inflicted more casualties during January and February than any other unit of the regiment. The company's activities were concentrated in the area from LZ Baldy to the Ba Ren River and west to Phu Loc Valley, a vital and much used enemy line of communication which connected the Nui Loc Son sector with the Hoi An, An Hoa, and Da Nang areas. Much of the action resulted from the aggressiveness of the new South Vietnamese commander of the 1/20 Regional Force Group. This officer controlled the activities of the RF and PF in the Moc Bai Subsector, which encompassed that portion of Que Son District northwest of Baldy, including the stretch of Route 1 between Baldy and the Ba Ren bridge. In January, the RF commander began pushing his units, including those attached to the CUPPs, into previously abandoned or currently Viet Cong-dominated hamlets. The Viet Cong reacted strongly with over 40 sharp actions, most of them at night.

Much of the pressure fell on CUPP 6, a Marine squad from Company G paired with the 197th Popular Force Platoon. In January, CUPP 6 moved into the strongly pro-VC Phu Huong village about two miles northwest of Baldy. Phu Huong is just to the southwest of Phu Thanh, which had been brutally attacked by the VC in June of the previous year. During the month of January, CUPP 6 reported 28 incidents in its area of operations, including half a dozen major fire fights. In the largest of these, during the night of 11-12 January, a patrol of Marines and PFs spotted about 20 Viet Cong waiting in ambush and quickly took defensive positions. Four VC advanced to probe the CUPP's line. The Marines and PFs fired, killing two. For two and one-half hours, the CUPP unit battled the enemy. As the fight expanded, the Marines called in a "Black Hammer" night helicopter patrol, and with the support of the helicopters' firepower, routed the VC, who left 16 dead behind, nine of them killed by the helicopters. The CUPP unit had only one slightly wounded Marine.

In many of its night actions, Company G received support from the Black Hammer patrols of Lieutenant

Colonel Richard J. Blanc's HML-167. The squadron had developed this patrol during the previous year under the codename Night Hawk. It consisted of a UH-1E search aircraft equipped with a machine gun, a night observation device (NOD), and a 50,000,000 candlepower Xenon searchlight, accompanied by two armed UH-1Es. Flying over the countryside at night, the search plane could spot the enemy with its NOD and then illuminate them for the gunships with its powerful searchlight. In January, HML-167 renamed this package Black Hammer and began to coordinate it more closely with the infantry, especially the CUPP Company, which did so much of its fighting at night. When supporting the CUPP, the Black Hammer provided not only fire power, but also airborne command and control. Captain Tilley, the company commander, usually rode in one of the helicopters, directing the maneuvers of his ground units from his airborne observation post.31

CUPP 6 again had sizeable firefights on 19, 22, 24, 27, and 28 January in which the unit and the Black Hammer aircraft killed 36 more VC. The CUPP suffered only minor casaulties. Other CUPPs also ambushed small groups of enemy or fought off probing attacks on their hamlets. By the end of the month, Company G and its RF and PF allies had accounted for more than 60 enemy dead, taken two prisoners, received 10 Hoi Chanhs, and captured 2,900 pounds of rice and seven weapons. Company G's losses amounted to two Marines killed and 26 wounded and one RF and 16 PF soldiers wounded.<sup>32</sup>

With the increase in contacts, the 5th Marines sent regular infantry to reinforce its CUPP company. On 22 January, the 2d Platoon of Company H moved from Baldy to the Ba Ren bridge, where it assisted the militia in protecting the span. The platoon was placed under the operational control of Company G. From 29-31 January, the opening days of the VC K-800 offensive, the 1st and 3d Platoons of Company H also reinforced CUPP units in exposed areas.<sup>33</sup>

During the first part of February, the regiment sent a platoon of Company F to assist three CUPPs, including the embattled Team 6. As the month progressed, however, enemy pressure on the CUPPs eased significantly, even though the Moc Bai Subsector Regional and Popular Forces continued to push into enemy-dominated areas north and west of LZ Baldy. Occasional night action still flared up, however, and Company G used Black Hammer support seven times in February. To counter the new allied pacification drive,

the enemy launched two terrorist attacks on Xuan Phuoc village, just off Route 535 southwest of Baldy. In two invasions of the village, the VC burned 39 huts and killed two civilians. After the second attack, Company C deployed a reinforced squad for several nights in ambush along the main Viet Cong avenues of approach to the village. The ambushes produced no contact, but the enemy attacks on Xuan Phuoc stopped. In spite of these outbreaks, Captain Tilley's Marines were able to resume intensive training of their PF counterparts during February, while devoting more time to civic action.<sup>34</sup>

Late in January, the 5th Marines used its Quick Reaction Force to revive the Kingfisher tactic employed so successfully by the 1st Marines the year before. Under the codename Green Anvil, the 5th Marines began sending a reinforced squad from its QRF company, in two CH-46Ds, on airborne patrol over the regimental TAOI. A UH-1E command aircraft would fly ahead

of the transports searching for targets, and two AH-IG Cobras would escort the CH-46s. If the command helicopter sighted enemy, the infantry squad could land within minutes, supported by the gunships. The Green Anvil patrols, like those of the 1st Marines' Kingfisher, usually concentrated on areas which intelligence sources singled out as enemy LOCs or assembly points.

In two operations in the last weeks of January, Green Anvil units killed four VC/NVA and captured five prisoners and two weapons. During the following month, the airborne patrols, drawn from Companies E and F of the 2d Battalion, made eight landings, most of which produced significant contact. The largest of these Green Anvil actions began at 1830 on 24 February, just south of the Ba Ren River and northeast of Phu Thanh. At that time, the command "Huey" of a patrol spotted a cluster of three bunkers with packs and weapons laying around them. The infantry squad,

Marines of the 3d Battalion, 5th Marines in the Que Son Mountains strip and clean their rifles during a quiet period in the war. Note the .50-caliber machine gun position and flag on the rock above them. Their live-in bunker behind them is made of empty crates.

Department of the Defense Photo (USMC) A373806

from the 1st Platoon of Company E, landed to sweep the area. As they came out of their helicopters, the Marines were met by small arms fire and grenades. They returned fire, and the enemy fled, pursued by the Cobras. In the running fight which followed, two Marines were seriously wounded, but the squad and the Cobras killed a total of 15 enemy, and the infantry took two prisoners and captured two weapons and 12 pounds of Communist documents. By the end of February, Green Anvil operations had accounted for 35 enemy dead, 5 prisoners, 11 weapons, and 6,000 pounds of rice captured, along with an assortment of documents and equipment.<sup>35</sup>

During January and February, 1st Division Marines and their supporting aircraft, fixed-wing and helicopters, had killed over 375 North Vietnamese and Viet Cong and captured 25 more and 172 weapons. While contacts with the enemy were only slightly increased during January and February over the last few months of 1970, the VC/NVA losses to Marines in January alone were the highest since the preceding August. Marine casualties in the same period amounted to 11 dead and 202 wounded. For over 12,400 Marines of III MAF, these had been the last two months of Vietnam combat. Redeployment of the units scheduled for Keystone Robin Charlie was well under way by the end of February.

#### Keystone Robin Charlie Begins

Preparation for Keystone Robin Charlie began on 13 January, with the standing down of Marine Air Control Squadron (MACS) 4. Personnel and equipment from this squadron sailed from Da Nang on 1 February on board the amphibious ships of the first of 12 planned embarkation units. The ships also carried aircraft and extra equipment of other redeploying organizations.

Redeployment activity speeded up in mid-February. While no ground combat units actually redeployed during January and February, by the 15th of the month, the 3d Battalion of the 5th Marines, along with the combat support units, Batteries D and F of the 2d Battalion, 11th Marines, and Battery K of the 4th Battalion, 11th Marines, had ended combat operations. Thirteen days later, the 1st Engineer Battalion (-) also stood down. Units of the 1st MAW also began readying for departure. HMM-364 flew its last mission on 16 February; by the end of the month, its men and aircraft were on their way to the United States. On 22 February, VMFA-115 ceased operations.<sup>37</sup>

Departure plans for four other major 1st MAW units assigned to Keystone Robin Charlie were abruptly cancelled. Lieutenant General Sutherland obtained permission from MACV for HMH-463, which was playing such a crucial role in supporting operation Lam Son 719, to postpone its departure until Increment Seven. Later, on 23 February, Sutherland requested authorization to retain two other helicopter squadrons, HML-167 and HMM-263, declaring that XXIV Corps needed these additional helicopters to meet other aviation requirements in MR 1. Sutherland also asked to keep MASS-3 (-), which provided the air support radar teams at Khe Sanh, FSB Birmingham, and Da Nang. MACV approved all these requests and postponed withdrawal of the affected units until the next redeployment. To maintain these squadrons during their extended time in Vietnam, 1st MAW obtained permission to reduce the size of the detachments being withdrawn from its headquarters and support units. These changes diminished the Marines' share of Keystone Robin Charlie by a total of 821 men. The retained Marines would be replaced in the redeployment by men from other Services and would go out later with the 3d MAB.38

Ground operations in Quang Nam increasingly centered on the complicated rearrangements necessary to cover the Que Sons while extracting the 5th Marines from combat. As planned, the redeploying regiment's 3d Battalion displaced its forward command post on 13 February from Hill 381 back to Firebase Ross. Two rifle companies, K and L, stayed in the field for two more days, attached to the 2d Battalion. On the 13th the 3d Battalion resumed control from the 11th Marines of Company M, which had been garrisoning FSB Ryder, west of Ross, and Observation Post Roundup, south of the base.

On 15 February, the 3d Battalion formally turned FSB Ross over to the South Vietnamese 411th Regional Force Company. The battalion Headquarters and Service Company, Companies I, K, and L, and part of Company M moved the same day to Hill 34, where the battalion was to stage while preparing to redeploy. Elements of Company M remained at Roundup and Ryder for another day to protect engineer detachments that were levelling the two installations, neither of which the U.S. Army nor the RVNAF wished to occupy. Marines from Company F, 2d Battalion, 5th Marines took over this security mission on the 16th, and the rest of Company M left by helicopter for Hill 34.39

Extensive artillery rearrangements accompanied the

beginning of the 5th Marines' withdrawal. In anticipation of the closing down of Firebases Ross and Ryder and of the removal from combat of the 2d Battalion, 11th Marines, the 1st Battalion, 11th Marines received the mission of establishing batteries in the Que Sons to support the continuation of Imperial Lake. On 9 February, Lieutenant Colonel Ogden and members of his staff made an aerial reconnaissance of the mountains and selected Hills 510, 425, 381, and 218 as battery positions. All these locations had been occupied frequently during the long campaign in the Que Sons.

Movement of the batteries from the 1st Marines' TAOI began on the 12th, when four 105mm howitzers from Battery C and two 155mm howitzers, which had been attached to the 1st Battalion Headquarters Battery, moved by road from the Northern Artillery Cantonment to LZ Baldy. From Baldy, helicopters flew the 105s and their crews to Hill 510, the main reconnaissance patrol base in the western Que Sons, and the 155s, designated Platoon "CX", to Hill 218 about a mile north of Ross. The following day, a detachment of four mortar crews and tubes from the 1st Battalion's Mortar Battery displaced by helicopter from Camp Lauer near Marble Mountain to Hill 381, the command post of the 2d Battalion, 5th Marines. These units, under the operational control of the 2d Battalion, 11th Marines, took over the fire support tasks of Battery F of the 2d Battalion, which stood down at FSB Ryder on the 13th, and Batteries D of the 2d Battalion and K of the 4th Battalion, 11th Marines, which stood down at Ross on the 14th and 15th. Completing the removal of artillery from Ross, Battery D, 1st Battalion, 82d Artillery, U.S. Army, which had been a tenant unit at the Marine firebase, moved to Hill 65 on 15 February. There, Battery B, whose parent battalion was one of the support units of the 196th Brigade, was to conduct fire missions under operational control of the 11th Marines until possession of Hill 65 passed to the Army.

On 22 February, the two remaining 107mm mortars and crews of the 1st Battalion, 11th Marines were ferried by helicopter from Hill 270, west of Da Nang, to Hill 425 in the northern Que Sons. This mortar detachment relieved elements of the mortar battery of the 2d Battalion, 11th Marines, which was standing down. That same day, the 1st Battalion established a forward command post, consisting of its S-3 officer, fire direction center, and a logistical detachment, at Hill 34, to shorten lines of communication to the units in the Que Sons.<sup>40</sup>

As the troops and artillery evacuated Firebases Ross and Ryder and Observation Post Roundup, Marine engineers demolished those installations not taken over by other allied units. Ross, occupied by South Vietnamese forces, remained intact. At Roundup and Ryder the engineers, with Marines from Company F, 2d Battalion, 5th Marines as security, levelled bunkers, filled in trenches and fighting holes, and removed or destroyed all equipment, even the trash. By 26 February, both bases had been reduced to bare hilltops.<sup>41</sup>

Early in March, the 5th Marines, following plans completed by the 1st Marine Division during late February, withdrew its 2d Battalion and regimental headquarters from operations. The 1st Marines then assumed responsibility for the entire division TAOI and continued Operation Imperial Lake. For these tasks, Colonel Kelley's regiment was reinforced by the last remaining active element of the 5th Marines, Lieutenant Colonel Franklin A. Hart, Jr.,'s 1st Battalion.

On 1 March, the 2d Battalion, 5th Marines pulled its forward CP back from Hill 381 to LZ Baldy. Companies F and H of the battalion continued patrolling in the Que Sons until the 3d, when they, too, joined the battalion headquarters and Company E at Baldy. Company G by the 3d had withdrawn from CUPP activity and reassembled at Baldy as a conventional rifle company.\* During the next two days, the entire battalion and the 5th Marines' regimental Headquarters moved from Baldy to Hill 34 to prepare for embarkation.<sup>42</sup>

The 1st Marines took operational control of the 1st Battalion, 5th Marines, on 2 March. This battalion at once deployed a forward command post, with its own Company B and attached Company E, 2d Battalion, 1st Marines, to Hill 510. These units were to conduct Operation Imperial Lake. Company D of Hart's battalion moved to Baldy on the 2d to guard the big base until the South Vietnamese, to whom it was being transferred, could bring in troops to defend it. The remaining two companies of the 1st Battalion protected Division Ridge. On 3 March, with these troop movements completed, the 1st Marines formally enlarged its TAOI to incorporate that of the 5th Marines.<sup>43</sup>

On the 3d, also, Headquarters Battery, 2d Battalion, 11th Marines stood down, and the 1st Battalion of the artillery regiment took operational control of

<sup>\*</sup>The Combined Unit Pacification Program officially ended in April when the four remaining teams of Company M, 3d Battalion, 1st Marines were finally removed from the program.



Department of the Defense Photo (USMC) A373954

A Marine from Headquarters Battery, 11th Marines sits on an improvised bench in a well-emplaced, sandbagged .50-caliber machine gun position on Hill 218 providing a panoramic view of the Que Son Mountains, the Que Son Valley, and the possible enemy.

the batteries located in the former 5th Marines TAOI. The 1st Battalion began consolidating and reducing the artillery support for Imperial Lake. On 6 March, helicopters lifted the two 155mm howitzers from Hill 218 to Hill 510, the position of the 105mm howitzers. The four mortars from Hill 381, which had been displaced to Baldy on the 2d, shifted to Camp Lauer on 11 March as the Americans started evacuating Baldy.<sup>44</sup>

From 2-23 March, the 1st Battalion, 5th Marines maintained the offensive in the Que Sons. Maneuvering northeast of Hill 510, the two infantry companies spread out in squad patrols to search assigned areas. Reconnaissance teams continued to patrol, search, and ambush west of Hill 510. On 11 March, two platoons of Company D replaced Company E of the 2d Battalion, 1st Marines in the field. Company E (-) then returned to its parent unit, leaving one platoon to assist a platoon from Company D in guarding Baldy. The Imperial Lake units uncovered a number of base camps and killed six Communists in brief firefights. They also captured the usual haul of miscellaneous weapons, ammunition, equipment, food, and documents. The Marine companies suffered only one man killed by a boobytrap.45

On 19 March, the 1st Marines issued orders for the next phase of the redeployment of ground forces: relief of the 1st Battalion, 5th Marines in the Que Sons by elements of one of the 1st Marines' battalions and repositioning of the others within the Rocket Belt. The two platoons at Baldy at last turned defense of the base

over to the South Vietnamese on 20 March and returned to their parent unit. That same day, the 2d Battalion, 1st Marines, under Lieutenant Colonel Roy E. Moss, who had relieved Lieutenant Colonel Donald J. Norris on 7 March, began moving its headquarters from Camp Lauer, which was to be turned over to the ARVN, to Hill 34. Moss repositioned his rifle companies to protect Division Ridge, and his battalion's sector of the Rocket Belt, and he organized an additional provisional rifle company from headquarters and support troops to strengthen the defense of the ridge with its many Marine, U.S. Army, and South Vietnamese installations.\* The 2d Battalion had completed its shift of forces by the 24th, when Lieutenant Colonel Moss assumed the additional duty of defense coordinator for Division Ridge.

On 23 March, the 1st Battalion, 5th Marines withdrew its forward command post and two rifle companies from Hill 510 and under the protection of 2d

<sup>\*</sup>As defense coordinator, Moss, besides providing forces from his own battalion, directed the close-in self-defense of the units and installations within the battalion TAOI. These included the 1st Marine Division Headquarters; ARVN 1st Mobile Brigade Task Force Headquarters; the 44th ARVN Artillery; the Hoa Cam Territorial Forces Training Center; the III MAF Freedom Hill Recreation Center; the 1st and 11th Marines Headquarters; the U.S. Army's 504th Military Police Battalion, 522d Replacement Battalion, and 478th Aviation Company; MASS-3; Ammunition Supply Point (ASP) 1; the 1st Motor Transport Battalion; 1st Medical Battalion; and 1st Battalion, 5th Marines, which was standing down.

Battalion, 1st Marines, stood down at Hill 34. That same day, a forward command group from Lieutenant Colonel Marc A. Moote's 3d Battalion, 1st Marines, with Companies K and L, took up positions on Hill 510 to carry on Operation Imperial Lake. Company I of the 3d Battalion, with Company M (-), which had returned from CUPP duty to its parent battalion on the 20th, continued to guard Hai Van Pass and the area northwest of Da Nang. The 1st Battalion maintained its positions in the Thuong Duc corridor and deployed platoons on Charlie Ridge to support reconnaissance teams in Operation Upshur Stream.<sup>46</sup>

On 23-24 March, the headquarters of the 11th Marines stood down. The artillery regiment transferred control of all the batteries remaining in Quang Nam, as well as its aerial observer section, observation posts, and IOD sites to its 1st Battalion, which was to form the 3d MAB's artillery element. At the end of March, the 1st Battalion had three 105mm howitzer batteries under its command: Battery A on Hill 65: B on Hill 55; and C on Hill 510. A detachment of two howitzers from Battery C was located on Hill 270. The battalion's mortar battery had withdrawn from Camp Lauer on the 22d and now was concentrated at the Northern Artillery Cantonment (NAC). The 3d 8-inch Howitzer Battery had two platoons stationed at the Northern Artillery Cantonment and one on Hill 55. Batteries A, B, and C each had been reinforced with two 155mm howitzers,\* and a provisional Battery Z had been formed at the NAC with four 105mm howitzers and crews from Batteries A and B. as well as two additional 155s. On Hill 65, Battery D, 1st Battalion, 82d U.S. Artillery also passed under the operational control of the Marine artillery battalion.47

During March, the flow of departing units became a flood. By the end of the month, the headquarters and 2d and 3d Battalions of the 5th Marines had left Da Nang for Camp Pendleton, and the 1st Battalion was completing preparations to embark. For the 5th Marines, elements of which had first arrived in Vietnam in March 1966, redeployment ended five years of combat. Units of the regiment had participated in over 50 major operations in I Corps/Military Region 1, including Union I and II, Mameluke Thrust, Meade River, and Imperial Lake in Quang Nam. In Operation Union I and II alone, the 5th Marines had in-

flicted over 3,000 casualties on the enemy, eliminating the 2d NVA Division as an effective fighting force. Although the regiment operated almost exclusively in Quang Nam during its last few years of participation in the war, the 5th Marines had also played a major role in Deckhouse II, Hastings, and Prairie near the Demilitarized Zone.

The Headquarters Battery of the 11th Marines and the remaining batteries of the artillery regiment's 2d and 4th Battalions had embarked for the United States or were preparing to embark by 31 March. The 1st Reconnaissance Battalion (-), 1st Engineer Battalion (-), 1st Medical Battalion (-), and 1st Motor Transport Battalion (-) also departed during March, each leaving one company behind for inclusion in the 3d MAB. The entire 11th Motor Transport Battalion redeployed.

Aviation redeployments continued more slowly. VMFA-115, which had ceased operations in February, moved to Iwakuni during March. VMO-2 stood down on 23 March, except for a detachment of OV-10As which would remain in Vietnam with the brigade. Also on the 23d, Marine Air Control Group (MACG) 18, which operated the wing's tactical air direction center (TADC) and direct air support center (DASC), began standing down, followed on the 28th by 1st MAW Headquarters and Marine Wing Headquarters Group (MWHG) 1. Although these units formally ceased regular operations, many Marines from them continued day-to-day air control and direction activities and wing staff functions. These Marines with their equipment were to be incorporated into the 3d MAB Headquarters when their parent organizations left Vietnam.48

As the Keystone Robin Charlie redeployment proceeded, the 1st Marines, its units spread from Hai Van Pass to the Que Son Mountains, kept as much pressure on the enemy as its limited resources permitted. On Charlie Ridge, elements of the 1st Battalion involved in Operation Upshur Stream secured patrol bases for teams from the 1st Reconnaissance Battalion. The reconnaissance Marines, continuing their search of the mountains, killed four enemy during March and directed artillery fire that accounted for six more. Their own losses amounted to one Marine killed and one slightly wounded. The 2d Battalion continued its antiguerrilla and counterrocket campaign in the lowlands south of Da Nang, killing or capturing a modest but steady toll of Viet Cong. Companies K and L of the 3d Battalion, patrolling north of Hill 510, had no contact but sighted a few enemy and captured

<sup>\*</sup>The 155mm howitzers had been left in Vietnam attached to the 1st Battalion when the 11th Marines' general support battalion redeployed.

three 122mm rocket motors. With Lam Son 719 still going on, the enemy persisted in harassing supply convoys moving through the Hai Van Pass. Marines from the 3d Battalion helped Regional Forces repel seven minor attacks on bridges, convoys, and the railroad.<sup>49</sup>

With reduced forces and an expanded area of responsibility, the 1st Marines used its by now highly developed intelligence capabilities in an attempt to improve the effectiveness of ARVN operations. The regiment could trace the movements of enemy units in its tactical area of interest quite accurately, but often did not have troops available to exploit potentially profitable targets. Further, the VC and NVA usually stayed outside the Marines' established AOs. Major John S. Grinalds, the regimental S-2, reported that, "They would just hang right over the boundary so that we would have to get AO extensions to go out and get them but this was sort of counter to the policy at the moment, because we were trying to turn over responsibility for operations to the Vietnamese . . . ." Grinalds explained that the 1st Marines came to rely on Vietnamese units to exploit the intelligence

they collected. He said that the 1st Marines would go to a specific Vietnamese commander who was responsible for the targeted area, "and present him an intelligence package, which was a map with all the trails and instances of past contact . . . ." Grinalds stated, the Marines, at times, even provided a "recommended scheme of maneuver and concept of operations for going after the target . . . ." Then the Marines would sit down with the operations and intelligence staffs of the Vietnamese unit and put the plan into action. 50

According to Grinalds, this procedure worked well, especially with Colonel Thuc, commander of the 51st ARVN Regiment. "The only variations [on Marine suggestions] we got from him," Grinalds declared, "were improvements he made on the plans . . . ."51

Units of the 1st Marines were scheduled to continue operations in the Que Sons until 13 April, when the Army was to move into the area, but late in March, intelligence reports of an imminent new enemy offensive forced drastic curtailment of Imperial Lake. On 27 March, at the direction of the division, the 1st Marines ordered its 3d Battalion to move all but one in-

A sandbagged 106mm recoilless rifle position provides an excellent field of fire for Marine gunners on the northern perimeter of Hill 218 in the Que Son Mountains. The Army was to take over the Marine defensive positions in the Que Sons in April 1971.

Department of the Defense Photo (USMC) A373962



fantry platoon from Hill 510 to the Rocket Belt for defensive operations. The platoon left on Hill 510 was to protect the artillery there and to maintain a patrol base for reconnaissance teams which would take over the search of the area from the infantry. By 30 March, Companies K and L, less a platoon from L remaining on Hill 510, had returned to their battalion's sector of the Rocket Belt.<sup>52</sup>

As the 3d Battalion companies moved out of the Oue Sons, the 1st Marine Division on 28 March issued orders ending Operation Upshur Stream and enlarging Imperial Lake to include Charlie Ridge and the mountains west and northwest of Da Nang. This order, issued in anticipation of the Marines' final departure from the Que Sons, in effect, made all search and destroy operations outside the populated lowlands part of Imperial Lake. The concept of operations for Imperial Lake remained unchanged; the burden of patrolling was to rest on reconnaissance teams, while the 1st Marines was to furnish one infantry battalion to protect havens for the teams and reinforce them when necessary. By the end of April, Imperial Lake would claim 126 NVA and 179 VC killed and 215 individual and 16 crew-served weapons captured.53

#### The Pacification Effort Diminishes

With the Keystone Robin Charlie redeployment, the Combined Unit Pacification Program came to an end for both the 1st and 5th Marines. Reduction of the 1st Marines' CUPP program, two squads from Company I and all of Company M in villages throughout the regiment's TAOI, began on 4 January. On that date, one of the Company I CUPPs was deactivated. On 12 February, at the recommendation of the 1st Marine Division, III MAF approved a schedule for disbanding the rest of the 1st Marines' CUPP units. The first four squads to be deactivated under this plan, including the remaining one from Company I, withdrew from their villages on 12 and 13 February, and returned to conventional infantry duties. CAPs relocated from more secure villages replaced three of these CUPPs. On 15 March, the 1st Marines deactivated three more CUPPs. Five days later, Company M (-), with the exception of four squads still operating as combined units, reverted to the control of the 3d Battalion and began patrolling as a regular infantry company in an AO northwest of Da Nang.\* The last four CUPP squads were scheduled for deactivation on 15 April.54

The 5th Marines began dismantling its CUPP unit on 27 February when four squads from Company G withdrew from their villages. The remaining squads were combined in fewer villages and continued protecting Baldy, Route 1, and the Ba Ren Bridge. These CUPPs ceased operations on 3 March, as the 2d Battalion, 5th Marines, Company G's parent organization, prepared to stand down. Company G reassembled at Baldy as a conventional rifle company and moved to Hill 34 with the rest of the battalion.\*55

In its 18 months of existence, the Combined Unit Pacification Program had been effective in increasing hamlet security and combating enemy guerrillas. CUPP Marines and the RFs and PFs working with them had killed 578 Communists and captured or brought in 220 more as *Hoi Chanhs*. 56 Marine CUPP losses amounted to 46 dead and 254 wounded. Beyond the body count, the program demonstrated that ordinary infantry units could operate successfully when combined with RF and PFs, and the CUPP squads had improved overall security and increased people's confidence in the South Vietnamese government in the villages where they were stationed. Whether these improvements would outlast the departure of the Marines responsible for them remained to be seen.

While the CUPPs were deactivated, the other element of the Marines' hamlet-level and antiguerrilla force, the 2d Combined Action Group, continued operations. The 612 Marines, 48 Navy corpsmen, 719 PFs, and 102 RFs of the group conducted an average of 3,400 patrols and ambushes each month during January, February, and March. The CAPs, which then included 34 combined action platoons, had few significant contacts; it appeared that enemy units were trying to avoid them. Still, the CAPs continued to take a toll of Communist dead and prisoners. During January and February, for example, combined action units killed 31 enemy and captured eight, at a cost of 14 Marines and three Navy corpsmen seriously wounded and two PFs killed and 14 wounded. As an indication of increasing Regional and Popular Force strength during February the 2d CAG was able to relocate five CAPs in Hieu Duc, Dai Loc, Hoa Vang, and Dien Ban Districts, "as their former areas of operations were being well protected by Popular Forces."57

As part of the 3d MAB, the 2d CAG was to be one of the last Marine units to cease operations, but by

<sup>\*</sup>The CUPP units of the 1st Marines had been under the operational control of the battalions in the TAOIs of which they were located. Company M and most of the teams had been under the 1st Battalion. 1st Marines before 20 March.

<sup>\*</sup>As a CUPP company, Company G had been under direct operational control of the regiment.



Department of the Defense Photo (USMC) A373964

The 81mm mortar pit in the center of the picture is surrounded by well dug-in sandbagged bunkers on Hill 218. Two Marines on the far side of the picture can be seen looking out to the west during the last phase of Marine operations in the Que Sons.

the end of March it had begun strength reductions under a deactivation plan approved by III MAF. Between 21 and 23 March, six CAPs were disbanded. The other 29 platoons of the 2d CAG were scheduled to be dissolved between 13 April and 7 May.<sup>58</sup>

Using procedures worked out during the deactivation of the Combined Action Force in 1970, the allies accompanied each CUPP or CAP withdrawal from a village with an extensive psychological warfare campaign. Colonel Le Tri Tin, the Quang Nam Province Chief, began meeting with his district chiefs and the Combined Action Company commanders early in the year. According to Lieutenant Colonel John J. Tolnay, the 2d CAG commander, Tin "impressed upon them [the district chiefs] the fact that they're going to have to take over more and more of the effort and that they're going to have to operate alone." The district chiefs then carried the same message to the village authorities.

Before, during, and after the removal of each CUPP or CAP, American and South Vietnamese psycholog-

ical warfare units saturated the affected village with leaflets and loudspeaker broadcasts and held face-toface meetings with as many inhabitants as possible. Through all these media, the allies stressed the same theme: that the local RF and PF troops now could keep the Viet Cong out of the village without help from the U.S. Marines. Allied propaganda recounted every military success of the local forces, crediting them rather than the Marines with the enemy killed and weapons captured. CUPP and CAP deactivations usually included elaborate ceremonies with speeches by village and district dignitaries, a band whenever possible, exchanges of gifts, and presentations of decorations. The effectiveness of these efforts in convincing Vietnamese civilians that they were not being abandoned was difficult to assess. Lieutenant Colonel Tolnay believed that most of the people "did accept the fact that we were leaving. They watched us go with great reluctance [but] not with any great fear that their PFs could not handle the situation."59

On at least one occasion, the psychological campaign failed. On 3 March, the members of CUPP 10

of Company G, 5th Marines, stationed in a hamlet near the Ba Ren Bridge, were packing their equipment to move to Baldy when they were surrounded by about 200 Vietnamese. The crowd included Regional and Popular Force soldiers and members of a Provincial Reconnaissance Unit (PRU),\* as well as local civilians. As a RF lieutenant and the PRU team leader stood by, the Vietnamese began boldy picking up articles of the Marines' equipment and personal effects and walking away. One PRU member entered the CUPP command post bunker in search of more loot. When a Marine challenged him, the Vietnamese drew his pistol. The Marine platoon leader finally persuaded the intruder to holster his weapon and leave, but other Vietnamese broke down the back door of the bunker and swarmed in. After a vain appeal for help to the RF lieutenant and the PRU leader, the CUPP commander set fire to the bunker to stop further stealing. Then he and his men hailed two passing Marine jeeps on the highway and hastily drove away. As the Marines left, scattered small arms fire from the Regional Force soldiers slightly wounded three of them. The CUPP squad lost four M16s, a .45 caliber pistol, an M79 grenade launcher, and many other pieces of government equipment and personal property. The CUPP commander's bunker which was set on fire spread to another bunker nearby and destroyed most of the ammunition of the RFs and PFs guarding the bridge.60

Cooperation between U.S. and ARVN commanders at all levels prevented other major outbreaks of this sort and provided better protection for deactivating CUPPs and CAPs. Nevertheless, many CUPP and CAP Marines reported harassment and stealing by Vietnamese as the Americans left their villages; a few units found it necessary to station armed guards around their property while awaiting transportation. ARVN and Regional Force soldiers, especially, grew more aggressively hostile toward Americans as redeployment continued. On the other hand, Lieutenant Colonel Tolnay reported that the relationship between popular force soldiers and their Marine counterparts in the CAPs often became closer during the final weeks, as though the local troops were trying to obtain every last bit of training, help, and advice from the Marines before they left. "We had relatively little stealing," Tolnay declared. "In fact, toward the end there, if . . .

a PF... did steal something, a word to the district chief was sufficient to have him send his 3 out there and the purloined goods appeared. This ... was not the case with the RFs, however ...."61

Whether in CAPs, CUPPs, or conventional combat and support units, Marines kept up civic action efforts until they redeployed. As their time in Vietnam grew shorter, Marine units concentrated on short-term, inexpensive activities, such as gifts of building materials, foodstuffs, or school supplies. They also continued the always-popular MedCaps. Units of the 2d Combined Action Group tried to help the people in their AOs obtain civic action assistance and supplies from South Vietnamese government agencies, but this endeavor met with frustration. The 2d CAG reported in February that "The slow response of Vietnamese to civic action requests from civilians has seriously hampered this effort." 62

During the first months of 1971, the 1st Marine Division continued to assist the Vietnamese refugee resettlement villages on Go Noi Island and along Route 4. On Go Noi Island, Marine engineers cleared grass and brush from almost 1,250 acres of farmland, prepared a site for a third village, and constructed a road to it. Then they moved to the settlement of Ky Ngoc on Route 4, where they cleared 350 more acres and prepared them for cultivation. The resettlement project continued to prosper as the Marines redeployed. By the end of March two villages were firmly established on Go Noi, with work beginning on a third. Over 200 houses had been completed in Ky Ngoc: construction of 50 more would start as soon as tin roofing and lumber became available. The various districts had drawn up five additional ambitious resettlement plans, and the province CORDS advisor reported that Quang Nam "could experience a major breakthrough in this program provided the present momentum is maintained and support is received in a timely manner. The interest, initiative, and desire . . . of the people [are] not lacking."63

The assistance to the Go Noi and Ky Ngoc projects was a last gesture for III MAF. Most of the Marine engineers who had done so much work on the new villages redeployed during March. Further signalling the end of Marine Corps civic action in Vietnam, on 24 March, the Commandant announced that after 30 April 1971, no more contributions would be accepted for the Marine Corps Reserve Civic Action Fund (MCRCAF). About \$15,000 remained in this fund, which was administered by CARE, Inc. III MAF was

<sup>\*</sup>Provincial Reconnaissance Units were paramilitary organizations which worked under the province governments in operations against the VCI.

to continue expenditures from this balance until 14 April, when it would turn whatever money remained over to the 3d MAB.<sup>64</sup>

As their numbers dwindled during February and March, the Marines remaining in Quang Nam had reason to doubt that civic action had won many Vietnamese hearts and minds. The harassment and looting experienced by some of the deactivating CUPP and CAP units were not isolated incidents. They were only manifestations of a wave of open Vietnamese hostility to Americans that had become apparent in Quang Nam in mid-1970 and intensified in early 1971. Colonel John Chism, USA, the Province Senior Advisor, warned on 3 March: "Anti-foreign feeling continues at an endemic level. Incidents are becoming more numerous and testy. . . . Further increases can be expected as opportunists will use incidents to further nefarious ends." 65

Motor vehicle accidents had long been a source of antagonism between American servicemen and Vietnamese civilians.\* Now accidents frequently triggered potentially violent confrontations. Angry civilian crowds, sometimes joined by ARVN or RF or PF soldiers, would surround Marine or other American vehicles involved in even minor mishaps. Holding the vehicle and driver captive by weight of massed bodies and sometimes by surrounding them with barbed wire or threatening the driver at gunpoint, the Vietnamese would demand ransom, in the form of immediate compensation payments for real and imagined injuries or damages.

To avert violence in these confrontations and to mollify the Vietnamese on 20 October 1970, III MAF had organized a special Foreign Claims Investigation (FCI) unit in the 1st Military Police Battalion. The unit, un-

der Second Lieutenant John A. Van Steenberg, consisted of three mobile teams, each composed of a NCO investigator with at least limited Vietnamese language training, a Vietnamese interpreter, and a Marine driver/radio operator. While it was responsible for investigating all civilian claims for damages resulting from incidents involving Marines, the unit spent most of its time on traffic accidents. An investigating team would accompany the MP patrol to the scene of each accident, question the Vietnamese witnesses, and, if the facts warranted, help Vietnamese victims file their claims for compensation. When necessary to calm "potentially explosive" situations, the investigators could make small payments on the spot, but they usually tried instead to assure the Vietnamese of rapid, fair processing of regular claims. The teams were busy during the first months of 1971. They investigated 24 incidents in January, 18 in February, and 15 in March. By this time, they could complete an investigation in 12 days, from first notification of the accident to filing of a report with the Army Foreign Claims Commission at XXIV Corps Headquarters, which actually made the damage payments.\*66

Speedier processing of civilian damage claims partially alleviated one source of Vietnamese hostility, but threats and occasional violence against Marines and other U.S. personnel continued. On 5 March, after the attack on CUPP 10 at the Ba Ren Bridge, Lieutenant General Robertson visited Lieutenant General Lam, the I Corps commander, to express his deep concern about this and other incidents and to request Lam's cooperation in maintaining harmony among the allies. General Robertson, noting that he had known General Lam through two tours in Vietnam, recalled that in all their mutual dealings, "I was frank with him and I felt he was the same with me." Following the meeting with Lam, Robertson wrote to Lieutenant General Sutherland. He emphasized to the XXIV Corps commander the danger that continued Vietnamese assaults on Marines "could well result in overreaction by U.S. personnel with . . tragic consequences" and urged Sutherland also to discuss

<sup>\*</sup>Motor vehicle accidents, many of them resulting from a combination, in Brigadier General Simmon's words, of "unauthorized driver, alcohol, unauthorized runs, or [mis]appropriated vehicle," were a major noncombat concern of all Marine commands. During the first nine months of 1970, the 1st Marine Division alone lost three Marines killed and 85 injured in traffic smashups, and these same accidents left 39 Vietnamese dead and 81 injured. Besides speeding up payment of compensation, all major Marine commands tried to instill safer driving habits in their troops, tighten control of use of vehicles, and impose more certain and severe punishment of Marine traffic violators. 1st MarDiv, Talking Paper, dtd 2Oct70, Leadership&Discipline Notebook, 1st MarDivDocs, gives accident statistics. The Simmons quotation is from BGen Edwin H. Simmons, Orientation Talk to New Lieutenants in 1st MarDiv, ca. early 71, p. 45 (OralHistColl, MCHC). For an example of the effort to improve Marine driving, see CG 1stMarDiv msg to DistList, dtd 14Aug70, in Leadership&Discipline Ntbk, 1stMarDivDocs.

<sup>\*</sup>Before establishment of the FCI unit, civilian damage claims against Marines were investigated first by the unit to which the involved Marines belonged. The unit then reported the facts and a recommendation for payment or nonpayment to a Foreign Claims Commission at Force Logistic Command. The commission at FLC then forwarded the claim again to the Army commission at XXIV Corps. This system was cumbersome and slow, contributing to Vietnamese resentment of the Americans, and creation of the FCI unit was designed to shorten and simplify the entire claims process.



Department of the Defense Photo (USMC) A373797

In March 1971, a well-protected 105mm howitzer from Battery C, 1st Battalion, 11th Marines on Hill 510 fires at a suspected enemy staging area in support of maneuvering Marine infantry and reconnaissance troops in Operation Imperial Lake in the Que Sons.

this problem directly with General Lam. "Hopefully," Robertson concluded, "our combined efforts will contribute to the maintenance of U.S./Vietnamese good relationships by correcting a most serious situation."<sup>67</sup>

U.S. and South Vietnamese authorities managed to prevent a major explosion of violence. In fact, on 25 April, XXIV Corps actually declared Da Nang city "on limits" for off-duty American servicemen for the first time in over a year.\* Tension still persisted. In May, just after the 1st Marine Division redeployed, the assistant division commander, Brigadier General Edwin

H. Simmons, again reported a "rising tide of anti-American feeling . . . in Da Nang and Quang Nam Province." He continued:

Some of the villagers have made it evident that they are sorry to see our CAP and CUPP teams leave their hamlets, but most seem apathetic. There have been numerous acts of arrogance and even active belligerence on the part of the ARVN as well as the RF and PF . . . . 68

The timing, if not the causes, of this outbreak of open hostility was a matter of speculation and debate among Marines and other Americans in Quang Nam. Some attributed the outbursts to the surfacing of long pent-up resentment of the foreigners. As Lieutenant General Robertson put it, perhaps the Vietnamese were simply "getting tired of seeing us around." Colonel Chism, the Province Senior Advisor, pointed out that the Vietnamese presidential election campaign, already under way, would inevitably intensify political and social tensions of all kinds and might lead to deliberate creation of incidents by candidates or parties. It was logical to assume that the VC might be

<sup>\*</sup>Da Nang and most other cities and villages in Quang Nam previously had been declared "off limits" to all U.S. military personnel except those on official business with written passes from their unit COs or a division staff section head. 1stMarDiv, DivO 1050, dtd 3Feb70, in 1st MarDiv ComdC, Feb70. For procedure for travel by Marines into Da Nang after the restriction was lifted, see 3d MAB Bde Bulletin 11240, dtd 29Apr71, 3d MAB ComdC, 14-30Apr71, Tab A-4. Additional discussion of troop morale and recreation programs is in Chapter 20.

stirring up or at least directing resentment, but this was difficult to prove in any individual case. It was possible, also, that many of the incidents were the Vietnamese people's expression of anger at the Americans for going home and leaving them to fight on alone. Two years later, General Robertson summed up his puzzlement at the causes of this problem in words that could serve as the epitaph of the entire pacification program: "You know human beings don't always respond the way we think they should, or think they will . . . ."69

## The Enemy Grows Bolder

If the reactions of supposedly friendly Vietnamese to the American withdrawal seemed inconsistent and unpredictable, enemy reaction was completely in character. The VC intensified all forms of pressure, not on the Marines, but on the South Vietnamese government, armed forces, and people. Propaganda and incidents of terrorism increased in frequency. At the end of March the VC, supported for the first time in many months by large North Vietnamese units, mounted a major military offensive.

The hamlet-level war of assassination, kidnapping, vandalism, and propaganda never slackened. During January, according to III MAF, eight civilians in Quang Nam were killed, 11 wounded, and 41 abducted in terrorist attacks. The enemy took advantage of the Tet holiday truce at the end of January to conduct loudspeaker broadcasts, political indoctrination meetings, and flag raisings in many hamlets. In one village, the VC, in a graphic display of power, publicly took 12 carbines away from unresisting members of the local PSDF. Terrorism casualties increased in February; 11 people died and 62 were injured. Mining of a civilian bus northeast of An Hoa on the 23d accounted for five of the dead and 17 of the wounded. Violence continued through March, with 18 more persons killed, 53 injured, and 14 kidnapped.70

Viet Cong assassins took a steady toll of South Vietnamese government officials, especially in the villages and hamlets. On 11 January, for instance, four VC with AK-47s entered Duc Ky hamlet, less than a mile from Hill 55. They murdered two hamlet officials, wounded four other people, and escaped. Five days later, the hamlet chief of Phu Huong in Dai Loc District died in an ambush on Route 4. Finding a replacement for him proved difficult, because "no one wanted to be elected for fear of the VC." Occasionally, higher ranking officials fell victim. On 9 February, for example,

the Viet Cong blew up the national police activities chief for I Corps by planting a time bomb in his car.\*71

As the Marines reduced or withdrew their forces in contested areas, the enemy frequently responded with a show of strength. Nui Kim Son, a Viet Cong-infested hamlet at the gates of the 2d Battalion, 1st Marines base at Camp Lauer, was the scene of two such displays. On 4 March, three VC entered the military trash dump near the hamlet and killed a local woman who had been an informer for American intelligence. Two of the murderers were quickly captured, but according to a 2d Battalion report, many villagers blamed the woman's death on the Marines "because of their not providing adequate protection." On 27 March, after the 2d Battalion had pulled out of Camp Lauer, a Marine patrol in Nui Kim Son reported:

The complexion of Nui Kim Son has greatly changed in the last four days. All South V[ietnamese] flags and government posters on buildings have been etched out with black paint. All South V[ietnamese] flags are absent from village flag poles.<sup>72</sup>

During the first weeks of March, enemy military activity increased in Quang Nam. On the 4th, 16 rockets hit Da Nang. Throughout the lowlands, allied patrols had more frequent contact with small enemy units. Prisoners taken in some of these engagements claimed that they were reconnoitering objectives for a major attack. From these indications and from other bits of information, III MAF gradually pieced together the plan of a new Communist offensive, to be launched late in March and called the K-850 Campaign. Like previous offensives, this one was to consist of many small-scale ground and fire attacks on district headquarters, territorial force positions, and CUPP and CAP units, supplemented by rocket bombardment of Da Nang, Marble Mountain, and other installations. The enemy preparations seemed unusually extensive and thorough, indicating the probability of more numerous and possibly more sustained attacks than in past campaigns. Through the K-850

<sup>\*</sup>Some of this death and destruction may not have been the work of the Viet Cong. According to the PSA for Quang Nam, "at least" 15 incidents in late 1970 and early 1971 resulted from fights among the non-Communist political factions in the province. "Although these have been ascribed to the VC it later develops that they were most likely local power struggles." The advisor remarked, "another unique facet of Quang Nam politics is the willingness with which party members tend to settle their differences by force." CORDS Quang Nam Province Senior Advisor, Report for Period Ending 28Feb71, dtd 3Mar71, CMH Files.

Campaign, it appeared the VC/NVA had decided to progressively increase the pressure against the GVN forces and, in general, the Vietnamese pacification effort as final withdrawal of Marines from Quang Nam neared.

On 27 March, the 1st Marine Division put all subordinate units on alert against rocket and mortar attacks. The next night, with low-hanging clouds and darkness to cover their movements, Communist rocket units opened fire on Da Nang and nearby allied positions. Other enemy troops conducted attacks on the Duc Duc, Dien Ban, Dai Loc, and Que Son District Headquarters. The enemy also put heavy pressure on CUPP and CAP hamlets, and refugee resettlement villages and attempted to destroy bridges and cut highways throughout the province.<sup>73</sup>

The rocket bombardment, which began at 0157 on the 29th and continued sporadically until 0453, did relatively little damage. Twelve 122mm rockets fell on Da Nang airfield, wounding one U.S. Army soldier and killing two Vietnamese civilians and wounding six. The rockets damaged a building and an airplane. Six more rockets hit Marble Mountain airfield, but only two struck the base itself, slightly damaging two UH-1Es. Another wrecked an ARVN building, and the remaining three overshot and blew up harmlessly in the ocean off China Beach. Three more of the 122mm rockets exploded in Da Nang City. These destroyed an automobile and a civilian electrical shop.<sup>74</sup>

The heaviest ground attack occurred at Duc Duc District Headquarters, just west of An Hoa on the eastern bank of the Thu Bon River and within easy striking distance from Base Area 112.75 Here, for the first time since late 1970, Front 4 committed its sole remaining North Vietnamese regular infantry unit, the 38th Regiment. Local guerrillas had been preparing for this assault since early January, reconnoitering allied positions and readying the ground for the NVA advance. Beginning on 22 March, guerrillas made a series of minor attacks on Liberty Bridge and Liberty Road, the only land link between Duc Duc and allied reinforcements.

At 0210 on 29 March, an estimated two battalions of the 38th Regiment, consisting largely of well-equipped men fresh from North Vietnam, reinforced by two Viet Cong sapper battalions, stormed into Duc Duc. Under cover of a mortar and rocket barrage, the NVA struck directly at the district headquarters compound, while the sappers began systematically destroying the nearby civilian hamlets. Duc Duc's defenders,

the 412th Regional Force Company and the 123d Popular Force Platoon with a handful of U.S. Army advisors, fell back to the district headquarters compound and made a stand. Soon the North Vietnamese had them completely surrounded and enemy infantry had reached the perimeter defensive wire. The cloud ceiling, down to 600 or 800 feet, prevented fixed-wing air support from coming to the aid of the defenders.

With the villages around Duc Duc in flames, a VC flag flying near the district headquarters, and the district compound under intense attack, the 1st MAW's Black Hammer helicopter patrol intervened with decisive effect. That night, the patrol consisted of a UH-1E searchlight aircraft from HML-167, flown by Captain Thomas C. McDonald, the flight leader, and two of the new AH-1Js from HML-367, which that month had taken over the gunship assignment of the Black Hammer mission. Lieutenant Colonel Clifford E. Reese, commander of HML-367, was on board one of the gunships.\*

At 0245, the Black Hammer helicopters had just finished refuelling at Marble Mountain after completing their second patrol of the Rocket Belt. As enemy rockets began exploding on the airstrip, the Marines manned their helicopters and lifted off. The Da Nang DASC almost immediately instructed them to go to the aid of Duc Duc. Flying low under the clouds, the three helicopters, with running lights off to reduce danger from enemy antiaircraft fire, headed southwestward. In spite of this precaution, ground fire forced the aircraft to fly part of the way above the low clouds. The Marine aviators eventually located Duc Duc by the light from the burning villages, which created a bright spot in the overcast.

As the flight approached the town, Captain McDonald contacted the Army advisors by radio. They told him that the district compound was in danger of being overrun and gave the Marines clearance to fire at targets anywhere around their perimeter. The Army advisors also stated that they would be unable to direct air strikes from the ground, as enemy fire had forced them under cover.

McDonald's UH-1E led the Black Hammer helicopters to the attack. Dropping to altitudes as low as 400 feet and air speeds as slow as 60 miles per hour, the

<sup>\*</sup>Reese initially had piloted one of the AH-IJs, but before taking off for Duc Duc, he switched places with one of the other pilots and flew the Duc Duc mission as a copilot and gunner.

light Huey located targets, either by spotting gun flashes and tracers or by using its infrared observation device, and illuminated them with its Xenon searchlight. Then the Huey and the Sea Cobras fired long bursts down the light beam from machine guns and 20mm cannons. Initially, Lieutenant Colonel Reese's AH-1J concentrated cannon and rocket fire on a knoll just west of the compound where large flashes indicated a RPG or mortar position. The other aircraft sought and attacked targets all around the besieged district headquarters, at times firing at enemy no more than 30 meters from the South Vietnamese defenses. Heavy fire from automatic weapons on the ground answered that of the helicopters, especially when the searchlight was turned on. Several times, the helicopters had to climb back into the overcast to evade enemy gunners, but each time they returned to attack.

The Black Hammer flight remained in action over Duc Duc for almost four hours. Each of the AH-1Is flew back to Marble Mountain to refuel and rearm while the other stayed on station at Duc Duc. Finally, the North Vietnamese broke off the attack and fell back northwestward toward the Thu Bon River, where they began wading the river and paddling across in boats. The Huey and the gunships pursued the NVA. One of the AH-1J blasted the boats in midstream and sank at least six of them. North Vietnamese trying to cover the withdrawal continued to fire at the helicopters and finally wounded the light operator in the Huev. With the assault on Duc Duc beaten back and their own casualty to care for, the Marine aviators broke off the action and returned to Marble Mountain, landing at about 0600. In the night battle, the AH-IJs had expended 2,800 rounds of 20mm cannon ammunition and 64 rockets. They and the Huey were credited with four confirmed enemy dead, a probable 10 more killed, and six boats destroyed.76

The fighting around Duc Duc continued for the next several days. Units of the 51st ARVN regiment, sent to reinforce the RF and PF garrison, made repeated contact with the North Vietnamese. In the initial attack and the two days of fighting that followed, the North Vietnamese lost at least 59 men killed, while the RFs and PFs who had defended the compound suffered 20 dead and 26 wounded. Tragically 103 South Vietnamese civilians had died in the blazing hamlets; 96 more had been injured and 37 kidnapped. At least 1,500 homes had been demolished. In spite of government counterattacks, the 38th Regiment remained in the Duc Duc area, instead of pulling back

into the mountains. On 3 April, the NVA again attacked the Duc Duc District Headquarters and neighboring hamlets with 100 rounds of mortar fire, numerous RPG rounds, and small arms fire, but did not follow with another ground assault. It was clear by mid-April that the Communists had opened a new offensive area of operations west of An Hoa, and they appeared willing to remain in the Duc Duc District area and challenge the 51st ARVN.

Elsewhere in Quang Nam, units of the 2d Combined Action Group came under heavy pressure on the night of 28-29 March. Nine enemy rockets exploded near the group headquarters compound outside Hoi An, and most CACO command posts were attacked by small arms or mortar fire. Almost all of the CAPs in the field reported some type of enemy contact. Combined action units quickly counterattacked. For example, on the night of the 29th, a patrol from CAP 2-2-2 south of Dai Loc spotted a force of about 90 North Vietnamese and Viet Cong and called in helicopter gunships and artillery. Sweeping the area the next morning, the CAP found only one dead enemy, but local villagers reported that the shelling and strafing had wounded at least 40 more Communists. Two days later, elements of two CAPs sweeping near Dien Ban District Headquarters engaged about 50 North Vietnamese in a daylight battle. Supported by artillery and gunships, the Marines and PFs killed 16 enemy and captured five AK-47s, at a cost to themselves of one PF soldier killed. In the entire flurry of action during the opening days of the K-850 Campaign, the 2d CAG accounted for a total of 44 enemy dead and 12 prisoners. The Marines and their RF and PF counterparts in the same period lost one Marine and seven PFs killed and 14 Marines and 17 PFs wounded. The intensity of fighting experienced by the 2d CAG during March, particularly late in the month when the enemy's K-850 Campaign kicked off, was greater than any other period since the previous July.77

Enemy harassment of the Hai Van Pass continued during the first day of the offensive. On the morning of 30 March, the Viet Cong planted three command-detonated mines on the railroad track. At 0830, they exploded one mine under the locomotive of a passing train and opened fire on the train with mortars, RPGs, and small arms. Small arms fire also covered a nearby defensive position manned by RF soldiers and Marines from Company I, 3d Battalion, 1st Marines. The Marines and RFs returned fire and the Marines

called in a helicopter to evacuate eight RFs and one Marine wounded in the attack.

As the helicopter, a CH-46D from HMM-262 flown by First Lieutenant Steven A. Kux, settled down near the railroad tracks, the Viet Cong set off a second mine. The explosion shattered the helicopter, killing one Marine and wounding seven. Lieutenant Kux, painfully wounded in the face, helped pull survivors out of his wrecked aircraft. Then, using a Company I radio, he called in another medical evacuation flight and directed air strikes on suspected enemy positions and escape routes. The air strikes and a reaction force of Marines and RFs drove off the enemy. The Regional Force soldiers later found and removed the third mine planted on the tracks.<sup>78</sup>

During the first 10 days of April, the tempo of action gradually declined. The enemy launched more mortar, rocket, and occasional ground attacks on bridges, refugee villages, and RF and PF compounds. On 5 April, they fired seven rockets into Da Nang, and on the 8th and 9th they hit Hill 55 with eight rockets. They fired five or six more rockets into Da Nang on the 9th. None of the rocket attacks inflicted significant damage, and after the last bombardment of Da Nang the incidence of all forms of enemy action declined sharply.<sup>79</sup>

It was clear, neverthless, that the K-850 Campaign was far from over and that it had features different

from those of earlier such offensives. Throughout April, frequent contact between allied patrols and enemy groups indicated that most NVA and VC main force formations were remaining in the lowlands and being resupplied there, rather than pulling back into the mountains. Further, allied intelligence agencies believed that an element of Front 4 Headquarters now was operating in the populated areas. Most important, the North Vietnamese 38th Regiment had reappeared on the battlefield after a long absence and was continuing offensive operations around An Hoa and Duc Duc. All signs, in short, pointed toward further attacks in the coming weeks.<sup>80</sup>

The enemy, it seemed, had gained little in the first phase of the K-850 Campaign. They had overrun no major U.S. or South Vietnamese positions and had suffered much heavier losses in men and material than had the allies. III MAF conceded, nevertheless, that the enemy offensive was at least a limited political and psychological success, concluding:

... although casualties and damage inflicted during this phase of the K-850 Campaign were negligible in proportion to the ordnance and lives expended by the enemy, he may have succeeded psychologically. The Communists demonstrated again to the Vietnamese populace that they can and will carry out attacks despite the best efforts of the allied forces. Combined with the reduction in U.S. forces, this demonstration could have a detrimental effect on the ARVN, the Territorial Forces, and the civilian population.<sup>81</sup>

## CHAPTER 13

# The Marines Leave Da Nang

Operations in Southern Quang Nam, 1-13 April 1971
Activation and Operations of the 3d Marine Amphibious Brigade—The End of Keystone Robin Charlie
Keystone Oriole Alpha: The Final Stand-Down—Quang Nam after the Marines Left

Operations in Southern Quang Nam, 1-13 April 1971

By the beginning of April, the war in I Corps was reverting to its pre-Lam Son 719 pattern. Allied forces in Quang Tri and Thua Thien had resumed saturation patrolling of the populated lowlands. The allies also mounted occasional large-scale sweeps of enemy base areas, notably Operation Lam Son 720, a combined offensive in the A Shau and Da Krong Valleys by the 101st Airborne and 1st ARVN Divisions. In Quang Nam, as the first phase of the Communists' K-850 Campaign came to an end, the 51st ARVN Regiment and the South Vietnamese RFs and PFs began another in the Hoang Dieu series of operations. The new offensive, Operation Hoang Dieu 107, was aimed at destroying enemy local forces and protecting the rice harvest.

The 1st Marines, now the only active infantry unit of III MAF, kept up small-unit warfare within its TAOI. The regiment's 3d Battalion maintained its defense of the Hai Van Pass and patrolled and ambushed in the northwestern quadrant of the Rocket Belt. This battalion had a forward command post and one platoon on Hill 510 in the Que Sons, securing an artillery firebase and a haven for reconnaissance elements in Operation Imperial Lake. Also participating in Imperial Lake, the 1st Battalion used a platoon to protect a reconnaissance patrol base on western Charlie Ridge, while continuing to defend its portion of the Rocket Belt. The 2d Battalion coordinated the defense of Division Ridge and kept Marines in the field in pursuit of the VCI in the hamlets south of Da Nang.<sup>1</sup>

With the enemy regrouping after the initial surge of the K-850 offensive, the Marines had few contacts during the first two weeks of April, although boobytraps remained a threat. Marine artillery accounted for most of the casualties inflicted on the enemy. On 10 April, for example, Marines manning the Integrated Observation Device on Hill 65 spotted a substantial group of VC and NVA with packs and rifles in the Arizona Territory south of the Vu Gia River and called for a fire mission by howitzers of Battery A, 1st Battalion, 11th Marines. RFs and PFs from Dai

Loc District, sweeping the area after the artillery bombardment, reported finding 30 dead Viet Cong.<sup>2</sup>

In these final days before it redeployed, the 1st Marine Division made one last drive into Base Area 112 west of An Hoa. The division conducted this operation at the direction of MACV, which had received information indicating that U.S. and allied prisoners were being held in a camp hidden in the hills of western Quang Nam. III MAF intelligence officers doubted the accuracy of these reports, but the plight of American POWs had become a major political and diplomatic issue and the authorities in Saigon wanted to exploit even the slimmest chance of a spectacular rescue.\*3

Accordingly, III MAF on 7 April issued orders for the attack, codenamed Operation Scott Orchard. Under the plan, a provisional composite battery of 105mm and 155mm howitzers from the 1st Battalion, 11th Marines was to reopen FSB Dagger, used the previous autumn for Operation Catawba Falls. Then the 1st Marines, employing a reinforced infantry battalion, was to make a helicopter assault on the hills west of Dagger, where the POW camp was supposed to be located. The infantry were to search the area and, if they found an enemy prison compound, try to free the inmates. III MAF alerted Company A, 1st Medical Battalion to receive and care for diseased, dehydrated, and debilitated former prisoners and ordered that the attacking infantry be equipped with bolt cutters. Advance information about the operation was to be closely restricted and aerial reconnaissance of Dagger

<sup>\*</sup>Since the beginning of major American involvement in the war, the Communists had refused to follow the Geneva Convention provisions governing accounting for and communicating with prisoners of war. By mid-1970, under increasing pressure from families of captured servicemen, the Nixon administration had begun making a public issue of the problem, using the Paris peace talks and other diplomatic channels to press the Communists for information about prisoners. The administration also tried forceable rescue. In late November 1970, a force of Army Rangers and Special Forces troops made a helibotne raid on Son Tay POW camp about 20 miles from the center of Hanoi. The raiders got in and out without casualties, but found the camp empty. For a discussion of the Son Tay raid and the POW issue in general, see *Time*, 7Dec70, pp. 15-21.

and the objective area kept to a minimum to avoid warning the enemy.<sup>4</sup>

Despite the restriction on conducting an extensive reconnaissance of the target area, Lieutenant Colonel Roy E. Moss, then battalion commander of 2d Battalion, 1st Marines, recalled that he got permission from Colonel Kelley to make a quick aerial reconnaissance:

Major Connie Silard and Major Jim Clark, the pilots of the helicopter, and my S-3, Major Tom Campbell, departed the afternoon of the 6th in a UH-1E to have a look at the area. We knew we would have the opportunity to make only one pass over the objective area, locate the LZs, and plot them on our maps. The area near Fire Support Base Dagger was extremely dense and suitable LZs were extremely difficult to spot, even from the air. We quickly pinpointed six suitable landing zones and then exited the area quickly in order not to give away our future intentions.<sup>5</sup>

Following an intensive A-4 preparation of LZ Dagger, the operation began at 1045 on 7 April, when helicopters from MAG-16 inserted two teams from Company A, 1st Reconnaissance Battalion, a total of 14 Marines and two Navy corpsmen, on FSB Dagger. The teams searched the firebase for boobytraps and found two old ones. They had a brief firefight with three to five enemy, who quickly fled. A provisional platoon from Headquarters and Service Company of the 1st Battalion landed in trace of the reconnaissance units. At 1100, helicopters began bringing in two 105mm and four 155mm howitzers, with their crews and an infantry platoon. The infantry relieved the reconnaissance Marines in defense of the firebase. One of the reconnaissance teams was then lifted by helicopter to Hill 37, while the other remained at Dagger. By 1800, the artillery pieces were in position and ready to fire.

On the 8th, MAG-16 helicopters inserted five infantry companies (three from the 2d Battalion and one each from the 1st and 3d Battalions) under the operational control of the 2d Battalion, 1st Marines into six landing zones. The helicopters also brought in four more reconnaissance teams. This complicated lift into six widely separated landing zones, which involved 24 CH-46s, 4 CH-53s, and extensive fixed-wing and gunship support, went so smoothly that the 1st MAW command history called it "a culmination of six years' improvement on techniques and procedures developed prior to the Vietnam War."6

As III MAF had expected, Scott Orchard turned out to be a blow at empty air. From the 8th until the 11th, the rifle companies and reconnaissance teams maneuvered through the rugged country west of FSB Dag-

ger. They found a scattering of small abandoned camps and caches and a number of old trails, but no prison compounds. Except for a few patrols and stragglers, the North Vietnamese and Viet Cong had left long before the Marines arrived. The Marines did catch a few enemy. On 9 April, for example, a patrol from Company F encountered a lone Viet Cong in an open field and killed him. The following day, Marines from Company K spotted 15-30 North Vietnamese regulars wearing new-looking green utilities. In the ensuing exchange of fire, neither side suffered any casualties, and the NVA quickly withdrew. The artillery on FSB Dagger fired 235 missions during the operation, only two of them against observed enemy troops. On 11 April, helicopters lifted the infantry companies back to their battalion TAOI and extracted the reconnaissance teams. The artillery evacuated FSB Dagger the next day. In this, their last search and destroy operation of the war, the Marines suffered no casualties. They killed four enemy, three of them by artillery; took one prisoner; and captured 12 weapons and miscellaneous ammunition, food, clothing, and equipment. While establishing that Base Area 112 was still a very active line of communication, the Marines found no evidence of a prison camp.7

East of the area of Operation Scott Orchard, elements of the 196th Brigade began moving into the Oue Sons as the last Marine units cleared out of the mountains. On 6 April, part of Company B, 3d Battalion, 21st U.S. Infantry arrived by helicopter on Hill 510. The next day, Company C from the same battalion occupied Hill 65 to protect the Army artillery already stationed there. On 7 and 8 April, the forward command post, an infantry platoon from the 3d Battalion, 1st Marines, and a 105mm howitzer detachment from Battery C, 1st Battalion, 11th Marines left Hill 510, the infantry elements returning to their battalion TAOI and the artillery going to the Northern Artillery Cantonment (NAC). On the 11th, the Marine mortar detachment displaced from Hill 425 to NAC. This movement, and the evacuation of FSB Dagger the following day, completed the removal of Marines from the area of Quang Nam south of the Vu Gia and Thu Bon.

At 2400 on 13 April, as planned earlier, the 1st Marine Division formally transferred responsibility for this portion of its TAOI to the Americal Division. By that time, all four companies of the 3d Battalion, 21st Infantry were operating around Hill 510. Company, D of the 2d Battalion, 1st Infantry had taken over the



Department of the Defense Photo (USMC) A702695 Photo of MajGen Alan J. Armstrong, Commanding General, 1st Marine Aircraft Wing, and Commanding General, 3d Marine Amphibious Brigade.

defense of Hill 65. Elements of the 11th Combat Aviation Group, which would furnish helicopter support for the 196th Brigade, were moving in as tenants of MAG-16 at Marble Mountain.8

# Activation and Operations of the 3d Marine Amphibious Brigade

With all Marines out of southern Quang Nam and the units scheduled for Keystone Robin Charlie either embarked or completing preparations for embarkation, the time had come to activate the 3d Marine Amphibious Brigade.\* The organization, composition, and mission of the brigade had been laboriously worked out during the previous year. Planning and preparation for the activation of the brigade head-quarters had begun in early February 1971, because

the process would be complicated and had to be conducted without interrupting control of operations and redeployments.

On 5 February, Lieutenant General William K. Jones, CG FMFPac, sent Lieutenant General Robertson a plan and schedule for command restructuring in the Western Pacific, which established the framework for activating the MAB. Under this plan, III MAF Headquarters would relocate to Okinawa on 14 April, and assume command of the 3d Marine Division, 1st Marine Aircraft Wing, and 3d Force Service Regiment (FSR). The same day, the Commanding General, 1st MAW, Major General Alan J. Armstrong, was to activate and take command of the 3d MAB at Da Nang, while the bulk of the wing headquarters redeployed to Iwakuni, Japan to join the 1st MAW (Rear). The former rear headquarters then would become the new 1st MAW Headquarters and control all Marine air units in the Western Pacific outside Vietnam. Brigadier General Robert F. Conley, who commanded 1st MAW (Rear), was to become the new 1st MAW commander. Also on 14 April, Major General Widdecke and the 1st Marine Division Headquarters were to move to Camp Pendleton and assume command of all division units already there.9

Shortly before General Jones set the schedule for the changes of command, on 3 February, the 1st Marine Division and 1st MAW staffs began informal discussion of the problems to be expected in organizing the brigade headquarters and transferring control of operations to it. Following these discussions, on 24 February, Brigadier General Simmons, the ADC, proposed that a small staff be organized on 1 March to devote full time to MAB activation planning. This staff, Simmons said, should be headed by the brigade chief of staff-designate, Colonel Boris J. Frankovic, and should include "one well qualified planner, preferably of field-grade," each from III MAF, the division, the wing, and Force Logistic Command. Other officers designated for assignment to the MAB staff could participate in the planning as required. Simmons proposed that the tasks of the staff include preparation of MAB operational and administrative plans, review of the brigade's communications requirements, preliminary planning for the Increment VII redeployments, and preparation for activation of the MAB Headquarters and Headquarters Company and for the physical establishment of the MAB command post.10

III MAF accepted Brigadier General Simmon's proposal and on 27 February ordered activation of a

<sup>\*</sup>The 3d MAB had been previously activated on 7 May 1965 when it was landed at Chu Lai with a mission of occupying the terrain necessary to construct an expeditionary airfield. Commanded by Brigadier General Marion E. Carl, it consisted of RLT 4 (Colonel Edward P. Dupras, Jr.), the advance elements of MAG-12 (Colonel John D. Noble), and Naval Mobile Construction Battalion 10 (Commander John M. Bannister, CEC, USN).

3d MAB planning staff on 1 March. The planning staff immediately began work, its deliberations supplemented by occasional conferences to coordinate the interests of the major commands. By 10 March, the schedule for forming the brigade headquarters had taken shape. Officers of the MAF, division, and wing assigned to the brigade were to be available for parttime work on MAB matters between 10 March and 13 April. Between 3 and 13 April, the 3d MAB staff would begin moving into the 1st Marine Division CP, which had been established as the site for the brigade CP. The MAF, division, and wing headquarters were to continue their normal operations until activation of the brigade on 14 April, but beginning around 7 April, the MAF and wing would relocate key staff functions and personnel to the division CP.11

On 15 March Lieutenant General Jones, confirming what he had indicated in his 5 February message to Robertson, appointed Major General Alan J. Armstrong to command the brigade. Armstrong, a native of Nebraska, had been a Marine aviator since 1941. A World War II veteran, Armstrong had come to Vietnam in June 1970 to command the 1st MAW, after completing a tour as Director of the Marine Corps Development Center at Quantico. In selecting Armstrong to command the brigade, HQMC and FMFPac set aside Brigadier General Simmons, who had been the initial designee for the assignment. This decision resulted from continuing concern that a one-star general might be at a disadvantage in dealing with the other Services and other Service commands, especially the Seventh Air Force. Also, the Marines expected air operations to continue longer than ground operations under brigade control. They also thought aviation redeployment problems would be a principal concern of the MAB commander. Hence Armstrong was selected as brigade commander, with Brigadier General Simmons reassigned as his deputy.12

The brigade staff now took final shape. As early as July of the previous year, Marine planners had developed a list of MAB Headquarters billets and had decided which of them should be filled from the MAF, division, wing, and FLC staffs. Assignment of particular officers to jobs had begun late in 1970 and was largely completed by mid-March. In making these assignments, the planners emphasized continuity in key positions. According to General Simmons, "The function performed by the Headquarters, III Marine Amphibious Force, 1st Marine Aircraft Wing, and 1st Marine Division were all telescoped together, reduced

in scale, and in most cases continued to be performed by the same persons who had had the job all along." For example, four officers from the division FSCC remained in the MAB FSCC. The organizers of the MAB staff often disregarded the usual practice of automatically redeploying Marines with the least time remaining in their Southeast Asia tours. Major General Armstrong declared:

worked. We got some criticism . . . because they didn't put the right R{otation] T[our] D{ates} in the billets that would make the MAB come out even and the people all go home. . . . That's again the numbers business waggin' the operational dog. We put . . . the people . . . in there because they were people that were considered essential for the jobs, and that's why it went so well . . . . 13

The 3d MAB planning staff, in conjunction with representatives of the MAF, division, wing, and FLC, revised and refined the schedules previously drawn up for redeployment of the brigade. By 22 March, carrying out General Abram's 17 February directive to prepare for another withdrawal between 1 May and 30 June, the Marines had drafted a timetable under which the infantry and artillery units of the MAB would stand down between mid-April and mid-May. The aviation and support elements were to cease operations during late May and early June.<sup>14</sup>

Establishment of the 3d MAB Headquarters went forward on schedule. By 24 March, the Marines who were to operate the brigade communications center were in position at the division CP. Most of the equipment, facilities, and personnel to operate the MAB communications center came from Communication Support Company, 7th Communication Battalion. Early in April, the officers and enlisted men assigned to the various MAB staff sections began moving into the offices of their counterpart division staff sections. Many entire headquarters elements became part of the MAB staff. The III MAF G-4 section, for example, transferred its real estate management, equipment redistribution, ordnance, and embarkation offices intact to 3d MAB Headquarters. On 8 April, the brigade staff took charge of conducting the daily operations briefing for General Robertson; on the same day, the 1st MAW began directing tactical air operations from the division command post.15

As the MAB Headquarters was taking shape, President Nixon on 7 April announced the long-expected new troop withdrawal which was to end the brigade's short operational life. Declaring to the American peo-

ple that "The American involvement in Vietnam is coming to an end," Nixon directed the removal of another 100,000 U.S. military personnel from Vietnam by 1 December 1971, an action which would reduce the total number of Americans in the country to 184,000. Under JCS instructions, MACV promptly issued orders to execute the first increment of the new withdrawal, codenamed Keystone Oriole Alpha. As previously planned, Keystone Oriole Alpha was to involve 29,000 men, including all of the 3d MAB.

III MAF began implementing the MAB redeployment plan developed during March, actually initiating the Keystone Oriole Alpha withdrawal before all the units in Keystone Robin Charlie had left Vietnam. On 13 April the 1st Battalion, 1st Marines ceased combat operations and moved to Hill 34 to prepare for embarkation. The same day, Battery A, 1st Battalion, 11th Marines stood down at Hill 65 and displaced to the Northern Artillery Cantonment, while the 2d CAG deactivated CACOs 2-1 and 2-2, with a total of 10 CAPs. The CAG now had only three CACOs still in operation. 16

On the 12th and 13th, the 2d Battalion, 1st Marines redistributed its forces to fill in for the 1st Battalion. Company E of the 2d Battalion occupied Hill 10, just northeast of the foot of Charlie Ridge. A platoon of Company F, heavily reinforced with machine gun and mortar detachments and accompanied by an artillery forward observer and a forward air controller, took position on Hill 785, about five miles northeast of Thuong Duc. This platoon was to protect a patrol base for reconnaissance teams involved in Operation Imperial Lake. Company G sent a platoon to hold Hill 270, an artillery position in the foothills west of Hill 10. The rest of the 2d Battalion, which was scheduled to be the last operational Marine infantry battalion in Vietnam, continued operations south of Da Nang and on Division Ridge.17

On 14 April, with all sections of the brigade staff in position and functioning, Lieutenant General Robertson officially activated the 3d Marine Amphibious Brigade during a ceremony at Camp Jay K. Books, the Force Logistic Command compound northwest of Da Nang. At the same time, Major General Armstrong assumed command of the MAB, to which Robertson assigned all III MAF units remaining in Vietnam. The ceremony, attended by over 100 high-ranking U.S. and South Vietnamese guests, included a parade by units representing the MAF, division, wing, and FLC and a fly-over by 16 1st MAW aircraft. In his brief remarks

before the troops passed in review, Robertson paid tribute to the Marines of III MAF. "Results of our combined efforts," he said, "surround us in the security in the hillsides, construction of buildings and prosperity of the people. . . . I am proud to have been a partner in that effort." 18

Following the ceremony, Robertson, with his staff and the III MAF flag, boarded a plane for Okinawa, where he was to reestablish force headquarters. Major General Widdecke left for Camp Pendleton the same day, stopping enroute for a debrief at FMFPac in Camp Smith, Hawaii. General Widdecke's arrival in Camp Pendleton was preceded by his chief of staff, Colonel Don B. Blanchard, who traveled on a separate aircraft with the division colors. Colonel Blanchard had also served with the 1st Marine Division at Guadalcanal as a corporal and in Korea as a captain.19 The 1st MAW staff took the wing colors to Iwakuni, where the 1st MAW (Rear), the nucleus of the new wing headquarters, was located.\* For each command, the removal of its colors from Vietnam signalled the formal end of its war service.

With the departure of the colors on 14 April, almost six years of war ended for the III Marine Amphibious Force. Activated at Da Nang on 7 May 1965 to command the 3d Marine Division and 1st Marine Aircraft Wing, the force had grown with the expanding American involvement in the war until it reached a 1968 peak strength of over 150,000 Marine, Army, and Navy personnel, in two reinforced Marine divisions, a Marine aircraft wing, and two Army divisions. III MAF had been one of the largest Marine combat commands ever established and had directed most of the American war effort in northern South Vietnam. Now it would revert to the MAF role of directing the Marine ready forces in the Western Pacific.

The 3d Marine Amphibious Brigade began its brief existence with a total strength of 1,322 Marine and 124 Navy officers and 13,359 Marine and 711 Navy enlisted men. Its infantry element consisted of Colonel Kelley's 1st Marines, the 1st Battalion of which already had stood down. The 1st Battalion, 11th Marines and the 3d 8-inch Howitzer Battery constituted the brigade artillery. Company A (Rein), 1st Reconnaissance Battalion furnished long-range patrol capability. The 1st

<sup>\*</sup>Although 1st MAW elements served in Vietnam since 1962, the wing headquarters did not move to Da Nang until 1965. The 1st MAW then evolved into the largest wing in Marine history, including fixed-wing and helicopter squadrons, and air control assets for air defense and air-ground coordination.



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LtGen Donn J. Robertson, Commanding General, III Marine Amphibious Force, says farewell to LtGen Hoang Xung Lam, Commanding General, Military Region 1. LtGen Robertson and his staff departed Vietnam on 14 April and moved his "flag" to Okinawa.

Military Police Battalion remained to protect the Da Nang Vital Area, and the 2d CAG continued its hamlet security efforts. Supporting units of the brigade included a Communication Support Company from the 7th Communication Battalion and one reinforced company each from the 1st Medical Battalion, 1st Motor Transport Battalion, 1st Shore Party Battalion, and the 1st and 7th Engineer Battalions. In Brigadier General James R. Jones's Force Logistic Command, the flag of the 1st Force Service Regiment had been moved to Camp Pendleton in Keystone Robin Charlie. FLC now had separate headquarters, supply, and maintenance battalions under its command.

The brigade aviation element, the organization of which had been the subject of so much debate during the long planning process, consisted of two aircraft groups. MAG-11, under Colonel Albert C. Pommerenk, included VMA-311, VMA(AW)-225, and a detachment of OV-10s under H&MS-11. Colonel Lewis C. Street III's MAG-16 consisted of HMH-463.

HMLs -167 and -367, and HMMs -262 and -263. This disproportionately large helicopter complement resulted from the redeployment postponements caused by Lam Son 719. Air operations were now controlled by the aviation section of the MAB staff, with tactical air support directed by a direct air support center (DASC)\* located at the brigade CP.20

Brigade operations began with additional reductions and stand-downs. On 15 April, the last four CUPP squads of the 1st Marines, which had been protecting hamlets just north of Hill 55, was deactivated, concluding the Combined Unit Pacification Program. Between 20 April and the end of the month, VMA(AW)-225, one of MAG-11's two fixed-wing squadrons, ceased combat operations and redeployed to MCAS El Toro.<sup>21</sup>

The remaining two active infantry battalions of the

<sup>\*</sup>This DASC also discharged the functions of the Tactical Air Direction Center (TADC). See Chapter 15.

1st Marines continued saturation patrolling within their TAOIs. The 2d Battalion, besides operating south of Da Nang and around Hill 10, kept platoons on Hills 785 and 270 and coordinated the defense of Division (now Brigade) Ridge by the units stationed there. The 3d Battalion used one of its companies in rotation as regimental reserve and quick reaction force and kept the other three in the field north and northwest of Da Nang. Marines of both batalions had few contacts with the enemy. Those that did occur, following the by now usual pattern, were brief exchanges of fire with small Communist groups that showed no disposition to stand and fight. Reconnaissance teams scouted Charlie Ridge and Elephant Valley, sighting a few enemy but experiencing no combat. The 2d CAG, with its remaining three CACOs operating in Dien Ban, Hieu Nhon, and Hoa Vang Districts close in around Da Nang, also reported only light contact.<sup>22</sup>

The brigade artillery unit, the 1st Battalion, 11th Marines, had only two 105mm batteries, Battery B on Hill 55 and Battery C at the Northern Artillery Cantonment (NAC). Battery C also maintained a two-howitzer detachment on Hill 270. Each 105mm howitzer battery had an attached platoon of two 155mm howitzers. The 107mm mortar battery was located at the Northern Artillery Cantonment, and the 3d 8-inch Howitzer Battery had two platoons deployed at the NAC and a third on Hill 55. Battery D, 1st Battalion, 82d U.S. Artillery on Hill 65 remained under operational control of the Marine artillery battalion until 16 April, when it passed to XXIV Corps Artillery control.

Between 14 and 30 April, these artillery units fired 1,229 missions in the 3d MAB TAOI, expending 3,869 rounds. Many of these missions were fired at a suspected enemy rocket storage site near La Bong village, about five miles southwest of Da Nang. This village lay in a swampy area along the banks of the Yen River, a small river often used by the Communists to move rockets into firing range of the city and airbase. On 22 and 23 April and again on the 25th and the 26th, Company H, 2d Battalion, 1st Marines directed fire into the La Bong area, causing 42 major and 139 minor secondary explosions.<sup>23</sup>

During the MAB's first two weeks of operation, the ARVN and the U.S. Army took over the defense of most of Quang Nam. All four of the 51st ARVN Regiment's battalions were in the field southwest of the Marines, sweeping enemy-infested areas around Hill 55, An Hoa, and in the Arizona Territory. Regional

and Popular Forces assumed a steadily increasing share of responsibility for patrolling the pacified and semi-pacified portions of the province. The South Vietnamese, both regulars, RFs and PFs, encountered substantial action, reporting 435 enemy killed, 200 VC suspects seized, and 152 weapons captured during March and April.<sup>24</sup>

The U.S. Army presence in Quang Nam expanded rapidly. By 14 April, Battery D, 1st Battalion, 82d U.S. Artillery had relieved the 1st Marines as the command responsible for defense of Hill 65. In preparation for the 1 May Army takeover of most of Quang Nam, the 3d MAB and the 196th Brigade agreed on 21 April that the Army brigade would begin operations on Charlie Ridge immediately and that on the 27th, an Army battalion would deploy in a two-and-one-half-square-mile area around Hill 350 in the northwestern part of the 3d Battalion, 1st Marines TAOI.

Carrying out this agreement, on 21-22 April, the 2d Battalion, 1st Marines removed its platoons from Hills 785 and 270, and the howitzer detachment displaced from Hill 270 to NAC. Elements of the 1st Battalion, 46th U.S. Infantry immediately occupied Hill 270. On the 27th, the 4th Battalion, 31st U.S. Infantry began moving onto Hill 350. Two days later, the 196th Brigade assumed responsibility for all of Quang Nam Province north of the Vu Gia and Thu Bon Rivers and west of a north-south line about 10 miles west of Da Nang.<sup>25</sup>

While the combat units of the 196th Brigade deployed in the field, the rear elements of the infantry battalions and the artillery, headquarters, and support units began moving into Marine cantonments on Brigade Ridge. Between 21 and 30 April, the Army took possession of the camps of the 1st Medical Battalion and the 11th Motor Transport Battalion, the former 11th Marines CP, the old 1st Reconnaissance Battalion base at Camp Reasoner, and the 1st Marines headquarters compound at Camp Perdue. Marines continued to occupy portions of these installations, but now as tenants in Army-controlled facilities. All formerly Marine-established and occupied facilities for which no tenant, U.S. Army or RVNAF, was available or which were of no lasting "military or economic value" were dismantled to avoid the requirement to garrison them with security forces.26

As the allies carried out these troop redeployments, the North Vietnamese and Viet Cong opened Phase Two of their K-850 offensive on 26 April, with another surge of rocket, mortar, and small ground attacks

throughout Quang Nam. In spite of the Marines' preemptive shelling of the La Bong storage area, the Communists fired nine rockets at Da Nang Air Base and Marble Mountain in the small hours of the 26th, wounding seven soldiers. At the same time, the NVA and VC hit Dien Ban District Headquarters with a 60-round mortar barrage which killed one civilian, wounded another, and destroyed a number of homes. At 0210 on the 27th, the enemy fired four more 122mm rockets at Da Nang airfield. These rockets ignited two fuel storage tanks, and over 500,000 gallons of jet fuel and aviation gasoline went up in flames. With the exception of the rocket attacks, the Communists continued to direct most of their attention to South Vietnamese units and installations while avoiding American positions. According to the 3d MAB intelligence staff, the second surge of the K-850 offensive "did not reach the levels planned due to coordination and logistic problems, resulting in a low level of activity throughout the province."27

The Communists had more success with terrorism and political agitation, which they intensified in connection with the offensive. On 25 April, for instance, 15 Viet Cong entered Kim Lien, a valley in the 3d Battalion, 1st Marines TAOI where the battalion had conducted intensive pacification operations. The guerrillas killed the hamlet chief and five people's self defense force members and wounded three other PSDF troops before withdrawing. On the night of 26-27 April, about 60 NVA and VC invaded two hamlets of Hoa Vinh Village, just south of the Cau Do River, collected rice and money, and held propaganda meetings. The enemy attempted the same kind of incursion at Hoa Thanh, another village in the 3d Battalion's TAOI, but there Popular Force troops repelled the intruders.28

Unaffected by the Communist offensive, the 196th Brigade continued its movement into Quang Nam and by 30 April had deployed three of its four infantry battalions in the province. All four companies of the 4th Battalion, 31st Infantry were patrolling around Hill 350. The 1st Battalion, 46th Infantry had established its command post on Hill 270 and was maneuvering its companies on western Charlie Ridge. The 3d Battalion, 21st Infantry continued to sweep the Que Sons from its base on Hill 510. The brigade's remaining infantry battalion, the 2d of the 1st U.S. Infantry occupied Hill 65 with one company. Another company was in the field northeast of An Hoa, while the rest of the battalion completed preparations to leave its former TAOI in Quang Tin. As planned, all of the

196th Brigade was moving into the mountains west and southwest of Da Nang, leaving protection of the lowlands to the ARVN, the RFs and PFs, and the remaining Marines.<sup>29</sup>

With Army troops moving into position on the edges of the 3d MAB TAOI and the enemy avoiding Marine units, 3d MAB operations resulted in few casualties on either side. Between 14 and 30 April, the brigade killed only 22 Viet Cong and captured 10 individual weapons. With Marine units of 3d MAB moving progressively into a stand-down posture during April, patrol activities numbered just over 2,000 where as in February, with more ground combat units available and patrolling more intensely, more than 6,000 were recorded.<sup>30</sup> Reflecting the decline in activity, Marine casualties in the same period amounted to two dead and 45 wounded.

The two aircraft groups of the MAB kept up the tempo of operations. Even with VMA(AW)-225 standing down on the 20th, jets of MAG-11 flew 436 sorties in the last two weeks of April. They conducted 44 of these in support of Imperial Lake and most of the rest for other Marine operations in Quang Nam and U.S. Army and ARVN offensives elsewhere in Military Region 1. MAG-16's helicopters completed 10,473 sorties in the same period, carrying 1,064 tons of cargo and 12,154 passengers.<sup>31</sup>

## The End of Keystone Robin Charlie

During the last days of April, the remaining Marines scheduled for Keystone Robin Charlie embarked. Between 14 and 25 April, the 1st Battalion, 5th Marines; the 1st Medical Battalion (-); the 11th Motor Transport Battalion; and the Headquarters Battalion (-), 1st Marine Division left Da Nang by ship and plane. The surface embarkation, coordinated by the Army Port Authority, proceeded well enough but not without a problem or two. The staging areas for unit equipment to be reloaded were selected to conform with the anticipated piers where ships for dedicated units were supposed to tie up. When the ships arrived, however, recalled Lieutenant Colonel Robert E. Wehrle, commanding officer of Headquarters Battalion, 1st Marine Division:

It appeared almost as if it was a random selection by the pilot as to which pier he put the ship on. There was no match up between the staging area at the head of the pier and the ship that was on the pier. As a consequence, we had a tremendous cross traffic of material handling equipment attempting to move gear from a staging area to its respective ships.\*

Wehrle said that the ships could have been backed out into the stream but then, "we would probably have had some irate Navy captains on our hands if that requirement would have been established. And they were trying to meet sailing deadlines also." Wehrle concluded that "our greatest salvation was that it was an administrative load and not a combat load." 32

During the same period, Marine Wing Headquarters Group (MWHG) 11, Headquarters and Headquarters Squadrons (H&HSs) 1 (-) and 18 (-), Marine Wing Facilities Squadron (MWFS) 1, and Marine Wing Communications Squadron (MWCS) 1, left for Japan. The last of 12 embarkation units of men and equipment being redeployed by sea sailed from Da Nang on 23-24 April in four amphibious ships.\*\* By the 30 April deadline, the III MAF/3d MAB part of this redeployment phase had been concluded; 11,911 more Marine and Navy officers and men and 383,494 cubic feet of cargo had been moved out of Vietnam.<sup>33</sup>

As if to furnish a dramatic ending for Keystone Robin Charlie, on 30 April President Nixon welcomed the 1st Marine Division home during an elaborate ceremony at Camp Pendleton. The President; his daughter Tricia Nixon; Undersecretary of the Navy John W. Warner; Admiral John S. McCain, CinCPac; and Admiral Bernard A. Clarey, Commander-in-Chief Pacific Fleet (ComPacFlt), were present at this special review. The Commandant, General Leonard F. Chapman, Jr.; Lieutenant General Jones, CGFMFPac; and Major General George S. Bowman, Jr., Commanding General, Camp Pendleton, attended for the Marine Corps. Major General Widdecke, his staff, and the commander, staff, colors, and a ceremonial platoon from each regiment and battalion, including those still in Vietnam, represented the 1st Division. The 1st Marines was represented by a platoon from the 3d Marines, and the 5th Marines' ceremonial unit was composed partly of men from the 7th Marines.

Before a crowd of 15,000 cheering Marines, Marine families, and local school children bused in for the occasion, the President presented the 1st Marine Division with its second Presidential Unit Citation for Vietnam service, the eighth PUC to be received by the division. In his remarks to the division, Nixon declared:

As I welcome you home, I say to you that the Nation is proud of you. I can say to you, you come home mission accomplished . . . . Certainly in terms of personal heroism there is no question about the verdict of history.<sup>34</sup>

After Nixon's speech, the ceremonial units from the division passed in review as aircraft from the 3d Marine Aircraft Wing flew overhead. Later on the 30th, at a separate ceremony, Major General Widdecke, who had led the division throughout its last year of combat in Vietnam, turned over command to his ADC, Brigadier General Ross T. Dwyer, and prepared to assume command of I MAF, headquartered at Pendleton, which controlled Marine air and ground units on the west coast. The 1st Marine Division, most units of which had returned from Vietnam at much reduced strength, now would begin rebuilding and reestablishing combat readiness.<sup>35</sup>

Keystone Oriole Alpha: The Final Stand-Down

On 1 May, the 3d Marine Amphibious Brigade began its last week of ground operations in Vietnam, and the next-to-last phase of its withdrawal from combat and turnover of Quang Nam to the 196th Brigade. The 3d Battalion, 1st Marines stood down on the 1st and moved with three of its companies to Camp 14 on Brigade Ridge to prepare for embarkation. The 1st Marines Headquarters ceased operations that same day, transferring direction of air and artillery support for its remaining infantry in the field to the headquarters of the 2d Battalion. Also on 1 May, Battery C and the Mortar Battery of the 1st Battalion, 11th Marines ended operations at the Northern Artillery Cantonment, although two 155mm howitzers of Battery C continued to conduct fire missions for another week. The 3d 8-inch Howitzer Battery stood down and withdrew its platoon from Hill 55 to Camp Faulkner near Marble Mountain. Company A (Rein), 1st Reconnaissance Battalion ended tactical operations on the 1st, but was to remain active until its previously scheduled stand-down date of 7 May. On 1 May, the 2d CAG deactivated CACOs 2-4 and 2-7, with 10 combined action platoons; only CACO 2-3, with six CAPs, now was left in the field. MAG-16's HMM-263 stood down and began preparing its CH-46s and equipment for embarkation.36

As these units ceased operations, the 196th Brigade extended its TAOI to cover all of Quang Nam outside the boundaries of Hoa Vang District. The Army brigade's attached armored cavalry squadron, the 1st Squadron, 1st U.S. Cavalry began operations in the

<sup>\*</sup>For details on embarkation see Chapter 19.

<sup>\*\*</sup>USS Cleveland (LPD 7), USS Anchorage (LSD 36), USS Fresno (LST 1182), and USS Durham (LKA 114).

province on the 1st. Its CP was at Camp Faulkner and two troops, A and B, were in the field near the Thu Bon River,<sup>37</sup>

Within Hoa Vang District, Lieutenant Colonel Roy E. Moss's 2d Battalion, 1st Marines reshuffled its companies to protect Brigade Ridge and continue saturation patrolling of the small portion of the Rocket Belt left to the Marines. The battalion had six rifle companies under its control, its own four organic companies, a provisional Brigade Ridge defense company drawn from its headquarters and rear elements, and Company K of the 3d Battalion. The 1st Military Police Battalion continued to protect Da Nang airfield. Outside the 3d MAB TAOI, the six CAPs of CACO 2-3 guarded hamlets in Dien Ban District; and Battery B, 1st Battalion, 11th Marines stayed in position on Hill 55. This battery, reinforced by the 155mm howitzer platoon of Battery C at NAC, now provided all of the MAB's artillery support.

The last week of ground operations went quietly for the Marines. The 2d Battalion and the 1st MP Battalion conducted 117 small-unit patrols and 129 squad ambushes between 1 and 7 May, with no enemy contact and no encounters with boobytraps. CACO 2-3 also had a relatively uneventful week, reporting a few minor enemy attacks by fire. MAG-11, with only VMA-311 still operational, flew 80 sorties and dropped 128.7 tons of ordnance during the week, while helicopters of MAG-16 flew 3,691 sorties and carried 5,691 tons of cargo and 6,563 passengers.<sup>38</sup>

During the first days of May, the North Vietnamese and Viet Cong continued Phase Two of their K-850 Campaign. Their pressure on South Vietnamese forces reached a climax on the 2d and 3d, when at least 200 men, later identified as members of the 38th NVA Regiment and the Q-83d Viet Cong Battalion, launched a series of mortar and ground attacks on RF and PF positions in Dai Loc District, southwest of Da Nang. In the heaviest of these assaults, at 0245 on the 2d, a reinforced company of VC infantry and sappers stormed Dai Loc District Headquarters near Hill 37 behind a mortar and rocket barrage. The Communists managed to blow up a bridge and an ammunition dump, but were driven off by Regional Force troops. In the fight at the district headquarters and in other small engagements, the Dai Loc Regional and Popular Forces, almost all of whom had been trained by Marine combined action units, gave a good account of themselves. Fighting largely without U.S. air support, which was hampered by cloudy weather, the RFs and PFs in two days killed 95 Communists and captured 43 individual and crew-served weapons, at a cost of 15 dead and 43 wounded. This success, and other minor RF and PF victories throughout the province during the spring, appeared to vindicate the Marines' long, patient effort to improve the once-neglected local forces.<sup>39</sup>

Occasional rocket attacks reminded 3d MAB Marines of the continuing Communist offensive. On 3 May, eight rockets landed on Hill 55, destroying an ARVN bunker and killing one South Vietnamese soldier and wounding five others and one U.S. Marine. The enemy fired two rocket salvos at Da Nang Airbase on the 5th, three missiles at 0400 and six more at 2300. Most of the rockets overshot the airfield and exploded in Da Nang City, where they killed six Vietnamese civilians and injured six others and three ARVN soldiers.40 The overall impact of enemy attacks was negligible and seemed to demonstrate the VC/NVA reluctance to do more than harass the withdrawing Marines, knowing that with the Marine removal from the Da Nang TAOR remaining allied targets would be potentially more lucrative.

During the first week of May, the last week of combat operations, the Assistant Commandant of the Marine Corps, General Raymond G. Davis, who was visiting Vietnam, accepted an invitation from Lieutenant Colonel Roy E. Moss, commander of the 2d Battalion, 1st Marines, to stop for lunch with Company F which was to be the last combat unit of the battalion withdrawn from operations. Moss recalled:

General Davis accepted this offer and arrived at the 2d Battalion command post about 1130 and we then flew to Foxtrot's company position a few miles south of Hill 34. Capt Mark [T.] Hehnen, the Foxtrot Company commander, had been alerted to these plans and had a lunch of "C" rations and hamburger patties waiting upon our arrival. Of course, Captain Hehnen had ensured tight security around the area and, for about one-half hour, General Davis, Lieutenant Colonel C. [Clyde] D. Dean and myself, and a few members of the company had lunch and an interesting conversation with the Assistant Commandant of the Marine Corps. Needless to say, we didn't carry on too long and, after we finished chatting, boarded helicopters back to the 2d Battalion CP where I departed and General Davis continued on his planned itinerary.

On 7 May, all units of the 3d MAB ceased combat operations. The 2d Battalion, 1st Marines turned defense of Brigade Ridge over to two companies from the 196th Brigade and withdrew to Hill 34 to stand down. At noon of the previous day, Lieutenant Colonel Bruce F. Ogden, commander of the 1st Battalion, 11th

Marines fired the last Marine artillery round of the war from one of the 155mm howitzers of Battery C at the NAC. On the 7th, Battery B, and the 1st Battalion Headquarters Battery stood down: and Battery B displaced from Hill 55 to Camp Books to prepare for embarkation and the transfer of its weapons to the Vietnamese Marine Corps. That same day, the 2d Combined Action Group deactivated its last CACO. 2-3. The 1st Military Police Battalion turned over defense of Da Nang Airbase to the 104th Regional Force Battalion and the 796th RF Company, but, unlike most of the 3d MAB units ceasing operations on 7 May, the MP battalion remained active. It deployed companies to protect the Force Logistic Command installations where the other Marine organizations were standing down.42

At 1200 on the 7th, the 3d MAB terminated Operation Imperial Lake. This operation, which had begun in the Que Sons on 1 September of the previous year, eventually had involved elements of all three regiments of the 1st Marine Division. In the final days of operations in Quang Nam, it had been extended to cover all patrol and ambush activity. In almost nine months, Marines in Imperial Lake had killed 126 North Vietnamese and 179 Viet Cong and captured 215 individual and 16 crew-served weapons, while losing 24 Marines and two Navy corpsmen killed and 170 Marines and three corpsmen wounded. The conclusion of this long running search and destroy operation graphically demonstrated that, for Marines, the ground war in Vietnam was over.<sup>43</sup>

Marine fixed-wing aviation operations also ended on 7 May. After flying a final 14 sorties over Laos in support of the Seventh Air Force, VMA-311 stood down, as did H&MS-11's detachment of OV-10As. HMM-262 stood down on the 7th, but the other helicopter squadrons of MAG-16 remained operational for noncombat missions.<sup>44</sup>

With Marine combat operations at an end, on the 7th the 196th Brigade enlarged its TAOI again to include Hoa Vang District and Da Nang Airbase and city. The Army brigade also took possession of the former 1st Marine Division command post, with 3d MAB Headquarters sharing the facility. The remaining infantry battalion of the 196th Brigade, the 2d Battalion, 1st U.S. Infantry completed its displacement northward from Quang Tin. By 8 May, this battalion had set up its CP on Hill 151, named LZ Chloe by the Army, about four miles east of An Hoa in the northern foothills of the Que Sons. One company of

the 2d Battalion continued to garrison Hill 65, another was located at Da Nang, and the remaining two were in the field near Hill 151.45

The 1st Marines was the last of eight Marine infantry regiments to leave Vietnam. The last detachment of the regiment's 1st Battalion, which had stood down on 13 April, left Da Nang on 3 May. By the 13th, the regimental headquarters company and the 3d Battalion were on their way to the United States. The regiment had entered Vietnam in 1965 and 1966, with one battalion landing at each of the then three major Marine enclaves: Chu Lai, Hue/Phu Bai, and Da Nang. In the next six years, the 1st Marines had taken part in over 50 operations, including the battle of Hue during the 1968 Communist Tet offensive. Late that same year, the regiment had moved to Quang Nam, participating in Operation Meade River, one of the largest Marine helicopter assaults of the war, in which over 1.000 VC/NVA were killed and 299 captured. The regiment spent the next two and one-half years before its withdrawal rooting the enemy out of Ouang Nam Province.46

The 1st Battalion, 11th Marines also quickly redeployed. Battery A of the battalion had embarked for Camp Pendleton on 1 May. On the 10th, Head-quarters Battery, Battery C, and the Mortar Battery moved to Camp Books from the Northern Artillery Cantonment, which was then transferred to the ARVN. Three days later, the battalion command group and the colors boarded a plane for the United States, while other personnel and equipment of Head-quarters Battery, Battery C, and the Mortar Battery left Da Nang on board the USS Ogden (LPD 5).<sup>47</sup>

Still other ground and air units of the MAB left Vietnam in the week after the termination of offensive operations. Between 10 and 13 May, Company A (Reinforced), 1st Reconnaissance Battalion, redeployed to Camp Pendleton. VMA-311 flew its planes to Iwakuni on the 12th, and the following day HMMs -262 and -263 completed embarkation, respectively for Hawaii and Quantico. These early departures were in accord with Lieutenant General Robertson's view that "when the time comes to withdraw from an area like that, keep active up to the last minute, then roll up and get the devil out." 48

By 14 May, the units of 3d MAB still in Vietnam were all in the positions they would occupy until they redeployed. The two aircraft groups remained at the airfields from which they had operated, MAG-11 at Da Nang Airbase and MAG-16 at Marble Mountain.

On Hill 34, the 2d Battalion, 1st Marines and the 3d 8-inch Howitzer Battery, which had moved from Camp Faulkner, were completing embarkation preparations. Battery B, 1st Battalion, 11th Marines and the engineer, shore party, and motor transport companies of the 3d MAB all were at Camp Books. Company A, 1st Medical Battalion remained at the battalion's former cantonment on Brigade Ridge. The 1st MP Battalion Headquarters was at Camp Stokes near Da Nang airfield. The Force Logistic Command continued to operate embarkation facilities at Camp Haskins on Red Beach. All of these organizations, aided by the MPs, provided protection for their camps, but beyond their perimeters the ground was controlled by the Quang Nam Regional and Popular Forces, the ARVN, and the 196th Brigade.49

As unit after unit stood down and redeployed, Marine civic action came to an end. Most organizations continued their efforts in this field until late in the process of preparing to redeploy, concentrating on providing material for village self-help projects and conducting frequent MedCaps. They tried to finish long-term construction and other projects before they departed. After its activation, the 3d MAB continued spending public and private civic action funds that the MAF, division, and wing had left behind. The brigade used a large portion of this money to buy building, plumbing, and electrical supplies for the Quang Tri Child Care Center, the former 3d Marine Division Memorial Children's Hospital, which was now nearing completion.

Two ceremonies in mid-May signalled the end of the long, often frustrating, and occasionally rewarding Marine pacification and civic action campaign. On 11 May, the 2d Combined Action Group Headquarters departed its compound near Hoi An, after a farewell parade and a speech of gratitude and good wishes from Colonel Le Tri Tin, the Quang Nam Province Chief. Three days later, at Quang Tri, Major General Armstrong participated in the dedication of the Child Care Center, a combined orphanage, maternity clinic, and secondary school dormitory. By the end of May, the brigade could report, "3d MAB civic action program terminated." 50

During the final weeks of May, the two Marine aircraft groups ceased operations and turned their facilities over to the U.S. Air Force and the Army. Both of the MAG-11 jet squadrons had redeployed during the first part of the month. On 19 May, the ground elements of the group, H&MS-11 and MABS-11, ceased

operations. Two days later, Colonel Pommerenk transferred control of the MAG-11 area on the west side of Da Nang airfield to the Air Force, although units of MAG-11 remained until early June completing embarkation preparations.

At Marble Mountain, HMH-463 stood down on 18 May. Eight days later, HMLs -167 and -367 ended operations, as did H&MS-16 and MABS-16. Two Hueys of HML-167 remained operational until 15 June to support the MAB headquarters, but the rest of the helicopter group concentrated on readying equipment and aircraft for embarkation. On 1 June, Colonel Street turned possession of Marble Mountain Air Facility over to the Army's 11th Combat Aviation Group.<sup>51</sup>

While the aircraft groups completed their stand-down procedures, most of the remaining infantry and artillery of the 3d MAB left Vietnam. On 19 May, Lieutenant Colonel Moss, the command group, and the colors of the 2d Battalion, 1st Marines boarded a plane for Camp Pendleton. The rest of the battalion followed in several detachments. On 1 June, the last 186 officers and men of the last Marine infantry battalion in Vietnam left Da Nang on board the USS *Denver* (LPD 9). The 3d 8-inch Howitzer Battery had embarked on 24 May, and Battery B, 1st Battalion, 11th Marines also went out on the *Denver* on 1 June.<sup>52</sup>

With its ground combat and combat support units gone, the 3d MAB rapidly wound up its activities. On 4 June, as General Armstrong put it, the Marine Corps "went out of the real estate business" in Vietnam with the turnover of the last 3d MAB cantonment, Camp Books, to the Army. Force Logistic Command continued using Camp Books and the Retrograde Facility at Red Beach, turned over earlier to the ARVN 1st Area Logistic Command, to prepare material for embarkation. With no more Marine controlled installations to protect, the 1st Military Police Battalion stood down on 7 June. The MPs and the remaining aviation, engineer, and medical units redeployed during the next three weeks. FLC, which assisted these last departing organizations, finished loading Marine supplies and equipment. The FIC redeployed in several detachments.53

Occasional enemy rocket attacks continued during the final weeks of logistic activity. According to Armstrong, an afternoon salvo on 5 June:

... jolted everyone. We had convinced ourselves they only did that at night. We were fortunate . . . . MAG-11 lost a utility shed about 100 feet from Colonel Al Pommerenk's . . . quarters. He had a good scare and shakeup. With three

days to go [before redeployment] he is at the nervous stage anyhow.54

On 25 June, the concluding seaborne embarkation unit of Keystone Oriole Alpha sailed from Da Nang on the USS Saint Louis (LKA 116). Two days later, Force Logistic Command Headquarters was deactivated, completing a redeployment which had involved 13,497 Marine officers and men, most of whom were moved by air; 489,927 cubic feet of cargo; and 408,295 square feet of deck space of vehicles.\*55

Under plans completed late in May, the last 3d MAB Marines to leave Da Nang were to be Major General Armstrong and 10-12 members of the brigade staff. They were to fly to FMFPac Headquarters at Camp Smith, Hawaii, on 26 and 27 June. The MAB would be deactivated as this final staff element left Vietnam, but the remainder of the staff were to spend a few more days together at Camp Smith to finish lastminute MAB business.

Armstrong and his staff left Da Nang on schedule, after a hectic, uncomfortable month of coping with the myriad final details of redeployment while their facilities were being dismantled around them. According to Armstrong:

It got damn miserable towards the end. [During] the last couple of weeks, after . . . we pulled our telephones out of places like . . . FLC, we lost all telephone communications. We couldn't even talk between the old division CP area and FLC. If we . . . had to get a message over, we had to send a vehicle, back and forth. We couldn't talk to Marble Mountain; we couldn't talk to the Deep Water Pier. Local communications [were] just awful . . . especially after you put most of your vehicles on the boat . . . . 56

Other systems also deteriorated toward the end, including the water supply. Armstrong noted that "not having water for indoor plumbing is not necessarily a hardship, but it sure as hell is if you don't have any outdoor heads."<sup>57</sup>

On 25 June, two days before their scheduled departure, the 3d MAB staff received "a great big sheaf of messages, dating all the way back to the 1st of June," from the communications station at Korat, Thailand. An equipment failure at the station had prevented prompt transmission of these messages, most of which

dealt with personnel matters and disposition of Marines' personal effects. General Armstrong recalled:

We just never got the messages, so there [was] a lot of undone business floating around. We got copies of all those, and on the . . . morning of the day we left, we got a "We're so sorry" from the station over at Korat, that they were putting all these messages out, hoping that they'd be duplicates. Well, we found that most of 'em weren't duplicates; we'd just never gotten the traffic . . . . <sup>58</sup>

The MAB staff had to take the messages with them to Hawaii, where they would deal with them along with the other remaining MAB business.

In spite of these last-minute difficulties, 3d Marine Amphibious Brigade Headquarters closed down on 26 June. That day, Major General Armstrong, with 10 members of his staff, 53 other MAB Marines, and about 2,000 pounds of records and files, including the messages from Korat, boarded a Marine KC-130F tanker for the flight to Okinawa, the first leg of their trip to Hawaii. The following day, 3d MAB was formally deactivated. As planned, Armstrong and his staff cleared up final details of brigade affairs at Camp Smith. By early July, all had scattered to new assignments, Armstrong himself going to HQMC as Assistant Chief of Staff, G-4.59

One of the last elements of the MAB to depart was a detachment of Communication Support Company, 7th Communication Battalion (CSC-7), which left two days after General Armstrong and his staff, thus affording 3d MAB the means to communicate until the very last moment. Major Robert T. Himmerich, commander of the company, later explained how his command was incrementally reduced so that General Armstrong could communicate until he boarded his airplane on 26 June:

In reality the company did not stand down, but rather displaced from Vietnam to MCAS, Kaneohe Bay, Hawaii. As operational missions, except for the Communication Center, were transferred to XXIV Corps signal units, personnel released became involved in preparing equipment for transportation in USS St. Louis (LKA 116) on 25 June. The AN/TNC-5 was the last major piece of equipment to be processed, and when it was taken off line, communication guard was shifted to the Air Force Communication Squadron at Da Nang Air Base. Message traffic was picked up and processed every two hours until Captain Fishero (Comm Center Officer) filed the Brigade Headquarters and CSC-7 movement reports on 26 June. The final message pickup was made when the movement reports were filed and carried to General Armstrong's waiting aircraft. Because the Brigade was deactivated, CSC-7 brought the final MAF/MAB guidon out of Vietnam in 1971.60

<sup>\*</sup>In addition to the Marines, 15,030 Army, 516 Navy, and 985 Air Force personnel left Vietnam in Keystone Oriole Alpha. MACV ComdHist 71, II, Anx F, pp. 9-10.

After the departure of the last elements of the 3d MAB, only 542 Marine officers and men remained in Vietnam. Most were members of Sub-Unit 1, 1st Air and Naval Gunfire Liaison Company (ANGLICO); others comprised the Marine Advisory Unit (MAU), serving with the Vietnamese Marine Corps, and the U.S. Embassy security guard detachment at Saigon. A few served on the MACV staff.

# Quang Nam after the Marines Left

As the 3d Marine Amphibious Brigade completed redeployment during May and June, the 196th Light Infantry Brigade began Operation Caroline Hill, the codename for its search and destroy activities in the mountains and lowlands west and south of Da Nang. The Army brigade, under Colonel William S. Hathaway, USA, who was replaced by Colonel Rutland B. Beard, Jr., USA on 6 June, had four infantry battalions and an attached armored cavalry squadron for maneuver elements. Two artillery battalions, the 3d of the 16th U.S. Artillery and the 3d of the 82d U.S. Artillery, provided fire support.\* The 11th Combat Aviation Group, based at Marble Mountain, furnished helicopters.

The mission of the brigade in Quang Nam was to conduct "combat operations in assigned areas of operations within the Brigade Tactical Area of Interest to find, fix and destroy enemy forces, lines of communication and cache sites," to "deny the enemy use of the terrain for movement or the conduct of combat operations," to assist the Quang Nam Province pacification effort, and to provide "standoff security for designated pacified areas." With the exception of one infantry company and one cavalry troop stationed at Da Nang as reaction forces, two infantry companies guarding Brigade Ridge, and another garrisoning Hill 65, the infantry battalions and armored cavalry squadron conducted continuous operations in the AOs in which they initially had deployed. The 4th Battalion,

31st Infantry and the 1st Battalion, 46th Infantry patrolled west of Da Nang, with firebases on Hills 270 and 350. The 2d Battalion, 1st Infantry and the cavalry squadron swept the flat land around An Hoa, at times working westward into the Arizona Territory. The 2d Battalion, 21st Infantry searched the Que Sons south of Hill 510 and conducted sweeps in Antenna Valley.

The Army troops, like the Marines before them, had only brief firefights with small enemy detachments, and suffered most of their casualties from boobytraps. In the largest contact of the brigade's first two months in Quang Nam, on 27 May, Troop B of the cavalry squadron, on a combined sweep with the 3d Battalion, 51st ARVN Regiment, engaged about 50 VC. The Army cavalrymen and ARVN infantry killed 14 of the enemy and captured five, and five weapons. Between 29 April and 1 July, the 196th Brigade lost 15 dead and 125 wounded in Quang Nam, while killing 162 VC/NVA, taking 11 prisoners, and recovering 78 individual and three crew-served weapons.

The pattern of enemy operations continued unchanged in May and June. Guerrillas and local force units kept up a steady campaign of terrorism and small attacks by fire on South Vietnamese positions. The main forces continued the K-850 offensive. On 29-30 May, another wave of ground and rocket attacks signalled the start of the third and final phase of this campaign. This time, the largest assault came in central Dai Xuyen District, south of Da Nang, where over 80,000 South Vietnamese civilians, including high government officials, had gathered for a religious ceremony. In spite of security precautions by the 196th Brigade, the Korean Marines, and the 51st Regiment, three enemy battalions, including elements of the 38th Regiment and 91st Sapper Battalion, attacked the ceremony site on the 30th. The battle raged throughout the day and into the following night before the Communists fell back, leaving behind over 200 dead. The allies, who had lost five killed and 35 wounded, claimed a military victory, but 20 civilians had died in the fighting and homes in the area had suffered extensive damage.62

The 575th Rocket Artillery Battalion, operating from its refuge on Charlie Ridge, continued to bombard Da Nang with its erratic, but occasionally deadly, missiles. At 0330 on 30 May, for example, the enemy fired 11 122mm rockets at Da Nang Airbase. The six rockets that fell on the airstrip caused no casualties or damage, but the other five landed in downtown Da Nang, where they killed 12 civilians,

<sup>\*</sup>The 3d Battalion, 16th Artillery with headquarters in Da Nang and 155mm howitzer batteries on FSBs in the northeastern Que Sons and on Hill 65, provided direct support to the 1st Squadron, 1st U.S. Cavalry and general support/reinforcing fires for both the 196th Brigade and the 198th Brigade in Quang Tin to the south. The 3d Battalion, 82d Artillery (105mm howitzer) was the direct support unit for the 196th Brigade, with batteries on former Marine FSBs in the Que Sons and in the hills west of Da Nang. This battalion had operational control of Battery D, 1st Battalion, 82d Artillery (8-inch and 175mm howitzers) on Hill 65 and of Battery C, 3d Battalion, 16th Artillery (155mm guns). 23d Inf Div ORLL, Period Ending 15Oct71, dtd 1Nov71, pp. 57-61.

wounded 11, and damaged six houses. Three more rocket attacks occurred during the first week of June, including the one on the 5th that narrowly missed Colonel Pommerenk's quarters at the airbase. This persistant harassing fire concerned Lieutenant General Lam, who ordered the Quang Nam Province Chief to increase night patrols in the Rocket Belt and conduct more combined antirocket search and destroy operations with allied forces.<sup>83</sup>

By mid-summer, both MACV and XXIV Corps were convinced that Quang Nam was becoming militarily less secure. Lieutenant General Sutherland, the XXIV Corps commander, observed in August:

Quang Nam Province has a serious security problem. Present force levels in the province are inadequate to maintain the security level we had prior to U.S. Marine redeployments, since we have only the 196th Brigade and the 11th CAG replacing the 1st Marine Division and . . . [1st MAW]. Coordination between Vietnamese agencies has [also] been a problem in the province . . . . 64

At about the same time, General Abrams reported to CinCPac that "a continuing pattern of regression" in security had become evident since November 1970 in Quang Nam, Quang Tin, and Quang Ngai in southern MR 1 and in Binh Dinh in northern MR 2. Abrams called these provinces, which comprised the enemy's Military Region 5, "one of the most troubled areas on the map of South Vietnam." The security rating of these provinces under the Hamlet Evaluation System all had fallen 10-15 percent since the previous November, and other indices of progress, such as the number of Chieu Hois, also had declined. The enemy appeared to have regained "significant . . . influence" over a substantial minority of the population of each province. In Quang Nam, the worst of the four, the Communists now controlled about 17 percent of the people. Abrams attributed this regression primarily to the reduction in U.S. forces in the area, especially the removal of the Marines from Quang Nam. He also cited poor coordination between the ARVN and local forces, a lack of mobile Regional Forces in many districts, and the devisive effects of the GVN elections as causes of the deterioration in security.

Abrams concluded:

The overall impact of these combined factors has been a growing uncertainty and a lessening of self-confidence among local officials, local forces, and the general populace. The enemy in turn is taking advantage of this situation by directing the preponderance of his activities towards terrorism, to the general exclusion of large scale military actions. He has established psychological dominance over much of the populace and local friendly forces . . . .

On an optimistic note, Abrams ended his report by declaring, "This dominance is essentially a state of mind which can be changed."65

In spite of these pessimistic assessments, the situation in Quang Nam appeared to improve during the last half of 1971. After the end of the third phase of the K-850 Campaign, the 38th Regiment and other enemy main force units withdrew from the lowlands into Base Area 112 and did not again emerge. Harassing attacks by guerrillas and local forces decreased in frequency and did less damage. Between January and June, according to a XXIV Corps analysis, the enemy made 424 attacks by fire and 97 ground attacks against secure areas and consolidation zones in Quang Nam. These attacks resulted in 294 South Vietnamese and allied dead and 1,021 wounded. Between July and December, the Communists made only 303 fire attacks and 25 ground assaults, killing 74 South Vietnamese and allied personnel and wounding 211. Rocket attacks on Da Nang stopped after the national elections in October, and by the end of the year the city had enjoved three consecutive bombardment-free months. The cessation resulted partly from the 1st Task Force's Operation Da Nang 101, during which ARVN and RFs and PFs continually patrolled the Rocket Belt.66

Except for the decline in security noted by Sutherland and Abrams which was partially remedied by the end of the year, no major alteration occurred in the military situation in Quang Nam after the Marines' departure. The enemy made no significant noticeable gains, but neither did the allies. The ARVN and local forces seemed to be holding their own, which could be interpreted as a success for Vietnamization. The question remained whether the South Vietnamese forces were sufficient in number and quality to hold the province when the remaining allied units withdrew.

#### CHAPTER 14

# Continuing Operational Problems, 1970-1971

Protecting the Da Nang Vital Area - Base Defense - Intelligence: Collection and Use - The Boobytrap War

# Protecting the Da Nang Vital Area

Marines had first landed in Vietnam in 1965 to protect the Da Nang airfield. Defense of the airfield, and also of the city of Da Nang and the teeming military and civilian complex surrounding it, continued to be a III MAF responsibility during the last year and a half of combat. The Da Nang Vital Area (DVA), as it was called, in early 1970 encompassed about 45 square miles of territory, was bordered on the south by the Cau Do River and on the east by the South China Sea and extended westward to include the airbase. An estimated 600,000 Vietnamese civilians lived in the DVA, their villages and hamlets crowding close to 65 South Vietnamese and 45 United States military installations. These installations included ARVN I Corps Headquarters, the III MAF and later XXIV Corps Headquarters at Camp Horn, the 1st MAW and MAG-11 cantonments at Da Nang, and MAG-16's field at Marble Mountain, as well as a variety of combat support and service support commands.

Most of the civilians in the DVA lived in Da Nang, South Vietnam's second largest city. Called Tourane by the French, Da Nang had grown explosively as a result of the war, its population increasing from 110,000 in 1961 to 400,000 10 years later. Government and public services had not kept pace with growth. In 1969, the city had only six postmen and 380 telephones. It possessed neither a sewage system nor a newspaper. Only 10 percent of the population was served by the municipal electric system and seven percent by the water system. A U.S. Government report described Da Nang as "a miserable collection of unserviced huts, infused with temporary military infrastructure, surrounding a heavily overused and outdated city core."1 The congested downtown area and the outlying hamlets were a refuge for U.S. and ARVN deserters and AWOLs, prostitutes, and drug peddlers. Viet Cong agents and terrorists mingled with the city's rootless, often unemployed lower class.

South Vietnamese political and military authority within the DVA was divided. The area around Marble Mountain Air Facility and a strip of land between the south end of the airfield and the Cau Do River

were part of Hoa Vang District, with defense and civil government conducted by the district under the supervision of Quang Nam Province. The rest of the DVA, including the city and the airfield, constituted the municipality of Da Nang, controlled both militarily and politically by a mayor appointed from Saigon. The mayor was independent of and often hostile to the province chief. ARVN Colonel Nguyen Noc Khoi, Mayor of Da Nang during 1970, also acted as Commander, Da Nang Special Sector (DSS), and as Deputy for Garrison Affairs to the I Corps commander, Lieutenant General Lam. As Mayor, Khoi supervised the activities of the 1,376 national policemen and three companies of the National Police Field Force stationed in Da Nang. As Commander, Da Nang Special Sector, he controlled 3 Regional Force companies, 19 Popular Force platoons, and 16,000 armed PSDF members. As Deputy for Garrison Affairs, Khoi was responsible for maintaining order among all RVNAF military personnel in Da Nang City and directed the Vietnamese Armed Forces Police there.2

III MAF, in cooperation with Da Nang Special Sector and Hoa Vang District, coordinated the defense of the U.S. military installations in and around Da Nang and assisted in the general protection of the city. Under III MAF supervision, the 1st Military Police Battalion, which had arrived at Da Nang in 1966 to relieve Marine infantry guarding the vital airfield, performed the defense function. At the beginning of 1970, the battalion, commanded by Lieutenant Colonel Speros D. Thomaidis, was assigned the mission of planning and directing the integrated defense of the DVA. This was to be accomplished in cooperation with the Commander, Da Nang Special Sector, by coordinating the activities of tenant units to assign and secure sectors of responsibility, establish and maintain lines of communication, and constitute reserve contingency forces.

In essence, the battalion supervised the close-in defense activities of the commands within the DVA and ensured that these commands were ready to furnish company and platoon reaction forces, as required, for operations in the area. The MP battalion itself manned the fortifications surrounding Da Nang Airbase. It conducted antiinfiltration patrols and ambush-

bushes and maintained observation posts outside the boundaries of the various installations, and it assisted South Vietnamese security forces guarding strategic bridges.<sup>3</sup>

Also located in the DVA, the 3d Military Police Battalion, under Lieutenant Colonel Charles Fimian, assisted the 1st Battalion in security efforts. The 3d Battalion, in addition to furnishing war dogs for the 1st Marine Division, provided guards for the III MAF Correctional Facility, staffed the III MAF Criminal Investigation Department (CID), and contributed a 50-man MP contingent to the U.S. Armed Forces Police (AFP) in Da Nang. Marines from this AFP detachment protected the U.S. Consulate in Da Nang and helped guard the POW ward at the U.S. Army 95th Evacuation Hospital.\*4

On 10 August, as the 3d MP Battalion prepared for redeployment in Keystone Robin Alpha, the 1st MP Battalion assumed control of the Marine war dog teams and also took over the 3d Battalion's security responsibilities in the DVA. The 1st Battalion, now under Lieutenant Colonel Newell T. Donahoo, who had relieved Lieutenant Colonel Thomaidis on 2 June, furnished guards for the former III MAF brig, which passed under Army control on 10 August. Company A of the 1st MP Battalion provided the AFP detachments, administered the dog force, and manned the III MAF CID. The 1st MP Battalion initially was scheduled for redeployment in late 1970, and by mid-August III MAF had completed plans to replace it with a provisional defense battalion consisting of one MP company and a rifle company from the 1st Battalion. 5th Marines. With the delay of Marine redeployments, III MAF scrapped this plan and retained the entire 1st MP Battalion, which in fact became one of the last Marine ground units to stand down.5

Throughout 1970 and early 1971, 1st MP Battalion Marines, who were not detailed to the Armed Forces Police or other special assignments, put in an average of 21 hours per week on day watch and 24 on night

watch. They spent another eight hours on patrols and ambushes and manned portions of the Da Nang perimeter for another 48 hours. In July 1970, a typical month, the battalion carried out 280 fire team and 30 squad daytime patrols and 300 fire team and 133 squad night ambushes, made 31 river patrols, and manned 62 squad combat outposts. The battalion also conducted one multi-company operation. Of the total of 836 small-unit activities, the battalion conducted 627 with South Vietnamese forces. None of these operations produced significant enemy contact. The few actions that did occur were confined to brief exchanges of fire or an occasional grenade thrown at a passing Marine patrol.<sup>6</sup>

Each month elements of the battalion took part in sweeps and cordon and search operations in cooperation with Vietnamese Regional and Popular Forces, national police, and with reaction forces from other U.S. commands in the DVA. These operations rarely flushed out any NVA or VC, but they produced a steady haul of suspected VCI. RVNAF deserters and American military personnel who were off limits or absent without leave were also frequently taken into custody. During August, for example, companies of the 1st MP Battalion participated in 10 searches, apprehending 16 VCI, 35 ARVN deserters, 2 U.S. Army soldiers, a Marine, and a U.S. Navy sailor.

Working with troops and police from Da Nang Special Sector, the Marine MPs cracked down on the drug peddlers and prostitutes that infested the city. On 12, 13, and 14 October, elements of Company B joined Vietnamese authorities in a series of raids on hideouts in downtown Da Nang. The MPs and police seized caches of drugs, and arrested 21 Marines and five U.S. Army soldiers, all of whom were turned over to the Armed Forces Police and charged with being in unauthorized areas. They also apprehended 27 prostitutes and two VC suspects.

The enemy in the DVA consisted mostly of Viet Cong terrorists, sappers, and political agitators who usually operated in groups of three to five. By effective security measures, III MAF prevented sapper attacks on the airfields during 1970 and early 1971, but terrorism still took a steady toll of American and South Vietnamese lives and property. During July 1970, for example, three civilians were killed and 2 U.S. Marines, 11 ARVN soldiers, 6 national policemen, and 14 civilians were injured in 10 separate terrorist incidents. In October, Navy intelligence reported that enemy sappers were planning to attack the U.S. Consulate in

<sup>\*</sup>Until 1 January 1970, the commander of the 3d MP Battalion had the additional duty of III MAF Provost Marshal. As such, he had operational control of the U.S. Armed Forces Police in Da Nang. On 1 January, a separate III MAF Provost Marshal was created on the MAF staff, again with operational control of the AFP. On 9 March 1970, as part of the III MAF/XXIV Corps exchange of roles, XXIV Corps took operational control of the AFP, to which the Marines continued to contribute a contingent of MPs. Later, on 15 June 1970, the 504th Military Police Battalion, U.S. Army, took operational control of the AFP under XXIV Corps. 3d MP Bn ComdC, Jan70, Mar70, Jun70.



Department of Defense Photo (USMC) A800401

Marine Cpl Gavin R. Lebus, left, holds the leash on his sentry dog "Max" taut while Sgt Ted J. Ryan, Jr., muzzles his dog "Caesar" before boarding a Marine CH-53 helicopter. The men and dogs are from the Sentry Dog Platoon, 3d Military Police Battalion.

Da Nang. The 1st MP Battalion temporarily doubled its guard force at the consulate, but no attack took place. Communist harassment of the DVA declined in the last months of 1970, partly as a result of severe floods, but gradually increased again in early 1971.

Viet Cong terrorism sometimes took unusual forms. During March 1971, for instance, the MP battalion received reports of "female VC operating in Da Nang in the role of prostitutes with the intention of spreading VD to American and Korean officials. These VC were also reported to have been carrying small weapons with the intention of assassinating clients." These ladies of the evening, if in fact they existed, claimed no known victims, but other young female Viet Cong were active in Da Nang. The MPs helped to break up a cell of 15- to 18-year-old VC girls who had been blowing up allied military vehicles with

bombs made from soda cans filled with plastic explosive.<sup>7</sup>

Rockets attacks were the greatest Communist threat to the DVA, but their effect during 1970 and 1971 was more political and psychological than military. The III MAF Chief of Staff, Brigadier General Leo J. Dulacki, observed:

They sure didn't inflict much damage on us . . . . I think they were pretty damn poor when you consider what they could have done. Imagine the number of ammunition dumps, the number of fuel depots and what-have-you we had scattered all over . . . . If you had given me a couple of Marine squads I could have raised holy hell . . . by just planting a rocket or a mortar in the right place at the right time . . . . 8

Looking back at the effects of enemy rocket attacks, Dulacki conceded that while of neglible importance militarily in most instances, rocket attacks on Da Nang served the enemy in other ways: "Unfortunately, these attacks did achieve one success—the stateside media blew such incidents completely out of proportion and drew erroneous conclusions as to their meaning and effect."9

The Marine MPs had to contend with internal South Vietnamese domestic terrorism, as well as the more familiar enemy violence. ARVN soldiers occasionally threw grenades at national policemen and Popular Forces fired small arms to break up fights between rival non-Communist political groups. During October, the battalion conducted a series of psychological operations in the supposedly pacified hamlets on the north and west borders of the Da Nang Airbase, "in an effort to gain popular support to stem the indiscriminate firing of small arms . . . directed towards the perimeter bunkers and aircraft." In spite of this effort, aircraft landing and taking off continued to be subjected to sporadic fire, some of which appeared to be from Popular Forces compounds.<sup>10</sup>

During the first months of 1971, as III MAF was replaced by 3d MAB, the 1st Military Police Battalion, now commanded by Lieutenant Colonel John Colia, who had replaced Lieutenant Colonel Donahoo the previous November, continued to protect the Da Nang Vital Area. On 7 May, with the cessation of all Marine combat, the battalion ended small-unit operations and turned defense of the airfield over to the 104th Regional Force Battalion and the 796th Regional Force Company. The MP battalion retained its AFP and brig duries throughout the rest of May, as well as the guard of the remaining 3d MAB cantonments. On 1 June, a detachment of Marines from the U.S. Embassy Security Guard in Saigon relieved the MPs protecting the Da Nang consulate, and five days later the battalion was released from all Armed Forces Police tasks. The battalion stood down on 7 June. By the 24th, all elements had departed for Camp Pendleton, where the battalion was deactivated. As the last Marines left, the commander of the 196th Light Infantry Brigade took over as defense coordinator for U.S. installations in the DVA.\*11

#### Base Defense

Throughout Quang Nam, major Marine bases were potentially lucrative targets for ground patrols and at-

tacks by fire. Sprawling complexes such as LZ Baldy, FSB Ross, Hill 55, and An Hoa Combat Base contained headquarters, supply dumps, artillery batteries, and communications and support units of many kinds. Some bases housed ARVN and U.S. Army as well as Marine commands. By 1970-1971, the Marines had perfected their system for defending these bases, primarily using manpower from tenant units, while tying down a minimum of infantry units to static defensive missions.

Typical of the Marine base defense system in its most highly developed form was the 5th Marines' plan for protecting An Hoa Combat Base.12 Until American withdrawal from An Hoa in midsummer 1970, this complex contained the 5th Marines' regimental command post and the rear elements of the regiment's 2d and 3d Battalions. The roughly triangular-shaped installation, just across the Thu Bon River from the Arizona Territory and within easy reach of enemy infantry and rocket attacks, also contained Headquarters Battery, Battery E, and the Mortar Battery of the 2d Battalion, 11th Marines; Battery M, 4th Battalion, 11th Marines; the 3d 175mm Gun Battery; a platoon of the 1st 8-inch Howitzer Battery; a tank platoon; engineer and motor transport companies; and detachments from Force Logistic Command and MAG-16. The base included a small airfield, and two helicopter landing zones. A continuous belt of barbed wire surrounded An Hoa, backed by fortified two- or threeman fighting positions, and several firing positions for tanks; five watchtowers overlooked the surrounding terrain.

During spring and early summer 1970, the 5th Marines commander, Colonel Ralph F. Estey, as installation coordinator, was in charge of the defense of An Hoa. Estey exercised this authority through his executive officer, Lieutenant Colonel William R. Kephart, who performed the additional duty of base defense commander (BDC). The base was divided into six sectors, lettered A through F, each encompassing a section of the perimeter and the units within it. The 5th Marines designated a commander for each sector, normally the commander or executive officer of one of the tenant units,\* who was responsible for manning and maintaining the perimeter defenses and watch-

<sup>\*</sup>The commander of the 23d Infantry Division had the ultimate responsibility for DVA security, but he delegated the actual coordination of defense efforts to the 196th Brigade.

<sup>\*</sup>In April 1970, the sector commanders were: Sector A—Executive Officer, 3/5 (Rear); Sector B—CO, Headquarters Company, 5th Marines; Sector C, Executive Officer, 2/11; Sector D—CO, Base Augmentation Company; Sector E—CO, 3d 175mm Gun Battery; Sector F—Executive Officer, 2/5 (Rear).

tower of his sector and for daily patrolling of the defensive wire. Each sector had its own combat operations center (COC), linked to its fighting positions by sound powered telephone and to the regimental COC by both telephone and radio. Sector commanders and duty officers met with the BDC each afternoon to receive the latest intelligence of enemy activities and coordinate night defensive operations.

To meet the threat of infantry and sapper assaults, the base maintained reaction forces. Each sector was required to have 10-20 Marines available for deployment to the 5th Marines COC or any prescribed assembly point. In addition, the Headquarters Commandant of the 5th Marines organized a provisional rifle company, which mustered daily at the regimental COC. This unit could be committed anywhere within the combat base. Finally, the 5th Marines rotated one rifle company in from the field to act as base defense augmentation company. Under operational control of the base defense commander, this company defended Sector D and furnished Marines for patrols and road sweeps outside the perimeter and for working parties within the base. During a major ground attack, any or all of these units could deploy to reinforce a section of the perimeter, contain a breakthrough, or counterattack.

To help repel assaults and to counter rocket and mortar bombardment, the 5th Marines had elaborate artillery fire plans. The regiment divided the entire area around An Hoa, including previously used or suspected enemy rocket and mortar positions, into targets identified by map grid locations and assigned each target to a specific battery, usually of the 2d Battalion, 11th Marines. A section of two 81mm mortars, controlled by the 5th Marines S-3, had the sole task of firing illumination missions as requested by the sectors. Each day, the 5th Marines tried to obtain advance political and military clearance for artillery fire on designated targets, especially the rocket and mortar positions. During enemy attacks by fire, Marines in the watchtowers would attempt to spot the enemy locations and phone them in to the 5th Marines COC over a special countermortar/rocket communications line. The regiment could then request fire missions on the precleared targets.

Colonel Estey could place An Hoa in any of four alert conditions. Condition I meant that the installation was under ground or fire attack; Condition II denoted "imminent" attack; Condition III indicated that an attack was expected within 12 hours; Condition IV, in effect most of the time, required only

normal security precautions and implied no immediate threat of a major assault. The base was also subject to three readiness conditions. These ranged from Condition C, the usual daytime defense posture, in which each sector manned its watchtower and two or three perimeter fighting positions, through Condition B, in which reaction forces were to be available for muster within 15 minutes, to Condition A, under which all fighting positions were fully manned, command and control facilities activated, reaction forces assembled and standing by, and the base blacked out.

In October, after the 5th Marines shifted its base to LZ Baldy, it put a similar defense plan into effect. Again, the regimental executive officer acted as base defense commander, this time with four sector commands under him. Each sector maintained its own squad-size reaction force and furnished a platoon for a mobile base defense reaction company. The artillery defensive fire plan again featured preassigned and precleared targets covering the area around the base.<sup>13</sup>

Defense of the numerous allied headquarters and installations behind Division Ridge, immediately west of the Da Nang Vital Area, followed similar principles. In this roughly triangular eight-by-five-mile area, which stretched from the Cau Do River north almost to the Cu De River, were concentrated III MAF Headquarters at Camp Haskins, the 1st Marine Division CP, the Force Logistic Command Headquarters at Camp Books, the 1st and 11th Marines CPs, the III MAF Transit Facility, and the Freedom Hill Recreation Center. Two U.S. Navy construction battalions, Army MP and helicopter units, an Army replacement battalion and R and R Center, and ground elements of the Air Force 366th Tactical Fighter Wing also had cantonments behind Division Ridge. South Vietnamese commands there included the 1st Mobile Brigade Task Force Headquarters, the Hoa Cam RF/PF Training Center, and artillery and engineer units.\*

<sup>\*</sup>Reading roughly from north to south, the tenant units were: III MAF Headquarters (Camp Haskins); Force Logistic Command (Camp Books); NCBs 5 and 62 (USN); 58th Transportation Battalion (USA); 11th Marines; 1st Marines; 1st Motor Transport Battalion Headquarters, 1st Marine Division; 1st Medical Battalion; 11th Motor Transport Battalion; 1st Reconnaissance Battalion; 15th Light Engineer Company (ARVN); 8th Engineer Company (ARVN); 16th Bridge Company (ARVN); Freedom Hill Recreation Center (III MAF); 522d Replacement Battalion (USA); 478th Aviation Company (USA); III MAF Transit Facility; 1st Battalion, 5th Marines; 504th MP Battalion (USA); 366th Tactical Fighter Group (USAF); Ammunition Company, 1st FSR (ASP-1); MASS-3; 1st Mobile Brigade Task Force (ARVN); 44th Artillery (ARVN); Hoa Cam RF/PF Training Center.

After 10 August 1970, when III MAF discontinued the Northern and Southern Sector Defense Commands, this entire headquarters and support complex was included in the TAOR/TAOI of the 1st Battalion, 5th Marines. This battalion, which was the division reserve, acted as defense coordinator for both American and South Vietnamese tenant units. By early 1971, the battalion had divided the area into three sectors, designated from north to south A, B, and C. The battalion commander was in charge of the defense of Sector C, which included the battalion headquarters cantonment on Hill 34. Under 1st Battalion supervision, the commander of the 1st Marine Division Headquarters Battalion coordinated the defense of Sector B. The 1st Battalion, 5th Marines directed the protection of the northernmost area, Sector A, through a small satellite COC established at Camp Books. Each tenant unit conducted its own perimeter defense and maintained internal security against sabotage and infiltration. The 1st Battalion, 5th Marines kept two rifle companies on Division Ridge. These two companies occupied observation posts, manned fortified positions, and patrolled areas outside the cantonment boundaries.14

Late in March 1971, when the 1st Battalion stood

down for redeployment in Keystone Robin Charlie, the 2d Battalion, 1st Marines took over its TAOI and defense coordination mission. The 2d Battalion divided the area into two defense sectors, instead of three, but otherwise continued the security system established by its predecessor. On 7 May, as Marines ended ground operations, the 2d Battalion was relieved by elements of the 196th Brigade, which in turn assumed the coordination task.<sup>15</sup>

With the exception of a 6 January 1970 sapper attack on FSB Ross, the Communists did not seriously test the Marines' base defenses during 1970 and 1971. They confined their harassment of Marine bases to a steadily diminishing volume of rocket and mortar fire. How much of the base defense success resulted from American preemptive operations and the formidable nature of the defenses, and how much from a deliberate Communist decision to go after the South Vietnamese instead, is impossible to determine with finality. Nevertheless, it appeared that III MAF had succeeded in protecting its rear in a war without fronts.

Intelligence: Collection and Use

Timely, accurate information about the enemy is a prerequisite for military success. The guerrilla charac-

Marine gunners man their 106mm recoilless rifle from a defensive position in preparation to fire a mission after being told that 30 enemy infantrymen were stopped in the open. Col Clark V. Judge, Commanding Officer, 5th Marines, peers through binoculars.

Department of Defense Photo (USMC) A373701



ter of much of the struggle in Vietnam made timely intelligence even more vital, and at the same time more difficult to collect and evaluate. Lieutenant General Leo J. Dulacki, who had been III MAF G-2 in late 1965, pointed out that in a conventional war, collecting information about the other side "is not . . . that difficult from the standpoint of the intelligence people. The enemy has tanks. It's easy to pick up tanks with reconnaissance aircraft and the like. The enemy has organized units. It's easy to pick up the location, movements and the like of organized units."17 Dulacki observed in retrospect, however, that the Marines learned in Vietnam that the conventional intelligence indicators were seldom to be found. "The guerrilla not only did not possess conventional equipment, he didn't even wear a uniform and was hidden among the populace. An alien language and culture further exacerbated the problems." Intelligence was not accorded its rightful importance in the early period of III MAF involvement. In 1965 the III MAF intelligence section was a handful of officers and men who were according to Dulacki:

... struggling to perform a Herculean task. The development and growth of the assets required to perform the crucial intelligence tasks was long and slow, too long and too slow, but it eventually materialized. It had to. And the intelligence personnel acquitted themselves with distinction. 18

By early 1970, the Marines' intelligence effort had evolved into a many-faceted, highly sophisticated system that combined traditional methods with new technology. Brigadier General Simmons, the ADC of the 1st Marine Division, recalled that during his first Vietnam tour in 1965-1966, "we were half-blind and nearly deaf." When Simmons returned in mid-1970, "I was not prepared for the tremendous advances in Marine combat intelligence which I found . . . ."19

III MAF and its subordinate units obtained much information from established methods of air and ground reconnaissance. VMO-2's OV-10As served as the airborne eyes of the 1st Marine Division, flying hundreds of visual reconnaissance missions each month. The versatile OV-10A, which also could perform tactical air control and attack functions, proved, in General Simmons' words, to be a "superb platform" for aerial reconnaissance.\*20

Until VMCJ-1 redeployed in July 1970, its RF-4Bs flew conventional and infrared photographic and

ground radar survey missions for III MAF. Although hampered by frequent equipment breakdowns, the squadron, which had its own film processing facility, produced finished pictures within two hours of an emergency mission request. Frequently, response took longer, because III MAF, as a subordinate under the MACV system of single management of aviation, had to pass many of its photographic mission requests through the Seventh Air Force, rather than directly to the 1st MAW. After VMCJ-1 left Vietnam, III MAF depended on the U.S. Air Force for most of its aerial photography and on the XXIV Corps G-2 (Air) staff for film processing.\*

Rapid, expert interpretation of aerial photographs was essential. Colonel Edward W. Dzialo, the III MAF G-2, a former photo interpreter, emphasized that "it isn't the picture that you want, but the information that's on the picture." Dzialo declared that the old adage, "One picture is worth 1,000 words," had ceased to be valid. "In today's modern photography . . . a thousand words [from expert analysts] are better than the picture." Until late February 1970, III MAF had concentrated all photographic interpretation in the Photo Imagery Interpretation Center (PIIC) of its G-2 section, to which most of the 1st MAW's photo interpreters were attached. Between 17 and 23 February. as part of the general reduction of its authority, III MAF returned the interpretation mission and the photo interpreters to the 1st MAW PIIC, which performed this function until the wing redeployed.21

Ground patrolling and reconnaissance was another basic information source. The 1st Reconnaissance Battalion, reinforced until July 1970 by the 3d Force Reconnaissance Company and from August 1970 through early 1971 by a subunit of the 1st Force Reconnaissance Company, screened the western approaches to the populated area of Quang Nam. Reconnaissance patrols penetrated deep into mountain base areas to locate enemy troops and camps and direct air strikes and artillery against them.\*\* Closer to the hamlets and villages, a myriad of infantry small-unit activities continually generated information which was passed to the regiments and the division.<sup>22</sup>

The Marines' artillery observation and target acquisition system also produced intelligence.\*\*\* Through-

<sup>\*</sup>For details of the other functions of VMO-2, see Chapter 15.

<sup>\*</sup>For further discussion of the electronic warfare role of this squadron and the single management system, see Chapter 15.

<sup>\*\*</sup>For an extended discussion of reconnaissance operations, see Chapter 17.

<sup>\*\*\*</sup>For additional detail on artillery targeting and operations, see Chapter 17.

out Quang Nam, numerous observation posts not only directed artillery fire but also permitted general surveillance of enemy movements. Many of these observation posts were equipped with the Integrated Observation Device (IOD). According to Colonel Dzailo, the IOD, designed to spot targets for artillery attack, "helps us . . . in intelligence because of the readout capability that we have from it. . . . We can always follow them [the enemy] to a certain extent, where they originated and where they're going. . . . "23 In the same way, the 11th Marines' computerized Fire Support Information System (FSIS), a continuously maintained data file of enemy sightings and action taken against them, assisted intelligence analvsis, as well as fire direction. According to Colonel Edward A. Timmes, 1st Marine Division Assistant G-2 during 1970:

Prisoners and captured enemy documents yielded much information. Major John S. Grinalds, the 1st Marines' S-2, considered these two sources, and intercepted enemy radio signals, "the three most valuable sources of information that we had in our TAOR . . . ." The most important document discovery of the last year of the war came in November 1970, during Operation Imperial Lake, when Marines found the complete files of the enemy's Quang Nam security section. Among other things, this huge mass of material contained the names, and in some cases photographs, of many key members of the Viet Cong infrastructure.<sup>25</sup>

To extract information from POWs and documents, the 1st Marine Division relied heavily on the specially trained Marines of its interrogation-translation teams (ITTs), interpreter teams (ITs), and counterintelligence teams (CITs).\* These teams worked under the division G-2 section. In mid-1970, the division had four ITTs under its control, three of them attached to

the infantry regiments and the fourth located in the POW ward of the 95th Army Evacuation Hospital in Da Nang. These teams, as their name implied, interrogated NVA and VC prisoners and civilian detainees and reviewed captured documents. Of the two Interpreter Teams, one constituted the Division Interrogation Center and the other the Document Translation Center. In July 1970, a typical month, the Document Translation Center screened 58 batches of papers, totalling 1,117 items, and translated 58 of the documents. The team also translated four ARVN interrogation reports, 19 ARVN messages, and the monthly report of the Quang Nam Pacification and Development Committee. The three CITs, in addition to performing their usual security and counterespionage tasks, participated extensively in the effort to neutralize the Viet Cong infrastructure. Team members accompanied Marine units in the field, checking the identities of detained civilians against blacklists of known VC leaders. The teams also employed Vietnamese agents to ferret out information on VCI membership and activities and on the enemy military order of battle. Both ITTs and CITs questioned prisoners, but with different objectives. The interrogation teams engaged in lengthy questioning following a set procedure, while the counterintelligence teams tried to obtain information which could be used immediately in continuing operations.26

These Vietnamese language trained Marines were useful in intelligence gathering but their ability to extract data from POWs and informants was limited. The Vietnamese language is so complex and subtle that even the most fluent American had difficulty conducting a meaningful conversation, not to mention an effective interrogation. Major Grinalds, himself a graduate of military Vietnamese language schools, observed:

I could ask: "Where's the head?"; "I'd like a cup of coffee"; "How are your children?" Things like that. But to actually get in and interrogate a . . . captured NVA or VC—unless he were really willing and trying to give me information—was a very difficult thing. The same thing is true of every other American interpreter or linguist that I saw . . . . 27

The Marines employed many Vietnamese interpreters and agents, relying heavily on the Kit Carson Scouts with their proven loyalty and knowledge of the people and terrain. Some Marine units also worked extensively with the South Vietnamese Government's Armed Propaganda Teams (APTs). As the name implied, the primary mission of these teams was politi-

<sup>\*</sup>In July 1970, the division's attached teams were the 3d, 9th, 13th, and 15th ITTs 1st and 7th ITs; and 1st, 3d, and 7th CITs. 1st MarDiv ComdC, July 70, pp. 12-16.



Department of Defense Photo (USMC) A373967

A view of Fire Support Base Ross as the 3d Battalion, 5th Marines prepares to leave by truck for Hill 34 and turn over the firebase to the South Vietnamese. Note the sandbags on the roofs to protect from typhoons, the lookout towers, and the extensive barbed wire.

cal and psychological warfare, but through informal conversations with villagers, APT members collected information about local guerrillas and the VCI. In the 1st Marines TAOI, whenever Major Grinalds's S-2 section received reports of a terrorist incident or of an impending attack, they would arrange to put an APT into the affected area. "By the time they get through working the area over," Grinalds reported, "they've got a good idea of what's going on, who the VCI are . . . who's bad, who's good, what's going to happen, what units have been in the area . . . ."<sup>28</sup>

To enlist the help of Quang Nam's civilians in their intelligence effort, the Marines had developed the Voluntary Informant Program (VIP). Under this program, administered by the division G-2 staff, each subordinate command down to the battalion level was provided with its own fund which it could use to buy information. Individual commands were granted wide discretion in spending this money, including the power to negotiate the amount of any payment less than 5,000 piasters. Rules for administering the program included provisions for careful accounting of money expended and for protecting the anonymity of informants, including relocating them and their families when necessary. Marine units spent much of their VIP money rewarding Vietnamese who brought in grenades, dud rounds, and other potential boobytrap

material which littered the countryside, but occasionally they purchased information about the enemy which was of varying reliability. During July 1970, for example, 1st Marine Division units spent a total of 278,890 piasters (about \$1,000 U.S.)\* in 359 separate payments for turn-in of ordnance and made six payments for information.<sup>29</sup>

Reports from part-time agents recruited by the Voluntary Informant Program and from regular informants enlisted by the CITs, while large in volume, required careful evaluation. Vietnamese agents frequently told Americans what they thought the Americans wanted to hear. As Lieutenant General Nickerson put it, "You can buy the intelligence you want to hear . . . . As long as they know you are buying rocket intelligence, that you are going to get plenty of." Nevertheless, informants were indispensable sources of intelligence, especially about local Viet Cong members and their activities.<sup>30</sup>

The North Vietnamese and Viet Cong, like the Americans, relied heavily on radio for command and control. If the Americans could read enemy messages or just determine the locations of their transmitters, the Communists would lose much of their advantage

<sup>\*</sup>At this time, the official GVN exchange rate was 275 piasters to \$1 U.S.

of concealment. During 1970-1971, the 1st Radio Battalion provided III MAF with this capability.31 At the beginning of 1970, the battalion, commanded by Lieutenant Colonel Delos M. Hopkins, was headquartered at Camp Horn, with its Headquarters and Service Company nearby at Camp Hoa Long and an Operations Company at Dong Ha in northern I Corps. Of the battalion's six radio platoons, three operated monitoring sites in Quang Nam and three were deployed along the Demilitarized Zone. During February and March, the battalion withdrew its elements in northern I Corps and transferred the signal intelligence mission there to the U.S. Army 407th Radio Research Detachment.\* From then until it redeployed in April 1971, the battalion was concentrated in Quang Nam, with the exception of a platoon temporarily stationed at Chu Lai. The number of active platoons in the battalion gradually declined as Marine units redeployed, from six at the beginning of 1970 to four, all in Quang Nam, at the end of the year. In October and November 1970, the battalion, now under Lieutenant Colonel Edward D. Resnik,\*\* moved its headquarters from Camp Horn and Camp Hoa Long to Camp Books, close to III MAF Headquarters at Camp Haskins.

Under III MAF operational control, the radio battalion deployed its men and equipment to monitoring sites at observation posts and firebases throughout Quang Nam. During large operations, such as Pickens Forest, Catawba Falls, and Imperial Lake, direct support units from the battalion accompanied the command groups to furnish information for immediate, rapid exploitation. Recalling the important role of 1st Radio Battalion Marines during Imperial Lake, Colonel Robert H. Piehl, commander of the 7th Marines, said the regiment "found this information very useful in planning our day-to-day operations . . . and frequently took advantage of it without waiting for it to be processed into intelligence by the Division G-2."32

Using both ground installations and airborne equip-

ment, the Marine radio technicians listened to enemy messages and tried to fix the location of transmitter sites. They made an average of 2,000 to 3,000 radio direction fixes each month, many of which were then either attacked by air or artillery or became the objectives of ground operations. During early 1970 the 1st Marines launched most of its successful heliborne Kingfisher patrols on the basis of radio battalion intelligence reports. On other occasions, the battalion gave Marine units advance warning of enemy attacks, permitting the Marines to conduct preemptive attacks. Earlier in the war, extreme security precautions had prevented rapid transmission of signal intelligence to field units; however, by 1970 the Marines had largely overcome this problem. As a result, according to Colonel John W. Haggerty III, the Deputy G-3 of III MAF, by late 1970 the 1st Radio Battalion was furnishing "probably the best intelligence that the Marine Corps has ever had . . . . We always knew what the enemy was going to do and could always prepare for it."33

Highly developed radio intelligence was an improvement over previous methods and techniques. Electronic sensors, which III MAF was using extensively by 1970, were devices never previously employed on the battlefield. As a means of gathering information about the enemy and locating potential artillery and air targets, sensors showed great promise, but they also had significant limitations.

The sensors in use in 1970 were the products of a development effort begun five years earlier in connection with Secretary of Defense Robert S. McNamara's abortive Demilitarized Zone barrier project.\* The sensor barrier, codenamed Duel Blade, had not been completed, but during 1968, MACV introduced a new program, Duffel Bag, to employ the sensors intended for the barrier in tactical operations elsewhere in South Vietnam. Marines had been involved in the early development of sensors and had used the devices extensively and effectively at Khe Sanh in early 1968.\*\* By 1970, the 1st Marine Division had integrated sensors into its intelligence and artillery-targeting system.<sup>34</sup>

Most of the sensors employed by Marines were of the radio-frequency (RF) type, the designation refer-

<sup>\*</sup>In anticipation of withdrawal from northern ICTZ, the 1st Radio Battalion, in cooperation with Army signal intelligence agencies, established a Joint Tactical Processing Center at Dong Ha in October 1969, and the Army personnel were gradually prepared to take over the radio monitoring mission along the DMZ. 1st Radio Bn ComdC, Oct 69, pts. II and III.

<sup>\*\*</sup>Lieutenant Colonel Hopkins was relieved on 30 June 1970 by Major Donald J. Hatch, who in turn was relieved by Lieutenant Colonel Resnik on 31 July 1970.

<sup>\*</sup>For detailed discussion of McNamara's DMZ barrier plan, see Jack Shulimson, *U.S. Marines in Vietnam 1966, An Expanding War*, (Washington: History and Museums Division, HQMC, 1982), pp. 314-319.

<sup>\*\*</sup>Marines had used seismic intrusion devices at Da Nang as early as 1965.

ring to the method by which they transmitted information to monitoring stations. Small, battery powered, and usually camouflaged, sensors of this type were easy to conceal and could be dropped from aircraft or implanted by hand. Most were designed to self-destruct when tampered with or when their batteries were exhausted. Once in position, RF sensors reacted to minute physical activity in their immediate surroundings at ranges from five to 200 yards, depending on the device. Seismic sensors, known as Seismic Intrusion Devices (SIDs), the most common, responded to small ground vibrations, such as human footsteps. Magnetic sensors, or Magnetic Intrusion Devices (MAGIDs), detected moving metallic objects. Infrared sensors (PIRIDs) picked up heat radiations from bodies, vehicle engines, or campfires. Accoustic sensors detected audible noises. Seismic, magnetic, and infrared sensors, when activated, sent a signal to a receiver, known as a Portatale, from which the operators could determine the location and probable nature of whatever activated the sensor. Acoustic sensors transmitted the sounds they picked up. For the Da Nang Anti-Infiltration System (DAIS), the 1st Marine Division employed seismic and infrared line sensors, which were connected by wire to a readout device. After dismantling the DAIS in mid-1970, the division relied almost exclusively on RF sensors.35

During March 1970, the 1st Marine Division centralized the planting, maintenance, and monitoring of its sensors, tasks previously divided among the division and its regiments, in a Sensor Control and Management Platoon (SCAMP), part of the G-2 staff section.\* When formed, the SCAMP had a strength of three officers and 82 enlisted Marines. It included a headquarters section, an operations section respon-

sible for communications with tactical units, an installation section which planted and maintained sensors, a surveillance section which manned monitoring stations, and an instruction section to train other Marines in the use of sensors.<sup>36</sup>

The 1st Marine Division\* requested sensor equipment and radio frequency assignments through XXIV Corps from the J-3 section of MACV, which controlled Project Duffel Bag. The Marines had no difficulty obtaining sensors, but often could not secure enough frequencies. Colonel James R. Weaver, the 1st MAW G-2, explained: "These are all line-of-sight transmissions . . . so your frequency control is pretty critical. You can't just set these things around everywhere because you wipe out somebody else's." 37

By mid-1970, the 1st Marine Division had over 250 radio frequency sensors in operation in Quang Nam, which it used to target artillery and monitor enemy movement. Most of the sensors were clustered along the main infiltration routes from the mountains into the lowlands. They were monitored by SCAMP Marines at 12 readout stations positioned from Dong Den Mountain in the north to FSB Ryder in the southwest.

The division's sensors were usually planted in groups called "strings." In August 1970, the division had 80 active strings. A typical string, designed to detect movement along a trail, consisted of one magnetic and three seismic sensors. As the suspected enemy walked along the trail, the SIDs picked up the sound of their footsteps in succession and signalled a readout station. Simultaneous activation of the SIDs indicated vibrations from artillery fire, low-flying aircraft, or some other nonhuman source. If the suspected enemy carried weapons or ordnance, they would activate the MAGID. When a sensor string showed probable enemy presence, its monitoring station operator, usually located at an artillery observation post, could request a fire mission, alert nearby allied ground units, or simply record the time, direction of movement, and other details for intelligence analysis.

During August, Marines of the division SCAMP tried submerging modified MAGIDs in the rivers near Da Nang to detect rockets hidden under water, without significant results. SCAMP Marines, employing 1st MAW aircraft, also experimented with airdropped acoustic sensors in remote enemy base camps. Other acoustic sensors, placed in known Communist

<sup>\*</sup>Early in 1968, the Marine Corps Development and Education Center at Quantico established a tentative doctrine for Marine Corps use of sensors, which included a requirement for a specialized organization to manage them. The Marine Corps tested the SCAMP concept in Exercise Exotic Dancer II at Vieques in spring 1968. In May 1968, the 3d Marine Division established a Ground Surveillance Section (GSS), similar in functions to the SCAMP. The 1st Marine Division late the same year created a much smaller GSS, which merely advised the infantry regiments on location of sensors and readout sites and trained Marines in sensor operations. In October 1969, when the 3d Marine Division redeployed, its GSS, now renamed SCAMP, remained with III MAF to help U.S. Army and ARVN units take over the Marines' sensor system along the DMZ. This unit was deactivated on 31 December 1969. In March 1970, the 1st Marine Division formed its own full-fledged SCAMP with men drawn from other units of the division. Darron Intvw, pp. 92-93, 98-99; FMFPac, MarOps, Aug70, p. 15.

<sup>\*</sup>III MAF allowed the division to communicate directly with the Army on sensor equipment matters. The MAF received information copies of all messages. Mosher Debrief.

hideouts in the populated areas, at times picked up the voices of suspected enemy, although they more often transmitted the chattering of monkeys or the squeak of tree branches rubbing together.<sup>38</sup>

The division used both troops and aircraft to emplace sensors. For example, infantry units conducted periodic operations in Antenna Valley, west of FSB Ryder, to cover the replacement or addition of sensor strings. As redeployments reduced Marine ground strength, the division, in cooperation with the wing, tried to develop methods for inserting and monitoring sensors from aircraft. CH-46s, OV-10As, and UH-1Es made sensor drops, while Douglas C-117Ds and Grumman US-2Bs of H&MS-17 attempted airborne monitoring. Aircraft shortages and inability to obtain required radio frequencies prevented continuous and effective aircraft monitoring, but the OV-10A proved well-adapted for sensor dropping and, carrying a Portatale, could accomplish limited readouts.\*39

The number of sensors in use by the 1st Marine Division declined during 1970. The decline resulted, in part, from troop redeployments, which included the reduction of the SCAMP from 85 Marines to 28, and from a MACV decision to reduce the Marines' allotted radio frequencies from 10 to four. In anticipation of autumn redeployment of the 5th Marines, SCAMP Marines removed or deactivated most of its sensor strings in southern and western Quang Nam during the summer and closed all of its readout stations, except those on Hill 190, OP Reno, and Hill 65. When redeployment of the 5th Marines was postponed, in late August the SCAMP set up additional monitoring stations in the Que Son Mountains and Valley, manned by troops of the 5th Marines specially trained by the SCAMP, and also began implanting new sensor strings in southern Quang Nam. Nevertheless, by November, the number of operating sensors in the division TAOR had fallen to 76.

Sensor usage increased again during early 1971. As additional redeployments further thinned the ranks of Marine ground units, the division and then the 3d MAB installed more sensors, many of them airdropped, to cover areas Marines no longer could patrol on foot. During March the Marines activated 22 new sensor strings, nine of them on the approaches to the Rocket Belt. By 30 April, 120 active sensors in 29 strings were deployed in Quang Nam.<sup>40</sup>

While most Marine commands found sensors useful, the new devices were not a substitute for other methods of gathering information. Sensor effectiveness was reduced by the shortage of trained Marine operators and by an absence of well thought-out tactical plans for exploiting sensor activations. Even with sound plans, however, it was questionable that, as redeployment continued, either the 1st Marine Division or 3d MAB had the men and means to execute them. The ability to respond quickly to sensor activations was also hindered because sensor readout and reporting functions concentrated in the divisioncontrolled SCAMP. Infantry units often were unaware of activations within their TAORs until it was too late to respond. Major Grinalds complained: "The battalion commander would often find out . . . that he had movement in his TAOR from the division FSCC calling down for a clearance for an artillery mission . . . ." Except in remote, unpopulated areas, sensors inevitably picked up civilian movement and friendly troop activity, and as a result, according to General Simmons, "any sensing had to be regarded as highly tentative, subject to confirmation as to identity, friend or foe." Nevertheless, in spite of their deficiencies, sensors clearly represented a major addition to intelligence gathering technology, and one likely to be of increasing importance in the future.41

By whatever means it was collected, information had to be quickly correlated and transmitted as intelligence to staffs and units in the field. To speed up and improve this process, III MAF established a Surveillance and Reconnaissance Center (SRC) at Da Nang in November 1969, under the Assistant Chief of Staff, G-2, Colonel John S. Canton. The center received a continuous flow of information from signal intelligence sources, sensor readouts, aerial reconnaissance and photography, POW interrogations, and captured documents and plotted it on a single map. On the basis of this data, the SRC planned the activities of the attached 1st and 3d Force Reconnaissance Com-

<sup>\*</sup>The Surveillance and Reconnaissance Center in the wing G-2 supervised airborne planting and monitoring of sensors for the 1st Marine Division. The wing also flew sensor missions for U.S. Army units and dropped sensors of its own on enemy truck routes near the Laotian border. See for example 1st MAW G-2 ComdC, Mar 70, pp. 2-3. To compliment 1st Marine Division efforts in the fall of 1969, General Thrash directed his wing G-2 to "develop and implement an internal wing capability for reconnaissance and targeting" in western Quang Nam. Col James R. Weaver, Comments on draft ms, 18Apr83 (Vietnam Comment Files).



Department of Defense Photo (USMC) A373802

BGen Edwin H. Simmons, Assistant Division Commander of the 1st Marine Division, talks to Marines on the defensive position south of Da Nang. The Marines have cut down the trees to clear fields of fire. Note the commanding view of the river valley below.

panies; provided III MAF operations planners with comprehensive current intelligence; and furnished target information to the 1st MAW.

The Surveillance and Reconnaissance Center never had time to demonstrate its full potential. In March 1970, when III MAF relinquished control in I Corps to XXIV Corps the SRC staff was deactivated. III MAF, with its much reduced headquarters complement and TAOR, could no longer maintain the SRC, nor was there a need for it. XXIV Corps decided not to reconstitute the SRC. From the deactivation of the SRC until redeployment, the division and wing G-2 staffs coordinated the collection of intelligence. The remaining reconnaissance units, for example, came under operational control of the division.<sup>42</sup>

Establishing a timely exchange of information with both the South Vietnamese and Korean Marine forces in Quang Nam was a continuing and frustrating problem, especially for the 1st Marine Division. The Vietnamese, who often refused to pass information between their own commands, were slow in transmitting potentially valuable data to the Marines. The communication that did exist was usually based on acquaintances and friendships between CIT and ITT Marines and their Vietnamese and Korean counterparts, rather than on formal arrangements. In December 1970, to improve intelligence coordination, the 1st Marine Division, Quang Da Special Zone, Quang Nam Province, and the 2d ROKMC Brigade established a Combined Intelligence Conference, but to the end of the Marines' stay in Quang Nam, the inter-allied information exchange was, at best, sporadic.43

The January-June 1971 redeployments dissolved the Marines intelligence system. When the 3d MAB was activated, its G-2 section assumed control of the SCAMP, the ITs, ITTs, and CITs, and the wing's aerial reconnaissance and photography activities, while the remaining company of the 1st Reconnaissance Battalion was attached to the 1st Marines. The 1st Radio Battalion began deactivation and redeployment early in March, and the battalion's command group and colors left Vietnam on 15 April. A radio detachment of six Marine officers and 79 enlisted Marines was attached to 3d MAB's H&S Company. On 1 May, the SCAMP turned all of its remaining sensor strings and readout sites over to the 196th Brigade. Six days later, all Marine intelligence collection activities came to an end.44

#### The Boobytrap War

As the North Vietnamese and Viet Cong increas-

ingly avoided combat during 1970-1971, they relied on boobytraps, officially grouped under the comprehensive title Surprise Firing Devices (SFDs), to inflict American casualties. Boobytraps, especially in the heavily populated, strongly pro-Communist countryside south of Da Nang, had been killing and maiming Marines with grim regularity since 1965. During the Marines' last year and a half of ground warfare, SFDs inflicted about half of the 1st Marine Division's casualties. The Marines had developed well thought-out countermeasures against these devices. Nevertheless, as they left Vietnam, they had to acknowledge that their efforts had reduced rather than solved the boobytrap problem.

For the most part, the hamlet guerrillas who planted boobytraps turned the Marines' own ordnance against them. Foraging parties of guerrillas and villagers diligently retrieved the dud bombs and rounds left by lavish allied use of their supporting arms. They also picked up grenades which had fallen off allied soldiers' web belts in the thick brush or which had been carelessly left behind at previously occupied positions, and they retrieved mortar rounds and other ordnance which had been dropped from broken helicopter slings. The VC used their gleanings to manufacture boobytraps in small, well-hidden, easilymoved hamlet workshops. While capable of improvising SFDs from almost any piece of allied ordnance, they especially favored the American M26 fragmentation grenade. Over 75 percent of the boobytraps encountered in the 1st Marine Division TAOR/TAOI were made from grenades, most of them M26s. The enemy also employed homemade devices, such as tin cans packed with plastic explosive and with pieces of wire, gravel, glass, or other sharp objects to serve as shrapnel. These, according to an officer in the 2d Battalion, 1st Marines, "are probably as dangerous, if not more dangerous, than the ordnance that we have . . . and they will cause extensive [injury]."45

The Viet Cong commonly buried their explosive devices or attached them to tree trunks or low-hanging branches anywhere patrolling Marines were likely to go. The VC especially favored trails, dikes between flooded paddies, and other places where terrain channelled movement, or sites suitable for defensive positions, landing zones, and observation posts. Frequently, the enemy boobytrapped objects Marines would be apt to pick up as intelligence finds or souvenirs. On one occasion, the VC mined an infant's

corpse. The Viet Cong most often relied on trip wires hidden in grass and brush to cause the detonation, and they also used pressure-release devices, activated by a Marine stepping onto and then off of a buried trigger. To emplace their boobytraps, the Viet Cong routinely conscripted local civilians, including young children, who could move about freely and watch American operations near their hamlets. Many of these civilian boobytrappers, according to Major Dale D. Dorman, S-3 of the 2d Battalion, 1st Marines, which had perhaps the most heavily mined AO in Quang Nam, were "in effect between a dog and a fire plug . . . . It's a case of, either they do this or they are . . . killed or mutilated by the VC."<sup>48</sup>

The Viet Cong set boobytraps in large numbers with a systematic tactical purpose. For the 2d Battalion, 1st Marines, it was "not uncommon for one of our patrols to go out [and] in the space of four hours find as many as five or six boobytraps . . . . We have found as many as 15 boobytraps in . . . 45 minutes." The enemy moved their boobytraps in response to the movement of Marine sweeps and patrols. According to Colonel Floyd H. Waldrop, the 1st Marine Division G-3, "the enemy has a habit of planting boobytraps, using them tactically, putting them out in just a matter of minutes." When a Marine patrol left its base, VC or peasants would hurry ahead of it and set traps in its path, or move in behind the Marines and mine their return route. Occasionally, VC being chased by Marines stopped long enough to emplace boobytraps for their pursuers, or deliberately lead Marines into previously boobytrapped areas. Often, the enemy used boobytraps to hamper Marine activities, then picked them up to facilitate their own movement or permit peasants to reach their fields. A 2d Battalion, 1st Marines squad leader recalled that the Viet Cong were:

The enemy also used concentrations of SFDs "in a pattern . . . suspiciously like a defensive mine field," to protect major caches, headquarters, and hideouts. Marines could penetrate these mined areas at will, but they had to move slowly and carefully, which allowed the enemy to escape with key items of equipment. Marines, preoccupied with the search for boobytraps,

often overlooked cleverly concealed caches. Nevertheless, according to Major Dorman, "In going in there and in cleaning these [mined areas] out, we have found some . . . quite important finds in the way of radio gear, documents, officers, and such . . . ."48

To protect their own troops and civilians, the Viet Cong frequently posted boobytrap warnings. They occasionally used small paper signs written in French or Vietnamese or merely a crude drawing depicting an explosion. More frequently, they arranged combinations of sticks, stones, or other common objects to mark the location or direction of boobytraps. When Viet Cong main force or North Vietnamese units, unfamiliar with a locality, moved in to conduct an attack, the local guerrillas removed most of their SFDs to give the unit safe passage. Knowledgeable Marines used this habit as a clue to detect enemy movements and intentions. According to Major Grinalds, the 1st Marines S-2, "You can always tell when a main force unit has moved into some place like the Arizona or Dodge City, which is notoriously bad for boobytraps, because all the boobytraps disappear for about three days."49

For the enemy, boobytraps were a cheap and profitable method for maintaining pressure on the Americans. The experience of the 1st Platoon, Company H, 2d Battalion, 5th Marines on a particularly bad day in the Arizona Territory graphically demonstrated what a few Viet Cong with explosives could accomplish.50 Early in the morning of 22 April 1970, the platoon began a patrol of the hamlets and rice paddies several miles northwest of An Hoa. At 0845, as the Marines were resting on dry ground after wading through waist-deep, flooded paddies, a machine gunner sat down on a large pressure-detonated boobytrap, later determined to have been a 105mm shell or a box mine. Staff Sergeant Thomas G. Ringer, the platoon sergeant reported, "all portions of [the machine gunner's] body from the middle of his stomach on down, were completely blown off and he was killed instantly." Three other Marines suffered multiple fragmentation wounds and concussions.

After a Marine helicopter evacuated the dead and wounded, the platoon continued its patrol. At 0950, a Marine hit a trip wire, setting off two boobytraps together; one was a 60mm mortar shell, the other a

M26 grenade.\* These blasts wounded three more Marines; one lost a leg. The platoon called for another medical evacuation helicopter. After it took off with the wounded, the patrol moved out again. It had gone barely 15 meters when a Marine, who made the mistake of not following in the footsteps of the men ahead of him, set off another pressure-detonated land mine. This SFD wounded only the Marine who tripped it, blowing off part of his leg, and once again the platoon went through the routine of evacuating wounded, and then marched on. It finished the patrol without further incident, but without seeing or engaging the enemy.

Suffering heavy, often gruesome casualties from boobytraps as the Company H patrol did, necessitating the suspension of operations to evacate the dead and wounded, was frequent experience for units operating in the Da Nang TAOR's lowlands. In the latter stages of 1970 as redeployment proceeded and face-to-face contacts with the enemy lessened, these casualties became even more demoralizing. The casualties involved, Major General Widdecke pointed out, "are particularly profitless in that, unlike a firefight, no cost or penalty is inflicted on the enemy." 51

Cumulatively, the enemy's boobytrap war caused significant operational limitations. The danger of hitting SFDs slowed infantry maneuver and often effectively restricted Marine patrolling. Constant danger undermined morale and further reduced combat effectiveness. A sergeant in the 2d Battalion, 1st Marines found that many of his men had a "psychological block" about boobytraps. "Whenever they took a step outside of their perimeter," he reported, "the only thing they could think of was boobytraps . . . . And it really puts them in a bind as far as getting the job done." 52

By early 1970, the 1st Marine Division, after almost five years of bitter experience, had developed counter-boobytrap tactics. The Marine effort began with measures to hinder Viet Cong manufacture and emplacement of SFDs. In frequent hamlet cordon and search operations, infantry units concentrated on finding and destroying enemy boobytrap workshops. To deprive the workshops of raw material, the Marines expended most of their VIP funds by paying civilians to bring in dud or discarded ordnance. Vietnamese children, especial-

ly, responded to these appeals, hauling in everything from rifle cartridges and grenades to mortar shells. During June 1970 the 2d Battalion, 1st Marines paid out 105,500 piasters (\$380 U.S.) for an assortment of explosives, including 44 M26 grenades, 69 Chinese Communist grenades, 11 containers of C-4, 44 105mm shells, and 13 81mm and 19 60mm mortar rounds. Marines suspected that they might be buying back their own stolen ammunition, but wherever the material came from, "by paying the children, we prevent this ordnance from becoming a boobytrap." 53

Constant small-unit patrolling, although increasing Marine exposure to boobytraps, made it more difficult for the enemy to emplace them. Preparatory air strikes and artillery bombardment could detonate some boobytraps in dangerous areas before infantry moved in, although the shelling and bombing also involved the risk of adding to the number of battlefield duds available to the enemy.

Small Marine units maneuvering in the countryside took elaborate precautions. Patrols avoided using the same paths and halting places. Whenever possible, they stayed away from trails, paddy dikes, and easy routes through rough terrain. As one officer put it, "It may be a little hard on the individual Marine, but he will find it a lot safer to walk in rice paddies where the water may be up to his hips or even . . . his chest, rather than walking on a dike or on a trail."54 Marines patrolled with Kit Carson Scouts whenever they could, or conducted combined operations with the Regional and Popular Forces, taking advantage of their allies' superior knowledge of the people and the ground. Small-unit leaders learned to "watch Charlie," following trails and paths which they saw the local villagers using, on the assumption that the inhabitants usually knew where the boobytraps were and avoided them.

Marines patrolling areas suspected or known to be boobytrapped moved slowly and cautiously. Wearing helmets and flak jackets, the Marines kept 15 to 20 meters apart to minimize casualties in the event of a detonation. The point man, and often other Marines, normally carried a probe stick, a long, thin pole of bamboo or similar light material, with which he carefully prodded the ground ahead of him. With his stick, an experienced, alert Marine could feel a trip wire in grass or underbrush before hitting it, or lo-

<sup>\*</sup>Multiple groupings of SFDs, known as "Daisy Chains," were a favorite VC boobytrapping strategem.

cate a buried pressure-release trigger in soft dirt or sand. A few fortunate units acquired electric ordnance detectors and used them for the same purpose as the probe stick. Small-unit leaders carefully selected and trained their point men. Many tried to relieve the point man every 15 to 30 minutes in the field, before weariness dulled the keen edge produced by mental fatigue and anxiety.

During 1970, specially trained mine and boobytrap detecting dogs began accompanying Marine units on operations. These animals had been taught to find hidden SFDs by the odor of the explosives in them or by the scent of the VC who had planted them. Their keen hearing often could pick up the vibrations of a trip wire in the wind; and they could feel a wire touching the fur on their chests before running into it. Fourteen dogs and 18 Marine handlers arrived at Da Nang on 7 March and were attached to the 3d MP Battalion, which then controlled all III MAF war dogs. The first dogs went into the field on 18 March. By late August the number of mine and boobytrap dogs had grown to 23. When the 3d MP Battalion redeployed, these animals, with the scout and sentry dogs, were assigned to the 1st MP Battalion.55

Marines in the field found the dogs useful but not infallible. The intense heat of Vietnam often caused the dogs to become fatigued and less alert. Occasionally, the dogs tripped boobytraps, and their handlers sometimes misunderstood or ignored the animals' signals. Also, as a platoon commander in the 2d Battalion, 1st Marines observed; "After several days of following a dog, you become overconfident in the dog and you stay less alert." In spite of their limitations, the dogs did provide another set of senses, in some respects sharper than those of men, for patrols working their way through dangerous terrain.

When a patrolling unit found or detonated a boobytrap, an established emergency procedure was put into effect. Every Marine froze in position. If the boobytrap had not gone off, a designated Marine, following a search for other nearby SFDs, carefully probed his way to the detected device, attached plastic explosive to it, and "blew it in place." The division repeatedly enjoined Marines not to tamper with or try to disarm boobytraps, a task reserved for trained en-

gineers and ordnance disposal teams, but periodically Marines disregarded these injunctions and paid with life or limb.<sup>57</sup>

If a boobytrap was triggered, especially the grenade type, Marines were taught to use the four second delay unless the fuse had been shortened by the VC, between the tug of the trip wire and the explosion to drop to the ground, giving themselves a chance to escape some of the blast and shrapnel. In Company G, 2d Battalion, 1st Marines, which often ran into boobytrapped M26s in tall grass, Sergeant Thomas F. Massey told his Marines:

... when they think they've tripped a boobytrap in tall grass to turn around and jump, back in the direction they came from. This has been very effective in quite a few cases, where guys knew they'd tripped the boobytrap, turned and jumped, and they just caught two or three pieces of shrapnel in their lower legs, where it could have been emergency medevacs or even worse.<sup>58</sup>

After a boobytrap detonation, the surviving Marines remained in position. An officer explained, "We found initially that when boobytraps were detonated, his buddies wanted to go and assist [the casualty] and by doing so they would detonate [another] boobytrap, causing three or four [more] casualties."59 The senior Marine, with the unit corpsman following in his footsteps, probed his way to the injured man or men and administered first aid. Other members of the unit, continually probing for more boobytraps, secured a landing zone for the medical evacuation helicopter. Within 48 hours of hitting a boobytrap, the parent unit commander was required to send a report to the division, which included a brief narrative of the incident, a description of the preventive tactics used by the patrol, planned countermeasures to prevent further incidents, and recommendations and lessons learned.

Marine units in heavily boobytrapped TAORs/TAOIs tried to vary their methods of operation to reduce exposure to SFDs while still accomplishing their missions. For some units, limitation of daytime movement and patrolling proved effective for this purpose. In June 1970 the 2d Battalion, 1st Marines, at the instruction of its new commander, Lieutenant Col William G. Leftwich, did most of its patrolling and ambushing at night, watching its AO

by day from static observation posts. Major Grinalds, then the battalion S-3, explained:

The VCI would put out boobytraps in the day, ahead of us, and we hit them, and they'd bring them in at night so that their people could get out and roam at large. So we took advantage of their concept by moving at night with them and avoiding the boobytraps. Then we'd stop during the day and stay out. The kids and the VCI would watch us, and we just wouldn't move into a position where they could lay some boobytraps either in front of us or behind us . . . . <sup>60</sup>

During May, Marines of the 2d Battalion found 22 boobytraps and unintentionally set off 30. In July, with the new concept of operations fully implemented, they found 20 and detonated 9; and in August they discovered 18 and detonated 14. At the same time, according to Grinalds, "we also maintained the same level of contact . . . and . . . kept the rockets from being fired." 61

Reducing the patrolling during the daytime led to fewer boobytrap casualties in many units, but there were tradeoffs accepted. In the heavily populated lowlands surrounding Da Nang, where VC/NVA agents continually operated, other commanders argued that failing to patrol during daylight afforded the enemy greater opportunity to conduct his business and maintain influence over the Vietnamese populace. Lieutenant Colonel William V. H. White. who commanded the 2d Battalion, 1st Marines through the spring of 1970, was convinced that "the size and nature of the terrain" in the 1st Marines AO necessitated extensive daytime patrolling, even if done with great caution because of the boobytrap threat: "... there were thousands of persons in the area. civilians, VC, RFs, PFs, ARVN, and others wandering around by day," he recalled, "it was necessary to get out among them to know what was going on." White also said that his experience with VC boobytrapping practices suggested that "only those types of boobytraps which interfered with normal daytime commerce were usually removed once placed." Most important, he contended, like many commanders, that units could not afford to "stay with one pattern too long" whether or not that included daytime patrolling. In short individual commanders were required to devise tactics which balanced the threat of boobytrap casualties with their ability to accomplish their

mission of eliminating the enemy in assigned areas of operation.<sup>62</sup>

Other units devised their own expedients to control their AOs while minimizing boobytrap casualties. The 5th Marines simply stopped ordinary small-unit patrolling in known, thickly-mined areas, entering them only during large-scale, carefully prepared operations. In the Que Son Valley, in mid-1970, the 7th Marines began cordoning off VC-dominated hamlets during the day and then patrolling actively at night. According to Colonel Derning, the regimental commander, this procedure more effectively restrained enemy activity while at the same time reducing physical exhaustion and boobytrap casualties among the Marines.<sup>83</sup>

The 1st Marine Division made extensive efforts to pass on its hard-won antiboobytrap experience to newly assigned Marines. During late 1969, Major Wallace M. Greene III, of the G-3 staff drew up a comprehensive division standing operating procedure (SOP) for countermine warfare. Greene based his SOP on "correlation of various references; seminars with regimental and battalion commanders and their S-3s; conversations with platoon commanders, platoon sergeants, and pointmen; and attendance at the . . . Mine Warfare and Boobytrap School conducted by the 1st Engineer Battalion."64 The SOP covered every aspect of the problem, from enemy methods and doctrine to post-detonation procedures. In addition to promulgating this basic guide, the division issued periodic bulletins to its subordinate units, informing them often of new VC techniques and devices and ways of countering them. Major General Widdecke continually stressed to his commanders the importance of "detailed indoctrination and frequent reindoctrination" of all Marines in antiboobytrap methods.65

The division required every infantry battalion to conduct continuous anti-SFD training, including exercises on a boobytrap lane. Normally located near the battalion's headquarters, the boobytrap lane was a piece of typical terrain saturated with dummy versions of the most common SFDs. The 2d Battalion, 1st Marines set up its lane in "quite a bushy area" near the combat operations center. "And there are located there every conceivable type of boobytrap that we have run into . . . . These range from pitfalls . . . the ones ly-

ing on the deck, . . . the ones in the trees, and covers all types of ordnance."66

Supplementing and reinforcing unit training efforts, the 1st Engineer Battalion operated a Land Mine Warfare School at Camp Faulkner, its base southwest of Da Nang. Each month during 1970, 300-400 Marines representing most units of the division, took the school's intensive three-day course. These Marines studied boobytraps and countermeasures in detail and practiced on a complete and up-to-date boobytrap lane which accurately incorporated dummy replicas of the most commonly encountered SFD. The eight NCO instructors at the school continually monitored field reports of new devices and added either disarmed and captured specimens or their own duplicates to the boobytrap lane. "More often than not," an instructor reported, "our first eyewitness account of Charlie's newest gimmick is from one of our students." The engineers developed a wary respect for VC ingenuity, pointing out that "Charlie will mine everything and usually does." To their own students, they emphasized, "While in the field, there's no substitute for alertness, caution and a suspicious attitude."

To extend its reach to Marines who could not attend the three-day course, the mine warfare school regularly sent two-man contact teams out to 1st Marine Division units. These teams presented a two-hour course tailored to the needs of the organization, concentrating, for example, on road mines for a motor transport battalion and boobytraps for an infantry unit. By the end of 1970, the teams had instructed a total of 5,912 Marines.<sup>67</sup>

On 1 August 1970, as part of the preparations for Keystone Robin Alpha, the division closed the mine warfare school to everyone but members of the 1st Engineer Battalion, although the contact teams continued to visit all units. With the slowdown of redeployments, the division reopened the school to all personnel in October, offering a five-day course for classes of 50 students at a time. Between 12 and 26 February 1971, as the 1st Engineer Battalion prepared to stand down, the school moved from Camp Faulkner to the division headquarters cantonment. The engineer battalion redeployed during March, but its Company A, left behind for inclusion in the 3d MAB,

continued to conduct the school and dispatch contact teams until 30 April, when it turned the facility over to the 196th Brigade.88

All of the training and command attention apparently produced results. In 1969, the ratio of boobytraps found and destroyed to boobytraps inadvertantly detonated, the division's principal measure of success on this problem, was 1.83 to 1. The year's average for 1970 increased to 1.96 to 1. For the first three months of 1971, the overall average rose to 2.77 to 1.69

Contributing to these encouraging ratios were innumerable instances of Marine coolheadedness and courage. On 22 October 1970, the 3d Platoon, Company H, 2d Battalion, 5th Marines was moving through the Que Sons during Operation Imperial Lake.70 The platoon halted for a rest along a trail. Its Navy corpsman, Hospitalman Second Class Randall L. Hackett, sat down beside a tree, relaxed, and looked around. To his horror, he discovered that "two feet off the ground attached to a tree I was leaning against was a canister full of Composition B [explosive] with its detonator under my foot." Hackett kept his head. Remaining absolutely motionless, he whispered to the Marine next to him that he was sitting on a boobytrap and to quietly tell the company commander, Captain John W. Moffett, who was accompanying the platoon or the operation.

Captain Moffett carefully made his way to Hackett, looking him and the trap over. Since Hackett's foot was pressing on the detonator and the device had not exploded, Moffett and the corpsman decided it must have a pressure-release trigger. After placing flak jackets around the mine to absorb some of the blast if it went off, Moffett gingerly put his hand on the detonator and applied pressure. Hackett then took his foot off, rolled away, and scurried to cover. Moffett put a rock on the detonator and in turn jumped back. The device did not explode, and the Marines were able to destroy it.

Other Marines were not as skillful or fortunate. Too often, men forgot their training or neglected basic precautions. These lapses, according to Lieutenant General Nickerson, were almost inevitable under combat conditions. "You can only go so far, so many days," he observed, "before you get careless, you get tired.

. . . If you've been a grunt you know you get to the point where you just don't give a damn. When you get to that point you are starting to make mistakes."<sup>71</sup>

During 1970, in spite of improving discovery-to-detonation ratios, the 1st Marine Division lost 1,868 Marines killed or severely wounded by boobytraps. The toll continued into 1971. On 10 January 1971 a CUPP unit from Company G, 2d Battalion, 5th Marines and a QRF platoon from Company E of the same battalion were sweeping a hamlet just south of the Ba Ren Bridge. A Marine detonated a boobytrap made from a 60mm mortar shell; the blast wounded two Marines. The QRF command helicopter, carrying the battalion executive officer, Major Cornelius H. Ram, and the commanders of Companies E and G, landed to pick up the injured men. Major Ram and Captain Doug-

las O. Ford of Company E left the aircraft to help load the wounded. As they did so, they set off a second 60mm mortar round SFD, which immediately killed Captain Ford and mortally wounded Major Ram.<sup>72</sup>

With such incidents fresh in their memories, Marines left Quang Nam with the frustrating knowledge that they had contained, rather than defeated, the enemy in the boobytrap war. Brigadier General Simmons, the assistant division commander, concluded: "The 1st Marine Division's strenuous efforts—including troop indoctrination, land mine warfare school, contact teams, and mine and boobytrap dogs—did not solve the problem. The best we can conclude," he said, "is that these efforts greatly reduced what might have been the casualty figures if they had not been vigorously pursued."73

# PART V SUPPORTING THE TROOPS

#### CHAPTER 15

## Fixed-Wing Air Operations, 1970-1971

1st MAW Organization, Strength, and Deployment – Coming to Terms with Single Management Attacking the Ho Chi Minh Trail – Air Support Trends in Military Region 1 – Controlling Air Support

1st MAW Organization, Strength, and Deployment

At the beginning of 1970, MACV had about 2,500 American fixed-wing aircraft and 3,600 helicopters of various types at its disposal. Of these, 261 fixed-wing aircraft and 241 helicopters belonged to the 1st Marine Aircraft Wing.<sup>1</sup>

The fixed-wing aircraft of the 1st MAW, with the exception of one squadron, were concentrated at two bases in I Corps. At Da Nang, where the wing headquarters and air control groups were also located, Colonel Neal E. Heffernan's Marine Aircraft Group (MAG) 11 included four jet squadrons: Marine All-Weather Attack Squadrons (VMA[AW]s) 225 and 242, Marine Fighter/Attack Squadron (VMFA) 542, and Marine Composite Reconnaissance Squadron (VMCJ) 1. Two other fixed-wing groups flew from Chu Lai. MAG-12, first under Colonel Paul B. Henley, then commanded by Colonel James R. Weaver, consisted of Marine Attack Squadrons (VMAs) 211, 223, and 311. MAG-13, commanded by Colonel Thomas E. Murphree, included VMFAs -115, -112, and -314. The fighter/attack squadrons were all equipped with the McDonnell-Douglas F-4B Phantom II; the attack squadrons flew the versatile McDonnell-Douglas A-4E Skyhawk; while the all-weather attack squadrons used Grumman A-6A Intruders. VMCJ-1 had a mixed complement of RF-4B Phantom IIs, modified for aerial reconnaissance and photography, and EA-6A Intruders with sophisticated electronic warfare devices.

The helicopters of the 1st MAW were also divided between two airfields at the beginning of 1970, but all belonged to a single aircraft group, Colonel James P. Bruce's MAG-16, which had its headquarters at Marble Mountain Air Facility. Both Marine light helicopter squadrons (HMLs) of the group, HML-167 with Bell UH-1E Hueys and HML-367 with Bell AH-1G Cobras, were based at Marble Mountain. Two medium helicopter squadrons, HMMs -263 and-364, also flew from Marble Mountain, as did the two heavy helicopter squadrons, HMHs -361 and -463, and Marine Observation Squadron (VMO) 2, the one MAG-16 fixedwing squadron with its North American OV-10A Broncos. At Phu Bai, HMMs -161 and -262 remained after

the recent dissolution of MAG-36. All the medium helicopter squadrons were now equipped with Boeing CH-46D twin-rotor Sea Knights, while the heavy squadrons had replaced most of their Sikorsky CH-53A Sea Stallions with more powerful CH-53Ds.

A number of other aircraft, not in the regular operating squadrons, were attached to the 1st MAW. Five aging Douglas C-117Ds were employed by headquarters and maintenance squadrons for a variety of missions. H&MS-11 operated 12 TA-4Fs, two-seater trainer versions of the A-4 Skyhawk, for reconnaissance and forward air control missions. Under H&MS-17, three Grumman US-2Bs were used for aerial monitoring of sensors. A detachment of four Lockheed KC-130F Hercules refueler-transports, from Marine Aerial Refueler/Transport Squadron (VMGR) 152 on Okinawa, flew aerial refueling, troop and cargo transport, and flaredrop missions from Da Nang Airbase.\*

Major General William G. Thrash, commander of the wing at the beginning of 1970, had flown with the 1st MAW in two previous wars. A native Georgian who earned his naval aviator's wings in early 1942, Thrash won a Distinguished Flying Cross and five Air Medals with the wing in the Pacific during World War II. In Korea, Thrash, then a lieutenant colonel with MAG-12, received the Silver Star for gallantry in action before being shot down, captured, and held prisoner for two years by the Chinese Communists. Thrash was promoted to major general in January 1967. After a tour as Commanding General, MCAS El Toro/Commander, Marine Corps Air Bases, Western Area, he took command of the 1st MAW in July 1969, relieving Major General Charles S. Quilter.

Thrash had taken over when the wing was still adjusting to MACV's imposition of single management of fixed-wing aircraft while at the same time the wing's system for controlling helicopters was under sharp criticism from many Marine ground commanders. Described by a subordinate as "a charmer" and "ex-

<sup>\*</sup>Also based at Da Nang were over 200 U.S. Air Force aircraft of the 366th Tactical Fighter Wing and the 41st Wing, 1st Vietnamese Air Force Air Division. The latter unit included two fighter, two helicopter, and one liaison/observation squadrons, with 122 aircraft.

tremely intelligent"<sup>2</sup> he devoted much of his first six months in command to improving the working relationship between the wing and the Marine divisions. Brigadier General Dulacki, then III MAF Chief of Staff, recalled:

I've never seen a commander operate the way he does, from the standpoint of getting the aviation message across. General Thrash made it a point to visit all the battalions, all the regiments. If they have a problem, he'll go out and talk to them . . . . He has visited the Army units; his group commanders have; his squadron commanders have. And . . . they have just knocked themselves out to support the ground forces in every way they can . . . . This attitude has permeated his entire command . . . . 3

By the end of 1969, Thrash's campaign to improve air-ground teamwork appeared to be succeeding. Major General George S. Bowman, Jr., a Marine then serving as Deputy Commanding General, XXIV Corps, informed General McCutcheon late in December:

Here in III MAF we have a very fine relationship between our Ground and Air. . . . [Thrash] spends a good deal of time to make it so. He is bending every effort to use more of the air capability in support of the ground effort. And I mean this from a planning point of view, and not just having it available should someone call up . . . . 4

General Thrash also oversaw a steady diminution of 1st MAW strength. During January and February 1970, HMH-361, VMFA-542, and VMFA-223 were transferred from Vietnam to MCAS, Santa Ana and MCAS, El Toro, MAG-12, commanded by Colonel James R. Weaver, with its headquarters and support squadrons and VMA-211, was transferred to MCAS, Iwakuni. These changes were accomplished as part of Keystone Bluejay. The withdrawals permitted the transfer of VMO-2 from Marble Mountain to Da Nang, a field more suitable for its operations, and once there the observation squadron became part of MAG-11. The removal of the OV-10As and the redeployment of HMH-361 made room at Marble Mountain for HMMs -161 and -262, which now moved there from Phu Bai, completing the concentration of all the wing's helicopters at one base. At Chu Lai, VMA-311, the last Marine A-4E squadron in Vietnam, was transferred from MAG-12 to MAG-13. By the end of March, the 1st MAW had been reduced to two fixedwing and one helicopter group, a total of 174 planes and 212 helicopters.5

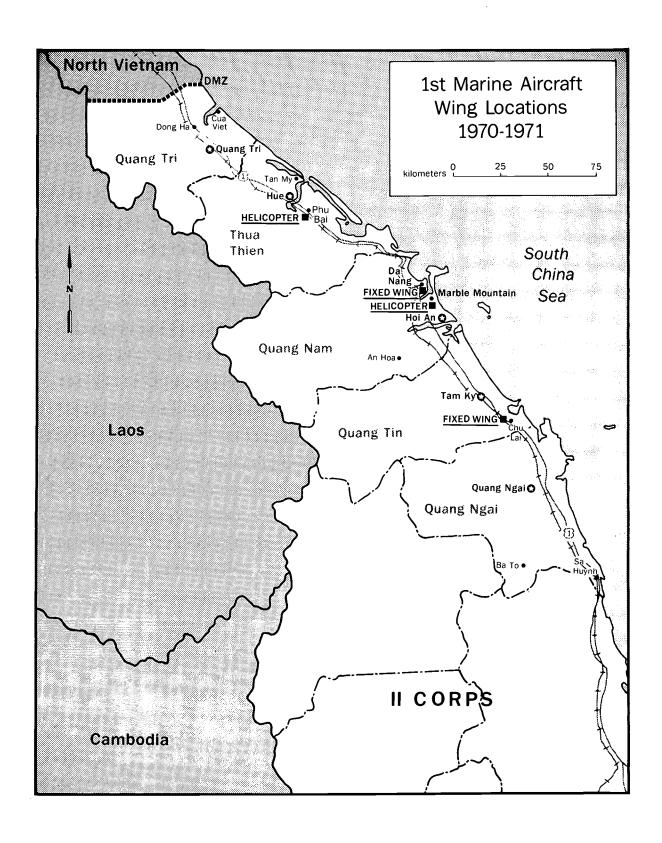
The wing, more than other III MAF elements, felt the disruptive impact of repeated changes in plans for the Keystone Robin Alpha redeployment.\* Initially, the Marines planned to remove six squadrons in this withdrawal: VMCJ-1, VMA(AW)-242, VMFAs -122 and -314, and HMMs -161 and -262. They also intended to redeploy MAG-13, with its headquarters and support elements, and close Chu Lai Airbase.

These plans were quickly changed. MACV and XXIV Corps forced retention of VMFA-314 and HMM-262 to assure adequate jet and helicopter support for I Corps; they also objected to the proposed withdrawal of VMCJ-1. III MAF particularly wanted to remove the latter squadron. Large in manpower, VMCJ-1 had continual difficulty keeping its complicated equipment in working order. It flew most of its photographic reconnaissance and electronic countermeasures missions in support of Seventh Air Force and Seventh Fleet operations over Laos and North Vietnam rather than Marine forces in South Vietnam. Emphasizing the logistic costs of keeping the squadron in South Vietnam, III MAF finally persuaded MACV to let VMCJ-1 leave.

All these changes in plan occurred in mid-June. In August, with the Keystone Robin Alpha redeployment already under way, including extensive transfer of men and equipment between squadrons, MACV and III MAF decided to put VMFA-314 back in the withdrawal. The Joint Chiefs of Staff had restricted the number of monthly fighter-attack sorties, so the additional Marine jets were no longer needed in Vietnam. This meant that personnel and material had to be shifted again.<sup>6</sup>

Eventually, VMCJ-1, VMFAs -122 and -314, VMA(AW)-242, HMM-161, and MAG-13 with its headquartrers and support squadrons left Vietnam in Keystone Robin Alpha. VMFA-115 and VMA-311 moved to Da Nang and joined MAG-11. In October, the last Marine aviation elements left Chu Lai, and control of that airfield passed to the U.S. Army. By 1 November, all of the remaining wing units, with the exception of two air support radar teams (ASRTs) deployed in northern I Corps, had been drawn into the Da Nang area. The wing, now under Major General Alan J. Armstrong, who had relieved Thrash on 2 July, consisted of two aircraft groups: MAG-11 under Colonel Albert C. Pommerenk, and MAG-16 commanded by Colonel Lewis C. Street III. Pommerenk's

<sup>\*</sup>For a full account of the planning for this and other redeployment phases and for the formation of the 3d MAB, see Chapter 3.



group included the remaining 81 fixed-wing aircraft; MAG-16 controlled the 149 remaining helicopters.\*

Between January and mid-April 1971, the 1st MAW headquarters group, Marine Wing Headquarters Group (MWHG) 1, and the bulk of the wing's air control group, Marine Air Control Group (MACG) 18, redeployed to Iwakuni in Keystone Robin Charlie. In the same redeployment, VMFA-115 went to Iwakuni, and HMM-364 and VMO-2 left Vietnam for the United States. On 14 April, the headquarters of the 1st Marine Aircraft Wing was formally transferred to Iwakuni, where Brigadier General Robert F. Conley, who had commanded 1st MAW (Rear), assumed command of the wing, replacing Armstrong who remained at Da Nang with the 3d MAB.

MAG-11, with VMA-311, VMA(AW)-225 and H&MS-11, which now had four OV-10As\*\* as well as its TA-4Fs, constituted the fixed-wing air element of the 3d MAB. MAG-16, the brigade helicopter group, consisted of HMLs -167 and -367, HMMs -262 and -263, and HMH-463. Marine Air Support Squadron (MASS) 3, formerly part of MACG-18, remained at Da Nang as part of MAG-11, to operate the brigade direct air support center (DASC) and furnish three ASRTs. A detachment of 20 Marines from Marine Air Control Squadron (MACS) 4, which had redeployed in February, stayed on Monkey Mountain to man the Marine Tactical Data Communications Center (TDCC), an automated facility which linked the Air Force and Navy aircraft tracking systems and antiair warfare direction. Air combat operations under the 3d MAB ended on 7 May. By 22 June, all Marine aviation units had left Vietnam. Only the TDCC detachment continued operating on Monkey Mountain. It would stay until Marine squadrons returned to Vietnam to help stem the North Vietnamese invasion in 1972.

Coming to Terms with Single Management

Since March 1968, the Commanding General, Seventh Air Force, in his capacity as Deputy Com-USMACV for Air Operations, had exercised "mission direction" of all 1st MAW fixed-wing strike and reconnaissance aircraft. The Air Force commander performed the daily function of "fragging" these Marine airplanes, that is assigning them to specific missions in South Vietnam, North Vietnam, or Laos.\*

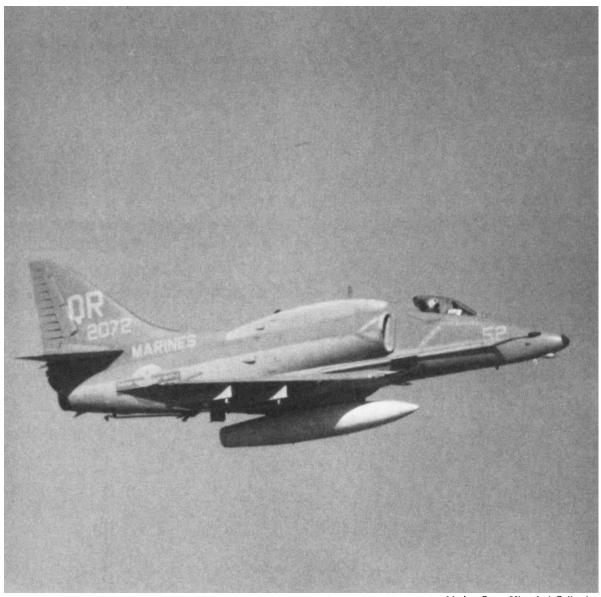
From its inception in a letter from General William C. Westmoreland, then ComUSMACV, to the Commanding General, III MAF, on 7 March 1968, this system, usually called "single management," had met continuing Marine Corps opposition and criticism. Westmoreland had justified its imposition as necessary to assure adequate air support for the Army divisions reinforcing the Marines in I Corps during the Communist Tet Offensive and siege of Khe Sanh, and as a means for improving the general efficiency of United States tactical airpower. In his 7 March instructions, he assured III MAF that "consistent with the tactical situation," Marine aircraft normally would continue to be assigned to support Marine ground units. In spite of these rationalizations and reassurances, most Marines interpreted the establishment of single management as a thinly veiled Air Force bid for operational control of their fixed-wing aviation. They bitterly recalled their frustrations in the Korean conflict, when the Marine air-ground team had been broken up, with the 1st MAW under Fifth Air Force control and the 1st Marine Division under the Eighth Army.7

During 1968, Lieutenant General Robert E. Cushman, Jr., the III MAF commander, waged a persistent campaign to reverse Westmoreland's directive. He had the full support of the Commandant, General Leonard F. Chapman, Jr., who appealed the issue to the Joint Chiefs of Staff. Marine Corps leaders declared that the imposition of single management had reduced the responsiveness and effectiveness of tactical air power in I Corps. They insisted that single management represented a de facto transfer of operational control of Marine fixed-wing air units to the Air Force, desttoying the integrity of the Marine Corps' air-ground team and violating both the law establishing Marine Corps organization and the Inter-Service agreements on the conduct of joint operations. Repeatedly, the

<sup>\*</sup>Both MAGs had changed commanders previously during the year. In MAG-11, Colonel Robert N. Heffernan had been replaced by Colonel Grover S. Stewart, Jr. on 19 February 1970. Colonel Stewart in turn had been relieved by Colonel Pommerenk on 19 June. In MAG-16, Colonel Haywood R. Smith had taken over from Colonel Bruce on 7 March and was in turn replaced by Colonel Street on 4 October.

<sup>\*\*</sup>These aircraft had been transferred from the departing VMO-2. H&MS-11 ComdC, Mar71.

<sup>\*</sup>The daily orders assigning aircraft to fly particular missions are known as fragmentary orders; hence the slang verb "frag" as applied to air operations. Until March 1968, the 1st MAW had "fragged" all of its own aircraft and had reported to the Seventh Air Force each day the number of fixed-wing sorties not needed to support Marine operations. The Seventh Air Force could then use these extra sorties for its own purposes. Under the new system, the wing reported all of its daily fixed-wing sorties, except those of light observation craft, for Seventh Air Force assignment.



Marine Corps Historical Collection

A McDonnell Douglas A4E Skyhawk from VMA-322, as indicated by the call signs QR on its tail, is shown in flight. The Skyhawks were the backbone of Marine close air support during the Vietnam War, carrying an extensive and versatile combat load.

Marine Corps proposed changes in the MACV system which in effect would return control of Marine fixedwing aircraft to III MAF. General Westmoreland and his successor, General Abrams, stood firm in their defense of single management, and a majority of the Joint Chiefs supported them. Emotion ran high on both sides, to the point where Westmoreland later declared that single management was "the one issue . . . during my service in Vietnam that prompted me to consider resigning. I was unable to accept that

parochial consideration might take precedence over my command responsibilities and prudent use of assigned resources."8

Although Marine frontal attacks on single management proved fruitless, partly because the Army strongly favored the system, which provided more and better Air Force support for its divisions in Vietnam, III MAF and the 1st MAW were able gradually to modify the system through informal working arrangements with the Seventh Air Force. Lieutenant General Nickerson,

who took command of III MAF early in 1969, and Major General Thrash, who assumed command of the wing a few months later, both took the position that single management was a fact of life and that the Marines should try to recover as much control of their aircraft as was possible under the system. General George Brown, USAF, who commanded the Seventh Air Force throughout 1969 and most of 1970, responded favorably to this pragmatic, conciliatory Marine approach.9

By mid-1970, III MAF and the 1st MAW had recovered, in fact if not in principle, much of their ability to assign missions to Marine strike and reconnaissance aircraft. Colonel Stanley G. Dunwiddie, Jr., commander of Marine Air Control Group (MACG) 18 reported:

Over the past year, although it was not officially recognized and not done in an overt fashion, the wing gradually began to frag more and more of its own aircraft again . . . although the fabric of single management still exists

The 1st MAW, for example, had gained the right to deduct the sorties required for landing zone preparation and other special missions in support of Marine forces from the number reported available to the Seventh Air Force. Further, the number of Marine sorties turned over to the Air Force was calculated on a rate of one sortie per day for each aircraft, but Marine squadrons normally flew at a rate of more than one sortie per plane per day. By agreement with the Seventh Air Force, III MAF could "frag" these additional sorties in support of its own operations.

The wing also exerted some supervision over the sorties that it surrendered to Air Force "mission direction." Customarily, the Seventh Air Force assigned all Marine aircraft used within South Vietnam to missions in I Corps/MR 1. The 1st MAW, through its liaison officer at Seventh Air Force Headquarters in Saigon, could recommend which Marine aircraft groups or squadrons should be employed on particular tasks. In fact, during late 1969 and the first part of 1970, the chief of the Strike Plans Branch of Seventh Air Force Headquarters, in charge of all aircraft task assignments, was a Marine lieutenant colonel. Marines declared jokingly: "Single management works great as long as the Marine Corps runs it." 11

As a result of these developments, according to General McCutcheon:

... The modus operandi ... relative to fragging of Marine aircraft is about as follows. With three F-4 squadrons, two A-6 squadrons and one A-4 squadron we had a total

of 89 aircraft assigned. This would provide 89 sorties per day at a 1.0 sorties rate. From this 89 it was agreed that we could withold 16 special sorties for radar beacon and LZ prep hops. This left 73 which we identified or made available to 7th Air Force. By agreement with them, they would frag 13 out of country, 36 for preplans and 24 for the alert pad which could be scrambled by Horn DASC. The net result of this was that in effect the Wing really controlled the 16 specials and 24 alert pad sorties, plus any add-ons that were generated. These usually amounted to nine to 27 per day depending on whether the sorties rate was 1.1 or 1.3.12\*

While the Marines had thus been able to modify single management in practice and keep their airground team substantially intact, these arrangements had no formal, written basis in either MACV directives or Inter-Service doctrines for joint operations. MACV Directive Number 95.4, prescribing rules for all aspects of air operations, had been issued in 1965 and never fundamently modified. In December 1968, MACV had proposed a revision incorporating the basic principles of single management and including a new term, "operational direction," to describe the Seventh Air Force's relationship to Marine fixed-wing aircraft. III MAF, in a sharply worded response, refused to concur in the draft, and MACV had abandoned the revision attempt. The only official description of single management on paper was General Westmoreland's letter of 7 March 1968 to General Cushman, prescribing a system which by 1970 had been altered extensively. Both to protect the Marines' position in Vietnam and to establish a favorable precendent for application in future joint operations, III MAF during 1970 sought an opportunity to incorporate a description of single management as it was actually working into a revision of MACV Directive 95.4.13

The III MAF commander, Lieutenant General McCutcheon, was uniquely suited to this task. During 1965, as J-3, CinCPac, he had helped develop the initial MACV Directive 95.4 and then had implemented it as 1st MAW commander. He had been Deputy Chief of Staff (Air) at HQMC throughout the post-1968 single management dispute. McCutcheon had decided that, because both MACV and the Army were benefiting from single management in Vietnam, the Marine Corps could not hope to obtain formal abolition of the system. Instead, he declared with characteristic bluntness, "I am working . . . on the philosophy that single management is here, and the

<sup>\*</sup>Horn Direct Air Support Center was a combined USAF/USMC/VNAF facility located at Camp Horn. It was created in 1968 and was the senior tactical air control agency for I Corps/MR1.

way to beat it is to join it and outmanage them." <sup>14</sup> In practical terms, this meant trying to retain as much Marine control of fixed-wing aircraft as possible within the rules. It also meant restating at every opportunity the principle that operational control of all 1st MAW elements remained with the commander of III MAF. MACV, in its statements on single management, had always acknowledged III MAF's command and control over Marine air, as well as other Marine forces in Vietnam. McCutcheon simply took MACV at its word on this point. He continually emphasized that the commander of the Seventh Air Force exercised limited tasking authority over 1st MAW aircraft in his capacity as ComUSMACV's deputy for air, not as an Air Force commander. <sup>15</sup>

McCutcheon closed on his goal when MACV revised its Directive Number 10.11, governing general command relations in Vietnam, after XXIV Corps became the senior U.S. headquarters in MR 1. McCutcheon and his staff proposed for inclusion in the document, a statement that the commander of III MAF would "exercise operational control of 1st Marine Aircraft Wing." He would make available "to Deputy Commander, USMACV for Air Operations, strike and reconnaissance air assets and tactical air control system for mission direction." MACV and Seventh Air Force accepted this proposal. McCutcheon declared: "My worst fears on this subject have been taken care of by the rewrite of 10.11. That shows I still have OpCon." 16

In early July 1970, the MACV staff again began revising Directive 95.4, and General Abrams ordered III MAF to submit proposed changes. The III MAF submission, sent to MACV on 6 July, reaffirmed that the Commanding General, III MAF "will exercise operational control of U.S. Marine Corps aviation resources and will conduct offensive and defensive air operations" while making strike and reconnaissance aircraft available to the Commanding General, Seventh Air Force, as Deputy ComUSMACV for Air, for "mission direction." Giving formal sanction to the practical arrangement already in effect, the Marines' draft permitted III MAF to withhold from Seventh Air Force direction "those assets necessary to support Marine Corps peculiar operations, e.g., . . . helo escort and landing zone preparation fire."

Reflecting McCutcheon's strategy for "outmanaging" single management, the most important proposed III MAF changes centered on an attempt to both clarify and restrict the authority of the Seventh Air Force under the system. The Marines did this by providing a definition of the terms "mission direction" and "operational direction," both of which MACV had used in relation to single management. Neither of these terms had an established definition in the United States military lexicon. III MAF proposed that "Mission/Operation Direction" be defined as "the authority delegated to ComUSMACV's Deputy Commander for Air Operations (CG 7th AF) to assign specific fixedwing air tasks to the Commanding General, III Ma-

A North American OV-10A Bronco is seen in flight. The Broncos were introduced into Vietnam in 1968 for forward observation and to control close air support. The OV-10A Broncos could stay on station for three to four hours at altitudes of over 7,500 feet.

Department of Defense Photo (USMC) A568683



rine Amphibious Force, on a periodic basis as implementation of a basic mission assigned by ComUSMACV."17

McCutcheon explained the significance of this language in limiting Air Force authority and protecting Marine interests:

Operational control comprises four essential elements: composition of subordinate forces, the assignment of tasks, the designation of objectives, and the authoritative direction necessary to accomplish the mission. By our definition mission direction is restricted to one element only, namely, the assignment of tasks. CG III MAF therefore retains the other elements of operational control. . . . A basic mission or task assigned by ComUSMACV to CG III MAF is to conduct offensive and defensive tactical air operations. Directive 95.4 now delegates to Deputy Commander MACV for Air, i.e., Commander 7th Air Force, responsibility to assign specific fixed-wing air tasks to CG III MAF on a periodic basis, that is in the weekly and daily frags, as an extension of the basic mission of offensive tactical air support assigned directly by MACV . . . . . 18

The Seventh Air Force and MACV both accepted the Marine draft. Colonel Richard H. Rainforth, the 1st MAW liaison officer at Seventh Air Force Head-quarters, declared that the revised Directive 95.4 "was written completely by Marine Corps input. We wrote it the way we wanted it, and the Air Force bought it." Issued by MACV on 15 August, the new directive reiterated that III MAF retained operational control of all Marine aircraft and included the provision for withholding specialized Marine support sorties from the Seventh Air Force. It incorporated almost word for word the Marines' definition of "Mission/Operational Direction."\*19

McCutcheon's proposals and the revised Directive 95.4 met initial criticism at HQMC as a formal surrender to single management, but most Marines quickly realized that they had gained more than they had given up. Looking to protect the Marine Corps' future, General McCutcheon concluded that 95.4, as published in 1970, "will stand us in good stead later as the JCS or unified commands research the subject and look for some way of explaining command relationships with air." Major General Homer S. Hill, McCutcheon's successor as DC/S (Air), seconded McCutcheon's view:

We have set a precedent whereby the Air Force had agreed in writing, to the Wing Commander retaining operational control of Marine aircraft . . . . We have inserted the MAF Commander in the chain which will prevent what the 7th Air Force was trying to do with the 1st MAW upon the advent of single management . . . . We may not always agree with the allocation of Marine forces under mission direction, but we sure as hell have a strong Marine voice that can go straight to the boss and not fiddle around with the Air Force.<sup>21</sup>

Throughout the rest of 1970 and until the last Marine squadrons redeployed in 1971, III MAF and the 1st MAW worked harmoniously with the Seventh Air Force. General Lucius D. Clay, Jr., USAF, who replaced General Brown as Seventh Air Force commander in September 1970, was acquainted with both Lieutenant General McCutcheon and Major General Armstrong from previous joint assignments. "I could go talk to them as a person," Clay recalled, and "just say, 'Hey, fellows, we've got a problem . . . . Let's work it [out]". The Marines, in turn, found Clay, in General Robertson's words, "very fine" to work with. "I think he had great respect for Marine aviators and Marines themselves," Robertson declared, "and the relationship we had, and the wing had with Seventh Air Force during my time . . . couldn't have been finer." Marine and Air Force commanders alike approached single management from a practical, rather than a doctrinal standpoint. Their concern, as General Clay put it, was to make "a very honest effort . . . to put the . . . ordnance where the people wanted it."22

Sortie allocations followed the practices developed during the previous year and the MACV Directive 95.4. Each evening, General Clay and his staff, including Colonel Stephen G. Warren,\* who had relieved Colonel Rainforth as 1st MAW liaison officer, would "sit down and plan our sorties for next day." According to General Clay, "Every night the Marines would say, 'We are going to . . . give you X, Y, or Z sorties today. We're going to retain A, B, and C for some

<sup>\*</sup>The exact MACV wording was: "Mission/Operational Direction. The authority delegated to DEPCOMUSMACV for Air Operations (Cdr, 7th AF) to assign specific fixed-wing air tasks to the CG, III MAF, on a periodic basis as implementation of a basic mission assigned by COMUSMACV." MACV Directive 95.4, dtd 15Aug70, paragraph 3c.

<sup>\*</sup>Colonel Warren, who had served five previous exchange tours or duty assignments with the Air Force beginning with the Korean War, was instructed by General McCutcheon to "act as a catalyst to ameliorate the enmity between Marine aviation and Seventh Air Force." Warren later observed: "If we Marines did 'outmanage' single management it was only with full awareness of General Lucius Clay and Major General Ernest Hardin . . . . My daily association with them was most pleasurable and rewarding and they quickly came to understand the entire problem of the Marine Air/Ground concept when involved in combined and joint operations." Col Stephen G. Warren, Comments on draft MS, 11Apr83 (Vietnam Comment File).

direct support activities, but beyond that these are yours". Colonel Warren, who represented the Marine Corps on a daily basis in negotiations with Seventh Air Force, recalled that the real facilitators were Generals Clay, McCutcheon, and Hardin who created "the high degree of amity in the pragmatic tactical operations" associated with single management.23 If disagreements arose, they were settled immediately by telephone calls from Seventh Air Force to 1st MAW Headquarters at Da Nang. The Marines had no difficulty obtaining all the fixed-wing support they wanted for their own operations. "When we had a big show for the division," Armstrong reported, the Seventh Air Force "never, never argued with pulling people off the runs into Laos or anywhere else to give us exactly what we wanted." Clay, on the other hand, felt confident that, if he needed the withheld Marine sorties to meet a major emergency, Armstrong "would say, 'They're yours; go'."24

By the time 1st MAW Headquarters redeployed in April 1971, Seventh Air Force/1st MAW relations had reached such a peak of amicability that General Clay nominated the wing for an Air Force Outstanding Unit Award with Combat "V." "They had done a hell of a job," he said later, "and I thought . . . they deserved some form of recognition." Through direct telephone calls to the Chief of Staff and Secretary of the Air Force, Clay obtained permission to make the award. He brought the streamer with him to the 1st MAW departure ceremony at Da Nang on 14 April. There, Major General Armstrong informed Clay that the Navy Department had not approved acceptance of the award on the grounds that it might duplicate a similar Navy unit citation for which the wing was being considered. This meant that the wing could not attach the streamer to its colors. Nevertheless, at the departure parade, General Clay "gave the streamer to Al Armstrong and read the citation, saying, 'This is a proposed citation that is being submitted' and let it go at that . . . . Then it turned out it was never awarded."\*25

While harmony and cooperation prevailed in the field, the doctrinal issue was far from settled. Gener-

al Chapman emphasized this fact on 14 October, in a letter to the commanders of the two FMFs and to the Marine Corps Development and Education Command. Evaluating the revised MACV Directive 95.4, Chapman declared that the directive, while it "clearly and decisively protects some of the Marine Corps principles with minimal derogation of policy," represented only "a special accommodation to a peculiar command relationship." In principle, Marines must continue to insist on "Marine aviation assets being tasked in support of Marine ground requirements prior to commitment of air assets to other missions," and that only "air assets in excess of requirements for Marine ground support" be committed "in general support of a joint force." 28

In Vietnam, the Marines had come to terms with single management and had modified it to assure continued support of their ground forces by Marine aviation, yet this favorable outcome had resulted in large part from circumstances, and from the ability and willingness of Marine and Air Force commanders on the scene to accommodate each other's interests through informal working relationships. In the end, General Armstrong suggested, doctrines and regulations always would give way to tactical necessity as perceived by the joint commander:

When we really come down to it . . . when you get in a tough situation where decisions have to be made, they're going to be made on merit. And I don't give a damn what's in writing. You could never hold COMUSMACV, for example, to any agreement. If he's got a tactical situation that dictates that he does something or he had to do something, on its merit he's going to do it. And you can't take that away from a commander by writing in a bunch of ironclad rules.<sup>27</sup>

The debate on whether or not the Marine Corps' long-term interests in maintaining the integrity of the air-ground team was damaged in Vietnam will, doubtless, continue for years. The assessment of senior commanders in Vietnam in 1970-1971, however, was that the single management controversy had little effect on Marine air's ability to support the troops on the ground: "There certainly was no degradation of either our capabilities or our ability to do anything we wanted

\*Under Navy regulations, no unit may receive more than one unit award for the same action or service. Unit awards from the U.S. Army or Air Force may be accepted by Navy or Marine units, but only with the concurrence of the Secretary of the Navy. This concurrence "is necessary to preclude dual recognition of those units for which the Navy Department is considering or has already approved a unit award." Department of the Navy, United States Navy

and Marine Corps Awards Manual, SecNavInst 1650.1D, CH-3, dtd 19Aug71, Paragraphs 314.5 and 316.1. The current 1st Marine Aircraft Wing list of streamer entitlements include no unit award for the period September 1970 - April 1971, although the wing holds a Presidential Unit Citation for Vietnam service 11May65-15Sep67 and a Vietnam Service Streamer with two Silver and two Bronze Stars for service between 11May65 and 14Apr71.



Department of Defense Photo (USMC) A422881 F4B Phantom is seen on a bomb-

A heavily loaded and armed Marine McDonnell Douglas F4B Phantom is seen on a bombing run in Vietnam during January 1971. The Marine Phantom fighter/attack aircraft were introduced early into the Vietnam War in April 1965 in a close air support role.

to do," said General Armstrong. "If our ground guys wanted to do something, we told Seventh Air Force we'd like to have a light schedule of commitments and excess sorties to do something on our own within III MAF, and never, on any occasion, were we refused."<sup>28</sup>

#### Attacking the Ho Chi Minh Trail

After the United States stopped bombing North Vietnam in 1968, the American effort to hinder the movement of men and supplies into South Vietnam was concentrated on the southern panhandle of Laos, codenamed the Steel Tiger area. Here, the Ho Chi Minh Trail, a complicated network of trails and roads, crossed the western border of North Vietnam through four passes in the Annamite Mountains and then turned south, its innumerable branches leading to Communist base areas in South Vietnam. The North Vietnamese constantly repaired and extended these routes, in spite of American bombing. Over the elaborate trail and road network, enemy troops, fuel, and munitions flowed southward. Carried most of the way in a series of short hauls, with repeated changes of vehicles, each truck, or group of them, continually

shuttled different loads over the same short stretch of road, almost always traveling by night. At various key points, troops could rest in hidden camps and supplies could be stored in carefully camouflaged depots.

The flow of enemy material through this system. and the American air effort to restrict it, was tied to the annual cycle of weather. Between October and February, the northeast monsoon brought relatively cool, foggy, rainy weather to coastal North Vietnam and northern South Vietnam. At the same time, the interior of Laos west of the Annamite Mountains experienced clear, dry days and nights. The North Vietnamese regularly took advanatage of this period to move large amounts of supplies through the passes into Laos. Most of the material sent south during a year entered the northern end of the Ho Chi Minh Trail at this time. The allies adjusted their air interdiction effort to the same schedule. During the winter northeast monsoon, when bad weather reduced flying and ground activity in South Vietnam, MACV allocated the majority of its tactical air and B-52 sorties to the Steel Tiger area. Then, as the summer southwest monsoon brought rain to Laos, and northern South Vietnam entered its dry season, the air effort was gradually shifted back to support operations in South Vietnam.

Conforming to the seasonal ebb and flow of activity, MACV and the Seventh Air Force in October 1969 launched Operation Commando Hunt III, the second in a series of campaigns to disrupt the Laotian portion of the enemy supply line. United States Air Force, Navy, and Marine tactical aircraft and Air Force B-52s made intensive day and night attacks on vehicle parks, transfer and storage areas, fords, and passes. By January 1970, MACV was allotting 55 percent of all preplanned tactical air sorties and 65 percent of all ARC Light missions to Commando Hunt III.<sup>29</sup>

In addition to the attacks on the Ho Chi Minh Trail, American aircraft flew other missions over Laos and, to a limited extent, North Vietnam. Over northern Laos, American aircraft conducted Operation Barrel Roll, providing tactical air support to anti-Communist Laotian forces. This operation involved primarily Air Force and Navy planes. American aircraft also continued reconnaissance flights over North Vietnam. Early in 1970, the Joint Chiefs of Staff authorized short incursions into North Vietnamese airspace by aircraft conducting Commando Hunt III missions and permitted attacks on North Vietnamese surface-to-air missile (SAM) sites threatening B-52s flying into Laos.

At the beginning of 1970, the 1st Marine Aircraft Wing was providing 25-35 sorties per day in support of Commando Hunt III and other operations outside South Vietnam. While F-4Bs and A-4Es were conducting conventional bombing and strafing attacks in South Vietnam, most 1st MAW activity over Laos and North Vietnam was designed to exploit unique capabilities of Marine aircraft.<sup>30</sup>

The most distinctive Marine contribution to the Laos interdiction effort was Operation Commando Bolt, which exploited the all-weather capabilities of A-6A Intruders in night armed reconnaissance flights over the Ho Chi Minh Trail. These long-range twin-engine jets could carry as many as 22 500-pound bombs. Described by General McCutcheon as "the finest all-weather bombing aircraft in the world," they had elaborate radar and computer navigation and bombaiming systems. These systems could locate and attack small moving targets, making the A-6A ideal for night-time truck-hunting. The EA-6As also provided exceptional electronic jamming for strike missions into areas in Laos and North Vietnam which were heavily

defended by antiaircraft artillery and surface-to-air missiles.

By early 1970, the A-6As were flying most of their missions under the guidance of the Air Force sensor readout station, which monitored seismic and acoustic sensors airdropped along the many branches of the Ho Chi Minh Trail.32 An A-6A assigned to Commando Bolt would take off from Da Nang and fly to a prearranged point where it would orbit, awaiting a target assignment. As trucks, known as "movers," activated the sensors, the readout station would notify the Marine aircraft of the target location. The Marine aircrew would then feed this data into the A-6A's computer system and go in for a low-level attack. The A-6A proved effective as a truck destroyer. In the course of Commando Hunt III, MACV credited the Intruders with 977 trucks demolished or damaged in 1,486 sorties, an average of .66 trucks hit per sortie. Of the aircraft types used against the Ho Chi Minh Trail, only the Air Force AC-119, AC-123, and AC-130 gunships had a higher kills-to-sorties ratio.\*

Marine Intruders making night bombing runs along the Ho Chi Minh Trail during late 1969 and early 1970 drew increasingly heavy antiaircraft fire. North Vietnamese gunners simply blazed away either at the sound of the aircraft or at the general area above where bombs were exploding. As a Marine pilot described it, the Communist strategy was to throw up "a tremendous volume of fire without stoppage from any gun that was able to deliver . . . fire in the immediate area . . . which was causing the A-6 some difficulties." 33

To suppress this inaccurate but potentially dangerous flak, 1st MAW began sending an F-4B, codenamed appropriately Commando Bolt Assassin, to escort some of the patrolling A-6As. The crew of a F-4B, assigned the Assassin role, received the same briefing as the crew of the A-6A with which they were paired, then flew independently to orbit point, where the F-4B joined the A-6A and waited for a target. When the Intruder started its bombing run, the Phantom II followed in radar trail, armed with Zuni rockets and Rockeye II cluster bomb units (CBUs). The fighter-bomber crew watched for enemy gun flashes and attacked any Communist positions which opened fire. If the Intruder encountered no antiaircraft fire, which was infrequent, the F-4B expended its ordnance on the A-6A's target.

<sup>\*</sup>U.S. aircraft were credited with destroying or damaging 9,839 Communist trucks on 15,777 sorties during Commando Hunt III. MACV ComdHist, 70, I, ch. VI, pp. 95-96.

Initially, Da Nang-based VMFA-542 carried out this mission. After this squadron redeployed in March, VMFAs -115, -122, and -314 at Chu Lai took over.

For the Phantom II pilots, accompanying an A-6A night bombing run was no easy task. Captain Lawrence G. Karch, of VMFA-542, pointed out that "the A-6 had a terrain-following radar and . . . all the goodies to do all-weather night interdiction missions . . . . We don't . . . . Following this dude around right on the ground and then going in for a visual attack on a gun at night . . . it's really quite challenging."34 Some Phantom crews complained that the Rockeye II was ineffective in night attacks because the bright flash when its casing opened warned enemy gunners to take cover; nevertheless, the F-4B escorts achieved their goal of flak suppression. After the assassin flights began, A-6A and F-4B pilots flying over Laos reported that NVA gunners either were not shooting at the Intruders or were firing only brief bursts.

Under the codename Playboy, Marines of H&MS-11, flying McDonnell-Douglas TA-4Fs, conducted daily low-level, high-speed, visual reconnaissance of sections of the Ho Chi Minh Trail where NVA antiaircraft fire forced slower observation craft to remain at high altitudes.35 The TA-4F proved ideally suited to this dangerous mission. Its speed, small size, and maneuverability made it difficult for antiaircraft gunners to hit, and its two-place cockpit could accommodate an aerial observer. On a typical Playboy mission, a TA-4F would remain on station for about 40 minutes. It would fly along its assigned network of trails at altitudes of 200 to 2,000 feet at airspeeds between 450 and 550 miles per hour, constantly maneuvering up and down and from side to side to dodge hostile fire. After covering 10 or 15 miles of one route, the TA-4F would shift laterally to a different trail branch and follow it for a while. This tactic prevented the North Vietnamese from alerting batteries ahead of the TA-4F on its original flight path. The TA-4Fs were fired at on most of their missions and frequently were hit, but only one aircraft from H&MS-11 was shot down during 1970, and it was lost in South Vietnam. Occasionally, the Playboys, like Commando Bolt A-6As, flew with F-4B escorts for flak suppression.

While Air Force OV-10As, which remained on station for three or four hours at a time at altitudes above 7,500 feet, located large truck parks and storage areas and monitored the overall pattern of enemy activity, the TA-4Fs concentrated on smaller, hidden targets. Their crews regularly flew over the same portions of

the trail system and developed the ability to spot subtle changes in foliage and topography, indicating enemy activity. They could locate individual, camouflaged trucks, bulldozers, and small supply dumps. While singly of minor importance, such sightings could form significant cumulative patterns. As a TA-4F pilot put it, "when you get into a particular area, [and] you'll find a truck or two trucks, or storage, or a few oil drums, . . . every day for a two-week period you know . . . that they've got a lot of stuff in there, and it's become a lucrative area to hit." 36

The TA-4Fs could also call for and control air strikes, but, because of their relatively short time on station, normally preplanned air support was not assigned to them. Often the TA-4Fs worked in cooperation with the OV-10As, which usually had flights standing by. The Marine jets would make low-level turns to investigate areas the high-altitude observers thought might contain potential targets; then the OV-10As could direct follow-up strikes.

VMCJ-1 supported operations over Laos and North Vietnam with both intelligence and electronic countermeasure flights. The RF-4Bs of the squadron, supplementing the much larger Air Force reconnaissance effort, collected target information and photographed strike results. The Marine jets on the average flew two of the approximately 40 photographic missions conducted in Laos and North Vietnam each day by the Seventh Air Force. More important were the Marine EA-6As. With the Navy EA-6s based offshore on carriers, these were the only electronic warfare planes in Southeast Asia fast and maneuverable enough to accompany strike aircraft to a target. They flew day and night radar detection and jamming missions in support of Air Force and Navy as well as Marine air raids.<sup>37</sup>

While the allies possessed total command of the air during 1970-1971, North Vietnamese MIG fighters posed a continuing threat to aircraft operating over Laos, especially the B-52s. To deter MIG attacks, the Americans kept fighters on airborne alert over Laos (MIGCAP) and over the Navy carrier task force in the Tonkin Gulf (BARCAP). The F-4B squadrons of the 1st MAW drew their share of both MIGCAP and BARCAP assignments. Normally, a squadron committed most of its strength to this mission on a particular day or days during the month, keeping two aircraft orbiting on the patrol station over Laos or the carriers, with others ready on the airstrip to relieve or support them. The mission also required a KC-130F tanker to refuel

the fighters when they reached their patrol area, extending both the range and the time on station.

While these missions at times strained the 1st MAW's diminishing fighter-bomber capabilities, General Thrash considered BARCAP, in particular, to have compensating advantages. Thrash declared that participation in BARCAP "maintains our air-to-air proficiency as well as coordination with carrier task force operations," and "has the side benefit of maintaining cordial relations with the fleet." 38

During the first half of 1970, 1st MAW operations over Laos and North Vietnam kept pace with the intensity of the air campaign. Aircraft of the wing flew an average of 785 Commando Hunt related sorties each month. These included 250 A-6A Commando Bolt sorties, 75 F-4B bombing missions, and 15 Playboy TA-4F flights. VMCJ-1 conducted an average of 40-50 photographic reconnaissance and 150 electronic warfare missions per month. The wing's monthly BARCAP contribution averaged 48 sorties, and some months the F-4Bs flew another 50 or 60 bomber escort and Commando Bolt Assassin missions.

During May and June, Marine air operations expanded into Cambodia, as American and South Vietnamese troops swept the enemy's border base areas. On 5 and 6 May, Phantom IIs of VMFAs -115 and -314 flew eight missions in support of Operation Binh Tay I, a large-scale incursion by the U.S. 4th Division and the 22d ARVN Division into a Communist base area

40 miles west of Pleiku. The Marine jets dropped 1,000-pound bombs to clear landing zones for allied heliborne assaults. Later in the month, supporting the same operation, MAG-13 Phantoms completed 26 direct and close air support sorties, attacking NVA and VC positions with napalm and 500-pound bombs. Marine air operations over Cambodia concluded in June with four flights by VMFA-314 to drop 500-pound delayed action bombs on a key ford.<sup>39</sup>

In mid-1970 the usual seasonal decline in American sorties against the Ho Chi Minh Trail began, the number falling from 10,966 in April to 6,242 in July and only 4,943 in August. Conforming to the pattern, the 1st MAW, with the concurrence of the Seventh Air Force, reallocated most of its fixed-wing sorties to support the I Corps/MR 1 summer offensive and participate in such large-scale 1st Marine Division operations as Pickens Forest and Imperial Lake. Redeployment of key Marine air units involved in the interdiction campaign further diminished 1st MAW operations outside South Vietnam.

The gradual removal of 1st MAW aircraft from Commando Hunt and related operations began in mid-June. On the 16th, as MAG-13 and two of the Marines' remaining three F-4B squadrons prepared to stand down, the Phantom IIs ceased flying bombing missions over the Steel Tiger area. Aircraft of non-redeploying VMFA-115 continued BARCAP and MIG-CAP flights. The withdrawal of VMCJ-1 in July ended

A Marine Grumman EA-6A Intruder is shown on the runway at the Da Nang Airbase. The EA-6A was the electronic countermeasures version of the A6A. EA-6As were used to detect and jam enemy radars in the air war over Laos and participated in Lam Son 719.

Marine Corps Historical Collection



the Marines' photographic reconnaissance and electronic warfare contributions to the interdiction campaign. A-6A Commando Bolt sorties also declined, from 212 flown in June to 60 in July and 87 in August. On 19 August, the 1st MAW temporarily halted Commando Bolt flights. This action resulted also from increased need for the all-weather bombers within South Vietnam and in part from severe maintenance problems which plagued the A-6A throughout the summer.\* TA-4F Playboy missions ended on 14 September, again because of redeployment of some of the aircraft and the need for the others within South Vietnam. By October, only the F-4Bs of VMFA-115 still were flying Steel Tiger missions. They completed 33 B-52 escort missions during the month, as well as 32 BAR-CAP sorties.40

In November, the air war against the Ho Chi Minh Trail resumed with increased fury. MACV and the Seventh Air Force launched Commando Hunt V. another monsoon-season attempt to halt the flow of Communist troops and supplies into South Vietnam. General Abrams allotted 70 percent of all United States tactical sorties in Southeast Asia and the entire Arc Light effort to this campaign. At Abrams' direction, the Seventh Air Force concentrated most of this airpower on four "interdiction boxes," each a rectangle three-quarters of a mile by one and one-half miles in size covering the routes leading from one of the major passes. B-52s and tactical aircraft blasted these boxes in round-the-clock raids aimed at destroying trucks and supplies and obliterating the roads and trails. At the same time, tactical aircraft resumed antitruck patrols of the routes outside the interdiction boxes.41

As a result of troop redeployments and the declining level of ground action, the 1st MAW, even with

its own strength much reduced, could now fly many more sorties than were needed to support Marine and allied forces in South Vietnam. The wing devoted most of the surplus to Commando Hunt V. On 8 November, the A-6As of VMA(AW)-225 resumed Commando Bolt missions, flying a steady seven sorties a day over the Laotian roads. At the same time, the F-4Bs of VMFA-115 and the A-4Es of VMA-311 went north in daylight raids on the interdiction boxes. Aircraft of these two squadrons soon were flying 14 Commando Hunt sorties a day. The F-4Bs also increased escort activities; to protect the B-52s over Laos, the Phantoms conducted 66 MIGCAP missions in November and they completed 87 BARCAP sorties. 1st MAW Commando Hunt operations continued at a level of 700-800 sorties per month through the end of 1970 and the first four months of 1971. During March and April 1971, the Marines' interdiction effort in effect became part of the close air support for Lam Son 719 \*42

To support the renewed Laotian air offensive, EA-6As of VMCJ-1 reentered South Vietnam. In October, MACV and the Seventh Air Force asked the Marine Corps to return at least the electronic warfare elements of the squadron to help ward off SAM attacks on B-52s over Laos. Initially, the Marines were reluctant to comply; they were concerned about the political repercussions of sending even part of a withdrawn unit back to the war. Further, the Marines' worldwide level of maintenance and support personnel, parts, and equipment for the EA-6A was limited, and a recommitment of the aircraft to Southeast Asia would force curtailment of EA-6A activities elsewhere. At the urging of General McCutcheon, who stressed the indispensability of the EA-6A in Southeast Asian operations, the Marines finally agreed to deploy detachments from VMCJ-1 to Da Nang while the parent squadron stayed at Iwakuni. The aircraft at Da Nang were to be under the operational control of the Seventh Fleet, rather than III MAF.43

Two temporary deployments of four-plane EA-6A detachments took place during March 1971, one from the 9th through the 19th and another on the 22d. The aircraft flew 17 electronic warfare sorties during both deployments. On 5-6 April, another detachment of four EA-6As moved to Da Nang, this time "on a long-term basis." The aircraft and their crews were accompanied by 100 VMCJ-1 ground personnel and seven vans of electronic warfare support equipment. Sup-

<sup>\*</sup>In June, after a Navy A-6A suffered a wing failure, the Marines began inspecting each of their Intruders for wing cracks, using both ultrasonic and x-ray equipment. The Marines' Intruders were found to be structurally sound, but, under a Navy Department program, each had to be taken out of service temporarily for modifications to strengthen the airframe. While this was being done, A-6As and EA-6As were restricted to speeds of less than 500 miles per hour and pilots were instructed to avoid violent maneuvers except on "flights of operational necessity." In addition to these limitations on operations and availability of the aircraft, the A-6A squadrons in Vietnam suffered from a shortage of key ground crewmen, and the 1st MAW Semiautomatic Checkout Equipment (SACE) complex, crucial to repair of the Intruder's complicated electronic systems, itself had to undergo extensive rehabilitation during the summer. Not until October were all the aircraft modified and the SACE complex returned to full operation. FMFPac, MarOps, Jun70, p. 46, Jul70, pp. 44-45, Aug70, p. 45, Oct70, pp. 33-34.

<sup>\*</sup>For details of the Marine air role in Lam Son 719, see Chapter 11.

plementing the equipment brought from Iwakuni, the detachment received assistance from MAG-11 and from VMA(AW)-225. Between 15 April and 7 May, the EA-6As completed 116 combat sorties, fragged by the Seventh Air Force and CTF 77, then returned to Iwakuni as Marine ground and air operations ceased.<sup>44</sup>

Between 8 November 1970 and 30 April 1971, when Commando Hunt V ended, Marine A-6As flew a total of 1,011 Commando Bolt sorties. They claimed 251 trucks destroyed and reported 771 secondary explosions and 241 secondary fires. In the same period, Marine F-4Bs and A-4Es completed 2,498 sorties, in which they claimed 36 trucks, 2 bulldozers, 4 tanks, and 14 crew-served weapons, caused 900 secondary explosions, and made 396 road cuts. Air operations over Laos continued after the end of Commando Hunt V. VMA-311, the last operational fixed-wing squadron of 3d MAB, flew missions over Laos until all Marine combat ended on 7 May.<sup>45</sup>

#### Air Support Trends in Military Region 1

I Corps/Military Region 1 consistently received more fixed-wing air support than any other allied corps area. By late 1970, the region was absorbing beween 65 and 100 percent per month of the B-52 sorties flown within South Vietnam and up to 30 percent of all tactical air sorties. Much of this airpower, substituting for withdrawing American ground forces, was used to break up enemy troop concentrations and destroy supplies in the large Communist base areas in western Quang Tri and Thua Thien Provinces.<sup>48</sup>

Until late 1970, Marine aircraft daily flew about 65 percent of the tactical air-strikes conducted in MR 1,47 but, inexorably, as 1st MAW strength declined, so did Marine air activity. During January 1970, Marine aircraft completed 3,036 attack missions in MR 1 and 735 "combat support" sorties, a category that included reconnaissance, artillery and air-strike control, and flare drops. By June, the number of attack sorties had fallen to 2,497, although combat support missions had increased to 1,046.48

Reflecting the shifting balance of allied forces, Marine aircraft flew more than half of their close and direct support missions for U.S. Army, South Korean, and ARVN units. Of 29,998 A-4E, A-6A, and F-4B sorties flown in 1970, for instance, 11,348 supported Marines and 12,116 were called for by Army forces. The attack aircraft completed another 1,814 missions for the South Vietnamese and 290 for the Korean Marines. Attacks on targets outside South Vietnam accounted for the remaining sorties. By contrast, the

OV-10As of VMO-2 flew all but a handful of their 7,018 sorties in support of the 1st Marine Division. The TA-4Fs split their 2,009 missions about evenly between the division and Seventh Air Force operations in Laos.<sup>49</sup>

Marines in turn occasionally received close support from the U.S. Air Force. An officer at the 1st MAW tactical air direction center remarked:

Once on the target, the Air Force air is every bit as good as Marine air, not better in any way, but comparable in getting the ordnance on the target. There is a bit of a slowdown . . . as a result of the fact that Air Force air is not as familiar with the terrain features . . . in I Corps . . . but you can get them on target almost as quickly and once there they do a fine job . . . . 50

During the last months of 1970 and early 1971, strike aircraft of all the Services operated under strict sortie limits. The Joint Chiefs of Staff on 17 August, as an economy measure, compelled by budget cuts, restricted the number of tactical air attack sorties which could be flown in southeast Asia to 14,000 per month. Of these, the JCS allotted 10,000 to the Air Force, 2,700 to the Navy, and 1,300 to the Marine Corps. Earlier, for similar reasons, the Joint Chiefs had limited B-52 sorties to 1,000 per month. MACV could exceed these ceilings only with special JCS permission.<sup>51</sup>

Under the JCS order, the 1st MAW could launch a maximum of 42 or 43 attack sorties per day; combat support missions did not count toward the limit. Since most of the daily attack sorties would be subject to Seventh Air Force assignment under single management, and the wing no longer could increase its sortie rate at will, the restriction initially revived III MAF fears that its ground forces would be denied adequate Marine air support, but, these concerns proved unfounded. The Seventh Air Force continued to be accommodating in mission assignments, and MACV permitted 1st MAW to reduce sorties below the maximum on some days of a month in order to exceed the maximum on other days when extra air support was required. According to Colonel Frank A. Shook, Jr., the 1st Marine Division Air Officer, "It's 1,300 sorties in any one month, but you can run 10 sorties one day and then maybe 50 the next, but you've got to bank them to do it." By this means, the wing met the 1st Marine Division requirements for support of major operations and covered the troop redeployments during August and September. In October, November, and December, as monsoon-season storms restricted both flying and ground action, the wing easily remained within the sortie limit, even with renewed

operations in Laos. In December, for example, 1st MAW aircraft flew only 539 in-country attack missions<sup>52</sup> which did, nevertheless, include close air support for units in the Da Nang TAOR, combat air patrols for strikes in Laos, and interdiction and armed reconnaissance missions to curtail traffic on the Ho Chi Minh Trail.

During the remaining months of combat in 1971, the 1st MAW kept its attack missions within or exactly at the 1,300 ceiling, except when the JCS temporarily removed the limit during Lam Son 719. Marine aircraft, until the final redeployments, flew 500-600 in-country strike sorties each month and the same number of combat support sorties. The rest of the available attack missions were normally used in Commando Hunt V.53

#### Controlling Air Support

Under single management, requesting and controlling fixed-wing air support was a complex but increasingly efficient process. For all missions but those employing sorties withheld for landing zone preparation and other special purposes, or the extra sorties above the one-per-day allocation to Seventh Air Force, control centered in Horn DASC.54 This combined U.S. Air Force/U.S. Marine/Vietnamese Air Force direct air support control center had been established at Camp Horn, then III MAF Headquarters, in 1968 as the senior tactical air control agency for I Corps. Horn DASC could divert any fixed-wing mission assigned to I Corps/MR 1, and it could launch aircraft held on alert for tactical emergencies. The 1st MAW air control system, consisting of a Tactical Air Direction Center at Da Nang Airbase, a Tactical Air Operations Center on Monkey Mountain, and a Direct Air Support Control Center at 1st Marine Division Headquarters, worked in close cooperation with Horn DASC.\* Until March 1970, DASC Victor at Phu Bai, subordinate to Horn DASC, controlled air support assigned to XXIV Corps units.

Marine ground units submitted requests for preplanning air support 24 hours in advance to the 1st Marine Division Air Officer. The consolidated requests from the division then went to III MAF, which combined them with air support requests from other MR 1 forces and transmitted them to the MACV Tactical Air Support Element (TASE) and the Seventh Air Force Tactical Air Operations Center (TAOC) at Saigon. After the change of command in MR 1 on 9 March 1970, XXIV Corps, now at Camp Horn, took over the transmitting function and DASC Victor was dissolved. Under MACV supervision and general direction, Seventh Air Force apportioned available sorties among the corps areas, normally assigning 1st MAW to missions in I Corps. These assignments came to the wing in the form of a daily "frag" order, to which the wing could add the special mission and surplus sorties that it still directly controlled. For 1st Marine Division support missions, the 1st MAW TADC informed the DASC of the schedule of flights ordered and the number, type, ordnance loads, radio call signs, and time of arrival on station of the aircraft assigned. The DASC had responsibility for establishing communication with the aircraft as they came into division airspace and for turning them over to ground forward air controllers (FACs) or airborne forward air controllers (FAC[A]s) who directed the actual strikes.

If fixed-wing airpower were needed to meet a sudden tactical emergency, the DASC would receive the request from the ground unit or forward air controller. On its own authority, the DASC could divert preplanned flights already assigned to the division. If no such flights were in the area, the DASC would ask the TADC for additional strikes. The TADC then could "scramble" any available Marine aircraft or pass the request on to either Horn DASC or Saigon. With the slowing tempo of ground combat during 1970-1971, the Marines found it possible to rely more on preplanned missions and less on emergency scrambles. An officer of the wing TADC reported: "We have . . . gone much more in-country to pre-fragged missions and reduced our scramble rate." 55

While complicated, the system by 1970 usually delivered air support when and where Marine ground troops needed it. According to a FAC(A) with VMO-2, "You can expect [emergency] fixed-wing support on station within 30 minutes, in almost all cases, unless the weather or some emergency situation should arise, or the aircraft should go down [suffer mechanical

<sup>\*</sup>In the Marine air control system, the TADC was the senior facility, responsible for command and control of all 1st MAW aircraft, and for use on assigned missions. The TAOC was to conduct air surveillance and direct antiair warfare operations; in Vietnam, it assisted in controlling fixed-wing aircraft. The DASC, a wing agency usually located at the headquarters of the supported unit, controlled all fixed- and rotary-wing aircraft assigned to missions in support of the 1st Marine Division.

Army divisions had the equivalent of a DASC, and the Air Force had its own air control system for its aircraft, with a Combat Reporting Center (CRC) on Monkey Mountain as senior control agency.

failure] on the ground . . . . Thirty minutes is generally soon enough to do the job."56

All aircraft furnishing direct support to Marine ground forces had to be controlled by a ground or airborne forward air controller, or by an air support radar team. Marine battalions each had a tactical air control party to transmit air support requests and control strikes, but ground FACs had proved to be of only limited usefulness in the obstructed terrain and scattered small-unit actions characteristic of the war in Quang Nam. Airborne FACs, usually flying in OV-10As in the air over the division TAOR, conducted visual and photographic reconnaissance, or spotted for artillery when not controlling strikes. In emergencies, one of these OV-10As, diverted by the division DASC, was the first aircraft on the scene. The forward air controller, riding in the backseat of the OV-10, established contact with the ground unit, determined what type and amount of air support was required, requested it through the DASC, and then controlled the responding aircraft.57

To support ground forces and conduct bombing missions at night and in bad weather, the Marines developed two sophisticated and effective electronic air strike control systems. In 1968, they brought the Radar Beacon Forward Air Control (RABFAC), commonly known as the "Beacon," to Vietnam for use with the A-6A.58 The heart of this system was a six-pound, battery-powered radar transponder, or beacon, carried by a ground forward air control party. The beacon emitted a distinctive signal which the Intruder's radar picked up as the aircraft came within range of the unit to be supported. By radio, the ground FAC informed the pilot of his location and that of the friendly troops, provided the bearing of the target in relation to the beacon, and stated the target type and desired direction of the bombing run. Once fed this data, the A-6A's attack-navigation system could guide the plane to the objective and automatically release its ordnance. Since the FAC rarely could determine the bearing between himself and the target with complete accuracy, beacon strikes usually had to be adjusted like artillery fire, with the A-6 dropping one or two bombs on each pass and the FAC sending course corrections, but normally the plane would be on target by the third run.

During 1970-1971, Marine A-6A squadrons regularly flew as many as a dozen beacon sorties per day on missions fragged directly by 1st MAW. Units of the Americal and the 101st Airborne Divisions; the 1st Brigade, 5th Infantry Division (Mechanized); and the 5th Special Forces Group, as well as the 1st Marine Division,

were equipped with beacons. According to Colonel Walter E. Sparling, the 1st MAW G-3, the Army units "like [the beacon] even better, they say, than an Arc Light. They know there's complete secrecy in a beacon [and] greater accuracy . . . ."59

In November 1970, to increase exploitation of the beacon and furnish more close air support during the monsoon season, the 1st MAW introduced "Buddy Bombing." It began sending A-4s, F-4s, or A-6s with nonfunctioning electronic systems to accompany each Intruder on a beacon flight. The "Buddy" aircraft would follow the beacon guided plane on its run, releasing its ordnance at the command of the lead pilot.

While useful, the beacon system had its limitations. Ground units in heavily populated areas rarely could employ it for lack of political clearance for strikes. Radio equipment failures often prevented the infantry from contacting the supporting aircraft, and the elaborate electronic systems of the Intruder were also difficult to keep in working order. General Armstrong summed up: "There's too damn many things to go wrong . . . in the beacon. The airplane system goes down, beacon doesn't work properly, or you don't have reliable air-ground communications. Our mission completion rate was only about 50 percent . . . in a long period of months." 60

Much more reliable than the RABFACs were the Marine AN/TPQ-10 radar course directing centrals, operated by the air support radar teams (ASRT) of MASS-3.61 These devices, each a combination of radars and computers, located at strategic points throughout Military Region 1, could track aircraft at ranges of up to 50 miles and direct them to targets. An ASRT normally received target assignments from the DASC it was supporting and was subordinate to the DASC. When a strike aircraft came into range, the ASRT took over as final controller of the attack. The ASRT would determine the aircraft's position in relation to that of the TPQ-10. With this information, and with the position of the target already known, the team then worked out a course and bomb release time for the aircraft and directed it to the objective by radio. Using the AN/TPQ-10, the air support radar teams could deliver ordnance accurately under the worst weather conditions, day or night.

ASRTs during 1970 controlled 5,421 Marines, Air Force, Army, and Navy missions. They also positioned aircraft for flare and supply drops, photographic reconnaissance runs, and medical evacuations. In early 1971, the Da Nang ASRT and HMM-262 successfully used

the system, combined with a beacon, to guide helicopters to preselected landing zones in the field. The application of air support radar devices to helicopter operations enhanced the wing's ability to resupply ground units and move them when rain and fog had previously made helicopter support operations prohibitive. With the ASRT, the Marine Corps made a unique contribution to the air war; no other Service had facilities comparable in both accuracy and displacement ability.

At the beginning of 1970, MASS-3 had five ASRTs deployed, at Quang Tri, FSB Birmingham near Phu Bai, Da Nang, An Hoa, and Chu Lai. As part of the Keystone Robin Alpha redeployment in mid-1970, III MAF prepared plans to withdraw most of the personnel of MASS-3 and all of its ASRTs except the one at

Da Nang. This plan met strong objection from XXIV Corps, which relied heavily on the Quang Tri ASRT to support the 1st Brigade, 5th Infantry Division (Mech) and Birmingham ASRT to control air strikes for the 101st Airborne Division in northern MR 1. The Army so valued the AN/TPQ-10 that, according to General Armstrong, "If the Army commanders had had their way, our AN/TPQ-10 would have been out there until they left." After extensive discussions, the Marines agreed to remove MASS-3 from the Keystone Robin Alpha troop list and keep three ASRTs at Quang Tri, Birmingham, and Da Nang. These ASRTs continued in operation until the final Marine redeployment in May 1971.\*62

<sup>\*</sup>For the role of the Quang Tri ASRT in Operation Lam Son 719, see Chapter 11.

#### CHAPTER 16

## Helicopter Operations and New Technology, 1970-1971

Improving Helicopter Support of the 1st Marine Division—Helicopter Operations New Ordnance and Aircraft—Aviation Achievements and Costs

## Improving Helicopter Support of the 1st Marine Division

During the last year and a half of combat, Generals Thrash and Armstrong devoted much time and effort to improving helicopter support of ground operations. The wing commanders acted against a background of mutual recrimination between aviation and ground Marines. This quarrel had reached a climax in 1969, when the wing, with not enough helicopters, was trying to support two reinforced Marine divisions. Ground commanders complained that Marine helicopters were unresponsive to their requirements, and many looked with increasing favor to the Army system of attaching helicopters directly to individual divisions and brigades. Lieutenant Colonel James W. Rider, who flew AH-1G Cobra gunships with VMO-2 and HML-367 in 1969-1970, was sympathetic in recalling criticism from the infantry: "The Marine command and control system required that all helicopters be requested at least one day in advance with exception of emergency missions. This did not afford Marine ground commanders the flexibility that their Army ground colleagues had." Other Marine aviators declared that their ground counterparts made unrealistic demands and refused to appreciate the limitations and difficulties of rotary-wing operations. These arguments spread from Vietnam throughout the Marine Corps, raising doubts about the validity of the Marine system of helicopter command and control and, indeed, about the solidarity of the air-ground team as a whole. General Chapman, in a Green Letter to all general officers issued on 4 November 1969, acknowledged that "unfortunately, air-ground relationships are not all they could and must be."2

Even as Chapman wrote, efforts to remedy the situation were under way. During 1969, two separate Marine study groups investigated helicopter usage, and command and control. In Vietnam, Lieutenant General Nickerson convened a board of III MAF officers, headed by Major General Carl A. Youngdale, the MAF deputy commanding general, which thoroughly reviewed the conduct of 1st MAW helicopter operations. At Quantico, a study group at the Marine Corps

Development Center, then commanded by Major General Armstrong, who shortly afterward took over the 1st MAW, examined air-ground relations in general. This group also concentrated on helicopter problems as the major area of friction.

Both investigations reached similar conclusions. The boards reaffirmed the validity of basic Marine Corps principles of air and ground organization and helicopter command and control. Both declared that most of the air-ground difficulties in Vietnam had resulted from a shortage of helicopters and from the fact that one wing had had to work with two widely separated divisions. The investigative boards, nevertheless, also uncovered remediable failings in the application of Marine Corps doctrine. They emphasized training deficiencies, which had left many air and ground commanders ignorant of the fundamentals of each other's specialties. While they rejected the Army system of permanently attaching helicopters to ground units, both study groups recommended strengthening the authority of the DASCs, located with the divisions and which controlled both helicopter and fixed-wing support, to speed the exchange of information between the divisions and the wing, and to permit more rapid reassignment of helicopters in response to tactical emergencies. To improve support of the 3d Marine Division, the Youngdale Board advocated establishment of a 1st MAW auxiliary wing headquarters, which would be commanded by a brigadier general assistant wing commander and located at 3d Division Headquarters in Quang Tri. Lieutenant General Nickerson promptly implemented this recommendation with beneficial results.3\*

The withdrawal of the 3d Marine Division from Vietnam during the second half of 1969 reduced III MAF to a single Marine division paired with a single wing, both located in the Da Nang area. To support the 1st Marine Division, at the beginning of 1970 the 1st MAW had available 52 UH-1Es, about half of them armed, 28 AH-1Gs, 117 CH-46Ds, and 20 CH-53Ds. This represented an abundance of helicopters never

<sup>\*</sup>Earlier, Provisional MAG-39 had been set up at Quang Tri in an effort to coordinate helicopter support of the 3d Marine Division.

attained or even expected by the division.\* The favorable ratio of air support to ground troops continued throughout the 1970-1971 redeployments, as III MAF kept infantry and helicopter withdrawals in close balance.

Major General Thrash took full advantage of the new sufficiency of helicopters. He announced as his policy that "any [helicopter] mission requested by the division that is within our capability will be launched." Following many of the recommendations of the Youngdale Board, Thrash tried to improve the coordination of helicopter and ground operations and to increase mutual understanding by air and ground Marines of each other's techniques and problems. Also, within the limits of existing aviation organization and doctrine, he began experimenting with the delegation of helicopter mission assignments, and, in some cases, command and control, to ground unit headquarters.

During 1970-1971, the 1st MAW assistant wing commander routinely attended the 1st Marine Division commanders' briefing four days a week to note and report to the wing any ground complaints about air operations and any division plans which would affect air activities. To improve day-to-day coordination of helicopter and infantry operations, the wing stationed a colonel/assistant G-3 at the DASC located with the 1st Division. This officer, in consultation with the division air officer, had the authority to divert or assign secondary missions to any helicopters flying in support of the division; if necessary he could request additional helicopters directly from the wing TADC. All 1st MAW helicopters on missions for the division on a particular day were treated as a single "division block," which the DASC could employ. In contrast to the previous practice of having only junior aviation officers regularly in the DASC, placing a colonel there expedited air-ground consultation on problems as they arose. In the words of Major General Armstrong, "You get a colonel up . . . at the division, and you can talk to people."5\*

To enhance understanding by air and ground Marines of each other's methods and problems, wing and division units began orientation visits. Lieutenants from the division periodically spent days with the CH-46 squadrons of MAG-16. According to Colonel Haywood R. Smith, who commanded the helicopter group from March to October 1970, the infantry officers "would fly with us, see . . . their area from the air. See what we did and how we did it and why we did it. And it helped."6 Both fixed-wing and helicopter aviators, in turn, visited infantry regiments and battalions. They toured positions, attended briefings on operations, and watched artillerymen and infantrymen employ their weapons. The jet pilots, particularly, found this experience "highly interesting to most of the officers, who had not been to Basic School and had a chance to fire . . . these . . . weapons."7\*\* Many pilots also had lengthy, informal, and frank discussions with ground commanders about air support problems. Among the problems discussed was medical evacuation after dark. "Support at night was difficult to obtain, except for emergencies," recalled Lieutenant Colonel James W. Rider who flew Cobras for HML-367, "This was true even on nights with good visibility and bright illumination. I called in a priority medevac about 1800 one evening, before sunset, and was told that the night crews had assumed

<sup>\*</sup>The wing is the aviation element which is task-organized to support a Marine division. It's composition is variable, however each wing must be capable of performing the six functions of Marine aviation. A typical wing might include two fixed-wing Marine Air Groups (MAGs) and one helicopter MAG. The MAGs are also task-organized. In 1970, a helicopter MAG supporting a division could have included one attack squadron (HMA) of 24 AH-1Gs, three medium helicopter squadrons (HMMs) each composed of 12 CH-46Ds, a heavy squadron (HMH) of 24 CH-53Ds, and a light squadron (HML) of 24 UH-1Es. The foregoing helicopter structure is notional; its precise composition would be determined by the actual size of the ground unit, the mission assigned, and a host of other subjective considerations associated with mission accomplishment.

<sup>\*</sup>Helicopter missions were divided into preplanned and on-call categories. Ground units requested preplanned helicopter support a day in advance through the 1st Marine Division Air Officer, who, in turn, submitted requests to 1st MAW G-3. The wing then consolidated requests from the division and other XXIV Corps units and prepared a daily fragmentary order, a copy of which went to the DASC. The DASC then monitored the missions, controlling the helicopters as they entered division airspace and passing them on to the terminal controllers with the ground units. On any given day, more preplanned missions were ordered than there were helicopters to carry then out. As a helicopter finished its first assigned mission, if another mission remained uncovered and the helicopter had not exceeded its flight hours for the day, the DASC could give it a second mission. On-call missions, not listed on the frag, came from the regiments and the division air office to the DASC, which then could divert already assigned helicopters, assign the additional mission as a secondary mission, or call on the TADC to launch additional aircraft. Helicopters fragged to the division for preplanned or on-call additional missions all became part of the "division block," when so assigned. McNamara Intvw.

<sup>\*\*</sup>Due to a shortage of pilots, most junior Marine aviators at this time did not attend the Basic School, but instead went directly from the officer candidate programs to flight instruction.



Department of Defense Photo (USMC) A422840

Three Sikorsky CH-46 Sea Knights return to Marble Mountain Airbase east of Da Nang after an operation in July 1970. The Sea Knights were introduced into Vietnam in 1966 and by 1970 the versatile aircraft were the mainstay of Marine troop airlifts.

the duty at Marble Mountain and only flew emergency missions."8

Aviators assigned as air liaison officers (ALOs) with regiments and battalions often found themselves involved in a process of mutual education. First Lieutenant George S. Bennett of VMA-311, assigned to the 1st Battalion, 1st Marines as a FAC/ALO, discovered little need for his services as a forward air controller, but he reported: "the infantry does have a need for an ALO on many occasions, mainly because they're not trained in aviation . . . . They just didn't know certain things, and the ALO . . . became quite involved in planning for operations." Sometimes, Bennett recalled, "you would just have to corner the colonel or a major and say, 'Well, Sir, you just can't do that . . . . You just don't understand, Sir, you're not a pilot.""9

Whether as a result of ALOs cornering colonels, or of orientation visits, or of more frequent experience in working together, ground units and helicopter squadrons during 1970 became increasingly adaptable in adjusting tactics for particular missions. To assist the 2d Battalion, 1st Marines in its successful August surprise raid on a Viet Cong district headquarters, MAG-16 waived its standard requirement for prior air and artillery preparation of the helicopter landing

zone. Major Grinalds, the 2d Battalion S-3, declared:

The planning started from the initial stages. As soon as the information came in . . . the ALOs got together with the MAG, and the ground scheme of maneuver came forward immediately, and the question of the prep was discussed right away . . . and the decision [was] made that we could go without the prep.<sup>10</sup>

One aviator years later gave a blunt rationale for eliminating the prep: "This policy was frequently waived, when it bordered on the ridiculous. In late 1969, a staff study floated around the 1st Marine Division criticizing the stereotyped, long drawn out preps. They frequently sacrificed surprise and shock."

During 1970-1971, the wing made increasing use of helicopter "package," assortments of command aircraft, gunships, and transports organized for particular missions and usually placed on alert each day, ready for emergencies or tactical opportunities. A quick reaction package, for example, Mission 80, consisting of four CH-46s, a Huey, and two gunships, stood by at Marble Mountain for use by the 1st Marine Division Pacifier unit and for reconnaissance team extractions. Daily, the wing furnished two medical evacuation packages, each of two AH-1Gs or armed UH-1Es and two CH-46Ds. In April 1970, the wing instituted the Night Hawk package, later renamed Black Hammer, a Huey with special observation equipment escorted

by two gunships, for night armed reconnaissance and support of troops in contact.\*

Helicopter packages, as such, were not new, but during 1970-1971 the wing departed from past practice by placing particular packages under the operational control of infantry regimental commanders. General Thrash introduced this innovation early in 1970. Carrying out a proposal of the Youngdale Board, he assigned a command and control package, usually two CH-46Ds, to each infantry regiment of the 1st Marine Division. Each day, the wing placed these helicopters at the disposal of the regimental commander, to be used as he wished for reconnaissance, resupply, and administrative movement of personnel. Thrash explained: "They can use it any way they want to, except for tactical use to put troops in the field, because then we have to tie it back to gunbirds and other things."12

Major General Armstrong, after replacing Thrash as 1st MAW commander, went even further in turning helicopters over to the regiments. In October 1970, Armstrong established Mission 86, a package of six CH-46Ds, four AH-1Gs, a UH-1E command and control aircraft, and sometimes a CH-53D, daily stationed at LZ Baldy to support the 5th Marines. Colonel Clark V. Judge, the 5th Marines commander, had full control of these helicopters. In consultation with a helicopter commander (airborne) (HC[A]) provided by the wing, Judge could employ the package even for heliborne combat assaults. Colonel Judge had originally proposed the creation of this package to give his regiment more flexible and responsive helicopter support. The wing, according to Armstrong:

... took a look at it. My helicopter people were not for it, but I said, "Look, that's part of the system. If a quick reaction force down there will do the tactical job, then we'll try it ...."

And we were ready to do it before the division was ready to turn responsibility for the conduct of operations over to the regimental commander, and decentralize their authority in execution and decision-making . . . . We were willing to do ir, and did ir. But we were ready before they sold it up the infantry side of the chain.<sup>13</sup>

The 5th Marines' package proved to be a complete success, and the wing later created a similar, smaller package for the 1st Marines.\*\* General Armstrong acknowledged that: "The type of operation we had there

was possible only because . . . relative to the number of ground forces that were there, we had probably the most favorable ratio of helicopters" in the whole Vietnam war. Armstrong encountered "a great reluctance on the part of some of my good aviator friends" to exploit this favorable ratio by creating regimental packages. "They had husbanded their limited resources for so long that they didn't think this would work . . . . In fact, it was very effective—and they admitted so, afterwards." 14

By the time the last helicopter and ground units withdrew from Vietnam, the 1st MAW apparently had vindicated the Marine system for command and control of helicopters. With only one division to support, and with a sufficient number of helicopters available, the wing had been able to furnish rapid, flexible, and innovative assistance to ground operations. All the steps taken by the wing during this period, General Armstrong pointed out, including the creation of regimental-controlled packages, existed in established Marine Corps helicopter doctrine. He summed up: "We used the doctrine . . . . We knew what it was. We took advantage of it . . . ."15

#### Helicopter Operations

The declining intensity of combat brought no reduction of the demands on the MAG-16 helicopters and crews. In fact, Colonel Robert W. Teller, the 1st MAW Chief of Staff, observed: "I don't understand it, but if the helicopter availability goes up, flight hours go up, and we got just as good a war going on as we ever had." 16

During January 1970, Marine helicopters flew 30,942 sorties. They carried 71,978 troops and passengers, hauled 5,549 tons of cargo, and completed 6,873 gunship and 3,057 command and control missions. The monthly helicopter sortie rate remained at or above 30,000 until July 1970, when it rose to 38,109. Consistently, Marine helicopters flew about 70 percent of these missions in support of the 1st Marine Division, and most of the remainder for the ARVN and the Korean Marines.

Under the standards set by the Navy Department, the 1st MAW was overusing its helicopters. The Chief of Naval Operations prescribed a maximum number of flight hours per month for each helicopter type in the Marine Corps inventory, ranging from 31.5 hours for the CH-53 to 60.6 for the UH-1E. On this standard, called the utilization factor, the Navy planned its purchase of fuel and spare parts and maintained

<sup>\*</sup>For additional detail on Black Hammer actions, see Chapter 12.

<sup>\*\*</sup>For details of regimental quick reaction force operations, see Chapter 6.

its "pipeline" of these items for the squadrons in Vietnam. By early 1970, III MAF helicopters regularly were flying at a rate of 125 to 150 percent of the CNO utilization factor. This high rate of use in turn created a shortage of spare parts, causing helicopters to be grounded for lack of parts,\* and increasing the already high utilization rate of the remaining aircraft. The vicious cycle continued until, by mid-1970, utilization rates for some helicopter types had reached 170 percent of the factor. At the same time, reductions in spare part shipments and a shortage of maintenance personnel, which resulted from disrupting the replacement system due to uncertainty in Keystone Robin Alpha plans, compounded repair and supply problems. Colonel Teller bluntly summed up: "You can't keep this going forever."\*\*17

In late August, accordingly, Major General Armstrong limited flight hours for all helicopter types to a maximum of 120 percent of the CNO utilization factor. With the number of helicopters then in its possession, under this restriction the wing could furnish an average of 315 helicopter flight hours per day, about 220 of which were normally available to support the 1st Marine Division. The division often used up to 150 helicopter hours in a single major troop lift, but it managed to operate within the limit by reducing command and control packages and cancelling resupply runs when necessary to support a large operation. Colonel Walter E. Sparling, the wing G-3, reported: "It took a little while for people to get used to this, but we've been able to juggle our frags and stay with it and . . . keep utilization down."18 In spite of the limitation, in October the wing was able to establish the regimental packages for the 1st and 5th Marines.

Partly as a result of the flight hour reduction, and partly as a consequence of redeployments and monsoon weather, monthly helicopter sorties fell to a little over 30,000 in September, and during the last three months of 1970 dropped to below 25,000. Helicopters in this period flew about 7,000 hours a month. During the first part of 1971, the rate of helicopter activity declined in pace with Marine redeployment and TAOI reductions. Even with the assignment of

heavy lift helicopters and gunship support for Lam Son 719 from January to March, however, the missions flown by CH-53Ds and CH-46Ds had decreased markedly.

After four years of war, the missions of each type of Marine helicopter had been established and the tactics for those missions worked out and refined. For most helicopters, missions and tactics changed little during 1970-1971. The CH-46D medium transports continued to perform the bulk of combat and noncombat trooplifts and resupply missions; and they carried out the important and hazardous medical evacuation and reconnaissance team insertion and extraction flights. CH-46s regularly flew about half of the 1st MAW helicopter sorties each month.

The AH-IG Cobra gunship played a crucial role in most helicopter combat operations, and Cobras were included in every mission package. The first of these aircraft had arrived in Vietnam in April 1969. Initially, III MAF had assigned them to the VMO-2, but in December 1969 III MAF moved the Cobras to HML-367 to assure better maintenance support and improve operating efficiency. HML-367 remained an all Cobra squadron until it redeployed in June 1971.

Helicopter gunships, both Cobras and armed Hueys, had escort of transports as their primary task. On flights likely to meet opposition in the landing zone, the pilot of the lead gunship often located and scouted the zone and directed the troop carriers into it. If enemy gunners opened fire, the Cobras, circling at altitudes of 500-800 feet, immediately closed in on the source of the fire and replied with machine guns, miniguns, grenade launchers, and rockets. The gunships could attack targets within 15 to 20 yards of friendly positions. Their fire was intended less to kill the enemy than to stop the Communists from shooting at the transports. As Colonel Smith, the MAG-16 commander, put it, "I'm not saying that . . . we're killing someone every time that we put the fire down . . . . What it does, it keeps the people's head down and they quit firing at the airplane."19

The AH-1Gs were plagued by repeated engine failures, which eventually were ended in late 1970 by replacement of the power plants in most Cobras with a much improved T53 engine. Retrofitting the AH-1Gs enabled the squadron to resume full operational capability. HML-367 also had difficulty obtaining satisfactory ammunition belts for its 40mm automatic grenade launchers and, according to Colonel Smith, had to "steal a lot . . . from the Army" to keep its

<sup>\*</sup>Such aircraft would be designated aircraft out of commission parts (AOCP), as opposed to aircraft out of commission maintenance (AOCM), which indicated failure to complete repairs.

<sup>\*\*</sup>As far back as April 1969, the Youngdale Board had recommended that III MAF either make "every effort" to increase the supply of spare parts or reduce the number of hours to the CNO utilization factor. Youngdale Report, pp. 16-19.



Marine Corps Historical Collection

Two Marine Sikorsky CH-53D Sea Stallions are seen lifting off after landing troops of the South Vietnamese Regional Forces in a landing zone during July 1970. These heavy helicopters could carry as many as 60 Marines, almost double the capacity of the CH-46.

weapons firing. In spite of these difficulties, the Cobra squadron kept up a gruelling flight schedule. Its monthly sortie rate rose from 4,556 in January 1970 to 5,720 in June and then gradually declined during the rest of the year, partly as a result of the reduction of III MAF forces and operations and partly as a consequence of stricter 1st MAW enforcement of the CNO helicopter flight hour limitations. By early 1971, the Cobras were flying an average of about 1,600 hours per month in 4,400 sorties. First Lieutenant Herbert P. Silva, a gunship pilot, reported, "We've got a tremendous [aircraft] availability from our maintenance [and] we use our people as much as we can. It's not unusual for a pilot to be ready to fly, in the ready room, or out on a mission for 12 to . . . 15 hours a day."20

The UH-1Es of HML-167 were continually in demand for a variety of tasks. Command and control missions for III MAF units and for the 2d ROKMC Brigade daily required about half of the squadron's 12-15 available unarmed Huey "Slicks." Two were constantly in use by III MAF Headquarters, two more were regularly assigned to the 1st Marine Division, and one each to the 1st MAW, Force Logistic Command, and the Korean Marine Brigade. The rest often transported the endless stream of visitors to III MAF Headquarters, including commanders from other Services and allied

nations and travelling U.S. Congressmen and government officials. These requirements decreased after III MAF ceased to be the senior American command in I Corps/MR 1, but "VIP" missions remained a drain on the wing's helicopter availability until the last Marines redeployed.\*21

The unarmed Hueys also flew reconnaissance missions. Carrying the XM-3 Airborne Personnel Detector (APD),\*\* they attempted to locate hidden enemy troops. Hueys fitted with xenon searchlights and night observation devices were the eyes of the effective Night Hawk/Black Hammer patrols. The squadron's gunships, reinforcing the HML-367 Cobras, escorted trans-

<sup>\*</sup>Major General George S. Bowman years later noted the mobility the helicopter brought, for better or worse, in some cases, to the war. Considering the mobility afforded the "commanders, their staffs and the visitors, including the press," he said, "even the squad leader was not exempt from a surprise visit from the top brass in Washington down to his own unit commander, and sometimes they had a politician in tow . . . I'm still impressed by the mobility the helicopter gave to this conflict." MajGen George S. Bowman, Comments on draft MS, 27Jun83 (Vietnam Comment File).

<sup>\*\*</sup>The APD, or "People-sniffer," located the enemy by sensing the chemicals in the air given off by human activity, including sweat, campfire smoke, and engine exhaust. FMFPac, MarOps, Dec70, pp. 49-50.

port helicopters, supported troops in contact, and participated in the APD and Black Hammer flights.

In January 1970, Hueys of HML-167 flew over 2,460 hours; the gunships accounted for about 1,450 of these and the "Slicks" for 1,010. By June, activity had increased to 2,480 flight hours, about evenly divided between gunship, transport, and command and control missions, in 7,028 sorties. The squadron in this month of peak activity carried 3,846 passengers, and its gunships fired 191,500 rounds of machine gun ammunition and 2,020 2.75-inch rockets. During the remainder of 1970 and early 1971, demands on the Hueys gradually declined with the reduction in Marine strength and activity, but HML-167 continued flying reconnaissance and transport missions until the last units of the 3d MAB redeployed. Even after the squadron stood down on 26 May, two of its Hueys remained in operation until 15 June to support 3d MAB Headquarters, allowing HML-167 to claim the title of "the last operating Marine helicopter squadron in Vietnam."22

Unlike the other Marine helicopters, the CH-53 enlarged its combat role and took on major new missions during 1970-1971. The first of these heavy helicopters had arrived in Vietnam in January 1967. Two squadrons of them, HMHs -361 and 463, were in the country at the end of 1969. Much to the frustration of their crews, the Sea Stallions had largely been restricted to noncombat troop transport and supply missions and to recovering downed aircraft. Marine commanders hesitated to risk such an expensive helicopter under hostile fire.\* Furthermore, a shortage of spare parts and inexperience in maintaining the CH-53 had reduced the number of aircraft available for service at any one time to no more than 25 percent of the nominal strength of the squadron.

Withdrawal of HMH-361 early in 1970, roughly halving the total number of CH-53s in Vietnam, alleviated the shortage of parts and qualified ground crewmen. As a result, HMH-463 was continually able to keep 14 to 16 of its 20 aircraft in flying condition. By March 1970, all of the "A" model CH-53s had been

removed from Vietnam, and HMH-463 had a full complement of improved CH-53Ds. According to Colonel Sparling, the CH-53D was "the first airplane I know of that we've got that is over-powered, that has more power than is really required." HMH-463 at the same time removed a major inhibition on exposing the CH-53 to enemy fire by developing a method for recovering downed CH-53s from the field.\* In the light of these changes, Lieutenant Colonel Charles A. Block, the HMH-463 commander, began pressing the wing to give his aircraft a more active role in the war.<sup>23</sup>

During March, the 1st MAW began using CH-53Ds, as well as CH-46s, to carry Marines and also Vietnamese and Korean troops in heliborne assaults. The ability of the Sea Stallion to move as many as 60 Marines in one aircraft and the large helicopter's speed, which reduced the duration of exposure to hostile fire when approaching a defended landing zone, quickly won the favor of troop commanders. With its great power, the CH-53D could lift men and equipment into high-altitude landing zones which CH-46s could not reach. By mid-August, CH-53Ds were participating in three or four assault missions a week, as well as continuing their logistic and aircraft recovery activities.<sup>24</sup>

Despite the "rapid troop buildup" capacity of the aircraft, commanders continued to worry about the high casualties that would occur if a fully loaded CH-53D were shot down or crashed during an assault. The decision whether to put many men in a single large helicopter or to use more smaller helicopters involved a complex balance of risks. Major General Armstrong later summed up the problem:

If you have . . . a defended zone, are you better off to put twice as many people in a single helicopter and take advantage of either surprise or your suppressive capabilities, getting in quickly, unload it and get it out? Or should you put half as many people in the first one; and because of the lack of the element of surprise—and that pertains to not only the fact that you're making the operation but the direction of approach and everything which is given away by the first troop-lift helicopter—and do you thereby so affect the vulnerability factors that you greatly decrease the survival [chances] of the second helicopter? . . . This is a very controversial thing, and one [that] would really have to be calculated very carefully.<sup>25</sup>

Eventually, late in 1970, Armstrong, Lieutenant

<sup>\*</sup>In December 1966, Lieutenant General Victor A. Krulak, then CGFMFPac, had defined the role of the CH-53 as "primarily for transport of supplies and equipment . . . . They are not regarded as primarily an assault, reconnaissance, evacuation, or observation aircraft . . . ." CGFMFPac msg to CMC, dtd 3Dec66, quoted in LtCol William R. Fails, USMC, Marines and Helicopters, 1962-1973 (Washington, D.C.: History and Museums Division, HQMC, 1978), D. 116.

<sup>\*</sup>Under the squadron plan, the rotor heads, and transmission would be removed from the downed aircraft. Then three Sea Stallions would lift out the hulk and the other components as separate loads. Hayes intro.

General McCutcheon, and Major General Widdecke together agreed that no more than 33 Marines were to be carried in any one helicopter in normal operations, although up to 45 South Koreans or South Vietnamese and "just any numbers of irregular, CIDGs," could be lifted. Nevertheless, Armstrong recalled, "We did leave the door open for discussion and running operations on a basis of their own, but the planning figure thereafter was 33."<sup>26</sup>

During May and June 1970, the wing began using CH-53s to conduct large-scale napalm attacks on enemy troops and base areas.27 The concept for these operations originated with the 2d ROKMC Brigade. The South Korean Marines had discovered that the 55-gallon fuel drums filled with napalm, when dropped from an Army CH-47 Chinook, would smash their way to the ground through the thickest jungle and burst upon impact, spattering their inflammable contents in all directions. Ignited by strafing, napalm so delivered would spread fire over the ground more effectively than would napalm bombs from fixed-wing aircraft and served admirably to clear an area of boobytraps. At the request of the South Koreans, late in May, XXIV Corps ordered 1st MAW to prepare to carry out such operations. The Marines quickly realized that this technique would allow effective air attacks on enemy positions, for instance under thick jungle canopy, which could not be seriously damaged by conventional bombing. On 31 May and 3 June, CH-53Ds of HMH-463 made two small napalm drops southwest of Da Nang to support the Korean Marines. Under the codename Operation Thrashlight, the wing staff began planning larger drops, using napalmcarrying CH-53s in combination with bombing and strafing by jets and helicopter gunships.

On 7 June, the wing launched its first full-scale Thrashlight. The target, an area of deep ravines and canyons roofed with triple-canopy jungle about 35 miles southwest of Da Nang, was believed to contain the hideout of *Front 4 Headquarters*. Starting at 0600 on the 7th, CH-53Ds struck the target in 12-plane flights, each flight composed of waves of three helicopters. Each Sea Stallion carried 8,000 pounds of napalm in 20 55-gallon drums slung in cargo nets, the rigging of which was provided by Marines of Company C, 1st Shore Party Battalion. The pilots released the drums at an altitude of 1,500 to 2,000 feet. OV-10As and AH-1Gs, escorting the CH-53s, set fire to the napalm with tracers and rockets. Between helicopter flights, F-4Bs and A-6As pounded the target with

heavy delayed-action bombs. During the day, the CH-53s flew 99 attack sorties, the F-4Bs completed 20 sorties, and the A-6As, 14. The results were anticlimatic. Aerial photographs taken after the raid showed caved-in bunkers and denuded trails in the burned-over area, but the fate of *Front 4 Headquarters* if it had been there at all, could not be determined.

Thrashlight, nevertheless, possessed promise as a means of spreading fire and destruction over a wide area. As an HMH-463 pilot put it, "Besides having a tremendous psychological impact on the enemy, it burns the heck out of him." The Marines now had their own small-scale version of the carpet bombing carried on by Air Force B-52s. Indeed, Marine pilots, according to General McCutcheon, began calling the CH-53 the "B-53." 29

Marines conducted two more large Thrashlight operations, as well as a number of smaller napalm drops, during 1970. One of the major attacks took place on 14 June, in support of a 51st ARVN Regiment drive against enemy-held ridges overlooking Thuong Duc. The second, on 4 September, prepared the ground for a two-company sweep by the 3d Battalion, 5th Marines in the Arizona Territory. Logistic limitations, including difficulty in obtaining enough 55-gallon drums, and the impossibility of using the technique near populated areas, prevented more frequent Thrashlights.

At the same time as the wing was developing Thrashlight, HMH-463 was preparing for still another new mission. In May 1970, Marine CH-53Ds began carrying MACV Studies and Observation Group (SOG) teams of United States Army Special Forces soldiers and South Vietnamese mercenaries on intelligence-gathering and sabotage raids against the Ho Chi Minh Trail in Laos. These teams, which often went into landing zones as high as 7,000 feet above sea level, had special need for a helicopter with the speed and power of the CH-53D. The Marines installed reconnaissance team insertion and retrieval equipment on their Sea Stallions for this mission and fitted some of their aircraft with an armament package which the Air Force had developed for its "Jolly Green Giant" search-and-rescue version of the CH-53.30

Each month, from May through November, Marine helicopters took part in SOG lifts, described in HMH-463 reports as "a tri-Service mission in a denied access area." These activities reached their climax in Operation Tailwind. During this operation, between

7 and 14 September, HMH-463 daily committed five or six CH-53Ds, eventually supported by four Marine AH-IGs, five Army AHIGs or UH-1Es, two Marine and one Air Force OV-10As, and numerous flights of jets. In the face of heavy antiaircraft fire, the Marine-led flights inserted a company-size SOG force near a North Vietnamese regiment and then, after the SOG troops had accomplished their mission, extracted them. The operation cost HMH-463 two CH-53s shot down and six crewmen wounded, all of whom were rescued.<sup>31</sup>

Although Operation Tailwind resulted in an estimated 430 NVA casualties and in the capture of documents of great intelligence value, it evoked sharp protests to MACV from Generals McCutcheon and Armstrong. The Marine commanders complained that SOG operations were diverting too many of III MAF's dwindling number of helicopters from operations in Quang Nam and that the helicopters assigned to support the SOG spent most of their time sitting on the ground on alert. Further, especially in the case of Tailwind, the Marines criticized SOG planners for underestimating the amount of enemy opposition and

initially failing to provide adequate fixed-wing and gunship protection for the transports. Armstrong recalled that he and Colonel Smith, the MAG-16 commander:

... virtually put ourselves on the line and provided our own Huey Cobras for escort, etc., and we ran a fixed-wing flight down in one case. It was called for by a Cobra with no authorization . . . and [we] could have gotten into an awful lot of trouble sending airplanes into Laos to support our own helicopters without proper clearance . . . . We did it because the situation was hot and we weren't about to let our own people go unsupported . . . . These things were made necessary because the people who were involved didn't know what they were doing and what the fire support requirements really were. <sup>32</sup>

Marine helicopter participation in SOG operations dropped off sharply after Tailwind. CH-53Ds made a few more "tri-Service mission" flights in October and November, but then out-of-country helicopter operations ended until the Sea Stallions and Cobras went back to Laos in late January 1971 for Operation Lam Son 719.

The newly designed prototype of the Bell AH-1J Sea Cobra is shown here. The AH-1J Sea Cobras had twice the fire power of the AH-1G Huey Cobras which they replaced. A small detachment of AH-1J aircraft and pilots arrived in Vietnam in February 1971.

Department of Defense Photo (USMC) A419809



### New Ordnance and Aircraft

During late 1970 and early 1971, the 1st Marine Aircraft Wing tested two new types of ordnance and two new aircraft. While most of this equipment represented improvement or refinements of aircraft and weapons already familiar to Marines, at least one item foreshadowed a new era in nonnuclear warfare.

On 18 November 1970, the wing received 80 CBU-55 Low-Speed Fuel-Air Explosive Munitions for tactical use and evaluation. Designed to be carried by OV-10s and helicopters, each CBU-55 weighed about 500 pounds and consisted of a canister containing three smaller bombs. When released from an aircraft, the canister opened and the three bomblets drifted to earth by parachute. Each bomblet was filled with a flammable gas. On impact, the bomb released the gas creating and then detonating an explosive mixture. The resulting blast had a force comparable to that of a conventional 2,000-pound bomb. The Marines intended to use this weapon, which could be dropped when weather prevented jet operations, for clearing landing zones and boobytrapped areas.

During November and December, OV-10As employed 68 CBU-55s in tactical operations, and UH-1Es dropped eight more. The Marines found that, as expected, a single CBU-55 could clear a landing zone in elephant grass in thick brush large enough for a CH-53D, although it could "not consistently remove trees." They also discovered that the CBU-55 could crush bunkers, cave in tunnels, and clear away foliage.

In December 1970, the wing began testing a laser target spotting and bomb guidance system. This system was composed of two devices, the Laser Target Designation System (LTDS) and the Laser Guided Bomb (IGB), popularly known as the "Smart Bomb." The LTDS, a portable battery-powered laser beam generator, could be carried by a ground forward air control party or installed in an aircraft. Its narrow, invisible beam, when aimed at a target, created a reflection which an airplane equipped with a suitable detection device could sense and use as an aiming point. The IGB, a 500-pound or 2,000-pound bomb, had a detector which could guide its fall toward a laserilluminated target, provided the pilot released his ordnance within a certain range and direction. The bomb, in effect, could aim itself.

On 12 December, four A-4Es of VMA-311, fitted with laser beam detectors, began flying LTDS-guided combat missions first with conventional ordnance and later with 500-pound "Smart Bombs." The system

quickly proved effective. In good weather, a ground FAC could illuminate targets as far as 4,000 yards from his position, and the Skyhawks could pick up the reflections at distances as great as 10 miles. During January, Marine Skyhawks and A-6As carrying LGBs began flying Steel Tiger missions, in cooperation with LTDS-equipped F-4Bs of the Air Force's 244th Tactical Fighter Squadron. The Air Force jet, controlling the strike, would light up the target with its laser beam, which the Marine aircraft would use to guide their "Smart Bombs." With this system, the jets could release bombs accurately at altitudes of up to 12,000 feet, out of range of most enemy antiaircraft and automatic weapons fire. The 1st MAW also tried to combine the LTDS and LGBs with the beacon, but this experiment proved unsuccessful. In weather poor enough to require use of the beacon, the ground FAC usually could not locate the target well enough to illuminate it with his laser. Nevertheless, when the tests of laser-guided ordnance ended on 31 January, the 1st MAW recommended that the LTDS be made an "integral part" of the A-4 weapons system and that laser guided bombs "be incorporated into the Marine Corps' inventory of weapons."34 Used on only a limited scale in this period of the war, "smart" ordnance and its associated target-seeking systems would lend precision and weight to the renewed bombing of North Vietnam in 1972-1973 and held out both the promise and the threat of an era of unprecedented accuracy in both air and ground firepower.

Of the two new aircraft tested, one was an improved version of the Cobra AH-1G helicopter gunship. The AH-1G, originally designed for the Army, had electronic systems not compatible with those of the Navy and lacked features, such as rotor brakes, required for shipboard operation. By early 1971, accordingly, the Navy Department and the Bell Helicopter Company had developed the AH-1J Sea Cobra, designed specifically for the Marines' amphibious mission. The AH-1J had improved armament, including a 20mm automatic three-barrelled cannon in a revolving chin turret. Twin jet engines gave it greater power and reliability, important in overwater flight, and it had rotor brakes and a Navy avionics system.

On 16 and 17 February 1971, a detachment of eight Marine officers and 23 enlisted men, commanded by Colonel Paul W. Niesen, arrived at Da Nang with four AH-IJs. Colonel Niesen, who had received the 1969 Alfred A. Cunningham Trophy for his work as commander of a transport helicopter squadron in Vietnam,

and his team were to test their Sea Cobras in combat attached to HML-367. The detachment spent the rest of February preparing the Sea Cobras, which had been brought from the United States in a C-130, for action while training the HML-367 pilots in their operation. On 2 March, the Cobras began flying combat missions. From then until the detachment redeployed to Okinawa in May, the AH-1Js, flown by members of HML-367 as well as Niesen's detachment, participated in every type of gunship operation. The aircraft especially distinguished itself in Lam Son 719 and in repelling the enemy night attack on the South Vietnamese garrison of Duc Duc. Beginning with its first combat missions in 1971, the AH-IJ Sea Cobra demonstrated a vastly improved performance over its predecessor, afforded by twin engine reliability, the increased firepower of the 20mm cannon, and a greater diversity of weapon systems, including the ability to carry CBU-55s.\*35

On 26 May 1971, as 3d MAB was standing down, two YOV-10Ds arrived at Da Nang for combat evaluation. These aircraft, an improved version of the Bronco, were equipped with a Night Observation Gunship System (NOGS) and a 20mm turret cannon coupled to an infrared target locating device. The system was supposed to be able to detect enemy troops on the ground at night, even in light jungle foliage. Since all 1st MAW units had ended combat operations, the wing arranged for a detachment of 21 Marine pilots and ground crewmen to operate the YOV-10Ds, as part of the Navy's Light Attack Squadron (VAL) 4, in southern South Vietnam.\*\* On missions in MRs 3 and 4, the modified OV-10s performed satisfactorily. They were credited with killing 43 enemy in their first week of operation, causing three secondary explosions, and destroying a storage area, four sampans, and three bunkers. The detachment flew with the Navy squadron until late August, when it returned to the United States to continue tests of the NOGS.

#### Aviation Achievements and Costs

In its final year and a half of combat, the efforts of the 1st Marine Aircraft Wing diminished in quantity as units redeployed, but not in diversity. The wing furnished the full range of fixed-wing and helicopter support to the 1st Marine Division and to other United States, South Vietnamese, and Korean forces in Military Region 1, and it contributed significantly to the interdiction campaign in Laos. Marine aviators continually improved and refined the tactics and techniques for carrying out their many missions.

These efforts and achievements had their price in men and equipment. Between January 1970 and 14 April 1971, the wing lost 40 Marines killed in action or dead of wounds, 193 wounded, and 9 missing in action. In the same period, 17 Marine fixed-wing aircraft and 31 helicopters were destroyed in combat.\*36

Shortly before Marine aviators left Vietnam, for what most believed was the last time,\*\* one of them, Lieutenant General McCutcheon, summed up the record:

Marine Corps aviation . . . performed its mission for nearly six years and carried out every function in the tactical air book. The innovations and developments it had worked on over the years were proven in combat. The new environment created new challenges for men in Marine aviation, and these were met head-on and solved. The war was the longest, and in many ways the most difficult one in which Marines have had to participate. The restraints and constraints placed upon the use of air power, and the demanding management reports of all aspects of aviation required by higher authority, imposed additional requirements on staffs with no increase in resources, in most cases, to perform the tasks. In spite of these difficulties, . . . no one outflew the United States Marines.<sup>37</sup>

<sup>\*</sup>For details of these actions, see Chapter 11 and Chapter 12.

<sup>\*\*</sup>In early 1970, the Marine Corps and Navy had considered deployment of ordinary Marine OV-10As to support VAL-4, but the Marine Corps had opposed any diversion of its limited Bronco strength. Admin FMFPac msg to CGFMFPac, dtd 23Apr70, FMFPac Message Files.

<sup>\*</sup>These losses should be placed in context. During 1970, the U.S. Air Force reported 173 aircraft lost in combat; another 81 were destroyed in 1971. The U.S. Army lost 347 helicopters in 1971. MACV ComdHist, 71, I, ch. 6, p. 20.

<sup>\*\*</sup>Marine aviation would return to Vietnam in 1972 to help contain the Communist "Easter Offensive."

### CHAPTER 17

# Artillery and Reconnaissance

Artillery Operations, 1970-1971—Reconnaissance Operations, 1970-1971

### Artillery Operations, 1970-1971

At the beginning of 1970, all Marine artillery units in Vietnam, with the exception of one 175mm gun battery, were under the control of the 11th Marines, the artillery regiment of the 1st Marine Division. The regiment, commanded by Colonel Don D. Ezell, consisted of its four organic battalions and the attached 1st Battalion, 13th Marines; 1st and 3d 8-inch Howitzer Batteries (SP); 1st and 3d 175mm Gun Batteries (SP); Battery K, 4th Battalion, 13th Marines; and Battery G (-), 29th Artillery, USA.

Each of the four 105mm howitzer battalions was in direct support of a Marine infantry regiment. The 1st Battalion, 13th Marines, with its CP at the Northern Artillery Cantonment (NAC) and batteries at NAC, Hill 10, and FSB Los Banos north of the Hai Van Pass, fired missions for the 26th Marines. This battalion had operational control of the Mortar Battery, 1st Battalion, 11th Marines, positioned at Hill 270 and Hai Van Pass. The rest of the 1st Battalion, 11th Marines supported the 1st Marines, with its CP and one 105mm battery on Hill 55 and the other two batteries deployed at small firebases in the flatlands south of Da Nang. From positions at An Hoa and Hill 65, the 2d Battalion, 11th Marines supported the 5th Marines, while the 3d Battalion, deployed at Combat Base Baldy and FSBs Ross and Ryder, provided fire for the 7th Marines. The 4th Battalion, with its CP on Hill 34 and batteries at NAC, Hill 55, An Hoa, and FSB Ross, was in general support of the 1st Marine Division, reinforcing the 105mm batteries as required. This battalion also had operational and administrative control of Battery K, 4th Battalion, 13th Marines, stationed at FSB Ross.1

Of the Force Artillery units temporarily under the 11th Marines, the 1st 175mm Gun Battery (SP) was split between NAC and Hill 34, and the 3d 175mm Gun Battery (SP) was posted at An Hoa. The 1st 8-inch Howitzer Battery (SP) had platoons at Baldy, An Hoa, and Ross; the 3d was similarly divided, with platoons at NAC, Hill 65, and Hill 55. All of these units provided long-range, heavy artillery support throughout the division TAOR.<sup>2</sup>

The single Marine artillery unit not under 11th Marines control, the 5th 175mm Gun Battery (SP) (Rein), operated in northern I Corps. Its command post was at Dong Ha Combat Base, while its 175mm guns were at Camp Carroll and a reinforcing platoon of 8-inch self-propelled howitzers was located at FSB A-2. This battery, under the operational control of the 108th Artillery Group, USA, fired long-range missions in support of the 101st Airborne Division; the 1st Brigade, 5th Infantry Division (Mechanized); and the 1st ARVN Division. It also attacked targets in enemy base areas along the Laotian border. The battery's tracked 175s periodically moved west along Route 9 to participate in Army artillery raids on enemy bases not in range from American positions.\*3

These Marine artillery units possessed a total of 156 guns, howitzers, and mortars. Three firing batteries in each direct support battalion were armed with the tried and proven M101A1 105mm towed howitzer, which had a maximum range of 11,300 meters and could be air-transported by a CH-46; the fourth firing battery had six 4.2-inch mortars with a maximum range of 5,600 meters. The 4th Battalion, 11th Marines was equipped with M109A self-propelled 155mm howitzers, capable of hitting targets at ranges up to 14,600 meters. Eight towed 155mm howitzers also remained in the 11th Marines' inventory. These had been replaced in the general support battalion by the self-propelled version but were retained in Vietnam as a helicopter-transportable heavy weapon for reinforcement of 105s at temporary firebases.4 Each of the regiment's direct support battalions had been issued a few of these howitzers. The battalions normally attached them to individual 105mm batteries or to their mortar batteries. The 8-inch howitzer and 175mm gun batteries, respectively, were equipped with the M110

<sup>\*</sup>Activated in August 1966 as a 155mm gun battery, this unit had been in Vietnam since July 1967, initially near Chu Lai and Da Nang and in Northern ICTZ since the beginning of 1968. In March 1969, it had received its 175mm guns, and in October of the same year, as the 3d Marine Division redeployed, it came under operational control of XXIV Corps, attached to the 108th Artillery Group. 5th 175mm Gun Battery. Battery Order 5060.1, dtd 27Feb70, in 5th 175mm Gun Battery (SP) ComdC, Feb70.

8-inch howitzer, maximum range 16,800 meters, and the M107 175mm gun, maximum range 32,000 meters. Each of these self-propelled weapons had the same type of tracked, motorized carriage, which simplified maintenance and supply for the Force Artillery batteries.<sup>5</sup>

In early 1970, Keystone Bluejay brought artillery redeployments and relocations. The 1st Battalion, 13th Marines left Vietnam during March 1970, following its supported infantry regiment, the 26th Marines. Battery K, 4th Battalion, 13th Marines and the 5th 175mm Gun Battery also departed. To fill in for the redeploying 13th Marines battalion, the 1st Battalion, 11th Marines moved its command post to the Northern Artillery Cantonment, reassumed control of its own Mortar Battery, and moved 105mm batteries to NAC and Hill 10. Battery F, 2d Battalion, 11th Marines displaced from An Hoa to Hill 55 to reinforce the 1st Battalion.

The basic 1st Marine Division operation order assigned the 11th Marines the mission of providing "defensive and offensive fires in support of operations within and beyond the TAOR, AO, and Reconnaissance Zone" for Marines, other American Services, the South Vietnamese, and the South Koreans.<sup>6</sup> In performance of this task, the regiment's batteries responded to calls for fire from units in contact. They attacked actual or suspected enemy rocket and mortar positions. The Marine batteries expended much ammunition on "preemptive" and "intelligence" missions, formerly called "Harassing and Interdiction" and "Unobserved" fires.\* These were bombardments of known or suspected Communist base camps, infiltration trails, assembly points, and supply caches. Many of these missions were carried out according to special fire plans to thwart periodic North Vietnamese and Viet Cong offensive "high points." As the tempo of ground combat declined, missions fired in support of engaged troops diminished to a small proportion of the total amount of artillery fire. By August 1970, only about one percent of the 11th Marines' fire missions were contact missions.7

In spite of the decline in contact missions, the 11th Marines continued to conduct a large volume of observed fire, mostly directed by the regiment's own observation posts as part of a program to use artillery to supplement, and in some cases replace infantry patrols blocking enemy infiltration of the populated areas of

Quang Nam. Colonel Ezell, who had instituted this effort after taking command of the 11th Marines late in 1969, declared:

It appeared to me that when we first went in, the infrastructure and the organized units were lying together in the coastal plains, and that the Marines, through offensive operations, had disengaged the organized units from the infrastructure, knocking them back to the west and to the hills . . . . Now the infrastructure had to remain . . . to control the population. But they also had a great deal of dealing with the organized units . . . . It would appear if there was a disengagement that there must be . . . a lot of travel back and forth across the battlefield by both the infrastructure and the organized units to perform their missions. My artillery was not in position to control this. My F[orward] O[bserver]s were with the rifle companies, and they were certainly forward but they weren't observers in six feet of elephant grass.\*8

In an effort "to destroy the enemy as far away as possible, to diminish his capabilities across the battlefield to perform his mission," Ezell stated, "took 100 people out of my hide and we started a regimental OP system." These hilltop observation posts (OPs), each manned by a team of artillerymen and protected by reconnaissance or infantry elements, afforded a commanding view of the principal infiltration routes between the mountains and the populated area around Da Nang. An OP at FSB Ryder covered Antenna Valley and portions of the Que Son Valley. OPs on Hill 425 in the northern Que Sons and on Hill 119 overlooked Go Noi Island and the An Hoa basin, while others on Hills 200 and 250 in the northwestern Arizona Territory and on Hill 55 dominated the Thuong Duc corridor. Farther north, Hills 190 and 270, respectively, commanded Elephant Valley and the routes leading down from Charlie Ridge. Artillery observers in these positions searched the countryside for enemy movement and called fire missions on promising targets, passing their requests through the appropriate fire support coordination centers (FSCCs).9

Six of these observation posts\*\* were equipped with the Integrated Observation Device (IOD). Introduced in late 1969, this Marine Corps-developed 400-pound instrument consisted of high-powered ships' binocu-

<sup>\*</sup>The regiment ordered this change in terminology on 9 March 1970. 3/11 Jnl, dtd 9Mar70, in 3/11 ComdC, Mar70.

<sup>\*</sup>Colonel Ezell was relieved on 29 March 1970 by Colonel Ernest R. Reid, Jr. Reid in turn was replaced on 31 August 1970 by Colonel Edwin M. Rudzis. All three commanders followed the same artillery employment strategy.

<sup>\*\*</sup>In April 1970, the six IOD positions were: Hill 270, Hill 200, Hill 65. Hill 119, Hill 425, and FSB Ryder. FMFPac, MarOps, Apr70, p. 4.



Department of Defense Photo (USMC) A374027

Two Marine enlisted men from Battery K, 3d Battalion, 11th Marines clean their 105mm howitzer. The battery position is located on Combat Base Baldy in March 1970. The sign above the ammunition bunker door reads "No Smoking Within 50 Yards."

lars combined with a night observation device and a laser rangefinder.\* Using the IOD, a trained operator could sight a target at maximum range, of about 30,000 meters in daylight and, employing a supplementary xenon searchlight, 4,000 meters at night. He could identify the target and accurately establish its distance and direction from the OP. Combining the ability to provide exceptional range and an azimuth accuracy with a digital computer to prepare firing data, the batteries could "fire for effect" on the first volley, thereby eliminating the usual registration rounds which warned the enemy to take cover, while producing a 70 percent probability of first round hits. Colonel Ezell called the IOD the "missing ingredient as far as good fire support was concerned . . . . We were losing targets because during the adjustment phase while we were trying to bracket them they were jumping in holes." The IOD, he continued, "with its ability to give us the first round hit . . . was just what we needed." <sup>10</sup>

To operate the IODs, the 11th Marines selected its best forward observers, gave them special training with the S-2 section in use and maintenance of the instrument, and kept them at the same OPs for periods of up to five months. Constantly scanning the same countryside, observers learned every twist and turn of the enemy trail networks and spotted every tree line and bunker where the enemy customarily ran for cover from artillery fire. The more proficient observers could call in fire so as to "lead" a moving enemy column. Even when the regiment displaced an IOD to a new position, it usually left the observer team behind, to continue watching the same terrain by other means.<sup>11</sup>

The IOD observation posts were credited with causing impressive North Vietnamese and Viet Cong casualties. On 2 January 1970, the IOD on Ryder spotted 25 NVA in Antenna Valley; answering the call for fire, Battery I, 3d Battalion, 11th Marines killed an estimated 20. Eight days later, Battery G of the same battalion claimed 11 enemy killed of 50 sighted by the Hill 425 IOD. On 31 January, the Ryder IOD called for fire on 40 more NVA, and Battery I responded, claiming 21 killed. During 1970, IOD-directed fire ac-

<sup>\*</sup>The IOD was a product of the Marine Corps Special Procedure for Expediting Equipment Development (SPEED) project, administered by HQMC and the Marine Corps Development and Education Center. The purpose of speed was to respond more quickly than could regular research and development procedures to special requests for new equipment for Vietnam. Production and initial delivery of the IOD, a combination of three existing devices, took about six months. Of the first 10 made, four went to the Army in Vietnam and six to the 11th Marines. For additional details on SPEED, see FMFPac, MarOps, Jan-Feb71, pp. 37-39.

counted for at least 40 percent of the enemy killed by artillery in the 1st Marine Division TAOR. In a typical week 25-31 January 1970 for example, the IODs, positioned on Hills 65, 250, 119, and on FSB Ryder, fired 92 missions, claiming 91 kills.<sup>12</sup>

The IODs had other uses. During March 1970, the division employed their spotting reports in planning helicopterborne Kingfisher missions. Infantry units maneuvering in areas being observed by the IODs occasionally asked the observers to give them an accurate ground fix. Colonel Ezell reported: "Sometimes they ask if we will locate them. At night they can shoot a flare or fire some tracers, or in the day use a smoke grenade, which you lase on . . . and tell them exactly where they are."13 Colonel Edwin M. Rudzis, who asumed command of the 11th Marines in the end of August, later observed that the IOD had other valuable uses: "For the artillery, it provided high burst registrations, center of impact registrations, and target area surveys." The IOD was also used to conduct six naval gunfire calibration firings and to calibrate TPQ-10 air drops of aviation ordnance. Friendly surveillance on request was another capability.14

An incident in early 1970, further demonstrated the influence of the IOD. On 29 January, the Ryder IOD team sighted what appeared to be an American prisoner guarded by four VC/NVA entering a hut below them in the valley. Lieutenant Colonel Charles R. Dunbaugh, a CH-46 pilot, recalled that CH-46s, Cobras, and fixed-wing aircraft had been diverted from various missions, and he then assumed "the role of helicopter commander airborne and quickly briefed the [newly] constituted flight . . . ." With an aerial observer controlling, a "Battery One" was fired to prep the zone just before landing. Fixed-wing aircraft arrived on station but couldn't support the mission because of a low cloud ceiling. Following a brief firefight in which five VC/NVA were killed and five Marines were wounded, the Marines swept the area, finding no evidence of whether or not the enemy had an American prisoner.15

Some Marine commanders voiced skepticism at the large casualty totals regularly claimed for IOD missions. Colonel Edward A. Wilcox, commander of the 1st Marines during the early part of 1970, commented: "I was personally of the opinion that there was an overclaim on these things. As an infantry commander, we didn't report kills unless we had them . . . on the ground and could see them; but the IOD was claiming kills from vast ranges." 16 Colonel Ezell, on the

other hand, insisted that, if anything, the number of enemy dead from IOD missions was being understated. "Sometimes," he declared, "we fired on as many as 100 [troops] and we hit right on top of them maybe with 750 rounds, enough to wipe them out, and we couldn't see but two or three enemy dead." Ezell also observed:

When you see 25 or 30 people on that battlefield, it may be 125 or 130. This has been experienced several times when we had the opportunity to find out, by our own troops. One night, we had a rifle company, . . . 129 men, and we picked them up with the IOD, and we called in to check on them, and it happened to be a friendly unit, but we had estimated them at 30 people in the elephant grass.<sup>17</sup>

Whatever the actual casualties inflicted, enemy reaction appeared to confirm that the accurate, sudden artillery bombardments were disrupting Communist operations. The NVA and VC launched numerous harassing attacks against IOD sites. In the most serious of these, on 9 August, an estimated 25 enemy troops, supported by mortar and RPG fire, rushed the wire surrounding the Hill 119 OP. The 20-man security unit from the 1st Reconnaissance Battalion repulsed the assault, killing eight enemy while suffering no Marine losses. Other OPs underwent occasional attacks with grenades, RPGs, or small arms, none of which inflicted significant casualties or damage.<sup>18</sup>

The enemy reacted by reducing daytime movement, traveling in smaller groups, and changing infiltration routes to bypass the IOD sites.\* In May 1970, the 3d Battalion, 11th Marines reported: "The enemy appears to be using the traditional resupply trails in Antenna and Phu Loc Valleys less and less. However, sightings by the other OPs . . . and by units in the field showed greatly increased movement to the south and east of the Que Sons . . . possibly to avoid the IOD."19 The 11th Marines countered this enemy tactic by periodically moving its IODs to new positions. In October, the Ryder IOD shifted to FSB Roundup, overlooking the southern Que Son Valley. This displacement resulted in an increased number of sightings and fire missions. Similarly, in November, the Marines redeployed the IOD on Hill 270 to Dong Den, a peak in the mountains above Elephant Valley often used by recon-

<sup>\*</sup>Lieutenant Colonel Pieter L. Hogaboom, operations officer of the 26th Marines, years later said the regiment "was mildly surprised that most of the kills we got from surprise fire called by the IOD teams were gotten during broad daylight, and not as we anticipated at night or in reduced visibility." LtCol Pieter L. Hogaboom, Comments on draft ms, 10Jun83 (Vietnam Comment File)

naissance teams, but the move produced only meager results. Partly as a consequence of the general decline in enemy activity and partly due to the Communists' evasive tactics, IOD fire misssions during October, November, and December accounted for only 62 enemy dead, in contrast to 1,153 claimed in the first three months of 1970? Despite this decline, in the estimation of artillery commanders, IOD employment had increased the effectiveness of the artillery. "It was the best investment of artillery assets," recalled Colonel Rudzis. "The IOD personnel represented approximately four percent of the artillery population, but even if it had required 20 percent, it would be well worth it for the functions that they performed." Rudzis added that "they were not only the 'eyes' of the artillery on a 24 hour per day basis," but they also provided timely intelligence to infantry units, from companies right up to the division.21

In addition to observation posts, the 11th Marines relied heavily on aerial reconnaissance to locate targets, especially in the Rocket Belt around Da Nang. The regiment had its own aerial observation section, employing Huey gunships and light observation helicopters (UH-6s) of the Americal Division's 123d and 282d Aviation Battalions. According to Colonel Rudzis, the 11th Marines had, in effect, their own aviation unit from July 1970 forward, with the OH-6 being the primary aircraft. The crew of the OH-6 consisted of a warrant officer pilot and a sergeant machine gunner. Adding a Marine aerial observer, the 11th Marines patrolled the Division AO daily in this highly maneuverable and versatile aircraft. "The helicopter was used not only on a routine patrol of the Danang Rocket Belt but also on intelligence missions to provide up to the minute information on unusual activities reported by other sources," said Rudzis. He added that the cooperation showed by Army aviation units was outstanding, saying that if a helicopter "was disabled or shot down, a replacement was provided from Chu Lai on the same day or the next one, so that the AO missions could be carried out on a daily basis."22

In addition to the light observation helicopters, the Army OH-1G Bird Dog observation planes of the 21st Reconnaissance Aircraft Company were used, as well as MAG-16 helicopters, for low-altitide visual reconnaissance missions. Batteries also frequently fired missions at sensor activations, and the artillery OPs were sited to cover many of the 1st Marine Division sensor fields. Radio interceptions provided by 1st Radio Battalion also were a source of targets.<sup>23</sup>



Department of Defense Photo (USMC) A372603 A Marine gunner cleans the breech of his 175mm gun after firing. The M107 175mm gun had a range of 32,000 meters, the longest in the Marine inventory.

The 11th Marines planned much of its "preemptive and intelligence" fire with information from the 1st Marine Division Fire Support Information System (FSIS), renamed early in 1971, as the Tactical Information Deposit Retrieval System (TINDER). This system, inaugurated in 1968, was located in the Target Information Section of the Division FSCC. The section received reports of enemy movement, caches, rocket firings, and other sightings and activities from 25 sources, including OPs, sensors, reconnaissance patrols, prisoners, and agents. This information went to Force Logistic Command, where Data Processing Platoon 16 coded it and stored it on computer tape. Using a specially prepared program, the Force Logistic Command computer, at the request of unit commanders, could produce prompt reports, accompanied by map overlays, on all enemy sightings and contacts in a given area. The 11th Marines used this system to plot recurring patterns of enemy movement and directed unobserved fire against the most heavily traveled routes.24

According to Colonel Ezell, this sophisticated target analysis system had made "preemptive and intelligence" missions into an accurate, effective weapon. Other commanders disagreed. Lieutenant General McCutcheon, for one, remained unconvinced of the

value of unobserved artillery fire. At his insistence, the 11th Marines in late September drastically reduced preemptive and intelligence missions.<sup>25</sup>

During 1970-1971, the 11th Marines made much use of temporary fire support bases (FSBs) established and supplied entirely by helicopter and often located deep in enemy base areas. The 1st Marine Division and the 1st MAW had perfected their techniques for landing reconnaissance and security elements, engineers, construction equipment, guns, crews, and ammunition on remote peaks and could have batteries emplaced and firing within a few hours. By 1970, the 11th Marines had used a total of 65 firebase sites throughout Quang Nam. Most commanding hilltops in the province were cleared of large trees and pocked with gun pits, further simplifying the preparation of temporary FSBs. The direct support battalions routinely displaced

105mm howitzers, towed 155mm howitzers, and 4.2-inch mortars to provide fire support for infantry sweeps in the mountains. They developed weapon and equipment lists and organized mobile fire direction centers for helicopter-transportable provisional batteries. Periodically, the regiment conducted larger artillery deployments to support major operations, such as Pickens Forest or Imperial Lake.<sup>26</sup>

In a variation on the temporary firebase technique the 11th Marines conducted a number of "artillery raids," rapid heliborne deployments of batteries to advanced positions for attacks on reconnaissance and intelligence targets which were beyond the range of the more permanent firebases or protected by terrain. During May and June 1970, the regiment conducted a series of raids west of Thoung Duc. This CIDG camp, 30 miles southwest of Da Nang, had come under per-

Marine artillerymen from the 2d Battalion, 11th Marines on Fire Support Base Ryder make last-minute adjustments after receiving new direction coordinates before preparing to fire their weapon. The 2d Battalion relieved the 3d Battalion on Ryder in late 1970.

Department of Defense Photo (USMC) A373811



sistent mortar and rocket fire from Communist positions in Base Area' 112, beyond the range of the Marines' nearest 175mm guns. To bring the Communists' positions under fire, Colonel Ernest R. Reid, Jr., commander of the 11th Marines, decided to move light artillery forward into the Thuong Duc area. He selected Hill 510, a peak five miles west-southwest of the CIDG camp, to be the firing position. This hill overlooks the confluence of the Cai River and Boung River Valleys, much-travelled enemy supply and infiltration routes. Marine reconnaissance teams frequently used it as an OP and radio relay site.\*

The raids began at first light on 30 May. Partially protected by heavy ground fog, a reconnaissance team and four mortar crews from the Mortar Battery, 2d Battalion, 11th Marines landed on Hill 510. By 0655, the mortars were ready to fire, but the mist delayed the first mission until 1000. During the day, the mortars fired 530 rounds at 26 targets, including suspected enemy troop and rocket positions, bunkers, a base camp, and a group of enemy spotted by the reconnaissance team. At 1120, three rockets, launched from a position southwest of Hill 510, flew directly over the Mortar Battery toward ARVN positions to the north. The Marines, who could see the rocket firing site, replied with 140 mortar rounds and the rocket fire stopped. At 1620, helicopters extracted the battery. which had suffered no losses in men or equipment, and returned it to An Hoa.27

On 2 June, the 11th Marines conducted a second raid, this time using three 105mm howitzers from Battery E, 2d Battalion to gain greater range. The battery remained on Hill 510 throughout the day and fired a total of 564 rounds. Targets taken under fire included a suspected ammunition cache, enemy troops sighted by a reconnaissance team, and rocket positions located by radio interceptions. The battery returned to An Hoa by helicopter at 1740. The 11th Marines repeated this operation on 17, 20, 22, and 29 June, each time with weapons and crews from the 2d Battalion. In all but the last raid, the regiment employed provisional composite batteries of two 105mm howitzers and two 4.2-inch mortars. The final raid, on 29 June, involved three 105s. The raids met no significant enemy opposition and resulted in no losses of men or equipment. Damage to the enemy was impossible to determine, but the raids apparently disrupted Communist operations against Thuong Duc. Various size artillery raids continued until the final redeployments and reduction of the Marine TAOR; the largest raid, Operation Catawba Falls in September 1970, covered the 5th Marines' movement from An Hoa to the Que Son Valley.<sup>28</sup>

Target clearance continued to be a complicated, often frustrating process for Marine artillerymen. "Frustration on the artillery side was principally due to not being able to provide the rapid, responsive fire support supported units would expect to receive," recalled Colonel John D. Shoup, who was assistant division fire support coordinator in early 1970.29 Except in "Specified Strike Zones,"\* where artillery and other supporting arms could fire without restriction, a call for fire had to be checked ("cleared") with the appropriate U.S., ARVN, or South Korean Marine commands and with South Vietnamese political authorities before the mission could be executed. Under throughly planned procedures, the 1st Marine Division FSCC\*\* coordinated all air and artillery supporting fires within the division TAOR. Each regiment, through its own FSCC, coordinated fire within its TAOR, as did each infantry battalion. The regiments and battalions were primarily responsible for maintaining contact with allied military and civil headquarters within their areas of operation and for obtaining fire clearances from them. The 1st Division FSCC, in close coordination with the DASC, operated the Sav-A-Plane\*\*\* system to prevent aircraft from flying into the artillery's line of fire.30

Tactical innovation, such as Kingfisher patrols often aggravated the already complex system of controlling

<sup>\*</sup>For details of reconnaissance activities in this area, see the "Reconnaissance Operations" section in this chapter.

<sup>\*</sup>The division TAOR was divided into three types of fire zones: no-fire zones, usually GVN-controlled population centers, where supporting arms could not be used; precleared fire zones, where supporting arms could fire during a specific time period; and specified strike ("free-fire") zones. 1stMarDiv OpO 301A-YR, dtd 10Dec69, Anx E.

<sup>\*\*</sup>A unit's FSCC was supervised by the G-3 or S-3 and consisted of artillery liaison personnel from the command and liaison officers representing the available, supporting arms, e.g. air and naval gunfire. While not a link in the chain of fire support requests, it monitored the requests from forward observers to fire support units and could interfere in cases involving the safety of troops or to prevent fire from disrupting the scheme of maneuver.

<sup>\*\*\*</sup>For Sav-A-Plane, the DASC was informed daily by the FSCC of the line of fire of all artillery missions being fired. Aircraft crossing division airspace checked in with the DASC, which could divert them around the danger zones, in consultation with the FSCC, and, depending on the relative priority of the air and artillery missions, could issue a "check fire" to the artillery. Maj John J. McNamara, OIC Da Nang DASC, "Sav-A-Plane," *The Professional*, Feb70, copy in 1st MAW ComdC, Feb70.

supporting fires. "They were initially planned with due regard for artillery support but in operation found that support nonexistent due to lack of timely clearance in other 'free-fire' zones," said Colonel Shoup. "Preclearance of fire zones would have been tantamount, in my view, to advertising that Kingfisher was on the way, although efforts were made to do this without much success."31 Initially, calls for fire from IOD observation posts also created special clearance and coordination difficulties for the artillery and infantry. The OPs, controlled by the 11th Marines, directed many missions within the infantry regimental TAORs. While the artillery observers cleared all fires through the FSCCs of the concerned infantry units, both fire support requests and reports of enemy activity remained within the artillery communication network and were not transmitted immediately to battalion and regimental commanders. Colonel Wilcox of the 1st Marines "found that if we didn't watch it . . . the IOD was reporting targets directly back through FSCC channels to the 11th Marines, and they were reporting enemy running around in my TAOR and having them shot at." Wilcox made sure that his "battalion commanders, through their fire support coordinators, had an absolute obligation to pass that word on, and the IOD operators had an absolute obligation to talk to my infantry commander[s] . . . so that the information flowed back through the infantry channels."32 Aside from this problem, and from the perpetual difficulty in coordinating artillery clearances and Sav-A-Plane information with the South Vietnamese, by late 1970, the 11th Marines had what Colonel Reid called, "probably the optimum fire support coordination system, balanced . . . on the one hand on the side of safety, and on the other, responsiveness."33

In accord with III MAF's emphasis on Vietnamization, the 11th Marines assisted ARVN operations and helped to train and improve the Quang Da Special Zone artillery. The Marine artillery battalions regularly fired missions in support of 51st ARVN Regiment, Regional and Popular Force units, and CIDGs and often assigned forward observers to Vietnamese commands. At Hai Van Pass, the Mortar Battery, 1st Battalion, 11th Marines; the 1/25 Regional Force Group; and an element of the 101st Airborne Division established a combined combat operations and fire support coordination center at the 1/25 Group CP to ensure rapid Marine response to RF calls for fire. This system short-cut the political clearance requirement by allowing the RF group to give clearance for its own

area of operations. If a mission required more than mortar fire, the request went from the joint FSCC to the 1st Battalion, 11th Marines, which in turn cleared it with the 1st Marines fire support coordination center.<sup>34</sup>

The 11th Marines helped Quang Da Special Zone to organize its own fire support coordination center and conducted training programs for ARVN artillerymen in surveying, heavy gun motor transport, and 4.2-inch mortar employment. In April 1970, the regiment formed two Firing Battery Instructional Training Teams, each made up of two Marine artillerymen and an ARVN officer and NCO. These teams spent week-long periods with the batteries of the two QDSZ artillery battalions, the 44th and 64th, teaching gunnery and firing procedures.

The Marine artillery battalions also provided training assistance. The Mortar Battery of the 2d Battalion conducted forward observer schools for RFs and PFs working with CAPs. These efforts brought noticeable improvements in the South Vietnamese artillery units but could not remedy its greatest deficiency: a shortage of crews and artillery pieces to cover Quang Nam Province after the Marines left. "I don't believe that they have enough artillery to do the job, if we are displaced," Colonel Ezell concluded. "They only have two small-size battalions . . . . This would certainly be insufficient."35\*

Marine artillery strength declined rapidly during late 1970 and early 1971. In Keystone Robin Alpha, during August, September, and October, the 3d Battalion, 11th Marines redeployed with the 7th Marines. Paralleling the shift of the 5th Marines to replace the 7th, the 2d Battalion, 11th Marines moved south to Ross, Ryder, and Baldy. Headquarters Battery and Battery M, 4th Battalion, 11th Marines also withdrew in Keystone Robin Alpha, leaving behind two self-propelled 155mm batteries, one of which was attached to each remaining direct support battalion. From the heavy artillery, the 1st and 3d 175mm Gun and 1st 8-inch Howitzer Batteries redeployed. By the end of 1970, only 74 Marine artillery pieces remained in Vietnam.

When the 5th Marines redeployed in Keystone Robin Charlie, during February-March 1971, it was accompanied by the 2d Battalion, 11th Marines and Battery L, 4th Battalion. On 28 March, as part of Keystone Robin Charlie, Headquarters Battery and the regimen-

<sup>\*</sup>The establishment of separate Regional and Popular Force artillery platoons partially alleviated this shortage. See Chapter 10.

tal colors of the 11th Marines embarked for the United States. The artillery regiment's 1st Battalion, reinforced by Battery K, 4th Battalion and the 3d 8-inch Howitzer Battery, remained behind as the artillery element of the 3d MAB, redeploying with the brigade in May and June.

Throughout 1970-1971, the volume of Marine artillery fire diminished. In January 1970, the 11th Marines fired 178,062 rounds during 19,250 missions. By December, the amount of fire had fallen to 26,999 rounds for 2,902 missions. The volume rose again, to 35,408 rounds during 3,044 missions in January 1971. It remained at about that level during February, then fell precipitously with the final redeployments and contractions of the Marine TAOR/TAOI. Naval gunfire employment followed a similar pattern, dropping from 5,541 rounds from six ships during January 1970 to 217 rounds from one ship in December, then increasing to 370 rounds from a single ship in January 1971 before beginning a final decline.<sup>36</sup>

This reduction in artillery fire resulted in part from the diminishing number of weapons, but it also reflected lessened usage, the consequence of both fewer enemy sightings and contacts and also of the cutback in preemptive and intelligence missions. In January 1970, the 11th Marines had fired an average of 1,141 rounds from each of its 156 tubes. In December 1970, with 74 tubes, the regiment fired only 365 rounds per tube. Between 15 and 17 January 1971, General Leonard F. Chapman, Jr., the Commandant, paid a last visit to III MAF in Vietnam. When Chapman returned to Washington, General McCutcheon recalled, he told McCutcheon "that the whole three days he was in Da Nang, he didn't hear one artillery round. He was pretty conscious of that, being an artilleryman."37

## Reconnaissance Operations, 1970-1971

At the beginning of 1970, III MAF reconnaissance forces consisted of the 1st Reconnaissance Battalion and the 1st and 3d Force Reconnaissance Companies. The two Force Reconnaissance companies were controlled by III MAF, while the 1st Reconnaissance Battalion was under its parent 1st Marine Division.\*

The 1st and 3d Force Reconnaissance Companies, directed by the III MAF Surveillance and Reconnaissance Center,\* conducted patrols deep in enemy base areas, usually beyond the 1st Marine Division TAOR. Based at Phu Bai, the 3d Force Reconnaissance Company concentrated its efforts on the A Shau Valley, a major Communist infiltration route and assembly area in western Thua Thien. Patrols from this company, usually inserted and extracted by helicopters from the U.S. Army's 2d Squadron, 17th U.S. Cavalry, ventured far into the mountains to locate enemy units, camps, and storage sites. They spotted targets for artillery fire and B-52 strikes and occasionally fought small Communist units. During January 1970, the company observed or encountered 159 enemy and killed 26 in eight separate engagements with losses of only one Marine killed and 14 wounded. The company also directed 38 artillery fire missions.38

The 1st Force Reconnaissance Company, working from Da Nang, conducted long-range patrols in Quang Nam and Quang Tin Provinces. During January, this company saw much less action than the 3d. The company completed 13 patrols, sighted 12 enemy, and killed one, with no casualties.<sup>39</sup>

During February and March 1970, the Keystone Bluejay redeployment reduced force reconnaissance strength, and the III MAF-XXIV Corps exchange of roles ended separate Force Reconnaissance operations. The 3d Force Reconnaissance Company ceased combat activities in February, although the unit, almost at zero strength, remained in Vietnam until July. With the breakup of the III MAF Surveillance and Reconnaissance Center, both the cadred 3d and the still active 1st Force Reconnaissance Companies were placed under the operational control of the 1st Marine Division. The 1st Force Company, attached to Lieutenant Colonel William C. Drumright's 1st Reconnaissance Battalion, continued operations as a division reconnaissance unit.<sup>40</sup>

At the beginning of 1970, the 1st Reconnaissance Battalion was over strength; it had five letter companies instead of the usual four. Company A, 5th Reconnaissance Battalion was also attached, but it redeployed during Keystone Bluejay. The battalion performed a variety of missions. It furnished teams to support in-

<sup>\*</sup>Force reconnaissance companies usually operate under a landing force commander, providing him with preassault reconnaissance and long-range reconnaissance after the landing. The division reconnaissance battalion, under operational control of the division, supports division operations.

<sup>\*</sup>The Surveillance and Reconnaissance Center integrated all forms of information—signal, sensor, ground/aerial surveillance, POW and documentary—for use in III MAF planning from November 1969 to March 1970. For details on its organization and operations, see Chapter 14.



Department of Defense Photo (USMC) A373160

Sgt Michael L. Larkins, left, and 2dLt Louis E. Daugherty from the 1st Reconnaissance Battalion display their unusual trophy, the carcass of a 300-pound tiger. The animal charged the Marines who were on patrol in the jungles northwest of Da Nang.

fantry search and destroy operations, secure firebases, and locate targets for artillery raids. Scuba\* divers from the battalion checked bridges in the 1st Marine Division TAOR for underwater demolitions and searched streams for submerged cave entrances and weapon caches. Detachments from the battalion also protected four of the IOD observation posts.

Patrolling the western fringes of the division TAOR was the reconnaissance battalion's principal function. In these generally mountainous areas, the enemy could move less cautiously because of the cover provided by the jungle canopy. Operating in six-man teams, reconnaissance units monitored movement over the network of trails which linked the rugged base areas to the fertile lowlands surrounding Da Nang. Each team included an officer or NCO patrol leader, a radioman, three

specially trained riflemen, and a Navy corpsman. During most of 1970, the battalion had 48 such teams available for duty. Normally, about half the teams were in the field, scattered from Elephant Valley to the far reaches of Base Area 112. Teams not patrolling or on other assignments protected the battalion cantonment near Division Ridge, underwent refresher training, and prepared for their next mission.

Reconnaissance patrolling had become a well-developed skill. Each team member backpacked 65-70 pounds of food, ammunition, and equipment to sustain him for as many as six days in the field. Helicopters lifted the teams to their assigned operating areas. After insertion, teams worked their way along streambeds, followed enemy trails, or "broke brush" across country, carefully noting and reporting details of terrain and enemy activity. Some teams tried to take

<sup>\*</sup>Self-Contained Underwater Breathing Apparatus.

prisoners or, using the Stingray\* concept of operations, concealed themselves where they could direct artillery and air strikes on enemy troops and base camps. At the end of their assigned five- or six-day missions, or when they were discovered and attacked by the enemy, helicopters extracted the teams.

Patrolling resulted in a steady stream of small contacts. During June 1970, for example, the 1st Reconnaissance Battalion conducted 130 patrols, sighting 834 Communists, and directed 120 artillery fire missions and 25 air strikes. Reconnaissance battalion Marines were credited with 198 enemy killed and the capture of three individual weapons, at a cost of 2 Marines dead, 15 wounded, and 9 nonbattle casualties.<sup>41</sup>

For the individual reconnaissance Marine, this level of activity entailed a grueling routine. Lieutenant Colonel Drumright, the battalion commander, reported:

These kids... work very hard. You put them in the field five days; they're out of the field three. Their first day back is cleaning gear. Their second day, they train... They go through throwing hand grenades again, scouting and patrolling, immediate action drill, which is being able to get that first shot off the fastest, and... we do night work with them. So they never really have a day off. 42

The primary purpose of reconnaissance patrols was to obtain information, usually through surveillance of enemy movement. Frequently reconnaissance teams directed artillery and air strikes on VC/NVA units while avoiding contact with them, but teams often found themselves involved in close combat. Some fights erupted from ambushes set by teams or from efforts to take prisoners; others were meeting engagements with small NVA or VC elements.<sup>43</sup>

In the first months of 1970, many contacts resulted from an aggressive counter-reconnaissance effort begun at the orders of General Binh, the *Front 4* commander. At Binh's direction, North Vietnamese regulars and main force Viet Cong formed 15 to 25-man teams to protect their base areas. Some of these teams carried captured M16s and wore American clothing and camouflage paint to confuse the Marines during firefights. The counter-reconnaissance units watched for helicopters inserting Marine teams and signaled the Marines' arrival with rifle shots, then tried to close in and attack the Marines before they could leave the landing zone.

The Marines responded to these enemy tactics by making false insertions, often complete with helicopter gunship and fixed-wing landing zone preparations, before actually putting in a team. To avoid forewarning the enemy, some insertions were made without LZ preparation fires. As a result of these varied measures, most reconnaissance teams were able to move out of their landing zones before the enemy arrived. The Communists then tried to track the Marines across country. These deadly games of hide-and-seek frequently culminated in firefights and emergency extractions. Due to Marine small arms proficiency and the availability of lavish air and artillery support for teams in contact, the enemy invariably suffered many more casualties in these engagements than they inflicted.44

On 14 June 1970, a team from Company E, 1st Reconnaissance Battalion fought the battalion's most severe patrol action of the year.45 The team, identified by its radio call sign "Flakey Snow," consisted of five enlisted Marines, a corpsman, and two South Korean Marines assigned to the patrol as members of a combined allied reconnaissance training program. Helicopters inserted the patrol at 1122 on the 14th in the southwestern Que Sons about five miles west of FSB Ryder. Although deep in the mountains, "Flakey Snow's" first area of operations was a level region with no jungle canopy, but a secondary growth of small trees, bushes, bamboo, and sharp-edged elephant grass. The team's arrival was unopposed, and it moved northward from its landing zone along a wide trail that showed signs of recent, heavy use. After about an hour of uneventful walking, the Marines crossed a small stream and turned eastward on an intersecting trail. This trail, also obviously well traveled, ran toward a hill where the patrol leader, Sergeant Frank E. Diaz, planned to spend the night.

Clouds closed in and heavy rain was falling. About 1220, Diaz called a halt along the trail to wait until the rain stopped. There the Marines heard heavy machine gun and automatic weapons fire. Although no bullets seemed to be coming toward them, the members of "Flakey Snow" formed a defensive perimeter with only the elephant grass for cover, and quietly readied their weapons. As they did, two Viet Cong, both armed with AK-47s, came walking up the trail, "right into us," Diaz recalled. The Marines shot and killed both of them, but the firing gave away their position. Diaz at once reported by radio that his team was in contact.

<sup>\*</sup>For details of the origin of Stingray, see Jack Shulimson, U.S. Marines in Vietnam, 1966 (Washington: History and Museums Division, HQMC, 1981), p. 175.

Contact quickly became heavy. From positions north, east, and west of the Marines, an enemy unit, later estimated to have been at least 50 men, opened fire with 12.7mm machine guns and automatic weapons. The Marines, with their backs to the stream they had just crossed, hugged the ground and returned fire with M16s and their one M79 grenade launcher. Whether the enemy was a counter-reconnaissance unit or simply a large force encountered by chance was never established, but it was obvious that they were determined to overwhelm "Flakey Snow." "They really wanted to get us," Diaz reported later, "for whatever reason they had in mind." The enemy began rushing the Marine position in groups of three and four, firing and throwing grenades. Some closed to within 30 feet of the Marines before being cut down. Bodies piled up in front of the patrol. Diaz had his men pull two or three of the closest into a barricade. One American Marine was mortally wounded and another was hit in the shoulder by grenade fragments. A Korean received a severe leg wound. "All this time," Diaz recalled, "we could hear people moaning and groaning on both sides . . . . The enemy just kept coming, and we just kept shooting and shooting."

Diaz had called for an aerial observer, and an OV-10 arrived over the patrol at 1245. The aircraft at once began strafing the enemy positions, causing some secondary explosions and more "loud crying and moaning." At 1300, Cobra gunships arrived on station and added their machine guns and rockets to Marine firepower. The closeness of the enemy to "Flakey Snow" prevented use of artillery, but according to Diaz the gunships were "really accurate and a great help in getting us all out of there." In spite of this punishment, the determined enemy hung on. Their fire slackened as the helicopters made their strafing passes, but then resumed.

At 1345, CH-46s from HMM-263 arrived to extract the team, but the wounded could not be hoisted out. The pilot of one of the Sea Knights, Major Peter E. Benet, executive officer of HMM-263, managed to land close to the team, with the nose of his aircraft hanging over the stream and the rear wheels on the bank. Benet's copilot, 1st Lieutenant Peter F. Goetz, reported that as the helicopter settled in, "we had to cut down through the elephant grass with our blades, the elephant grass was so high."

Diaz at first thought that the helicopter had been shot down. Then he saw the tailgate opening and began moving his men toward it while he and the reconnaissance battalion extraction officer, who had jumped out of the gate with a rifle, covered the withdrawal. Under continuing enemy fire, the reconnaissance Marines scrambled on board carrying their injured and dying. A few enemy tried to rush the withdrawing team, but Diaz and the extraction officer gunned them down. Lieutenant Goetz, monitoring the helicopter's radios, saw another enemy "pop up, right about our 11 o'clock, with an AK . . . . It was really fortunate that one of the Cobras was passing over us at the time and spotted him and blasted him with some rockets."

At 1353, the helicopter lifted off with all members of "Flakey Snow." Diaz and his men had only a magazine of ammunition left between them and a single M79 round; the helicopter crew had expended all the ammunition from their two .50-caliber machine guns. At the price of one American Marine dead of wounds, another slightly wounded, and a South Korean Marine severely injured, "Flakey Snow" had killed at least 18 enemy in front of the patrol's position. An unknown number of enemy had been killed or wounded farther away, either by small arms and grenades, or by OV-10 and helicopter guns and rockets. Sergeant Diaz reported that "the firefight was so intense, and the fire was coming from so many directions, that the enemy themselves had killed their own people, trying to get to us."\*

While no other fight during 1970-1971 equaled "Flakey Snow's" in severity, reconnaissance teams continued to meet aggressive enemy counteraction, either from chance contacts with regular units or special counter-reconnaissance teams. On 3 September, a sixman patrol from Company C, inserted in the mountains just south of Elephant Valley, came into immediate contact with at least 15-20 enemy who tried to surround the team. After a firefight in which the Marines killed three enemy and suffered one man wounded, the team was extracted after only 14 minutes on the ground. As soon as the extraction helicopters departed, the 11th Marines fired 225 105mm rounds into the landing zone, and fixed-wing jets also struck the area.<sup>47</sup>

Artillery bombardment and air strikes were a standard 1st Reconnaissance Battalion tactic after an extraction under fire. According to Lieutenant Colonel Drumright, a reconnaissance team, under these cir-

<sup>\*</sup>For his part in this action, Sergeant Diaz was awarded the Silver Star. Another member of the patrol received the Bronze Star with Combat "V".

cumstances, acted on the enemy as "a little bucket of honey" acted on bees. He explained:

The bees, they'd swarm all around. And then you'd pull the bucket of honey out and you'd work it over, and then you get all the bees that don't run off . . . . You get them out of their caves. They have to come out of their caves to fight.48

By late 1970, the enemy had become more cautious about attacking reconnaissance teams. Instead, their counter-reconnaissance forces began shadowing Marine patrols, following them and signalling their location with rifle shots. The NVA and VC would engage a patrol only if it approached an important base camp or cache. The enemy occasionally used dogs to track the Marines. Reconnaissance teams sought to evade the enemy by night movement; they would establish a night position about sunset, then quietly shift position after dark. To temporarily kill the enemy dogs' sense of smell, the Marines often scattered CS crystals on trails and around night positions.<sup>49</sup>

Combat frequently erupted when reconnaissance patrols unexpectedly burst into occupied camps. To protect their hideouts from air strikes, artillery bombardments, and infantry sweeps, the enemy began locating them in the dense vegetation below the crests on the reverse slopes of ridges. They rarely left discernable trails into these positions. To increase their chances of finding camps, reconnaissance teams often hacked their way through the vegetation on the slopes rather than following the easier natural routes along crests or streambeds. "Breaking brush" in this way, teams occasionally walked into camps while enemy troops were still in them. When this happened, a team would attack immediately, moving quickly through the camp, shooting at any enemy they saw and throwing grenades into huts, bunkers, and caches. According to Lieutenant Colonel Drumright:

Our guys could outshoot theirs. They could throw a hand grenade further. They could think a little faster. They used a . . . technique of just going right through the camp throwing hand grenades into every hole and bunker you could find, usually about two or three going through the camp, and the other two or three covering . . . . Then they'd move back out of the area and try to saturate the thing with artillery and air.50

Patrolling deep in the mountains had its hazards even when no enemy were encountered. In May, a tiger attacked a 1st Force Reconnaissance Company patrol leader while the patrol was in its night position, dragged him off into the brush, and killed him. In

September, a 1st Reconnaissance Battalion patrol lost two men killed and two others seriously injured in an accident during an unopposed extraction. The battalion suffered its most severe noncombat loss on 18 November, when its commander, Lieutenant Colonel William C. Leftwich, and nine other reconnaissance Marines died in a helicopter crash in the Que Sons.<sup>51</sup> Lieutenant Colonel Bernard E. Trainor, who had previous reconnaissance experience, then commanded 1st Reconnaissance Battalion until its redeployment in the spring of 1971.

With five years of experience behind them, the division and wing had developed well tested techniques and equipment for inserting, supporting, and extracting reconnaissance teams.\* To assure prompt artillery response to calls for fire and at the same time prevent accidental shelling of friendly units, the division established a special reconnaissance zone for each deployed patrol in which only that patrol could direct fire missions. The 11th Marines usually designated a battery or platoon to support each patrol and stationed a liaison officer at the 1st Reconnaissance Battalion CP to assist in fire planning and coordination.

The 1st MAW's quick-reaction helicopter package, Mission 80, could be used for emergency extractions of teams, among other tasks. Reconnaissance units had developed standard procedures for teams involved in a contact from which they could not extricate themselves. Normally the first step would be to call in the nearest OV-10 to locate the unit and provide initial suppressive fires. The wing would then dispatch two Cobra gunships and two CH-46s to lift the Marines out. While the Cobras worked the enemy over, to within 25 yards of the reconnaissance team if necessary, a CH-46 maneuvered to an LZ or lowered a special extraction device. Final authority to pull out a team in trouble rested with the 1st Reconnaissance Battalion commander. "When it happens out there, it

<sup>\*</sup>Lieutenant General Bernard E. Trainor, a former commander of the 1st Reconnaissance Battalion, later commented on the impressive "choreographed" firepower including helicopter gunships, fixed-wing aircraft, and artillery available to Marine teams being extracted out of difficult situations: "By routinely devastating an area immediately upon a team emergency extraction, it was surmised that the VC/NVA would become conditioned to fear contact with a Recon team because it meant that the sky would fall upon them . . . . Whether this drill really did have the desired effect on the enemy, we'll never know. But there is no doubt that it had a terrific and positive effect on the psychological outlook of the Recon Marines." LtGen Bernard E. Trainor, Comments on draft MS, 13Jan86 (Vietnam Comment File).

happens very quickly," Lieutenant Colonel Drumright reported.\* "And the key . . . is to very quickly get the OV-10 and start the gunships out and make up your mind . . . whether to leave them in or take them out." 52\*\* Some of the most skillful patrol leaders could maneuver their men out of a contact and continue their missions, but the battalion usually followed the more prudent course of immediately withdrawing an engaged team and reinserting it later.

A new piece of equipment, the Special Patrol Insertion/Extraction (SPIE) line, made it easier and safer for teams to get in and out of small mountain and jungle landing zones. To put teams in or take them out of sites where a helicopter could not land, the Marines had previously used a 120-foot ladder which was lowered from the tail ramp. Because of its weight, the ladder was hard to maneuver in narrow spaces, and in hot weather at high elevations helicopters often had difficulty lifting it with Marines hanging onto it. In these situations, the SPIE, a strong nylon line, proved a practicable alternative. Much lighter than the ladder and more compact when stowed in a helicopter, the line could be dropped quickly through small openings in the jungle. Reconnaissance team members, who wore a special harness, then hooked themselves onto the line, and the helicopter lifted them straight up and flew back to base trailing the Marines behind it. If necessary, Marines could fire their weapons while attached to the SPIE rig; many found it more comfortable to ride in flight than the ladder.53

To train reconnaissance Marines for their exacting job, the 1st Reconnaissance Battalion conducted periodic 11-day indoctrination courses for all newly arrived personnel. The course, supervised by the battalion S-3, included instruction and practice in the use of the PRC-25 radio, map reading, first aid, rappelling down cliffs and from helicopters, air and artillery forward observer procedures, and combat intelligence report-

ing. New reconnaissance Marines also practiced scuba diving and rubber boat handling. Weapons refresher training and physical conditioning received emphasis throughout the course. According to Lieutenant Colonel Drumright, "It was strictly scouting and patrolling, and learning to shoot . . . first and . . . shoot straight and . . . to throw a hand grenade. Learn to hide. Learn to move. Get him in physical condition so he can outwalk the enemy." The course ended with the planning and execution of a practice patrol in a safe area.<sup>54\*</sup>

Under an agreement between the 1st Marine Division, Quang Da Special Zone, and the 2d ROK Marine Corps Brigade, the 1st Reconnaissance Battalion conducted three-week training courses for ARVN and Korean troops. During 1970, the battalion instructed 230 members of the ARVN 1st Ranger Battalion, as well as the reconnaissance companies of the 51st Regiment and the Korean Marine brigade. Vietnamese and Korean graduates of the course then participated in Marine patrols, one or two men to a team. The South Korean Marines who took part in the "Flakey Snow" fight were trained under this program. Both Korean and South Vietnamese reconnaissance troops learned quickly and performed well with the Marines.<sup>55</sup>

The battalion also trained combat operations center and communications personnel for the allies, in the hope that the South Vietnamese, in particular, would eventually carry out their own independent reconnaissance effort. Repeatedly, the 1st Marine Division pressed Quang Da Special Zone to begin deploying all-Vietnamese patrols in a reconnaissance zone separate from that patrolled by the Marines. The South Vietnamese continually refused, pleading a lack of manpower, helicopters, and radios. They preferred to continue combined patrols with the Marines. The South Vietnamese did not have enough helicopters to support the kind of wide-ranging reconnaissance program the Marines carried on. For the reconnaissance missions they ran, they relied on foot patrols from

<sup>\*</sup>Lieutenant Colonel Drumright had been relieved on 11 August 1970 by Lieutenant Colonel Edmund J. Regan, Jr. Lieutenant Colonel Leftwich in turn replaced Regan on 13 September. 1st Recon Bn ComdCs, Aug-Sept 70.

<sup>\*\*</sup>Another former commander of the 1st Reconnaissance Battalion, Lieutenant General Bernard E. Trainor, later commented, "... a team normally did not ask for an emergency extract unless they really had an emergency .... In truth, however, I did have to veto a few emergency extract requests where in my judgment the situation was not sufficiently threatening to warrant the risky rescue procedure. It's times like that when the responsibility of command takes on real meaning." LtGen Bernard E. Trainor, Comments on draft ms, 13Jan86. (Vietnam Comment File).

<sup>\*</sup>Lieutenant General Bernard E. Trainor, who commanded the 1st Reconnaissance Battalion in 1970-1971, also emphasized the importance of the initial training in his comments on the draft manuscript. He later wrote, "Even sleeping had its SOP—no lying—a team would 'harbor-up' in the concealment of the undergrowth; it would form a circle facing outboard back-to-back, shoulder-to-shoulder; all quadrants covered. Those not on watch slept sitting up with chins on chests. Not comfortable but do-able. Contact and communication could thus be made by touch rather than by voice." LtGen Bernard E. Trainor, Comments on draft ms, 13Jan86 (Vietnam Comment File).



Marine Corps Historical Collection

An aerial photograph shows the helicopter landing pad and Southeast Asia huts that serve as the quarters and offices of the 1st Reconnaissance Battalion's Camp Reasoner.

fixed bases. Marine commanders recognized that the Vietnamese would be limited to such short range operations after the Americans withdrew.<sup>56</sup>

The Keystone Robin Alpha redeployments drastically reduced Marine reconnaissance strength. During August, the 1st Force Reconnaissance Company stood down and left for the United States, leaving a subunit of two officers and 29 enlisted men attached to the 1st Reconnaissance Battalion. The reconnaissance battalion itself deactivated Company E in August, and in September Companies C and D left Vietnam. These withdrawals halved the number of available reconnaissance teams, from 48 to 24. The 1st Reconnaissance Battalion, then under Lieutenant Colonel Leftwich, turned over protection of three of the four IOD sites to the infantry regiments and reorganized its two remaining letter companies. Each company would consist of two three-team platoons and one four-team platoon. With these rearrangements, Leftwich planned to have all 24 teams available for operations, and an average of 12 in the field at a time.<sup>57</sup>

With fewer teams available and with operations in the mountains restricted by the fall-winter monsoon, the reconnaissance battalion concentrated much of its patrolling in areas closer to the populated lowlands. As part of Operation Imperial Lake, beginning in early October, the battalion saturated the Que Son Mountains with patrols, keeping 8-10 teams continuously in the area. These teams worked closely with infantry quick reaction forces in an effort to deny more territory to the enemy while using fewer Marines. Smaller saturation operations covered Charlie Ridge and eastern Elephant Valley.

Instead of being inserted and extracted by helicopter, most of the teams participating in saturation patrolling worked from platoon patrol bases in the mountains. The 1st Reconnaissance Battalion set up the first of these on 5 October, on Hill 845 in the Que

Sons. Three teams used the hill as a CP, radio relay station, and resting place. Remaining for 13 days, they fanned out on foot on assigned patrol missions. One team usually rested at the patrol base, constituting a reaction force while the other two were deployed. From then on, the battalion maintained a patrol base continuously in the Que Sons and periodically established bases on Charlie Ridge and in Elephant Valley. When weather often restricted helicopter operations, teams working out of patrol bases, once inserted, could remain longer in the field and reinforce each other in the event of a major contact. The teams also gained an advantage of surprise, since no helicopter activities, except for those involved in setting up the patrol base, signalled the reconnaissance Marines' entry into their operating areas.58

Under Lieutenant Colonel Trainor's guidance the battalion continued this pattern of operation later in 1970 and during the first months of 1971. Its patrol base on Charlie Ridge became part of Operation Upshur Stream late in January. On both Charlie Ridge and in the Que Sons, infantry platoons took over the protection of reconnaissance patrol bases, while reconnaissance teams did most of the patrolling during Upshur Stream and Imperial Lake. Lieutenant Colonel Trainor observed that his reconnaissance teams usually had the "advantage of the initiative." He later wrote that during his command tenure "no team was ever

ambushed; on the contrary, it was the teams that did the ambushing."59

During late 1970 and early 1971, reconnaissance sightings of enemy troops and reconnaissance-inflicted enemy casualties grew steadily fewer. This decline reflected both reduced Marine reconnaissance activity and the shift of most patrolling to areas closer to Da Nang. The low level of action also indicated an apparent decline in enemy strength and aggressiveness. In December 1970, the 1st Reconnaissance Battalion sighted only 162 NVA and VC during 56 patrols, called 10 artillery fire missions and three air strikes, killed 23 enemy, and captured nine weapons. In the same month, the battalion lost three Marines wounded in action and seven nonbattle casualties. Action continued at this rate during January and February 1971.

On 14 March 1971, the battalion began its Keystone Robin Charlie redeployment. On that day, the Headquarters and Service Company and Company B ceased operations. After a farewell ceremony on the 19th, these units left Da Nang on the 24th with the battalion colors, bound for Camp Pendleton. Company A of the battalion, the reconnaissance element of the 3d MAB, continued operations until 28 April, when it extracted its last two deployed teams from Sherwood Forest, west of Da Nang, and from Elephant Valley. On 1 May, the company stood down; by the 13th, the last reconnaissance Marines had left Vietnam.<sup>61</sup>