PART V SUPPORTING THE TROOPS

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CHAPTER 23 Marine Air at the Beginning of the Year and Air Support of Khe Sanh

Marine Air at the Beginning of the Year—Marine Control of Air Proposed Changes in Command and Control over Marine Air; Operation Niagara, January 1968 Operation Niagara and Air Resupply in the Defense of Khe Sanh

Marine Air at the Beginning of the Year

In January 1968, like the other elements of III MAF, the 1st Marine Aircraft Wing faced a daunting task. Supporting two reinforced Marine divisions as well as flying supplemental missions for the allied and U.S. ground forces in I Corps and the Seventh Air Force, the Marine aviators were stretched to the very limits of their capability in both aircraft and personnel. In addition to the difficult operational environment, doctrinal questions relative to control of both fixedwing aircraft and helicopters would arise that would further blur the entire picture of Marine aviation during 1968. Many of these problems would never be completely resolved, even after the conclusion of the Vietnam War.

As the year began, Major General Norman J. Anderson, a veteran naval aviator who served in the Guadalcanal campaign in World War II and in Korea in 1950, commanded the wing, having done so since June 1967. The 1st MAW now contained over 15,000 men and more than 400 aircraft. This latter figure included nearly 200 fixed-wing planes and more than 220 helicopters. The wing consisted of three Marine fixed-wing and two Marine helicopter aircraft groups plus supporting elements. The fixed-wing groups were at Da Nang and Chu Lai while the helicopter groups were based at Marble Mountain and Phu Bai. All told, in January, the Marine Corps had 10 out of its 27 attack or fighter/attack squadrons and 11 out of its 25 helicopter squadrons in Vietnam. This did not include the two attack and fighter/attack squadrons at Iwakuni, Japan, or the two helicopter squadrons of the Seventh Fleet Special Landing Force, which could readily reinforce the in-country squadrons.1

At the overcrowded Da Nang base where Anderson maintained his headquarters, the wing shared space with Seventh Air Force components, the South Vietnamese Air Force, an Army aviation company, and III MAF ground forces. Marine Wing Headquarters Group



Department of Defense (USMC) Photo A140843 MajGen Norman J. Anderson, here in an official portrait, commanded the 1st MAW in January 1968. Gen Anderson, a naval aviator, had commanded the wing since June 1967 and was a veteran of the Guadalcanal Campaign of 1942 and of Korea in 1950.

(MWHG) 1, Marine Wing Service Group (MWSG) 17, Marine Air Control Group (MACG) 18, and Marine Aircraft Group (MAG) 11 were all at Da Nang. MWHG–1, under Colonel Tolbert T. Gentry, furnished general command and control and administrative support for the wing while MWSG–17, commanded by Colonel John E. Hansen, provided logistics, facilities, and intermediate and organizational maintenance on all aircraft and other equipment. Colonel Lyle V. Tope's



Photo from the Abel Collection

A Marine Chance-Vought F–8 Crusader from VMF(AW)–235 takes off from Da Nang Airbase in January 1968. Its landing gears are beginning to retract into the wing.

MACG-18 had the responsibility for all air control and air defense support in the wing.*

Colonel Leroy T. Frey commanded MAG-11, the Marine fixed-wing group at Da Nang. Under MAG-11 were a headquarters and maintenance (H&MS) squadron, an airbase (MABS) squadron, and four fixed-wing squadrons. These included: Marine Composite Reconnaissance Squadron (VMCJ) 1**; Marine Fighter Attack Squadron (VMFA) 122 flying 13 McDonnell Douglas F-4B Phantom IIs designed for both air superiority and ground support; Marine All-Weather Fighter Squadron (VMF(AW)) 235, used in a close-air support role and equipped with 15 of the soonto-be-phased-out F-8 Chance-Vought Crusader jet fighters; and a Marine all-weather attack squadron VMA(AW)-242 with the newest attack aircraft in the Marine inventory, 12 Grumman A-6A Intruders,*** equipped with the latest in electronic and radar navigational and target acquisition systems.^{2****}

From the nearby Marble Mountain Air Facility, across

^{*} In January 1968, the group consisted of Headquarters and Headquarters Squadron (H&HS) 18, Marine Air Support Squadron (MASS) 2, Marine Air Support Squadron (MASS) 3, Marine Air Control Squadron (MACS) 4 and the 1st and 2d LAAM Battalions. Until the activation of MACG–18 the previous September these units had belonged to MWHG–1. MASS–3 and the 2d LAAM Battalion were both located at the Chu Lai base.

^{**} The VMCJ squadron flew photo reconnaissance missions in both North and South Vietnam and also electronic jamming missions to foil North Vietnamese radars and communications in support of both the Seventh Fleet and Air Force Rolling Thunder campaign in the north. In January 1968, the squadron had assigned to it 20 aircraft. These included eight Douglas EF-10B, a modified version of the Navy F3D Skynight, a two-engine jet night-fighter. The EF-10B, nicknamed "Willie the Whale," flew both electronic countermeasure (ECM) and electronic intelligence missions. In addition to the "Whales," the squadron inventory included four EA-6A, the electronic countermeasures version of the Intruder, and eight RF-4B, the photo-reconnaissance version of the Phantom II. FMFPac, MarOpsV, Jan68, p. 58a. Colonel Eric B. Parker, who assumed command of the squadron in March, observed that the Marines were the "pioneers of stand-off electronic jamming." He remembered that his pilots "were proud of the effectiveness of our equipment and personnel . . . Our call sign was 'cottonpicker' and to identify yourself as a 'cottonpicker' in an AF [Air Force] or Navy club where deep-strike pilots were, would almost always result in free drinks. We were appreciated." Col Eric B. Parker, Comments on draft, dtd 13Dec94 (Vietnam Comment File).

^{***} The two-man, twin-jet Intruders which could carry an 18,000 pound payload were equipped with a digital-integrated attack navigation system and an electronic-integrated display system which provided the pilot at night and in bad weather images of targets and geographical features on two viewing screens in the cockpit.

^{****} Attached to H&MS-11 was a three-plane detachment of TA-4Fs, two-seater trainer versions of the Douglas A-4 Skyhawk, used generally for forward air control missions. In Vietnam, both the Air Force and the Marine Corps employed forward air controllers (FAC) (airborne), who in a variety of aircraft like the TA-4F jets, UH-1E helicopters, and small light fixed-wing prop-driven aircraft controlled attack, fighter, and fighter/attack fixed-wing aircraft and armed helicopters in close air support missions. In addition, H&MS-11 owned one Douglas C-117D Skytrain fixed-wing transport (a military counterpart of the civilian DC-3) which the squadron employed for a multitude of purposes including night illumination. Three more of the relatively venerable transports belonged to MWSG-17 at Da Nang. All told, including the four C-117Ds, there were over 60 Marine fixedwing aircraft based at Da Nang.

the Da Nang River and on the lower end of the Tiensha Peninsula, MAG-16, a helicopter group, conducted its operations. Under the command of Colonel Edwin O. Reed, MAG-16 consisted of Headquarters and Maintenance Squadron (H&MS) 16; Marine Air Base Squadron (MABS) 16; an observation squadron, VMO-2; and three medium (HMM-262, - 265, and -363) and one heavy (HMH-463) helicopter squadrons. VMO-2 had in its inventory 27 armed and unarmed Bell UH-1E (Hueys) single-engine light helicopters, used for a diverse number of missions including observation, forward air control (airborne), and ground support.* The 30 relatively new single-rotor Sikorsky CH-53A Sea Stallion heavy-lift helicopters in III MAF, each powered by two-shaft turbine engines and able to carry a payload of over six tons, were all in HMH-463. Two of the medium helicopter squadrons, HMM-262 and -265, flew the twin-turbine tandem rotor Boeing Vertol CH-46A Sea Knight aircraft that had replaced the older and smaller Sikorsky single rotor UH-34 Sea Horse. With the shortage of helicopters caused by the grounding and refitting of the CH-46s in 1967 because of rear pylon failures in flight, the third medium helicopter squadron, HMM-363, still retained the UH-34D.** In early January, HMMs -262 and -265 had 47 CH-46s between them while HMM-363 owned 24 of the UH-34s.3

In addition to the helicopters assigned to the flying

squadrons, Colonel Reed retained a detachment of 14 Cessna light single-engine fixed-wing O–1C and O–1G bird dog aircraft in H&MS–16 for both air control and observation purposes. Like H&MS–11 at the main base, H&MS–16 at Marble Mountain also possessed one Douglas C–117D Skytrain transport. MAG–16 also had operational control of the U.S. Army 245th Surveillance Aircraft Company, equipped with 18 OV–1 Mohawk aircraft designed for tactical aerial reconnaissance. For the most part, MAG–16 supported the 1st Marine Division at Da Nang but also flew missions on behalf of the 3d Marine Division, Korean Marine Brigade, and Army Americal Division. It also performed a myriad of tasks for the South Vietnamese military units and the related Revolutionary Development pacification campaign.⁴

About 50 miles to the south of Da Nang, at Chu Lai, two Marine Aircraft Groups, MAGs-12 and -13, flew out of the airfield located there. MAG-12, under Colonel Dean Wilker, consisted of three Douglas A4E Skyhawk attack squadrons, VMAs-121, -211, and -311, and one A-6A Intruder all-weather squadron, VMA (AW)-533. All told the group possessed 12 of the Intruders and nearly 60 of the Skyhawks. The maneuverable Skyhawk was a formidable close support aircraft. An extremely accurate bomber, the single-seat A-4 belied its relative small size and could carry a variety of ordnance and a payload of nearly 8,000 pounds. Three F-4B Phantom II squadrons, VMFAs -115, -314, and -323, with a total of 33 aircraft, constituted MAG-13. The versatile Phantom, capable of a speed nearly equal to the fastest interceptors, could also carry a payload of nearly 16,000 pounds, second only to the A-6A. Two C-117D transports, five Douglas TA-4Fs, and three Korean War-vintage Grumman two-seater, single-engine TF-9J fighter trainers rounded out the Marine aircraft inventory at Chu Lai.5*

^{*}The armed Hueys carried air-to-ground rocket packs and fuselage-mounted, electrically-fired machine guns and proved to be formidable close air support aircraft. The unarmed Hueys, nicknamed "slicks," were used for medical evacuation, reconnaissance, air control, and occasionally for insertion of reconnaissance teams. Later in the spring of 1968, there was a reduction of the number of Hueys in the VMO squadrons because of the introduction of the fixed-wing North American turbo-prop OV-10A Bronco into the Marine Corps inventory and to III MAF. See Chapter 25. Colonel Samuel J. Fulton, who assumed command of VMO-2 in May, remembered that his squadron then had only 14 Huey gunships and "the only 'slick' I recall is the one that was used for III MAF." Col Samuel J. Fulton, Comments on draft, n.d. [Nov94] (Vietnam Comment File).

^{**} Designed to hold a four-man crew and 17 combat-loaded troops, the CH-46 carried approximately double the load of the UH-34 and with its cruising speed of 115 knots was approximately 25 knots faster than the older aircraft. For detailed discussion of the problems experienced with the CH-46 in 1967, see Telfer, Rogers, and Fleming, U.S. Marines in Vietnam, 1967, pp. 210-11 and LtCol William R. Fails, Marines and Helicopters, 1962-1973 (Washington: Hist&MusDiv, HQMC, 1978), pp. 101-02 and 121-24. Major General Anderson, the wing commander, commented that he believed that there was "only one instance of catastrophic failure [of the CH-46], the weakness was identified and grounding ensued immediately." According to Anderson, it was "fuselage and pylon cracks . . . [in several aircraft that] gave rise to this essential refit program." MajGen Norman J. Anderson, Comments on draft, n.d. [Jan95] (Vietnam Comment File).

^{*}Lieutenant General Richard E. Carey, who commanded VMFA-115 until 16 January 1968, commented in 1994 that the Phantom was the "fastest interceptor in the American inventory and its speed has not been equaled by any American interceptor to this date." He observed that in addition to its fighter escort and close air support role, it also had an air defense role. His squadron maintained a strip alert against possible MIG incursions into South Vietnam and that on two occasions, General Carey stated, he personally chased MIG aircraft near the North Vietnamese city of Vinh until "told to abort by my GCI [Ground Control Intercept] controller." According to Carey, the "Phantom was the primary reason our ground forces were never attacked by North Vietnamese Air." General Carey wrote that the Douglas TA-4Fs and the Grumman TF-9Is "were constantly used as TAC(A) [Tactical Air controller (Airborne)] when a FAC [Forward Air Controller] was not available." He mentioned that "throughout the war they also provided a fast FAC capability for strikes north of the DMZ and recovery of downed air crews when the slow moving FAC(A) could not survive." LtGen Richard E. Carey, Comments on draft, dtd 12Dec94 (Vietnam Comment File), hereafter Carey Comments.



Both photos are from the Abel Collection

Top, a Cessna O-1 Bird Dog light single-engine observation and air control aircraft from MAG-16 is seen in flight. The Bird Dog was in the Marine inventory from WW II and was to be phased out. Below, passengers are seen boarding a Marine Douglas C-117D Skytrain, a twin-engine transport aircraft. The C-117D was an improved version of the C-47, the military version of the DC-3.





Top is Department of Defense (USMC) Photo A421997 and bottom photo is from the Abel Collection Top, two Grumman A6A Intruders (only the wing tip can be seen of the second aircraft) from VMA(AW)-533 return to Chu Lai after a mission. Note that the bomb racks of the first aircraft are empty. Below, a fully loaded Douglas A-4A Skyhawk from VMA-211 is located at the Chu Lai airstrip. The small maneuverable Skyhawk could carry a variety of ordnance and a payload of nearly 8,000 pounds.





Photo from the Abel Collection

A Marine McDonnell Douglas F4B Phantom II from VMFA–323 lands at Chu Lai. The tail parachute slowed the speed of the aircraft and the arresting cable brought the Phantom to a complete stop.

Until October of 1967, Chu Lai had also been the home of the second Marine helicopter group, MAG–36. While supersonic Marine jets could cover the distance from Da Nang and Chu Lai to the DMZ in 18 and 27 minutes, respectively, it was quite another matter for the relatively plodding rotary aircraft. With the Americal Division having ample organic helicopter support, III MAF decided to upgrade and expand the small airfield at Phu Bai, build a new one near Quang Tri City out of range of the North Vietnamese artillery positions north of the Ben Hai, and move MAG–36 closer to the northern battlefront.⁶

By January 1968, with the focus of the war on the north, Colonel Frank E. Wilson, the MAG-36 commander, in addition to his H&S squadron, had six helicopter squadrons attached to his command. Four of them, HMMs-164, -362, and -364 and VMO-3, were with the group headquarters at Phu Bai. The remaining two squadrons, VMO-6 and HMM-163, were with the forward headquarters at the newly constructed Quang Tri Airfield, and joined on 10 January by HMM-262. Equipped with 23 UH-1Es each, both armed and "slick," VMOs-3 and -6 performed similar missions in their sectors as their sister squadron, VMO-2, at Marble Mountain. HMMs-163 and -362 were both UH-34 squadrons with 49 aircraft between them while the remaining squadrons flew the Boeing CH-46. HMM-164 had 19 of the older CH-46As while -364 had acquired 32 of the newer and improved D Models, which had fewer problems than the older craft. Finally, one C-117D and 18 UH-34s belonged to H&MS-36 for various logistic runs and other miscellaneous missions. While mainly supporting the 3d Marine Division along the DMZ and in

Thua Thien Province and eventually the 1st Marine Division's Task Force X-Ray, MAG-36, like MAG-16, had a variety of missions to accomplish and several masters to service.⁷

Besides the main airbases, the wing maintained forward airfields at Dong Ha, An Hoa, Tam Ky, and Khe Sanh, large enough to land Marine Lockheed Hercules KC-130 transports which required about 3,000 feet of runway. While Marine Refueller Transport Squadron (VMGR) 152 remained based at Okinawa, it always kept a small detachment or detachments of approximately four aircraft in Vietnam at all times. With a 15-17 ton capacity, the KC-130s flew resupply and reinforcements throughout the Western Pacific from bases in Vietnam, Japan, Okinawa, and the Philippines. They played a large role in the resupply of Dong Ha in the eastern DMZ and especially of the 26th Marines at Khe Sanh with the land lines of communication closed to that isolated base. Configured for inflight refueling missions, the KC-130s were an important ingredient in the air war as they serviced attack and fighter aircraft in the skies over both North and South Vietnam.8*

January 1968 proved to be an extremely busy month for the aviators of the 1st Wing. During the month, Marine attack and fighter aircraft flew 4,891

^{*}Prior to the Vietnam War there had been some question whether the Marine Corps would be permitted to have the KC-130, the tanker configuration version of the C-130 Lockheed transport. Air Force officials claimed that the Hercules KC-130 was primarily a transport and should remain only in the Air Force. The Marines successfully argued that it was both and used it as such. See Jack Shulimson, U.S. Marines in Vietnam, An Expanding War, 1966 (Washington: Hist&MusDiv, 1982), p. 268.



Photo from Abel Collection

A Marine Lockheed KC-130 Hercules transport/refueler from VMGR-152 refuels two Douglas A-4 Skyhawks from MAG-12 at 10,000 feet over South Vietnam. VMGR-152, based on Okinawa, kept one detachment in Vietnam for both refuelling and transport missions.

combat sorties in South Vietnam, of which 1,174 were close air support missions. Of the remaining sorties, 3,651 were in direct support of ground forces, and 66 were helicopter support, armed reconnaissance, or air defense.* These aircraft dropped some 9,000 tons of bombs, which according to Marine statistics resulted in an estimated 400 dead. Marine fixed-wing aircraft also made 476 visual reconnaissance and 216 sensor reconnaissance flights in providing battlefield surveillance for ground commanders in South Vietnam.9

The record was about as impressive in the skies over North Vietnam and Laos. These numbers represented 1,434 combat and combat support sorties, 1,180 of which were strike sorties. The other "out of country" sorties included 226 reconnaissance sorties and 28 combat air patrols. Over North Vietnam, the Marine strike sorties, 739 out of 796, hit targets in Route Package 1, that area immediately north of the Ben Hai River. Marine participation in the bombing of the northernmost sector of North Vietnam, Route Package 4, required an especially integrated effort. The A–6As, EA–6As, F–4Bs, and the KC–130s had to meet precise time schedules "with fully operational systems" to carry out a successful mission. The two Marine A–6A squadrons, VMA (AW)s–242 and 533, struck more than 1,000 targets, most of them moving, in 350 sorties, 34 of them in the northern route packages over North Vietnam. Marine aviators also flew over 380 strikes against the lines of communication in Laos. All told, the Marine airmen, exclusive of the transports and the helicopters, completed a total of more than 7,000 sorties over South Vietnam, North Vietnam, and Laos, the largest number since July 1967.¹⁰

The helicopter and transport pilots also could boast of similar achievements during January. Marine C-117s and KC-130s carried nearly 30,000 passengers and more than 6,600,000 pounds of cargo during the month. Not to be outdone, the CH-53s of HMH-364 hauled slightly over 19,000 passengers and over 7,500,000 pounds of food, arms, and equipment in January. For the month, Marine helicopters from both III MAF and the SLF of the Seventh Fleet flew 34,957 sorties, lifting nearly 60,000 troops and 6,617 tons of cargo.¹¹

These accomplishments had come at some cost to the Marine wing in both personnel and aircraft. Communist antiaircraft fire downed seven fixed-wing planes including three A4E Skyhawks, one F-4B Phantom II, one F-8 Crusader, one EF-10B Whale, and one A-6A Intruder. The enemy gunners also shot down six helicopters, three Ch-46s, one UH-34, one CH-53, and one UH-1E. Enemy rocket and mortar

^{*}Close air support missions were conducted in such close vicinity of the ground force that they required detailed coordination and integration with the ground supporting fires. While coordination with the supported ground force remained important in direct air support missions, these sorties were conducted at a sufficient distance that the integration with the supporting ground fires was less involved.



A completely destroyed Grumman A–6A Intruder is the victim of a rocket and mortar bombardment on the Da Nang Airfield.

men also destroyed six F–4Bs and one A–6A in their shelling of the Da Nang and Chu Lai airfields. In addition, enemy machine gun fire caused some impairment to 328 Marine aircraft, 38 of them sustaining serious damage. Communist mortar and rocket attacks on the airfields also hit another 104 aircraft, 13 of which required extensive repairs.* Even more costly were the losses of trained Marine airmen—enlisted crewmen and Marine aviators—adding to the already existing shortage of aviation personnel.¹²

The coming months would bring even more problems. For the entire III MAF staff and particularly for General Anderson, it would be a frustrating experience. It would be a period of conflicting responsibilities, in which Marine Corps doctrine relative to the mission and employment of fixed-wing air in support of ground forces would be called into question.

Marine Control of Air

By the end of the month, the siege of Khe Sanh, the insertion of the 1st Air Cavalry into northern I Corps, and the launching of the Communist Tet offensive would bring several Marine aviation issues to a head. Especially sensitive was the issue of control of Marine fixed-wing air in Vietnam. According to Marine Corps doctrine, the purpose of Marine air was to provide close and direct air support to the Marine infantry division on the ground. The Marine Corps had worked out, as noted by Major General Anderson, "detailed and effective procedures," particularly for amphibious operations, but applicable to extended ground operations, which closely integrated Marine aviation and infantry units into "air-ground task forces."13 As Marine Major General Keith B. McCutcheon, serving in 1968 as Deputy Chief of Staff (Aviation) [DCS (Air)] at Headquarters, U.S. Marine Corps and one of the major architects of Marine aviation doctrine, later emphatically

^{*}The Communists rocketed Da Nang Air Base on 3 January and followed with rocket and mortar attacks at the Da Nang and Marble Mountain Airfields on 30 January, and hit the Marble Mountain facility once again on 31 January. They hit the new Quang Tri airstrip with both rockets and mortars on 24, 27, and 29 January. They also mortared and rocketed MAG–13 at Chu Lai on 31 January 1968. 1st MAW ComdC, Jan68, pp. 3-5-3-8. Colonel Robert Lewis, at the time the commander of VMCJ-1, photographed the Chu Lai Air Base from an RF-4B the day after the attack. He recalled that at Chu Lai, the rockets "hit the MAG-13 bomb dump. The ensuing explosion severely damaged two squadron hangars and absolutely flattened the VMA [AW]-533 hangar." Col Robert W. Lewis, Comments on draft, n.d. [Dec94] (Vietnam Comment File). Colonel Dean Wilker, who commanded MAG-12 at Chu Lai, remembered the attack somewhat differently. According to Wilker, the rockets hit "the Navy bomb dump"-rather than the one belonging to MAG-13-located between the shoreline and the MAG-12 hangars. He stated that "bombs exploded and left a huge hole in the sand dune area. The blast caved in one of my hangars and damaged the others." Col Dean Wilker, Comments on draft, dtd 18Nov94 (Vietnam Comment File).

THE DEFINING YEAR

wrote, the Marine Corps "jealously guards the integrity of its air-ground team."¹⁴

From the very beginning of the Marine Corps involvement in Vietnam, Marine officers sought to avoid any repetition of the Korean War experience where for the last two years of that conflict the Marine ground force "worked for the 8th Army and the [Marine] air forces worked for the Fifth Air Force." In 1963, then Marine Brigadier General McCutcheon, Assistant Chief of Staff for Operations, CinCPac, headed a 12-man board with representatives from the Pacific Command staff and from all of the CinCPac Service component commands to "examine the full spectrum of tactical air support" in the theater and to come up with recommendations for its organization under a joint command. Without going into all of the ramifications, the "McCutcheon Board" proposed

MajGen Keith B. McCutcheon, Marine Deputy Chief of Staff (Air) in 1968, was a former commander of the 1st MAW. Gen McCutcheon was a pioneer Marine aviator who played a large role in the development of Marine close air support doctrine as well as in Marine employment of the helicopter.

Department of Defense (USMC) Photo A413010



that a joint force commander under CinCPac should appoint a Service commander (in most instances the Air Force component commander) to be the "coordinating authority for tactical air operations." This distinction was important since under the then existing joint definitions, "coordinating authority" permitted a commander "to require consultation between the agencies involved, but does not have authority to compel agreement."¹⁵

Although Admiral Ulysses S. Grant Sharp and his predecessor failed to approve the "McCutcheon report," the CinCPac commander used the "coordinating authority" solution as the basis for command of aviation resources in Vietnam. In fact, when in March 1965, General Westmoreland informed CinCPac that he planned to place Marine fixed-wing units under the overall operational control of his Air Force component commander, at that time the Commanding General, 2d Air Division, Admiral Sharp overruled him. In no uncertain terms, in a message probably drafted by General McCutcheon, Sharp told Westmoreland that he would exercise operational control of Marine aviation through III MAF and that authority could not be "delegated to the 2d Air Division."16

The resulting MACV Air Directive 95–4 on air support issued in July 1965 provided the 2d Air Division commander "coordinating authority," but retained operational control of all Marine air in III MAF. At the same time, however, the Marines were to notify the 2d Air Division on a daily basis of the number of aircraft in excess of III MAF needs and make them available as needed. While modified slightly in 1966, this basic directive remained in effect into 1968. As a member of the 1st MAW staff, Lieutenant Colonel Richard E. Carey later observed that the Marines "were very careful to ensure we provided daily reports of the number of aircraft in excess of III MAF needs," but that by January 1968, "there were seldom excess sorties or aircraft available."¹⁷

Lieutenant General Krulak, the FMFPac commander, pointedly stated a few months earlier that the Marines had the air-ground team in Vietnam that they had wanted in Korea. According to Krulak, this was, "no accident. We have CinCPac to thank for putting his foot down and saying 'No' We have to thank him, plus the stubborn persuasion on him by a few Marines." Furthermore, the FMFPac commander correctly observed that notwithstanding all the talk about the Marine air-ground relationship the Vietnam arrangement provided the Marine Corps for one of the first times in combat, the air-ground team "in its classic sense."¹⁸

Despite the operational control retained by III MAF and the 1st MAW of its fixed-wing assets, the Marines recognized the primacy of the Seventh Air Force commander as the MACV air coordinator. The air directive permitted ComUSMACV in the event of emergency to direct the Commander of the Seventh Air Force to assume operational control of Marine aircraft. Moreover, in August 1965 in an agreement between General McCutcheon, who commanded the 1st MAW from May 1965 through May 1966, and General Joseph H. Moore, the commander of the 2d Air Division, which later became the Seventh Air Force, the Marines acknowledged that the Air Force command had overall responsibility for air defense in the unlikely event of a North Vietnamese air attack.19

In accordance with this agreement, the Marines designated a certain number of aircraft for air defense purposes. The Air Force, through its control and reporting center (CRC)* in I Corps, codenamed Panama, located on Monkey Mountain on Tiensha Peninsula, had the authority to alert or scramble and assign air defense targets to these Marine fighters. Moreover, the CRC determined when and if the 1st and 2d Light Antiaircraft Missile (LAAM) Battalions "were free to engage a target presumed to be hostile" with its HAWK** surface-to-air guided missiles. Part of MACG-18, the two battalions, each with a basic load of 108 missiles, were responsible for ground antiair defense at Da Nang and Chu Lai. In January 1968, Lieutenant Colonel Marshall J. Treado, the commander of the 1st LAAM Battalion at Da Nang, had one battery near the Hai Van Pass, another on Monkey Mountain, and the third west of the airbase near the 1st Marine Division headquarters. The 2d LAAM Battalion, under Lieutenant Colonel Stanley A. Herman, disposed its batteries in similar fashion around Chu Lai to provide adequate protection. Lieutenant Colonel David S. Twining, who later commanded Marine Air Control Squadron (MACS) 4, credited the LAAM Battalions with "permitting the allocation of virtually all of the Marine fighter/attack resources to the attack role." He noted that by 1968, only two "Air Force F-4 aircraft maintained on strip alert for launch against unidentified inbounds were the only additional routine air defense measures required "20***

Outside of the specific air defense measures directed by the Seventh Air Force, the heart of the Marine air command and control system was the 1st MAW tactical air direction center (TADC).**** A component of MACG–18, the TADC oversaw the use of all Marine aircraft, both fixed-wing and rotary, and determined the requisite number for specific missions. The TADC consisted of two subordinate agencies, the tactical air operations center (TAOC), responsible for air defense, air surveillance, and air control, and the direct air support centers (DASCs) which maintained control of close and direct air support missions.²¹

The wing TAOC, manned by Marines from MACS-4, had the latest in technology to carry out its duties. When the squadron arrived in June 1967, it brought with it a "modern semi-automated, computer-oriented TAOC" to replace the older manual procedures. MACS-4 emplaced the TAOC on Monkey Mountain near the HAWK firing positions there and the Air Force "Panama" CRC. The squadron required ample space for its sundry radars and antennae. It took four huts to house the Tactical Data

^{*}The Panama CRC was an element of the U.S. Air Force tactical air control system from which the Air Force directed radar control and warning operations within its sector. It was subordinate to the Seventh Air Force Tactical Air Control Center in Saigon which controlled all Air Force tactical air operations and air-warning functions in South Vietnam. The TACC in Saigon "did not have authority over operations in the northern route packages of North Vietnam; Air Force operations there were controlled by the Seventh Air Force Command Center. Until Mar 1968, the Seventh Air Force Command Center also controlled operations in Route Package One." Dr. Wayne Thompson, USAF Historical Office, Comments on draft, dtd 23Nov94 (Vietnam Comment File).

^{**}The acronym HAWK stands for Homing-All-the-Way-Killer. The HAWK air defense is a mobile, surface-to-air guided missile system designed to defend against enemy low-flying aircraft and shortrange rocket missiles.

^{***} While there was discussion of rotating the 2d LAAM Battalion out of Vietnam, the Tet offensive and the Khe Sanh crisis resulted in the battalion remaining at Chu Lai. Brigadier General Earl E. Anderson, the III MAF Chief of Staff, even proposed to move the battalion from Chu Lai to Quang Tri because of a postulated increased air threat. Anderson argued, "we all recognize that it is vital to intercept enemy aircraft as far from the troops installation as possible." BGen E. E. Anderson ltrs to MajGen Keith B. McCutcheon, dtd 19Feb and 14Mar68, Encl to Gen Earl E. Anderson, Comments on draft, dtd 18Dec94 (Vietnam Comment File). Later in the year, the possibility of the enemy air threat had diminished again and the 2d LAAM Battalion departed Vietnam on 12 October 1968. See also Chapter 21.

^{****} Although the Marine Corps normally designated its senior air command and control organization the Tactical Air Control Center, it used the usually subordinate term, TADC, in Vietnam to avoid confusion with the Seventh Air Force TACC in Saigon.

Communications Central (TDCC) and another 16 huts for the TAOC proper. Part of the recently developed Marine Tactical Data System (MTDS), compatible with the Navy's Airborne Tactical Data System (ATDS), the new TAOC permitted the Marine controllers to monitor about 250 airborne aircraft at one time, both friendly and hostile, and to handle about 25 air intercepts at the same instance.^{22*}

The new Marine system had a larger capacity and more sophisticated air control capability than the Air Force Panama station. More importantly, the Marines could electronically exchange air defense and air control data instantly with the ships of the Seventh Fleet operating both in the Gulf of Tonkin and the South China Sea. For the time being, however, the only way that the Air Force CRC could communicate with either the fleet or the Marine TAOC was by voice relay.** Brigadier General Earl E. "Double E" Anderson, a Marine aviator who had previously worked on the DCS (Air) staff at HQMC and was now the III MAF chief of staff, wrote to General McCutcheon in Washington that the "Air Force colonel who now commands Panama finally swallowed his pride." According to Anderson, the Air Force commander had "asked MACS-4 if they would permit him to send Air Force controllers to work with the TAOC." The Marines agreed and "they have Air Force controllers working on the MTDS

equipment and passing plots by phone to the Panama site."23***

The several DASCs made up the second component of the 1st Wing's Tactical Air Direction Center. Personnel from the two Marine air support squadrons, MASS-2 and -3, manned the five DASCs, usually collocated with the Marine fire support coordinating center (FSCC) of the supported unit. MASS-3 ran the DASC with the 1st Marine Division at Da Nang, a mini-DASC with the 26th Marines at Khe Sanh established there in mid-January, and the one at Chu Lai. The two remaining DASCs, manned by MASS-2, were both in early January with the 3d Marine Division, one at the division's main CP at Phu Bai and the other at the division's forward headquarters at Dong Ha. When the 3d Division turned its CP at Phu Bai over to the 1st Marine Division Task Force X-Ray in mid-month, the Phu Bai DASC remained behind and provided the same service to the new command.24

Supplementing the DASCs, the two MASS squadrons also maintained five air support radar

^{*}Lieutenant Colonel William A. Cohn observed that "when the MTDS replaced the manual system, approximately 1700 a month missions were being handled . . . in a few months the MTDS system was handling over 17,000 missions a month." He declared this was a "quantum leap" and contrasted it with the Air Force system at Panama, "where all aircraft were put on punch cards and then introduced into the system, while MTDS acquired aircraft automatically as soon as they were airborne." LtCol William A. Cohn, Comments on draft, dtd 13Dec94 (Vietnam Comment File), hereafter Cohn Comments.

^{**} Colonel David S. Twining, a commander of MACS-4 in 1968, recalled that "the TAOC/TDCC had the capability to similarly exchange digital target information with HAWK Missile Battalions and also with adjacent Air Force control agencies. As early as 1965 the JCS had agreed on joint technical standards for such information exchange. The Marine Corps and Air Force implemented these standards in both the MTDS and Air Force 407-L development programs but the Air Force equipment at the site 'Panama' CRC was the older Back-Up Intercept Computer (BUIC-2) which had only the Air Force unique SAGE/BUIC data link. Using the Marine Corps TDCC equipped with mission-specific modems a special data link translator was devised which eventually succeeded in automating the link between the two centers. Col David S. Twining, Comments on draft, dtd 15Nov94 (Vietnam Comment File), hereafter Twining Comments.

^{***}General Anderson had more than a passing interest in the MTDS equipment. He recalled that as a colonel in 1963, he was told that "the MTDS program (which was the largest R&D Program the Marine Corps had ever undertaken) was in serious trouble and despite the Commandant's reluctance the Marine Corps decided to take the Program Manager route. Despite my protestations, I was assigned that billet and while physically located within DC/S Air, I reported directly to the Chief of Staff." Gen Earl E. Anderson, Comments on draft, dtd 18Dec94 (Vietnam Comment File). Lieutenant General Richard E. Carey, who after his stint as a squadron commander served on the 1st MAW staff, recalled that he "had numerous conversations with Panama in which they sang the praises of our MTDS capability." Carey Comments. Both Lieutenant Colonel Cohn who commanded MACS-4 until April 1968, and his successor, Colonel Twining, commented on their relations with the Air Force commander of the "Panama" station. Lieutenant Colonel Cohn wrote, "the Air Force colonel commanding Panama brought his VIP visitors to see 'his' Marine air control system in action. At this time MTDS was handling Army, Navy, and Air Force aircraft to such locations as Udorn, Piraz, and many other bases. This in addition to the normal day-to-day operations with 1st Wing AC." Cohn Comments. Colonel Twining observed that he had excellent working relations with local Air Force commanders at Da Nang, but contrasted this with the "political agenda" of the Seventh Air Force headquarters in Saigon. He cited as an example where he had worked out a particular working agreement with the Panama commander in which MACS-4 would control returning certain Air Force flights in bad weather when the Air Force equipment "was not up to the task." According to Twining the new procedures worked well until the Panama Commander "made the mistake of relating this to Saigon, whereupon he was summarily relieved and was not even allowed to return for his personal gear. His successor made one call on me upon his arrival and told me that he was under orders to break off all cooperative air control procedures and that he was furthermore prohibited from further meetings with his Marine counterparts." Twining Comments.

teams (ASRT) which used the TPQ-10 radar system to control air strikes in poor and marginal weather. Like the DASCs, each team was usually collocated with the supported unit. At the beginning of 1968, there were two ASRTs at Dong Ha with the 3d Division, one at Phu Bai, one with the 1st Marine Division at Da Nang, and one at Chu Lai, which later in the month moved to Khe Sanh and was operational there on 23 January. From these locations, with the 50-mile range of the TPQ-10 radar, the operators could cover most of I Corps. The Marine A-4s, A-6s, and F-4Bs all came equipped with beacons that the TPQ-10 could track for the entire 50 miles.^{25*}

In January, the MASS–2 DASCs controlled nearly 5,000 missions, about 3,000 fixed-wing and 2,000 helicopter. MASS–3 directed only slightly fewer, about 3,000 missions equally divided between helicopters and fixed-wing aircraft. The ASRTs belonging to the two squadrons ran about 3,400 radar-controlled missions between them.²⁶

The Marine close and direct air support system called for an intimate relationship between the air and ground commands. With each Marine infantry battalion usually having its own forward air control (FAC) or air liaison party (ALP) attached to it, consisting usually of a Marine aviator and radio operators and equipment so as to be able to communicate with both aircraft and the DASC, ground commanders had their own aviation advisor on their staff. Although the ground FACs had the capability to control both fixedwing and helicopter airstrikes, usually airborne controllers handled most of these missions because of limitations caused by terrain features and the elusiveness of the enemy. The ground FAC, nevertheless, contributed important assistance to the ground commander. He provided the infantry the ability to talk to the air and perhaps more important was able to advise the infantry commander just what type of air support and ordnance to use.**

Fixed-wing direct and close air support was of two kinds, preplanned and immediate. In the preplanned strikes, the infantry battalion commanders, usually with their air liaison officer, determined the day preceding the mission what targets he wanted to hit. The battalion then sent the list through channels to division headquarters where the collocated DASC and FSCC consolidated the air requests. The division then forwarded the complete package to III MAF which in turn relayed the information to the wing TADC.At the TADC, the wing prepared the preliminary or fragmentary order for the next day. In this order, usually called the "frag," *** the TADC designated the number of missions, time on target, and the type of ordnance. The "frag" then went out to the various aircraft groups to carry out and to the Marine DASCs to control. Despite the complexity of the system, the process allowed for flexibility. Ground commanders could still call for modifications in the preplanned missions until 2000 of the night before. Normally, a battalion commander could expect the air strike within 20 hours of the initial request.27****

Marine fixed-wing immediate support was even more responsive. In the event of need, battalion commanders could send in their request at any time. If necessary, the TADC or DASCs, in an emergency, could divert aircraft from preplanned missions and brief the pilots in mid-flight to the new targets. Lieutenant Colonel Twining, a commander of MACS-4, later

^{*}Colonel Twining provided the following description of TPQ-10 operations: "The TPQ-10 computer compared the aircraft radar track with the operator-entered target location, taking into account bomb ballistics and winds. The indicated aircraft track corrections and bomb release signal was relayed by the operator to the pilot. For the A-4 aircraft this information was designed to be sent automatically by data link to the aircraft autopilot but equipment problems on both ends of the link resulted in the almost exclusive use of the voice relay. The TPQ-10 operator and aircraft pilots became so skillful that all-weather bomb miss distances were typically less then 50 meters. The chief problem with TPQ-10 operations was the occasional entry of gross errors in target location resulting in 'bad drops' which in a number of instances caused casualties to friendly forces and civilians." Twining Comments.

^{**}Ground units used VHF radio nets while aircraft employed UHF radios. All FACs, both airborne and on the ground, could employ either system. Otherwise, the air could not talk to the ground.

^{***}Among both aviators and ground officers this process was called "fragging," not to be confused with the slang term later identified with the attempted killing or injuring of officers and senior noncommissioned officers by throwing fragmentation grenades at them.

^{****} Colonel Joel E. Bonner, the 1st MAW G-3, related that in Vietnam, the wing modified somewhat the formal procedure described above: " \ldots due to improved communications both encrypted and unencrypted most of the required info[ormation] was in the hands of the G-3 action officers long before the formal info arrived. Much of this info came from the Divisions Air Officer and the Ops officers running specific operations. Also, at Da Nang the Wing G-3 and the TADC... were collocated in the same building and the G-3 produced the frag order." Bonner noted that the TADC worked for the G-3 as its control center: "The TADC was the instrument that was used not only to carry out those control functions dictated by the Frag Order, but also by the Commanding General to redirect Tactical Air for higher priority missions and emergencies as the tides of battle changed." Col Joel E. Bonner, Comments on draft, dtd 25Oct92 and 7Dec94 (Vietnam Comment File), hereafter Bonner Comments.



Department of Defense (USMC) Photo A422857 Marines of the 1st LAAM (Light Antiaircraft Missile) Battalion talk on the radio next to their HAWK surface-to-air guided missiles at the missile site overlooking the Da Nang Airbase from the west.

observed that, "moreover, there were generally sufficient preplanned missions canceled after launch to provide a 'divert pool' from which aircraft could be assigned to immediate requests."28 The TADC could also launch strikes from any of the three "hot pads." Each of the fixed-wing groups usually kept four aircraft on strip alert. Completely fueled and armed with an assortment of ordnance, these planes usually would be airborne under 10 minutes from receipt of the initial request. Other aircraft would immediately take their place on the hot pad. In the event of an intense combat situation, the wing would prebrief pilots and then send them aloft in aircraft on airborne alert. If circumstances dictated the wing could also call upon the Seventh Air Force and even Seventh Fleet fixed-wing attack aircraft for assistance.29

For the most part, Marine air flew about 80 percent of its missions in support of the two Marine divisions. The wing gave the remaining 20 percent to the Seventh Air Force. Up to this point, Marine air normally did not support Army units except upon request of the Seventh Air Force. The Korean Marines, however, came directly to the wing which in part was the reason for maintaining the Marine DASC at Chu Lai. Major General Norman Anderson remembered several years later that the Army's Task Force Oregon, later to become the Americal Division, when it arrived in I Corps in 1967, "provided their own communications into the TADC of the 1st MAW at Da Nang." The Army division could then lodge requests for preplanned and emergency close air support with the Marines. Mostly, however, the "Americal relied . . . on the Seventh Air Force for preplanned support," although the Marine wing made supplementary sorties available. Anderson, nevertheless, insisted that the arrangement required that the supported unit provide "its own communications into the Marine system . . .

^{*} Army General William B. Rosson, who commanded Task Force Oregon in the Spring of 1967, remembered that he was supported by both the Seventh Air Force and the 1st Marine Aircraft Wing then and, "the support was timely and effective overall. Admittedly, the Task Force required duplicate Air Force and Marine liaison and control party assets, but this did not pose a difficult problem for III MAF. (We had deployed with normal Air Force liaison and control party elements; Marine elements joined us from Chu Lai.)" Gen William B. Rosson, USA, Comments on draft, dtd 27Feb96 (Vietnam Comment File).



Photo courtesy of LtCol William A. Cohn, USMC (Ret) The Marine Tactical Air Operations Center (TAOC), located on Monkey Mountain on the Tiensha Peninsula east of Da Nang, was equipped with the latest in computer technology. The TAOC, run by Marine Air Control Squadron (MACS) 4, required ample space for its sundry radars and antennae.

it being manifestly impossible for a Marine Air Wing to possess equipment and personnel to net with all possible supported units." By January 1968, with the situation at Khe Sanh drawing more attention and the planned deployment of more Army units north, General Westmoreland worried not only about whether Marine air could continue to operate independently, but whether he had to alter the entire fabric of command relations in I Corps.³⁰

Proposed Changes in Command and Control over Marine Air; Operation Niagara, January 1968

Early in 1968, General Westmoreland planned to launch an air offensive in northwestern I Corps to protect the Marine base at Khe Sanh and to counter the North Vietnamese Army buildup there. Based on the previous late summer-early fall air effort, Operation Neutralize in support of Con Thien, the MACV air commander decided upon what he called another SLAM (seek, locate, annihilate, and monitor) campaign. Conceived in an imagery "of cascading bombs and shells," Westmoreland labeled the new endeavor Operation Niagara. According to the concept, U.S. Air Force Strategic Air Command's eight-engine Boeing B-52 Stratofortresses would fly massive carpetbombing "Arclight" missions in support of Khe Sanh from their bases in Guam and Thailand. In coordination, Air Force, Marine Corps, and Navy tactical aircraft would make precision air strikes against identifiable enemy forward positions. Marine and Army artillery from both firing positions at Khe Sanh and Camp Carroll in the DMZ sector would supplement the air bombardment. The idea was to surround the Marine base with both a "steel curtain" and a "ring of fire" to keep the North Vietnamese out.^{31*}

On 5 January, General Westmoreland implemented the first phase of Operation Niagara, which was primarily an intelligence gathering effort employing air and ground reconnaissance resources. This included the use of sensors^{**} and the monitoring of enemy communications. At the same time, the MACV comman-

^{*}For discussion of the Khe Sanh campaign from January through June 1968, see Chapters 4, 14, and 16.

^{**} Navy Captain Bernard D. Cole, who as a Navy lieutenant was attached to the 26th Marines as the assistant target intelligence officer, wrote that "air dropped sensors were a primary source of targeting data for us." Capt Bernard D. Cole, USN, Comments on draft, dtd 27Oct94 (Vietnam Comment File), hereafter Cole Comments.



A USAF Boeing B–52 Stratofortress drops its bombs during an Arclight mission over Vietnam. Gen Westmoreland proposed during Operation Niagara to drop a cascade of bombs and shells on the NVA force around Khe Sanh.

der ordered his staff to come up with a plan for the second phase of the operation. Most importantly, Westmoreland placed his deputy for Air, Air Force General William W. "Spike" Momyer in charge.

General Momyer made no secret about his unhappiness with the air arrangements in Vietnam, especially with Marine aviation. As his nickname implied, Momyer, who had replaced General Moore as Commanding General, Seventh Air Force in the summer of 1967, was a strong, opinionated commander who argued his case forcefully. He bluntly shared his views even with Marine generals. Momyer told both Major General Louis B. Robertshaw, the previous commander of the 1st MAW, and Brigadier General John R. Chaisson, the director of the MACV combat operations center, that he wanted operational control of Marine air and "didn't think we should have two air forces supporting the battle in South Vietnam." While Marine commanders held up the Korean War aviation arrangement as the one precedent to avoid at all costs, Momyer frankly declared that it was his objective "to

get the air responsibilities straightened out as we had them in Korea" He believed that the Marine system of air control failed to make priorities and, in effect, wasted valuable air assets in attempting to meet all of the needs of the ground commanders.^{32*}

With the impetus now on Operation Niagara, Momyer used the opportunity to try to alter the air relationships at Khe Sanh. He convinced General

^{*}General Wallace M. Greene, Jr., who was Marine Corps Commandant from 1964 through 1967, recalled that during one visit to Vietnam he had an "extremely angry exchange [with General Momyer] which culminated in 'Spike' and his staff following us to the curb on our departure! Verbal fists flying!" Gen Wallace M. Greene, Jr., Comments on draft, dtd 110ct94 (Vietnam Comment File). According to a still unpublished Air Force history, General Momyer was selected as commander of the Seventh Air Force because of "his convictions about the best way to employ fighter aircraft . . . No Army commander was apt to get the best of an argument with Momyer over air power." Wayne Thompson, "The United States Air Force in Southeast Asia, From Rolling Thunder to Line Backer, The Air War over North Vietnam, 1966–1973," ms, Center of Air Force History, Chapter 1, pp. 21–22.

Westmoreland that changes had to be made. From a Marine Corps perspective, General Chaisson, who was very close to General Westmoreland, later related that the MACV commander "was weak as hell on his comprehension of tactical air support on a day-to-day basis. That's why I think he got hooked on that one." During these discussions, interestingly enough, General Chaisson was on home leave in Maine and did not return to Vietnam until later in the month. Also both Lieutenant General Cushman, the III MAF commander, and Major General Norman Anderson, the Marine wing commander, at this point, were unaware of the implications of the Niagara plan.³³

While obviously influenced by General Momyer, General Westmoreland also had his own agenda.* The MACV commander already had other concerns with the Marine Corps command. Moreover, Westmoreland did not always acquiesce to Seventh Air Force desires. He had resisted previous attempts by the Air Force to have a larger representation on the MACV staff. Indeed, he kept most strike targeting authority for both B–52s and Air Force tactical air in the Army-dominated Tactical Air Support Element (TASE) of his own staff rather than delegating that function to the Seventh Air Force. Even General Chaisson admitted that Momyer and Westmoreland had a relationship based on mutual respect and trust and that the Air Force general was "a very competent component commander."³⁴

For whatever his motivation, on 18 January, General Westmoreland proposed to Admiral Sharp that because of the "impending major battle," that he planned to give operational control of the 1st MAW aircraft "less the helicopters" to General Momyer, his deputy for air. He wanted "rapid decision making" and the ability to concentrate all air, which he did not believe existed under the present system. Westmoreland stated that he was considering the move a "temporary measure," but made no mention of the emergency provision available to him under his own air directive 95–4. In fact, the MACV commander several years later stated that he was unaware that he had that authority: "I didn't worry about things like that. I had a deputy [Momyer] and he never told me anything like this."³⁵

At this point, Admiral Sharp denied Westmoreland's request. In a return message on the same day, he asked the MACV commander to consider all the ramifications including the probable inter-Service wrangle that would result in a change of the existing order. Before making a final decision, the CinCPac commander stated that he wanted to review the recommendations and viewpoints of both Generals Momyer and Cushman on the matter.³⁶

After the shelling of the Khe Sanh base on 21 January and believing that the long-awaited battle may have started, Westmoreland decided against pursuing the subject of control over Marine air any further. Instead, he immediately implemented the second phase of the Niagara operation. In a message to Admiral Sharp explaining his actions and future plans, he stated that it had never been his "intention to in any way interfere with the close air sup-

Gen William W. Momyer, USAF, seen here as a lieutenant general, was commander of the Seventh Air Force and the MACV deputy for air. Momyer was a strong advocate of the Air Force position relative to controlling aviation assets in Vietnam.

Photo courtesy of Office of Air Force History



^{*}Army historian Graham A. Cosmas observed that "this is a valid and necessary point." According to Cosmas, "the Marine command throughout the single management fight tended to view Westmoreland as little more than a 'useful idiot' for Momyer, whom they identified as their principal antagonist. This may have cost the Marines politically, since they failed to address the problem ComUSMACV though the saw and instead concentrated on a hard-line doctrinal argument against the Air Force. This in turn exasperated Westmoreland, who became as a result more susceptible to Momyer's arguments." Dr. Graham A. Cosmas, CMH, Comments on draft, 23Nov94 (Vietnam Comment File).

port so essential to the Marines." Westmoreland radioed, however, that he still required the "authority to delegate to my deputy commander for air, the control that I deem appropriate." He declared that in Niagara II, he had charged Momyer, "with the overall responsibility for air operations for the execution of the plan." While the Seventh Air Force would coordinate and direct the employment of tactical air in Niagara II, General Westmoreland carefully added that the Marine wing would make only available those sorties not required for the "direct air support" of Marine units. The MACV commander observed that the Seventh Air Force commander and the Marine command would work out the details for the coordination of their effort. Interestingly, both III MAF and the Seventh Air Force received a copy of this message which was not the case of the earlier communications between Westmoreland and Sharp.37

III MAF and the Seventh Air Force quickly resolved the particulars between the two relative to Niagara II. Major General Norman Anderson, the 1st MAW commander, visited the Seventh Air Force headquarters at Tan Son Nhut in Saigon to complete the coordination between the two. During his stay at Saigon, General Anderson inspected the Seventh Air Force intelligence control center for the operation, which eventually produced some 300 targets during a given week. According to Anderson, the intelligence center was designating targets, but was not sure whether they were being hit. The 1st Wing commander and Momyer agreed "to exchange attack information on a 24-hour basis." About midnight, the Seventh Air Force would inform III MAF of the number of targets struck, their coordinates, and any available battle damage assessment (BDA). III MAF in turn would turn over its target data and BDA to the Air Force.38*

For the Khe Sanh sector, the Seventh Air Force established an airborne command and control center (ABCCC), an electronically equipped Lockheed C-130E transport. From its orbit over eastern Laos, the ABCCC controlled all aircraft in Niagara II, except Marine close air support fixed-wing planes and helicopters.** At Khe Sanh, on 22 January, the 1st MAW moved a mini-DASC from Chu Lai to Khe Sanh, backed by a Marine airborne DASC in a KC-130.*** The Marine wing and the Seventh Air Force divided the air space over the Marine base into six concurrent zones. In the three closest to the base, aircraft reported into the Khe Sanh FSCC and DASC, which, of course, were collocated. The 1st Wing and 3d Marine Division Dong Ha DASC and FSCC controlled the easternmost zone. The Air Force ABCCC had complete authority over the two remaining zones.³⁹

Although somewhat formalized, the aviation arrangements at Khe Sanh were at best ad hoc and sometimes confusing. As General Norman Anderson described it, at first, all sorties within the range of the Marine air support radar teams would be "directed by our forward air controllers" and would be a 1st Wing responsibility. With the beginning of the B-52 sorties, however, "this became a jumbled arrangement as well" and air control became a matter of "expediency" rather than "doctrine." Air Force controllers complained that Marine aircraft over Khe Sanh too often ignored the Seventh Air Force ABCCC. From an Air Force viewpoint, this duo-air-control relationship "perpetuated the existence of two air forces operating in a compressed area." General Momyer believed that the Niagara compromise placed "too much emphasis on geographical considerations." He believed that Marine air was fighting its "own private war at Khe Sanh" rather than fitting into the overall air campaign. As Air Force historian Bernard C. Nalty later

^{*} According to General Carey, who at the time served on the 1st MAW staff, "the concept of intelligence center targeting proved to be ineffective principally because of its lack of timeliness. Targets for the most part were fleeting targets and required quick response. BDA for the most part was unrealistic. We looked upon the system as 'Big Thinking' strategic targeting but not very practical from a tactical standpoint." Carey Comments.

^{**}Colonel Bonner, the 1st MAW G-3, commented that the lack of airbases in I Corps limited General Momyer in his ability "due to time, distance, and weather to place a 'Hallmark USAF stamp' on Air Support in I Corps. Therefore the C-130 Airborne Command and Control Center was invented for Khe Sanh and Niagara with B-52s was the Momyer way of getting the Air Force involved." Bonner Comments. General Carey, who at the time as a lieutenant colonel, worked for Colonel Bonner, recalled that "feedback from the Seventh Air Force ABCCC was non existent. On the other hand our communications with the Khe Sanh and Dong Ha DASC were excellent and as a result the TADC had a good picture of our sectors." Carey Comments.

^{***} Colonel Twining recalled that there was some thought to moving one of the two TPQ-10 ASRTs at Dong Ha to an area west of Camp Carroll, probably at Ca Lu, to support Khe Sanh. The NVA interdiction of Route 9 in that sector prevented the move. According to Twining the "most logical solution was an ASRT located at Khe Sanh itself, along with elements of a DASC. Accordingly, General Anderson moved one of the TPQ-10's and a mini-DASC from MASS-3 assets at Chu Lai to Khe Sanh... To provide interim control of air support operations while the Khe Sanh DASC was being moved into position and set up, MASS-2 provided an airborne DASC in a KC-130 which orbited Khe Sanh at 20,000 ft, out of range of the NVA antiaircraft guns." Twining Comments.

MARINE AIR

wrote: "Momyer thought in terms of using a limited number of aircraft to attack an increasing number of targets over a wide area; the Marines focused on providing the swiftest and deadliest support for the man with the rifle."^{40*}

In contrast to Momyer, Marine Generals McCutcheon and Norman Anderson were relatively satisfied with the arrangements for Niagara II. While still uneasy about MACV and Seventh Air Force motivations, they believed that for the most part the questions about air control had been put to bed. On 23 January, in Washington, General McCutcheon informally wrote to Anderson, the wing commander, that Headquarters Marine Corps was "watching with great interest the OpCon command relationship game and the flurry of message traffic between the powers-to-be." McCutcheon acknowledged, however, that the Niagara implementing order was "simply a restatement of existing procedures." In reply, about two weeks later, the wing commander assured General McCutcheon that III MAF relations with the Seventh Air Force "have again normalized." According to Anderson, "the heat is temporarily off in doctrinal matters . . . We both can live and perform our jobs while respecting the others' doctrinal position. For the time being, it appears that Spike Momyer is willing to do this."41

Operation Niagara and Air Resupply in the Defense of Khe Sanh

While the issue of command and control over air operations still simmered below the surface, the allies unleashed their air offensive in Operation Niagara. From 22 January through the end of March, American airpower in a massive onslaught bombarded the North Vietnamese forces surrounding the Marine base at Khe Sanh with over 95,000 tons of ordnance.** Within the first week, Marine and Air Force fighter bombers flew about 3,000 sorties and the B–52 stratofortresses over 200. On 7 February, General Anderson, the 1st Wing commander, observed that "some fantastic amounts of ordnance are delivered daily, hopefully with a beneficial effect."⁴²

A key element of the Niagara air offensive was the B-52 Arclight strikes. During the period 22 January-31 March, the stratofortresses, each plane able to hold 27 tons of ordnance, released nearly 60,000 tons of high explosive upon the enemy. To enhance the concussion effects, the big bombers carried mixed bombloads of 250-, 500-, and 750-pound bombs. Beginning at the end of February, employing van-mounted Combat Skyspot radar MSQ-77, Air Force ground radar operators directed some of the Arclight missions as close as 1,000 meters to the Marine lines. Thinking that they had a 3,000 meter comfort range, the North Vietnamese had stored some of their ammunition within those limits. The results were some spectacular explosions. Marine defenders at Khe Sanh came out of their bunkers to watch, calling the display of pyrotechnics from the sky, "Number One on the hit parade."43***

^{*}In 1996, Lieutenant Colonel Richard E. Donaghy, who as a captain in 1968 was the 26th Marines regimental air officer, remembered that sometime in late February an "Air Force Jolly Green [helicopter] arrived at Khe Sanh unannounced. . . . Into the Regimental Command Bunker walked Gen Momyer complete with utiliries, flak jacket, and helmet." After a briefing, the Air Force general asked to speak to the "senior Marine aviator on the regimental staff," which of course was Donaghy. According to Lieutenant Colonel Donaghy, "General Monyer gave me the impression that he wanted to help us get the job done at Khe Sanh, but only on his terms." General Momyer stated that "he could send us more air than I could control with the ground and airborne FACs I had available." Donaghy replied that the Air Force aircraft "were carrying the wrong ordnance and were dropping too high. They always carried 'slick' bombs and were dropping so high that rhey rarely hit the point targets we so often were after (bunkers)." The Marine officer continued that what he needed were "snake and nape." ["Snake" pertained to 250- and 500-pound bombs configured with a special tail called "snake-eyes," while "nape" referred to napalm]. In Donaghy's account, General Momyer "smiled and told me to get the high drag ordnance from rhe Marines. His pilots would continue ro do as rhey had over the pasr months because he didn't want ro lose planes 'down in rhe weeds." Donaghy stared that after Monyer left, he started to obrain Air Force aircraft and eventually worked out a system "where we would use the Air Force planes with their low drag ordnance for Marine TPQs on rargets well away from friendlies, with FACs that had 'area targets', or pass them . . . for use in Laos where the NVA big guns were always shooting at us from Co Roc. The Marine air we used in close because of their ordnance loads and their release altitudesthey could see who they were going after." LtCol Richard E. Donaghy ltr to Jack Shulimson, n.d. [Jul96] and 4Oct96 (Vietnam Comment File), hereafter Donaghy Comments.

^{**}The exact tonnage dropped varies from the figure of 95,430 mentioned by MACV in its history to 103,500 tons listed by FMFPac. Air Force historians Bernard Nalty and John Schlight use the figures 98,000 and 100,000 tons, respectively. MACV ComdHist, 1968, I, p. 423; FMFPac, MarOpsV, Mar68, p. 3; Nalty "Operation Niagara, Air Power, and the Siege of Khe Sanh," p. 39; Schlight, *Years of the Offensive*, 1965–68, p. 285.

^{***} Colonel Bonner, the 1st MAW G-3, observed that the safety zone for the Arclight strikes were three kilometers, and "undoubtedly there were some missions conducted closer rhan three kilometers bur probably not many." According to Bonner, the Air Force briefers told the wing staff that "the Arclight targets would be made by map grid coordinates rather than geographical features and the targer would always be one kilometer square. Their rarional was the dispersion of a full load of 250, 500, and 750 pound bombs would safely land in the one kilometer square, ie. Carpet bombing." Bonner Comments. Navy Captain Bernard D. Cole, who at the rank of lieutenant served as the assistant target intelligence officer with the 26th Marines, remembered rhat the B-52 strikes "were devastating, but their very effectiveness precluded accurate body counts: many enemy were undoubtedly buried by the detonations; there were also interesting POW accounts about the deafening and psychological effects of rhe strikes" Cole Comments.



Department of Defense (USMC) Photo A191632 The Marine Air Traffic Control Unit (MATCU) 62 detachment area at Khe Sanh displays its radar equipment. Notice the fire truck in the revetment in the foreground.

While the 26th Marines FSCC at Khe Sanh provided the targeting data for 90 percent of the B–52 missions, General Westmoreland personally approved each of the Arclight strikes and occasionally diverted missions from his headquarters at Tan Son Nhut. The 26th Marines sent their requests for the massive air raids with specific targets to the 3d Marine Division air officer about 15 hours prior to the scheduled drop time. Up to three hours prior to the strike, the 26th Marines target intelligence officer could request an alternate target. After that time, no changes were permitted in the targeting process.⁴⁴

The MACV timetable for the Arclights called for eight strikes every 24 hours. Later, the Strategic Air Command pared the response time of the big bombers even further, sending out three-plane cells every three hours from Guam and Thailand and eventually from Okinawa. Every 90 minutes, a Combat Skyspot unit would pick up the bombers and direct them to a particular target block or alternate target. To avoid predictable patterns and to keep the enemy off balance, the B–52 cells would vary their intervals over their targets from an hour to 90 minutes, or even two hours. In the last week of February, the Air Force changed the number and intervals of aircraft once more, dispatching six B–52s every three hours instead of three aircraft every 90 minutes.⁴⁵

While allied intelligence attempted to assess the effectiveness of this heavy intensive bombardment, several factors impeded the collection effort. More than half of the B-52 strikes occurred at night and heavy cloud cover during the day often frustrated aerial photographic coverage. According to an Air Force historian, the aerial photographic experts could only interpret "accurately" about seven percent of the total of Southeast Asia Arclight missions. From the available sources, Air Force BDA officers concluded that for the period 15 January through 31 March, the stratofortresses destroyed over 270 defensive positions including bunkers and trenches and another 17 weapon positions. The raids damaged nearly 70 more of the enemy bunkers and trenches and another eight weapons. B-52 crewmen claimed "1,382 secondary explosions and 108 secondary fires."46

Any estimate of the number of enemy casualties as a result of the B-52 bombardment around Khe Sanh would only be a guess. Still, enough impressionistic evidence exists that the bombing created havoc with enemy morale and at the same time lifted that of the Marine defenders at Khe Sanh. In March 1968, a North Vietnamese noncommissioned officer from the 9th Regiment, 304th NVA Division, near Khe Sanh, entered in his diary: "Here the war is fiercer than in all other places. . . . All of us stay in underground trenches We are in the sixtieth day and B–52s continue to pour bombs . . . this is an area where it rains bombs and cartridges. Vegetation and animals, even those who live in deep caves or underground, have been destroyed." Another enemy diarist wrote, "the heavy bombing of the jets and B–52 explosions are so strong that our lungs hurt." Marine Captain William H. Dabney, the company commander of Company I, 3d Battalion, 26th Marines on the isolated outpost on Hill 881 South, observed that "B–52s make excellent CAS [close air support] birds." He then exclaimed: "Not much for bombing trails and base areas, but God! Give them a target and get them to it quickly and scratch one target."⁴⁷

Despite the dramatic aspects of the Arclights, the 26th Marines relied heavily on the close air support missions flown by the tactical fighter-bomber aircraft, especially those controlled by Air Support Radar Team Bravo (ASRT-B) from MASS-3. For much of the period of Niagara, especially through February, the atmospheric conditions called by the French, crachin, consisting of low-lying clouds, morning fog, and intermittent rain showers, dominated the weather over Khe Sanh. With the resulting overcast skies and reduced visibility, the pilots flew a greater percentage of radar-controlled strikes. On 18 February, in a record-setting 24hour period, Marine and Air Force aircraft, all under Marine ground radar control, dropped over 480 tons of ordnance on 105 separate targets. An indication of the confidence that both ground and air commanders had in the accuracy of the radar, TPQ strikes as close as 500 meters to friendly lines were routine. An Air Force liaison officer believed that the Marine radar operators

Marine TPQ ground controllers at Khe Sanh could handle as many as four aircraft on "the same pass as long as the pilots flew in a tight formation and radar did not break lock." The Khe Sanh FSCC generally used a rough rule of thumb relative to the weight of the ordnance and distance from friendly lines to determine targets for TPQ missions. Normally 500-pound bombs, because of their large fragmentation pattern, would not be dropped within 500 meters of friendly troops while 250-pound ordnance would not be dropped within 250 meters of Marine lines. Shore, Battle for Khe Sanh, p. 104. Lieutenant Colonel Donaghy, who served in 1968 as the 26th Marines regimental air officer, commented: "I cannot imagine what would have happened at Khe Sanh had we not had ASRT-B. They were always 'up', always 'on target and always innovative." He recalled that the Khe Sanh defenders wanted to use napalm against the ever expanding NVA trenches at night, which would have "had to be done under flares and were extremely difficult in mountainous terrain . . . We asked ASRT-B if they could control napalm drops using TPQ radar. At first they said no, because that weapon was not in their ballistic tables, but after some thought said they'd give it a try. We scheduled several flights of A-4 could safely bring a bombing mission in as close as 50 meters while a Marine member of the Khe Sanh FSCC stated in an emergency, "he would have no qualms about calling in an ASRT–B . . . TPQ within 35 meters of his position." During Niagara, ASRT–B controlled nearly 5,000 missions. All told, excluding the B–52 raids, Marine, Navy, and Air Force pilots exceeded 22,000 fixed-wing strikes in support of Khe Sanh, with the Marines flying more than 7,000 of those missions and dropping over 17,000 tons of high explosives upon the enemy.⁴⁸

In their bombing campaign around Khe Sanh, the Marines experimented with several techniques. Two of the most unique were the "Mini" and "Micro" Arclights, which were used for area bombing and required close coordination with ground supporting fire. Devised by Captain Kent O. W. Steen, the 26th Marines assistant fire support coordinator, and Captain Mirza M. Baig, the regimental target intelligence officer, the concept behind the Mini Arclight was to act upon fast breaking intelligence when B-52 strikes were not available.** When the regiment received indications that North Vietnamese units were moving into a specific area, the Khe Sanh FSCC would plot a 500by 1,000-meter zone in the center of the suspected enemy sector. The regiment then asked for Marine fixed-wing aircraft on station to conduct a TPQ mission and at the same time alerted artillery batteries at Khe Sanh, Camp Carroll and the Rockpile for fire missions. With the bombing runs, usually flown by two A-6 Intruders, carrying 28 500-pound bombs, and artillery batteries firing mixed caliber ranging from 4.2-inch mortars to 175mm guns, the FSCC and ASRT computed the data so that the initial shells and

aircraft carrying napalm to arrive at Khe Sanh during daylight. We flew them at several thousand feet over a safe target area and let the ASRT-B folks develop their own ballistics for a napalm canister. They got accurate enough that we later did it at night against the trench lines." Donaghy Comments.

^{**}Colonel Steen commented that the Marine "culture' of fire support planning and coordination integrated with the infantry they support" played a large role in the defense of the base. He wrote that the "integration of the ASRT (ground support radar team) and Marine Corps fire support coordination apparatus was a brilliant but overlooked accomplishment which saved our bacon many times during low visibility... when other close air support couldn't be used." Col Kent O. W. Steen, Comments on draft, dtd 14Dec94 (Vietnam Comment File). Navy Captain Cole who was Captain Baig's assistant related that the mini Arclights involved "several aircraft ... [usually A-6As] timed for a simultaneous time on target with an artillery barrage (everything from 105s to 175s)...." He stated the concept "was thought up by Harry Baig (as was the idea of flooding the NVA trenches with napalm; he was a real wild man)." Cole Comments.

bombs hit the target at the same time. Obviously the calculations of trajectory and flight information had to be carefully doverailed to have the desired effect and yet avoid shooting down an aircraft. The "Micro Arclight" was a smaller version of the Mini Arclight using smaller targets and lighter ordnance.⁴⁹

Even with the Arclights, the TPQ missions, and the Mini and Micro Arclights, a basic ingredient of Marine air at Khe Sanh remained the visual close air support missions.* Despite the crachin, the breaks in the weather permitted the Marines to provide their traditional support of the Marine ground forces. Upon arrival in the sector, the fixed-wing aircraft would report into the Khe Sanh DASC who in turn would assign the pilots to a Marine or Air Force airborne controller. These controllers were from the Air Force 20th Tactical Air Support Squadron or from Marine H&MS-36 and VMO-6. At least five pilots flying either Cessna O1E "Birddogs" or Huey "Slicks" remained overhead during the day in radio communication with both the ground and air. Once in visual and radio contact with the attack aircraft, the controller would make a "marking run" where he fired either a smoke rocket or dropped a colored smoke grenade upon the target. Given the correct headings by the airborne controller and possibly after a few "dummy" passes, the jets would then strike the enemy positions. In the meantime, the controller would be in contact with the ground and make any necessary adjustments in his instructions to the attack pilots. Once the attack aircraft released their ordnance, the air controller made an assessment of the strike and radioed the results to the fixed-wing pilots. A typical transmission would be:

Your BDA follows: 5 KBA [killed by air]; 2 bunkers, 1 automatic weapons, and 50 meters of trenchline destroyed; one secondary explosion. You have been flying support of the 26th Marines; your controller has been SOUTHERN OSCAR. Good shooting and good afternoon, gentlemen.⁵⁰

Air support involved more than dropping bombs. With Route 9 cut, Khe Sanh depended upon airdelivered supplies for its survival. Even with its 3,900-foot airstrip, this was not always a simple task. The first challenge faced by an aircrew inbound to Khe Sanh was to find the combat base. In addition to

the crachin which for much of the morning made navigation difficult, the Khe Sanh airstrip was located hard by a "fog factory," which complicated the task even further. Just off the east end of the runway, the ground dropped away sharply into a gorge over 1,100 feet deep. The wind channelled warm, moist air from the coast into the gorge, producing the right conditions for thick, heavy banks of fog which spilled onto the plateau to obscure the combat base and the surrounding area. Before the siege began, the structures at Khe Sanh showed up vividly on aircraft radar, allowing pilots to "see" through the fog. But soon, heavy shelling forced the Marines further underground and leveled many bunkers and revetments, resulting in poor radar return. A detachment from Marine Air Traffic Control Unit-62, MAG-36, operated a ground control approach (GCA) radar from the airstrip to guide aircraft, but enemy fire knocked it out on 19 February. As an expedient, the ground air controllers pressed into service the ASRT TPQ-10 radar, normally used to control bombing, to direct landings, with some success.51**

If the weather was clear, as occasionally happened, or if a pilot had the skill or luck to find the airstrip despite the fog, he and his crew next had to brave North Vietnamese antiaircraft fire. The enemy cleverly concealed heavy machine guns and some 37mm antiaircraft guns along the approaches to the runway and invariably engaged aircraft on landing and takeoff. Even when the supply planes approached the field in dense fog under radar control, the NVA gunners fired away, "in the dark," so to speak, presumably firing at the sound of the engines. For an aircraft loaded with several tons of fuel or ammunition, a single hit could be disastrous.⁵²***

^{*}While the TPQ missions in many instances could be classified close support, Marine close air support usually refers to missions where the pilots under the direction of an airborne or ground controller visually obtain and attack the target.

^{**}Lieutenant General Carey then on the wing staff commented that ASRT at Khe Sanh "proved to be invaluable in a multitude of roles. We utilized it in conjunction with aerial delivery on the tin foil strip, for supplementary positioning and control of A-6... strikes which we conducted when the Arclights were not available, and we used them for Special Close Air Support on the hill positions surrounding Khe Sanh." Carey Comments.

^{***}Colonel Twining observed that "one of the problems with the Khe Sanh defense was that the terrain overlooking the airfield was close enough for the NVA to cover the base with direct fire but too far to include within the Marine perimeter. The covering artillery was emplaced in caves with narrow embrasures, making it almost invulnerable to counter-battery or air strikes. According to a defector, the guns were aimed with an awkward but ingenious system of mirrors, moved by lines and pulleys. Once completed, it was possible to fire on aircraft that were in the process of landing or taking off, as well as those stationary and unloading." Twining Comments.



Photo from David Douglas Collection

An enemy mortar shell impacts below a just-landed Marine Lockheed KC–130 Hercules transport at the Khe Sanh airstrip. One of the Marine crew members can be seen on the ground under the wing.

The necessary sequence of landing, offloading cargo and replacements, loading wounded and evacuees, then taking off again created a precarious time for all concerned. When an aircraft touched down, the enemy immediately fired on the runway with a variety of weapons ranging from small arms to rockets, often damaging the aircraft or causing casualties among the exposed personnel gathered to service or board it. Every moment spent on the ground was fraught with hazard. Pilots soon developed the technique of "speed offloading" for cargo, in which the plane continued to taxi after landing and the cargo was simply rolled out the back. This reduced offloading time from the 10 minutes required with a forklift to less than 30 seconds. Fairchild C-123K Providers, equipped with auxiliary jet engines, could land, offload, take on passengers, turn around and lift off again in as little as one minute. Of course, when leaving the combat base, the planes were once again exposed to enemy antiaircraft guns.53

The workhorses of the fixed-wing air delivery effort were the Lockheed C–130 (or KC–130) Hercules, the Fairchild C–123 Provider, and the C–7 Buffalo, with cargo capacities of 15 tons, 5 tons, and 3 tons, respectively.* VMGR–152 provided the KC–130s while the Air Force flew all three types of transports into Khe Sanh. While the C–130 had the obvious advantage of greater carrying capacity, the smaller aircraft could land on shorter spaces of open runway, spend less time on the ground, and present a smaller target on the ground as well as in the air.⁵⁴

Prior to 10 February, seven C-130s were hit and damaged on resupply missions to Khe Sanh. On the 10th, North Vietnamese heavy machine gun fire struck a 1st Marine Aircraft Wing KC-130, with a crew of six and five passengers, piloted by Chief Warrant Officer 3 Henry Wildfang and Major Robert E. White on the approach to the combat base. The plane was carrying flamethrowers and bulk fuel in bladders. According to Wildfang, the enemy fire "set the #3 engine ablaze, punctured the fuel cells in the cargo compartment, and ignited the fuel." He recalled that "two explosions rocked the . . . [aircraft] in-flight, with a third occurring at touchdown." Oily black smoke and flames entered the cockpit area and "limited visibility to near zero." Wildfang and White had contacted the base "to keep the approach area and landing zone clear of operating helicopters, and to alert the base fire equipment personnel." They were able to maneuver the aircraft clear of the runway upon landing so that the airstrip could remain in use. He and White escaped the aircraft through their respective "cockpit swing windows" although White had difficulty in extricating his foot, caught in the window. Warrant Officer Wildfang opened the crew door, but "a wall of fire and dense smoke" forced him back. At that point, the crash crews arrived and rescued another three men, two of whom

^{*}The C-7, sometimes also called the "Caribou," is a turboengine version of the C-2. All the Marine Lockheed Hercules transports were configured as refuelers and were thus designated KC-130s rather than C-130s.



Photo is from the Abel Collection

An Air Force Fairchild C-123K Provider transport brings in supplies for the Marines at Khe Sanh. This version of the Provider was equipped with auxiliary jet engines and could land, unload, and take off in less than one minute.

later died of their wounds. All told, of the 11 persons on board the aircraft, 8 perished.⁵⁵

The following day, a North Vietnamese 122mm rocket exploded 15 feet from an Air Force C–130 which was offloading troops, killing one and wounding four. Fragments damaged the tail section and the aircraft could not fly until repaired. On 12 February, enemy gunners once again hit the transport, which finally departed the next day, sporting 242 new holes. At this point, General Momyer, the Seventh Air Force commander, ordered the cessation of Air Force C–130 flights into Khe Sanh. Ten days later, General Cushman followed suit, issuing the same prohibition for Marine Corps KC–130s.³⁶

The supply needs of the garrison were too great to be satisfied without the heavy lift capability of the C-130s. On the average, the defenders of Khe Sanh consumed or expended 125.6 tons of supplies per day, compared to Marine Corps planning figures for a force of that size which estimated a consumption of 131.4 tons per day. Initially, however, the need to replenish stocks consumed or destroyed, as in the explosion of ASP No. 1, drove the daily requirement up to 235 tons. The combination of weather and hostile fire prevented the smaller aircraft from flying a sufficient number of daily sorties to fulfill this requirement.⁵⁷

To maintain the flow of supplies without landing C-130s, logisticians switched to other methods of employing these aircraft. The most familiar was the simple parachute drop, known officially as the Container Delivery System. The Marines established a drop zone to the west of the combat base, near the 1st Battalion, 9th Marines. C-130s parachuted bundles of supplies into this zone to be recovered by the Marines of Company A, 3d Shore Party Battalion, assisted by working parties from other units and trucks from the 1st Battalion, 13th Marines. The system was largely successful, but occasionally equipment suffered damage through improper packing or heavy bundles crashed into the 1st Battalion, 9th Marines perimeter, destroying bunkers. Some drops drifted into enemy territory, or could not be recovered from the drop zone because of enemy fire.

In these cases friendly artillery fire or air strikes destroyed the supplies to prevent them from falling into the hands of the enemy.^{58*}

The Americans introduced two more exotic methods in the air resupply of Khe Sanh. These were the Ground Proximity Extraction System (GPES) and the Low Altitude Parachute Extraction System (LAPES), techniques tested by the Air Force just prior to the Vietnam War, but not in general use. With the GPES, loadmasters positioned palletized cargo on rollers inside the aircraft with a hook attached to the pallet in such a manner that it would hang down like the tailhook of a carrier plane. To drop his cargo, the pilot made a low pass over the drop zone trailing the hook and engaged an arresting cable, much like a plane making a carrier landing. The cargo slid out of the back hatch of the aircraft and onto the ground. GPES only had limited use at Khe Sanh, not for any fault with the system, but rather because of faulty installation of the arresting gear. The enemy took the Marines who attempted to install the arresting apparatus under mortar fire forcing them repeatedly to leave their work and take cover. As a result, they failed to anchor it properly. In the first attempt, the Air Force C-130 ripped the arresting cable out of the ground. After the Marines repaired the cable, other efforts were more successful. In one instance, the system extracted from a C-130a pallet containing 30 dozen eggs, "without a single eggshell being cracked." Another source allowed that two of the eggs were broken.59

LAPES missions, on the other hand, were more numerous, 52 deliveries as compared to 15 GPES, if not more uneventful. For a LAPES delivery, the loadmasters prepared the cargo in much the same manner as for GPES, except that, instead of attaching a hook to the pallet, they attached a parachute. The pilot flew over the runway at an altitude of five feet and fired a small explosive charge which cut a restraining cable and allowed the parachute to deploy out of the rear cargo hatch. The parachute pulled the palletized cargo out of the aircraft to drop the few feet to the ground. LAPES was extremely accurate, with some crews able to place their cargo within a 25-meter square. One LAPES delivery malfunctioned, however, sending a nine-ton pallet careening a quarter of a mile off the runway at high speed, crashing into a messhall and killing a Marine. LAPES also caused some damage to the runway, the result of repeated pounding by nine-ton loads moving at over 100 knots, slamming down from five feet and skidding along the strip.**

Near the end of February, the Air Force resumed C–130 landings at Khe Sanh. A few days later, on 1 March, North Vietnamese fire hit and destroyed a C–123 attempting to take off, causing General Momyer to end the experiment and forbid C–130 landings once again. Enemy gunners continued to take a toll, however. On 5 March, they hit a C–123 caught on the ground while changing a flat tire, wrecking the transport completely. Only a day later, 49 died when another C–123 fell to antiaircraft fire while approaching Khe Sanh to land.⁶⁰

Despite the many problems and risks encountered, both the Air Force and Marine transport aircraft kept the base supplied when they were the only means available to do so. The Air Force aircraft delivered over 12,000 tons of supplies to the garrison, with two thirds of that amount arriving by parachute, LAPES, or GPES. From the period 5 January through 10 April 1968, Marine fixed-wing transports, mostly KC–130s from VMGR–152, hauled 1,904 tons into Khe Sanh and carried 832 passengers.⁶¹

While fixed-wing aircraft largely provided for the needs of the units located within the Khe Sanh base itself, the Marines on the isolated hill posts depended upon Marine helicopters for everything from ammunition to water. The 1st Marine Aircraft Wing mounted a monumental helicopter effort using aircraft from both helicopter groups, MAGs–16 and –36. This massive helicopter lift also resulted in new techniques involving close coordination between

^{*}Colonel John F. Mitchell, who commanded the 1st Battalion, 9th Marines at Khe Sanh, recalled that the drop zone was a "'no-man's land' from the valley floor west of Khe Sanh and north/northwest of . . . [the combat base]." He assigned Company C the recovery mission, supported by Company A. He recalled that the Marines were frequently subjected to sniper fire and an occasional ambush. The North Vietnamese often competed in attempts to recover the supplies, but the Marines seldom lost. Mitchell believed his Marines recovered about 95 percent of the material dropped in their zone. Occasionally the dropped material landed in nearby minefields, which required extreme caution and his men took some casualties as a result. Col John F. Mitchell, Comments on draft, dtd 5Jan95 (Vietnam Comment File).

^{**}Colonel Rex O. Dillow, who served as the G-4 or logistics officer for III MAF, described LAPES as an "experimental U.S. Air Force system, which was used effectively until all the equipment was torn up. Although not as efficient as air landed resupply, it was much more efficient than airdrop due to less dispersion. However, it required a large smooth surface; the aircraft came in at such a low altitude that they had the landing gear down in case of an inadvertent touch down. This limited its use." Col Rex O. Dillow, Comments on draft, dtd 10Nov94 (Vietnam Comment File).



Both photos are from the David Douglas Duncan Collection Top, Marines on the ground stand back and watch as the KC-130 piloted by CWO-3 Henry Wildfang and Maj Robert E. White burns on the Khe Sanh runway after enemy fire set ablaze the cargo of flame throwers and bulk fuel. A member of the ground rescue team can be seen at the tip of the wing. Below, a rescue team chief stands exhausted looking at the foam-covered wreckage of the aircraft. Eight of the 11 persons on board the aircraft died in the crash and resulting fire.



MARINE AIR

Marine fixed-wing and rotary aircraft as well as with supporting artillery fire.*

Helicopter flights to the hills were at least as dangerous as the C-130 runs to the combat base. The helicopters were exposed to small arms fire from hundreds of North Vietnamese positions in proximity to the Marines' lines as well as to mortar fire while in the landing zone or hovering above it. The enemy quickly learned that the Marines ignited smoke grenades to mark their landing zones when helicopters were inbound. As a result, mortar fire almost always greeted the resupply aircraft and harassed the Marines detailed to recover the supplies from the landing zone. Weather also was a factor. Using visual approach and landing techniques, helicopters were subject to the vagaries of the fog and of low-lying clouds which sometimes dipped down to enshroud the peaks of the higher hills, even when the combat base remained clear.**

The Marines on the outposts attempted to alleviate somewhat the problems for the aviators of resupplying the hills. On Hill 881 South, Captain William H. Dabney always tried to obtain needed fire support from external sources, rather than from the mortars and howitzers on his own hill. In this manner, he conserved his ammunition, thereby reducing the number of resupply helicopters. To confuse NVA mortar crews, Dabney would set off numerous smoke grenades of different colors when expecting helicopters, then he would tell the pilot by radio which color smoke marked the correct landing zone.⁶²

The Marine helicopters brought supplies to the hill positions directly from Dong Ha, rather than from the combat base at Khe Sanh, itself. This reduced the number of times cargo handlers had to package and stage the supplies, as well as the amount of time the aircraft had to remain airborne in the hazardous environment around Khe Sanh. This system was not without problems of its own. One battalion commander complained that priority requests required up to five days for delivery, while routine resupply took 10 days. Further, carefully assembled loads, packaged to fulfill specific requests, sometimes arrived at the wrong position.⁶³

By mid-February, with the enemy shooting down on a single day three helicopters attempting to reach the Khe Sanh hill outposts, Marine commanders realized that they had to take steps to remedy the situation. According to Major General Norman Anderson, Lieutenant Colonel William J. White, the commander of VMO–6, came to him and stated that the wing needed to work up a plan to keep the outposts resupplied. Anderson agreed and had White sit down with his operations staff to iron out the details. On 23 February, with the assistance of the assistant wing commander, Brigadier General Robert P. Keller, the small planning group, within a day drew up an operational resupply concept, later dubbed the "Super Gaggle."^{64***}

The idea was to establish a small task force consisting of 8 to 16 resupply CH-46 helicopters, about a dozen A-4 Skyhawks and four Huey gunships to fly cover, a Marine KC-130 to refuel the aircraft, and a TA-4F with a TAC (A) in the backseat to orchestrate the entire affair. The Khe Sanh DASC and FSCC insured the coordination of the air and ground fires. In

^{*}Lieutenant Colonel Walter H. Shauer, who as a major commanded HMM-362, a UH-34 squadron assigned to MAG-36, recalled that he kept several helicopters at Khe Sanh for three- or four-day periods during January and February, and would relieve them with replacement crews and aircraft: "During the siege there was of course no aircraft maintenance support, only fuel. The . . . [aircraft] were parked in Khe Sanh's revetments, and the crews bunkered underground in the 26th Marines CP. We primarily engaged in emergency medevac, and emergency resupply of ammo and water, to the various adjacent Marine hilltop positions." LtCol Walter H. Shauer, Comments on draft, dtd 1Nov94 (Viernam Comment File), hereafter Shauer Comments.

^{**}Lieutenant General Carey, then serving on the 1st MAW G-3 staff, observed that helicopters were not always able to use a "visual approach." According to Carey, the "skies were overcast more often than not." The helicopters flew on instruments to Khe Sanh and then "let down through the overcast under control of a TPQ or on a selfdevised instrument approach on the Khe Sanh beacon. Once underneath they would pick up their fixed-wing escort. This operation required a great deal of coordination, generally conducted by an airborne TAC(A) in a TA4." Carey Comments.

^{***}Gen Cushman, the III MAF commander, claimed to have conceived the idea for the "Super Gaggle." LtGen Robert E. Cushman, Comments on "The Battle for Khe Sanh," dtd 23Mar69 (Vietnam Comment File). MajGen Keith B. McCutcheon, however, credited Colonel Joel E. Bonner, Lieutenant Colonel William J. White, and LtCol Richard E. Carey, with the further comment that Carey named the procedure. MajGen Keith B. McCutcheon, Comments on "The Battle for Khe Sanh," n.d. (Vietnam Comment File). This latter version appears to be in conformity with MajGen Anderson's recollections. MajGen Norman Anderson intvw, 3d Session, 17Mar81, pp. 225-6. Lieutenant General William J. White noted in his comments that the MAG-36 group commander, Colonel Frank E. Wilson, was the one who decided that White should see the wing commander and accompanied him to the meeting with General Anderson. LtGen William J. White, Comments on draft, dtd 1Oct94 (Vietnam Comment File). In his comments, General Carey wrote: "it became apparent that we had to do something fast. In discussion with Col Bonner and Gen Keller, Bill White and I suggested that we could come up with an answer. I was the considered authority on the fixed-wing participation and Bill provided the helicopter expertise. When all the details were sorted out I suggested the name supet gaggle as that is a favorite fighter pilot term meaning, 'perceived confusion of the first order." Carey Comments.



Both photos are from the Abel Collection

With the closing of the airfield to larger aircraft, aerial parachute drops were the most familiar method of resupplying the Marines at Khe Sanh. Top, an Air Force Lockheed C-130 transport drops supplies for the embattled Marines at the base. Below, Marines on the ground at Khe Sanh watch as the supplies come floating down. Several collapsed parachutes can be seen in the background.



the first "Super Gaggle" mission flown on 24 February, under cover of suppressive fixed-wing and artillery support, each of eight CH–46s successfully dropped off a 3,000-pound external load "covering less than five minutes when they could have been taken under fire." One helicopter took a hit, but landed safely at the Khe Sanh airstrip. All the rest of the aircraft returned to base safely. General Anderson, the 1st Wing commander, exulted "today, was a small victory." He then wrote, "the only way to beat the enemy is to bludgeon the hell out of him. . . . These coordinated resupply missions under marginal weather conditions undoubtedly will be required again and again in the next few weeks."^{65*}

In a typical "Super Gaggle" mission, a TA-4 would fly to Khe Sanh on weather reconnaissance. When the TA-4 reported favorable conditions, the A-4s launched from Chu Lai, enroute to Khe Sanh, and the helicopters took off from Quang Tri, enroute to Dong Ha where prestaged supplies waited. After picking up their loads and carrying them externally underneath in especially designed cargo slings, the helicopters began the short trip to Khe Sanh flying on instruments and then letting down through a hole in the cloud cover. Just before they arrived, four A-4s struck enemy positions with napalm and two others saturated antiaircraft positions with CS gas carried in spray tanks. About 30 seconds prior to the helicopters' final approach to the designated hills, two A-4s laid a smoke screen on both sides of the planned flight path. As the helicopters flew in behind the smoke, four more Skyhawks carrying bombs, rockets, and 20mm cannons suppressed known and suspected North Vietnamese gun positions. The Hueys followed closely to pick up any downed crews, and a Lockheed KC-130 Hercules orbited high overhead to refuel any A-4s in need. At times, the entire "gaggle" operated in the hills where some peaks reached 3,000 feet with less than 1,500 feet ceilings and occasionally the helicopters took off and landed at Dong Ha with less than 400 feet clearances.66

Using the "Super Gaggle" technique, groups of helicopters could resupply the hills four times per day

with little danger of losses. Indeed, only two CH-46s fell to enemy fire during "Super Gaggle" missions, and in both cases, the Hueys picked up the crews immediately. During the month of March, the helicopters in "Super Gaggles" delivered about 80,000 pounds of cargo per day to the hill outposts. Brigadier General Henry W. Hise,** one of two assistant wing commanders, observed, however, that without the fixed-wing support, "the 46s could no longer have supplied the hills." He noted that the Super Gaggle reduced the "hit rate" among the helicopters from 10 per 1,000 sorties to 5 per 1,000 sorties. According to Captain Dabney on Hill 881 South, with the suppression of the North Vietnamese antiaircraft batteries by the fixedwing aircraft, "you could get in 10 helicopter loads on the hill in one minute and get the birds the Hell out of there and into smoke where the NVA couldn't see to shoot." With obvious Service pride, Dabney later praised the Super Gaggle: "It was a massive, complex, well rehearsed, gutsy and magnificent performance and only the Marines could have pulled it off."67***

On 31 March, with the coming of better weather and the beginning of the pullback of enemy forces from Khe Sanh, the allied command ended Operation Niagara. For the 1st Marine Aircraft Wing it had been an immense effort. In addition to the nearly 7,100 sorties contributed by Marine tactical air to Niagara, Marine helicopters flew over 9,000. Including the Super Gaggle flights, the Marine rotary aircraft carried more than 10,600 passengers and brought in over 3,300 tons of supplies to the Khe Sanh defenders. While the helicopters mostly delivered their cargo to the hill outposts, they also played a part in the resupply of the main base, especially after the enemy gunners curtailed the landings of the large transports. In support of the Niagara operations, 23 Marine fixedwing aircraft and 123 helicopters sustained some combat damage.68

Little question remained that without air support, the entire defense of Khe Sanh would have been untenable. All the U.S. major aviation commands, including the Strategic Air Command, the Seventh Air Force, the

^{*}General Carey observed that the coordination of the Super Gaggle originated at the TADC. The procedure required A4s from Chu Lai and "helos from Dong Ha/Quang Tri to take off at appropriate intervals so as to arrive at Khe Sanh at the same time. When the delivery was successfully completed and aircraft safely egressed [the area] the cycle [was] restarted for subsequent delivery." He observed that Marine ground crews were the unsung heroes: "Helos and strike fixed-wing aircraft were often reloaded in as little as 30 minutes time and sent again on their way to support their fellow Marines at Khe Sanh." Carey Comments.

^{**}Because of the extended operations in the north, the 1st MAW in January 1968 like the two Marine divisions was authorized two assistant commanders.

^{***}Lieutenant Colonel Walter H. Shauer, the commander of HMM-362, expressed a minority view about the effectiveness of the Super Gaggle. He wrote the "Gaggle' turned out to be what its name connotates. Uncoordinated event waiting to crash." He believed that the reduction of the hit rate occurred because the NVA had begun to withdraw and just "weren't there." Shauer Comments.

Seventh Fleet, and the 1st Marine Aircraft Wing demonstrated remarkable coordination over the skies of Khe Sanh. This coordination also was tied in very closely with both the Khe Sanh ground defenses and the Marine and Army artillery positions along the DMZ. While obviously the massive airlift and air bombardment permitted the Marines to hold the base and kept the enemy at bay, it still remained unclear how badly the enemy was hurt. The amount of ordnance dropped, as one historian observed, only measured the effort rather than the results.* Moreover, despite the inter-Service cooperation in the Khe Sanh operation, the Niagara Operation reopened the old dispute about the role of Marine air in the overall air campaign. Indeed, on 10 March, with the approval of Admiral Sharp, General Westmoreland issued his Single Manager directive placing Marine fixed-wing tactical and reconnaissance aircraft, at least as far as fragging purposes, under the operational control of General Momyer. While the Single Manager issue had little impact on the Niagara operations since it came out so late in the campaign, it would dominate, however, MACV, III MAF, and Seventh Air Force relations throughout the rest of the year and in reality throughout the remainder of the war.⁶⁹

^{*}Navy Chaplain Lieutenant Commander Ray W. Stubbe, who has researched and written extensively on Khe Sanh, commented "the US Air Force's count of 'secondary explosions' at Khe Sanh, by which MACV determined through their complex mathematical formulae just how many NVA were killed, is grossly faulted since many of the 'secondary explosions' they counted were actually conjointly-fired artillery missions: What they counted as a secondary explosion being, actually, a 'friendly explosion!" LCdr Ray W. Stubbe, USN, Comments on draft,

²⁵Oct94 (Vietnam Comment File).Lieutenant Colonel Richard E. Donaghy, who served as the 26th Marines air officer, also had his doubts, commenting that it was "nearly impossible to measure the real effectiveness of sorties in those days (BDAs were in the eyes of the beholder)...." Donaghy, nevertheless, commended General Momyer, the Seventh Air Force commander, for visiting Khe Sanh and "coming to where the action was.... General Momyer obviously wanted to see where he was devoting so many of his assets." Donaghy Comments.

A Matter of Doctrine: Marine Air and Single Manager

The Establishment of Single Manager—Point, Counterpoint—The Continuing Debate

The Establishment of Single Manager

While the Khe Sanh situation influenced the implementation of the "single manager" system at the time, General Westmoreland's doubts about the ability of III MAF and its limited staff provided an underlying motivation for his action. He especially worried about the capability and even willingness of Marine aviation to support the new Army divisions he was sending north. From a senior and joint commander's perspective, the MACV commander also sympathized with the desire of General Momyer, the Seventh Air Force commander, to centralize the air assets in Vietnam. All of these factors played a role in his final decision.¹

Apparently accepting with relative good grace (at least outwardly) Admiral Sharp's initial denial of his effort to bring Marine fixed-wing air under the Seventh Air Force in Operation Niagara, General Westmoreland yet remained concerned about air support for the newly arrived 1st Air Cavalry Division in northern I Corps. With the establishment of the 1st Cavalry command post near Phu Bai on 20 January and its subsequent deployment to Camp Evans by the end of the month, Westmoreland became even more agitated on the subject. According to the MACV commander at a meeting with both Generals Cushman and Norman Anderson, the 1st MAW commander, he told them that with the new deployments and the impracticality of Seventh Air Force direct support for the division, he wanted the Marines to provide that air coverage. Westmoreland claimed that he received assurances from both Marine commanders that the Marine wing would establish liaison with the Army division and the necessary arrangements would be made.²

The three commanders had different impressions about the results of their meeting. While Generals Anderson and Cushman promised that III MAF would furnish air support, their understanding about the undertaking was at great variance from that of General Westmoreland. General Cushman later recalled that the Marines flew air support for the 1st Air Cavalry, but that the Army division did not know how to employ it. The 1st MAW commander, Major General Norman Anderson, related that the problem was one of communication. According to Anderson, he told General Westmoreland that the Marine wing would support the Air Cavalry, but that there would be need for the Army division to establish a communications network with the Marine air command and control system.^{3*}

The upshot of the situation was that the 1st Air Cavalry still had not tied into the Marine Tactical Air Direction Center after it deployed to Camp Evans. According to General Westmoreland, about 24 hours to 48 hours after he had broached the subject to the Marine commanders, he visited Major General John J. Tolson, the 1st Air Cavalry Division commander at his CP and discovered that there had been no liaison with the wing. Until that juncture, Westmoreland claimed he had been content not to alter the air command system, but now "I blew my top . . . [this] was absolutely the last straw. . . . I go up there and nothing has happened and here I've got a division up there . . . and they [III MAF] just ignored me." The result, according to the MACV commander, was his decision to go ahead with the single manager directive.4

^{*}General Earl E. Anderson, who at the time as a brigadier general was the III MAF Chief of Staff, recalled that he also attended this meeting, "and it became a little 'testy' at times. General Cushman stated that any excess sorties would be made available to Army units on request, but that the 7th AF had the primary responsibility to provide air support for the Army units." According to the former III MAF Chief of Staff, "the lack of communication between the 1st MAW commander and the CG of the 1st Air Cav at the outset, in my opinion exacerbated the problem and brought the matter to a 'boil' in Westmoreland's mind." Anderson further stated that "we should have taken the initiative. By not doing so, we got off on the wrong foot as MACV and 7th AF were looking for anything for which they could, rightly or wrongly, assess blame to III MAF or the 1st MAW." Gen Earl E. Anderson, USMC (Ret), Comments on draft, dtd 18Dec94 (Vietnam Comment File), hereafter E. E. Anderson Comments. Colonel Joel E. Bonner, the 1st MAW G-3, also emphasized that for Westmoreland the support of the 1st Air Cavalry "was priority ONE !!" Col Joel E. Bonner, Comments on draft, dtd 18Jan93 (Vietnam Comment File), hereafter Bonner Comments. Brigadier General Henry W. Hise, who was one of the two assistant wing commanders, observed, nevertheless, that the Army units needed the appropriate "radios and frequencies to enter Marine nets . . . [and] this was clearly an Army responsibility." BGen Henry W. Hise, Comments on draft, dtd 22Dec94 (Vietnam Comment File), hereafter Hise Comments.

Much of the ensuing unhappiness between MACV and III MAF revolved around the expectations of the various commanders and their differing recollections of their various meetings. This was especially true about the debate over the communication net with the 1st Air Cavalry. While General Anderson remembered emphasizing this matter. General Westmoreland denied that the subject was ever brought up and fully anticipated that the Marines would have provided liaison parties with the 1st Air Cavalry Division. In a letter several years later, Major General Anderson recalled that General Cushman accompanied General Westmoreland during the latter's visit to General Tolson. According to Anderson, Cushman sensed the MACV commander's vexation about the situation and "directed my per-

sonal immediate attention to the issue." The wing commander then visited the 1st Air Cavalry with his communications officer. He discovered that the Army division lacked the technical ability to connect into the Marine aviation close-air-support radio net. Anderson remembered "that we had a problem finding within the wing assets" the necessary communication equipment to provide the link. He recalled that it took about 24 to 48 hours to make the connection and this was "unacceptable" to General Westmoreland. As far as the wing commander was concerned, however, this resolved the problem and that General Tolson told him a few days later that the Air Cavalry had no complaint about the quality of its air support. Apparently, however, the damage had been done. Westmoreland, obviously, had

Gen William C. Westmoreland, ComUSMACV, walks with LtGen Robert E. Cushman, CG, III MAF, on a formal visit to III MAF beadquarters. The dispute over single manager of air complicated relations between MACV and III MAF during 1968.

Department of Defense (USMC) Photo A191509



expected the Marines to take the initiative while the wing commander believed that the Army division should have taken the first steps to ensure that it was in the Marine air radio net.^{5*}

Despite General Westmoreland's later contention that it was the dispute over the air support to the 1st Air Cavalry Division that caused him to go ahead with the single manager issue, it would appear that it was only one of many contributing factors. The discussion over air support to the 1st Cavalry occurred over a twoor three-week span at a series of meetings where it was only one of several topics.** General Norman Anderson believed that it became a matter of concern sometime before Tet, but was not sure exactly when. On 28 January, Marine Brigadier General John R. Chaisson, the director of the MACV combat operations center, wrote home to his wife relative to deteriorating relations between III MAF and MACV. He mentioned that "Westy [Westmoreland] is a bit jumpy and is up to some major moves which [would] have an adverse impact on U.S. Marines." Chaisson claimed that he "worked on him [Westmoreland] considerably and got him to give a little, but not entirely." While aviation support may have been one of the disputed areas, the Marine brigadier made no reference to the 1st Air Cavalry Division and implied that his concern was over the general tenor of the MACV and III MAF relationship. In his own general entry in his historical summaries for this period, General Westmoreland made little reference to air control, but wrote of the limitations of the III MAF staff to handle the number of divisions in I Corps and the necessity of establishing the MACV Forward Headquarters. Finally, in his book, the MACV commander implied that it was the meeting on 7 February with General Cushman that resulted in his final disillusionment with the Marine command and forced his hand on single management.6

While Westmoreland's accounts of the 7 February meeting deal largely with his unhappiness concerning the fall of Lang Vei and the slowness of the Marine command at Da Nang to react to the NVA threat to Da Nang,*** the subject of air control must also have been a factor. Up to this point, at least at the III MAF and 1st Wing level, neither General Cushman nor General Anderson appeared to worry about the air control situation. Indeed, on 7 February, General Anderson wrote to Major General Keith B. McCutcheon in Washington that the "heat . . . [was] temporarily off" that subject. Less than a week later, however, Anderson informed McCutcheon that he had been "too optimistic" relative to the Seventh Air Force. According to

^{*}Lieutenant General Richard E. Carey, who as a lieutenant colonel served on the 1st MAW staff in 1968, commented, "The major problem was that the Army divisions were not tied into our air control system and thus could not, by normally accepted means, submit requests for pre-planned missions. Of course the problem was one of communications. We did not have sufficient organic communications to provide them with communications capability. Our Wing was already supporting two Marine Divisions. Granted over time we had significantly augmented our communications capability to support our Divisions, but we were already stretched very thin with all the widespread communications supporting our Marines. I do recall however that the Comm O was directed to find a way." LtGen Richard E. Carey, Comments on draft, dtd 12Dec94 (Vietnam Comment File), hereafter Carey Comments. Colonel David S. Twining, who in January and February 1968 commanded the MASS-2 detachment at the Dong Ha DASC, recalled an investigation that he conducted concerning "a 'bad' TPO-10 drop" in support of the 1st Air Cavalry Division. An Air Cavalry battalion had made a request for air support which had been "passed up to the 1st Air Cav TOC [Tactical Operations Center]." This agency had forwarded the request through the Seventh Air Force headquarters who then passed it to the Air Force Airborne DASC. There were no Air Force aircraft available and the request ended up at the Marine Corps Dong Ha DASC. Twining stated the "elapsed time was 72 hours and the initiating battalion had considered the request 'overtaken by events." The Dong Ha DASC, however, was not aware of this and sent the request to the collocated 3d Marine Division FSCC for clearance. The Marine FSCC observing that the target was in the "1st Air Cav area of responsibility, . . . called the Air Cav Division TOC for verification. This was given and the target cleared." The DASC assigned the TPQ-10 mission to a flight of Navy A-4s who struck the target about 30 minutes later. By this time the Army Air Cavalry battalion had "physically occupied" the target area. According to Twining, it was fortunate that "only unmanned helicopters were on the target when the bombs were dropped and no personnel were injured." Colonel Twining discovered in the course of his investigation at "Camp Evans that targets, air support requests and troop dispositions were not centralized at the senior TOC but rather at the battalion level. The air support coordination element was expected to query the supported battalion directly for clearance. The Army maintained a special net for this purpose but this was not known to the Marine Corps FSCC." Twining recommended that the FSCC should first check directly with requesting Army units down to battalion level and not clear any target area "for which the FSCC lacked direct and current information on friendly troops dispositions" His recommendations were not implemented. Col David S. Twining, Comments on draft, dtd 15Nov94 (Vietnam Comment File).

^{**}In his interview with Marine Corps historians, General Westmoreland insisted that the difficulty with air support related to the 101st Airborne Division. This apparently was incorrect as the headquarters of the 101st did not arrive in I Corps until the beginning of March. Major General Anderson is adamant that he had no problems with the 101st Division and moreover in his book, General Westmoreland mentions only the 1st Air Cavalry relative to this matter. Westmoreland intvw, 1983, p. 42; Westmoreland, *A Soldier Reports*, pp. 342–3; N. Anderson Itr, 8Sep83; Anderson intvw, 3d Session, 17Mar81, pp. 192, 194–95.

^{***}See Chapters 8 and 14 relative to the 7 February meeting.

the wing commander, his liaison officer to the Seventh Air Force had told him that General Westmoreland was about to approve a proposal for General Momyer to "take over all air operations in defense of Khe Sanh."⁷

Despite General Westmoreland's protestations about the support of the 1st Air Cavalry Division, he apparently was only waiting for an opportunity to centralize the air command in the north. Such a move fit in with the steps he had already initiated with the establishment of MACV (Forward) to assume more direct control of the northern battlefield. Admiral Sharp in his message of 18 January denying such centralized authority for Niagara had left room for the MACV commander to implement his request at a later date. On 28 January, Westmoreland implied in a message to Lieutenant General Victor H. Krulak, Commanding General, Fleet Marine Force Pacific, who had protested Westmoreland's earlier appeal to change the air command arrangements, that the matter was not settled. While denying that centralization of air control and resources meant an "abrogation of the traditional service roles and missions," the MACV commander observed that the new tactical situation required "careful planning and control of our air resources to assure maximum effective use of this valuable and limited resource in countering major enemy initiatives." Between 13 and 17 February, the Seventh Air Force "presumedly at the direction" of MACV issued several directives which in effect positioned General Momyer "to command and control air operations, including those of the ... [Marine wing] in a wide area and encompassing most of Quang Tri Province."8

Worried about the ramifications of these messages, on 17 February 1968, Major General Anderson met at III MAF headquarters with Major General Gordon F. Blood, the Seventh Air Force Deputy Chief of Staff for Operations. According to Anderson, Blood related that with the number of increasing Arclight strikes at Khe Sanh, the Seventh Air Force believed that "adequate coordination requires firm scheduling, firm targeting, and rigid control of airborne flights." Furthermore, General Momyer wanted "to establish now a control and coordination system which could handle all [italics in the original text] sorties that could be made available under emergency conditions." Anderson concurred with the necessity of scheduling and "indicated my willingness to proceed along these lines, to include the fixing of altitudes and orbit points as ... means for preventing mutual interference." At that point, Blood stated that General Momyer planned to ask for the

extension of the original Niagara operating area to include almost all of Quang Tri Province, including the sector east of Dong Ha, and to extend as far south as the city of Hue in Thua Thien Province. Anderson countered that was too large an area "to be directly associated with the defense of Khe Sanh."9

According to the 1st Wing commander, the meeting resulted "in no meeting of the minds." General Anderson fully expected the Seventh Air Force commander "to attempt to influence General Westmoreland to issue a flat order" for the 1st Wing to turn over its control and scheduling of Marine fixed-wing assets to the Air Force. While General Cushman would appeal any such order, Anderson predicted a troubled time ahead for the Marine air-ground team.^{10°}

III MAF anticipated the worst. On 18 February, General Cushman sent a message to General Krulak warning that he expected continuing difficulty over air control and complained that "Momyer attacks us at every opportunity." In a private letter to General McCutcheon on the 19th, Brigadier General Earl E. Anderson, the III MAF Chief of Staff, observed that "some of our biggest battles are with the other Services, rather than with the VC and NVA." He accused Momyer of being more concerned with the "Air Force's party line," rather than "getting this job done within a reasonable period of time."¹¹

The Marines did not have long to wait for the other shoe to drop. On 19 February, General Westmoreland radioed Admiral Sharp that with the reinforcement of the Army divisions in the north and the establishment of MACV (Forward) the situation required "a new and objective look at the control of tactical air." The MACV commander mentioned the added complication of the B-52 strikes further dictated "the creation of a single management arrangement." He wanted one man to bear the responsibility for this air effort and that man logically was General Momyer, who already commanded the Seventh Air Force and was his deputy for air. Westmoreland told Sharp that he had directed Momyer to develop a plan "that will give him [Momyer] control of the air assets" excluding helicopters and fixed-wing transport. The plan was to contain provisions that would permit "Marine aircraft to continue direct support to their deployed ground forces." Momyer was to coordinate his effort with III MAF.12

^{*}General Earl E. Anderson remembered that he and other members of the III MAF staff attended the meeting with General Blood. He may have confused this meeting, however, with the one that occurred three days later. E. E. Anderson Comments.

On 20 February, General Momyer came to Da Nang to brief both Generals Cushman and Norman Anderson on his proposed plan to modify the air control situation. At the outset of the meeting, Momyer stated that he was there to discuss General Westmoreland's desire to have a single manager for air and to bring back to the MACV commander the III MAF perspective. In a sense, the conferees generally talked past one another.* The Marine generals emphasized responsiveness to the ground forces while General Momyer and his staff members stressed the need "to mass more of our efforts." In some frustration and obviously as a jab at the Air Force, General Cushman stated it made as much sense to centralize control of helicopters as that of fixed-wing aircraft. The Marine general knew very well that Momyer had no desire to take on the Army on this subject. The Seventh Air Force commander merely stated that helicopters were another matter and had "to be treated separately." According to the proposed outlines of the MACV plan, Momyer in his dual capacity as Commanding General, Seventh Air Force, and the MACV Deputy Commander for Air Operations, would have the responsibility for most Marine fixed-wing aviation.13

General Cushman immediately protested and forwarded his concerns to General Westmoreland. On 22 February, the MACV commander attempted to placate Cushman and told him that as the ground field commander in I Corps, the III MAF commander would still retain the "tactical air assets available to support your forces, subject to modifications that I might invoke as the situation dictates." At the same time, Westmoreland stated that his air deputy, Momyer, "would have general direction of all routine matters relating to the procedures for requesting, fragging and controlling air support." On the cover sheet of the message from Westmoreland, a Marine staff officer penned in green ink: "These two positions are in direct contradiction in my opinion." In Saigon, a week later, Brigadier General Chaisson jotted down in his diary: "AF [Air Force] is doing real job on III MAF. Will get op con [operational control] of wing. Very unprofessional work." The Marines had lost the fight in Saigon.14

The battle had shifted to Honolulu and Washington. In Washington, on 21 February, Marine Corps Commandant Leonard F. Chapman sent a memoran-



Photo courtesy of Office of Air Force History Adm U. S. Grant Sharp, CinCPac, nearly at end of his tour of duty, acquiesced to Gen Westmoreland's request for "single manager" control of air after rejecting previous proposals.

dum to General Earle G. Wheeler, the Chairman of the Joint Chiefs, protesting General Westmoreland's proposed action as abrogating the Marine air-ground team and in violation of JCS directives establishing "III MAF as a separate uni-Service command directly subordinate to MACV." Wheeler in turn forwarded a copy of the memorandum to the MACV commander. As expected, Westmoreland denied that this was the case. He insisted that Marine air would support the Marine ground forces when "the tactical situation permitted." Westmoreland argued that he had now, including the Marine divisions, the equivalent of a field army in I Corps. He mentioned that the air support of these forces required large elements of the Seventh Air Force as well as the Marine aircraft wing. Because of the air campaign in support of both Khe Sanh and the allied forces in the northern two provinces, the MACV commander contended that "Marine air therefore, has become a junior air partner in the total air effort" According to Westmoreland the problem was one of "coordination and directing all of these diversified air elements so that the air support can be put where and when needed in the required quantity." This needed, the MACV commander asserted, "a single airman [obviously General Momyer] I can hold responsible for coordinating all the air effort that is made available to me." Westmoreland maintained that his proposed

^{*}Among the participants in the meeting were Air Force generals Momyer and Blood and Marine generals Cushman, Norman Anderson, and Earl E. Anderson.

modifications would result in "no change in Service doctrine or roles and mission."¹⁵

Such arguments apparently convinced Admiral Sharp at CinCPac headquarters in Honolulu to acquiesce to Westmoreland's request. On 28 February, General Westmoreland sent to Honolulu Major General Blood of the Seventh Air Force "to make sure Admiral Sharp understood the arrangement in detail." According to the MACV commander, he wanted to reassure Sharp that this was not an "Air Force maneuver," but rather his "initiative as a joint commander." This effort apparently counterbalanced any influence that the Marines may have had in Hawaii to reverse the decision. Lieutenant General Krulak, the FMFPac commander whose headquarters was in the same building as that of Admiral Sharp, admitted his failure to persuade the Navy admiral. According to Krulak, Sharp refused to listen to the Marine case, "telling me that he already knows our side, and anyhow, that Westy is a big commander, and should have what he wants." In a later interview, Admiral Sharp declared that he approved the single manager concept because with the arrival of large Army forces in I Corps, he "thought it a reasonable thing to do."16

On 4 March, MACV learned that Admiral Sharp had approved the single manager concept. Marine Brigadier General Chaisson at the MACV Combat Operations Center received the assignment to prepare the final directive. Two days later, Major General Anderson, the 1st Wing commander, sent his assistant commander, Brigadier General Robert P. Keller to Saigon to iron-out any remaining differences. According to General Anderson, the Marines proposed "slightly more palatable language" and some alterations in a couple "wiring diagrams," but no substantive changes. Although apparently acceptable to some of the MACV staff, Air Force Major General Blood, supported by Generals Momyer and Westmoreland, vetoed the III MAF proposed alterations. General Momyer and his staff planned to hold on to every advantage they had obtained and viewed the single manager issue as a "catalyst for change."17

With only minor revisions, Westmoreland's implementing order differed very little from the proposal that he had forwarded to CinCPac. Admiral Sharp had insisted that the senior DASC in I Corps retain "scramble" and "divert" authority in the event of emergency and that Lieutenant General Cushman be permitted to communicate directly with CinCPac on "proposed improvements in the system or in event of his dissatisfaction with the employment of Marine air assets." According to the directive, CinCPac would be an addressee on any message from Cushman to Westmoreland on this subject. Contrary to the assertion by the ComUSMACV commander that he had given due consideration to the Marine perspective, the III MAF staff denied that General Westmoreland in his forwarding letter provided any evidence of its "violent disagreement."¹⁸

Published on 7 March, to be implemented three days later, in the form of a letter from General Westmoreland to General Cushman with six enclosures, the single manager directive outlined the new aviation command arrangements. Westmoreland officially placed with General Momyer the "responsibility for coordinating and directing the air effort throughout Vietnam, to include I CTZ and the extended battle area." General Cushman was to make available to Momyer as the MACV Deputy Commander for Air Operations, all strike and reconnaissance aircraft and that part of the Marine air command and control system that related to the employment of these aircraft. Marine fixed-wing transports, observation aircraft, and helicopters were exempted from the directive. According to the order, the MACV and III MAF control systems were to be joined for fixed-wing jet operations, but retain the "integrity of the Marine tactical control system" Marine aviation officers were to augment the various Air Force/MACV control systems. These included the MACV Tactical Air Support Element (TASE) and Seventh Air Force Tactical Air Control Center (TACC), both located at Tan Son Nhut Air Base in Saigon; the I DASC that the Seventh Air Force maintained at I Corps headquarters in Da Nang; and DASC Victor that the Seventh Air Force maintained at Phu Bai for the MACV (Forward) headquarters, soon to become Provisional Corps, Vietnam. 19*

The concept was that preplanned requests for fixedwing air support from lower commands be consolidated at the I Corps tactical operations center, and then forwarded to the MACV TASE. In Saigon, the TASE would then determine the allocation of strikes to the various commands and send this list to the Seventh Air Force TACC. The TACC in turn would assign the targets to specific air units, establish ordnance loads, and time on target.

As much as the tactical situation permitted, "every effort would be made to have Marine aircraft support Marine units." At the end of his letter, General West-

^{*}See Chapters 8 and 13 for the establishment of the MACV Forward and Provisional Corps headquarters.
moreland declared that these instructions "will be reviewed within thirty days to determine those technical and organizational changes which may prove necessary as a result of experience in this single management system."²⁰

Despite the decision and the issuance of the order on single manager, there were still several rough edges to its implementation. Major General Anderson observed that III MAF did not receive a copy of the directive until 9 March and then only through the personal intervention of General Abrams, who was still at Phu Bai. On the morning of the 9th as well, III MAF received from the Seventh Air Force interim instructions for procedures relative to Marine fixedwing strike sorties and the incorporation of these sorties into the Seventh Air Force daily "frag" or fragmentary order. According to the Marine wing commander, the Air Force wanted specific information on number of Marine aircraft, flight schedules, and sortie rates. At this point, the Marine fighter and fighter/attack aircraft remained exempt from the Air Force frag, but "were told to continue our operations and cross-tell with I DASC who in turn would keep the TACC informed."21

General Anderson, the wing commander, was especially unhappy about the employment of the Marine photo reconnaissance and electronic warfare aircraft of VMCJ-1. According to Anderson, the Air Force ignored the radar and electronic capability of the squadron but informed the Marine wing that it planned to reevaluate current photo reconnaissance missions. Future requests for planned photo missions were to go to the III MAF G-2 (Intelligence) (Air) section and then forwarded to the Seventh Air Force TACC. The TACC would then publish the missions and sorties in the frag order it issued to the wing. General Anderson related that the wing then reported daily by phone and by followup message the activities of the squadron. When the photo aircraft were airborne, they came under the control of the particular DASC in the target area. The MACV TASE had the authority to divert any of the aircraft from any of the DASCs.22*

On 11 March, the Seventh Air Force I DASC at I Corps headquarters and DASC Victor at Phu Bai announced that they were now functioning under the new system and had assumed control of air operations. I DASC stated that its mission was "to furnish more equitably distributed air support throughout I Corps." Major General Anderson, the wing commander remarked caustically that DASC Victor was more "modest." It merely stated that it had assumed "control for PCV [Provisional Corps Vietnam] area." On the 11th and the 16th, General Anderson met with the director of the Seventh Air Force TACC to discuss the eventual location of I DASC and the phasing in of the Marine Corps system with that of the Air Force. General Anderson wanted to collocate the I DASC with the 1st MAW Tactical Air Direction Center (TADC) in the wing compound and recommended a three-stage implementation. The first stage would consist of improving the information exchange between the TADC and I DASC so that the latter could transmit the necessary data back to Saigon. In the second stage, the U.S. sector of I DASC would be located in the 1st MAW G-3 building and then in the final stage would be the collocation of I DASC with the III MAF DASC and 1st MAW TADC. The Air Force agreed to the first two phases as a temporary measure, but recommended that the permanent location of the III MAF and I

^{*}Colonel Robert W. Lewis, who as a lieutenant colonel commanded VMCJ-1 until mid March, remembered that he was "in the middle of the air control furor." He recalled that "in early March we started to get our photo recon taskings from Saigon. That meant that a Marine battalion commander who wanted imagery to his front had to wait 2-3 days for a response. When there was a hot operation on we carried the 7th Air Force missions with us in the airplane along with those slipped under the table to us by our int[elligence] briefers. Usually we had time to complete most of the Saigon missions. I, or one of my more experienced pilots, flew the 'weather hop' at first light every morning

and it was a simple matter to call back to Da Nang and tell them to brief and launch the subsequent photo missions at the Marine hot spots, where we had observed the weather to be suitable for good picture taking." Lewis wrote that the Seventh Air Force TACC "did not understand that immediate photos were required if effective CAS [close air support] was to happen." According to Colonel Lewis, "during the early days of the battle for Khe Sanh we would make a low level run on the airfield perimeter and approaches once an hour, have the film to our photo interpreters 20 minutes later, and immediately advise the 26th Marines intel. section what the threat had been 30 minutes before. You can't do that with 2-day tasking." He stated that the squadron tried to make the system work "to the benefit of our Marines on the ground. During those periods when enemy contact was light we would aggressively execute the Saigon photo plan-it did have a strategic, theater intelligence benefit. However, when Marines were in heavy contact anywhere in I Corps TAOR they got all they requested from us. Often we would arrange for a courier helicopter to drop by Da Nang, pick up negatives which were exposed 20 minutes before and deliver them to III MAF intel. We didn't, however have to rely on III MAF to pass intel. to the ground units. We had photo interpreters assigned to VMCJ-1 and they would read wet negatives shortly after the RF-4B landed. Hot items would then be passed directly to the unit involved (in some cases). We would then deliver all the imagery to III MAF for further delivery to intelligence units in RVN, Hawaii and ConUS. What they ever did with all those pictures we never knew. No I Corps ground units ever saw them." Col Robert W. Lewis, Comments on draft, n.d. [Dec94] (Vietnam Comment File).

DASC air control agencies should be at III MAF headquarters rather than in the 1st Wing compound. General Cushman and his staff supported the Air Force rather than the wing commander relative to the location of the I Corps DASC at III MAF.²³

While the question of the location of I DASC remained in abeyance, on 18 March 1968, Major General Anderson in a message to both Generals Cushman and General Krulak outlined what he considered the weakness of single manager to date. In fact, according to the 1st MAW commander, the system was not working. Anderson believed that MACV and the Seventh Air Force, "in the haste to implement the procedure," overlooked too many details and the necessary air control facilities were simply not prepared to take on their new tasks. Anderson admitted, however, that the Marine and Air Force agencies were identifying and sorting out many of the problems and that the wing was receiving "more cooperation than expected." The wing commander promised to "provide information, assistance, and assets as requested and required to

make the actual transition as smooth as possible." At the same time, he declared "until such time as 7th AF/MACV can formulate, man, and put into being a modus operandi for I Corps, the wing will continue to do what is needed to operate and provide the necessary support." As he concluded, "I see no other way to go, without causing undue risk to our ground Marine currently in critical contact."²⁴

The following day, in a personal note to General McCutcheon, Major General Anderson enclosed his report of the first week's operations under single manager that he had forwarded to General Cushman. The wing commander half humorously wrote: "If it reads in a disjointed fashion, and therefore gives the impression of describing a disjointed maneuver, it is a perfect piece of writing." He observed that for III MAF and the wing the subject of single manager was a "closed issue. We have to, always hoping that you will be more effective in Washington than anyone else has been up the line." In an earlier letter, Anderson had assured McCutcheon that "we will break our backs to

Adm Thomas H. Moorer, Chief of Naval Operations, center, visits with VAdm William F. Bringle, Seventh Fleet Commande, left. Adm Moorer, like the Commandant of the Marine Corps and Army Chief of Staff, supported the Marine position on single manager.

Unnumbered Department of Defense (USMC) Photo



provide you with both fact and fancy if you should decide to go this route."25

In many respects, the entire question of single manager had passed out of the hands of both the III MAF and Fleet Marine Force Pacific commands to influence. After Admiral Sharp approved the single manager directive, Lieutenant General Krulak advised General Cushman about future actions on the subject. Krulak told the III MAF commander to reassure General Westmoreland "that even a poor decision will have your energetic and unreserved support." At the same time, the FMFPac commander directed that Cushman assemble "an honest record of the Air Force stewardship of our assets." Krulak then mentioned that he put Admiral Sharp "on notice that he could be in for trouble," and that the latter had exceeded his authority in approving the single manager directive.²⁶

In Washington, General Chapman and the HOMC staff had already begun its counterattack. On 4 March, upon learning of Admiral Sharp's decision, the Marine Corps Commandant officially placed the matter before the Joint Chiefs of Staff. In a memorandum to the Chairman, General Wheeler, the Commandant protested both the Westmoreland directive and its approval by Admiral Sharp. Chapman argued "irrespective of the various organizational formats and terms of reference, the net effect . . . is to remove Marine fighter/bomber/reconnaissance assets from being directly responsive to CG III MAE." The Commandant closed with the statement that he could not "concur in such an arrangement" and asked that the Joint Chiefs review the entire subject. Like General Krulak, the Commandant maintained that both General Westmoreland and Admiral Sharp had exceeded their authority relative to Marine air in Vietnam.27

The Marines could expect some assistance in the "joint arena" from at least the Navy. Despite Admiral Sharp's approval of the directive, Admiral Thomas H. Moorer, the Chief of Naval Operations, and Vice Admiral John J. Hyland, commander of the Seventh Fleet, both had doubts about the wisdom of the decision. Hyland feared that now that Westmoreland had obtained control over Marine air, that he might want to obtain similar authority over the Navy's carrier aircraft. He also worried about the MACV commander's intentions about Navy and Marine amphibious forces and Navy gunfire ships in Vietnamese waters. Moorer wondered why, if the Air Force was so dedicated to centralized control, it had not placed its B–52 SAC forces under the centralized command. In any event, Moorer

remarked that he would support the Marine Corps position with the Joint Chiefs.²⁸

While the single manager controversy never formally went beyond the Department of Defense, General Westmoreland remembered that shortly after the publication of the directive, he received a telephone call from President Johnson. According to the MACV commander, the President asked him bluntly, "Are you screwing the Marines?" Westmoreland claimed he explained the reasons for his decision and the President apparently accepted for the time being his rationale. In his book, the MACV commander wrote that the single manager was the one issue "to prompt me to consider resigning."29*

Although MACV made no public announcement about the new air command relations, the press soon had the news. According to one account, the Air Force released the story. The article included statements from both Marine aviators and ground commanders. One Marine air commander allegedly said, "Why, oh why, did they have to do this to us at this time? . . . [we]are nose deep in problems of fighting the Reds and now we have to take on the Air Force too." The reporter quoted a "mud-spattered" Marine battalion commander declaring, "now we are faced with the tragic aspect of having this Marine air-ground team broken asunder simply because of the ambitions of the Air Force brass." As would be expected, Air Force officers welcomed the change, one saying, "The Marines have different ways of doing things than we do . . . some may be better ways, others worse, but now all are under one system with increased efficiency and effectiveness."30

Senior Marine officers speculated about the reasons behind the news releases and what their reaction should be. According to Lieutenant General Krulak, Marine commanders should remain silent: "Now that the word is out, there are others who will take the Air Force to task." Krulak believed that the "Air Force erred in making a public announcement which could only be abrasive, and could have no beneficial effect." Brigadier General E. E. Anderson, the III MAF Chief of Staff, stated that he had not been able to locate any Air Force announcement. General Cushman observed that his bet was that there was no public statement: "Spike [Air Force General Momyer] is not that

^{*}Army historian Graham A. Cosmas noted that by this time, March 1968, "Westmoreland's resignation was somewhat academic, since his departure from MACV was announced on the 22d [March 1968]." Dr. Graham A. Cosmas, Comments on draft, dtd 23Nov94 (Vietnam Comment File), hereafter Cosmas Comments.

gauche. Stupid, he ain't." In a later message, General Krulak remarked that HQMC learned from the Department of Defense Public Affairs office that it had no knowledge about an announcement relative to the single-manager issue. The FMFPac commander suspected that the reporter was trying to use the guise of a press statement, "to lend an official flavor to what appears to be a leak."31

While the story about the change in air control arrangements received some play in the press, it for the most part remained somewhat muted as did the single-manager issue for a time. Part of the reason may have been that the single-manager system remained in a somewhat grey zone until the later part of March. According to the MACV command history, that although the directive was issued on 7 March, the actual preplanning only began on 21 March and the first programmed missions did not occur until 22 March. MACV considered the entire period from 10 March, when the single manager system supposedly went into effect, until the end of the month, "a period for training and indoctrinating air crews and controller personnel."³²

Major General Anderson, the wing commander, had a harsher judgement. On 23 March, Anderson reported to Generals Cushman and Krulak that the past week had been one of "initial confusion. This had to be expected in view of the urge to implement without proper and prior planning." The wing commander gave specific examples. On the night of 21-22 March, I DASC scrambled three flights of Marine attack and fighter/attack aircraft "for what was termed an immediate mission." A planned rendezvous with a flare and a forward control aircraft over Laos failed to occur and the Marine planes returned to base nearly out of fuel. According to Anderson, a ground radar TPQ team provided one of the Marine flight sections with a secondary mission, but the other two sections jettisoned their ordnance. On the following day, 22 March, I DASC told the Marine TADC that several sorties planned for the 1st Marine Division, "had been canceled by the 'user'." The 1st Division air officer, however, denied making any such request and declared the division "wanted all the air that it could get." Anderson also mentioned problems with obtaining clearance from the Air Force Khe Sanh airborne command and control center (ABCCC). On two occasions, the ABCCC diverted two A6As from missions in support of Khe Sanh because of bad weather. Apparently the Air Force controllers were unaware of the capability of the A6A to operate under all weather conditions.33

Anderson mentioned that the new system also began to place an added strain on Marine air control resources. Because of the necessity to send personnel to help man the Air Force control centers, the Marine wing decided to close its Chu Lai DASC.* The Americal Division immediately protested and asked the wing to reconsider or "to provide them some means to replace our control." General Anderson reactivated the DASC in the interim until the Air Force decided how it was going to take over. The wing commander also mentioned problems of overcrowding and air traffic control problems at the Phu Bai terminal. While the Army and Air Force helped with equipment and the assignment of additional personnel, Anderson suggested that the Marines might want to consider "a possible withdrawal of some of our air control assets from northern I CTZ." With the expansion of Army forces north of the Hai Van Pass, General Anderson argued that the Marines were not a major logistical and support organization and would be better off to realign to the south; "refurbish and reestablish a mount out capability; and reduce to some extent the stretch we have on our current personnel assets."34

These and many other questions about the implications of single manager remained largely unanswered during this initial period. On 25 March, at the weekly meeting of the Joint Chiefs, General Chapman** formally brought up the subject. Major General McCutcheon accompanied the Commandant and made the presentation before the Chiefs. Generals Wheeler, the Chairman, and Harold K. Johnson, the Army Chief of Staff, were both absent. Major General Haines, Army Deputy Chief of Staff, represented the Army; General John P. McConnell, the Air Force Chief of Staff, the Air Force; and Admiral Moorer, the Navy. According to both Generals Chapman and McCutcheon, the reception was much what they expected. Admiral Moorer openly supported the Marines. The two Marine generals believed that the Army's actual position was favor-

^{*}According to the wing commander, he provided two additional naval aviators to the Seventh Air Force TACC in Saigon making for a total of four to assist with the daily frag order. He also provided seven personnel each to I DASC and DASC Victor: two lieutenant colonels, six captains or lieutenants, and six noncommissioned officers. CG1stMAW to CGFMFPac and CG111MAF, dtd 23Mar68, Doc No. 23, III MAF Incoming Msgs, 15–27 Mar68.

^{**}While not a formal member of the Joint Chiefs at that time, the Marine Corps Commandant had a vote on all matters relating to the Marine Corps, which was usually interpreted in the broadest terms. For all practical purposes, the Commandant was a sitting member of the Joint Chiefs.



EFFECTS OF SINGLE MANAGEMENT ON MARINE FIXED-WING OPERATIONS IN ICTZ



able but that it had "probably made some sort of a deal with the Air Force and in all probability go 'agin' us." They had no doubt what General McConnell's stance would be. General McCutcheon also assumed that the chairman, General Wheeler, "was locked in concrete against us." Actually the meeting resolved little. General McConnell suggested that no vote on the subject be made until the return of General Wheeler. General Chapman agreed and observed that he would "get McCutcheon to pitch to him [Wheeler] as soon as I can corner him." According to General McCutcheon, the "die has been cast, we are on record in the JCS and the Commandant will continue the fight."³⁵

Point, Counterpoint

Although touching upon several themes including legal and doctrinal aspects, the "strongest single factor" of the Marine Corps argument against the single manager system was responsiveness. According to Major General McCutcheon, "there isn't any doubt about it that when you add more layers to the system it is bound to take more time. We are making a bigto-do about this." On 26 March, he observed to both Generals E. E. and Norman Anderson that it "was absolutely necessary" that they record "in great detail what [air] you put in for, and when, and what you actually get and when." The Commandant reinforced this request in a formal message to General Krulak, remarking that Marine commanders needed to keep detailed records: "We need an audit trail that will stand up under any scrutiny."³⁶

Major General Anderson needed little encouragement. On 27 March, he began a daily summary on a statistical and narrative account of the workings of the single manager system. This was in addition to the weekly reports that he already had submitted to both FMFPac and Headquarters, Marine Corps. In early April, General Anderson began to draft for General Cushman an evaluation of the single manager system. He reviewed the workings of the system for the last three weeks of March. The Marine general observed that neither I DASC nor DASC Victor was ready to operate when they claimed they were up and running. According to the Marine command, "Facilities were not ready, and personnel not assigned, and no chance to test communication and equipment."^{37*}

^{*}Different Marine aviation tactical commanders had different impressions about the single manager imbroglio at the time. Brigadier General Harry T. Hagaman, who as a lieutenant colonel commanded VMFA-323 from January into May 1968, recalled that he was, "acutely aware of the Air Force effort to single manage Marine air in I Corps." He stated that during this period, the first wing "directed MAG-12, MAG-13, and MAG-11 to document all delays and frequency changes that we were required to make when working with Air Force controllers." General Hagaman remembered that in the second part of March when single manager went into effect, "there were some delays in getting 'on target' because of the increased communication requirement." BGen Harry T.

Because of the existing tactical situation, the Marines continued until 21 March operating under their old procedures. Anderson then offered some comparisons between Marine air support during the first part of the month under its system and that since the 21st under single management. According to the wing commander, a reduction of Marine sorties occurred in support of Marine divisions from 212 for the period 1 through 11 March to 177 for the corresponding number of days from 21 through 31 March. At the same time, the 1st MAW's fixed-wing sorties in support of other forces increased from 135 for the first 20 days of the month to 154 for the last 10 days. Anderson observed that the Seventh Air Force under single management had established a rate of 1.2 sorties per aircraft per day. He remarked that he was considering asking for an exemption to this rate because of the need to increase air support for the ground forces.38*

The basic Marine complaint, however, revolved around the requirements for preplanned missions, especially in support of the Marine divisions. The Marine command believed the entire process too cumbersome and unresponsive. According to the procedures outlined by the Seventh Air Force, a preplanned mission required a submission by the ground unit anywhere from 38 hours to over 50 hours before the mission was to be flown. This contrasted with the old III MAF system, which permitted a ground commander to make his preplanned request as late as 2000 of the night before.³⁹

In a representative preplanned mission under the new system, a Marine battalion commander would submit his target list through his regiment to the division at 0500 on the first day. At 0830, the division would then consolidate all the requests and forward them to the next higher echelon. In the case of the 3d Marine Division it would send its requests on to Provisional Corps, Vietnam, who in turn at 1100 would route them to III MAF. The 1st Marine Division would transmit its requests directly to III MAF. III MAF would then combine them into one list and relay it about 1430 of the first day on to the MACV TASE. The TASE would in turn reroute the approved request list to the Seventh Air Force TACC to prepare the frag order which would not be issued until the afternoon of the second day. It would be evening of the second day before I DASC or the 1st MAW TADC would retransmit the frag order to the proper DASCs and fire support agencies as well as to the tactical air units. During this process, each of the higher headquarters had the authority to determine priorities or even eliminate requests with the possibility of the battalion commander not knowing whether his request had been approved or not. In any event, it would usually not be before 0700 of the third day before that battalion commander received his air strike.40 (See Chart).

During April, the numbers appeared to confirm the Marine complaints. According to Marine compiled statistics for the month, the MACV TASE and Seventh Air Force TACC only scheduled 1,547 out of the 4,331 or 36 percent of the targets requested by III MAF ground commanders. Of the remaining targets, American aircraft carried out strikes on only 680 or 44 percent of them. Instead of the preplanned strikes, Marine ground commanders had to rely on 2,682 "diverts" or unscheduled strikes which made up 58 percent of the total tactical sorties flown in support of the Marine ground units.⁴¹

Hagaman, Comments on draft, dtd 30Nov94 (Vietnam Comment File).On the other hand, Colonel Dean Wilker, who commanded MAG-12 at Chu Lai until early March just before the implementation of single manager, wrote: "While I knew the relations between MACV/USAF and Navy/USMC were not in accord, I did not know to what extent. We flew our missions as fragged and had few problems communicating with the Wing or the forces we supported. I credit the Wing & its control centers for making it simple for us." Col Dean Wilker, Comments on draft, dtd 18Nov94 (Vietnam Comment File).

^{*}According to Colonel Joel E. Bonner, the 1st MAW G-3, "the 7th Air Force stated they were manned, supplied and funded to provide 1.2 sorties per available aircraft per day and were rigidly enforcing such a rate in order to sustain their effort over the long term." Bonner argued that "such a statement makes sense at the Air War College and to budget analysts but is not worth anything when there is a fight ongoing and Air Strikes will reduce casualties." He observed that the "1st MAW flew more than 2.0 sorties per available aircraft almost on a daily basis. 7th Air Force stated on more than one occasion that 1st MAW was wasting their resources-but 1st MAW never ran out!!!" Furthermore Colonel Bonner wrote, "the Air Force explained that the 1.2 sortie rate was to be computed on the expected available aircraft for the day. For example: 12 aircraft are expected to be available out of 24 assigned aircraft. A 1.2 sortie rate would provide 14.4 sorties for the frag order. If you change the sortie rate from available to assigned the number of sorties for the Frag Order is 28. This was a problem with the planners in the wing versus the planners at 7th Air Force." Bonner Comments. Lieutenant General Carey, who worked for Colonel Bonner in the G-3 section of the wing in 1968 as a lieutenant colonel, recalled that during the transition period into single management that he "received a call from Saigon, allegedly by direct instruction of Gen Momyer (as I recall at the time I thought the caller identified himself as Gen Momyer) that we were exceeding the desired sortie rate and that we should back off (in rather strong language). I informed him that I was taking my direction from Gen Anderson to give the Marines what they asked for and unless Gen Anderson instructed me otherwise, which I sincerely doubted he would, that was what I was going to do! I never heard from Saigon again and the Marine requests were all filled." Carey Comments.

USAF SYSTEM FOR PREPLANNED AIR REQUESTS AFTER 10 MARCH 1968



From Operations of US Marine Forces Vietnam 1968.

On 5 April 1968, Marine assistant wing commander, Brigadier General Henry W. Hise,* contrasted the difference between Marine responsiveness and that of the Air Force. According to Hise, the Air Force achieved "rapid response and flexibility by diverting sorties." He observed, however, that the air commander often did not consult the ground commander, "for whom the aircraft were originally scheduled" The Marine general called this depriving "one ground unit of vital support to aid another." He also declared this often resulted in an improper mix of ordnance to accomplish the mission. In comparison, the Marine system also permitted the diversion of airborne aircraft but only after receiving the acquiescence of the ground unit commander. For the most part, Marine aviation responded "to increased requirements by scrambles off the hot pad." According to Hise, the Marines had "the responsiveness of diverts without depriving a ground commander of possibly crucial support and . . . [pro-

vided] additional sorties over normal schedules to meet unforeseen needs." Furthermore, General Hise pointed out Marine aircraft on the "hot pad" could be fitted out with the proper ordnance to accomplish the mission.⁴² III MAF was not the only command unhappy with

the progress of the single-manager system. On 5 April, Army Major General Willard Pearson, the Deputy Commander of Provisional Corps, indicated to General Anderson that the new system was not working well in the northern two provinces of I Corps. In response on this date as well to General Cushman's complaints about the workings of the system, General Westmoreland acknowledged that single manager was undergoing "technical and procedural difficulties" He understood, however, things were improving. The MACV commander observed that from his perspective that there was "not enough tactical air capability in the RVN to provide all commanders all the air support they would like to have." He concluded his message that he expected to receive from the III MAF commander an evaluation of the system at the end of the month as to whether single manager was meeting III MAF requirements and if the "I DASC operation falls short in any respect."43

In Washington, on 5 April, the full Joint Chiefs of Staff again took up the single-management issue, this time with both the Chairman, General Wheeler, and the Army Chief of Staff, General Johnson, in attendance. At the meeting, much to the surprise and delight of the Marine Corps, General Johnson reversed the Army position and supported the Marines. In the final vote, only General Wheeler and the Air Force Chief of Staff, General McConnell, favored single manager. At a second session of the JCS three days later, General McCutcheon, who attended both meetings, related that General Wheeler attempted "to float" a compromise position indicating that the Seventh Air Force operational control of Marine fixed-wing sorties was a "temporary expedient and when the emergency was over the status quo would be resumed." General Chapman argued if that were the case the emergency was over and that the Marines should resume control of their assets. Wheeler rejected that proposition. According to McCutcheon, "so as at the moment the Army, Navy, and Marine Corps are lined up against the Air Force and the Chairman has weakened the position to the temporary gimmick." The next step was to send the matter up to the Secretary of Defense. McCutcheon concluded: "I feel better about it [single-manager dispute] than I have in a long time."44

In Washington, General Chapman decided to outline formally the Marine Corps position on single manager and its status to senior Marine commanders. In a "green letter" (so named because of the color of the paper) to all Marine general officers, the Commandant reviewed the initiation of the single-manager system over the protests of all Marine commands and his actions in the ICS. He declared there was an "essential difference between the Marine and Air Force concepts of air control and air support" Chapman emphasized in most strong terms that for Marines, air is "a supporting arm" which was to be employed "directly responsive to the ground commander" He believed this basic Marine concept had been set aside and would result in "increased enemy success, increased friendly casualties, and decreased advancement of the war effort." The Commandant viewed that the "integrity" of the Marine air-ground team and "even our force structure" was at stake. While asking all Marine officers to "face this challenge resolutely to forestall any future inroads" on the Corps, he ordered them not to comment on the subject, "either officially or unofficially," and to refer all queries especially from the press to Headquarters, Marine Corps. With the JCS split on the subject and the possible requirement of a Secretary of Defense decision to settle the matter, Chapman mentioned, "we're preparing for that eventuality now."45

^{*}Brigadier General Hise, one of the two assistant wing commanders, stated that because of his previous experience on the Joint Staff of the JCS, General Anderson, the wing commander, used him to argue the Marine case in the single manager dispute. Hise Comments.

In Honolulu, Lieutenant General Krulak was not sanguine about the probability of the Secretary of Defense overruling Westmoreland. As he told General Cushman, he expected the Secretary to hold a hearing on the subject, but "knowing how those things operate, I do not believe that General Wheeler would have permitted the matter to [go] forward to SecDef [Secretary of Defense] without first laying the groundwork for the decision he seeks." Krulak suggested to General Cushman another alternative means of attack. He recommended that the III MAF commander should avail himself of the "complaint channel to CinCPac," referring to the 30-day evaluation period called for in the initiating directive. Since all concerned agreed that the system had not really been implemented until 22 March, this would extend the original trial period until 22 April. General Krulak warned: "When we go down this track, we have to have the aces to a degree that will make it absolutely impossible for CinCPac to ignore us or brush us off."46

The FMFPac commander then proceeded to advise both Generals Cushman and Anderson about how to proceed. He counseled that General Anderson as the

senior aviation commander for III MAF should begin his presentation with Marine concurrence to the proposition that within a joint force there should be "single management" in that the senior Air Force commander should be the joint commander's "coordinating authority for all air operations." As far as matters relating to air defense and to the interdiction air campaign over Laos and North Vietnam, there was no debate that there should be a single authority. Krulak then observed, however, that Anderson needed to stress that for the Marine commander, "his air support is as inseparable to his combat team as is his artillery, his tanks, or even his infantryman's M16." He then pointed out that the Marine commander made close air support a "cardinal element in his tactical plan, and, if it is diverted to meet a need elsewhere his operation is compromised."47

General Krulak then cautioned the III MAF commanders not to get into a pure numbers game of how many sorties were flown and ordnance dropped, but rather to provide the context for the statistics. For example, he declared that in the case of immediate requests for support, the single-manager system

LtGen Lewis W. Walt, Assistant Commandant of the Marine Corps, talks to Marines during a visit to Vietnam. LtGen Walt made a strong presentation of the Marine position to Gen Westmoreland.



appeared to be working. For the period 3-12 April, the new air control agencies approved over 90 percent of them and that over 75 percent of the tactical air support aircraft arrived within 30 minutes of the request and usually with an acceptable bomb or ordnance load. Contrasting these figures to those relative to preplanned missions, Krulak contended that the "Marines were being shortchanged." For the same period in April, the Seventh Air Force TACC only scheduled 36 percent of the targets desired by ground commanders, and of the remaining targets, only 51 percent of the missions scheduled against them were carried out. According to the FMFPac commander, nearly 41 percent of the total sorties were extra and not requested by the ground commander, "who could neither preplan for this surge effort nor influence the selection of the ordnance available." Krulak then concluded with the observation that 42 percent of the preplanned sorties carried out were more than 15 minutes late: "This is unacceptable and compromises the basic principle of integrating totally all available fire power."48

Perhaps partially influenced by Krulak's message, but largely on their own initiative, III MAF and the 1st MAW had begun the process of evaluating the singlemanager process and forwarding their conclusions to higher headquarters. On 22 April, General Cushman sent a preliminary message to General Westmoreland to go on record with his unhappiness with the system. At the same time, Major General Anderson, the wing commander, prepared a lengthy presentation for the III MAF commander with the possibility of giving it later to the MACV commander.⁴⁹

Anderson stated the usual Marine arguments. After interviewing more than 70 Marine officers involved with the new procedures, he expanded upon his themes with specific case studies. While acknowledging that the Marine divisions by the beginning of April reported that air response to immediate requests had improved. Anderson maintained that even this part of the new system did not work as well as the statistics implied. He cited an air observer who spotted enemy troops "running across a bomb crater one at a time." The observer called the Marine DASC and asked for air strikes, stating that he had a "good target." Before he finished speaking, the DASC provided him with some A-4s. At about the time the A-4s were to reach the designated rendezvous point, the Marine DASC radioed the observer back and stated "they had to take the planes away because the new DASC said they had to go through them to get planes. It was 45 minutes after we asked for the air that we

finally got it on target." In another case, Anderson quoted the Marine officer in charge of the Khe Sanh DASC recounting that "there was this Air Force Lieutenant Colonel at Ca Lu who said I had to get airplanes through him, that was very slow. Then there was Colonel Lownds who needed air and needed it bad. I just did what I had to do." General Anderson contended that the only reason there were no more problems with the immediate response procedures was because "people at the lower echelons, finding themselves faced with an unwieldy and unresponsive system, were simply forced to circumvent it."⁵⁰

Anderson reserved his greatest criticism, however, for the single-manager preplanned missions and their long lead time. The wing commander quoted a battalion forward aircraft controller as saying, "They are telling us now that we have to turn in our CAS [close air support] request this afternoon for the day after tomorrow. We didn't know this morning what we were going to do this afternoon." An infantry battalion commander remarked, "When you are moving, your air has to be flexible, now I have to program myself so far ahead that the air' mission doesn't fix anything." General Anderson contrasted the 80 percent of preplanned targets hit under the former Marine system with the slightly over 50 percent under single manager.⁵¹

Finally, the wing commander ended with three general criticisms. According to Anderson, single manager was "far less responsive to our tactical needs, it has small provision for coordination of air with the total effort, and it increases the administrative burden." As an example of the latter, he compared the 50-page frag order coming out of the Seventh Air Force TACC with that of the former nine-page frag order published by the wing. Anderson concluded that the new system accomplished little that the former Marine system did not do better, especially in support of ground Marines.³²

In early May, General Cushman forwarded to General Westmoreland in message form many of the concerns that General Anderson had expressed in his formal presentation. Cushman basically stated that his analysis of the period 1–30 April drew him to the following conclusions. While response time may have improved, it occurred only because DASCs had diverted aircraft from preplanned targets. Marines had scrambled some aircraft in certain cases to cover the diverted missions. He again expressed dissatisfaction with the long lead time for preplanned missions. He protested the fact that while the number of Marine aircraft "fragged" for Army units increased every day, the number of "Air Force sorties remained significantly below the programmed level established for Army battalions." Finally, the III MAF commander recommended "that management of Marine strike and reconnaissance aircraft . . . be returned to me and the workable procedures outlined in [MACV directive 95–4] be reinstituted."⁵³

The Seventh Air Force evaluation of the system contrasted sharply with that of the Marines. General Momyer's command reported no significant problems "other than those associated with training and familiarity with a new system." It praised both the efforts and attitudes of Marine and Air Force officers in their attempts to link the two tactical air systems. While admitting that single manager was not perfect, the Air Force report asserted that "with better understanding by the Marine ground units and more experience on the part of all concerned . . . this system will work." The Air Force insisted that "in consideration of proposed large-scale ground offensive operations in being and planned . . . the air effort available must be concentrated, flexible and integrated to provide the tactical air support essential to all ground units."54

Bombarded by conflicting points of view, General Westmoreland held to the concept of centralized control, but began to look to the modification of some of the workings of the system. According to Marine Brigadier General Chaisson, the Director of the MACV Combat Operations Center, the visit to Saigon at the end of April by the Marine Corps Assistant Commandant and former III MAF commander, Lieutenant General Lewis W. Walt, played some part in the MACV commander's changing perspective. Chaisson wrote to his wife that when Walt met with the MACV commander, "He scared the daylights out of Westy by telling him that it was the most dangerous decision he had made-and that it would backfire." Apparently General Westmoreland then asked Walt for his specific criticisms. The Marine general repeated what the Marines had been saying all along: too long a delay in the approval of preplanned missions; too many "diverts" which often resulted in the use of the wrong ordnance on the target; and that the 3d Marine Division was not obtaining the "desired level of support."55

Whether influenced by Walt's criticisms or not, General Westmoreland ordered General Momyer to meet with Army Lieutenant General William B. Rosson, the commander of Provisional Corps, relative to what constructive changes should be made in the air support of ground forces in northern I Corps. Because of the implications for the Marine Corps, General Cushman with the approval of General Westmoreland directed that General Anderson, the wing commander, also attend. Representatives from the MACV TASE, the Seventh Air Force TACC, and DASC Victor were also present. General Momyer presided and declared that the purpose was to determine what were the flaws in the system "and how to correct them." Anderson believed that the question should have been "whether or not we should continue with Single Management."⁵⁶

The conference began with a discussion about the allocation of sorties in northern I Corps. General Momver stated that he had told General Walt that the reason for the reduced number of sorties for the 3d Marine Division were the priorities established by Provisional Corps. General Rosson agreed, explaining that for a time in the Provisional Corps sector, the 1st Air Cavalry because of Operation Pegasus received about 50 percent of the fixed-wing air sorties. The 101st Airborne and the 3d Marine Division during that period divided equally the remaining available sorties. General Rosson's perception also was that "Marines, having always had more air support tend today to ask for more than the Army units." All of the participants agreed, however, that because the Marine units had less artillery and fewer helicopter gunships than the Army, there was a natural tendency for the Marines to rely on more fixed-wing support. This was especially true relative to the escort of troop transport helicopters into landing zones. General Momyer suggested that the commands should determine the number of sorties Marines needed "in connection with helicopter operations in order to offset the lack of gunship helicopters." The Air Force general then declared that the Seventh Air Force "Frag" order would reflect the "number of sorties daily reserved" for helicopter escort.57

Even more surprising, according to Anderson, there was general unanimity on the weakness of the preplanning missions and the system of diverts. All concurred that the present preplanning only resulted "in placing a certain amount of air effort airborne and available for any use a specific ground commander may wish." General Rosson complained that the procedures were "too ponderous," although every one was trying to make them work.* Momyer acknowledged that all concerned

^{*}General Rosson later commented that after he assumed command of Prov Corps, "it soon became evident . . . that the system for preplanned fixed-wing support was too slow, and that too many requests for immediate support were being met by use of diverts. This in turn often meant different ordnance on target." Gen William B. Rosson, USA, Comments on draft, dtd 27Feb96 (Vietnam Comment File).

were doing the best they could and that he hoped to cut down on lead times and delays. In order to get the proper ordnance for a specific mission, the Seventh Air Force commander stated that he was giving some thought to permit modification to the daily frag order about six hours prior to time on target. General Anderson countered that the "downloading of ordnance and substituting another is much too wasteful of manpower" and recommended instead the strip alert of aircraft preloaded with a mix of bombs and ammunition. While General Momyer made no comment about the wing commander's suggestion, General Anderson observed that "the tenor of this discussion leads me to believe that the Air Force knows it is in some trouble on single management and is willing to modify the system, in major respects if necessary, to keep the system in force." The Marine commander concluded that. "in such an atmosphere of accommodation we will be hard pressed to obtain a reversal of the decision to implement single management."58

General Anderson was correct in his assumption that both Generals Westmoreland and Momyer were under some pressure from higher headquarters relative to the single-management issue. Upon receiving both the III MAF and MACV preliminary reports about the

Defense Secretary Clark Clifford, who relieved Secretary Robert S. McNamara meets with LtGen William B. Rosson, CG Prov Corps. Gen Rosson complained during a conference that the new control provisions were "too ponderous" Photo is from the Abel Collection workings of the new system, Admiral Sharp decided to send his own evaluation team, headed by Marine Brigadier General Homer G. Hutchinson, Jr., the CinCPac Chief of Staff for Operations, to examine the situation. According to Lieutenant General Krulak, General Westmoreland protested the move and asked the CinCPac commander to defer the arrival of the team until he held his own hearings on the subject. Admiral Sharp apparently denied the request. At that point, as related by General Krulak, Westmoreland made the statement that the CinCPac team would "come back and recommend to you that the system be returned to the old status quo."⁵⁹

The Hutchinson evaluation group arrived in Vietnam on 4 May and visited both MACV in Saigon and III MAF at Da Nang. Upon their return to Honolulu three days later, Brigadier General Hutchinson and his staff began to work on the report. After completion of the draft, he wrote to General McCutcheon at Marine headquarters in Washington that Admiral Sharp viewed single management "pretty well cracked." Hutchinson enclosed a copy of the draft report in his letter to McCutcheon and asked the latter to keep it "fairly well disguised." Despite his own viewpoint on

Marine BGen Homer G. Hutchinson, Jr., the CinCPac J-3and a naval aviator, headed a CinCPac evaluation team on the new air control provisions.

Unnumbered Department of Defense (USMC) photo





the subject, General Hutchinson observed that the "report had to be written with some obvious restraint from [a] 'joint staff' standpoint."⁶⁰

While not directly criticizing the decision for single management, the report discussed in detail what it considered several shortcomings in its implementation and operational procedures. Admitting that the Army units in I Corps received in April more air support than they had in the past, the report, nevertheless, pointed out that Marine ground units did not enjoy "as much or as responsive tactical air support" as under the old system. Like all the other evaluations of single manager, the report remarked upon the long lead time for preplanned sorties and the resulting large number of diversions. It observed, moreover, that the Marine wing met the most urgent "unfragged" requests from Marine ground units by overflying by 22 percent its aircraft "programmed sortie rate." At the same time, Air Force aircraft flew only at 96 percent of their "utilization index." According to the report, the Air Force wing at Da Nang conducted 1,404 missions over North Vietnam and Laos. The authors of the report commented that with the availability of Thailandbased Air Force aircraft and naval carrier aircraft in the Gulf of Tonkin that "it would not be necessary to use South Vietnam-based aircraft for this purpose when requests for sorties in I CTZ are not being filled." As Hutchinson mentioned in his personal letter to General McCutcheon, "we have pressed the point with Sharp that 7th AF has been flying too much out of country" with in-country-based aircraft, "thus alluding to the fact that if this were stopped, MACV should be relieved of his concern that the Army isn't getting needed support in I Corps."61

For his part, General Krulak, also in Honolulu, continued his efforts to convince Admiral Sharp to intervene in the single-management issue. According to the FMFPac commander, he persuaded Sharp to send a message to Westmoreland again noting that General Cushman remained unhappy with the present working arrangements of the single-manager system. The CinCPac commander stated that he wanted to hear the briefings that were to be presented at MACV headquarters by III MAF, the Seventh Air Force, and Westmoreland's own MACV evaluation team. These were scheduled for 8 May. In his reply, General Westmoreland agreed to have the concerned parties make the same presentations before Admiral Sharp a few days later in Honolulu. He observed, however, that many of the rough spots of the system had been worked out. General Krulak warned the Marine Corps leadership, "Westy is not going to let us get away with a presentation only of our gripes, but will include his own story too."⁶²

At the conference in Saigon at MACV headquarters, both Generals Cushman and Norman Anderson represented III MAF. General Anderson presented the III MAF position on single management. Basically, Anderson argued that the new system for III MAF had few advantages, but several disadvantages. The Seventh Air Force briefer stated that all concerned including the Marines were doing their best to make single manager work and several modifications were in the works.⁶³

After all the presentations, the senior commanders, including both Cushman and Anderson, met in a closed session. According to Cushman, General Westmoreland addressed the group and emphasized that the issue of single management involved Service conflicts revolving about "procedures, tactical arrangements, [differing] philosophies," and the desire of "commanders to allocate total resources in the most effective way." The deployment of the 1st Air Cavalry and 101st Airborne Divisions and the establishment of Provisional Corps headquarters in northern I Corps had irretrievably altered command relations including air arrangements. Westmoreland believed the briefings helped to clarify the points of contention. The MACV commander stated that the trial period for single management demonstrated "that the strong features of the Marine system are evident. The practical advantage of Ithe] commandwide area of the Air Force system is also evident." Westmoreland stated that he wanted to combine the best features of each: the responsiveness of Marine air together with the Air Force flexibility for concentrating air assets. He declared that the TASE and the Seventh Air Force procedures for fragging aircraft were too cumbersome and Marine practices were wasteful of bombs and aircraft. The MACV commander stated that it was his intention "to use our resources to meet the problem we face not on theory and not by ineffective practices."64

Following a desultory and inconclusive discussion about possible changes, Westmoreland turned to the upcoming briefing at CinCPac. He declared that his chief of staff, Major General Walter T. Kerwin, would represent him and provide the opening statement. III MAF, the Seventh Air Force, and the MACV evaluation team would make separate briefings based from their respective perspectives. General Kerwin, however, would field all questions. The MACV commander concluded the meeting by declaring, "it was fiction that this thing [single manager] was generated by Air Force roles and mission. It was his idea—his decision and not a maneuver by the Air Force." General Westmoreland stressed that he wanted "this point included in the briefing."65

Admiral Sharp may have been aware that the Department of Defense was about to act upon the referral of the single-management issue to the Secretary by the Joint Chiefs. Secretary of Defense Clark Clifford, who replaced Robert S. McNamara in February, delegated the decision to Deputy Secretary Paul H. Nitze. On 15 May, after listening to the formal presentations and reviewing the various position papers by the respective Services, Deputy Secretary Nitze generally supported the position of Generals Wheeler and Westmoreland. The secretary stated that he agreed with the Chairman that "the unified combat commander on the scene should be presumed to be the best judge of how the combat forces assigned to him are to be organized

In reply to the Deputy Secretary, General Wheeler stated that he was also troubled about the lack of responsiveness to preplanned air requests. Although he argued that the Marines may have exaggerated the length of time required for such requests and that some of the deadlines were self-imposed, the Chairman admitted that the system needed modification. He mentioned that MACV was looking to a partial decentralization "based on resource considerations" which would permit "the majority of preplanned requests" to be coordinated between III MAF and the "collocated DASCs." Wheeler stated that General Westmoreland's basic interest was to "have the flexibility to employ the tactical air resources most effectively where and when support is required."⁶⁸

By this time, all concerned with the issue were looking toward some settlement of the dispute. In one instance, General McCutcheon recommended to General Chapman, the Marine Corps Commandant, that the latter meet with the Air Force Chief of Staff, General McConnell. McCutcheon believed that a frank discussion between the Service chiefs might result in McConnell "to tell Momyer to back off a little." On 17 May, after learning about Deputy Secretary Nitze's decision, McCutcheon told Major General Anderson, the 1st MAW commander, about a new Marine Corps tack, "which is to get the opcon back, let them keep 'single management' and get on with the war."⁶⁹

Lieutenant General Krulak outlined this Marine Corps proposal in a back-channel message to Admiral Sharp. Krulak conceded that MACV under the old system had some reason for dissatisfaction. He observed that while MACV had controlled about 75 percent of the fixed-wing sorties in South Vietnam which included those sorties that the 1st MAW made available, General Westmoreland "was never sure of what number of sorties the Marines would make available"

^{*}General Chapman, the Commandant of the Marine Corps in 1968, remembered that about the time Deputy Secretary Nitze made his decision the House Armed Services Committee "held a hearing on the state of the War with JCS. Single management came up and was

strongly criticized by [the chairman' of the committee] for loss by Marines of *immediate* [emphasis in original], responsive close air support. Gen Wheeler presented the standard arguments to support S/M [single manager]. I... elected to remain silent, as did the other chiefs, because I believed Congress was no place to solve a war-time operational problem." Gen Leonard F. Chapman, Comments on draft, dtd 17Dec94 (Vietnam Comment File), hereafter Chapman Comments. Army historian Graham A. Cosmas noted the "very lukewarm nature of even Wheeler's and Nitze's support of Westmoreland. Both indicated grave doubts about the practical workings of single management, but were unwilling to overrule their theater commander on a question of organization of his forces. However, both emphasized this was a temporary tactical expedient and urged ComUSMACV to restore the former command arrangement as soon as he felt the situation warranted, which of course ComUSMACV never did." Cosmas Comments.

Moreover, even the MACV emergency authority did not permit "a day-in, day-out diversion of additional Marine sorties" to other missions. Krulak observed, however, that the single-manager system as instituted by General Westmoreland resulted in too severe a "surgery . . . that has left the patient extremely weak, with his Marine leg partially paralyzed." The FMFPac commander suggested instead return to III MAF operational control of Marine fixed-wing tactical and reconnaissance aircraft sorties. In turn, III MAF would make available to the Seventh Air Force "such sorties as ComUSMACV regards necessary to ensure a proper weight of tactical air effort." Krulak would not limit this MACV authority to preplanned sorties, but would permit the preemption of additional Marine air resources, when "in MACV's judgement, the overall tactical effort so requires." The III MAF TADC would provide the MACV TASE "with real time information on Marine air availability and status at all times." According to General Krulak this Marine solution "would legitimize single managership without question and would still leave essential operational direction of III MAF organic air resources in CG III MAF hands." In a memorandum to the Joint Chiefs on 18 May 1968, General Chapman presented much the same argument and concluded that the Marine proposal would provide a transition to normal command relations and also increase responsiveness.70

While the Marine Corps continued to present alternative policies, General Westmoreland's staff worked upon modifications relative to air control procedures. On 18 May, at a meeting with Admiral Sharp, General Westmoreland discussed his intention to make some changes in the working of the singlemanagement system at the end of the month. The MACV commander wanted a 30-day trial period until the end of June and planned to ask "III MAF to withhold comments" until that time. Admiral Sharp indicated his general approval of Westmoreland's course of action. According to Marine Brigadier General Chaisson, the head of the MACV Combat Operations Center, General Westmoreland was well aware of both the Marine objections and suggested revisions and tried to accommodate them. On 20 May, Chaisson jotted in his notebook diary, "Got Gen West[moreland] to go along with our approach to single management. Momyer is next hurdle." General Westmoreland also received prodding from General Wheeler, who directed that MACV in conjunction with both III MAF and the Seventh Air Force, "continue to evaluate the effectiveness" of single manager. Westmoreland was to inform both CinCPac and the Chairman of JCS "each month of the results of his evaluation and of any modification he has made to the system."⁷¹

While neither General Westmoreland nor Momyer was willing to return to III MAF full authority over Marine fixed-wing sorties, they made a drastic change in the scheduling of preplanned ground support missions. On 21 May, General Westmoreland outlined the new procedures. MACV now divided preplanned strikes into two categories, one to be determined weekly and the other daily in two separate frag orders. According to the modified system, 70 percent of all preplanned sorties were to be contained in the Seventh Air Force TACC weekly frag order. While the frag order designated number of aircraft, time on target, and basic ordnance load, the supported ground commander could use these sorties any way he desired, "consistent with aircraft and control capabilities." The Seventh Air Force daily frag order designated the remaining preplanned missions to meet "justified requests for additional support and increased enemy threats as they occur." In essence, as General Krulak observed, III MAF made available all its air "attack and reconnaissance capability" to the Seventh Air Force, who in turn hands about 70 percent back "to the Marine command."72

The new procedures were to go into effect on 30 May for a 30-day test period. At the end of that time, the concerned commands were to provide constructive criticism. General Cushman observed that he was under orders not to forward any comments on the modifications to CinCPac until after completion of the evaluation period. The III MAF commander, nevertheless, stated that he would provide ComUSMACV with his views and would share them with CMC and CGFMFPac "to preclude any action that cross pending proposals to Dep Sec Def or JCS." At the same time, General Cushman looked favorably on the new MACV directive, remarking that it "appears to offer us a considerable opportunity to regain control of our assets."⁷³

Admitting that the modification provided more flexibility, Marine commanders and staff officers still pointed to several continuing disadvantages. While prescribed ordnance loads and time on targets could be adjusted, III MAF still had to match the ground requirements of its subordinate Army and Marine units with the predetermined 70 percent sorties in the weekly frag order. As far as the remaining 30 percent preplanned sorties outlined in the Seventh Air Force daily frag report, with the exception of less required detailed information, III MAF was to follow the same procedures as before. The Marines still considered the single-management system, even with the changes, more cumbersome than necessary. Lieutenant Colonel Richard E. Carey in the Wing G-3 section later commented that while the 70-30 split "gave us more flexibility at the working level, matching available sorties to the requests of the units was time consuming, confusing, and error prone." He stated his staff "affectionately termed the system, 'Momyer's Chinese Fire Drill.'" In more earthy terms, General Anderson, the wing commander, described the entire procedure "an ass-backwards system." General Cushman concluded that "until Marine air assets are returned to full opcon of CG III MAF, command relationships will remain more complex."⁷⁴

At the same time MACV was altering single manager, General Chapman and the Marine headquarters staff in Washington proposed their own modification to the air arrangements in South Vietnam. In mid-May, the Commandant circulated for comment to both Generals Krulak and Cushman a headquarters point paper on the subject. The idea was for MACV formally to return to III MAF operational control 70 percent of Marine fixed-wing assets, while retaining sortie control of the remaining 30 percent. General Chapman planned to give the point paper to the Secretary of the Navy to forward to the Secretary of Defense.⁷⁵

While both Generals Cushman and Krulak had some reservations about some of the details contained in the point paper, they saw merit in the Commandant's course of action. General Cushman wanted return of 100 percent of the air assets to his control, remarking that the retention of the 30 percent by MACV would result in a "duplicative air request, control, and direction system." He, nevertheless, believed that the CMC proposal could be the basis for a further compromise on the single-management issue. While agreeing with Cushman and also taking exception to a few added minor details in the Commandant's proposal, Lieutenant General Krulak's reply was more positive. Krulak believed that the Marine headquarters recommended modification to the air control system "gets the camel's nose back into the tent-most advantageous, since the tent happens to be our own." The FMFPac commander then observed that he had not mentioned any of this to Admiral Sharp as he was of the opinion that "the impetus just has to come from the top down." Krulak stated that if Chapman wanted, he, Krulak, would "take him [Sharp] on immediately . . . but my recommendation is to give him a few thousand volts from above first."76

Incorporating many of the suggestions provided by both III MAF and FMFPac, General Chapman proceeded on two fronts to revise the air control policy in Vietnam. He met with the Secretary of the Navy and provided him the point paper and at the same time prepared a memorandum for the Joint Chiefs making the same points. As Chapman's chief air officer, General McCutcheon wrote, "at first blush this {the Marine recommendations] looks similar to the ComUSMACV proposal where 70 percent of the missions would be fragged on a weekly basis," but insisted "there are some vital differences." The basic difference, of course, would be that the Marine proposal would do away with the long weekly frag with its predetermined times on target and ordnance loads. In fact, McCutcheon, like both Cushman and Krulak, opposed any mention of 70 percent and favored "a 100 percent recapture" of Marine sorties.77

In his presentation to Secretary of the Navy Paul R. Ignatius, General Chapman argued his case. He provided Secretary Ignatius the statistical rationale for the Marine strong emphasis on fixed-wing support for its ground forces.* While appreciating the need for ComUSMACV, whether General Westmoreland or General Abrams, to have some form of "single manager" over tactical air, Chapman stressed that even the new MACV modification had not made the air support

^{*}The level of air support required for Marine and Army divisions differed because of many factors. According to an analysis by FMFPac, a Marine division in Vietnam consisted of approximately 20,736 and an Army division of 17,116 men. [For further discussion of Marine division strength see Chapter 27 and Appendices of Marine T/Os.] The Marine wing supported the Marine division with 276 transport helicopters, 60 armed observation helicopters, and 159 fixed-wing attack aircraft. The Army division on the other hand contained 479 transport helicopters and 184 authorized gunships, and required 132 fixed-wing aircraft in support at a 1.1 sortie rate. Citing DOD SE Asia air planning criteria, FMFPac analysts figured that the 159 Marine aircraft were to provide each Marine battalion with 200 fixed-wing sorties per month. This came out to six sorties per battalion per day or 160 daily sorties to support the Marine units in I Corps. These were about onethird more sorties than the Air Force programmed for fixed-wing support of Army divisions. According to FMFPac, the Air Force was to provide the Army four fixed-wing sorties per battalion per day or 150 sorties per battalion monthly. The resulting difference in the fixedwing support between the Army and Marine divisions was based on the following: the Marine battalion was about a third larger than that of the Army; the Marine division had about 20 percent less artillery support; and the Marines had fewer armed helicopters. CGFMFPac msg to CMC, dtd 30May68, HQMC Msgs, Mar-Jun68. In his comments, General Norman Anderson made the additional point that the 1st MAW supported two Marine Divisions and also Army and allied units when required. MajGen Norman J. Anderson, Comments on draft, n.d. [Jan95] (Vietnam Comment File).

as responsive as it should be. According to the Marine Commandant, the "net effect is that ground operations become responsive to air operations rather than the converse." Chapman recommended, instead, that III MAF retain mission direction of 70 percent of his available sorties and would make available to MACV the other 30 percent based on a rate of 1.1 sorties per day. Such a solution, according to General Chapman, permitted III MAF to ensure "the immediate availability of aircraft for support of troops on the battlefield," while MACV would in effect still control 30 percent of Marine sorties and able to divert any Marine air mission when the situation demanded.⁷⁸

The Commandant's efforts once more to have higher authorities in Washington reverse single manager by edict from above failed. While Secretaty Ignatius endorsed General Chapman's recommendations to him, Deputy Secretaty of Defense Nitze again refused to dictate air policy to MACV. Using much the same rationale as he had on 15 May, Nitze stressed that ComUSMACV was studying the responsiveness of the new procedures established at the end of May and the secretaty was sure that the field commander would make any changes that were necessary. At the same time, while General Wheeler, the Chairman, forwarded the Commandant's memorandum to CinCPac and ComUSMACV, the Joint Chiefs also declined to take any action on their own.⁷⁹

Given Secretary's Nitze's two unfavorable decisions, General Chapman believed any further exertion on his part to influence action through DOD to be selfdefeating. Instead, he planned to revert to pressure from below. As he advised Lieutenant General Henry W. Buse, Jr., his former chief of staff at HQMC and new Commanding General, Fleet Marine Force, Pacific, who relieved General Krulak at the end of May, "a move from Saigon may be our best bet at this time."⁸⁰

The Continuing Debate

The Commandant's change of course was based in part on the actual or scheduled reshuffling of the key personalities both at CinCPac and at MACV. At CinCPac headquarters in Hawaii, in addition to General Buse replacing General Krulak, Admiral John C. McCain was to take over command from Admiral Sharp at the end of July. In Saigon, on 15 June, General Abrams became ComUSMACV in place of General Westmoreland, who returned to Washington to become the U.S. Army Chief of Staff. Both Generals Norman Anderson, the commander of the 1st MAW,



Photo courtesy of Center of Military History

Army Gen Creighton W. Abrams, ComUSMACV, right, talks to MajGen George I. Forsythe, CG, 1st Air Cav Div. Upon his relief of Gen Westmoreland in June 1968, one of the problems facing Gen Abrams was the question of single manager.

and also General Momyer, the commander of the Seventh Air Force, were scheduled for reassignment. The hope was that with a different cast of commanders in place in strategic command billets there would be more room for compromise. Both General Buse, the new FMFPac commander, and General George S. Brown, the new Seventh Air Force commander, had less prickly personalities than their predecessors, Lieutenant General Krulak and General Momyer. In his appraisal of the situation, however, General Chaisson, who also completed his tour at this time in Saigon, stated that he personally did not believe that General Momyer's departure would change much, "essentially . . . [Momyer] was playing an Air Force policy push here, and I don't see the Air Force falling off on their push."81

While not too much was known about General Abrams' position, except that he wanted to ensure adequate fixed-wing air support for Army units in I Corps, Marine commanders assumed that he was more flexible about the single-manager issue than Westmoreland. Colonel Edward L. Fossum, the III MAF liaison officer at MACV, upon his relief, related that the bickering between III MAF and MACV over air command relations disturbed both Westmoreland and Abrams. Fossum believed that Abrams' solution might be to reduce Marine strength in the north and bring the



Department of Defense (USMC) Photo A422245 LtGen Henry W. Buse, CGFMFPac, in the foreground, arrives at the 1st MAW helicopter landing pad for a visit to the wing headquarters. As it was for Gen Abrams, the question of single manager was a major priority for the new FMFPac commander.

Marine divisions together and "solve this air business." Fossum admitted that he "could not really read General Abrams about the Marine Corps." General Chaisson, who also rotated at this time, observed that Abrams, while often critical* of the Marines and publicly supporting the single-management policy that he inherited, was not as adamant as Westmoreland and "has it [single manager] up for review."82

In one of his first actions, Lieutenant General Buse made arrangements to visit Vietnam to discuss the situation with General Abrams. On 16 June, the new FMFPac commander met with Abrams in Saigon. Buse described Abrams as "very cordial" and said that the two had a very frank discussion. According to General Buse, he told the MACV commander that he "wasn't down there to critique at what he [Abrams] was doing operationally, nor was I going to tell him what to do operationally." In turn, Abrams replied that he had no particular problems in I Corps, "unless air control could be so considered." Seeing an opportunity, Buse suggested that Abrams end the emergency in I Corps and return. control of Marine air to III MAF. The MACV commander, however, was not prepared to take such drastic action. Abrams countered that the "Marines use

more air support than anyone," and not only because of their lightness in artillery and helicopter support. Buse explained that "air support is part of our life and that we were structured, trained, and accustomed to use it to maximum benefit." General Buse then asked Abrams directly if he felt as strongly on the subject as General Westmoreland. The MACV commander answered "in a definite and strong negative." In assessing his meeting with Abrams and later that day with General Bruce Palmer, Deputy Commander, U.S. Army Vietnam, Buse considered Abrams still open on the subject and that "a tinkle has been heard from the bell of freedom."⁸³

Fresh from his trip to Vietnam, Lieutenant General Buse reported to the Commandant on the favorable atmosphere he found in Saigon and the present situation relative to single management. He observed that from the MACV perspective there was general satisfaction with the new modified system and "with the quantity and timeliness of air support." Although the loss of overall air control authority over fixed-wing sorties for III MAF still caused several deficiencies, Buse maintained the "Marine air control system is intact and functioning" He stated that the weekly frag procedures caused less of an administrative burden for III MAF in that it did not require specific coordinates. Still the FMFPac commander related that the only reason that single-manager system still worked was the

^{*}General Chaisson noted in his diary on 15 May that at dinner, "Abe [Abrams] took off on Marines, 'loners, small vision, won't play.'" Chaisson Diary, Jan–Jun68 (Chaisson Papers, Hoover Institute).

existing Marine Corps system and the "fact that the 1st MAW continually generates sorties in excess of the 1.2 [sortie] rate."^{84*}

Despite the apparent happiness on the part of MACV with the new modified single-manager system, General Buse agreed with General Chapman that the best channel for reversal of the policy was through Saigon and possibly Honolulu. The FMF-Pac commander stated that there was possibly a means of compromise through reducing the span of control of III MAF in I Corps. He posed the possibility of dividing I Corps into two sectors, one Army and one Marine, possibly divided at the Hai Van Pass. If that occurred, Buse thought Abrams might be induced to "return control of Marine air." One disadvantage that he saw to this path might be a lopsided distribution of air support. The Marines in a reduced two-division sector might be receiving more support while "our Army neighbors, who now have no complaints, could starve." Buse preferred that General Cushman, the III MAF commander, in his June evaluation, present "a plan for restoring the integrity of the air-ground team." According to Buse, the III MAF commander "had a good feel of the pulse and have some local accommodations which can be digested at this point and still lead to full recovery." At that point, General Buse would then approach Admiral Sharp, still CinCPac, "in consonance with Cushman's efforts and rationale, adding to them the personal observation and staff data I found during my trip."85

On 29 June 1968, the III MAF commander provided both Generals Buse and Chapman his draft appraisal of the May modification to Single Management and proposed recommendations to MACV and asked for their comments. General Cushman acknowledged a definite improvement and reported a 54-percent increase during the month in Air Force sorties. For Marine air, however, he stated that the weekly and daily frags "has required an inordinately high number of scrambles and add-on sorties." He concluded that the present preplanned sortie level fell far short of the number of air missions required by the ground commanders.⁸⁶

General Cushman's suggested revisions to single manager were much more moderate than earlier proposals he had made to MACV and those already being forwarded by the Commandant. He recommended that MACV retain the present system, but improve its coordination with supporting arms and basically refine the preplanned procedures. Cushman suggested that MACV give to III MAF, in a weekly block frag order, control over all Marine preplanned sorties, with the exception of those interdiction strikes against Laos and North Vietnam. III MAF would determine time on target and ordnance loads based on the needs of the respective Army and Marine divisions in I Corps. In turn, the Marine command would provide the Seventh Air Force control centers "real time reports" on Marine sorties.87

Both Generals Buse and Chapman were somewhat disappointed with the III MAF proposal and wanted a stronger statement from General Cushman. While agreeing with Cushman's evaluation and understanding his delicate position as a subordinate to MACV, they still desired the III MAF commander to preface his recommendations with a "positive statement reaffirming our collective position on the return of air assets" to Marine control. General Buse argued that this may be "our last shot" to reverse the situation because Abrams "and no one else will make this decision and once made we can expect it to last for the duration." According to Buse, the new MACV commander was "practical, apolitical, not necessarily bound by prior arrangements, and not intimidated by Seventh Air Force pressure." While Abrams possibly was impressed with the improvement in support of the Army divisions under the revised single-manager system, Buse believed the Army general susceptible to an appeal based on the relationship between infantry and supporting arms. The FMFPac commander thought that Cushman could make a convincing case that it was the Marine interface with the cumbersome Seventh Air Force mission control procedures that resulted in the enhanced air support for the Army divisions, not the centralization of air assets under the Seventh Air Force.88

In his revision of his reply to MACV, General Cushman made some minor cosmetic changes but decided against the direct approach suggested by General Buse. Cushman thanked the FMFPac commander for his advice, stating he incorporated "as many as possible under the circumstances prevailing." The III MAF commander declared that he had

^{*}Lieutenant General Carey made the observation that "our salvation in operating under the single-management concept was that our Marine Air had more flexibility than Seventh Air Force in that we were able to generate and maintain a higher sortie rate, we could surge to as high as a 3.0 sortie rate if required. In many informal conversations with my Air Force counterparts they marveled at our endurance and questioned, 'How do you do it?'" Carey Comments.

advanced "much of the philosophy" recommended by Buse several times to Abrams and "to repeat it once again could be counterproductive." Moreover, according to Cushman, if Abrams accepted the III MAF proposals, "I will once again have control of all my air assets " General Cushman, nevertheless, expressed his doubts about a positive outcome for the Marine position, but that his present tactic was "more saleable than our past direct approaches."⁸⁹

As General Cushman predicted, the MACV evaluation, despite the Marine arguments to the contrary, saw no need to alter the arrangements over air control in Vietnam. In fact, the author of a Marine Corps Headquarters memo on the subject wrote that the tenor of General Abrams most recent comments "seem to indicate the system may have reached a point of equilibrium unless some additional force is applied." In Washington, Major General McCutcheon expressed little surprise that General Abrams was relatively satisfied with the modified single-manager system. As McCutcheon* wrote to Major General Charles J. Quilter, the new 1st MAW commander who had relieved General Anderson on 22 June, "it is only us Marines who have noticed the diminution in effectiveness." McCutcheon even admitted that this socalled reduction in effectiveness "isn't very much now since they [the Air Force] incorporated all our suggested changes." The nub of the matter was, according to McCutcheon, "we still don't have the OpCon [operational control]."99

The Commandant and General McCutcheon were in hopes that the selection of Admiral John C. McCain to be the new CinCPac might provide another avenue to challenge single manager in Vietnam. As early as 23 May, just after his nomination for the command, the Marine headquarters staff in Washington briefed the admiral on its perspective of the single-manager dispute. The Marines continued to update McCain from time to time before he took over his new post. As General McCutcheon observed in his letter to Quilter, the new CinCPac would not be able "to jump in . . . right away and right the wrong that was done, but I think we have a solid friend in him."91

At the same time in Honolulu, Lieutenant General Buse tried to use his influence with Admiral Sharp to endorse the Marine proposal of giving General Cushman, as CG III MAF, the authority to frag directly the 70 percent of preplanned missions in the weekly frag order. According to Buse, Sharp had completed his own evaluation and basically supported General Cushman's recommended changes. Apparently, the admiral had discussed his recommendations with the new Seventh Air Force commander, General Brown. The Air Force general proposed that Admiral Sharp first clear his revisions with General Wheeler, the Chairman of the Joint Chiefs, before sending them on to General Abrams. General Buse believed that "Sharp will stick to his decision . . . But we now will encounter a day or so delay" Buse stated that he could see

MajGen Charles J. Quilter relieved MajGen Anderson as CG, 1st MAW in June 1968.

Unnumbered Defense Department (USMC) photo



^{*}As Deputy Chief of Staff for Air at Headquarters Marine Corps, General McCutcheon was not in any chain of command relative to the administration or operations of Marine aviation in Vietnam. While fully aware of this, General McCutcheon kept himself fully informed about Marine aviation matters in the country through an informal correspondence. As he wrote earlier to General Quilter, he would write "from time to time as I did Norm [General Anderson] and Ben [Major General Louis B. Robertshaw, an earlier commander of the 1st MAW] and occasionally get on the phone . . . I think we both understand that FMFPac is sensitive to being passed over so in most cases the kind of information that will be passed personally will be of such a nature that it will not compromise FMFPac's command prerogatives." McCutcheon ltr to MajGen Charles J. Quilter, dtd 5Jul68 (Ltr No. 34, File Q, 1968 Correspondence, McCutcheon Papers).



Unnumbered Defense Department (USMC) photo Adm John C. McCain, CinCPac (seated with cigar in his mouth), visits Marine Fire Support Base Lance in Operation Taylor Common. LtGen Cushman is seated just behind and to the right of Adm McCain. Both Gen Quilter and Adm McCain also had to wrestle with the single manager issue.

"no impact on anyone in Washington, if Sharp makes this decision with exception" of the Chief of Staff of the Air Force.⁹²

With Sharp leaving his command, however, it was obvious that his recommendations would only have validity if they were endorsed by his successor. Obviously, the Marines believed that the chances were good that Admiral McCain would do so. Marine Brigadier General Hutchinson, the CinCPac J-3, wrote to General McCutcheon that "we had McCain as near fully locked in on a decision to return about 70 percent of our fixed-wing assets to Marine control as it was possible to be short of having the decision signed off."⁹³

Again the Marine aspirations were to lead to frustration. After assuming command, in August, Admiral McCain together with Lieutenant General Buse visited General Abrams in Saigon. Their visit also coincided with one by General Chapman to Vietnam. General Hutchinson related that McCain had "withheld his final decision for the obvious protocol reasons of being able to say he had discussed the subject directly with Abe." In the meeting over single management that included the two Marine generals as well as McCain and Abrams, General Abrams apparently was willing to modify single manager in return for an alteration of command relations in I Corps. The Marine generals, at that point, decided not to push the issue. According to Brigadier General Hutchinson, this course of action made "it impossible for McCain to do anything but go along." Hutchinson stated that the admiral was not yet "in writing, but I would guess that after he sees Chapman . . . the issue will be closed out." In General Chapman's version, Admiral McCain, a close personal friend, told him, "that he was new on the scene, that such an order was vehemently opposed by his principal commander in the field . . . and that he just didn't feel persuaded that it was a good idea and that he ought to do it, and he never did."

Through the rest of 1968, the Marines would continue to bring up the single-manager issue, but with



Photo from the Abel Collection

U.S. Army BGen Howard H. Cooksey, an assistant division commander of the Americal Division, paints a "Happy Birthday" on a 500-pound bomb at the Chu Lai airstrip in honor of the 193d anniversary of the Marine Corps and in appreciation of Marine close air support for the division. Col Rex A. Deasy, commanding officer of MAG–12, looks on.

diminishing expectations.* On 9 September, General Cushman asked General Abrams for authorization to have "mission direction of in-country Marine strike assets on a 30-day trial period within the framework of single manager." The III MAF commander then provided Abrams with a detailed breakdown both of Air Force and Marine sorties in support of ground forces in I Corps covering the period from 30 May until 2 September. According to III MAF statistics, 61 percent of the total sorties were preplanned while 34 percent of this total were "add-ons" and scrambles" (See Table 1). Nearly 40 percent of the Marine sorties fell into this latter category as compared with only 29 percent of the Air Force sorties in I Corps. According to Cushman, such a high percentage of add-ons and scrambles "points up either a shortage of preplans or less than optimum utilization of available resources." He believed the 30-day trial period would demonstrate a marked improvement in these percentages.⁹⁴

Despite discussion with Seventh Air Force officials and some optimism on the part of the 1st MAW staff that MACV might accept this trial period, General Abrams turned down the III MAF request. The MACV commander opposed what he considered double management, and hoped to end the dispute once and for all. Supported by General Wheeler, the JCS Chairman, Abrams ended the formal monthly evaluations of the system. As he stated in November 1968, "we do not wish to appear intransigent about this matter . . . but it is vital that ComUSMACV retain the centralized control and direction of TacAir [tactical air] in the hands of a single individual."95

^{*}On the tactical level, Colonel Robert D. Slay, who commanded MAG-11 from June through the end of the year, wrote that he "insured that my FRAG orders from 1st MAW were carried out; I really didn't care where the FRAG orders to Wing came from. Politics and in-fighting for control of air assets was of little concern... where the flying and dying took place. The concept of the Marine Air-Ground Team was well understood, however, and my command was briefed to give first and highest priority to any Marine ground unit in trouble." Col Robert D. Slay, Comments on draft, dtd 25Nov94 (Vietnam Comment File).

Table 1 Attack Sorties Planned and Flown by Marine and Air Force Aircraft 30 May—2 Sept 1968

		- 00pt	1,00	
				Percentage of
Туре	USAF	USMC	Total	Total Flown
Preplanned Flown	7,731	9,960	17,691	61
Immediate Diverts	468	573	1,059	5
Scrambles	1,505	3,235	4,740	16
Add Ons	1,807	3,696	5,503	18
Totals Flown	11,529	17,464	28,993	
Preplanned Fragged	9,473	11,980	21,453	83

While General Abrams remained firm in his support of single manager as modified in May, the Marine Corps continued the struggle in the following months and years, but in different forums. While the Commandant continued to raise the issue among the Joint Chiefs, only the Navy, since General Westmoreland became the Army Chief of Staff, now supported the Marine position. As General McCutcheon observed to General Quilter, the 1st MAW commander, in November, 1968, "I am working . . . on the philosophy that single management is here, and the way to beat it is to join it and out-manage them."⁹⁶

Using this tactic, the Marines in a series of local arrangements and working agreements managed to

obtain in 1969 and 1970 practical control of their aviation assets. In early 1969, III MAF had succeeded in vetoing an attempt by MACV to modify its air directive 95.4 to include the term "operational direction" to define the relationship between the Seventh Air Force and III MAF. Finally, in August 1970, Lieutenant General McCutcheon as CG III MAF, agreed to a new MACV air directive that gave "formal sanction" to the changes that the Marines had succeeded in obtaining from MACV and the Air Force. The Air Force accepted the Marine Corps interpretation of "mission" and "operational direction." Under the new directive, III MAF retained operational control of its aircraft and included a provision permitting the Marine wing to withhold "specialized Marine support sorties" from the Seventh Air Force. If the Marines obtained much of what they wanted, then as Bernard Nalty, an Air Force historian, asked, "Why the fuss?" Nalty answered his own question with the conclusion: "Tactically, the single manager meant nothing. Doctrinally, however, it affirmed a principle, centralized control, that the Army Air Corps and U.S. Air Force had consistently championed, and in doing so, it established a precedent for the future."97*

^{*} The new directive defined Mission/Operational Direction as "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 as quoted in Cosmas and Murray, U.S. Marines in Vietnam, 1970–71, p. 277. General Chapman summed up the outcome of the dispute in the following manner: "1. Marine system essentially restored—no gain or loss. 2. Army gained close air support from Air Force equivalent to Marine scope and type—a clear important winner. 3. Air Force lost accordingly." He emphasized that the precedent applied "only to joint land operations after the conclusion of [an] amphibious operation." Chapman Comments.

CHAPTER 25

A Question of Helicopters

Another Debate—The Need for Lighter Aircraft—To Keep the Mediums and Heavies Flying Another Look at Helicopter Air-Ground Relations

Another Debate

As the debate with the Air Force and MACV continued through the second half of 1968 over the control of Marine fixed-wing aircraft, a second controversy festered in Marine Corps circles. This question involved the employment and control of another indispensable, but relatively short-supply Marine aircraft resource, helicopters. While ComUSMACV and the Army were on the fringes to the dispute, the principals were III MAF ground and aviation commanders. Ironically, the 1st MAW, which argued so vehemently against central control from Saigon of its fixed-wing assets, insisted on "single management" of its rotary aircraft.

Again it was the arrival of the Army divisions, especially the 1st Air Cavalry Division, into northern I Corps in early 1968 that provided the impetus to this discussion. Major General Raymond G. Davis, as Provisional Corps deputy commander in March and April 1968, was tremendously impressed with the Cavalry's mobile helicopter-borne tactics in the relief of Khe Sanh, Operation Pegasus, and later in the A Shau Valley in Operation Delaware. When he took over the 3d Marine Division in mid-May, while not abandoning the strongpoints along the DMZ, Davis wanted to break free of them and strike at the battered North Vietnamese units in a series of freewheeling operations throughout the division sector. From the aviation perspective this created an insatiable demand on the wing's already overburdened and limited number of helicopters and crewmen. According to Major General Norman J. Anderson, the former wing commander, he just did not see how his successor, Major General Charles J. Quilter, could meet the desires of General Davis and at the same time "still take care of the 1st Division and provide logistic support elsewhere."1*

The Army and Marine Corps organization of their helicopters differed markedly. In one sense,

the Marine Corps viewed the rotary aircraft as a boat and a means to land troops from ship to shore to exploit the situation beyond the beach in an amphibious landing.** On the other hand, the Army looked at the helicopter as a horse, as cavalry, and a means of outmaneuvering and outflanking an enemy. Because of the limitations of room on board ship, the Marine Corps depended on fewer, but larger helicopters, the UH-34 or CH-46, to carry the assault force ashore. With less concern about space restrictions and more about maneuverability, the Army relied on an assortment of helicopters, mostly smaller and more maneuverable than the Marine aircraft, to carry the assault forces into the rugged forested hinterlands. With the establishment of small artillery fire bases on key hills, the 1st Air Cavalry could launch fast-paced, leap-frog airmobile operations far from its base areas irrespective of terrain.2

Marine aviation officers were quick to respond that there should be no comparison between Marine and Army helicopter support, especially that available to the 1st Air Cavalry Division. In contrast to the 1st Air Cavalry which had more than 400 helicopters under its control, the 1st Marine Aircraft Wing owned slightly more than 300 to support two and a third Marine divisions, ARVN units, and the Korean Marines in I Corps. Major General Norman Anderson, the wing commander, observed that the wing had inadequate numbers of helicopters because "the demand was limitless and was stimulated by the example of the

^{*}See the discussion of the 3d Marine Division offensive operations during this period in Chapters 15, 16, 18, 20 and 22.

^{**}One should not carry the analogy of the boat too far. As Major General John P. Condon, a veteran Marine aviator and commander of the 1st Marine Aircraft Wing in the early 1960s commented, "The boat could never envelop any unit in position on land. The Marine Corps pioneered vertical envelopment, beginning 'from the sea,' but never stopping just beyond the beach. The use of the helo in maneuver and envelopment, as well as in movements of heavy equipment and logistic support of follow-on actions was also visualized from the start." MajGen John P. Condon, Comments on draft, dtd 30Jan1993 (Vietnam Comment File), hereafter Condon Comments.

1st Cavalry Division (Airmobile) in an adjacent area zipping about all over."3*

Despite the massive and even decisive role the Marine helicopters played in the resupplying of the Marine hill outposts at Khe Sanh, ground officers elsewhere had complaints about helicopter support. Immediately after the recapture of Hue, newspaper accounts circulated that Army helicopter pilots flew under more adverse conditions than Marines. In response to a criticism in one article about a 500foot ceiling limitation during the battle, Major General Anderson wrote that the wing placed such restrictions on "all aircraft operations subject to the exigencies of the tactical situation." The wing commander remarked the reason for the 500-foot ceiling was "because of the extreme vulnerability to enemy fire of low flying helicopters" He then argued that the "Army UH-1 type aircraft has more capability for contour flying than the CH-46 and was therefore occasionally useable when the CH-46 was not "** Even with the deplorable flying conditions during much of the battle of Hue, Anderson pointed out that the Marine helicopters flew 823 regular sorties, transported 1,672 passengers, carried more than a million pounds of cargo, and conducted 270 medical evacuation sorties, lifting out 977 casualties. More to the point, he maintained provisions existed in the order to override the flying restrictions when the tactical situation demanded. General Anderson admitted, however, "that this proviso, in all honesty was little known or understood. The order is widely distributed, but little read."4***

By April 1968, Brigadier General Earl E. Anderson, the III MAF Chief of Staff and also an aviator,

^{*}Colonel David S. Twining, who as a lieutenant colonel commanded Marine Air Control Squadron 4 in 1968 and earlier served in the Dong Ha DASC, agreed with General Anderson that to an extent the difference between Marine Corps concepts of helicopter usage and that of the Army was based on "Marine Corps conservatism as a result of having far fewer helicopter assets." Twining, nevertheless, claimed that Marine Corps "helicopter doctrine or practice in Vietnam was not only conservative but relatively unimaginative." While stating that the Marine Corps was the "first of the services to institute a program to work out helicopter combat techniques," he believed rhat internal divisions within the Marine aviation community between fixed-wing and helicopter pilots hampered Marine helicopter innovation. In Twining's opinion, "it was only due to the insistence of the ground community and the Commandant himself, that we entered the war with the helicopter inventory that we had and this proved to be insufficient for the innovative tactics that we might have otherwise developed." Col David S. Twining, Comments on draft, dtd 15 Nov94 (Vietnam Comment File). Lieutenant Colonel Thomas F. Miller, who served on the MAG-16 staff and commanded a helicopter squadron in 1968, was unimpressed with the Army helicopter organization and tactics. According to Miller, some Army helicopter operations "anticipated aircraft losses of up to 25% of the first assault wave. I don't believe the Marine Corps would ever consider accepting such losses." LtCol Thomas F. Miller, Comments on draft, dtd 7Dec94 (Vietnam Comment File), hereafter Miller Comments.

^{**}One experienced CH-46 helicopter pilot suggested that the CH-46 has the same capability as the HU1 as far as contour flying, but that the Army helicopter was smaller and able to fit into tighter landing zones than the larger Marine craft. LtCol Dale Johnson comments to author.

^{***}In a contemporary letter, Brigadier General Earl E. Anderson, the III MAF Chief of Staff, expressed the following opinion about the subject: "Regardless of what we said in our official response, the fact remains that if the weather isn't above 1,500 feet and two miles, the mission has to be declared a priority one before the Wing will fly. If the weather is 500 feet and a mile, the requesting organization must declare an emergency before the helicopters will fly. If the weather is less than 500 feet and one mile, and if helicopters are required, the mission must be declared as mandatory, and the only two individuals who can approve a mandatory mission are the Wing Commander and the Commanding General III MAF. I should say, they were [emphasis in the original] the only ones who could approve such a mission, because following my investigation of certain allegations made during the Hue battle, General Anderson, at General Cushman's insistence, expanded the individuals who could approve a mandatory mission to include the two Assistant Wing Commanders, and the Chief of Staff, III MAF." Anderson concluded that even this was "not adequate. The helicopter pilots will fly, and do fly, in almost any kind of weather, but to require a requesting unit to go to the Wing Commander or the III MAF Commander to have a mission flown, when the ceiling is 400 feet, does not seem to be justified." BGen E.E. Anderson ltr to MajGen McCutcheon, dtd 14Mar68, Encl, Gen. Earl E. Anderson, Comments on draft, dtd 18Dec94 (Vietnam Comment File). Lieutenant General Richard E. Carey, who as a lieutenant colonel commanded a fixed-wing squadron in 1968 and also served on the 1st MAW staff, recalled that during the battle for Hue a "CH46 did not do a MedEvac because of an extremely low ceiling (allegedly on the ground). At wing we were notified that a Huey had done the Med Evac for us because of our 500foot restriction. We reiterated the proviso about exigencies of the tactical situation but too late. Unfortunately, this incident gave an impression that the Army provided better helo support than us. The 1st Cav observation helos buzzed around at low altitudes further emphasizing the difference in equipment, numbers of birds, and methods of operations, which certainly didn't enhance our support image to Marine ground units." LtGen Richard E. Carey, Comments on draft, dtd 12Dec94 (Vietnam Comment File). Several Marine helicopter commanders emphasized their willingness to fly under adverse conditions. For example, Lieutenant Colonel Walter H. Shauer, who commanded HMM-362, wrote, "We were mission oriented merely flying in whatever weather, terrain, or combat situation in a manner to accomplish the mission. In my briefings the only restriction was attempt no mission that you were not capable of performing, otherwise, attempt it later when you could get thru." LtCol Walter H. Shauer, Comments on draft, dtd 1Nov94 (Vietnam Comment File), hereafter Shauer Comments. See also Col Roger W. Peard, Comments on draft, dtd 9Dec94 (Vietnam Comment File), hereafter Peard Comments and LtCol Jack E. Schlarp Comments on draft, dtd 21Nov94 (Vietnam Comment File), hereafter Schlarp Comments.



Department of Defense (USMC) Unnumbered Photo A Marine Boeing Vertol CH-46 Sea Knight belicopter from HMM-165 approaches the helicopter carrier USS Tripoli (LPH 10) for a landing. Because of concern for space on board amphibious ships, Marines depended on larger capacity helicopters to carry the assault force so as to require fewer helicopters on board ship.

related that "there has been considerable fuss and fury over the responsiveness of the helicopters, and both division commanders are complaining" It may have been a matter of perspective, but General Cushman even had some doubts about the dedication of Marine helicopter pilots. The III MAF commander remembered that "some of the helicopter pilots from Marble Mountain would go up to Phu Bai to provide some support and hell, they'd come all the way back to Marble Mountain to eat lunch, just . . . baloney as that." According to Cushman "we had a long battle to utilize helicopters efficiently and it took great overhaul on the part of the divisions and the way they ran their logistics and a great overhaul on the part of the wing and the way they ran their helicopters."5*

General Westmoreland also believed that the Marines had problems with their helicopter organization. While he accepted the Air Force argument about the need of centralized fixed-wing air control by the air commander, he disagreed with the Marine concept of keeping the helicopter assets under the wing rather than the division. He believed the Marine Corps system was too inflexible. While crediting the Marines as the originators of the air assault doctrine, he confided to Brigadier General Chaisson, "You've got yourself so wedded to this centralized control of all your air assets over in the wing and the air-ground team, that down at the working level, the battalion, the infantry battalion, he has to ask for helicopters like he normally would have to ask for tactical air support." He believed the Army had advanced "way ahead of you in the way we've married our helicopters right in with the tactical infantry command."6

Marine aviation commanders, on the other hand, believed that the Army system, especially that of the 1st Air Cavalry, provided very little control and endangered not only helicopters, but also fixed-wing aircraft that were in the sector.** The Marine Direct Air Sup-

**Lieutenant General Carey, who at the time was in the G-3 section of the wing, wrote that the "Army employment of their organic helos was totally unorthodox to us. In the Marine system the HDC in the DASC controlled helo movement and coordination of fires. In those cases where large helo operations were scheduled we considered it absolutely essential to lift or shift fires as required to ensure safe passage of our helos. On the other hand, as we observed Army operations they appeared to ignore the requirement to monitor their helo flights to ensure safe passage through hot areas. They generally by-passed

^{*}Observing that the Marine wing supported two and a third Marine divisions, plus ARVNs and Koreans, General Condon wrote that "with assigned missions of that scope for the helos, it seems reasonable to me to take a centralized C&C [command and control] stand." Condon went on to say, nevertheless, "If full coordinated planning had been accomplished by both members of the Air-Ground Team as a meticulous doctrinal observance in all helicopterborne operations, I don't think there would ever have been any 'difficulty' to be discussed [Emphasis in the original]." Condon Comments. Lieutenant General Carey, also remarked on the dilemma of the wing with the "total overcommitment" of its helicopter assets to support not only Marine units but also other forces. The wing then was "taken to task by our own Marines for not being able to respond to a commitment" Carey, nevertheless, wrote that the "argument of ground commanders that helo assets are designed for the direct support of the division and should consequently be assigned to them for operational control has merit." He believed that while valid, "the aviation argument . . . that with the Corps' limited assets, training, employment, and logistic support is optimized with central control," there was still room for compromise. He believed that by task organizing "we . . . would have been more effective in supporting our Marines in Vietnam by selective assignment of certain Helo assets to the Divisions for operational control." Carey Comments.

port Centers (DASCs) controlled not only fixed-wing sorties, but also contained a Helicopter Direction Center (HDC) to oversee rotary-wing flights. Collocated with the divisions' FSCCs, the Marine DASCs were able to coordinate their helicopter assaults with both fixed-wing and artillery support. On the other hand, the Army had no similar system and their helicopter units, according to Marine commanders, "just didn't know what each other were doing." Major General Anderson observed that the Army Americal Division unit commanders were "delighted" with the Marine system "because they recognized the desirability of this kind of coordination." He noted that it was an entirely different situation with the 1st Cavalry since "they had such a mass of helicopters that the control became an utter impossibility, except in accordance with whatever control is the result of planning."7

The Need for Lighter Aircraft

In the spring of 1968, however, no matter whether the Marine Corps wanted to adopt more of the Army airmobile tactics, it was in no position to do so. Much of this was due to the type of aircraft. For much of its success, the 1st Air Cavalry depended on its fleet of light helicopters, both unarmed and armed, which it used to find, fix, and kill the enemy. As General McCutcheon expressed in Washington after a visit to Vietnam, the Marines could match the Army in helicopter lift, but "we are woefully short of small helos, both slick and gunships."⁸⁺

During March, in an exchange of messages with Headquarters, Marine Corps, FMFPac, and MACV, General Cushman discussed means of making Marine helicopter operations more effective, specifically through increasing helicopter reconnaissance and gunship assets. General Westmoreland had recommended to III MAF that the Marines adopt more of the Air Cavalry techniques relative to these as well as heli-

copter reaction missions. While the Marine hierarchy "appreciated" the MACV recommendations, General Krulak, then the FMFPac commander, observed that General Westmoreland "knows, moreover, that we cannot lay hands on any significant number of Hueys [UH-1Es] in a short time, any more than the Army can." The Commandant, General Chapman, commented that the Marines needed more light helicopters and "we need them now." Using phraseology recommended both from Washington and from Honolulu, General Cushman told the MACV commander that given the situation it was "difficult to see how current Marine Corps helicopter resources could be used to an advantage greater than now is achieved in conjunction with our fixed-wing aviation." He mentioned that he had requested more light helicopters, UH-1Es, and specifically more gunships. According to Cushman, Westmoreland agreed to a III MAF proposal for an exchange of Marine and Army helicopter pilots and reconnaissance personnel. Moreover, the MACV commander would support a Marine effort to expand its light helicopter assets. At the same time, Cushman allowed that he would continue to monitor III MAF reconnaissance and reaction capability.9

At the same time, III MAF was in the midst of reorganizing its UH-1E assets. With the planned introduction of the fixed-wing North American turbo-prop OV-10A Bronco into the Marine Corps inventory, these aircraft were to take over from the Hueys more of the observation and aircraft control missions. The "Broncos" were slated for the VMO squadrons and the original concept was to reduce the number of Hueys in-country by the number of the new aircraft. Given the increased demand for lighter helicopters, General McCutcheon instead proposed in mid-1967 that the Marines obtain permission to create new light helicopter squadrons that would be equipped entirely with Hueys. The VMOs would

checking in with the DASC causing concern that they would fly through friendly artillery fire with its possible consequences. We frequently observed massive helo movement out of Camp Evans and did not know of their destination, their routes or mission until they would suddenly reappear back in the landing pattern of their home field. It was a standard question, 'Wonder how many they lost to friendly fire today?'' Carey Comments. Colonel Joel E. Bonner, who was the Wing G-3 in 1968, observed that the subject of helicopter usage "will be with both the Army and the Marines forever—like frontal assaults and flanking maneuvers." Col Joel E. Bonner, Comments on draft, dtd 7Dec94 (Vietnam Comment File).

^{*}Major General Condon observed that the Marine Corps developed its helicopters under "the concept of the amphibious assault" and in effect, this concept drove all Marine helicopter design.

According to Condon, until the Vietnam War, there was no need for the gunship. Fixed-wing would provide helicopter protection and prepare the landing zones. On the other hand, the Army was limited by legislation from developing fixed-wing aircraft and "to acquire some organic airborne firepower, it was a natural step for the army to pursue the helicopter gunship development with vigor." Condon stated that the Marine Corps had "no comparable developmental thrust for either the high performance light helo or the growing capabilities of the gunship models." In General Condon's opinion, that as early as 1962, when Marine helicopters first deployed to Vietnam, the Corps should have pursued the development "of the best performing light helicopter, the helicopter gunship, and defensive armament for all helicopters... on a high priority basis [emphasis in the original]." Condon Comments.



Crew members of a Bell Iroquois UH–1E helicopter (Huey) gunship pause in the field awaiting a new mission. By 1968, the Marines required more helicopter gunships to support operations.

retain half of the Huey inventory while the new HMLs would acquire the surplus number displaced by the Broncos. As McCutcheon observed, the chances for approval were good in that the UH–1Es were already on hand and the procurement needs were modest. The Secretary of Defense agreed to the changes but only on a temporary basis.¹⁰

On 8 March 1968, Headquarters Marine Corps issued its implementing bulletin to restructure the VMOs and to establish the light helicopter squadrons (HMLs). The three permanent Marine VMO squadrons were eventually to contain 12 UH–1Es and 18 OV–10A Broncos. According to the headquarters directive, the Marine Corps would transform both of its temporary VMOs into HMLs consisting of 24 UH–1Es. A third HML would be established at Camp Pendleton in California. The Marine Corps was to retain the three HML squadrons only through the duration of the war.¹¹

In Vietnam, in early March, VMO-3 at Phu Bai, the one temporary observation squadron in-country, became HML-367 with a transfer of aircraft and personnel. On 15 March, HML-167 was established at Marble Mountain with 13 UH–1Es assigned to it. The first Bronco aircraft arrived in July and joined VMO–2 at Da Nang.* While the arrival of the Broncos may have eased the burden on UH–1Es somewhat, there were still too few of the new light fixed-wing aircraft in country at the end of 1968, 13 total, and all in VMO–2, to make much difference. In December, there were 74 Marine UH–1Es in Vietnam—12 attached to VMO–2, 14 with HML–167, 15 with HML–367, and 23 with VMO–6—only three more than were incountry in January. While there had been a change in designation, the HML squadrons through the year

^{*}Colonel Tullis J. Woodham, Jr., who commanded the 3d Battalion, 27th Marines, remembered that in July 1968, the enemy shot down one of the new aircraft "in our area of Go Noi. The spotter aircraft was probably lower in altitude than he safely should have been because he received a number of rounds through the bottom of the plane, causing it to go down." Woodham sent a company to retrieve any survivors and bring back what they could of the "sophisticated and classified equipment and manuals." With continuous air support, "that was about as close to an 'air show' as I'd seen in Vietnam," the company accompanied by tanks found the aircraft and recovered the bodies of the crew. Unidentified draft, Encl, Col Tullis J. Woodham, Jr., Comments on draft, dtd 7Dec1994 (Vietnam Comment File).

basically performed the same missions as the VMOs.* It would not be until 1969 with the introduction of the Bell AH1G Cobra helicopter gunship into the Marine inventory and the arrival of additional Broncos that the demands upon the overworked UH–1Es began to ease.¹²

While the Marines used the UH–1E both for observation and as a gunship, it had many disadvantages in comparison to the diverse light helicopter mix that the Army helicopter units had available to them. The 1st Air Cavalry already had the Cobra gunships in service. In addition, the Army division had available the bubble-topped Hughes OH–6A Cayuse or LOH (Light Observation Helicopter) for scouting missions and finally the UH–1H model of the Huey for command and control and trooplift purposes. The Army still used the UH–1B model in a gunship role.¹³

As early as March 1968, Brigadier General Henry W. Hise, one of the two assistant commanders of the 1st MAW, outlined the handicaps of the Marine UH-1E as a gunship. Equipped with the TAT-101 Turret, the UH-1E armament, according to Hise, did "not have enough range or punch."** Also in both the fight for Hue and in the environment around the DMZ and Khe Sanh, the Marine general argued that "the armed chopper is a point target to the man on the ground while in the great majority of cases the chopper pilot is firing at an area target." The result was that the helicopters were vulnerable to the enemy's 12.7mm machine guns while pilots had difficulty "in pin-pointing the guns firing at them." Hise believed "that chopper operations into 12.7[mm machine gun] defended areas is not good sense unless the weather allows fixed-wing support." The assistant wing commander observed that armed UH-1E pilots flying into these regions now "holler for longer range area weapons; specifically 20mm guns or at a minimum .50-caliber guns."14

In June, the new FMFPac commander, Lieutenant General Henry W. Buse, Jr., picked up on the refrain for more of a mix of light helicopters for the Marine Corps. After a visit to III MAF and especially the 3d Marine Division, he told the Commandant that the division's recent mobile operations in the interior and the western mountains "underscore the requirement for the relatively small, light, and powerful helicopter vis a vis the CH-46." While remarking that the latter aircraft was "worth its weight in gold," he stated it was "not the answer to the requirement for a troop carrier" in the rugged terrain in the central and western DMZ sector. According to Buse, the infantry and reconnaissance "insert and extraction problem in undeveloped LZ's, often under fire, dictates the employment of smaller, faster, more maneuverable helos." While recognizing the yeoman service performed by the Marine UH-1Es and the old Sikorsky UH-34s Sea Horses,*** he was especially impressed with the Army UH-1H "with its slightly greater capacity and increased power" for these purposes.15

Major General Davis, the 3d Marine Division commander, also had doubts about the Marine UH–1E as a command and control aircraft and compared it unfavorably to the Army UH–1H. While assistant Provisional Corps commander, prior to taking over the 3d Division, Davis recounted that the Army had provided him with his own Huey, an H model, and that he had been "spoiled." With the Army aircraft, with its increased power, he was able to get into "all of these out of way places and these hilltops, and through all this weather" When he assumed command of the 3d Division, the Marine wing provided him with a UH–1E "that couldn't hack it." The Marine aircraft with its comparative lack of lift would have difficulty in the mountains. Davis remembered that he "got

^{*}Lieutenant Colonel Thomas F. Miller, who commanded HML-167 from August through the end of 1968, recalled thar out of the 14 UH-1E aircraft that he had assigned to his squadron, he scheduled five of these aircraft each day as VIP aircraft for the commanding generals of the two Marine Divisions, the 1st Marine Aircraft Wing, III MAF, and the Korean Marine Corps. While stating that the number of these especially designated aircraft by themselves were not significant, they consisted of nearly six percent of all UH-1E assets. Miller Comments.

^{**}According ro Lieutenant Colonel Thomas Miller, he did not recall that when he assumed command of HML-167 in August 1968 that any of his aircraft were equipped with the TAT 101. He stated that his UH-1E's "were armed with forward-firing 7.62 machine guns and 2.75 rocket pods attached to each landing skid. Two crew members operating 7.62 machine guns fired out the aircraft's side doors." Miller Comments.

^{***}Both Lieutenant Colonels Jack E. Schlarp and Walter H. Shauer, who both commanded HMM-362, a UH-34 squadron, in 1968, praised the reliability and availability of the UH-34. Lieutenant Colonel Shauer observed rhat when he arrived in Vietnam in the last half of 1967, the "[UH-]34's were doing the bulk of the flying. . . . This was because the older H-34 [in comparison to the CH-46] was much simpler to maintain and [had a] reliable piston engine vs sophisticated jet turbine engines [of the CH-46] subject to FOD (foreign object damage) and temperature limitations." Shauer Comments. Lieutenant Colonel Schlarp wrote, "if the Corps had hung on to the H-34's and not tried to rely on the H-46s, and/or H-53s everyone might have been better served. The H-34 was a reliable helicopter that did not suffer from the lack of availability as did the newer helicopters." Schlarp Comments.



Photo from the Abel collection

A Marine North American OV–10A Bronco lands at the Marble Mountain airstrip at Da Nang. The Bronco was to take over more of the observation and aircraft control missions from the Hueys.

flopped down two or three times with those Hueys [UH–1Es]." According to the 3d Marine Division commander, the Army provided him with a backup helicopter because, "those Marine helicopters could not go where the H–model could go."¹⁶⁺

While the situation was not entirely bleak, General McCutcheon commented in mid-November that the improvement in the inventory of Marine gunships and other light helicopters would only be modest in the foreseeable future. As he wrote to Major General Quilter, the 1st Wing commander, "I must tell you in all honesty, that there just aren't any more helos or any more pilots to make available to III MAF in the foreseeable future." He mentioned a combination of both personnel ceilings and an attempt to reduce the budget as "tremendous constraints on any expansionist program at this stage of the game." McCutcheon, nevertheless, stated that he was working on "a final crack . . . to increase the number of light helos in our structure."¹⁷

To Keep the Mediums and Heavies Flying

While the Marine command remained concerned about its shortage of light helicopters during much of 1968, it continued to have difficulties with the availability of both its medium and heavy rotary aircraft. After taking the drastic measure in the latter part of 1967 of grounding all of the Boeing Vertol CH-46 Sea Knights because of several accidents involving the rear pylons of the aircraft, the Marine Corps and Boeing undertook an expensive and extensive repair program, including both structural and system modifications.⁴⁴ In the first phase of the solution, the Marines rotated the aircraft from Vietnam to Okinawa and Japan where structural modifications were carried out. By the end of

^{*}Colonel Roger W. Peard, Jr., who commanded HMH-463, in 1968, observed that the greatest difference between the UH-1E and UH-1H models was engine power, otherwise the aircraft were very similar. Peard wrote that maneuverability "relates to a machine's ability to change direction, accelerate, and decelerate. These are important characteristics for fighter/intercepter aircraft, but not so crucial in a helicopter. Maneuverability in a helo may add to the exhilaration of flight, but most helos are flown to maintain the lift vector from the rotor disc close to vertical to maximize lift." Peard acknowledged that size considerations were another matter and that "laymen" speaking of maneuverability usually refer to ability to "get into a small LZ, which is a size consideration." In any event Colonel Peard did not believe there was enough size differentiation to quibble about between the E and H versions. He concluded, "I imagine that MGen Davis may just [have] liked flying in the newer H rather than in a well-used 'E'." Peard Comments.

^{**}Lieutenant General Louis Metzger who in 1967 and early 1968 as a brigadier general served as the 3d Marine Division Assistant Division Commander, recalled that it took some time to identify the problem with the CH-46 as equipment failure. He remembered that it was sometime in the second half of 1967 that when the 3d Division assistant aviation officer, "was flying and observed the tail come off a CH-46. His report was the first indication of this equipment problem. This observation led to the 'expensive and extensive repair program'...." LtGen Louis Metzger, Comments on draft, dtd 20Dec94 (Vietnam Comment File).

1967, Marine, Navy, and corporate technicians and mechanics had replaced the rear pylons on all but 16 of the 105 Sea Knight aircraft in the Western Pacific. They refitted the remaining aircraft with the structural modifications by February 1968.¹⁸

During the remaining months of 1968, the Marine Corps and Navy initiated the second phase during regularly scheduled maintenance overhaul of the 46s or those aircraft sent back because of extensive battle damage. Called Project Sigma, these modifications consisted of the installation of a new tail section, a new transmission mount, and a cruise guide indicating system.* While the second phase caused less of a drawdown of the CH-46 resources than the initial alterations, about 12 to 14 of the aircraft a month were either at Japan or Okinawa undergoing rework. In July, moreover, the 1st MAW reported two instances of the "structural failure of CH-46 rotor blades" manufactured prior to March 1967. This required the Marine Corps and Navy to undertake a new testing procedure of all the blades of that vintage. While this affected nearly half of the Sea Knights in the 1st MAW inventory, the wing accomplished most of the retesting in-country without impacting greatly on the tempo of operations.19**

Another modification was added to the CH-46s in 1968 that had nothing to do with the structural problems. In February 1968, after much hesitation, General Krulak, at FMFPac, finally approved an experiment of General Anderson's, the wing commander, to replace the 7.62mm machine guns on board the CH-46 with the .50-caliber guns. Major General McCutcheon told Krulak after his visit to Vietnam in January 1968 that almost all commanders, including a division commander, were in favor of the replacement and willing to give up troop space to carry the heavier armament with its greater range. According to McCutcheon, the question was which weapon was "most effective in the air, not on the ground.... Perhaps if you had a .50 to start with While the Marine wing remained concerned about the continuing effectiveness of the CH-46,* several minor problems with replacement parts plagued the large heavy-lift Sikorsky CH-53A Sea Stallion helicopter. General Anderson, the wing commander, later observed that strictly because of the lack of spare parts there were times in late 1967 and early 1968 when only three of the aircraft "would be available for flight." In January 1968, HMH-463, the CH-53A squadron, averaged only a 31 percent availability. During February, General McCutcheon in Washington raised "such a fuss" in Navy aviation logistic cir-

^{*}These modifications resulted "in added structural strength, and give the pilot a means of monitoring the structural loads imposed on the airframe, reducing the likelihood of overstress." Because of the magnitude of these changes, they were accomplished as the aircraft underwent "Progressive Aircraft Rework" (PAR) or Battle Damage Repair (BDR). There still remained, however, significant differences about the extent of modifications needed between the Boeing Vertol Corporation and the Marine Corps. For example General McCutcheon in a letter to an official of the company insisted that the Phase II modifications be carried out "in order to meet the Marine Corps operational requirements." He also expressed his concerns that a "desynch" device [to avoid intermeshing of the rotors] be added to the list of modifications. While willing to soften his position to the extent that he believed "it is 'highly desirable' vice 'mandatory,'" McCutcheon wrote "No matter how you look at it, the pilots still ask the question, 'How do I get down safely if I have desynch and blade intermeshing?" The device was never added. McCutcheon to Robert W. Tharrington, dtd 29Jan68, Ltr No. 28, File T, 1968 Cor, McCutcheon Papers; FMFPac, MarOpsV, Dec68, p. 111.

you might not have been forced down." Faced with the almost unanimous opinion from Vietnam, General Krulak relented. He told both Generals Anderson and McCutcheon that while believing the issue was "completely emotional . . . [but] I am no fool where emotion is involved." With the final assent from FMFPac, General Anderson announced that he desired to arm all of the 46s with the .50-caliber guns, but would "leave it to the discretion of the group and squadron commanders, however, as to whether or not they actually mounted the 7.62mm or the .50-caliber." As General Anderson stated later, he did not want "to make a dogmatic rule" but wanted to permit his commanders to determine the best armament according to the particular circumstances. MajGen Norman Anderson ltrs to McCutcheon, dtd 2 and 7Feb68, and McCutcheon to Anderson, dtd 8Feb68, Letter No 50, File A and LtGen Victor H. Krulak to McCutcheon, dtd 2Feb68 and McCutcheon ltr to Krulak, dtd 8Feb68, Ltr No. 39, File K, 1968 Cor, McCutcheon Papers; MajGen Norman J. Anderson, Comments on draft, n.d. [Jan95] (Vietnam Comment File), hereafter Norman Anderson Comments.

^{***}Besides the structural problems with the CH-46, Lieutenant Colonel Roy J. Edwards, who commanded HMM-265 which operated with SLF Bravo in the summer of 1968, related problems with fuel filters which were unable to prevent the "super fine sand in this littoral region . . . [from] being drawn into the fuel tanks as the helicopters . . . landed on or near the beaches." After extended use, the sand "worked its way into the fuel controls of the helicopter to prevent it from developing full power." According to Edwards, "this [was] happening to all [emphasis in the original] my helicopters even though they had all the routine prescribed maintenance." He recalled two near-accidents caused by the problem: "I had one a/c [aircraft] on a milk run take off from the carrier, climbed straight ahead, lost power and sagged back on the carrier as the carrier ran up under him! He was fully loaded with passengers, supplies, and mail. Not one got their feet wet!" In the second incident, a helicopter on the way to the beach from the carrier also lost power, "the pilot kept the engine running and just flew into the water and taxied the several miles to shore." Again there were no injuries nor damage. He then halted flights of all of his CH-46s until the squadron could determine a "fix". Eventually, they placed additional air filters on "the air intake to the fuel tanks of the helicopter plus judicious monitoring/cleaning of the fuel controls after each flight onto the beach where this 'superfine' sand was being ingested. This didn't prevent the contamination but we learned to live with it." According to Edwards, "it was a 'soul-searching' experience to have to 'ground' my helicopters in the middle of a war, while we found out . . . how to counteract." LtCol Roy J. Edwards, Comments on draft, dtd 10Nov94 (Vietnam Comment File).

cles that he "got a KC-130 load of CH-53 spares . . . under the nickname of Floodtide" sent out to the 1st Wing. Observing that the list of parts included clamps, tubes, gaskets, fasteners and other "mundane items", McCutcheon exclaimed, "I'll be damned if I can understand why this kind of stuff is not available in Da Nang or at least Subic [the Navy base in the Philippines at Subic Bay]."²⁰

While appreciative of the effort upon receipt of the Floodtide supplies on 4 March, General Anderson complained, "One critical item follows another in the history of the CH–53." He stated that during the past week he only had nine of the large helicopters flying for a 33 percent availability rate. According to the wing commander, if only he had replacement windshields to install he could have another 10 of the large aircraft in the air. Adding to Anderson's woes, an enemy rocket attack on Marble Mountain the night before resulted in the loss of one of the CH–53s.²¹

During the following months, the situation improved, but only modestly.* For example, in April, General McCutcheon again had to arrange a special airlift for CH–53 spare parts with "no appreciable change in their operational readiness." Only a third of the large choppers were operationally ready as contrasted to the number on hand. While not overly concerned about those figures, McCutcheon observed that these statistics become "alarming" when the number of operationally ready aircraft were compared to the number of aircraft assigned. The availability for the CH-53s then dropped to about 25 percent. In August, the arrival of HMH-462 at Phu Bai with 10 additional aircraft bringing the total of the Sea Stallions in Vietnam to 43, provided some relief for the other 53 squadron, HMH-463.** According to FMFPac, this improved the lift capability of the wing by 34 percent.22

**Colonel Joseph L. Sadowski, who commanded HMH-463 early in 1968, recalled that during Tet there were insufficient airframes to send a second CH-53 squadron to Vietnam, "not to mention the training pipe line for pilots/mechanics and the required flight hours stateside to accomplish this task." Col Joseph L. Sadowski, Comments on draft, dtd 20Nov94 (Vietnam Comment File).

While the CH-53 recovered some 167 downed helicopters and one Cessna O-1B light fixed-wing observation aircraft during the year, the aircraft continued to have problems. Near the end of 1968, Brigadier General Homer Dan Hill, the assistant wing commander, provided General Quilter his assessment about the CH-53 limitations. According to Hill, while the helicopter could carry about 9,000 pounds total, even under normal circumstances it could lift no more than 8,000 pounds externally. This load was further curtailed in the heat and mountains of Vietnam. The Sea Stallion was not capable of bringing in heavy equipment for the building of firebases or lifting in the large 155mm guns to these sites. In order to carry out these missions, the 3d Marine Division relied upon nearby Army helicopter companies equipped with the CH-54 Tarhe Sky Crane that could carry an external load of approximately 20,000 pounds. The Army Sky Cranes recovered 41 of the Marine CH-46s. Hill pointed to the fact that the Marines very recently lost three CH-46s that could not be field stripped and "quickly lifted to safety by the CH-53A." He recommended that the Marine Corps try to procure a heavy-lift helicopter that could match the Army Sky Crane.23***

While design factors played a role as did a continuing pilot shortage**** in helicopter availability, the one constant problem was the lack of spare parts, especial-

^{*}Colonel Roger W. Peard, who commanded HMH-463 in the second half of 1968, observed that he made some changes relative to spare parts procurement. He recalled that when he took over, four aircraft were being used to scavage parts for other aircraft, but that the MAG-16 maintenance officer did not believe in creating "hangar 'queens' for parts." Instead when an aircraft was scheduled for its annual inspection, good parts were removed to replace parts needed by other aircraft. The other aircraft was then sent back for rework. While this may have increased labor costs, no perennial "hangar queens" were created. According to Peard, "parts shortages persisted, but this system improved availability of the CH-53A in HMH-463." Peard Comments.

^{***}General Carey, who in 1968 served on the wing staff, observed that through July the availability of the CH-53 was so low, "we frequently requested use of the CH-54 flying cranes for aircraft retrieval. At one time the situation was so bad we even considered requesting emergency procurement of our own flying crane capability." Carey Comments. Colonel Peard, a former CH-54 squadron commander, observed that relative to the external and internal lift capabilities of the CH-53A Sea Stallion, "weight is weight, wherever you put it in or on the aircraft." He stated, however, that the helicopter could carry an internal load at a higher airspeed, because of the limitations caused by "load motion, that is swinging." Colonel Peard acknowledged that the Army CH-54 Sky Crane was the "undisputed heavy-lift champion . . .," but noted that in contrast to the CH-53, it did not have a trooplift capability. According to Peard, General Quilter, the wing commander, "did not like going to the Army to use the Sky Crane . . . [and directed that] one of the CH-53s in HMH-463 be stripped of all possible equipment to lighten it as much as possible and thus maximize its lifting capability." Peard Comments.

^{****}See Chapter 27 for a detailed discussion of pilot training and shortages. Relative to the helicopter pilot shortage, in October 1968, Major General McCutcheon at HQMC witnessed the first six Marine officers graduate from the Army helicopter school at Hunter Airfield near Savannah, Georgia. He believed that with the inauguration of this training program earlier in the year that "finally got the pilot problem whipped into shape so that from here on in we should be making progress." McCutcheon Itr to E.E. Anderson, dtd 10 Oct 68, Ltr No. 93, File A, 1968 Cor, McCutcheon Papers, MCHC.



Top photo is from the Abel Collection and bottom photo is courtesy of Col Roger W. Peard, USMC (Ret) Top, a Marine Sikorsky CH-53 Sea Stallion lifts a damaged Marine Sikorsky UH-34D Sea Horse from the landing strip at An Hoa. Below, a crashed CH-53 Sea Stallion, itself, is lifted by an Army Tarhe CH-54 Sky Crane back to MAG-16 at Marble Mountain. The Army helicopter could lift up to 20,000 pounds.



ly for the CH-53s, but also for the 46s, and to a lesser extent the UH-1Es. While noting the low 25 percent availability in April for the Sea Stallion helicopters, General McCutcheon also pointed to a 33 percent and 50 percent availability respectively for the CH-46s and Hueys.* Five months later, in August, the 1st MAW commander, Major General Quilter wrote, "we are in deep trouble on provisioning for engine and airframe spares in the helos-CH-46, CH-53, UH-1E." In October 1968, a senior naval aviation supply officer in a speech to his colleagues stated, "if aircraft are going to fly, we all are going to have to get off our collective butts and manage repairables. There is only one word to describe the job we're doing-lousy." Throughout 1968, the resupply rate for Marine Corps helicopter parts hovered around 70 percent.24

In an exhaustive examination of Marine helicopter support, a III MAF special board in the spring of 1969 blamed the lack of spare parts on unrealistic standard monthly hourly flight maximums set in Washington. It observed that the "CNO monthly hourly flight maximum is the key against which dollars are made available to DOD [Department of Defense] to buy spare parts" The problem was that these established norms had not taken into consideration the demands upon the limited number of Marine helicopter assets in Vietnam and the resulting scarcity. To meet the actual combat requirements, the Marine helicopters constantly overflew the set maximums.** As the board concluded, the Marines had less "total helicopters available for daily operations and as a result we fly those in commission far in excess of the hour rate required for good maintenance, safety of flight, and dependable availability."25

The statistics of helicopter sorties flown, passengers carried, and tonnage lifted during 1968 set a record pace. From February through July 1968, Marine helicopters flew at an ever-increasing rate, running up the number of sorties, passengers carried, and tonnage lifted. For example in March 1968, the rotary aircraft flew more than 44,000 sorties and lifted over 53,000 troops and nearly 7,000 tons of cargo. This was an increase of over 10,000 sorties for the previous month, and 3,000 over the monthly average of the previous year. In July, the total number of sorties reached 71,452, a new monthly high for the war.

While the Marine helicopter pilots would fly at a slightly slower tempo after July, they still maintained a monthly average of about 60,000 sorties, with the exception of a slight dip in the numbers for September. In December, the Marine helicopters carried out 59,838 sorties, ferried over 113,499 passengers, and lifted 13,835 tons of cargo. For the year, the totals were 597,000 sorties, 122,100 tons of cargo, and 935,000 passengers. These figures represented a 31 percent increase in sorties, a 39 percent increase in passengers carried, and a 39 percent increase in tonnage lifted over 1967.²⁶

Notwithstanding that most of these helicopter missions were in support of Marine forces, a substantial number, 43,138 sorties for the year amounting to six percent of the total, were for other forces in Vietnam. These included 34,094 sorties for the Koreans, 3,840 for the ARVN, 3,508 for U.S. Special Forces, 1,666 for the U.S. Army, and 30 in support of the Seventh Air Force. While a lower percentage than the previous year, these flights in support of both allied and other Services still caused a drawdown on the scarce Marine helicopter resources.²⁷

Another Look at Helicopter Air-Ground Relations

During the spring of 1968, in order to meet the increasing demands on its resources, especially in the north, the 1st Wing decided to alter some of its command arrangements. As early as 6 March, acting on a suggestion of his staff, General Norman Anderson recommended the establishment of a provisional MAG at Quang Tri Airfield with three squadrons to reduce the span of control for MAG-36. In the meantime, MAG-36 maintained a forward headquarters and three squadrons, VMO-6, HMM-163, and HMM-262 at Quang Tri Airfield under Colonel John E. Hansen, the group's deputy commander. Finally after securing approval from both FMFPac and Headquarters, Marine Corps, on 15 April, General Anderson ordered the establishment of the new helicopter aircraft group, appropriately designated Provisional (Prov) MAG-39. He detached the three squadrons already at Quang Tri from MAG-36 to form Prov MAG-39 and made Colonel Hansen the new MAG

^{*}According to Lieutenant Colonel Thomas F. Miller, who assumed command of HML-167 in August 1968, the availability of UH-1Es, or at least for his squadron had improved in a few months. Miller stated his squadron "never suffered at a lowly 50 percent to my knowledge. During Sept-Dec68, with 14 aircraft assigned, average operational readiness was 84.7 percent " Miller Comments.

^{**}Lieutenant Colonel Walter H. Shauer, Jr., of HMM–262, wrote that his pilots "continuously overflew the CNO programmed monthly flight hour maximums (both in aircraft and pilot hours.)" He mentioned that his personal log book revealed "in a ten month period 914 flight hours, . . . [averaging] 91 hours per month." Shauer Comments.

MARINE HELICOPTER SORTIES JANUARY-DECEMBER 1968



From Ooperations of US Marine Forces Vietnam 1968.

commander.* General Cushman, the III MAF commander, admitted that "splitting the helicopters was sort of against our philosophy," but observed that they needed the helicopters near the 3d Division in the DMZ sector: "We had to move them up there so they'd have them."²⁸

Despite the establishment of Prov MAG-39, the new group was unable to meet the demands of the new 3d Marine Division commander, Major General Davis, who wanted to undertake more mobile operations. According to Davis, the way he wanted to use helicopters "was a whole new learning experience" for both the wing and the division. Davis declared, "instead of sitting down and looking around and saying, 'Where can we go? Where is it easier to put the

Source: FMFPac, MarOpsV, Dec68.

helicopters?' We never said that." Instead, Davis insisted, "We said, we're going to put the helicopters here by making whatever effort is required to prepare the place for the helicopters." The idea was to be "totally flexible and responsive to the ground commander's needs." The new division commander contended that the Marine Corps had given some thought to high-mobility operations, "but we really hadn't done it." He stated that he was not advocating the Army Air Cavalry solution which had too many helicopters and not enough control, but a middle course in which his regimental and battalion commanders at least had their own helicopters.²⁹

From the ground commander and especially the division commander's viewpoint, the main advantage of the Army system was that he owned the helicopter assets. The 1st Air Cavalry brigade and battalion commanders not only had their own personal helicopters, but also could depend on helicopter support almost on call. According to General Davis, in comparison, the Marine helicopter "system was so centralized that you have got to work out in detail the day before exactly

^{*}In May, HMM-161 arrived directly from the United States equipped with the new redesigned CH-46D models and replaced HMM-163, a UH-34 squadron at Quang Tri. According to Colonel Hansen, "this represented a substantial increase in the lift capability of Prov MAG-39 when you consider that HMM-161 arrived with essentially 100 percent aircraft availability versus . . . older [and less lift capacity] H-34s with reduced availability." Col John E. Hansen, Comments on draft, dtd 17Nov94 (Vietnam Comment File).



MajGen Norman J. Anderson, CG, 1st MAW, hands colors of new Provisional MAG-39 to its commander, Col John E. Hansen. The new MAG was formed at Quang Tri to provide helicopter support for the 3d MarDiv.

what you want and schedule it." Davis declared: "There's no way a ground commander can work out a precise plan for the next day's operations unless the enemy is going to hold still"30*

As could be expected this attitude caused immediate problems with both the wing and III MAF. A thenjunior member of the 3d Marine Division staff, Major William H. Dabney remembered General Davis telling III MAF: "Look, if I don't get this helicopter support that I'm asking for ... from you, I'm going to get it from the Army. The devil take the hindmost." According to Dabney, Davis argued against dividing the helicopter support evenly between the two divisions. The support should depend on the actual situation and requirement, not an attempt to distribute the same number of sorties to each command: "Hey, we need 22 sorties, CH–46s because I got an enemy that I can use them against, not because I'm one division and he's another."31

In personal letters to Washington, the 1st MAW commander, General Anderson, described his perception of wing-division relations. He declared that he had "tried at every turn to get the Marine doctrine of airground command structure accepted in III MAF." Anderson believed that "many of our problems have resulted from failure to inject sound air thinking into ground plans in a timely fashion." The wing commander mentioned, however, that he had opened at the Quang Tri Airfield what he called the 1st MAW Aux-

^{*}Major General Norman Anderson commented: "Twenty-five years later the crux of this disagreement still is numbers and types of helos, a fact of life exacerbated then by the proximity of helo-rich Army units. General Davis could not make a valid case at that time because a decision to let him have all the helo support he wanted had to be made at the III MAF level if not higher. At those levels the broader and deeper problems were dominant and they, of course, prevailed therefore at the Wing." He observed, "The Marine Corps remains structured primarily for assault from the sea, which is as it must be." Norman Anderson Comments.



Photo from the Abel Collection

BGen Homer D. Hill, one of the assistant wing commanders, poses at the Khe Sanh airstrip before the evacuation of the base. The wing opened an auxiliary command post at the Quang Tri Airfield under Gen Hill to coordinate belicopter operations with the 3d MarDiv.

iliary CP, under one of his assistant wing commanders, Brigadier General Homer D. Hill. Anderson directed Hill, "to interest himself in all aspects (not only helos . . .)" of the wing in northern I Corps.³²

While Anderson still complained that "Davis is totally insatiable," the establishment of the forward headquarters improved the relations between the wing and the division.* Major General Davis later related that the assignment of Hill to Quang Tri "provided this division with . . . an air/ground team capability" He stated that Hill's presence made his mobile concept work, "so long as he was here we were solving problems." In October 1968, General Hill mentioned in a letter to General Anderson that the division and wing had conducted about 75 "highly successful helicopter heli-borne assaults in and around the DMZ" since he had been there. Hill's assistant participated in all "3d Division planning and Task Force operations." According to Hill, this was helpful to both the ground and air commanders: "We stay on top of all operational discrepancy reports—both ways moving fast to correct what is wrong from either side—Division or Wing." General Hill wrote that he attended all division briefings with General Davis and went with him "on many of his helo rides to his units talking to our FACs [forward air controllers] and ALOs [air liaison officers] as well as the regimental and battalion commanders." Hill praised Anderson for establishing the forward headquarters and that it had paid dividends in Marine air-ground relations.³³

This short honeymoon between the 3d Marine Division and the wing soon came to an end. In October, the wing decided to close the forward headquarters and bring General Hill south to be part of a joint 1st Marine Division and wing task force to conduct Operation Meade River in the Da Nang area of operations. General Davis, the 3d Division commander, protested, but to no avail. According to Davis, when Hill departed, the situation immediately deteriorated. Davis complained that without Hill, he was left "to deal [with] agents of the wing and agents of III MAF who were not in a position to make any decision short of going to Da Nang. This was unworkable." In an attempt to placate the 3d Division commander, General Quilter would honor specific requests to send General Hill "to come up and stay awhile" until the particular problem was resolved. Davis stated, however, for the most part, "it has not been a good arrangement to attempt to conduct a air/ground team effort up here with the air part of the team having no authority."34**

^{*}General Davis commented on the draft that he was, "amused at my 'insatiable' need for choppers... when I had more enemy than anybody else!" Gen Raymond G. Davis, Comments on draft, dtd 4Sep95 (Vietnam Comment File).

^{**}Both Lieutenant Colonel Shauer and Lieutenant General Carey praised in their comments the efforts of General Hill in improving relations with the 3d Marine Division. In a letter to Shauer in June 1968, General Hill wrote, "I have noticed a great improvement in UH-34 ops over the last few days as a result of things you have done. I believe relationships have improved considerably between supporting and supported units. This is good. Keep up the fine work. Let me know of any problems we can help on." Shauer Comments and BGen H.D. Hill ltr to Maj Shauer, dtd 29Jun68, Encl, Shauer Comments. General Carey declared that while General Hill was with Davis the relationship with the division "was superior. Simply because he spoke for the wing and worked so closely with the Division commander." According to Carey, Hill "maintained a constant dialogue on both fixed-wing and helo support for the Division. It was not uncommon for him to be on the phone at all hours of the day and night working closely with us on the details of the required support. He certainly took the pressure off the Wing G-3 section. After he left, work had to be conducted through an intermediary, which really slowed down

While there were two assistant wing commanders, the second AWC, Brigadier General Henry F. Hise, served as the coordinator for air bases throughout I Corps and apparently was not available to take General Hill's place. From the III MAF perspective, Brigadier General E. E. Anderson, General Cushman's chief of staff, believed Hise's function could better have been accomplished by the 1st MAW chief of staff. General Anderson quoted Hise to the effect "that having a second AWC in the 1st Wing is like having tits on a bull."* Anderson supported a move to eliminate the position altogether and convinced both General Quilter, the wing commander, and General Cushman. According to Anderson, Quilter was of the opinion that unless given command of an air-ground task force. a second assistant wing commander was superfluous to his needs. On 19 December, the III MAF commander, General Cushman, officially asked FMFPac that a replacement for the second AWC not be sent. General Buse, the FMFPac commander, concurred. Apparently no thought was given to sending General Hise or his replacement to Quang Tri to replace General Hill.35

Even if an aviation general officer had been sent north, there remained some question whether the deteriorating relations between Marine air and ground officers would have improved measurably. As early as August, Major General McCutcheon in Washington wrote to Major General Quilter about disquieting reports from returning officers from Vietnam, varying "in rank from lieutenant colonel to major general that we do not have the communication and dialogue in existence between air and ground units that we should have." Even Brigadier General Hill commented that the wing would THE DEFINING YEAR

never "satisfy the [division's] helo appetites." He complained about lacking UH-1Es and being "plagued by the UH-1E gunships syndrome" as well as problems in helicopter availability. According to Hill, the only way the wing could meet the demands of both divisions was by overflying the maximum standards. As he later remarked: "This can only do one or two things; it can get you in trouble real fast, or sooner or later, it can drive you off the deep end."³⁶

In October, at the III MAF staff level, Brigadier General Earl E. Anderson remarked that "Ray Davis has really been shot in the fanny with the Army helicopter system, although I frankly believe that it's more the result of the large numbers of helicopters available to the Army units, together with the fact that the ground officer has greater control over them than does the Marine commander." According to Anderson, the 3d Marine Division general had proposed to III MAF the establishment of an "air cavalry group, similar to the 1st Air Cav." General Cushman had taken the recommendation under advisement and asked for opinions from his staff and senior commanders.³⁷

At about the same time, one of Davis' regimental commanders, Colonel Robert H. Barrow of the 9th Marines, forwarded a memorandum through command channels about modifying procedures on the use and control of helicopters. He wrote that while Marine doctrinal publications "do not clearly express the air ground command relations for helicopter operations," he believed they implied flexibility. He suggested that Prov MAG-39 be placed in direct support of the 3d Marine Division. According to Barrow, "essentially, the helicopter unit commander advises the helicopter-borne [ground] unit commander, participates in planning and, within his capability, provides the helicopter support and performs the tasks required by the helicopter-borne unit commander."38

Colonel Barrow then came to the crux of the matter. He urged that the ground commander be permitted to determine "type and adequacy of landing zone preparation, switching from primary to alternate landing zones, and landing in a high risk situation." Rejecting this idea, Major General Quilter, the wing commander, wrote across the memorandum: "This would overrule air judgment of pilot. Pilot has no authority to do *anything*," At this point, General Cushman decided against

the decision process. We also lost the pulse of the dynamic, fast-moving General Davis." Carey Comments. In a dissenting opinion, Colonel Walter Sienko, who assumed command of Prov MAG-39 in July 1968, commented that "if we had a full-MAG-39 at Quang Tri instead of a Prov MAG with limited resources, we still would not have satisfied the needs of General Davis." He believed "the decision of not inserting a third general officer in the chain of command between air and ground at the MAG level was a correct one." Col Walter Sienko, Comments on draft, n.d. [Nov94] (Vietnam Comment File).

^{*}Brigadier General Hise commented that "the West Texas saying, an area where I originated, is 'as useless as tits on a boar.' A boar has up to ten vestigial tits, a bull has only four. However, as with assistant wing commanders, an increase in their number does not add to their usefulness." BGen Henry W. Hise, Comments on draft, dtd 22Dec94 (Vietnam Comment File).

implementing either General Davis' or Colonel Barrow's recommendations.^{39*}

The controversy between the air and ground commanders surfaced in February 1969 in the Marine Corps Gazette, the Corps' professional journal. In a letter to the editor, Major General Davis publically vented his frustrations about helicopter usage and control. He stated that he regularly used Army LOH and other light helicopters for scouting and reconnaissance missions. Countering claims by the wing that the helicopters were vulnerable to enemy heavy machine gun fire, the division commander argued that the Army aircraft "have not been hit by ground fire-although they have discovered a number of 12.7 AA [antiaircraft] machine guns near the LZnor any of our troop helicopters hit by ground fire." On the other hand, Davis declared that as many as nine Marine helicopters at one time sustained damage in a landing zone when not using scout helicopters. He contended that "these scouts are as important to security of helicopter operations as scouts on the trail are vital to the security of ground maneuver units "40

Davis then turned to the matter of command relations between the helicopter and ground commanders. He complained that for the most part, after the initial planning, the infantry commander played a secondary role "in most of the Marine helicopter assaults in Vietnam." The company, battalion, or even regimental commander found himself stranded at the pick-up zone, "while the helicopter leader with his captive load of troops decides where, when, and even if the troops will land." According to Davis, "this is more the rule rather than the exception." General Davis then asserted that if a greater effort was made to include the infantry commander in the process, "we would have less aborts, better preps, and fewer landings made in the wrong LZ."41

The entire subject came to a head in the spring of 1969. In April, Lieutenant General Herman

Nickerson, who succeeded General Cushman as Commanding General, III MAF, ordered the formation of a board of senior officers, headed by his deputy, Major General Carl A. Youngdale, "to examine the use and command and control of Marine Corps helicopter assets" After holding extensive hearings, the Youngdale Board reported back to Nickerson. While recognizing that the root of the problem "lay in the shortage of helicopter assets in terms of numbers, types (particularly armed helicopters), mix, and lift," it identified several other problems. Chief among them was a lack of confidence between air and ground officers concerning the other's ability to carry out his part of the mission. Other shortcomings included the need for the development of more detailed planning and better coordination between the air and ground components in helicopter operations.42

While making several recommendations, the board realized that many of these questions required long-term solutions. This was especially true about building mutual trust between Marine ground and air officers. In part, the board concluded that there was a lack of common professional experience and socialization between the two groups.** The shortage

^{*}According to Lieutenant Colonel Louis J. Bacher, from his experience as commander of the 2d Battalion, 27th Marines at Da Nang until June, 1968, "it was necessary to schedule a helicopter for aerial reconnaissance of an 80 grid square TAOR days in advance. MedEvac requests were assigned a priority category and were filled accordingly, usually hours later. In contrast, Army battalion commanders had light observation and command helicopters (LOACH) either organic or readily available. The KMC [Korean Marine Corps] Brigade had at least three cargo choppers and one Huey assigned daily." LtCol Louis J. Bacher, Comments on draft, dtd 7May95 (Vietnam Comment File).

^{**}Lieutenant Colonel Thomas F. Miller described two programs that MAG-16 undertook to promote harmony between the helicopter and ground community. On large operations, the MAG operations officer and "the pre-selected helicopter flight leader to the ground commander's unit for the initial [emphasis in the original] planning sessions. These officers familiarized themselves with the ground unit's objectives. At this time they could offer their input to the OpPlan prior to it being 'etched in stone.' The officers returned to the ground unit as alterations or changes occurred." He believed this resulted in the following advantages: "1. . . . [The operations officer would] thoroughly [emphasis in the original] brief all helicopter flight crews participating in the assault. The crews were told exactly what the ground units were trying to achieve and where they in helicopters fit into the picture. (2) The selected flight leader knew exactly what the ground commander's objectives, time schedules, and general scheme of maneuver were; and planned his flight accordingly. On D-day the air and ground commanders were on the same page. If a change in landing zones became necessary, the flight leader made his recommendation based on the known ground commander's objectives. This program was very successful." In the second program, "on each Friday numerous company-grade officers were invited and flown 'out of the bush' to Marble Mountain. The officers were guests of the pilots at MAG-16. They were treated to hot showers, great meals, movies, and/or a socializing 'adult' beverage at the club. Saturday they could hit the PX; then toured the helicopter base and participated in a 'give & take' briefing session at the S-3 bunker. These 'give and take' sessions eliminated many of the misconceptions shared by both ground and the air officers who supported them. They made working together much, much easier." Miller Comments.

of pilots had exacerbated these differences. Because of the pressing need for aviators, especially helicopter pilots, many went to their duty stations without attending the Marine Corps Basic School at Quantico, let alone Marine Corps intermediate and senior schools.* The board recommended increased training in the coordination of air and ground and requiring all officers to attend the Amphibious Warfare School at Quantico.⁴³

While rejecting the Army helicopter control system as not applicable to the Marine Corps, the Youngdale board proposed that the wing reestablish its forward headquarters with the 3d Marine Division. It also called for a reexamination of Marine Corps helicopter tactics with an increased emphasis on helicopter gunships. On the other hand, the board also exhorted ground officers to practice "economy in the employment of helicopters," to be used only "when essential as opposed [to] when they are nice to have."⁴⁴

Even with the implementation of many of the Youngdale Board recommendations, the question of control and coordination of helicopters between Marine air and ground commanders remained to a certain extent unresolved. The departure of the 3d Marine Division from Vietnam in the fall of 1969, however, made the availability of helicopters more plentiful. This muted the debate over control.

Through the latter part of 1968, however, the differences over helicopters dominated the relations between Marine air and ground officers. Much of the tension resulted from the simple fact that there was not enough nor a sufficient variety of helicopters to go around. The Marine wing was supporting two and a third divisions and as one senior Marine aviator stated, "we didn't have two and a third's divisions worth of helicopters." Part of the problem, however, was organization. As another Marine aviation general observed, "we should never [italics in the original] try to support two divisions with a single Wing command, no matter how big the Wing is." The question of how much control or influence the ground commander should have over helicopter operations, nevertheless, is still a bone of contention between Marine air and infantry commanders.45

^{*}See Chapter 27 for discussion of pilot shortages and Marine aviators attendance at Marine schools. Lieutenant Colonel Daniel M. Wilson, who commanded HMM-361 in Vietnam, related that prior to that assignment he had commanded HMM-162 at New River, North Carolina where, "we were primarily if not exclusively engaged in training Pensacola graduates for Vietnam—a pipeline of about three months." When he took over HMM-361 and commanded "these same pilots in combat it became ap[parent] that more operational training was desirable at least . . . so [far] as Quantico schooling." He stated, "there neither were sufficient pilots nor time [for that additional training]." LtCol Daniel W. Wilson, Comments on draft, dtd 2Dec94 (Vietnam Comment File).