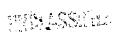
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Operations of battalion size or larger were conducted in all five provinces of I Corps, and the Special Landing Force of the Seventh Fleet attacked enemy positions in the Mekong Delta. Overall, these large unit operations were characterized by brief and generally light contact. They resulted in only 278 of the enemy killed, a figure substantially less than the average of the past year.

In January, Marine attack aircraft flew 4,300 combat sorties in South Vietnam, 490 in Laos, and 268 in North Vietnam, while an additional 214 photo reconnaissance and electronic countermeasure sorties were flown north of the Demilitarized Zone. The air effort in South Vietnam killed 202 of the enemy. There were 31,788 helicopter sorties, 27,103 of them in support of III MAF.

Revolutionary Development progress in the Marine areas showed small statistical gains, with fourteen villages advancing in some degree in their pacification level. At month's end, 600,205 villagers were living in areas considered to be under firm government control. As time passes it becomes increasingly plain that progress in Revolutionary Development must depend largely on ARVN effectiveness in their newly assigned RD mission.

As a part of the Revolutionary Development program, 13 County Fair's were conducted in January, the highest total since September. In these operations, GVN authorities processed 8,351 villagers, raising to 54,970 the cumulative number screened, fingerprifited, photographed, and issued identity cards in the 101 Marine County Fair operations since February 1966. Fourteen enemy were killed and 10 captured, bringing to 478 the number of enemy killed or captured in County Fairs to date.





Combined Action Companies - integrated Popular Force and U. S. Marine infantry - continued to exhibit their effectiveness as local security forces in support of Revolutionary Development. In January, they conducted 3,090 squad size patrols and ambushes, 14 platoon size search and clear operations, and 19 operations in combination with Marine units. CAC's killed 25 of the enemy and captured 56, the latter figure, in particular, an indication of the CAC's ability to obtain, and respond to, information about Viet Cong.

The substantial nature of the CAC program is becoming more visible as time passes, not only in terms of the effectiveness of the Popular Forces involved, in comparison with other Popular Force units, but in the hard achievements of the CAC formations. As a basic unit of measure, since the program began, the Viet Cong have never been able to reestablish control over an area seized from them by a CAC unit.

#### AIR OPERATIONS

During the month, Marine attack aircraft flew a total of 5,058 combat sorties: 4,300 in South Vietnam, 490 in Laos and 268 in Route Package I of North Vietnam. Electronic countermeasure and photo reconnaissance aircraft flew an additional 214 sorties north of the DMZ.

Over 6,369 tons of bombs and napalm, 11,000 rockets and 111,000 rounds of 20mm cannon ammunition were expended on enemy targets in January. Results of these attacks show 202 enemy confirmed killed by air and 1,769 buildings and 36 bunkers destroyed. Further evidence of the effects of this intense air effort came from a former member of the 1st VC Regiment who rallied to the GVN in Quang Ngai province at the end of the month. According to Le Van Lum, his company had suffered 100 casualties during late November due to bombing and artillery missions. He further stated that civilians in the countryside who had previously supported the Viet Cong were turning against them. Le said people have asked him, "What is the use of feeding you if you cannot defeat the enemy? You are only capable of drawing bombs."

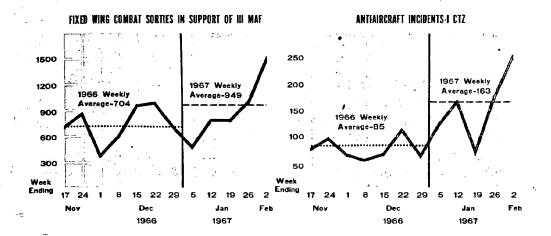
Strike aircraft flew 791 sorties in close support of the eight Marine large unit operations from Prairie at the DMZ to Operation DeSoto at the southern border of I Corps. Four hundred forty-one air attacks supported Operation Prairie and 193 were flown in support of Operation Chinook in Thua Thien.

The accelerated pace of Marine air operations in support of the intensified counterguerrilla campaign led to a sharp increase in antiaircraft incidents in January. During the month, the 1st Marine Aircraft Wing lost 2

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fixed wing aircraft and 6 helicopters to antiaircraft fire. In addition, a total of 38 fixed wing aircraft and 138 helicopters received combat damage ranging from single bullet holes to major damage requiring overhaul facility repairs in Japan or the Philippines. Fixed wing sorties and antiaircraft incidents over the past 12 weeks are shown below.



#### The A-6A Intruder

In November VMA(AW)-242 arrived in-country, equipped with 12 A-6A aircraft. Since that time these aircraft, with a substantial all weather capability, have flown over 1,300 sorties, including 952 at night. Over 1,052 instrument flight hours have been logged without accident or incident; a creditable night/all weather record.

During January, a total of 473 A-6A sorties delivered 1,777 tons of ordnance on enemy targets in I CTZ and North Vietnam. All 67 strikes north of the DMZ were flown at night and during poor visibility, when other aircraft types were obliged to abort due to target weather. Bomb damage assessments are limited in the environment in which this

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aircraft performs. However, four secondary explosions from hits on supply dumps have been sighted and an average of 3 or 4 moving targets have been detected and attacked each night.

The bomb carrying capacity of the aircraft, complemented by automated navigational and attack problem solving systems, makes it a versatile element of the tactical air effort.

Possible ordnance loads for the A-6A include 30 MK-82 500 pound bombs which can be delivered on a target obscured by weather or darkness 500 miles distant, or 5 MK-84 2,000 pound bombs which can be placed on targets 750 miles from the launching base. Other possible loads include five 1,000 pound fire bombs, four AGM-12 Bullpup missiles, or various combinations of these weapons with bombs or external fuel tanks. In short, the A-6A represents about 3.5 times the usual bomb load capability of the A-4 or F-8 aircraft and twice that of the F-4B.

The automated systems, called Digital Integrated Attack and Navigation Equipment, short name DIANE, include a digital computer, a high resolution search radar, a target tracking radar, an inertial navigator, an automatic flight control system and an automatic defensive and passive electronic countermeasure system. The output of the various automatic systems is displayed in the cockpit to present a real world picture of terrain and/or target. Readouts of geographical location, range and bearing to a check point or target are constantly available.

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Capabilities inherent to the DIANE include the ability to detect moving targets on the ground with the search radar and initiate an immediate attack on the target with the computer system providing continuous data to the crew. Another useful capability is offset bombing by radar. Using a prominent terrain feature or a radar reflector at a known geographical point as a reference, the Intruder can be directed to targets by range and bearing from the reference point. By this method ordnance can be delivered on targets which the pilot cannot see. Nine Special Forces camps in I CTZ have been surveyed by A-6A radar and prominent terrain features charted. Two camps have been provided locally fabricated radar reflectors, and AN/PRC-25 radios have been installed in the Intruders to permit direct communication with ground units.

The complex avionics systems which give the Intruder its capabilities are not easily maintained. The average number of aircraft with complete all-weather capability, all systems functioning, has been between 1 and 2 each day. Improved intermediate level avionics support should improve this situation, as the supply pipeline expands. As an interim step in this direction, on 25 January the Chief of Naval Operations directed a realignment of priorities in allocation of spare parts for the A-6 aircraft in WestPac. The effects of this measure were not yet apparent at the end of the reporting period.

# Helicopter Operations

A total of 4,262 tons of supplies were delivered

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to combat units and 47,421 personnel were lifted in ICTZ by MAG-16 and MAG-36 helicopters during the month. Of the total 31,788 sorties flown, 27,103 were in support of III MAF operations, 1,897 for I Corps ARVN and 2,806 for the 2d ROK Marine Brigade. Of these, 1,427 sorties were flown to evacuate casualties.

During January, a detachment of HMH-463 arrived from CONUS. The four CH-53A helicopters with which this element is equipped extend significantly the heavy lift capability organic to III MAF. The CH-53A can lift up to 8,000 pounds of cargo internally at a cruising speed of 150 knots to an advanced landing zone, hover for 10 minutes, land and return to the original take-off point with a 4,000 pound payload, and still have 10% fuel remaining.

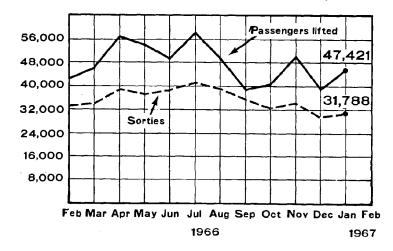
The cargo compartment is 30 feet long, 7.5 feet wide and 6.5 feet high. Cargo handling is accomplished through a rear ramp. Conveyors and built in winches permit rapid loading and unloading. In addition, a hoist for external lifts is located in the center of the cargo compartment. Under ideal ambient conditions, a 2 1/2 ton truck can be lifted for limited distances. The external lift capability of the CH-53A permits it readily to lift disabled UH-34D or CH-46A helicopters and return them to base.

A secondary mission for the CH-53A is the movement of troops or casualties. In normal configuration, the helicopter can seat 37 combat equipped troops or carry 24 litters.

The size of the CH-53A, over 88 feet long, dictates landing zones 200 feet wide on fairly level ground. The 95 knots of wind generated by the main rotor blades at maximum power make the removal or securing of any loose material in the area necessary.

In the first three weeks of combat operations in Vietnam, the four CH-53A helicopters have flown 129 sorties and, at the end of the month, had an aircraft readiness level of 66 percent.

# HELICOPTER SORTIES AND PASSENGERS LIFTED



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# **SUMMARY**

In February, the enemy continued his accelerated pace of operations which first appeared in December 1966. Strong action against our and ARVN forces in the hinterland, coordinated guerrilla activity against the Revolutionary Development structure, coupled with widespread mortar and rocket attacks on ARVN outposts and US bases, gave substance to the North Vietnamese premier's assertion that the current six months is to be a period of violent counter attack. This effort, although costly to the enemy, has heavily extended the US and GVN resources in the I CTZ.

Meeting the enemy's increased pace, the intensity of Marine operations proceeded at record, or near-record highs. In the single month there were 13 large unit operations, including one amphibious landing; 21,829 small unit counterguerrilla actions of up to company strength (monthly average in 1966 was 11,705); 119 Sting Ray missions (monthly average in 1966 was 79); and 3,765 attack aircraft sorties (monthly average in 1966 was 3,402).

The enemy's February effort resulted in heavy losses to him, with little compensatory gain. He suffered 1,721 troops known killed by Marines, second only to September (1,789 enemy KIA) when he made a strong, but unsuccessful bid in the DMZ area. Concurrently, the ARVN and ROKMC in the I CTZ killed 1,485.

More prisoners were taken by Marines in February (209) and there were more Chieu Hoi returnees in I CTZ (279) than in any month of the war to date. Prisoner and defector reports continued to produce a consistent theme of fear, sickness and low morale on the part of the enemy.

Efforts by III MAF to exploit the opportunities offered by the enemy's increased exposure were limited by broad commitments throughout the ICTZ, which spread the Marines' resources thin. Concurrently, the ARVN entry into support of the Revolutionary Development program caused further drain on the Marine resources. Introduction of thirteen Vietnamese infantry battalions into the RD program was accomplished at an investment of two and one half Marine battalions, which assumed the responsibility for outposts which the Vietnamese had hitherto manned. There is optimism that the Vietnamese pursuit of Revolutionary Development will be productive. Few concrete results are yet visible.

One endeavor aimed at getting more out of the thinly spread Marine assets was the Combined Action Program, which, by end-February, was beginning to pick up some of the load. Sixty Combined Action Platoons were in existence, converting some 1,600 relatively unproductive Popular Forces troops into effective soldiers, as they worked, lived, and fought alongside the Marines who were integrated into the Combined Action units.

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# AIR OPERATIONS

# Fixed Wing

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Marine jet attack, fighter, fighter-attack, photo and electronic countermeasure aircraft flew a total of 5, 798 combat sorties during the month. 699 sorties were flown in North Vietnam, 359 in Laos and 4,740 in South Vietnam. Good flying weather at the bases, with only minor exceptions, permitted attainment of this new high total, although weather over targets caused the cancellation of 702 sorties. Marine air support radar teams controlled 1,855 sorties flown under conditions of poor target visibility.

Of the 3,765 attack sorties flown in South Vietnam, 842 - over 22% - were close air support sorties in support of engaged Marine ground units.

Direct air support sorties, which include preplanned armed reconnaissance, interdiction and attacks on enemy forces relatively far into enemy-held territory, accounted for another 2,923 in-country attack sorties. In addition, 920 visual and photo reconnaissance, 47 air defense, and 8 escort sorties were flown during the month.

The 5,755 tons of ordnance placed on targets in the south included 1,304 napalm bombs, over ten thousand 2.75 inch folding fin aerial rockets, and almost four hundred 5 inch rockets. In addition, 135,742 rounds of 20mm cannon ammunition were expended on strafing runs. Damage assessments for these strikes include 257 enemy confirmed killed, 62 bunkers destroyed and 35 others damaged. The 129 secondary explosions from these attacks attest to the large quantity of munitions probably destroyed.

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First Marine Aircraft Wing sorties into North Vietnam delivered 1,004 tons of bombs and 1,130 rockets on military targets. Results that were discernible included 22 secondary explosions, 14 road cuts and 9 antiaircraft gun positions destroyed or damaged.

Sorties over Laos, to interdict enemy infiltration of personnel and supplies into the Republic of Vietnam, dropped 670 tons of bombs, achieving 52 secondary explosions, cutting 52 roads and ll fords and destroying 8 bridges, 14 bunkers and damaging 4 trucks.

One A-4 attack aircraft was lost to enemy fire during the month and 26 fixed wing aircraft received combat damage, compared with 2 lost and 38 damaged in January.

# A-6A Aircraft

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Availability of the Intruders, although far from the readiness objective of 55%, improved during the month to 24% in the last week, compared with a 16.8% readiness average in January. Although full digital integrated attack and navigation systems were not always available, air frame availability was good, with an average 9 of 12 air craft operational daily, compared with an average 6.6 ready during January. The multiple systems of the aircraft permitted completion of 395 attack sorties, 170 of these in North Vietnam. In the remaining 225 sorties flown in support of III MAF, ROKMC and ARVN forces in I Corps, 1040 tons of ordnance were dropped on Viet Cong targets. The Intruders were credited with 7 VC killed, lll probably killed, 137 buildings destroyed and 21 secondary explosions. In the north, where 528 tons of bombs were dropped, bomb damage assessments for the A-6A were limited to 6 secondary explosions due to the limited

visibility under which most missions were flown. Several moving targets, probably trucks, were detected and attacked using airborne moving target indicator radar but results were not discernible.

#### Air Control

Preparations were being made to locate Marine Air Control Squadron 4 at Monkey Mountain when that unit arrives from CONUS in April. This squadron is equipped with the Marine Tactical Data System (MTDS), an advanced automated air control system. Deployment of this system to the Danang area will provide the capability to interchange information vital to air defense between the shipboard Navy Tactical Data Systems of the 7th US Fleet and the present US Air Force in-country air control system.

# Helicopter operations

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Marine helicopters flew 33,670 sorties during February - 29,147 in support of III MAF units and the remaining 4,523 in support of ARVN and ROK Marine units in I CTZ. The varied tasks performed included the lift of 46,936 personnel, delivery of 5,682 tons of cargo to combat units and forward logistic support areas, and evacuation of 2,597 casualties - US and ROK Marines, ARVN soldiers, civilians, and enemy captives.

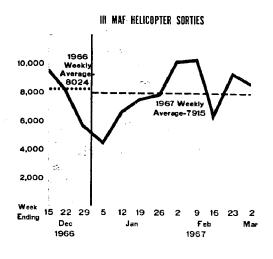
Other missions performed by helicopters were search and rescue, reconnaissance of potential landing zones, tactical recovery of downed aircraft and armed escort for combat troop lifts.

The four CH-53A helicopters of HMH-463 lifted 651 tons of cargo and 1,005 passengers in the first month of operations, while flying 444 sorties. The sortie rate

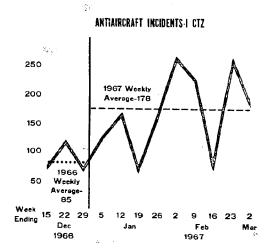
of 4 per day per aircraft attests to the reliability of this new heavy lift helicopter, exceptional for initial introduction to combat.

The eight CH-37C helicopters being replaced by the CH-53A flew 530 sorties during the month, an average of over 2.3 sorties per day. This is a respectable rate for a 10 year old workhorse.

Increased exposure of helicopters to ground fire due to the tempo of ground operations resulted in 162 helicopters receiving combat damage during the month, compared with 138 helicopters which received combat damage during January. There were no combat losses. The graphs below show the relationship between the helicopter sorties and antiaircraft incidents in I CTZ.



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#### SUMMARY

March marked a continued intensification of enemy activity over the whole of the I Corps Tactical Zone. His efforts to support infiltration into the A Shau and Ba Long valleys from Laos increased. Concurrently, his guerrilla actions against the fabric of the Revolutionary Development program grew, as did his efforts to harass our bases and lines of communication. Finally, he showed strong determination to abate the destructive trans-DMZ artillery attacks which were evidently causing him distress.

The simultaneous demands posed by these enemy initiatives placed a strain on Marine resources, and diminished their freedom of action. The Marines nevertheless countered the enemy's military effort with what was probably their broadest offensive effort of the war-28,229 small unit counterguerrilla actions, thirteen major operations of battalion size or larger, and intensified artillery action against enemy bases and staging areas in and north of the DMZ.

The accelerated level of offensive activity diminished somewhat the Marine contribution to Revolutionary Development. Concurrently, there was also evidence that the ARVN efforts in the RD area were affected adversely by the enemy's counter-RD program.

The overall intensification of the I CTZ conflict is reflected in casualty figures. The cost to the enemy was great. Marines killed 2,159 in March - a new record. At the same time, 74 others were captured. Marines sustained 279 killed during the month.

The non-shooting offensive operations in I CTZ exhibited growing momentum during the month, and produced results which commend their further expansion. Leaflet drops, aerial broadcasts, film presentations, Armed Propaganda Teams, Psychological Operations Exploitation Teams, Community Relations Committees and other similar efforts united to produce 284 Chieu Hoi returnees during the month - a record number.

The Combined Action Program continued to flourish in the face of growing and coordinated VC opposition. Nine new platoons were formed, four of them at Dong Ha, the first time Combined Action units have been organized in that area. There are now 69 platoons in existence, out of a 1967 program of 114.



# AIR OPERATIONS

# Fixed Wing

Keeping pace with intensified III MAF ground operations, a record 7,101 combat strike and reconnaissance sorties were flown by the 1st Marine Aircraft Wing. An additional 803 sorties were cancelled due to weather, 620 of them by target or enroute weather.

Close air support of Marines engaged in ground fighting accounted for over 20 percent (990) of the 4,847 strike sorties in the Republic of Vietnam. In addition, 901 combat reconnaissance and 31 air defense sorties were flown in the south. Over 6,200 tons of bombs, 11,000 air to ground rockets and 174,000 20mm cannon rounds were delivered on North Vietnamese and Viet Cong targets in I and II CTZ. Results included 288 confirmed enemy killed, 80 secondary explosions and 62 bunkers or gun positions destroyed or damaged.

A new high total of 902 combat sorties were flown over North Vietnam, 557 of them with attack missions, the remainder being photo reconnaissance and electronic countermeasure sorties. 1,239 tons of bombs were delivered on military targets north of the DMZ, 609 tons by the A6A attack aircraft which consistently proves its worth in engaging targets of opportunity by electronic means. Damage assessments in North Vietnam were limited to the 27 a secondary explosions, which resulted when ammunition resupply vehicles or supply points were hit.

Over Laos, flight activity also increased. 451 strike sorties were flown against enemy resupply routes, way stations, truck parks and supply points. 803 tons of bombs and 175 rockets were expended in these attacks with known

results of 40 secondary explosions, 64 road cuts and 11 fords cut. This compared with 359 sorties flown in southern Laos during the previous month.

Marine Air Support Radar Teams at Dong Ha, Phu Bai, Danang and Quang Ngai controlled 2,199 sorties, permitting air attacks on the enemy during periods of low visibility.

During the month, two attack aircraft, an F-4B and a A4E, plus one EF-10B electronic countermeasure aircraft, were lost to enemy ground fire in RVN, while 36 other fixed wing aircraft received combat damage.

#### The A6A

The A6A Intruders flew 177 strike sorties in North Vietnam during hours of darkness and poor visibility, delivering 609 tons of bombs and over 9,000 rockets on targets detected and hit with the use of the airborne moving target indicator and electronic attack system. Because of the nature of the mission, full assessment of bomb damage was not possible, but over 25 secondary explosions were reported.

157 of these strike sorties were flown at night, engaging 282 moving targets and 290 fixed targets. The usual ordnance load of A-6A's flying strike missions in North Vietnam is 16 MK-82 500 pound bombs and 4 AERO 7D rocket pods with seventy-six 2.75 inch rockets. Moving targets, generally trucks or boats, detected by airborne moving target indicator radar were usually attacked with Aero 7D rocket pods, a 19 rocket package of 2.75 inch folding fin aerial rockets, to give the highest possible kill probability.

Marine A6A's also flew 222 attack and reconnaissance sorties in the south in support of ground operations. Over 800 tons of bombs were dropped on the enemy.

VMA (AW) 242 suffered its first loss on 23 March, when a transport aircraft overshot its control point on a cross taxiway, moving into the path of a fully loaded A6A which was nearing the end of its take off run. The crew of the attack plane managed to escape with moderate injury. The crew of the transport was lost. Both aircraft were destroyed.

A high light of the month was the arrival of the first flight of VMA(AW) - 533 A6A's at Chu Lai on 31 March. In addition to the considerable contribution to the all weather capabilities of the 1st Marine Aircraft Wing, the trans-Pacific movement itself was spectacular. The crews and aircraft performed flawlessly during their six day, 8,500 mile journey from El Toro to Hawaii, to Guam and Vietnam. The entire operation, supported by Marine aerial refuelers from both VMGR-352 based at El Toro and VMGR-152 at Okinawa, was without incident. The squadron closed Chu Lai at 1135 on 1 April with all 12 aircraft still together. This squadron replaced an A4C squadron, VMA-211, which began its trans-Pacific flight to CONUS on 31 March.

At month's end, planning was well along for the employment of Marine A-6A's on strike missions into the northern portions of North Vietnam. Previous Marine attack missions have been into the area south of 18 degrees latitude, the 90 mile long southernmost segment of that country. Its unique all weather capabilities, particularly the ability to detect and attack moving or stationary ground targets without visual contact, make this an ideal aircraft for interdiction of lines of communication and south-bound supplies.

With the arrival of VMA(AW) - 533, there are now 23 land based Marine Intruders in RVN. The program of strikes into the northern portions of NVN calls for those A-6's with full attack navigation systems operational and not already committed to support of US and ARVN forces in ICTZ, to be made available for attack missions into the north. The tasking of Marine A-6's for these missions, which can be flown when other types of aircraft must be diverted due to weather, will provide a substantial augmentation to the 18 carrier - based Navy Intruders now available for this purpose.

# Helicopter Operations

Marine helicopters flew 40, 325 sorties in the month, the highest total since last July. 43,545 personnel were lifted and 5,341 tons of cargo carried in support of the widespread ground operations. One measure of the intense fighting during the month is the unusually high number of casualty evacuation missions: 4,324 compared to 2,597 for February.

33,486 of the helicopter sorties were in support of III MAF and 3,653 supported ARVN forces. Marine helicopters of the US 7th Fleet Special Landing Force flew 3,186 sorties in support of Deckhouse VI and Beacon Hill.

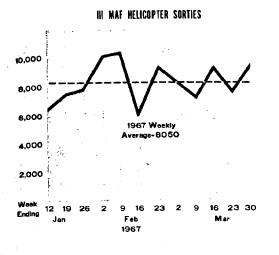
The CH-53A performed well during the month, transporting 792 tons of cargo and 902 passengers in 517 sorties. This high number of sorties raised the average to 4.1 sorties per CH-53A per day in March, from 4.0 for February.

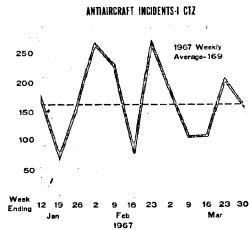
The increased pace of operation with added exposure to enemy ground fire resulted in the combat loss of 5 helicopters during the month. An additional 115 helicopters received combat damage. The chart below depicts the

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continuing rise in the antiaircraft incidents as they keep pace with the rising number of helicopter sorties.







#### SUMMARY

Before the month of April was over, it was clear that the enemy had made the I Corps Tactical Zone the object of his current main effort.

He had intensified greatly his efforts to neutralize the Marine and Army artillery positions near the Demilitarized Zone, to damage our forward logistic base at Dong Ha, and to damage our air bases at Chu Lai and Phu Bai. In the process, he fired over 2,300 rounds of mortar, rocket and artillery into these areas, causing moderate damage and 478 casualties.

Concurrently his guerrilla campaign had grown, and his efforts to impede the Revolutionary Development program increased in strength, coordination, and boldness.

Finally, he launched a series of major ground attacks to seize the tactical initiative, resulting in some of the most severe fighting of the war in the Demilitarized Zone area.

COMUSMACV, perceiving the evident determination of the enemy to build up his effort in the I Corps Tactical Zone, moved, early in April, to diminish the burden on III MAF by introducing Task Force Oregon, a six battalion force, into the Quang Ngai-Chu Lai area, thus relieving three Marine battalions to meet other critical needs. By month's end, the Marine battalions freed in the Chu Lai area were all heavily engaged in operations against enemy base areas southwest of Danang, as well as in operations in the DMZ region.

A total of 15 large unit operations were mounted by the Marines against the enemy during the month, as compared with 13 in March and an average of 10.5 for the past year. Operations were undertaken against major base areas between Danang and Chu Lai and northwest of Hue. Other important base areas, such as that in the A Shau Valley, were not attacked because of force limitations.

Most significant of the large operations was the major confrontation north of Khe Sanh, where a division size enemy attempt to overrun that outpost was frustrated by a combined Marine air-ground effort, at a cost of 661 enemy killed. Outstanding among the characteristics of this engagement was the performance of Marine Corps aviation forces which, in the space of about four days, delivered over 1,000 sorties in close support of the attacking Marines on the ground.

The Revolutionary Development program suffered during April as a result of several convergent factors: the intensified enemy activity, preoccupation of US and ARVN forces with other critical tasks, and the widespread redistribution of units incident to introduction of Task Force Oregon. Great morale loss was suffered by local Vietnamese as a result of the major enemy raid on Quang Tri city on 6 April, although this unfavorable development was partially neutralized later in the month by a series of successful ARVN operations in the Hue/Quang Tri area, where two large enemy forces were defeated and substantial quantities of equipment were captured.

Marine units, despite heavy involvement elsewhere, conducted the second highest level of small unit counterguerrilla operations of any month of the conflict. They aggregated 26,814 patrols, ambushes, and company size operations, only slightly below March's record of 28,229.

An additional 2,939 were conducted by US Army units of Task Force Oregon. 600 of the enemy were killed, - within 32 of the highest number killed in such operations in any month.

The Combined Action program continued to develop satisfactorily during April. There are now 72 Combined Action platoons, and their growing impact on Revolutionary Development is evident. Wherever a Combined Action platoon is established near one of the Revolutionary Development teams, progress toward rural stability is steady and heartening. The program for formation of Combined Action platoons is on schedule.

In every area of the conflict, April was an intensive month. The level of intensity can be measured in many ways, but is reflected clearly in the casualties. With little to show for his pains, the enemy suffered 3,157 killed throughout the I Corps and 3,174 probably killed. In addition, he lost 472 prisoners and 432 weapons.

The cost to us was not small. 292 Marines were killed and 2,527 wounded. Of the latter, about 50 percent did not leave the theater.

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#### AIR OPERATIONS

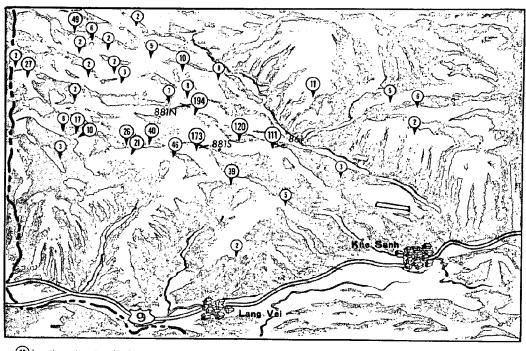
# Fixed Wing

The First Marine Aircraft Wing flew 6,574 combat sorties during April, which included 4,200 strike sorties in South Vietnam, 544 in North Vietnam, and 394 in Laos.

In South Vietnam, 26 percent of the 4,200 strike sorties were in close support of Marines, Army, ARVN and ROKMC forces engaged on the ground. 6,100 tons of bombs, 1,332 napalm bombs, 7,500 air to ground rockets and 225,000 rounds of 20mm were placed on enemy targets throughout I CTZ. Discernible results were 201 enemy confirmed killed, 95 secondary explosions, 57 fires, and 139 bunkers, 62 caves and tunnels and 1,222 other structures destroyed. An additional 467 enemy troops were probably killed.

A significant portion of this effort was in support of the battle around Khe Sanh and Hill 881. In this area alone, between 24 April and 6 May, Marine pilots flew 1,004 strike sorties, expending 1,502 tons of ordnance. Details of that support, and the results it achieved, are reflected on the map on the following page.

# MARINE CLOSE AIR SUPPORT-KHE SANH-24 APRIL-6 MAY



(10) Location and number of strikes

1004 SORTIES; 1502 TONS OF ORDNANCE.

ENEMY KILLED BY AIR: 112 CONFIRMED; 41 PROBABLE.

# DAMAGE

Bunkers destroyed	328	Tunnels damaged	7
Bunkers damaged	40	Automatic weapon	•
Structures destroyed	14	positions destroyed Secondary fires Secondary explosions	11
Structures damaged	4		10
Trenches damaged	12		14
Tunnels destroyed	5		

In Laos, Marine aircraft contributed 394 strike sorties to the interdiction of infiltration and supply routes. 795 tons of bombs and 161 rockets were expended, resulting in 18 secondary explosions, 16 fires, 68 road cuts, 8 fords destroyed, 9 landslides, 5 trucks and one tractor destroyed and 6 trucks and another tractor damaged. RF-4B's flew 7 photo missions over the extensive network of trails and roads through which supplies and manpower have moved in the past from North Vietnam.

Over North Vietnam, 544 strike sorties and 339 photo and electronic countermeasure sorties were flown during the month. 1,446 tons of ordnance were delivered on fixed and moving targets. Marine F-4B's, A-4E's and F-8E's flew 335 of the strike sorties, including 33 at night under radar control, expending 651 tons of ordnance. Known bomb damage includes 13 NVA confirmed killed, one bridge destroyed and another damaged, 15 roads cut, 2 trucks destroyed and 5 damaged. Four secondary explosions and two fires were observed, with one antiaircraft position destroyed.

#### The A-6A

The two squadrons of Intruders now assigned to the First Marine Aircraft Wing flew 546 combat sorties during the month. 337 were in support of US, ARVN and ROK Marine forces in I CTZ and the remaining 209 were over North Vietnam.

In the south, 993 tons of ordnance were delivered on enemy targets in support of friendly forces on the ground. VMA(AW)-533, which arrived in-country on the last day of March, conducted its shakedown and area familiarization flights in South Vietnam before being assigned missions north of the DMZ.

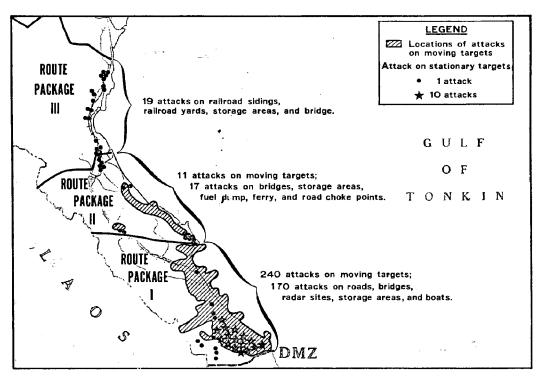
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April marked the initiation of A-6A full systems strikes north of Route Package I in North Vietnam. From 11 April until the end of the month, 59 strike sorties were flown into Route Packages II and III, attacking 47 targets. The remaining 150 Intruder sorties into the north struck military targets in the Route Package I area and in the DMZ. Ordnance delivered in the north amounted to 815 tons of bombs and 3, 821 air to ground rockets. The 206 fixed targets struck included barracks, radars, highway and railroad bridges, ferries, fords, truck parks, supply areas and one SAM site. Results of attacks on these targets were 17 secondary explosions and 8 fires. 251 trucks, boats and other moving vehicles were attacked, using airborne moving target indicator systems. It will be recalled that the moving target indicator and electronic attack systems of the A-6A provide its crew with the ability to locate and destroy moving vehicles or boats during darkness or when weather causes poor visibility. Results of these strikes were limited to the 20 secondary explosions, 6 fires which were observed by crew members, and one boat sunk.

The locations of Marine Intruder strikes into North Vietnam during April are shown on the map on the following page.

# MARINE A-GA ATTACKS IN NORTH VIETNAM APRIL 1967



#### Aircraft Losses

One A-6A was lost over North Vietnam from an unknown cause, when it disappeared while on an attack run near Vinh. One A-4E and one F-4B were lost to ground fire in South Vietnam. The crew of the F-4B was recovered but the A-4 pilot did not eject. Thirty-two other fixed wing aircraft received combat damage from antiaircraft fire but these managed to return safely to their bases. This brings total loss figures to 40 fixed wing aircraft destroyed and 88 rotary wing aircraft destroyed since our commitment to RVN.

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# Air Control

Construction of facilities at Monkey Mountain for Marine Air Control Squadron-4 and the Marine Tactical Data System, a semi-automated air defense system, progressed according to schedule.

The advance party of MACS-4 arrived at Danang on 27 April to facilitate turnover when their squadron arrives in early June. At that time, MACS-7, presently at Danang, will return to CONUS.

As a part of the MTDS equipment, a tactical aircraft data communications central will deploy shortly after the main body of the control squadron, to provide a real time tie in with the Navy Tactical Data System already operational with the US Seventh Fleet. The entire complex will provide the capability for instant display at Monkey Mountain of those enemy aircraft detected by the Navy Tactical Data System in the Gulf of Tonkin and those detected by MTDS radars. Integral computers of the MTDS can then provide instant solutions to intercept problems, whether USAF, USN or USMC aircraft fly the mission. The complex will also provide direct firing instructions and data to HAWK batteries to permit missile intercept. Ultimately, when the digital computer capability of the US Air Force is available, a data link with the Air Force Backup Interceptor Central (BUIC) will permit mutual exchange of air defense information.

#### Helicopter Operations

First Marine Aircraft Wing helicopters flew 38,060 sorties during the month, lifting 45,199 personnel and 4,467 tons of cargo in support of ground operations in ICTZ.

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The four CH-53A's of the detachment of HMH-463 performed notably, flying 821 sorties, an average of 6.8 sorties per aircraft each day, compared to 4.1 sorties per day during March. A total of 1,210 tons of cargo and 1,964 personnel were lifted. The varied missions performed were cargo and troop lift, casualty evacuation and tactical recovery of downed aircraft and damaged equipment.

The eight plane detachment of CH-37C's, the older heavy lift helicopter in the Marine inventory, flew a respectable 799 sorties, transporting 2,382 personnel and 484 tons of cargo in support of III MAF, ARVN and ROK Marines in I CTZ. These aircraft, which have been in service for 10 years, are scheduled to be replaced by CH-53A's with the arrival of the main body of HMH-463 in May. This squadron was embarking in the USS Tripoli (LPH-10), with 22 CH-53A helicopters, at the end of April, destined for Danang.

The bulk of the helicopter support in I CTZ was provided by the UH-34D and CH-46A squadrons. The UH-34's flew 13,146 sorties, transporting 16,948 personnel and 974 tons of cargo. The CH-46's, with their greater lift capability and speed, lifted 19,523 personnel and 1,727 tons of cargo in only 6,079 sorties.

The Marine helicopter squadrons assigned to the two Special Landing Forces of the US Seventh Fleet flew 1,757 sorties, transporting 2,582 personnel and 74.9 tons of cargo in support of Operations Beaver Cage, south of Danang, and Beacon Star, near the DMZ. These brought the total Marine helicopter sorties in South Vietnam and combat zone waters to 39,817 during the month.

Combat losses during the month were four, compared to 5 in March. 126 helicopters were damaged while flying combat missions, in addition to the 30 damaged during the enemy mortar and rocket attacks at Dong Ha and Phu Bai on the 27th (see Base Defense section).

#### SUMMARY

May was a month of records in I CTZ, in many of the areas regarded as criteria of progress. There were more enemy killed, more enemy captured, more Chieu Hoi returnees, more small unit operations, more combat air sorties, more bombs dropped, more propaganda broadcasts, more Combined Action units and more Revolutionary Development Teams.

These and other similar indices could, if taken in isolation, portray substantial progress. However, a more accurate assessment would be that, during May, all of these measures on our part served only to meet the enemy's broad front summer campaign and to prevent it from achieving all of its purposes.

During the month the confrontation in the DMZ area continued in the same pattern which characterized the two months preceding. The enemy moved south into Quang Tri Province with strong NVN forces, and exhibited a willingness to engage our major units wherever encountered. Concurrently he maintained a steady interdiction of our forward positions with artillery, rockets and mortars located in or north of the DMZ.

This enemy activity was largely frustrated by coordinated offensive action on the part of III MAF. The enemy suffered severely in the intensive combat in the Khe Sanh and Con Thien regions, and he lost heavily in men and material to our first major offensive into the southern DMZ.

Nevertheless, it was apparent throughout the month that the enemy was prepared to accept the losses involved, and to commit equivalent resources in replacement, as the price for causing us casualties and for fixing large numbers of our forces in the remote hinterland regions.

At the same time, the enemy maintained the high pace of his actions in the lowlands, to control the people and to disrupt the Revolutionary Development Program. These efforts were likewise rebuffed by US offensive operations, and at an even greater proportional loss to the enemy in casualties.

The ability of III MAF to meet and throw back all of the enemy thrusts during the month was largely a function of additional forces in ICTZ. Arrival of the nine battalions of Task Force Oregon occurred at a critical time. This, plus the decision to commit the three battalions and two helicopter squadrons of the PACOM amphibious reserve, served partly to redress the serious force imbalance which hitherto had existed in ICTZ and which, to some degree, persists.

These reinforcing actions contributed to the effective air-ground offensive operations of Marine forces in the DMZ region, where some 1,680 North Vietnamese regulars were killed at a cost of 358 US troops.

The reinforcements also permitted the resumption of the important campaign for protection of the people in the Nui Loc Son basin, between Danang and Chu Lai, as well as intensification of offensive operations in the rich lowlands south of Quang Ngai. In these actions, the enemy lost 1,448 men in two regions he regards as critical, while our forces suffered 200 killed in the process.

During the month ARVN participation in the larger tactical operations was at least as professional and as creditable as in any equivalent period in the past. Conversely, direct ARVN participation in the RD program showed little change in magnitude or quality from the preceding month. RD teams were often inadequately protected

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#### AIR OPERATIONS

# Fixed Wings

Marine fixed wing aircraft flew a record 7,685 combat and combat support sorties in May to keep pace with the increased tempo of operations on the ground. Of these, 6,542 were tactical strike sorties in the Republic of Vietnam, with 36 per cent flown as close air support for Marine, ARVN and ROKMC forces engaged with the enemy on the ground.

Ordnance delivered on Viet Cong and NVA targets in I CTZ included 9,350 tons of bombs, 1,502 tons of napalm, over 8,000 air-to-ground rockets and 339,000 rounds of 20mm cannon ammunition. Results included a record 505 VC/NVA confirmed killed, another 567 probably killed, and 667 bunkers, 106 weapons positions and 1,422 buildings destroyed. Hits on enemy supply caches and storage points were evidenced by 143 secondary explosions and 105 fires started by exploding ordnance.

Substantial credit for the success of Operation Hickory and of the Union series was due to these 1st Marine Aircraft Wing operations. A total of 996 Marine attack sorties, 398 of them in close proximity to Marine ground elements actually engaged with the enemy, supported Operation Hickory. The heavy air-delivered ordnance was a prime factor in driving out or destroying the enemy within the extensive bunker complexes in the DMZ. In Operation Union, 327 Marine fixed wing sorties supported the 5th Marines, 142 of them in the first six days of Union II.

Over North Vietnam, 457 attack sorties, 367 elec-

tronic countermeasure sorties and 90 photo sorties were flown. 1,362 tons of bombs and 1,074 rockets were expended on the flow of supplies and men moving southward. Damage assessments north of the Provisional Military Demarcation Line included one SAM missile transporter and 5 SAM sites, 3 supply dumps, 15 bunkers and 10 sampans destroyed. 18 road cuts were scored and 31 secondary explosions and 61 fires observed as resulting from Marine air strikes show that additional POL, ammunition and supplies were destroyed.

In Laos, Marine A-4's flew 117 sorties; F-4B's, 79; and F-8's, 30 sorties against the Ho Chi Minh trail complex, with its way stations, storage points and antiaircraft defenses. In addition, 3 A-6 Intruders flew attack sorties in Laos for the first time. Bombs totaling 399 tons accounted for 60 road and 10 ford cuts, 22 bunkers destroyed, one large supply storage area destroyed, 11 secondary explosions and 30 enemy troops confirmed killed.

# The A-6A

Marine Intruders flew 551 sorties during May, 339 of them in support of III MAF and 212 in support of the US Seventh Fleet and 7th Air Force. In RVN, over 1,300 tons of bombs and 50 rockets accounted for 137 enemy confirmed killed, 172 probably killed and 11 bunkers destroyed.

Over North Vietnam, Marine A-6's flew 209 sorties, all but 4 of them at night, striking targets from the DMZ to north of Hanoi. 938 tons of bombs were dropped on 191 fixed targets and 941 air-to-ground rockets were expended, mostly in strikes on the 65 moving targets hit. Positive damage assessments were limited to the 75 secondary explosions and fires which were observable during the night and cloudy weather strikes.

#### The SAM Threat near the DMZ

The North Vietnamese SA-2 surface-to-air missile system has been expanding southward from the Hanoi, Thanh Hoa and Vinh areas since September 1966. In March of this year, a SAM site two miles north of the DMZ was added to the air order of battle, and on May 10th a missile firing was observed in the DMZ area.

On the 10th, an A-4E flying a radar controlled mission was approaching its target near, the southern boundary of the DMZ, when Marines on the ground and other pilots in the area noted the firing of three SAM missiles. One exploded at the level of the A-4E and the aircraft disappeared from the controlling radar screen at Dong Ha.

Artillery was brought to bear on the suspected launching sites within minutes, but a damage assessment of the firing was not obtainable. Marines of the 1st Battalion, 4th Marines, saturating the area south of the DMZ with patrols, found an eight foot long section of an SA-2 missile two miles southwest of Con Thien. It was immediately evacuated through intelligence channels and proved to be the guidance section and lift surfaces of an SA-2 missile.

On the 13th, another SAM was observed in flight 18 miles north of Dong Ha, but Marine aircraft crews in the area also sighted the missile and took evasive action. The missile disappeared from view without doing any damage.

Suspected and probable launch sites were attacked by Marine and Air Force air strikes and Marine and US Army artillery. No other SAM missiles were sighted in the area, but on the 29th a patrol from the 2d Battalion, 26th Marines found another section of a missile three miles southwest of Con Thien. This section included most of an SA-2 guidance system and the sustainer engine.

Three new SAM sites were added to the air order of battle during the month, all within range of an aircraft flying ten miles south of the DMZ, and two suspected missile support facilities have been detected. Although air strikes, artillery and naval gunfire have inflicted heavy losses on SAM equipment moving into the area, the enemy is likely still to have at least two, and possibly three, SAM battalions within range of the DMZ.

#### Aircraft Losses

The increased exposure coincident with the intensified Marine air activity brought fixed wing aircraft losses for May to 7, the highest monthly total since the Marines were committed to Vietnam. In addition to one A-4 lost to the SAM missile in the DMZ, 3 other Skyhawks, one F-4B, an F-8E, and one O-1C were shot down by enemy antiaircraft fire. An additional 40 Marine aircraft received combat damage. The losses in May brought total fixed wing Marine aircraft combat losses to 47 since March 1965.

### The EA-6A and EF-10B

Companion to the increased US air activity in North Vietnam is the requirement to protect US aircraft from SAM and radar-controlled conventional antiaircraft fires. The four EA-6A's and eight EF-10B's of Marine Composite Reconnaissance Squadron-1 carry a large share of the load. During the month, EA-6A's flew 106 sorties in North Vietnam, 46 of these in support of US Air Force or US Seventh Fleet operations. The older EF-10B's flew 264 electronic countermeasure sorties, with 78 of these in support of other than Marine aircraft. 252 electronic countermeasure sorties were flown in support of III MAF, the bulk of them when the North Vietnamese moved SAM missile units into

Route Package I and the DMZ area.

#### The RF-4B

The RF-4B's of the Composite Reconnaissance Squadron flew 322 photo missions in support of III MAF during the month. This photo version of the Phantom flew 90 of these missions over North Vietnam, 67 during the last two weeks of May, to detect enemy troop and logistical movements while ground forces swept the southern portion of the DMZ.

## Air Control and Support

The five Marine Air Support Radar Teams controlled 1,845 strike sorties on enemy targets the length of I CTZ. The Dong Ha site controlled a major portion, 625, many against suspected SAM and artillery positions in and north of the DMZ. The decrease in total radar controlled sorties during the month is attributable to the improved weather which precluded the necessity to control many daytime attacks.

On the 12th of May, Marine Air Control Squadron-4 deployed from CONUS with their semi-automatic data link air control equipment, the Marine Tactical Data System. This system, when tied in with the shipboard Navy Tactical Data System in the Gulf of Tonkin, will provide the pilot of any Danang-based interceptor with the proper course and speed to attack enemy aircraft as soon as they are detected. The unit is scheduled to arrive at Danang on 3 June. A backup radar, AN/TPS-34, and the Tactical Data Communications Central to provide instant interchange of air defense data with Navy and Air Force systems, also are scheduled for airlift to Danang in early June. Site preparation is progressing on schedule.

# Helicopter Operations

Helicopters of the two RVN based helicopter groups and the two squadrons with the two Special Landing Forces broke all records for one month's operations. A total of 56,031 helicopter sorties were flown during May, exceeding the previous record (41,957 set in July 1966) by 33 per cent.

56,366 personnel were lifted, a 39 per cent increase over the average for the first quarter of this calendar year. Cargo lifted by helicopters increased 44 per cent over the first quarter average, with 6,042 tons being transported, over one third of it by the now full squadron of CH-53's. Medical evacuation sorties flown during May's intense ground action more than doubled over the previous month -6,534 compared to 3,134 for April.

These high totals were attributable to the extensive use of helicopters in Operation Hickory, which was supported by 1,165 helicopter sorties, and the rapid lift of 2 infantry battalions in Union I and Union II. 1,141 helicopter sorties were flown for Union II in 6 days and 2,021 for Union I in the first 17 days of May.

Helicopter combat losses rose to 6 in May, compared to 4 in the previous month and 5 in March. Two UH-1E's and 4 UH-34D's were lost to enemy fire, bringing to 94 the total Marine rotary wing losses due to enemy action since the large scale commitment of Marine helicopters 27 months ago. 142 other helicopters received combat damage from enemy antiaircraft fire during the month.

# CH-46 Helicopter

CH-46 helicopters of the First Marine Aircraft Wing were temporarily grounded when an investigation to deter-

#### SUMMARY

The pace of enemy activity in June declined slightly from previous months, but there was no evidence of a gross change in enemy strategy or of abatement of his intensified I Corps campaign which began in late 1966. Again in June he exhibited his willingness to pay a high price in men in order to draw friendly forces into engagements in the remote highlands near the DMZ.

During the month, III MAF killed 2,382 of the enemy and captured 123, raising to 12,808 and 1,177 the number of enemy killed and captured, respectively, in the first six months of 1967. An additional 8,207 were killed and 705 captured during operations by other friendly forces in I CTZ during the same period.

A special survey was conducted in June to analyze the effects on Revolutionary Development of the enemy's 1967 campaign. It verified figures collected previously in the regular III MAF RD reporting system, which showed that there had been little progress over the past six months, and even regression in some areas. By end-June, however, a resumption of progress was visible, due mainly to the arrival of Task Force Oregon, which allowed Marine and Army forces to pursue sustained military operations near the populated regions.

Noteworthy gains in RD during the month included the attainment of 60% or higher on the III MAF RD scale (equivalent to secure status) by four villages in the important Nui Loc Son/Duc Pho areas; the continued growth of ARVN RD Teams, from 110 teams in May to 118 by end-June; the return of 259 Chieu Hoi's, as compared with the 1966 monthly average of 145; and establishment of the first Combined Action Group Headquarters to oversee the training and support of Combined Action units.

A significant development, and one which may well prove to be a major long term weapon to combat the enemy, was the successful completion of the first phase of village and hamlet elections. In these first elections, 82.4 percent of those eligible voted in 154 village elections, while 79.8 percent cast ballots in 547 hamlet elections. Overall, 611,697 Vietnamese went to the polls in I Corps.

In June, III MAF forces conducted 15 large unit operations, concentrated principally in the populated coastal region from Danang south to the II Corps border. They accounted for 1,535 enemy killed and another 96 captured.

Despite the commitment of substantial forces to these 15 large unit operations, and to such diverse tasks as air base defense and construction of the firebreak buffer zone at the DMZ, III MAF maintained the growing pace of its counterguerrilla campaign. Company-size or smaller units conducted 37,477 patrols, ambushes, and search operations throughout the principal Revolutionary Development areas - the largest number in any month thus far in the conflict. These operations accounted for 669 enemy killed.

At the end of June it remained evident that the major enemy focus is still on the I Corps area. His recent troop buildup in the vicinity of Khe Sanh, Con Thien and Gio Linh underscores the likelihood of future, heavy action there. This situation, coupled with the enemy's reinforced campaign against the people in the lowlands, continues to create a significant troop imbalance. This is reflected, statistically, in the fact that about 32% of all the enemy forces in RVN are located in I Corps, about 44% of the total enemy incidents in 1967 have taken place in I CTZ, and about 45% of the total enemy killed in RVN in 1967 have occurred in I Corps - while only 21% of all friendly forces in RVN are located there.

### AIR OPERATIONS

### Fixed Wing

First Marine Aircraft Wing pilots flew 6,850 tactical fixed wing sorties in support of III MAF, ROKMC and ARVN forces in I CTZ, the Rolling Thunder campaign in North Vietnam and the Steel Tiger effort in the Laotian panhandle. These sorties included tactical strike, armed reconnaissance, photo and electronic countermeasures sorties.

## South Vietnam

A full 35% of the 5,111 Marine attack sorties in South Vietnam were closely integrated with the fire and maneuver of Marine, ROKMC, or ARVN units on the ground. Another 3, 287 attack sorties were flown in direct support of Marine, ARVN and ROKMC operations at distances from ground troops which did not require the close coordination of a close air support sortie. 8,899 tons of bombs, 2,598 napalm bombs, over 11,000 rockets and 164 thousand rounds of 20mm were delivered on NVA and Viet Cong targets in I CTZ. The rate of 1.99 tons of ordnance delivered per attack sortie in June compares favorably to the 1.86 tons per sortie average since January. Confirmed in-country damage assessments included 99 enemy killed by air, and 569 bunkers or mortar and automatic weapons positions destroyed. Two bridges and 14 sampans also were destroyed and 28 secondary explosions attested to hits on ammunition caches.

Of these total in-country strikes, F-4B's of VMFA-314, VMFA-542 and VMFA-115 flew 1,623 combat sorties in I Corps. Just over half of them, 812, were in the close air support category. These Marine F-4B's delivered the

largest share of aviation ordnance dropped in I CTZ, 3,055 tons of bombs, 1,227 napalm bombs and over four thousand air to ground rockets. The more numerous A-4's of VMA's 211, 311 and 223, based at Chu Lai, flew 664 close air support, 1,414 direct air support, and 154 helicopter escort sorties during the month. Crusaders of VMF(AW)'s 232 and 235, with only 27 aircraft on hand, flew 1,316 combat sorties, dropped 1,542 tons of bombs and fired 5,783 five inch Zuni and 2.75 inch rockets. The 24 A-6A's of VMA-(AW)'s 242 and 533 flew slightly over half of their 503 total sorties in South Vietnam, delivering 2,179 tons of bombs in direct support of large unit operations and US Special Forces outposts.

A significant amount of the Marine air effort not in close support of ground forces was directly related to our ground action, being targeted upon the increased enemy presence in A Shau valley. Since the early part of the year enemy activity, in the form of road and bridge construction in and around this major route of access from Laos, has been on the increase. He is apparently building a major logistic base in that area to support operations in Quang Tri, Thua Thien and possibly Quang Nam provinces.

Marine aircraft have flown 1,438 combat sorties in A Shau valley and along Route 9 since the 1st of March. These included 717 attack sorties, 259 armed reconnaissance, 95 visual reconnaissance, 59 photo, 16 tactical air controller sorties and a total of 292 air support radar controlled attack missions.

The 1,715 tons of bombs and rockets expended in these missions resulted in 30 enemy killed, 11 vehicles destroyed or damaged, 413 road cuts, 30 secondary explosions, 73 bridges or dams and 29 fords or river crossings destroyed or damaged.

The repeated attacks in the A Shau valley have restricted enemy movement on one of his main lines of communication. Aerial photographs showing significant road cuts also reveal great effort by the enemy to repair or bypass the damaged areas.

## North Vietnam

The A-6A heavy attack bombers of VMA 242 and VMA-533 took on a greater share of the First Marine Aircraft Wing effort north of the DMZ during the month. Of the total 410 Marine attack sorties in North Vietnam, the Intruders flew 253, mostly at night. This compares with 209 sorties into the north in May. F-4B's flew 70, A-4's flew 47, and F-8's flew 40 sorties, the majority of their strikes during daylight or under control of the Marine Air Support Radar Team at Dong Ha.

1,437 tons of bombs and rockets were expended on the enemy lines of communication and military installations and equipment from Route Package I to Route Package VI B near the northern border of North Vietnam. Bomb damage assessment in the north was limited to 70 secondary explosions, 3 artillery pieces, 3 antiaircraft positions and 4 bunkers destroyed.

The level of enemy activity has increased significantly in I CTZ since the major influx of enemy supplies during the TET stand-down. For example, during the period from the end of the truce, 12 February to end-June, the enemy fired 18,115 mortar rounds in I CTZ, most of it in the DMZ area. This is six times the total of 3,337 known fired in the 2 1/2 month period prior to TET. And it was in March, after TET, that the NVA started using artillery in the DMZ area. Although the artillery may have been north of the DMZ for some time previously, there was no record of its being fired before. Rocket fire at Marine

bases also began after TET, with 51 rounds in February, 219 in March, 40 in April, 353 in May and down to 153 in June when larger caliber artillery started to replace the less accurate rockets.

The continued increase in artillery and mortar attacks in recent months points up the fact that our increased air operations north of the Ben Hai River may be hurting but certainly are not stopping his resupply. The enemy determination to move surface to air missile systems into the region just north of the DMZ at heavy cost is a measure of his need to defend against air attacks. In the last six months the estimated conventional antiaircraft capability in Route Package I has almost doubled, 958 weapons compared to 514 in January.

### Aircraft Losses

There were no Marine fixed wing aircraft lost during June to enemy action. The overall losses since the March 1965 commitment of Marine attack aircraft remained at 47. A total of 26 fixed wing aircraft did receive combat damage in June, compared to 40 during the previous month.

# Helicopter Operations

The mobility given the ground forces by the Marine helicopter served to help overcome to some extent the dispersion of Marine infantry and artillery units. In June, First Marine Aircraft Wing helicopters flew 43,737 helicopter sorties, 38,906 in support of III MAF, with the rest in support of ROKMC and ARVN operations. The two squadrons with the Seventh Fleet Special Landing Forces, HMM-164 and HMM-362, flew 5,747 sorties in support of Marines ashore. A total of 62,957 personnel were transported and 6,452 tons of cargo moved by helicopter during the month. Both figures were new records.

During the month, 12, 205 helo sorties were flown for the Marine large unit campaign. Union II was supported by 561 helicopter sorties in just five days; Cimarron, which involved 6 Marine battalions, by 7, 303 helicopter sorties through the month; and three battalions in Operation Arizona, by 1,128 sorties.

The UH-34D's flew 22,769 sorties during the month and CH-46's, 7,247. The aircraft of VMO-2, VMO-3 and VMO-6 flew 10,218 UH-1E sorties, including 2,558 armed helicopter, 221 reconnaissance, 186 command and control missions and 61 tactical airborne controller missions.

The heavy CH-53's of HMH-463 performed well, flying 3,503 sorties, more than twice the number flown in May (1,540). Their missions included logistic and combat cargo lifts, logistic troop lifts, tactical recovery of downed aircraft and evacuation of casualties.

The many flights during June exposed an increased number of helicopters to enemy small arms fire. Seven Marine helicopters were lost to antiaircraft fire, bringing to 100 the number lost to enemy fire since March 1965. Although this was an increase of one over the loss of 6 in May, the number damaged dropped from 142 in the heavy combat in May, to 80 during June.

#### Air Control

The activation of the Marine Air Control Squadron-4 4 Marine Tactical Data System on Monkey Mountain in June is a milestone in the tactical control of combat air power. The portions of the expeditionary semi-automated air defense information center already activated permit the positive control of Marine aircraft from south of Chu Lai to the vicinity of Vinh. The elevation of Monkey Mountain (Hill 647) is such that control facilities at Phu Bai,

where a detachment of MACS-7 has been employed since 1965, are no longer necessary. The first operational step has been taken toward obtaining real time vital combat air defense data from US Seventh Fleet ships and aircraft hundreds of miles to the north. Installation of the Tactical Data Communications Central, which arrived at Danang in June, will complete the capability for instantaneous reception of information from these ships and, in addition, provide the capability to interchange air defense information with the existing USAF/VNAF air control system at Danang.

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### SUMMARY

The major development in the I Corps area in January was the reorientation of the ARVN effort to Revolutionary Development tasks. By the end of the month, four ARVN battalions were committed to the RD program in Quang Nam (Danang) province, with two battalions engaged in the program in each of the other four provinces of the Corps. These units were, in the main, undergoing RD-oriented training or conducting counterguerrilla operations.

III MAF forces, meanwhile, began their deployment to the back-country to assume functions hitherto discharged by the ARVN. To date, Marines have committed nine companies to occupation of outposts in the hinterland manned previously by ARVN or GVN paramilitary units. While freeing seven ARVN battalions for employment in the RD program, this new commitment has limited further the Marines' flexibility for the prosecution of offensive operations. They are now engaged over a front which extends some 200 miles from Khe Sanh near the DMZ to Duc Pho, in southern Quang Ngai.

The enemy's efforts to increase his emphasis on guerrilla warfare, which began in late 1966, continued through January 1967, and the III MAF response was an intensification of its own counterguerrilla campaign. Marines undertook 20,501 small unit counterguerrilla actions - the highest monthly total since their commitment to Vietnam, and some 8,796 over the 1966 monthly average. In 1,109 contacts, Marine patrols, ambushes, and company-size searches killed 632 of the guerrilla enemy, also a new record.

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Operations of battalion size or larger were conducted in all five provinces of I Corps, and the Special Landing Force of the Seventh Fleet attacked enemy positions in the Mekong Delta. Overall, these large unit operations were characterized by brief and generally light contact. They resulted in only 278 of the enemy killed, a figure substantially less than the average of the past year.

In January, Marine attack aircraft flew 4,300 combat sorties in South Vietnam, 490 in Laos, and 268 in North Vietnam, while an additional 214 photo reconnaissance and electronic countermeasure sorties were flown north of the Demilitarized Zone. The air effort in South Vietnam killed 202 of the enemy. There were 31,788 helicopter sorties, 27,103 of them in support of III MAF.

Revolutionary Development progress in the Marine areas showed small statistical gains, with fourteen villages advancing in some degree in their pacification level. At month's end, 600,205 villagers were living in areas considered to be under firm government control. As time passes it becomes increasingly plain that progress in Revolutionary Development must depend largely on ARVN effectiveness in their newly assigned RD mission.

As a part of the Revolutionary Development program, 13 County Fairs were conducted in January, the highest total since September. In these operations, GVN authorities processed 8,351 villagers, raising to 54,970 the cumulative number screened, fingerprinted, photographed, and issued identity cards in the 101 Marine County Fair operations since February 1966. Fourteen enemy were killed and 10 captured, bringing to 478 the number of enemy killed or captured in County Fairs to date.

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Combined Action Companies - integrated Popular Force and U. S. Marine infantry - continued to exhibit their effectiveness as local security forces in support of Revolutionary Development. In January, they conducted 3,090 squad size patrols and ambushes, 14 platoon size search and clear operations, and 19 operations in combination with Marine units. CAC's killed 25 of the enemy and captured 56, the latter figure, in particular, an indication of the CAC's ability to obtain, and respond to, information about Viet Cong.

The substantial nature of the CAC program is becoming more visible as time passes, not only in terms of the effectiveness of the Popular Forces involved, in comparison with other Popular Force units, but in the hard achievements of the CAC formations. As a basic unit of measure, since the program began, the Viet Cong have never been able to reestablish control over an area seized from them by a CAC unit.

#### AIR OPERATIONS

During the month, Marine attack aircraft flew a total of 5,058 combat sorties: 4,300 in South Vietnam, 490 in Laos and 268 in Route Package I of North Vietnam. Electronic countermeasure and photo reconnaissance aircraft flew an additional 214 sorties north of the DMZ.

Over 6,369 tons of bombs and napalm, 11,000 rockets and Ill. 000 rounds of 20mm cannon ammunition were expended on enemy targets in January. Results of these attacks show 202 enemy confirmed killed by air and 1,769 buildings and 36 bunkers destroyed. Further evidence of the effects of this intense air effort came from a former member of the 1st VC Regiment who rallied to the GVN in Quang Ngai province at the end of the month. According to Le Van Lum, his company had suffered 100 casualties during late November due to bombing and artillery missions. He further stated that civilians in the countryside who had previously supported the Viet Cong were turning against them. Le said people have asked him, "What is the use of feeding you if you cannot defeat the enemy? You are only capable of drawing bombs."

Strike aircraft flew 791 sorties in close support of the eight Marine large unit operations from Prairie at the DMZ to Operation DeSoto at the southern border of I Corps. Four hundred forty-one air attacks supported Operation Prairie and 193 were flown in support of Operation Chinook in Thua Thien.

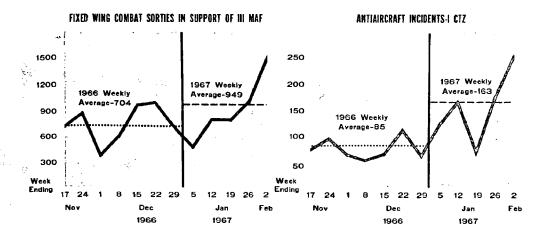
The accelerated pace of Marine air operations in support of the intensified counterguerrilla campaign led to a sharp increase in antiaircraft incidents in January. During the month, the 1st Marine Aircraft Wing lost 2

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fixed wing aircraft and 6 helicopters to antiaircraft fire. In addition, a total of 38 fixed wing aircraft and 138 helicopters received combat damage ranging from single bullet holes to major damage requiring overhaul facility repairs in Japan or the Philippines. Fixed wing sorties and antiaircraft incidents over the past 12 weeks are shown below.



#### The A-6A Intruder

In November VMA(AW)-242 arrived in-country, equipped with 12 A-6A aircraft. Since that time these aircraft, with a substantial all weather capability, have flown over 1,300 sorties, including 952 at night. Over 1,052 instrument flight hours have been logged without accident or incident; a creditable night/all weather record.

During January, a total of 473 A-6A sorties delivered 1,777 tons of ordnance on enemy targets in ICTZ and North Vietnam. All 67 strikes north of the DMZ were flown at night and during poor visibility, when other aircraft types were obliged to abort due to target weather. Bomb damage assessments are limited in the environment in which this

aircraft performs. However, four secondary explosions from hits on supply dumps have been sighted and an average of 3 or 4 moving targets have been detected and attacked each night.

The bomb carrying capacity of the aircraft, complemented by automated navigational and attack problem solving systems, makes it a versatile element of the tactical air effort.

Possible ordnance loads for the A-6A include 30 MK-82 500 pound bombs which can be delivered on a target obscured by weather or darkness 500 miles distant, or 5 MK-84 2,000 pound bombs which can be placed on targets 750 miles from the launching base. Other possible loads include five 1,000 pound fire bombs, four AGM-12 Bullpup missiles, or various combinations of these weapons with bombs or external fuel tanks. In short, the A-6A represents about 3.5 times the usual bomb load capability of the A-4 or F-8 aircraft and twice that of the F-4B.

The automated systems, called Digital Integrated Attack and Navigation Equipment, short name DIANE, include a digital computer, a high resolution search radar, a target tracking radar, an inertial navigator, an automatic flight control system and an automatic defensive and passive electronic countermeasure system. The output of the various automatic systems is displayed in the cockpit to present a real world picture of terrain and/or target. Readouts of geographical location, range and bearing to a check point or target are constantly available.

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Capabilities inherent to the DIANE include the ability to detect moving targets on the ground with the search radar and initiate an immediate attack on the target with the computer system providing continuous data to the crew. Another useful capability is offset bombing by radar. Using a prominent terrain feature or a radar reflector at a known geographical point as a reference, the Intruder can be directed to targets by range and bearing from the reference point. By this method ordnance can be delivered on targets which the pilot cannot see. Nine Special Forces camps in I CTZ have been surveyed by A-6A radar and prominent terrain features charted. Two camps have been provided locally fabricated radar reflectors, and AN/PRC-25 radios have been installed in the Intruders to permit direct communication with ground units.

The complex avionics systems which give the Intruder its capabilities are not easily maintained. The average number of aircraft with complete all-weather capability, all systems functioning, has been between I and 2 each day. Improved intermediate level avionics support should improve this situation, as the supply pipeline expands. As an interim step in this direction, on 25 January the Chief of Naval Operations directed a realignment of priorities in allocation of spare parts for the A-6 aircraft in WestPac. The effects of this measure were not yet apparent at the end of the reporting period.

## Helicopter Operations

A total of 4,262 tons of supplies were delivered

to combat units and 47,421 personnel were lifted in ICTZ by MAG-16 and MAG-36 helicopters during the month. Of the total 31,788 sorties flown, 27,103 were in support of III MAF operations, 1,897 for I Corps ARVN and 2,806 for the 2d ROK Marine Brigade. Of these, 1,427 sorties were flown to evacuate casualties.

During January, a detachment of HMH-463 arrived from CONUS. The four CH-53A helicopters with which this element is equipped extend significantly the heavy lift capability organic to III MAF. The CH-53A can lift up to 8,000 pounds of cargo internally at a cruising speed of 150 knots to an advanced landing zone, hover for 10 minutes, land and return to the original take-off point with a 4,000 pound payload, and still have 10% fuel remaining.

The cargo compartment is 30 feet long, 7.5 feet wide and 6.5 feet high. Cargo handling is accomplished through a rear ramp. Conveyors and built in winches permit rapid loading and unloading. In addition, a hoist for external lifts is located in the center of the cargo compartment. Under ideal ambient conditions, a 2 1/2 ton truck can be lifted for limited distances. The external lift capability of the CH-53A permits it readily to lift disabled UH-34D or CH-46A helicopters and return them to base.

A secondary mission for the CH-53A is the movement of troops or casualties. In normal configuration, the helicopter can seat 37 combat equipped troops or carry 24 litters.

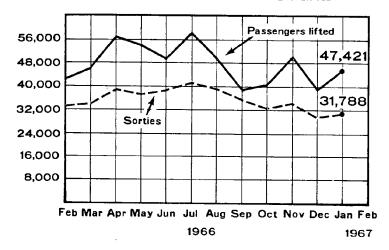
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The size of the CH-53A, over 88 feet long, dictates landing zones 200 feet wide on fairly level ground. The 95 knots of wind generated by the main rotor blades at maximum power make the removal or securing of any loose material in the area necessary.

In the first three weeks of combat operations in Vietnam, the four CH-53A helicopters have flown 129 sorties and, at the end of the month, had an aircraft readiness level of 66 percent.

## HELICOPTER SORTIES AND PASSENGERS LIFTED



#### SUMMARY

In February, the enemy continued his accelerated pace of operations which first appeared in December 1966. Strong action against our and ARVN forces in the hinterland, coordinated guerrilla activity against the Revolutionary Development structure, coupled with widespread mortar and rocket attacks on ARVN outposts and US bases, gave substance to the North Vietnamese premier's assertion that the current six months is to be a period of violent counter attack. This effort, although costly to the enemy, has heavily extended the US and GVN resources in the I CTZ.

Meeting the enemy's increased pace, the intensity of Marine operations proceeded at record, or near-record highs. In the single month there were 13 large unit operations, including one amphibious landing; 21,829 small unit counterguerrilla actions of up to company strength (monthly average in 1966 was 11,705); 119 Sting Ray missions (monthly average in 1966 was 79); and 3,765 attack aircraft sorties (monthly average in 1966 was 3,402).

The enemy's February effort resulted in heavy losses to him, with little compensatory gain. He suffered 1,721 troops known killed by Marines, second only to September (1,789 enemy KIA) when he made a strong, but unsuccessful bid in the DMZ area. Concurrently, the ARVN and ROKMC in the I CTZ killed 1,485.

More prisoners were taken by Marines in February (209) and there were more Chieu Hoi returnees in I CTZ (279) than in any month of the war to date. Prisoner and defector reports continued to produce a consistent theme of fear, sickness and low morale on the part of the enemy.

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Efforts by III MAF to exploit the opportunities offered by the enemy's increased exposure were limited by broad commitments throughout the ICTZ, which spread the Marines' resources thin. Concurrently, the ARVN entry into support of the Revolutionary Development program caused further drain on the Marine resources. Introduction of thirteen Vietnamese infantry battalions into the RD program was accomplished at an investment of two and one half Marine battalions, which assumed the responsibility for outposts which the Vietnamese had hitherto manned. There is optimism that the Vietnamese pursuit of Revolutionary Development will be productive. Few concrete results are yet visible.

One endeavor aimed at getting more out of the thinly spread Marine assets was the Combined Action Program, which, by end-February, was beginning to pick up some of the load. Sixty Combined Action Platoons were in existence, converting some 1,600 relatively unproductive Popular Forces troops into effective soldiers, as they worked, lived, and fought alongside the Marines who were integrated into the Combined Action units.



### AIR OPERATIONS

## Fixed Wing

Marine jet attack, fighter, fighter-attack, photo and electronic countermeasure aircraft flew a total of 5, 798 combat sorties during the month. 699 sorties were flown in North Vietnam, 359 in Laos and 4,740 in South Vietnam. Good flying weather at the bases, with only minor exceptions, permitted attainment of this new high total, although weather over targets caused the cancellation of 702 sorties. Marine air support radar teams controlled 1,855 sorties flown under conditions of poor target visibility.

Of the 3,765 attack sorties flown in South Vietnam, 842 - over 22% - were close air support sorties in support of engaged Marine ground units.

Direct air support sorties, which include preplanned armed reconnaissance, interdiction and attacks on enemy forces relatively far into enemy-held territory, accounted for another 2,923 in-country attack sorties. In addition, 920 visual and photo reconnaissance, 47 air defense, and 8 escort sorties were flown during the month.

The 5,755 tons of ordnance placed on targets in the south included 1,304 napalm bombs, over ten thousand 2.75 inch folding fin aerial rockets, and almost four hundred 5 inch rockets. In addition, 135,742 rounds of 20mm cannon ammunition were expended on strafing runs. Damage assessments for these strikes include 257 enemy confirmed killed, 62 bunkers destroyed and 35 others damaged. The 129 secondary explosions from these attacks attest to the large quantity of munitions probably destroyed.

First Marine Aircraft Wing sorties into North Vietnam delivered 1,004 tons of bombs and 1,130 rockets on military targets. Results that were discernible included 22 secondary explosions, 14 road cuts and 9 antiaircraft gun positions destroyed or damaged.

Sorties over Laos, to interdict enemy infiltration of personnel and supplies into the Republic of Vietnam, dropped 670 tons of bombs, achieving 52 secondary explosions, cutting 52 roads and 11 fords and destroying 8 bridges, 14 bunkers and damaging 4 trucks.

One A-4 attack aircraft was lost to enemy fire during the month and 26 fixed wing aircraft received combat damage, compared with 2 lost and 38 damaged in January.

### A-6A Aircraft

Availability of the Intruders, although far from the readiness objective of 55%, improved during the month to 24% in the last week, compared with a 16.8% readiness average in January. Although full digital integrated attack and navigation systems were not always available, air frame availability was good, with an average 9 of 12 aircraft operational daily, compared with an average 6.6 ready during January. The multiple systems of the aircraft permitted completion of 395 attack sorties, 170 of these in North Vietnam. In the remaining 225 sorties flown in support of III MAF, ROKMC and ARVN forces in I Corps, 1040 tons of ordnance were dropped on Viet Cong targets. The Intruders were credited with 7 VC killed, Ill probably killed, 137 buildings destroyed and 21 secondary explosions. In the north, where 528 tons of bombs were dropped, bomb damage assessments for the A-6A were limited to 6 secondary explosions due to the limited.



visibility under which most missions were flown. Several moving targets, probably trucks, were detected and attacked using airborne moving target indicator radar but results were not discernible.

#### Air Control

Preparations were being made to locate Marine Air Control Squadron 4 at Monkey Mountain when that unit arrives from CONUS in April. This squadron is equipped with the Marine Tactical Data System (MTDS), an advanced automated air control system. Deployment of this system to the Danang area will provide the capability to interchange information vital to air defense between the shipboard Navy Tactical Data Systems of the 7th US Fleet and the present US Air Force in-country air control system.

## Helicopter operations

Marine helicopters flew 33,670 sorties during February - 29,147 in support of III MAF units and the remaining 4,523 in support of ARVN and ROK Marine units in I CTZ. The varied tasks performed included the lift of 46,936 personnel, delivery of 5,682 tons of cargo to combat units and forward logistic support areas, and evacuation of 2,597 casualties - US and ROK Marines, ARVN soldiers, civilians, and enemy captives.

Other missions performed by helicopters, were search and rescue, reconnaissance of potential landing zones, tactical recovery of downed aircraft and armed escort for combat troop lifts.

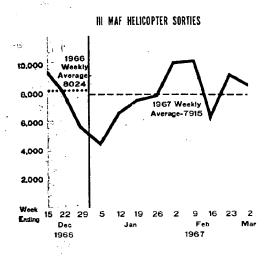
The four CH-53A helicopters of HMH-463 lifted 651 tons of cargo and 1,005 passengers in the first month of operations, while flying 444 sorties. The sortie rate

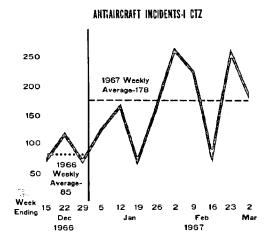


of 4 per day per aircraft attests to the reliability of this new heavy lift helicopter, exceptional for initial introduction to combat.

The eight CH-37C helicopters being replaced by the CH-53A flew 530 sorties during the month, an average of over 2.3 sorties per day. This is a respectable rate for a 10 year old workhorse.

Increased exposure of helicopters to ground fire due to the tempo of ground operations resulted in 162 helicopters receiving combat damage during the month, compared with 138 helicopters which received combat damage during January. There were no combat losses. The graphs below show the relationship between the helicopter sorties and antiaircraft incidents in I CTZ.





#### SUMMARY

March marked a continued intensification of enemy activity over the whole of the I Corps Tactical Zone. His efforts to support infiltration into the A Shau and Ba Long valleys from Laos increased. Concurrently, his guerrilla actions against the fabric of the Revolutionary Development program grew, as did his efforts to harass our bases and lines of communication. Finally, he showed strong determination to abate the destructive trans-DMZ artillery attacks which were evidently causing him distress.

The simultaneous demands posed by these enemy initiatives placed a strain on Marine resources, and diminished their freedom of action. The Marines nevertheless countered the enemy's military effort with what was probably their broadest offensive effort of the war-28,229 small unit counterguerrilla actions, thirteen major operations of battalion size or larger, and intensified artillery action against enemy bases and staging areas in and north of the DMZ.

The accelerated level of offensive activity diminished somewhat the Marine contribution to Revolutionary Development. Concurrently, there was also evidence that the ARVN efforts in the RD area were affected adversely by the enemy's counter-RD program.

The overall intensification of the I CTZ conflict is reflected in casualty figures. The cost to the enemy was great. Marines killed 2,159 in March - a new record. At the same time, 74 others were captured. Marines sustained 279 killed during the month.

The non-shooting offensive operations in I CTZ exhibited growing momentum during the month, and produced results which commend their further expansion. Leaflet drops, aerial broadcasts, film presentations, Armed Propaganda Teams, Psychological Operations Exploitation Teams, Community Relations Committees and other similar efforts united to produce 284 Chieu Hoi returnees during the month - a record number.

The Combined Action Program continued to flourish in the face of growing and coordinated VC opposition. Nine new platoons were formed, four of them at Dong Ha, the first time Combined Action units have been organized in that area. There are now 69 platoons in existence, out of a 1967 program of 114.



### AIR OPERATIONS

# Fixed Wing

Keeping pace with intensified III MAF ground operations, a record 7,101 combat strike and reconnaissance sorties were flown by the 1st Marine Aircraft Wing. An additional 803 sorties were cancelled due to weather, 620 of them by target or enroute weather.

Close air support of Marines engaged in ground fighting accounted for over 20 percent (990) of the 4,847 strike sorties in the Republic of Vietnam. In addition, 901 combat reconnaissance and 31 air defense sorties were flown in the south. Over 6,200 tons of bombs, 11,000 air to ground rockets and 174,000 20mm cannon rounds were delivered on North Vietnamese and Viet Cong targets in I and II CTZ. Results included 288 confirmed enemy killed, 80 secondary explosions and 62 bunkers or gun positions destroyed or damaged.

A new high total of 902 combat sorties were flown over North Vietnam, 557 of them with attack missions, the remainder being photo reconnaissance and electronic countermeasure sorties. 1,239 tons of bombs were delivered on military targets north of the DMZ, 609 tons by the A6A attack aircraft which consistently proves its worth in engaging targets of opportunity by electronic means. Damage assessments in North Vietnam were limited to the 27 secondary explosions, which resulted when ammunition resupply vehicles or supply points were hit.

Over Laos, flight activity also increased. 451 strike sorties were flown against enemy resupply routes, way stations, truck parks and supply points. 803 tons of bombs and 175 rockets were expended in these attacks with known

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results of 40 secondary explosions, 64 road cuts and 11 fords cut. This compared with 359 sorties flown in southern Laos during the previous month.

Marine Air Support Radar Teams at Dong Ha, Phu Bai, Danang and Quang Ngai controlled 2,199 sorties, permitting air attacks on the enemy during periods of low visibility.

During the month, two attack aircraft, an F-4B and a A4E, plus one EF-10B electronic countermeasure aircraft, were lost to enemy ground fire in RVN, while 36 other fixed wing aircraft received combat damage.

## The A6A

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The A6A Intruders flew 177 strike sorties in North Vietnam during hours of darkness and poor visibility, delivering 609 tons of bombs and over 9,000 rockets on targets detected and hit with the use of the airborne moving target indicator and electronic attack system. Because of the nature of the mission, full assessment of bomb damage was not possible, but over 25 secondary explosions were reported.

157 of these strike sorties were flown at night, engaging 282 moving targets and 290 fixed targets. The usual ordnance load of A-6A's flying strike missions in North Vietnam is 16 MK-82 500 pound bombs and 4 AERO 7D rocket pods with seventy-six 2.75 inch rockets. Moving targets, generally trucks or boats, detected by airborne moving target indicator radar were usually attacked with Aero 7D rocket pods, a 19 rocket package of 2.75 inch folding fin aerial rockets, to give the highest possible kill probability.

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Marine A6A's also flew 222 attack and reconnaissance sorties in the south in support of ground operations. Over 800 tons of bombs were dropped on the enemy.

VMA (AW) 242 suffered its first loss on 23 March, when a transport aircraft overshot its control point on a cross taxiway, moving into the path of a fully loaded A6A which was nearing the end of its take off run. The crew of the attack plane managed to escape with moderate injury. The crew of the transport was lost. Both aircraft were destroyed.

A high light of the month was the arrival of the first flight of VMA(AW) - 533 A6A's at Chu Lai on 31 March. In addition to the considerable contribution to the all weather capabilities of the 1st Marine Aircraft Wing, the trans-Pacific movement itself was spectacular. The crews and aircraft performed flawlessly during their six day, 8,500 mile journey from El Toro to Hawaii, to Guam and Vietnam. The entire operation, supported by Marine aerial refuelers from both VMGR-352 based at El Toro and VMGR-152 at Okinawa, was without incident. The squadron closed Chu Lai at 1135 on 1 April with all 12 aircraft still together. This squadron replaced an A4C squadron, VMA-211, which began its trans-Pacific flight to CONUS on 31 March.

At month's end, planning was well along for the employment of Marine A-6A's on strike missions into the northern portions of North Vietnam. Previous Marine attack missions have been into the area south of 18 degrees latitude, the 90 mile long southernmost segment of that country. Its unique all weather capabilities, particularly the ability to detect and attack moving or stationary ground targets without visual contact, make this an ideal aircraft for interdiction of lines of communication and south-bound supplies.

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With the arrival of VMA(AW) - 533, there are now 23 land based Marine Intruders in RVN. The program of strikes into the northern portions of NVN calls for those A-6's with full attack navigation systems operational and not already committed to support of US and ARVN forces in ICTZ, to be made available for attack missions into the north. The tasking of Marine A-6's for these missions, which can be flown when other types of aircraft must be diverted due to weather, will provide a substantial augmentation to the 18 carrier - based Navy Intruders now available for this purpose.

## Helicopter Operations

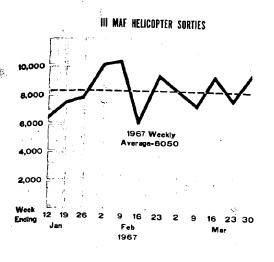
Marine helicopters flew 40, 325 sorties in the month, the highest total since last July. 43,545 personnel were lifted and 5,341 tons of cargo carried in support of the widespread ground operations. One measure of the intense fighting during the month is the unusually high number of casualty evacuation missions: 4,324 compared to 2,597 for February.

33,486 of the helicopter sorties were in support of III MAF and 3,653 supported ARVN forces. Marine helicopters of the US 7th Fleet Special Landing Force flew 3,186 sorties in support of Deckhouse VI and Beacon Hill.

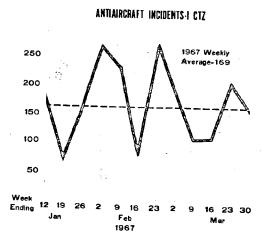
The CH-53A performed well during the month, transporting 792 tons of cargo and 902 passengers in 517 sorties. This high number of sorties raised the average to 4.1 sorties per CH-53A per day in March, from 4.0 for February.

The increased pace of operation with added exposure to enemy ground fire resulted in the combat loss of 5 helicopters during the month. An additional 115 helicopters received combat damage. The chart below depicts the

continuing rise in the antiaircraft incidents as they keep pace with the rising number of helicopter sorties.



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### SUMMARY

Before the month of April was over, it was clear that the enemy had made the I Corps Tactical Zone the object of his current main effort.

He had intensified greatly his efforts to neutralize the Marine and Army artillery positions near the Demilitarized Zone, to damage our forward logistic base at Dong Ha, and to damage our air bases at Chu Lai and Phu Bai. In the process, he fired over 2,300 rounds of mortar, rocket and artillery into these areas, causing moderate damage and 478 casualties.

Concurrently his guerrilla campaign had grown, and his efforts to impede the Revolutionary Development program increased in strength, coordination, and boldness.

Finally, he launched a series of major ground attacks to seize the tactical initiative, resulting in some of the most severe fighting of the war in the Demilitarized Zone area.

COMUSMACV, perceiving the evident determination of the enemy to build up his effort in the I Corps Tactical Zone, moved, early in April, to diminish the burden on III MAF by introducing Task Force Oregon, a six battalion force, into the Quang Ngai-Chu Lai area, thus relieving three Marine battalions to meet other critical needs. By month's end, the Marine battalions freed in the Chu Lai area were all heavily engaged in operations against enemy base areas southwest of Danang, as well as in operations in the DMZ region.



A total of 15 large unit operations were mounted by the Marines against the enemy during the month, as compared with 13 in March and an average of 10.5 for the past year. Operations were undertaken against major base areas between Danang and Chu Lai and northwest of Hue. Other important base areas, such as that in the A Shau Valley, were not attacked because of force limitations.

Most significant of the large operations was the major confrontation north of Khe Sanh, where a division size enemy attempt to overrun that outpost was frustrated by a combined Marine air-ground effort, at a cost of 661 enemy killed. Outstanding among the characteristics of this engagement was the performance of Marine Corps aviation forces which, in the space of about four days, delivered over 1,000 sorties in close support of the attacking Marines on the ground.

The Revolutionary Development program suffered during April as a result of several convergent factors: the intensified enemy activity, preoccupation of US and ARVN forces with other critical tasks, and the widespread redistribution of units incident to introduction of Task Force Oregon. Great morale loss was suffered by local Vietnamese as a result of the major enemy raid on Quang Tri city on 6 April, although this unfavorable development was partially neutralized later in the month by a series of successful ARVN operations in the Hue/Quang Tri area, where two large enemy forces were defeated and substantial quantities of equipment were captured.

Marine units, despite heavy involvement elsewhere, conducted the second highest level of small unit counterguerrilla operations of any month of the conflict. They aggregated 26,814 patrols, ambushes, and company size operations, only slightly below March's record of 28,229.

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An additional 2,939 were conducted by US Army units of Task Force Oregon. 600 of the enemy were killed, - within 32 of the highest number killed in such operations in any month.

The Combined Action program continued to develop satisfactorily during April. There are now 72 Combined Action platoons, and their growing impact on Revolutionary Development is evident. Wherever a Combined Action platoon is established near one of the Revolutionary Development teams, progress toward rural stability is steady and heartening. The program for formation of Combined Action platoons is on schedule.

In every area of the conflict, April was an intensive month. The level of intensity can be measured in many ways, but is reflected clearly in the casualties. With little to show for his pains, the enemy suffered 3,157 killed throughout the I Corps and 3,174 probably killed. In addition, he lost 472 prisoners and 432 weapons.

The cost to us was not small. 292 Marines were killed and 2,527 wounded. Of the latter, about 50 percent did not leave the theater.



## AIR OPERATIONS

## Fixed Wing

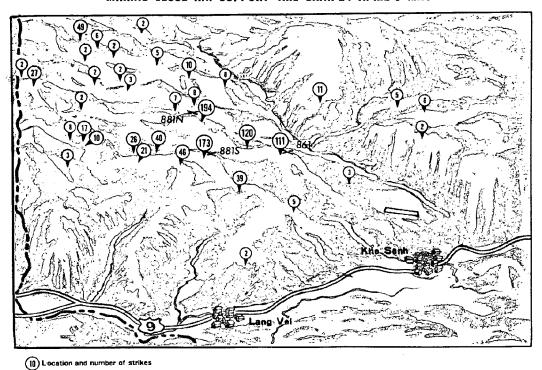
The First Marine Aircraft Wing flew 6,574 combat sorties during April, which included 4,200 strike sorties in South Vietnam, 544 in North Vietnam, and 394 in Laos.

In South Vietnam, 26 percent of the 4,200 strike sorties were in close support of Marines, Army, ARVN and ROKMC forces engaged on the ground. 6,100 tons of bombs, 1,332 napalm bombs, 7,500 air to ground rockets and 225,000 rounds of 20mm were placed on enemy targets throughout I CTZ. Discernible results were 201 enemy confirmed killed, 95 secondary explosions, 57 fires, and 139 bunkers, 62 caves and tunnels and 1,222 other structures destroyed. An additional 467 enemy troops were probably killed.

A significant portion of this effort was in support of the battle around Khe Sanh and Hill 881. In this area alone, between 24 April and 6 May, Marine pilots flew 1,004 strike sorties, expending 1,502 tons of ordnance. Details of that support, and the results it achieved, are reflected on the map on the following page.



# MARINE CLOSE AIR SUPPORT-KHE SANH-24 APRIL-6 MAY



1004 SORTIES; 1502 TONS OF ORDNANCE.

ENEMY KILLED BY AIR: 112 CONFIRMED; 41 PROBABLE.

## DAMAGE

Bunkers destroyed	328	Tunnels damaged	7
Bunkers damaged	40	Automatic weapon	
Structures destroyed	14	positions destroyed	11
Structures damaged	-4	Secondary fires	10
Trenches damaged	12	Secondary explosions	14
Tunnels destroyed	5		

In Laos, Marine aircraft contributed 394 strike sorties to the interdiction of infiltration and supply routes. 795 tons of bombs and 161 rockets were expended, resulting in 18 secondary explosions, 16 fires, 68 road cuts, 8 fords destroyed, 9 landslides, 5 trucks and one tractor destroyed and 6 trucks and another tractor damaged. RF-4B's flew 7 photo missions over the extensive network of trails and roads through which supplies and manpower have moved in the past from North Vietnam.

Over North Vietnam, 544 strike sorties and 339 photo and electronic countermeasure sorties were flown during the month. 1,446 tons of ordnance were delivered on fixed and moving targets. Marine F-4B's, A-4E's and F-8E's flew 335 of the strike sorties, including 33 at night under radar control, expending 651 tons of ordnance. Known bomb damage includes 13 NVA confirmed killed, one bridge destroyed and another damaged, 15 roads cut, 2 trucks destroyed and 5 damaged. Four secondary explosions and two fires were observed, with one antiaircraft position destroyed.

#### The A-6A

The two squadrons of Intruders now assigned to the First Marine Aircraft Wing flew 546 combat sorties during the month. 337 were in support of US, ARVN and ROK Marine forces in I CTZ and the remaining 209 were over North Vietnam.

In the south, 993 tons of ordnance were delivered on enemy targets in support of friendly forces on the ground. VMA(AW)-533, which arrived in-country on the last day of March, conducted its shakedown and area familiarization flights in South Vietnam before being assigned missions north of the DMZ.

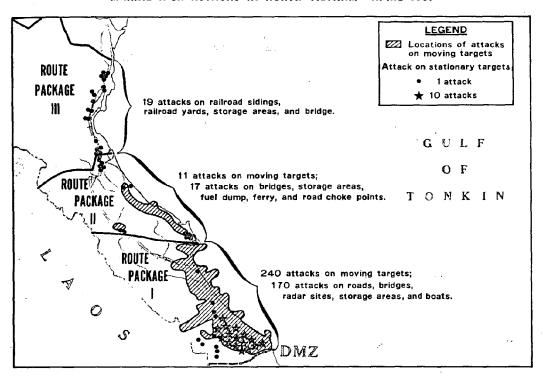
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April marked the initiation of A-6A full systems strikes north of Route Package I in North Vietnam. From 11 April until the end of the month, 59 strike sorties were flown into Route Packages II and III, attacking 47 targets. The remaining 150 Intruder sorties into the north struck military targets in the Route Package I area and in the DMZ. Ordnance delivered in the north amounted to 815 tons of bombs and 3,821 air to ground rockets. The 206 fixed targets struck included barracks; radars, highway and railroad bridges, ferries, fords, truck parks, supply areas and one SAM site. Results of attacks on these targets were 17 secondary explosions and 8 fires. 251 trucks, boats and other moving vehicles were attacked, using airborne moving target indicator systems. It will be recalled that the moving target indicator and electronic attack systems of the A-6A provide its crew with the ability to locate and destroy moving vehicles or boats during darkness or when weather causes poor visibility. Results of these strikes were limited to the 20 secondary explosions, 6 fires which were observed by crew members, and one boat sunk.

The locations of Marine Intruder strikes into North Vietnam during April are shown on the map on the following page.



## MARINE A-6A ATTACKS IN NORTH VIETNAM APRIL 1967



### Aircraft Losses

One A-6A was lost over North Vietnam from an unknown cause, when it disappeared while on an attack run near Vinh. One A-4E and one F-4B were lost to ground fire in South Vietnam. The crew of the F-4B was recovered but the A-4 pilot did not eject. Thirty-two other fixed wing aircraft received combat damage from antiaircraft fire but these managed to return safely to their bases. This brings total loss figures to 40 fixed wing aircraft destroyed and 88 rotary wing aircraft destroyed since our commitment to RVN.

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#### Air Control

Construction of facilities at Monkey Mountain for Marine Air Control Squadron-4 and the Marine Tactical Data System, a semi-automated air defense system, progressed according to schedule.

The advance party of MACS-4 arrived at Danang on 27 April to facilitate turnover when their squadron arrives in early June. At that time, MACS-7, presently at Danang, will return to CONUS.

As a part of the MTDS equipment, a tactical aircraft data communications central will deploy shortly after the main body of the control squadron, to provide a real time tie in with the Navy Tactical Data System already operational with the US Seventh Fleet. The entire complex will provide the capability for instant display at Monkey Mountain of those enemy aircraft detected by the Navy Tactical Data System in the Gulf of Tonkin and those detected by MTDS radars. Integral computers of the MTDS can then provide instant solutions to intercept problems, whether USAF, USN or USMC aircraft fly the mission. The complex will also provide direct firing instructions and data to HAWK batteries to permit missile intercept. Ultimately, when the digital computer capability of the US Air Force is available, a data link with the Air Force Backup Interceptor Central (BUIC) will permit mutual exchange of air defense information.

#### Helicopter Operations

First Marine Aircraft Wing helicopters flew 38,060 sorties during the month, lifting 45,199 personnel and 4,467 tons of cargo in support of ground operations in ICTZ.



The four CH-53A's of the detachment of HMH-463 performed notably, flying 821 sorties, an average of 6.8 sorties per aircraft each day, compared to 4.1 sorties per day during March. A total of 1,210 tons of cargo and 1,964 personnel were lifted. The varied missions performed were cargo and troop lift, casualty evacuation and tactical recovery of downed aircraft and damaged equipment.

The eight plane detachment of CH-37C's, the older heavy lift helicopter in the Marine inventory, flew a respectable 799 sorties, transporting 2,382 personnel and 484 tons of cargo in support of III MAF, ARVN and ROK Marines in ICTZ. These aircraft, which have been in service for 10 years, are scheduled to be replaced by CH-53A's with the arrival of the main body of HMH-463 in May. This squadron was embarking in the USS Tripoli (LPH-10), with 22 CH-53A helicopters, at the end of April, destined for Danang.

The bulk of the helicopter support in I CTZ was provided by the UH-34D and CH-46A squadrons. The UH-34's flew 13,146 sorties, transporting 16,948 personnel and 974 tons of cargo. The CH-46's, with their greater lift capability and speed, lifted 19,523 personnel and 1,727 tons of cargo in only 6,079 sorties.

The Marine helicopter squadrons assigned to the two Special Landing Forces of the US Seventh Fleet flew 1,757 sorties, transporting 2,582 personnel and 74.9 tons of cargo in support of Operations Beaver Cage, south of Danang, and Beacon Star, near the DMZ. These brought the total Marine helicopter sorties in South Vietnam and combat zone waters to 39,817 during the month.



Combat losses during the month were four, compared to 5 in March. 126 helicopters were damaged while flying combat missions, in addition to the 30 damaged during the enemy mortar and rocket attacks at Dong Ha and Phu Bai on the 27th (see Base Defense section).

### SUMMARY

May was a month of records in I CTZ, in many of the areas regarded as criteria of progress. There were more enemy killed, more enemy captured, more Chieu Hoi returnees, more small unit operations, more combat air sorties, more bombs dropped, more propaganda broadcasts, more Combined Action units and more Revolutionary Development Teams.

These and other similar indices could, if taken in isolation, portray substantial progress. However, a more accurate assessment would be that, during May, all of these measures on our part served only to meet the enemy's broad front summer campaign and to prevent it from achieving all of its purposes.

During the month the confrontation in the DMZ area continued in the same pattern which characterized the two months preceding. The enemy moved south into Quang Tri Province with strong NVN forces, and exhibited a willingness to engage our major units wherever encountered. Concurrently he maintained a steady interdiction of our forward positions with artillery, rockets and mortars located in or north of the DMZ.

This enemy activity was largely frustrated by coordinated offensive action on the part of III MAF. The enemy suffered severely in the intensive combat in the Khe Sanh and Con Thien regions, and he lost heavily in men and material to our first major offensive into the southern DMZ.

Nevertheless, it was apparent throughout the month that the enemy was prepared to accept the losses involved, and to commit equivalent resources in replacement, as the price for causing us casualties and for fixing large numbers of our forces in the remote hinterland regions.



At the same time, the enemy maintained the high pace of his actions in the lowlands, to control the people and to disrupt the Revolutionary Development Program. These efforts were likewise rebuffed by US offensive operations, and at an even greater proportional loss to the enemy in casualties.

The ability of III MAF to meet and throw back all of the enemy thrusts during the month was largely a function of additional forces in ICTZ. Arrival of the nine battalions of Task Force Oregon occurred at a critical time. This, plus the decision to commit the three battalions and two helicopter squadrons of the PACOM amphibious reserve, served partly to redress the serious force imbalance which hitherto had existed in ICTZ and which, to some degree, persists.

These reinforcing actions contributed to the effective air-ground offensive operations of Marine forces in the DMZ region, where some 1,680 North Vietnamese regulars were killed at a cost of 358 US troops.

The reinforcements also permitted the resumption of the important campaign for protection of the people in the Nui Loc Son basin, between Danang and Chu Lai, as well as intensification of offensive operations in the rich lowlands south of Quang Ngai. In these actions, the enemy lost 1,448 men in two regions he regards as critical, while our forces suffered 200 killed in the process.

During the month ARVN participation in the larger tactical operations was at least as professional and as creditable as in any equivalent period in the past. Conversely, direct ARVN participation in the RD program showed little change in magnitude or quality from the preceding month. RD teams were often inadequately protected

and overall progress in the program was small; this despite the greatly intensified Marine counterguerrilla efforts, which kept pace with the enemy's build-up but did not outdistance it.

Woven through the fabric of all Marine operations conducted during the month was the reflection of the power-ful contribution of close support aviation. The record number of 7,685 fixed wing support sorties of the 1st Marine Air-craft Wing figured decisively in all 14 of the major operations undertaken by III MAF in May.

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## AIR OPERATIONS

## Fixed Wings

Marine fixed wing aircraft flew a record 7,685 combat and combat support sorties in May to keep pace with the increased tempo of operations on the ground. Of these, 6,542 were tactical strike sorties in the Republic of Vietnam, with 36 per cent flown as close air support for Marine, ARVN and ROKMC forces engaged with the enemy on the ground.

Ordnance delivered on Viet Cong and NVA targets in I CTZ included 9,350 tons of bombs, 1,502 tons of napalm, over 8,000 air-to-ground rockets and 339,000 rounds of 20mm cannon ammunition. Results included a record 505 VC/NVA confirmed killed, another 567 probably killed, and 667 bunkers, 106 weapons positions and 1,422 buildings destroyed. Hits on enemy supply caches and storage points were evidenced by 143 secondary explosions and 105 fires started by exploding ordnance.

Substantial credit for the success of Operation Hickory and of the Union series was due to these 1st Marine Aircraft Wing operations. A total of 996 Marine attack sorties, 398 of them in close proximity to Marine ground elements actually engaged with the enemy, supported Operation Hickory. The heavy air-delivered ordnance was a prime factor in driving out or destroying the enemy within the extensive bunker complexes in the DMZ. In Operation Union, 327 Marine fixed wing sorties supported the 5th Marines, 142 of them in the first six days of Union II.

Over North Vietnam, 457 attack sorties, 367 elec-



tronic countermeasure sorties and 90 photo sorties were flown. 1,362 tons of bombs and 1,074 rockets were expended on the flow of supplies and men moving southward. Damage assessments north of the Provisional Military Demarcation Line included one SAM missile transporter and 5 SAM sites, 3 supply dumps, 15 bunkers and 10 sampans destroyed. 18 road cuts were scored and 31 secondary explosions and 61 fires observed as resulting from Marine air strikes show that additional POL, ammunition and supplies were destroyed.

In Laos, Marine A-4's flew 117 sorties; F-4B's, 79; and F-8's, 30 sorties against the Ho Chi Minh trail complex, with its way stations, storage points and antiaircraft defenses. In addition, 3 A-6 Intruders flew attack sorties in Laos for the first time. Bombs totaling 399 tons accounted for 60 road and 10 ford cuts, 22 bunkers destroyed, one large supply storage area destroyed, 11 secondary explosions and 30 enemy troops confirmed killed.

## The A-6A

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Marine Intruders flew 551 sorties during May, 339 of them in support of III MAF and 212 in support of the US Seventh Fleet and 7th Air Force. In RVN, over 1,300 tons of bombs and 50 rockets accounted for 137 enemy confirmed killed, 172 probably killed and 11 bunkers destroyed.

Over North Vietnam, Marine A-6's flew 209 sorties, all but 4 of them at night, striking targets from the DMZ to north of Hanoi. 938 tons of bombs were dropped on 191 fixed targets and 941 air-to-ground rockets were expended, mostly in strikes on the 65 moving targets hit. Positive damage assessments were limited to the 75 secondary explosions and fires which were observable during the night and cloudy weather strikes.



## The SAM Threat near the DMZ

The North Vietnamese SA-2 surface-to-air missile system has been expanding southward from the Hanoi, Thanh Hoa and Vinh areas since September 1966. In March of this year, a SAM site two miles north of the DMZ was added to the air order of battle, and on May 10th a missile firing was observed in the DMZ area.

On the 10th, an A-4E flying a radar controlled mission was approaching its target near the southern boundary of the DMZ, when Marines on the ground and other pilots in the area noted the firing of three SAM missiles. One exploded at the level of the A-4E and the aircraft disappeared from the controlling radar screen at Dong Ha.

Artillery was brought to bear on the suspected launching sites within minutes, but a damage assessment of the firing was not obtainable. Marines of the 1st Battalion, 4th Marines, saturating the area south of the DMZ with patrols, found an eight foot long section of an SA-2 missile two miles southwest of Con Thien. It was immediately evacuated through intelligence channels and proved to be the guidance section and lift surfaces of an SA-2 missile.

On the 13th, another SAM was observed in flight 18 miles north of Dong Ha, but Marine aircraft crews in the area also sighted the missile and took evasive action. The missile disappeared from view without doing any damage.

Suspected and probable launch sites were attacked by Marine and Air Force air strikes and Marine and US Army artillery. No other SAM missiles were sighted in the area, but on the 29th a patrol from the 2d Battalion, 26th Marines found another section of a missile three miles southwest of Con Thien. This section included most of an SA-2 guidance system and the sustainer engine.



Three new SAM sites were added to the air order of battle during the month, all within range of an aircraft flying ten miles south of the DMZ, and two suspected missile support facilities have been detected. Although air strikes, artillery and naval gunfire have inflicted heavy losses on SAM equipment moving into the area, the enemy is likely still to have at least two, and possibly three, SAM battalions within range of the DMZ.

### Aircraft Losses

The increased exposure coincident with the intensified Marine air activity brought fixed wing aircraft losses for May to 7, the highest monthly total since the Marines were committed to Vietnam. In addition to one A-4 lost to the SAM missile in the DMZ, 3 other Skyhawks, one F-4B, an F-8E, and one O-IC were shot down by enemy antiaircraft fire. An additional 40 Marine aircraft received combat damage. The losses in May brought total fixed wing Marine aircraft combat losses to 47 since March 1965.

## The EA-6A and EF-10B

Companion to the increased US air activity in North Vietnam is the requirement to protect US aircraft from SAM and radar-controlled conventional antiaircraft fires. The four EA-6A's and eight EF-10B's of Marine Composite Reconnaissance Squadron-1 carry a large share of the load. During the month, EA-6A's flew 106 sorties in North Vietnam, 46 of these in support of US Air Force or US Seventh Fleet operations. The older EF-10B's flew 264 electronic countermeasure sorties, with 78 of these in support of other than Marine aircraft. 252 electronic countermeasure sorties were flown in support of III MAF, the bulk of them when the North Vietnamese moved SAM missile units into

Route Package I and the DMZ area.

#### The RF-4B

The RF-4B's of the Composite Reconnaissance Squadron flew 322 photo missions in support of III MAF during the month. This photo version of the Phantom flew 90 of these missions over North Vietnam, 67 during the last two weeks of May, to detect enemy troop and logistical movements while ground forces swept the southern portion of the DMZ.

## Air Control and Support

The five Marine Air Support Radar Teams controlled 1,845 strike sorties on enemy targets the length of I CTZ. The Dong Ha site controlled a major portion, 625, many against suspected SAM and artillery positions in and north of the DMZ. The decrease in total radar controlled sorties during the month is attributable to the improved weather which precluded the necessity to control many daytime attacks.

On the 12th of May, Marine Air Control Squadron-4 deployed from CONUS with their semi-automatic data link air control equipment, the Marine Tactical Data System. This system, when tied in with the shipboard Navy Tactical Data System in the Gulf of Tonkin, will provide the pilot of any Danang-based interceptor with the proper course and speed to attack enemy aircraft as soon as they are detected. The unit is scheduled to arrive at Danang on 3 June. A backup radar, AN/TPS-34, and the Tactical Data Communications Central to provide instant interchange of air defense data with Navy and Air Force systems, also are scheduled for airlift to Danang in early June. Site preparation is progressing on schedule.



## Helicopter Operations

Helicopters of the two RVN based helicopter groups and the two squadrons with the two Special Landing Forces broke all records for one month's operations. A total of 56,031 helicopter sorties were flown during May, exceeding the previous record (41,957 set in July 1966) by 33 per cent.

56,366 personnel were lifted, a 39 per cent increase over the average for the first quarter of this calendar year. Cargo lifted by helicopters increased 44 per cent over the first quarter average, with 6,042 tons being transported, over one third of it by the now full squadron of CH-53's. Medical evacuation sorties flown during May's intense ground action more than doubled over the previous month -6,534 compared to 3,134 for April.

These high totals were attributable to the extensive use of helicopters in Operation Hickory, which was supported by 1,165 helicopter sorties, and the rapid lift of 2 infantry battalions in Union I and Union II. 1,141 helicopter sorties were flown for Union II in 6 days and 2,021 for Union I in the first 17 days of May.

Helicopter combat losses rose to 6 in May, compared to 4 in the previous month and 5 in March. Two UH-1E's and 4 UH-34D's were lost to enemy fire, bringing to 94 the total Marine rotary wing losses due to enemy action since the large scale commitment of Marine helicopters 27 months ago. 142 other helicopters received combat damage from enemy antiaircraft fire during the month.

## CH-46 Helicopter

CH-46 helicopters of the First Marine Aircraft Wing were temporarily grounded when an investigation to deter-



mine the cause of a CH-46 accident on 6 May revealed problems associated with the helicopters aft transmission system. Immediate corrective action of a temporary nature enabled the aircraft to fly combat missions while, at the same time, a detailed inspection program of all WestPac aircraft was instituted. Thus far, 20 faulty systems from 51 aircraft have been isolated. All squadron CH-46 aircraft should return to unlimited service by 1 July.



## SUMMARY

The pace of enemy activity in June declined slightly from previous months, but there was no evidence of a gross change in enemy strategy or of abatement of his intensified I Corps campaign which began in late 1966. Again in June he exhibited his willingness to pay a high price in men in order to draw friendly forces into engagements in the remote highlands near the DMZ.

During the month, III MAF killed 2,382 of the enemy and captured 123, raising to 12,808 and 1,177 the number of enemy killed and captured, respectively, in the first six months of 1967. An additional 8,207 were killed and 705 captured during operations by other friendly forces in I CTZ during the same period.

A special survey was conducted in June to analyze the effects on Revolutionary Development of the enemy's 1967 campaign. It verified figures collected previously in the regular III MAF RD reporting system, which showed that there had been little progress over the past six months, and even regression in some areas. By end-June, however, a resumption of progress was visible, due mainly to the arrival of Task Force Oregon, which allowed Marine and Army forces to pursue sustained military operations near the populated regions.

Noteworthy gains in RD during the month included the attainment of 60% or higher on the III MAF RD scale (equivalent to secure status) by four villages in the important Nui Loc Son/Duc Pho areas; the continued growth of ARVN RD Teams, from 110 teams in May to 118 by end-June; the return of 259 Chieu Hoi's, as compared with the 1966 monthly average of 145; and establishment of the first Combined Action Group Headquarters to oversee the training and support of Combined Action units.

A significant development, and one which may well prove to be a major long term weapon to combat the enemy, was the successful completion of the first phase of village and hamlet elections. In these first elections, 82.4 percent of those eligible voted in 154 village elections, while 79.8 percent cast ballots in 547 hamlet elections. Overall, 611,697 Vietnamese went to the polls in I Corps.

In June, III MAF forces conducted 15 large unit operations, concentrated principally in the populated coastal region from Danang south to the II Corps border. They accounted for 1,535 enemy killed and another 96 captured.

Despite the commitment of substantial forces to these 15 large unit operations, and to such diverse tasks as air base defense and construction of the firebreak buffer zone at the DMZ, III MAF maintained the growing pace of its counterguerrilla campaign. Company-size or smaller units conducted 37,477 patrols, ambushes, and search operations throughout the principal Revolutionary Development areas - the largest number in any month thus far in the conflict. These operations accounted for 669 enemy killed.

At the end of June it remained evident that the major enemy focus is still on the I Corps area. His recent troop buildup in the vicinity of Khe Sanh, Con Thien and Gio Linh underscores the likelihood of future, heavy action there. This situation, coupled with the enemy's reinforced campaign against the people in the lowlands, continues to create a significant troop imbalance. This is reflected, statistically, in the fact that about 32% of all the enemy forces in RVN are located in I Corps, about 44% of the total enemy incidents in 1967 have taken place in I CTZ, and about 45% of the total enemy killed in RVN in 1967 have occurred in I Corps - while only 21% of all friendly forces in RVN are located there.

### AIR OPERATIONS

### Fixed Wing

First Marine Aircraft Wing pilots flew 6,850 tactical fixed wing sorties in support of III MAF, ROKMC and ARVN forces in I CTZ, the Rolling Thunder campaign in North Vietnam and the Steel Tiger effort in the Laotian panhandle. These sorties included tactical strike, armed reconnaissance, photo and electronic countermeasures sorties.

## South Vietnam

A full 35% of the 5,111 Marine attack sorties in South Vietnam were closely integrated with the fire and maneuver of Marine, ROKMC, or ARVN units on the ground. Another 3, 287 attack sorties were flown in direct support of Marine, ARVN and ROKMC operations at distances from ground troops which did not require the close coordination of a close air support sortie. 8,899 tons of bombs, 2,598 napalm bombs, over 11,000 rockets and 164 thousand rounds of 20mm were delivered on NVA and Viet Cong targets in I CTZ. The rate of 1.99 tons of ordnance delivered per attack sortie in June compares favorably to the 1.86 tons per sortie average since January. Confirmed in-country damage assessments included 99 enemy killed by air, and 569 bunkers or mortar and automatic weapons positions destroyed. Two bridges and 14 sampans also were destroyed and 28 secondary explosions attested to hits on ammunition caches.

Of these total in-country strikes, F-4B's of VMFA-314, VMFA-542 and VMFA-115 flew 1,623 combat sorties in I Corps. Just over half of them, 812, were in the close air support category. These Marine F-4B's delivered the

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largest share of aviation ordnance dropped in I CTZ, 3,055 tons of bombs, 1,227 napalm bombs and over four thousand air to ground rockets. The more numerous A-4's of VMA's 211, 311 and 223, based at Chu Lai, flew 664 close air support, 1,414 direct air support, and 154 helicopter escort sorties during the month. Crusaders of VMF(AW)'s 232 and 235, with only 27 aircraft on hand, flew 1,316 combat sorties, dropped 1,542 tons of bombs and fired 5,783 five inch Zuni and 2.75 inch rockets. The 24 A-6A's of VMA-(AW)'s 242 and 533 flew slightly over half of their 503 total sorties in South Vietnam, delivering 2,179 tons of bombs in direct support of large unit operations and US Special Forces outposts.

A significant amount of the Marine air effort not in close support of ground forces was directly related to our ground action, being targeted upon the increased enemy presence in A Shau valley. Since the early part of the year enemy activity, in the form of road and bridge construction in and around this major route of access from Laos, has been on the increase. He is apparently building a major logistic base in that area to support operations in Quang Tri, Thua Thien and possibly Quang Nam provinces.

Marine aircraft have flown 1,438 combat sorties in A Shau valley and along Route 9 since the 1st of March. These included 717 attack sorties, 259 armed reconnaissance, 95 visual reconnaissance, 59 photo, 16 tactical air controller sorties and a total of 292 air support radar controlled attack missions.

The 1,715 tons of bombs and rockets expended in these missions resulted in 30 enemy killed, 11 vehicles destroyed or damaged, 413 road cuts, 30 secondary explosions, 73 bridges or dams and 29 fords or river crossings destroyed or damaged.

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The repeated attacks in the A Shau valley have restricted enemy movement on one of his main lines of communication. Aerial photographs showing significant road cuts also reveal great effort by the enemy to repair or bypass the damaged areas.

## North Vietnam

The A-6A heavy attack bombers of VMA 242 and VMA-533 took on a greater share of the First Marine Aircraft Wing effort north of the DMZ during the month. Of the total 410 Marine attack sorties in North Vietnam, the Intruders flew 253, mostly at night. This compares with 209 sorties into the north in May. F-4B's flew 70, A-4's flew 47, and F-8's flew 40 sorties, the majority of their strikes during daylight or under control of the Marine Air Support Radar Team at Dong Ha.

1,437 tons of bombs and rockets were expended on the enemy lines of communication and military installations and equipment from Route Package I to Route Package VI B near the northern border of North Vietnam. Bomb damage assessment in the north was limited to 70 secondary explosions, 3 artillery pieces, 3 antiaircraft positions and 4 bunkers destroyed.

The level of enemy activity has increased significantly in I CTZ since the major influx of enemy supplies during the TET stand-down. For example, during the period from the end of the truce, 12 February to end-June, the enemy fired 18,115 mortar rounds in I CTZ, most of it in the DMZ area. This is six times the total of 3,337 known fired in the 2 1/2 month period prior to TET. And it was in March, after TET, that the NVA started using artillery in the DMZ area. Although the artillery may have been north of the DMZ for some time previously, there was no record of its being fired before. Rocket fire at Marine

bases also began after TET, with 51 rounds in February, 219 in March, 40 in April, 353 in May and down to 153 in June when larger caliber artillery started to replace the less accurate rockets.

The continued increase in artillery and mortar attacks in recent months points up the fact that our increased air operations north of the Ben Hai River may be hurting but certainly are not stopping his resupply. The enemy determination to move surface to air missile systems into the region just north of the DMZ at heavy cost is a measure of his need to defend against air attacks. In the last six months the estimated conventional antiaircraft capability in Route Package I has almost doubled, 958 weapons compared to 514 in January.

## Aircraft Losses

There were no Marine fixed wing aircraft lost during June to enemy action. The overall losses since the March 1965 commitment of Marine attack aircraft remained at 47. A total of 26 fixed wing aircraft did receive combat damage in June, compared to 40 during the previous month.

## Helicopter Operations

The mobility given the ground forces by the Marine helicopter served to help overcome to some extent the dispersion of Marine infantry and artillery units. In June, First Marine Aircraft Wing helicopters flew 43,737 helicopter sorties, 38,906 in support of III MAF, with the rest in support of ROKMC and ARVN operations. The two squadrons with the Seventh Fleet Special Landing Forces, HMM-164 and HMM-362, flew 5,747 sorties in support of Marines ashore. A total of 62,957 personnel were transported and 6,452 tons of cargo moved by helicopter during the month. Both figures were new records.

During the month, 12, 205 helo sorties were flown for the Marine large unit campaign. Union II was supported by 561 helicopter sorties in just five days; Cimarron, which involved 6 Marine battalions, by 7,303 helicopter sorties through the month; and three battalions in Operation Arizona, by 1,128 sorties.

The UH-34D's flew 22,769 sorties during the month and CH-46's, 7,247. The aircraft of VMO-2, VMO-3 and VMO-6 flew 10,218 UH-1E sorties, including 2,558 armed helicopter, 221 reconnaissance, 186 command and control missions and 61 tactical airborne controller missions.

The heavy CH-53's of HMH-463 performed well, flying 3,503 sorties, more than twice the number flown in May (1,540). Their missions included logistic and combat cargo lifts, logistic troop lifts, tactical recovery of downed aircraft and evacuation of casualties.

The many flights during June exposed an increased number of helicopters to enemy small arms fire. Seven Marine helicopters were lost to antiaircraft fire, bringing to 100 the number lost to enemy fire since March 1965. Although this was an increase of one over the loss of 6 in May, the number damaged dropped from 142 in the heavy combat in May, to 80 during June.

#### Air Control

The activation of the Marine Air Control Squadron-4 4 Marine Tactical Data System on Monkey Mountain in June is a milestone in the tactical control of combat air power. The portions of the expeditionary semi-automated air defense information center already activated permit the positive control of Marine aircraft from south of Chu Lai to the vicinity of Vinh. The elevation of Monkey Mountain (Hill 647) is such that control facilities at Phu Bai,



where a detachment of MACS-7 has been employed since 1965, are no longer necessary. The first operational step has been taken toward obtaining real time vital combat air defense data from US Seventh Fleet ships and aircraft hundreds of miles to the north. Installation of the Tactical Data Communications Central, which arrived at Danang in June, will complete the capability for instantaneous reception of information from these ships and, in addition, provide the capability to interchange air defense information with the existing USAF/VNAF air control system at Danang.