PROJECT CHECO SOUTHEAST ASIA REPORT

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PROJECT
Contemporary
Historical
Examination of
Current
Operations
REPORT

7AF LOCAL BASE DEFENSE OPERATIONS

JULY 1965–DECEMBER 1968

1 JULY 1969

HQ PACAF

Directorate, Tactical Evaluation
CHECO Division

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PROJECT CHECO REPORTS

The counterinsurgency and unconventional warfare environment of Southeast Asia has resulted in the employment of USAF airpower to meet a multitude of requirements. The varied applications of airpower have involved the full spectrum of USAF aerospace vehicles, support equipment, and manpower. As a result, there has been an accumulation of operational data and experiences that, as a priority, must be collected, documented, and analyzed as to current and future impact upon USAF policies, concepts, and doctrine.

Fortunately, the value of collecting and documenting our SEA experiences was recognized at an early date. In 1962, Hq USAF directed CINCPACAF to establish an activity that would be primarily responsive to Air Staff requirements and direction, and would provide timely and analytical studies of USAF combat operations in SEA.

Project CHECO, an acronym for Contemporary Historical Examination of Current Operations, was established to meet this Air Staff requirement. Managed by Hq PACAF, with elements at Hq 7AF and 7AF/13AF, Project CHECO provides a scholarly, "on-going" historical examination, documentation, and reporting on USAF policies, concepts, and doctrine in PACOM. This CHECO report is part of the overall documentation and examination which is being accomplished. Along with the other CHECO publications, this is an authentic source for an assessment of the effectiveness of USAF airpower in PACOM.

Milton B Adams

MILTON B. ADAMS, Major General, USAF
Chief of Staff

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DEPARTMENT OF THE AIR FORCE
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(2) AIR FORCES
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FOREWORD

The characteristics of the present conflict in Southeast Asia, wherein United States and allied forces are in constant and close proximity to enemy ground forces, are unique and unprecedented in recent U.S. military history. Military installations are in continuous likelihood of being attacked at a time and place of the enemy's choosing. The variety of strategies and tactics available to the enemy is limited only by the types and quantity of weapons at his disposal. He is inclined to select targets which provide the greatest pay-off for the expenditures incurred.

Much of the enemy activity, therefore, has been directed against air bases, since they present to him a concentration of lucrative targets. Initially, enemy action against air bases was usually in the form of attempted penetration of the base perimeter. Later, as perimeter defenses were improved, standoff attacks with mortar and rockets were favored by the enemy. As each change or improvement in base defense has taken place, the enemy has shifted the method and tactics of his attacks. Consequently, air base defense efforts in SEA have been an evolutionary development to provide the best level of security and defense against a spectrum of potential threats.

Presenting a general analysis of overall USAF air base defense efforts, this CHECO report specifically addresses many facets which have limited or constrained the development of USAF air base defense. It analyzes selected major attacks to identify necessary changes occurring in base defense concepts and techniques, and outlines the development of the SAFE SIDE concept and the progress of Operation SAFE LOOK. Chapter VI prompts a comparison of USAF air

base defense in the Republic of Vietnam with defenses in Thailand and the Republic of Korea.

To fully appreciate how defense planners grappled with the problems and evolved solutions, it is necessary to view air base defense efforts against the background of a mounting threat, limited funding, manpower ceilings, and the political and environmental constraints imposed upon them.

CHAPTER I

MISSION ANALYSIS

Constraints Imposed by Service Roles and Missions

The National Security Act of 1947, as amended, established broad roles and missions for the Secretary of Defense, the Joint Chiefs of Staff, the three Military Departments, and the four services. Pursuant to the authority contained in this statute, the Secretary of Defense published Department of Defense Directive 5100.1, "Functions of the Department of Defense and Its Major Components," on 17 June 1966, outlining in more detail the specific roles and missions of the four services. For the most part, both the statute and the directive are silent about the responsibilities for base defense. The functions assigned to the Department of the Army emphasize the Army's responsibility for conduct of land war and "to seize, occupy, and defend land areas." Every function assigned to the Air Force contains the words and implication that the function is one conducted in or for warfare in the air.

These directives were designed for the conduct of highly sophisticated warfare wherein major logistic bases are assumed to be located well behind established military fronts. In such environments, air bases do not require large forces for their protection. Traditionally, all of the services had assumed the function of providing internal security for their own bases, and the Army was generally assumed to have the responsibility for external defense of both Army and Air Force installations.

These policies and assumptions, however, were not sufficiently flexible to counter the subversive insurgency found in Southeast Asia. Military bases

were located in a hostile environment among an enemy that could not be readily distinguished from friendly members of the local indigenous population; insurgents operating within this environment were well-organized and well-supported logistically; there was no U.S. military control over the adjacent indigenous civilian population; and a ceiling was imposed on the number of U.S. military forces in Vietnam. The Army's mission of destroying main force elements was of such overwhelming priority that any additional mission it might have been assigned to provide static defense for air bases was generally subordinated to search and destroy activities as part of a calculated risk to strengthen our offensive posture and shorten the conflict.

COMUSMACV policy thus did not permit combat troops to be used in static defense and commanders of all bases were charged with responsibility for providing their own defense, from their own resources, sufficient to limit enemy-inflicted casualties and damage to acceptable losses.[1/] This policy was based upon the military principle that given a limited force (the ceiling imposed on U.S. forces), troops available for and used in offensive operations are more effective than those engaged in static defense.

This basic policy placed the Air Force in an extremely disadvantageous position, in relation to the other services, with regard to air base defense. In the Army and Marine Corps, all personnel receive extensive training in ground combat and the use of small arms. They have specially trained, organic combat infantry units whose primary mission is to seize and defend land areas. Their support bases are generally located within a larger Tactical Area of Responsibility (TAOR), and the surrounding forces are usually all under the

command of a single local commander, providing him with space to defend his base in depth. The offensive TAOR of an Air Force base may lie hundreds of miles away and be changed frequently. On the ground, the Air Force base commander's base defense authority generally does not extend beyond the base perimeter, and at six of the ten USAF bases in the Republic of Vietnam (RVN), it may not extend that far. Except for their Security Police, the Air Force has no organic, suitably trained personnel to defend its bases. Security Police training has been based upon AFM 207-1 concepts of air base defense. These concepts were designed primarily for defense of bases located in the U.S. or at least in a friendly environment well behind enemy lines, and did not include such basic infantry tactics as firing heavy weapons (recoilless rifles, mortars, and 50 calibre machine guns), construction of towers and bunkers, setting up proper fields of fire and firing at night.[2/] The far-reaching implications of the constraints imposed upon the USAF by the National Security Act and DOD Directive 5100.1 became more apparent in August 1966 in unpublished communications between the Air Force Chief of Staff, General John P. McConnell, and the Army Office of the Chief of Staff, Gen. Creighton W. Abrams, Jr. "The communications considered the potential operational deployment of Air Force units equipped and trained for modified infantry tactics (such as the 1041st Security Police Squadron) for the defense of USAF bases. General Abrams suggested that the mission of such Air Force Security Police Squadrons may duplicate the mission of Army Combat Infantry Companies, and if a number of these units were to be developed, the matter should be addressed to the Joint Chiefs. General McConnell then indicated that these organizations were not designed to duplicate Army units, but were an attempt to better internal security consistent with the MACV directive that installation commanders assume

responsibility for the defense of their bases."[3]

Subsequent to this exchange of communications, the Air Force deployed the 1041st Security Police Squadron (with infantry weapons and modified Ranger training) to RVN on 16 January 1967 to conduct the Operation SAFE SIDE experiment.[4] The squadron was organized and designated as early as 1 July 1966, but the 1968 Tet Offensive was the impetus that finally brought the Squadron to RVN in an operational capacity.[5]

Undoubtedly, the absence of a specific ground combat defense mission has limited USAF development of air base defense systems. USAF Security Police have been unsuccessful in their efforts to obtain light infantry training for their personnel. They have not received official recognition for their tactical mission in SEA.[6] Of equal importance, the number of SAFE SIDE units deployed to RVN has been limited to a 559-man squadron on a rotating six-month TDY status, and procurement of U.S. Army infantry-type weapons and equipment has always been subordinate to the requirements of the Army. The effect of this mission constraint mushrooms at the operational level. Absence of light infantry training has required USAF Security Police to conduct in-country training courses for heavy weapons and night firing techniques. Basic infantry tactics and techniques such as the construction of bunkers, towers, and mine-fields, installation of concertina and double apron fencing, optimum strategic location of towers and bunkers, and setting up proper fields of fire for heavy weapons, to name but a few, had to be learned at the painful expense of trial and error.[7] The relatively short one-year tour of duty for personnel assigned to RVN has magnified the training problem to an alarming degree.[8]

Clarification of service roles and missions to specifically recognize USAF requirements for a limited ground combat defense mission in a limited war environment would appear to have a profound effect in long-range improvement of air base defense efforts in SEA.

Constraints Imposed by Command and Control Structure

At USAF, Major Command, and numbered Air Force level, the Security Police function falls under the management and operational control of the Inspector General. The Inspector General function is a management control element divorced from operational responsibility. It is not an established career field and it is manned by personnel temporarily detailed for this duty. By contrast, the Security Police function exercises staff supervision over subordinate units, is a recognized career field, and is permanently manned by professional Security Police personnel.

In the case of Seventh Air Force, it exercises operational control over SAFE SIDE resources and assumes responsibility for the proper distribution of forces in response to changing threat conditions. At base level, the Security Police function falls directly under the operational control of the base commander. Unlike the war environment envisioned in the AFM 207-1 concept of operations, Security Police forces in Vietnam perform a tactical combat mission. This transition from a staff to an operational mission in SEA, without accompanying changes in organizational command and control concepts, has had a limiting effect on the development of adequate ground defense forces to provide immediate response to the changing threat to USAF resources.[9/] Subordination of the Security Police function to the Inspector General has limited continuity

of supervision of Security Police operations at policy making levels.

PACAF Manual 207-25, the first USAF policy directive to provide operational guidance for an in-depth internal security program for USAF installations and resources located in a sustained limited war, insurgency, or guerrilla environment, was not published until 20 May 1968. Air Force Manual 206-1, the first USAF publication devoted to local ground defense tactics and techniques, was published on 30 June 1969. These policy directives were a step in the right direction, but are no substitute for the light infantry training and experience required for Security Police forces in SEA.[10/] For example, AFM 206-1 recognized the requirement for combat infantry skills, techniques, and tactics, but the method of attaining these goals has not been resolved. Harsh realities of the present conflict will continue to require security policemen at each local base to construct towers, bunkers, fences, and minefields without standardized guidelines, depending upon their own individual talent and ingenuity, and to obtain knowledge and skills in the use and deployment of heavy weapons by trial and error.[11/]

Many local bases have positioned 50 calibre machine guns in towers, without recognizing the inherent disadvantages of this tactic.[12/] Others have correctly placed the 50 calibre machine gun in bunkers to utilize its grazing fire in the event of mass attack, but without recognizing the importance of adequate fields of fire.[13/] Since ground defense requirements vary greatly from base to base, correction of deficiencies is a command responsibility under the present organizational structure of the Security Police function. Security Police staff agencies at numbered Air Force and Major Command level cannot

exercise direct supervision and control of operations at base level.[14]

It would appear that reevaluation of the organizational structure of the Security Police function, in light of their tactical mission in SEA, may indicate the need for more continuity of experienced supervision at policy-making levels, with perhaps vertical command and control included in the organizational structure below USAF level, and at operational level, the conversion of all Security Police units from a nontactical to a tactical organizational structure.[15] There is considerable precedent in the USAF for this type of command and control. The Staff Judge Advocate, Chaplain, the Surgeon General, and the Office of Special Investigations are presently organized along these lines.

Other Mission Constraints

There are a number of other factors which limit or constrain air base defense efforts in SEA. For the most part, no feasible solution is available for these factors; they are accepted as integral parts of the total military environment. They are mentioned only for the purpose of placing base defense problems, functions, and concepts in the proper perspective.

Base Location, Acquisition, and Ownership

Vietnamese Air Force (VNAF) bases at Pleiku, Nha Trang, Da Nang, Bien Hoa, and Tan Son Nhut, where USAF resources are present in a tenancy status, are located near densely populated suburban settlements. With the buildup after the Tonkin Gulf incident in August 1964 and the Viet Cong (VC) mortar attack on Bien Hoa Air Base in November 1964, these bases became dangerously

overcrowded and rendered more vulnerable to sabotage and attack from insurgents and sympathizers operating within cover of the adjacent urban areas.[16/] Intelligence reports concerning enemy activity became increasingly important in densely populated areas where conventional military reconnaissance and harassment and interdiction (H&I) fire are ineffective or cannot be conducted. In the absence of a specific ground combat mission, the USAF had never developed a ground intelligence capability. Although enemy forces were consistently successful in achieving tactical surprise in their attacks on air bases, the 1968 Tet Offensive clearly established the inadequacy of intelligence reports received from the other services, RVN forces, and other Free World Military Assistance Forces (FWMAF), in providing necessary warnings of impending enemy attacks.[17/] During this offensive, Viet Cong and North Vietnamese (VC/NVA) forces marched 30 kilometers after the hours of darkness to prepositioned caches of weapons and supplies and conducted battalion-size mass attacks on Tan Son Nhut and Bien Hoa Air Bases.[18/] To correct this situation, a Security Police intelligence program was established in the fall of 1968 to provide an organic intelligence collection and analysis capability within a 30-kilometer radius around each USAF base in RVN.[19/]

Even at Phu Cat, Tuy Hoa, Cam Ranh Bay, and Phan Rang, where the U.S. built bases from the ground up, negotiations for site selection include such criteria as international, national, and local politics, base mission, access roads, land ownership, effect on the economy, strategic positioning of forces, and many factors other than those directly concerned with a readily defensible site.[20/] There is little evidence to indicate that site selection was evaluated from the standpoint of defensibility.[21/] Phu Cat, for example, has sixteen and

one-half miles of perimeter and is located within three provincial districts. Rice paddies, elephant grass, and swamps make the base perimeter completely inaccessible by vehicle. Hilltops, trees, and heavy undergrowth obstruct observation and reconnaissance efforts within the base perimeter itself, and the surrounding mountains afford the enemy a great deal of protection.[22/]

Although some bases (Pleiku, for example) have the ideal high ground and rounded configuration for defense, most of the older VNAF bases are so crowded that POL storage is often located at the base perimeter, readily subject to destruction, and revetted ammunition and weapons storage areas are spaced close to one another and to the base perimeter, above ground and with their sides exposed to external observation and direct fire.[23/] The dangers inherent in this situation are illustrated by the accidental fire in May 1969 at Da Nang Air Base. Vietnamese civilians burning trash set fire to the Marine ammunition dump adjoining Da Nang Air Base. Explosives from the resulting fire fell into the USAF ammunition storage area. An entire village was leveled, 100 civilians were killed, and 38,000 tons of explosives were destroyed.[24/] The explosive force of that ammunition is almost as much as the combined force of the atomic bombs dropped on Hiroshima and Nagasaki to force the conclusion of World War II.

Six of the ten air bases in RVN are owned and controlled by the VNAF, which provides the official base commander. Since this commander controls access to and egress from the base, USAF Security Police are constantly faced with theft and inadequate control of access to the base by indigenous personnel employed on the base, military dependents of VNAF personnel assigned to the base, other FWMAF, and dependents located on or adjacent to the base, and the

VNAF commander's nonmilitary activities located on the base such as shops, bars, night clubs, and transportation facilities.[25]

Political Constraints

MACV Rules of Engagement require commanders to negotiate with the local political administrator to determine the conditions which must be met before returning fire into inhabited areas outside the base perimeter. At bases such as Phu Cat, this can be a costly, time-consuming process when the source of the fire originates from an area near provincial district boundaries. Enemy forces are well aware of this constraint and use it to advantage in planning attack positions and withdrawal routes.[26] Standoff mortar/rocket attacks at Bien Hoa Air Base consistently come from the same source near populated hamlets and between Army of the Republic of Vietnam (ARVN) positions. Permission to return fire is granted by provincial district chiefs in only about 25 percent of those cases where permission is required.[27] Permission to return fire may be delayed or not granted for a large variety of local political reasons, including ownership of property, nearby friendly residents, or friendly forces patrolling in the area. Although the requirement to obtain permission to return fire restricts the deterrent effect of the ability to retaliate in force, the rules undoubtedly represent a delicate balance between U.S. passive defense posture and widespread destruction of innocent civilian life and property.[28]

Other political constraints that can be imposed by district and province chiefs are: (1) furnishing labor passes for employment on base on the basis of a fee rather than the best available security check; and (2) refusal to permit U.S. forces to use herbicides to clear vegetation adjacent to the base, under

its perimeter fence, and in some instances, such as at Phu Cat Air Base, within the base perimeter.[29/]

CHAPTER II

FUNCTIONS AND CONCEPTS OF AIR BASE DEFENSE

Base Defense Functions

Although the major functions to be performed by each base defense force remain fairly constant, the specific methods of accomplishing the functions vary from base to base depending upon the intensity of the local threat, value of resources to be protected, base mission, size, geographic location, key terrain features, dispersal of priority resources, and resources available for defense. Base defense functions can be summarized under four main headings: warning, tactical defense, reaction, and passive defense measures.

Warning

Standoff mortar/rocket attack locations can be detected after firing commences by plotting azimuths reported by tower observers on an M-5 plotting board at Combat Security Control (CSC). This system, called the "flash base system," has been used effectively at Bien Hoa Air Base, and security police observers in strategically located towers have been able to consistently give base personnel 16-to-20-second warnings of an impending attack by activating the base siren system from switches located in the towers.[1/] Azimuth sightings from the direction of the rocket flash are then reported to CSC by radio and the source of fire can be plotted within 100-meter accuracy within 20 seconds.[2/] This information is relayed to artillery units on base, and range can be calculated and fire returned within two-to-three minutes after rocket flash is observed.[3/] Artillery fire is effective within a 100-meter radius and firing sequence is 100 meters over, under, both sides, and then on target. This is

designed to hit the enemy before he can withdraw. Of significant note, although Bien Hoa Air Base has counter-mortar radar, attack warnings in 13 standoff mortar/rocket attacks during the period 1 February to 17 June 1969 were initiated by Security Police tower observers.[4/]

As previously noted, however, political constraints play an important role in the deterrent effect of returning fire in standoff mortar/rocket attacks. Most of the attacks on Bien Hoa Air Base come from the same location--near villages and hamlets between TAORs of two Army of the Republic of Vietnam (ARVN) units. MACV Rules of Engagement in such circumstances require that U.S. commanders obtain clearance to return fire from both the ARVN commander and the local Province Chief. Permission is granted for only 20 to 25 percent of the requests made at Bien Hoa Air Base.[5/] This constraint has thus furnished the enemy an effective approach and withdrawal route.

Fencing and lighting at base perimeters and night observation devices (such as the U.S. Army's Starlight Scope) in strategically located towers have significantly reduced the threat of sapper attack. Bien Hoa Air Base has not had a sapper attack since February 1969.[6/] Initially, enemy action against USAF bases in RVN was usually in the form of attempted penetration of the base perimeter. Later, as perimeter defenses were improved, standoff mortar/rocket attacks were favored by the enemy. Thus, as each change or improvement in base defense has taken place, the enemy has shifted his type of attack and tactics. At Phu Cat and Nha Trang Air Bases, for example, Republic of Korea (ROK) forces assigned to TAORs outside the base perimeter have reduced the threat of attack from standoff weapons.[7/]

At Phu Cat, the VC subsequently concentrated their efforts on penetration of the perimeter with small sapper units. They wear only a loincloth and coat their bodies with grease to avoid detection by sentry dogs, and attempt to crawl under the barbed wire fences along the Main Line of Resistance (MLR). To counter this new enemy tactic, Phu Cat employed an old Korean War base defense tactic (used as early as World War I at military fronts) of stringing tin cans, with pebbles inside, along their fences to alert their sentry dogs.[8/] Since the enemy did not wear protective clothing, USAF Security Police collected empty bottles and broken glass and scattered broken glass under their concertina wire fences.[9/]

Thus, base defense efforts vary considerably from base to base and countering the threat depends, to a large extent, on the ingenuity and individual efforts of security policemen. Unequal distribution of resources available for fencing and lighting at the various bases compels security policemen to devise substitutes. Phu Cat, for example, has less perimeter lighting and fencing than any base in RVN, despite the fact that interrogation of captured VC prisoners indicates that perimeter lighting and fencing are among the most effective deterrents to enemy attack.[10/] In dark and isolated portions of the perimeter, (MLR), Security Police have installed "spooky" flares in the ground in front of their towers, behind corrugated steel reflectors, that can be activated by the tower observers who use Starlight Scopes for surveillance.[11/] This device provides warning to other defense forces and illumination of the enemy, in the event movement is observed or attempted penetration is detected. Thus, defense tactics at the operational level are not static and must be constantly changed and improved to counter the seemingly endless variety of

tactics and techniques employed by the enemy.

Strategic warning of mortar/rocket attacks before firing commences depends on accurate intelligence reports and ground and aerial reconnaissance and surveillance. The development of a USAF Security Police intelligence capability in the fall of 1968 greatly improved the base defense threat analysis capability and helped to reduce "our tendency to over-react to the constant flow of panic messages."[12/] False alarms far outnumber correct reports and with limited ability to remain in maximum alert posture, "the best we can and should expect from intelligence in most cases is an educated guess."[13/] The Security Police intelligence function is designed to take immediate advantage of all available intelligence collection agencies such as the CIA, OSI, U.S. Army, and Marine ground intelligence units, ARVN, VNAF, FWMAF, Regional Forces (RF), Popular Forces (PF) and National Police intelligence information within a 30-kilometer radius of air bases, by collecting and analyzing these reports on a daily basis. From this information, a local threat analysis is prepared and forwarded to interested and affected units and to Seventh Air Force IGS, which publishes a weekly intelligence summary for the command.[14/] This analysis also gives the Seventh Air Force Director of Security Police necessary information for the strategic relocation or deployment of Combat Security Police elements (SAFE SIDE I) to high threat areas.[15/]

Security Police are now participating as observers in helicopter reconnaissance flights in an attempt to discover evidence of site preparations for standoff mortar/rocket attacks. Lessons learned from previous attacks indicate the enemy frequently buries his weapons and digs trenches and builds

improvised launching platforms (frequently nothing more than carefully elevated mounds of dirt) and guidance mechanisms several days prior to the actual attack.[16] As experience and skills of Security Police observers (familiar with enemy positions, intelligence reports, and likely avenues of approach) improve, this should become an effective technique in countering the threat of standoff attack.[17]

Tactical Defense

Since ground-force penetration is likely to inhibit the function of the base, tactical defense is based upon the accepted premise of firmly fixing and engaging the attacking force to prevent its access to the base. This is accomplished through the use of obstacles, barbed wire, minefields and trip flares to delay, harass, and channel enemy forces into established fields of fire. It relies upon superior firepower from prepared defensive positions (machine gun bunkers and mortar positions). The firepower available at USAF bases since the 1968 Tet Offensive is overwhelming. All bases have 50-calibre machine guns, both mobile and fixed M-60 machine gun positions, 81-mm mortar and sufficient quantities of M-16 rifles for both Security Police reserve augmentees and mass arming of base personnel.[18] However, as mentioned previously, inadequate basic infantry training in the use and deployment of heavy weapons detracts from their overall capability and base defense posture. Most bases employ a checkerboard MLR, with alternating towers and bunkers, and with the bunkers located several meters inside and behind the towers to provide necessary fields of fire and crossfire. Although some bases use a linear defense, with towers and bunkers located in a straight line, either method is effective as long as sufficient Quick Reaction Teams (QRTs) and close-in

defenses are provided to avoid an "eggshell" type of perimeter defense.[19]

Reaction

Security Alert Teams (SATs) were employed under the old AFM 207-1 concept of air base defense. Under the new concept, 12-man QRTs are deployed, in addition to mobile SATs, in each sector of the base to provide at least a five-minute reaction capability.[20] After the 1968 Tet Offensive, a number of M-113 Armored Personnel Carriers (APCs) were ordered to help provide the necessary firepower and protection to counter the threat of mass attack. Delays in delivery forced Security Police planners to accept 60 M-706 Armored Cars as suitable substitutes. The older, lighter Armored Cars were more vulnerable to attack because of their large pneumatic tires and lighter armor, and did not have machine gun mounts.[21] The heavier M-113s were subsequently reordered, and with the arrival of 32 of these vehicles in-country in mid-1969, QRTs could be deployed in "mobile bunkers".[22] Although these vehicles have 50-calibre machine gun mounts, they have a history of maintenance problems.[23] Early 1969 deliveries of this vehicle without spare parts kits and guarantees from the manufacturer will add to the maintenance problem.[24] Experience has not yet determined which of these two vehicles is the more valuable in RVN. Two factors favor the Armored Car over the tank-type tracks of the APC: (1) most of the roads on bases in RVN are paved; and (2) the terrain is predominantly low marshland.[25]

The unquestionable value of the AC-47 gunship in air base defense is reflected in combat operations after action reports and the history of its operations.[26] However, most of the action in base defense operations takes

place on or immediately inside the base perimeter. The AC-47 cannot deliver highly discriminating, close-in fire support on strictly defined and shifting targets. Utilization of USAF helicopter gunships in base defense was discontinued in May 1967 at the direction of COMUSMACV on the grounds that base defense roles were not the best utilization of these assets and that Army and Marine armed helicopters were available for this defensive support.[27/] Subsequent CSAF investigation, beginning in May 1967, of the possibilities of increasing base defense capabilities through the use of 24-hour FAC coverage and armed helicopters resulted in a complete evaluation of these concepts at Binh Thuy Air Base beginning in August 1967.[28/] The results of this study and combat operations after action reports, particularly from Tan Son Nhut and Bien Hoa Air Bases during the 1968 Tet Offensive, demonstrated the accuracy and effectiveness of the hovering capability of the helicopter gunship. The accuracy of its highly discriminating firepower eventually led to the preparation of the PACAF Required Operational Capability (ROC) 6-69, "Gunship Program for Air Base Defense."[29/] This command policy position outlines the need for USAF helicopter gunships with an assigned base defense mission. Local Base Rescue (LBR) helicopters were used in limited roles for base defense perimeter reconnaissance missions as early as November 1964.[30/] Most bases in RVN have been able to negotiate arrangements with the U.S. Army or Marines to provide one or more helicopter gunship on three-minute alert for base defense roles. Some bases have them on airborne alert during high threat periods (2200 to 0300 hours, generally) to augment the AC-47 gunship.[31/]

In addition to Security Police QRTs, base defense OPlan 207-69, required by PACAFM 207-25, provides for Security Police augmentees during alert

condition Red, option I, when the base is in danger of imminent attack, and for mass arming of all base personnel during alert condition Red, option II, when the base is in danger of being overrun.[32] Bases collocated near U.S. Army or Marine units, such as Da Nang in I Corps, Pleiku in II Corps, Bien Hoa in III Corps, and Binh Thuy in IV Corps, have the additional reaction capability of long-range field artillery units with counter-mortar radar as integral parts of their base defense plans.

Passive Defense Measures

The employment of Soviet-type rockets by VC/NVA forces in the 27 February 1967 attack on Da Nang Air Base added a new dimension to air base defense efforts and responsibilities.[33] Rocket attacks proved to be the most effective weapon used against USAF resources, and friendly reaction capability was and is limited almost exclusively to artillery or airborne strikes.[34] Dispersal and hardening of resources became increasingly important, but overcrowding at VNAF bases made revetment difficult and further dispersal of resources almost impossible.[35] In May 1967, CSAF and CINCPACAF directed Seventh Air Force to investigate the possibility of increasing air base defense capabilities by testing and evaluating new concepts, procedures, tactics, techniques and various items of equipment.[36] Subsequent testing and construction of concrete reinforced revetment roofs for fighter aircraft has substantially reduced the damage that could be inflicted by standoff mortar/rocket attacks. A direct hit on one of these revetments with a 140-mm rocket at Da Nang Air Base in March 1969 did not inflict enough damage to require filing a combat operations after action report.[37]

Four-foot high revetments of troop barracks, work areas, clubs, and other personnel facilities with sandbags or the more permanent plywood frames filled with sand, are sufficient to withstand all but direct hits and have minimized personal injury and loss of life from standoff attacks.[38/]

Fencing and lighting remained deficient at six of the ten air bases in RVN as late as 7 August 1968.[39/] Secretary of Defense disapproval of the security fence project at Phu Cat Air Base for funding from the Military Construction Program appropriation, plus MACV's extension of this policy to other security fence projects in RVN, has delayed progress toward correction of this deficiency and has required all bases to submit their fencing projects in the O&M program for accomplishment within the $25,000 limitation.[40/] For bases where fencing is complete and only periodic replacement is needed, this policy did not present a significant problem. But at bases that have major construction projects on an original perimeter fence yet to be constructed, such as Phu Cat, the policy limitation may delay construction for an extended period of time. It is significant to note that this funding limitation has not yet been made applicable to USAF bases in Thailand.[41/]

Base Defense Concepts

Air Force Regulation 207-1, 10 June 1964, established the basic doctrine and concept for USAF worldwide aerospace security systems. Air Force Manual 207-1, 10 June 1964, supplemented and amplified the material in the regulation. Generally speaking, these directives were designed to provide security of operational resources, based upon a threat analysis that did not include a Vietnam-type war environment. Basically, they provided for controlled entry

to the base and high priority areas such as the flight line and combat operations center, and close-in defense of operational resources on a priority basis. They provided for an expanded security posture under emergency conditions by providing a Central Security Control Center, Security Alert Teams, area supervisors, etc., but manning requirements were based upon other than Vietnam-type security threat analysis.[42/]

Escalation of the war in Vietnam after the Tonkin Gulf and Bien Hoa incidents in the fall of 1964 substantially increased USAF Security Police responsibilities and requirements. Directors of Security Police at the original four major bases (Tan Son Nhut, Bien Hoa, Da Nang and Nha Trang) soon realized that the AFM 207-1 concept was not adequate for this environment.[43/] In December 1964, PACAF initiated a study of base defense posture for the purpose of obtaining recommendations for improvement in air base defense.[44/]

With the tremendous influx of supplies and equipment, about the most Security Police forces could do at that time was provide security guards for close-in defense of aircraft and high priority resources. There was little or no perimeter fencing and very little VNAF control over entry to the base. At Tan Son Nhut Air Base in the fall of 1964, there were only six Security Police vehicles (which had to be checked out of the base motor pool) available to patrol a base with 16 miles of perimeter.[45/] Based upon surveys, conferences and recommendations from Security Police at the four major bases, a new concept for base defense in the Vietnam war environment was developed. The new concept, patterned after old Army infantry "four rings of steel" concepts and tailored to modern guerrilla warfare and weapons, was submitted to PACAF for approval

in early 1965.[46] It provided for a three-ring (the first line of defense and Quick Reaction Forces found in the infantry defense tactics were combined), sector defense system which required three major changes in the AFM 207-1 concept, based upon the current threat analysis in RVN. It recognized that security priority listings recommended in AFM 207-1 were not applicable. Resources, both equipment and personnel, essential for sustained combat effort, had to be afforded optimum security. Protective measures had to be designed to engage the enemy at base perimeters before he gained access to the base, and manning requirements had to be increased to permit a sustained emergency (expanded) security posture designed to prevent hostile acts.[47] (Normal security posture under the old concept was maintained with a primary objective of detection.)

To accomplish these newly stated objectives, Security Police outlined a new set of priority resources for bases in RVN, and requested sentry dogs, 350 additional Security Police, and more vehicles.[48]

During the period of July 1964 to January 1966, Air Force commanders made every effort to shore-up internal close-in security through the use of TDY Security Police and base augmentees. During the period of October through December 1965, Security Police manpower inputs for RVN increased from 148 to 2,880.[49] The requests for sentry dogs and additional vehicles were disapproved.[50] The request for sentry dogs was resubmitted in the spring of 1965, and USAF agreed to test 40 dogs in RVN. The initial reluctance to introduce dogs to this theatre was based on a fear that they would not survive in this environment.[51] The first dogs arrived in RVN shortly after the July 1965 sapper

attack on Da Nang Air Base.

Following this attack, the new defense-in-depth concept was approved by PACAF in early 1966, and the first PACAF Supplement to AFM 207-1 was published in March 1966. It was specifically designed for the Vietnam war environment, using the sector defense concept, SATs and QRTs, bunkers, towers, fencing, lighting, minefields, and trip flares.[52] The only major difference between this original plan and the present one found in the current AFM 206-1 and PACAF Manual 207-25, is the introduction of heavy weapons. Although there have been refinements and improvements each year, the basic plan today is essentially the same. There was no need for heavy weapons in 1966 and 1967, because the major threat to air bases was from sapper attack--small units of six to twenty men attempting to penetrate the base perimeter.[53] No one anticipated the possibility of large-scale mass attacks against USAF installations.[54]

Publishing a new defense concept did not get the job accomplished overnight. The problem then, as now, is a question of priorities. Attacks on air bases were relatively infrequent. (Apps. I and II.) Commanders gave base defense a high priority immediately following an attack. But as defenses improved and passage of time since an attack increased, other priorities and operational requirements reduced the efforts devoted to base defense.[55]

As a result of the tremendous buildup of resources during 1965 and 1966, a PACAF Management Survey conducted in the spring of 1967 showed these findings relative to base defense posture:[56]

. Security posture in RVN was adequate to prevent penetration of close-in preventive perimeters around priority "A" resources

by sapper squads and other small VC groups, but RVN bases did not have sufficient numbers of Security Police forces to provide protection of the entire base perimeter and to comply with the PACAF concept for base security in RVN.

- Revetment had been accomplished for most tactical aircraft although the major limiting factor was lack of ramp space and nonavailability of revetting material.
- Horizontal dispersal of aircraft was necessary to eliminate the danger of weapon detonation.
- Misunderstanding of the new defense concept resulted in an attempte by some bases to protect the entire perimeter without adequate defense-in-depth and close-in security of priority "A" resources.
- Theft of equipment and supplies was widespread due to the lack of sufficient numbers of USAF security police to protect priority "C" resources.
- Severe motor vehicle maintenance problems threatened the mobility capability of security forces.
- A total of 193 Security Police were used as mechanics, carpenters, etc., which further depleted the inadequate security force.
- Control of vegetation inside base perimeters, a significant factor in the December 1966 surprise attack on Tan Son Nhut Air Base, was inadequate.
- Construction of bunkers, towers and fencing was proceeding slowly. Self-help projects by security policemen were necessary because other priorities did not permit civil engineers to commit their efforts to these projects.
- More definitive directions and guidance from PACAF was necessary to implement the new security concept.

After publication of the results of this survey, a more detailed PACAF Supplement 1 to AFM 207-1 was published in May 1967, containing new criteria for validating manpower requirements and instructions for providing a balanced defense-in-depth during the five security alert postures, within imposed manpower limitations.[57/]

As indicated here, prior to the 1968 Tet Offensive, the threat analysis for USAF bases in RVN did not include a threat of mass attack. Small force sapper attack was the major threat until rockets were used for the first time in the attack on Da Nang Air Base on 27 February 1967. Mortar/rocket attacks required greater emphasis on passive defense measures such as revetment and hardening of resources, but they did not significantly alter the posture of tactical defense forces and equipment. Rules of Engagement for USAF Security Police forces prior to the Tet Offensive of 1968 were roughly the same as those applicable in Thailand today. The battalion-sized mass attacks on Tan Son Nhut and Bien Hoa Air Bases on 31 January 1968 changed the entire perspective of air base defense in SEA.[58/] The Chief of Security Police at Tan Son Nhut Air Base during those battles is of the opinion that the concurrence of three factors prevented VC/NVA forces from completely overrunning the base: (1) Gen. William C. Momyer, Commander, Seventh Air Force, had placed the base in Red alert posture prior to the attack; (2) tactical blunders of the enemy (attempting to take too large an area, attempting to attack at too many points, and failure to use their reserve battalion); and (3) the courage of the individual security policemen and augmentees on post (youngsters, who had never been under fire before and were not trained for this type of combat, stood their ground, and refused to yield to overwhelming numbers of well-trained and experienced enemy forces).[59/] This view is shared by others familiar with the Security Police force capability at that time.[60/] Whatever the reasons for the successful defense of these bases during this attack, the 1968 Tet Offensive emphasized the weaknesses in air base defense: (1) insufficient numbers of Security Police forces; (2) lack of heavy weapons; and (3) inadequate training

in light infantry tactics and techniques.[61] A crash program was begun to construct proper fences, minefields, towers, and bunkers; obtain more vehicles and equipment, heavy weapons, and night observation devices; and provide better training for security policemen. MACV Rules of Engagement were changed to allow USAF security forces to return fire in more situations. (Permission was granted to use 81-mm mortar fire off base. Heretofore, use of the 81-mm mortar was limited to illumination charges.) Further, commanders were encouraged to negotiate for more free fire zones around their bases. In-country training courses for firing the 81-mm mortar and night firing techniques for the M-16 were established by the Security Police at Phu Cat Air Base.[62] The new concept for base defense was basically sound. A new enemy threat of mass attack on USAF bases had to be added to the security threat analysis.[63]

Once again, however, following the winter-spring 1968 Tet Offensive, as base defense forces were improved and the threat of mass attack decreased, the overwhelming priorities associated with carrying the air war to the enemy and continued limitations on resources and manpower compelled commanders to substitute other priorities for those associated with static defense. The major problems in air base defense efforts today are inadequate training of Security Police forces and lack of physical safeguards (perimeter fencing and lighting).[64]

CHAPTER III

SIGNIFICANT ATTACKS ON AIR BASES IN SEA, 1964 - 1968

Much information has been published and disseminated in different forms and extent of detail by many organizations on enemy attack characteristics, combat experiences, and lessons learned, enemy weapons and countermeasures against standoff attacks on U.S. installations in RVN. Highlights of selected attacks in this chapter were chosen to illustrate significant events in the evolutionary development of USAF air base defense in SEA, and the constantly changing and shifting tactics and techniques employed by VC/NVA forces.

Mortar Attack on Bien Hoa Air Base, 1 Nov 64

During the evening of 31 October 1964, elements of a VC mortar company made their way to a site located about 400 meters from the perimeter fence at Bien Hoa Air Base and set up six 81-mm mortar tubes. At 0025 hours on 1 November 1964, they fired 83 rounds of mortar into the airfield. Most of the rounds impacted in the B-57 parking area. The 20-minute attack resulted in four U.S. military personnel killed and 72 wounded. Five B-57 jet bombers were destroyed, eight suffered major damage, and the remaining seven sustained minor damage. In addition, three A-1Hs of the VNAF, and four USAF H-43 helicopters were damaged.[1/]

This attack represented the most serious enemy blow against USAF resources since the arrival of USAF forces in Vietnam in 1961. Removal of one of two squadrons of B-57s from Bien Hoa to Clark Air Base, Philippines, nine days before the attack reduced USAF losses considerably.[2/]

In mid-1964, with the serious deterioration of Vietnamese political stability, the Maddux destroyer incident, and the increased tempo of the war in Vietnam, USAF commanders had become increasingly concerned with the problem of air base defense. At the time of the attack, exterior perimeter defense of Bien Hoa Air Base was the responsibility of the Army of the Republic of Vietnam (ARVN). Four companies of the ARVN 36th Regional Forces Battalion were deployed along the 16-kilometer base perimeter, armed with individual weapons, three light machine guns, and three 60-mm mortars per company. Interior perimeter defense was the responsibility of the Vietnamese Air Force. They had 230 Air Police on the base with individual and crew-served weapons, two mobile quad 50-calibre machine guns, one mobile multiple rocket launcher, and two fixed 20-mm cannons. The USAF Security Police detachment, consisting of 61 men, was armed with individual weapons and five crew-served 7.62-calibre M-60 machine guns. The perimeter fence consisted of two barbed wire fences enclosing a 30-meter minefield. VNAF Air Police employed roving patrols on the base during the hours of darkness, and dogs were used in the bomb dump and on the flight line. The use of revetments for aircraft was not considered feasible at this time. There were no alarm systems, no perimeter lighting or flares available, although the base defense plan incorporated the use of helicopters to reconnoiter the base perimeter and outlying areas during the day.[3/]

Despite repeated and persistent efforts by USAF commanders to improve base defense measures at Bien Hoa Air Base, almost exactly the same number of ARVN troops were assigned to exterior perimeter defense in July 1964, as were assigned upon the arrival of the USAF "Farmgate" detachment in November 1961--four companies of approximately 700 men.[4/]

The November 1964 attack on Bien Hoa pointed out a number of serious deficiencies in the ARVN/VNAF command and control structure that contributed to the inadequate defense of the base. For example, responsibility for defense of the area from which the attack was launched beyond the perimeter was not considered by the VNAF commander to be his, although competent orders so indicated. The Commander, 36th Regional Force Battalion, charged with perimeter defense, received orders, often conflicting, from no less than four different authorities.[5/] U.S. authorities found it difficult to appreciate the full extent to which internal tensions among Vietnamese organizations and personalities influence their professional judgments and inhibit militarily sound actions. Although U.S. control over this problem was limited, the Bien Hoa attack pointed out the necessity and importance of thinking in terms of defense of U.S. installations with U.S. resources, if necessary.[6/]

Specific improvements in both active and passive defense measures directed by COMUSMACV after the Bien Hoa mortar attack included the following:[7/]

- Greater dispersal of aircraft and additional guards.
- Where feasible, construction of revetments for aircraft protection, and consideration of the possibility of overhead revetment covers for high cost jet aircraft.
- Replacement of partially trained Regional Forces units on base perimeters with up-to-strength regular ARVN units.
- Establish listening posts with radios around base perimeters in order to call in counter-artillery fire.
- Saturation patrolling within the 4,000-meter mortar range.
- Artillery and mortar batteries prepared to fire CVT fused ammunition on call.

- Provide artillery spotters with radio communications in each airbase control tower.
- Establish aircraft reaction forces, helicopter or A-1s, on alert to immediately respond in event of repeated attack. (Applicable only to Bien Hoa and Tan Son Nhut.)
- Assignment of ARVN Special Police Force to air bases to patrol populated areas and provide population and movement control adjacent to base perimeters.
- Establishment of Special Purpose Airbase Defense Intelligence System.
- Removal of vegetation around base perimeters to improve observation.
- Construction of wire obstacles at perimeters.
- Use of perimeter lighting at all critical installations.

Attack Against Tan Son Nhut, 13 April 1966

At 0027 hours, 13 April 1966, Tan Son Nhut Air Base was placed under a heavy mortar and recoilless rifle barrage that lasted about 13 minutes. Most of the rounds impacted in a fuel storage area and the aircraft parking ramps. Two hundred forty-five rounds hit the base, killing seven U.S. military personnel and wounding 184. Four aircraft were destroyed and 61 were damaged. In addition, 34 USAF vehicles were damaged or destroyed, one 420,000-gallon fuel storage tank was destroyed and there was minor runway damage.[8/]

In the 18 months preceding the Bien Hoa mortar attack, every major USAF air base in Vietnam, except Tan Son Nhut, had been subjected to enemy assaults. USAF commanders had expressed concern about a probable attack on Tan Son Nhut immediately following the 1964 attack on Bien Hoa, and had made considerable efforts to prepare for it. Exterior perimeter defense was the responsibility of both ARVN and RF/PF forces. Interior perimeter defense was the

responsibility of the VNAF. USAF Security Police, as in the 1964 attack on Bien Hoa, were primarily responsible for close-in security of USAF personnel and resources.[9/]

Reports of the attack indicate a number of USAF and friendly force improvements in base defense posture since the Bien Hoa attack. USAF Security Police in RVN had been increased from 148 to 2,880 men. The first USAF sentry dogs had arrived the previous July and studies were underway to develop a new concept for air base defense.[10/] A program to construct aircraft revetments was well underway at all bases. Although 23 of the aircraft damaged in the 13 April 1966 attack were in revetments, 39 other aircraft in revetments were not damaged. Regular ARVN units assisted RF/PF forces in exterior perimeter defense, although a breakdown in ARVN/RF command and control allowed an ambush site to be improperly relieved just prior to the attack and probably contributed to the complete success of the surprise attack. No known enemy forces were killed and they were able to withdraw without contact with friendly forces. Armed U.S. helicopters and flareships were airborne 20 minutes after the initial assault and fired on suspected withdrawal routes. Overall reaction by all friendly forces was good.[11/]

The success of the attack conclusively established enemy capability to hit any USAF base in South Vietnam, at a time and place of their choosing, with impunity. A counter-mortar radar set, installed after the 1964 attack at Bien Hoa, was completely ineffective in identifying enemy positions. However, USAF sentry dogs introduced in-country the previous July began to show their value in the 13 April attack. Seconds before the assault began, sentry dog teams along the west and southwest perimeter alerted, received fire, and returned

small arms fire.[12/] This would indicate that the VC intended to penetrate the perimeter with sapper squads in conjunction with the mortar attack, using the mortar barrage to help cover their entry and withdrawal. Whatever their intent on 13 April 1966, sentry dogs subsequently proved their value to base defense forces time and again, by alerting USAF security forces and permitting them to respond in force from a proper security alert posture.[13/] The major threats to the security of USAF resources in RVN in 1966 were from small sapper or commando-type raids and standoff attack with mortar and recoilless rifles, or a combination of the two.[14/]

In the months following the attack on Tan Son Nhut, commanders at every echelon began to emphasize base defense. New USAF-only bases were being constructed and the Security Police manning authorizations were based upon the new three-ring, defense-in-depth concept. However, ARVN and VNAF Security Police were still relied upon to furnish the bulk of the manning requirements for perimeter defense at the older VNAF bases. Light intensification devices (Starlight Scopes) began to arrive in-country and significantly improved surveillance capabilities from observation towers at night. Construction of more towers, bunkers, and perimeter fences, laying of mine fields, and providing programs for perimeter lighting were developed at all bases to comply with the new concepts of base defense. The major problem in air base defense efforts in the fall of 1966 was the lack of light infantry training for Security Police personnel.[15/]

VC/NVA Soviet Rocket Usage in Da Nang AB Attack

At approximately 0315 hours on 27 February 1967, an unidentified VC/NVA

unit attacked Da Nang Air Base with Soviet manufactured 140-mm rockets. Eleven U.S. military personnel were killed and 97 were wounded. Thirteen aircraft received shrapnel damage. The duration of the attack was less than 60 seconds and an estimated 64 rounds hit the air base and the adjacent Ap Po village. The eight rounds which struck the village inflicted 85 casualties (35 killed and 50 wounded) and an estimated 100 homes were destroyed from the blasts and resulting fires. After the attack, 134 rocket firing positions in two groups of 70 and 64 each were discovered some 8,000 meters southwest of the impact area on the air base.[16/]

This attack was the first known use of the 140-mm spin stabilized Soviet rocket in South Vietnam.[17/] An 18 April 1967 Combined Intelligence Center Vietnam (CICV) study of the attack and weapon characteristics indicated the relatively light weight and simplicity of the rocket permitted easy future employment from hastily constructed positions within the 10,000 meter range.[18/] After the Da Nang attack, the enemy conducted numerous attacks against air bases throughout RVN with Chinese 102-mm rockets, the advanced Soviet 122-mm rocket, and additional 140-mm rockets.[19/]

With the introduction of rockets, the problem of detecting and reacting to the enemy was compounded as his effective standoff distance increased from a maximum range of 5,700 meters for the 120-mm mortar to 11,000 meters for the 122-mm rocket.[20/] The use of rockets proved to be an effective method of attacking friendly installations as attested by the loss of lives and equipment. The ability to launch attacks swiftly, from a great distance, without warning, and normally during the hours of darkness made friendly forces reaction and

defensive measures exceedingly difficult.

U.S., ARVN, RF/PF, and FWMAF forces charged with responsibility for exterior perimeter defense had to extend their TAORs beyond the rocket belt at each installation. Aerial and ground reconnaissance capability had to be extended. Expanded base defense TAORs required additional coordination and cooperation efforts among all friendly forces in establishing quick clearance to return fire procedures, additional free fire zones, improved ground intelligence, and concentration of H&I programs on likely launch sites and avenues of approach.

The widest possible dispersal of aircraft had limited losses in spite of the large numbers of rockets used in the attacks. However, as the threat to USAF resources grew in proportion to the enemy's intentions and availability of rockets, it became necessary to reassess the AC-47 program. The number of AC-47s available in South Vietnam was considered inadequate to provide airborne alert over each USAF base during high threat hours and it was recommended that this capability be increased from 22 to 32 aircraft.[21/] Experience indicated that the VC timed their attacks depending on the location of the AC-47. They waited until the AC-47 was on the far side of his orbit around the base on a mission before launching their attacks. Frequently they broke off an attack when the AC-47 came within range.[22/]

The greater explosive force and fragmentation effects of rockets clearly required additional emphasis on exterior perimeter defense and passive defense measures during 1967. On 12 June 1967, a MACV command-wide seminar was conducted to formulate recommendations for improvements in the external defense

posture of major installations and to reduce the threat of rocket attack.[23] On 19 July 1967, the Commander, Seventh Air Force, appointed a study group for the purpose of reviewing and analyzing air base defense reaction capability problems related to protection of personnel, aircraft, and equipment.[24] In general, the recommendations of the study group paralleled those of the MACV seminar. Inadequate aerial reconnaissance, ground intelligence, the need for better AC-47 coverage at each base, more exterior perimeter patrols by friendly forces, the need for revetment of all quarters buildings (all future quarters were to be of a single story design), and practice of disaster exercises were minimal and unrealistic, were recognized problem areas and were in need of improvement. At the direction of the Commander, Seventh Air Force, a disaster preparedness test plan was developed on 5 August 1967 to test and evaluate various concepts, procedures, tactics, techniques, and items of equipment which might be used to increase air base defense capabilities.[25] It is significant to note that a training exercise, designed to test the capability of all security forces in the Tan Son Nhut Sensitive Area (TSNSA), was conducted at 0025 hours on 27 January 1968, just four days prior to the forthcoming mass attack on Tan Son Nhut Air Base.[26] U.S. efforts to provide better coordination and definite VNAF cooperation in base defense resulted in the publication of a directive by the RVN Ministry of Defense Joint General Staff, dated 11 August 1967, which required the establishment of VNAF passive defense plans, and measures to coordinate their base defense efforts with CTZ Headquarters.[27] Despite command emphasis on base defense posture throughout 1967, subsequent events were to establish several major deficiencies in base defense plans and concepts in effect at that time.

Mass Ground Attacks on TSNAB and BHAB

At 0300 hours on 31 January 1968, VC/NVA forces initiated simultaneous assaults in the Gia Dinh and Bien Hoa provinces. The strength of the enemy commitment, his tactics, the number of separate attacks within the capital complex, and post-battle intelligence indicated that he intended to overrun and occupy the headquarters base and take over the Vietnamese seat of government. The offensive began with an attack on the U.S. Embassy in downtown Saigon and a mortar/rocket barrage at Bien Hoa Air Base.

Within a half hour, the enemy was attacking Tan Son Nhut Air Base with small arms fire at several gates. At 0334 hours, elements of a VC Sapper Battalion, using a Lambretta Taxi on National Highway 1, approached the perimeter fence near Gate 051 and ripped open a section of fence with a Banglore torpedo. Within minutes, the 267th VC Battalion, with 500 men, about 25 percent of whom were NVA, joined the Sapper Battalion to lead the assault force through the breach. A second VC Battalion, the 16th, composed mainly of NVA personnel, was held in reserve immediately behind the 267th. A third Battalion, the 90th NVA, was located in the VINATEXCO factory northeast of the breached perimeter. Twelve mortar positions of the 90th NVA, located immediately north, west, and south of the factory, supported the assault forces. 28/

At 1732 hours on 30 January 1968, the Commander, Seventh Air Force, had placed USAF Security Police forces at Tan Son Nhut Air Base on security alert condition Red (Option I). Shortly thereafter, eight 13-man QRTs were formed and an additional 262 security policemen were armed and billeted in the squadron barracks for immediate recall. In addition to the 815 security

policemen available for duty, three 30-man platoons of the U.S. Army's 69th Signal Battalion Task Force 35 were put on a five-minute standby status to augment the Security Police.[29/]

At approximately 0344 hours on 31 January 1968, elements of the 267th VC Battalion, pouring through the breach in the fence near Gate 051, used a heavy mortar and rocket-propelled grenade (RPG) barrage to take and occupy Bunker 051, located adjacent and near Gate 051. Three Security Police QRTs and two platoons of Task Force 35 were rushed to the scene and bore the brunt of the initial assault. However, being in defensive positions, friendly casualties were extremely light compared to the onrushing attackers. While the defenders laid down a base of fire with two M-60 machine guns, M-14 and M-16 rifles, and grenade launchers for the M-16s, helicopter Light Fire Teams (LFTs) used miniguns to strafe the area where the enemy troops were concentrated.[30/]

By 0530 hours, the enemy had penetrated 600 meters into the base in an area about 300 meters wide. Heavy automatic weapons fire was received around the entire base perimeter, defended primarily by ARVN and VNAF Security Police units. USAF Security Police SATs were at various positions around the perimeter where incoming fire seemed to be concentrated and particularly at Gate 10 and the MACV annex areas. Two of three light tanks called in by the VNAF Base Commander to halt the assault on the western perimeter were destroyed within 15 minutes with RPG fire and the third was compelled to withdraw. At approximately 0523 hours, Tan Son Nhut artillery and mortar positions received clearance to fire outside the perimeter, and at 0630 hours, a troop from the U.S. Army's 4th Cavalry arrived after fighting its way down Highway 1 from its

base camp at Cu Chi, 20 miles NNW of Tan Son Nhut. With friendly reinforcements taking up flanking positions and support from artillery and helicopter LFTs, a counterattack began within five minutes.[31/]

Heavy fighting continued throughout the morning. An unsuccessful enemy counterattack was used to cover the withdrawal of their main force inside the perimeter. By 1217 hours the breach was closed as Bunker 051 was successfully assaulted by USAF Security Police, U.S. Army personnel, and members of the VNAF Defense Group. Air strikes later in the afternoon by VNAF A-1s and USAF F-100s destroyed 95 percent of the VINATEXCO factory. Sporadic small arms fire continued until 0700 hours on 1 February 1968, when the base was reported secure and all units operational.[32/]

Twenty-three U.S. military personnel were killed and 86 were wounded during the attack. Thirty-two VNAF/ARVN personnel were killed and 79 were wounded. Thirteen aircraft received light damage and damage to vehicles and structures was minimal. Total enemy personnel killed during the attack, both inside and outside the perimeter, was 792 plus.[33/]

Although the attack on Bien Hoa Air Base was initiated under the cover of a standoff mortar/rocket attack, it followed the same general pattern as the attack on Tan Son Nhut. Between 0300 and 0310 hours on 31 January 1968, 36 rounds of 122-mm rocket and 82-mm mortar impacted on the base. Immediately following the mortar/rocket barrage, a ground assault by an estimated eight VC companies penetrated the base perimeter at four separate locations. The main enemy force was forced to bypass Bunker Hill Nr. 10, manned by USAF Security Police armed with M-16 rifles, M-60 machine guns, and 40-mm grenade launchers

(Security Police QRTs had deployed to the Bunker in force when a sentry dog team patrolling the area had alerted several minutes before.), to a position along the engine test stand and dearming pad along the eastern taxiway of the air base. This placed the enemy forces in a crossfire and with fire support from helicopter LFTs from the 145th Combat Aviation Battalion at the adjacent III Corps Headquarters, halted further enemy penetration of the air base. Heavy exchanges of fire between friendly and enemy forces continued throughout the night. A small shack and personnel bunker near the test stand provided cover for the enemy forces. At dawn, a 57-mm recoilless rifle was used by VNAF Security Police to destroy the shack after the area was strafed by helicopter LFTs. Sweeps by USAF Security Police terminated further enemy resistance, although sporadic small arms fire continued around the perimeter for two days.

Four USAF personnel were killed and 26 were wounded during the attack. Friendly forces in the area listed 24 killed and 26 were wounded during the attack. Four hundered twenty-three enemy were killed (139 inside the perimeter) and 34 prisoners were captured. Two aircraft were destroyed, four received heavy damage, and six received moderate or light damage. A number of buildings and trailers were destroyed or damaged and mortar/rocket impacts inflicted other minor damage.[34/]

Although VC/NVA forces suffered a considerable setback in their plans for the 1968 Tet Offensive and lost a very costly number of highly trained and experienced NVA personnel, the 31 January 1968 attacks on Tan Son Nhut and Bien Hoa Air Bases demonstrated an enemy capability well beyond that envisioned in base defense plans and concepts in effect prior to that time. Several

lessons learned during these attacks indicated a need for major revisions in USAF concepts of air base defense in SEA:[35]

1. Too much local emphasis on close-in defense of USAF resources at the expense of strong tactical defense forces around base perimeters to firmly fix and engage attacking forces before they gained access to the base. It became apparent that USAF Security Police would have to assume a greater responsibility for manning perimeter defenses in face of the threat of mass ground attack, and could no longer rely on VNAF/RF guards posted around the perimeter.[36]

2. Security Police needed heavier crew-served weapons and light infantry training. VNAF Security Police had to be called upon to knock out enemy positions at Bien Hoa with 57-mm recoilless rifles. Inability to safely transport QRTs to attack areas and dangers unnecessarily encountered in resupplying ammunition and removing wounded personnel pointed out the need for APCs. Lack of experience in night firing and the use of mortars placed USAF Security Police at a disadvantage before experienced, well-equipped NVA troops, and required too much reliance on U.S. Army reinforcement troops.

3. Communications were inadequate in two respects: (1) the two-channel Motorola portable radios presently in use were inadequate to handle the traffic; and (2) direct communication between Security Police and supporting units (LFTs, AC-47s, flareships) was necessary. Only tactical field radios would solve the latter problem. Multichannel Motorola radios would relieve the congestion experienced during the recent attacks.

4. Ground intelligence was inadequate to provide strategic warning of

the attacks, in spite of the accumulation of hundreds of enemy forces and weapons caches just outside the perimeter fences in adjoining indigenous communities prior to the attack.

5. The demonstrated capability of the enemy to march 29 kilometers after the hours of darkness and conduct a mass attack without rest upon arrival (Bien Hoa) required an extension of exterior defense forces TAORs to the 39-kilometer range at each base, with accompanying increases in aerial surveillance and ground intelligence.

6. Better fencing, lighting, minefields, and trip flares were necessary to discourage repeated attacks.

USAF commanders placed higher priorities on base defense requirements after the 31 January 1968 attacks, and procurement requests for heavy weapons, APCs, additional vehicles, and night observation devices were initiated. USAF Security Police organized an in-country mortar and night firing training school at Phu Cat Air Base. Substantial increases in USAF Security Police were authorized to provide better USAF manning of the entire three-ring defense-in-depth concept requirements.[37/] A U.S. Army Ground Defense Advisor was assigned to each Security Police squadron to provide technical advice and assistance in the proper construction and placement of defense bunkers, towers, fencing, and minefilds, and to facilitate the procurement of U.S. Army infantry heavy weapons and equipment and necessary training in its use and deployment.[38/]

A special Lessons Learned IGS inspection and evaluation of base defense facilities and capabilities at all Seventh Air Force bases was conducted during

the period of April through July 1968 to monitor progress of improvements required by the Tet Offensive.[39] This inspection revealed that nine of the ten bases in RVN were deficient in base defense equipment (heavy weapons, APCs, Xenon lights for perimeter lighting and Starlight Scopes, ordered after the 31 January attacks, had not yet arrived in-country); five bases were deficient in minefields; all bases were deficient in revetment hardening of mission essential facilities; nine bases were deficient in base public address systems; four bases were deficient in defoliation; and nine bases were deficient or marginal in cantonment area revetment, and personnel bunkers.[40]

Subsequent inspections, as late as 13 February 1969, although indicating considerable improvements in physical security aids such as fencing, lighting, mine fields, towers, bunkers, and flares, established that deficiencies still existed in the completion or improper installation of these projects on some bases.[41] In the meantime, heavy weapons, armored vehicles, and night observation devices had begun to arrive in-country, and the establishment of a USAF Security Police ground intelligence force and training school for mortar and night firing techniques had improved air base defense capability at all bases.[42] Four-channel Motorola portable radios and 32 APCs for all Seventh Air Force Security Police were scheduled for delivery in mid-1969.

Improvements in heavy weapons, equipment, training, physical security aids, manpower, ground intelligence, and increased aerial reaction capability and reconnaissance during the 18 months following the 31 January 1968 attacks, provided a formidable defense against massive ground attack at all USAF air bases in SEA. Because of heavy losses of trained and experienced personnel during the 1968 Tet Offensive, and improvements in base defense capability on

the part of USAF bases, the enemy was forced to change his tactics and techniques once again. Standoff mortar/rocket attacks and small arms probes of perimeter defenses presented the major threat to the security of USAF resources following the 1968 Tet Offensive. (App. II.)

Significant increases in these standoff attacks and accompanying losses of high value jet aircraft (and possibly the threat of low-level air attack from enemy forces), required reevaluation of the proposal, made following the 1964 mortar attack on Bien Hoa Air Base, to construct reinforced revetment roofs for aircraft.[43/] From 30 January until 29 February 1968, enemy mortar/rocket fire destroyed nine USAF Strike/Recon aircraft. Thirteen Strike/Recon aircraft received major damage and 64 required minor repairs. Discounting operational loss, the total cost of the destroyed aircraft alone amounted to approximately $13,000,000. The damaged aircraft required some 11,000 manhours to repair, plus replacement parts.[44/] A 45-day study by the Air Force Weapons Laboratory on "Protective Construction for SEA," published in December 1967, concluded that protective covers should be tested. Project CONCRETE SKY, code name for the RED HORSE project of building concrete aircraft shelters, known as "Wonder Shelters," estimated that installation of these shelters was feasible at a cost of approximately $100,000 per unit.[45/] The CONCRETE SKY construction project was given number one priority in the FY 1969 USAF Military Construction Program in RVN and RED HORSE construction of the shelters began in early July 1968.[46/] The protective value and effect of the shelter were demonstrated in March 1969 when a shelter at Da Nang Air Base suffered negligible damage after taking a direct hit with a 140-mm rocket.[47/]

Thus, with damage to USAF resources from standoff attack minimized by revetments, personnel bunkers, and "Wonder Shelters," the only major defects in air base defense capability remaining at mid-1969, based upon the current threat analysis, were the continued absence of light infantry training for USAF Security Police forces and inadequate physical safeguards. (The SAFE SIDE Combat Security Police Squadron's assistance in heavy weapons training, and in-country training schools for heavy weapons and night firing have alleviated the problem, but long-range solutions require light infantry training for all Security Police personnel before assignment to RVN.)[48/]

CHAPTER IV

OPERATION SAFE SIDE

The success of the 13 April 1966 attack on Tan Son Nhut Air Base clearly established the enemy's capability to hit any USAF base in South Vietnam. After this attack, the Air Force Chief of Staff directed that a special Security Police unit be formed, trained, and employed in an active combat theatre to evaluate the adequacy of the concept, training, equipment, and tactics of USAF Security Police organizations assigned to provide security for USAF resources in insurgent environments. The project was designated Operation SAFE SIDE. 1/

The 1041st USAF Security Strike Force Test Squadron, later designated the 1041st USAF Security Police Squadron (T), was organized and designated on 1 July 1966. It functioned as a field extension of the Inspector General, Headquarters USAF, under the operational control of his Director of Security Police. The Squadron was specifically tasked with:

- Evaluating advanced security equipment including intrusion detection and surveillance devices, communications equipment, weapons, and vehicles.
- Evaluating Air Force Security Police training methods and requirements for the local ground defense of air bases.
- Acquiring the experience necessary to develop Air Force doctrine for air bases located in limited war or insurgent environments. 2/

The SAFE SIDE experiment was conducted in two phases. The first, a training phase, conducted during 5 September through 16 December 1966, was designed to equip and train the Squadron for deployment to an air installation

in RVN and to evaluate the ability of the Air Force to conduct such training. Phase two deployed the Squadron to Phu Cat Air Base, RVN, during 16 January through 4 July 1967, to provide surveillance and protection in depth along specified sectors of the base perimeter. To accomplish this, the Squadron employed tactical security support equipment (TSSE) along selected portions of the base perimeter, established observation and listening posts, conducted reconnaissance patrols and ambushes, and provided a mobile security reaction force for deployment within their assigned TAOR.[3/]

The 15-week training program consisted of selected material from the U.S. Army Infantry School and Ranger Course at Fort Benning, Georgia. The deployment phase tested a variety of TSSE, close air support from assigned AC-47s, O-1Es, and the UH-1F helicopter, scout dogs, and selected individual and organizational equipment. Concurrent with the deployment phase of Operation SAFE SIDE, the CSAF in January 1967 directed a Combat Security Police Functional Study to determine the size and nature of the USAF Combat Security Police forces required for the defense of future Air Force resources located worldwide in hostile environments.[4/] The CSAF approved the subsequent study and directed implementation of a proposed USAF Combat Security Police program including the establishment of a training base and staff to support five squadrons, each comprised of 559 men. The Tactical Air Command was designated single manager to administer, train, and deploy the Security Police forces. The force was to be designed primarily to provide security support worldwide for USAF tactical units deployed to bare bases in hostile environments. In addition, the force would be capable of:[5/]

. Providing augmentation support for other Security Police

forces under emergency operations.

- Providing security for minor installations, such as deployed radar or mobile communications units.
- Aiding civil authorities in the protection of U.S. interests and property.
- Providing security for USAF units on deployment exercises.
- Developing or evaluating tactics, doctrines and equipment for the defense of air bases.
- Providing ground combat training for other USAF elements.
- Providing security and search parties in the event of nuclear incidents.
- Providing additional security forces for CONUS dispersal plans and to furnish emergency security for SAC missile sites.

Clearly, this concept of operations was much broader than the original task of Operation SAFE SIDE. It envisioned a CONUS-based, large force of combat Security Police, completely self-contained with necessary equipment and housekeeping facilities, for immediate deployment anywhere in the world to secure USAF tactical resources.

Due in part to the constraints imposed by internal organizational structure and USAF roles and missions (discussed previously in Chapter I), and to a large extent by the manpower ceilings imposed in SEA, USAF Security Police encountered extreme difficulty following the conclusion of the test phase of Operation SAFE SIDE, in initiating a permanent Combat Security Police Program.

The 1968 Tet Offensive demonstrated that USAF Security Police in RVN did not have sufficient reserve forces available to quickly react to the numerous attacks throughout South Vietnam. Emergency in-country security force deployments became necessary as the numbers of attacks on air bases increased.

Fortunately, the U.S. Army provided timely assistance in the 31 January 1968 attack on Tan Son Nhut Air Base, but it became increasingly clear that other more pressing situations could rapidly develop which would deny such assistance in the future.

On 18 February 1968, Gen. William W. Momyer, Commander, Seventh Air Force, proposed that one SAFE SIDE squadron be deployed immediately to Phan Rang Air Base on a TDY basis to provide a contingency force during high threat periods to thwart or stand off coordinated ground attacks until outside assistance could be received.[6/] CSAF approved the request on 5 March 1968, and the 82d Combat Security Police Wing (CSPW), the USAF Combat Security Police Training School, and 821st Combat Security Police Squadron (CSPS) were activated at Fairchild Air Force Base, Washington, on 8 March 1968.[7/] The 82d CSPW was tasked to train the 821st CSPS for TDY deployment to RVN by 14 April 1968, and to train follow-on personnel for a complete replacement of the squadron strength not later than 31 August 1968. The nickname applicable to this program was SAFE SIDE I. Training of the 821st CSPS was conducted at Schofield Barracks, Hawaii. The Seventh Air Force IGS assumed operational control of the Squadron on 15 April 1968 for tactical deployment of elements of the Squadron throughout RVN based upon the dictates of local enemy threat analysis.[8/] The squadron of 524 men arrived at Phan Rang Air Base, RVN, its base camp, on 15 April 1968, with essential field equipment and light weapons and support personnel in the administrative, supply, vehicle maintenance, weapons maintenance, aeromedical, and food service specialties. They soon developed the capability to deploy sections of 33 men to any base in RVN for self-sustained operations for a period of three days, with all necessary bivouac equipment and

support personnel. Seventh Air Force IGS criteria for deployment of elements of the Squadron were:[9]

- To augment local base security forces to correct security deficits resulting from changes in the order of battle, i.e., friendly forces moving out of the TAOR or enemy forces moving into the area.
- To reinforce local base security forces under attack or facing a threat of imminent attack.
- To provide a variable counter-threat by denying the enemy a basis for planning on the strength of our security forces at any given time or location.
- To temporarily augment Security Police squadrons which have sustained losses due to enemy action or rotation, or which require support due to heavy work schedules and fatigue.

Emergency deployments of combat elements were classified SECRET and required direct expeditious communications and coordination between the Tan Son Nhut operating element and the base camp at Phan Rang. When these deployments were made as a result of enemy action, transmission of deployment orders by electrical message was not satisfactory because of the limited time factor involved. It became necessary for the Seventh Air Force IGS to use the Seventh Air Force Tactical Air Control Center's (TACC) secure land line communication network to communicate with the base camp. As elements were deployed to various bases, and when bases found it necessary to request deployment of the 821st CSPS elements, it became apparent that frequent daily coordination of movements was necessary. To prevent serious overloading of the Seventh Air Force TACC lines, an automatic secure voice communication (AUTOSEVOCOM) terminal between the Seventh Air Force IGS and Phan Rang was installed. Secure land lines to all bases in RVN were also requested[10] to enable all bases to

communicate directly with the command element.

In the meantime, bases continued to communicate to the command element through the TACC network at their base Combat Operations Center (COC). At most bases, the Security Police CSCC was not collocated with the base COC and no secure communication facility existed during an emergency. However, if CSCC and COC were collocated, as at Bien Hoa Air Base, additional AUTOSEVOCOM terminals would be unnecessary.[11/]

Three Combat Security Police (CSP) squadrons have been deployed to RVN since April 1968 in response to requests by the Commander, Seventh Air Force, and in accordance with AFR 206-1. Elements of these squadrons have been used as a mobile contingency force to reinforce the defense capability of air bases as dictated by the changing threat analysis. Of all the Security Police forces in RVN, the CSP squadrons alone possessed a tactical organization and the desired proficiency in the employment and maintenance of crew-served weapons. In every instance, they were capable of timely response to deployment requirements, in some instances with not more than one hour prior notification. They made a significant contribution to the overall air base defense posture in RVN, and based upon the Seventh Air Force experience, the program is fundamentally sound.[12/]

CHAPTER V

PROJECT SAFE LOOK

Southeast Asia Operational Requirement (SEAOR) 22-FY-66, "Intrusion Detection Equipment," November 1965, established a requirement for acquisition and installation of surveillance and detection equipment at some 13 air bases in RVN, Thailand, and Korea specifically designed to detect infiltration of personnel and equipment around base perimeters and to provide timely alarm for USAF Security Police QRTs to engage the infiltrators some distance away from critical and sensitive USAF resources.[1/] This SEAOR set in motion the Tactical Security Support Equipment (TSSE) program, which has since been redesignated Project SAFE LOOK.[2/]

A variety of TSSE was tested at Phu Cat Air Base in early 1967 by the Operation SAFE SIDE test squadron and was found reliable and valuable in perimeter defense. However, the relatively short period of deployment of the squadron (16 January through 4 July 1967) and the limited sections of perimeter selected for installation of the equipment did not permit a comprehensive test at that time.[3/] A completely integrated system, encompassing the entire 16-mile perimeter of the base was necessary to properly evaluate the long-range effectiveness of the system. Phu Cat Air Base was selected for the first test base for the completely integrated system because a limited amount of the equipment had already been installed there.[4/]

When the TSSE program began in late 1965, AFSC appointed Rome Air Development Center (RADC), Griffiss Air Force Base, New York, as manager of the

program. RADC canvassed the industry to procure off-the-shelf items that were readily available for deployment to SEA. By accepting off-the-shelf items and conducting operational tests in actual combat environment, it was believed that 24 months could be cut off normal lead time for system development and that more precise environmental test data could be obtained. Also, the equipment would immediately provide some measure of perimeter protection.[5/]

Innumerable delays were encountered during the first three years of development of the system. The two major problem areas were: (1) a lack of communication between the operational test site and RADC. Because of insufficient engineers at the test site to properly supervise installation and analyze failures, inexperienced Security Police personnel had to attempt to communicate with scientific personnel in the United States; and (2) lack of provisions for accountability, installation, and maintenance for the equipment resulted in many losses of valuable equipment. Attempts of Security Police, who lacked necessary technical skills to install parts of the system, caused delays. Other parts required heavy earth-moving and ditch-digging equipment before installation could be accomplished.[6/]

In December 1968, Seventh Air Force established priorities among its ten bases for installation of the TSSE, and a test plan for complete installation of the equipment at Phu Cat Air Base was published in early 1969. Target completion date for installation of the equipment in the first of three sectors (Idaho Sector) at Phu Cat was 15 September 1969.[7/] By mid-June 1969, installation of the equipment in Idaho Sector was about 60 percent complete.[8/]

Each component of the Phu Cat Subsystem, which had been tested under

laboratory combat conditions, was found to be rugged, reliable, and maintainable in actual combat environments in RVN. The components are in widespread use throughout the Department of Defense. The buried sensors to be installed at Phu Cat are used in the ROK Demilitarized Zone by the Army. Components of the system are used by the Defense Communications Planning Group in Thailand.[9/]

The purpose of Project SAFE LOOK was not to replace security policemen with hardware, but to extend and improve the assured detection and engagement of hostile forces prior to their penetration of base perimeters.[10/] It would appear that the system has much to offer the air base defense security program in RVN, and the higher project priority rating assigned in June 1969 was warranted to expedite installation and development of the program.[11/]

CHAPTER VI

COMPARISON OF USAF AIR BASE DEFENSE IN RVN WITH THAILAND AND ROK

USAF Air Base Defense in Thailand

For broad policy reasons affecting paramount national interests of both the United States and Thailand, agreements between the two countries vest responsibility for air base defense, except for internal security to guard War Readiness Materiel (WRM) USAF resources, in the Royal Thai Government (RTG).[1/] The Royal Thai Air Force (RTAF) Base Commander is primarily responsible for internal base defense (similar to the arrangements on VNAF bases in RVN), although he has delegated much of this responsibility to USAF Security Police at bases tenanted by USAF forces. U.S. forces are not permitted to function outside the base perimeter.[2/] Manpower ceilings on the number of U.S. personnel in Thailand required the Commander, U.S. Military Assistance Command, Thailand (COMUSMACTHAI) to initiate an agreement with the RTG to establish a Thai paramilitary force for internal base security. The agreement was signed on 21 January 1966, and the force was known as the Thai Security Guard (TSG) Regiment. Although directly responsible to the Ministry of Defense, the TSGs are under the operational control of USAF Base Commanders through their Directors of Security Police.[3/] Initial difficulties with the program were overcome by USAF Security Police training the TSGs, and issuing M-1 rifles (USAF Security Police in Thailand are armed with M-16 rifles) to them, as well as establishing complete integration of the TSGs into the USAF Security Police forces.[4/]

Although present Rules of Engagement for U.S. forces in Thailand prohibit

pursuit of attacking forces beyond the base perimeter, and allow firing off-base only for self defense,[5] the Deputy Commander, Seventh Air Force/Thirteenth Air Force was able to obtain permission in August 1968 to:[6]

- Arm a 12-man force of TSGs with M-16 rifles at each USAF base.
- Deploy TSGs from one base to another to counter emergency threats to USAF resources.
- Use USAF resources for emergency deployment of TSGs if RTG airlift is for some reason absolutely unavailable.

The major difficulty in the development of USAF air base security in Thailand has been the complacent attitude on the part of the RTG and its armed forces regarding the communist threat in that country. Until the 26 July 1968 attack on Udorn RTAF Base, the Thais maintained that air base defense was no major problem for their armed forces and that there was no serious threat to USAF resources in Thailand. The Udorn incident at least encouraged the Thai Prime Minister to sign a Base Defense Plan on 26 September 1968. This plan tasked the Thai Armed Forces with responsibility for base security at the seven major bases, and set up a Joint Base Protection and Security Center at each base to coordinate and supervise base defense matters as well as to collect intelligence. The plan also gave base commanders responsibility for a 16-kilometer security area outside the perimeter of each base, and required positive efforts by base commanders to sanitize this area.[7]

However, no deadlines were established for local commanders, and as of 27 June 1969, no RTAF commander had ordered a base defense plan into operation, although U.S. authorities had submitted suggested plans and strongly urged their

adoption.[8] The 28 July 1969 attack on Ubon RTAFB again demonstrated the need to implement base defense plans at all bases in Thailand, and to change the confident and complacent attitude of the Thai Armed Forces toward air base defense.[9]

The current threat to USAF resources in Thailand is from small-scale sapper raids. To counter the threat, U.S. authorities have increased the TSGs to almost full strength (6,031) and concentrated on construction of fencing and lighting of base perimeters. The projected threat analysis in Thailand indicates that Communist Terrorist (CT) and NVA activities could expand and increase in that country as they did in RVN. Proximity of RTAFB, Nakhon Phanom, Thailand to Laos and the location of "Task Force Alpha" there, have caused increased U.S. emphasis on base defense efforts at that base in recent months. An increase of 180 USAF Security Police was approved in late 1968, and the RTG deployed the 157th RTAF Infantry Battalion there. Construction is also underway for a nearby camp to accommodate a battalion of RTA troops.[10] To counter the projected threat, USAF Security Police have heavy weapons stored in their armories and have contingency plans for the emergency deployment of RTGs and USAF SAFE SIDE elements.[11]

Because of the current limited threat to USAF resources in Thailand, base defense development in that area is about one year behind RVN bases. USAF Security Police in Thailand follow the concepts of PACAFM 207-25 as much as possible, considering the political constraints and limited resources available to them. They currently use one channel Motorola portable radios, but will get the two-channel radios from RVN when the RVN bases receive four-channel

radios late in the summer of 1969. They are programmed to receive XM-706 Armored Cars in 1969, and currently use USAF CH-3 helicopeters for interior perimeter defense plans. RTAF helicopters and AC-47s are available on call for exterior perimeter defense.[12/]

USAF Air Base Defense in Korea

Exclusive of the area contiguous to the Demilitarized Zone, the Republic of Korea (ROK) is not presently considered a hostile area nor do insurgency conditions prevail there. The principal threat to USAF resources arises from the demonstrated capability of North Korea to launch sporadic small-scale ground attacks by elements of its armed forces against targets of their choosing. Efforts of the Communist regime of North Korea to foster an insurgency movement in ROK have been notably unsuccessful as a result of the loyalty of the South Korean population and the effective internal security system established by that government.[13/]

As in RVN, the USAF occupies both a host (Osan and Kunsan Air Bases) and a tenancy (Kimpo, Suwon, Taegu and Kwang-Ju Air Bases) status in ROK. In this respect, responsibilities for interior base defense in Korea are the same as they are in RVN. Prior to June 1968, USAF Security Police forces at the six bases in ROK were governed by the air base defense concepts contained in AFM 207-1. As discussed previously in Chapter II, this directive is designed for a war environment where USAF resources are assumed to be located behind established military fronts. As a result of repeated small-scale attacks on air bases in ROK, Headquarters PACAF determined in June 1968 that PACAFM 207-25, "Security Police Guidance for Guerrilla/Insurgency/Limited War Environments,"

would apply to USAF operations throughout the ROK.[14/]

An Air Base Defense Survey of USAF bases in the ROK conducted during 17 through 31 March 1969 revealed that most USAF Security Police personnel arriving in the ROK had little or no exposure to the theory and practice of PACFM 207-25 concepts. They had not been required to attend the Security Police Combat Preparedness Course (3ARZ 81150) required for Security Police personnel assigned to RVN. Consequently, their emphasis was on close-in defense of priority resources rather than a defense-in-depth concept of operations beginning at the base perimeter.[15/]

The survey recommended selected application of PACAFM 207-25 principles in the ROK: establishment of a Security Police ground intelligence capability at each base; preparation of Joint Base Defense Plans to integrate defense efforts of all friendly forces and to include a plan for direct air support of base defense operations; establishment of Joint Defense Operations Centers (JDOCs); utilization of random posting and the sector concept; and establishment of appropriate Rules of Engagement and indoctrination and training of Security Police personnel.[16/]

The limited threat to USAF resources in Thailand and the ROK and the limited application of PACAFM 207-25 in both countries illustrate the flexibility required in directives applicable to guerrilla, insurgency, or limited war areas. The permissive nature of PACAFM 207-25 was intended to afford each USAF base the widest possible latitude in formulating a defense system tailored to its specific needs. A comparison of its application in RVN, Thailand, and

the ROK indicates that the concept is sound and sufficiently flexible to counter the variety of threats to USAF resources. The development of adequate air base defense capability in any country and at any local air base is a very slow process. Thailand is going through the same type of growing pains experienced in RVN, but the knowledge and experience gained in the development of air base defense in RVN permit a more rapid evolution in Thailand. Korea presents an entirely different problem. Although the current threat includes only small-scale sniper attacks and requires limited application of the PACAFM 207-25 concepts, the projected threat analysis still includes the possibility of invasion from the North along established military fronts. Therefore, air base defense plans in the ROK must include contingency defense plans incorporating applicable parts of both the old and the new air base defense concepts.

CHAPTER VII

CONCLUSION

The stronger USAF internal base defense forces have become, the more the enemy has relied on standoff attacks, and the threat of penetration by sapper squads has diminished. When internal security capability decreased, the threat of sapper attack increased, and the enemy relied less on standoff weapons. In guerrilla, insurgency, and limited war environments, the threat of attack on air bases is fluid. The immediate threat in mid-1969 does not include enemy capability to launch mass attacks on the scale of the 1968 Tet Offensive. However, as our offensive ground forces change their location, as U.S. forces move out of the country, and as the total war situation changes, the threat of mass attack may again present itself.

Present concepts of air base defense are flexible and sound. The enemy pays a heavy penalty for his attacks and USAF losses are minimized. But there is no complete assurance that the enemy cannot get through. Air base defenses must be maintained at a level sufficient to make losses acceptable.

A contingency force, by its nature, is a waste until the force is needed. It would appear that the war in Vietnam has demonstrated that a well-trained, well-equipped USAF ground defense force is a necessary part of the Air Force mission in a guerrilla, insurgency, and limited war environment. The time-consuming trial and error process of developing tailor-made defenses for USAF resources in future Vietnam-type wars might well be streamlined and minimized, if service roles and missions recognized a limited ground defense mission for

the Air Force, as well as implementing Air Force directives which required the necessary training and resources to accomplish such a mission.

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HISTORY OF ATTACKS ON USAF BASES/SITES

1 JAN 1965 - 30 JAN 1968

TYPE ATTACKS	BIEN HOA	BINH THUY	CAM RANH BAY	DA NANG	NHA TRANG	PHU CAT	PHAN RANG	PLEIKU	TUY HOA	TAN SON NHUT	SITES	TOTAL BY TYPE
STANDOFF WEAPONS	2	6		8	2			3		1	25	47
STANDOFF WEAPONS/SAPPER				1						1	2	4
SAPPER	1				1					1		3
SABOTAGE	1											1
SMALL ARMS											2	2
MAJOR LAND ATTACKS												
											TOTAL	57

APPENDIX I

[redacted]

HISTORY OF ATTACKS ON USAF BASES/SITES

31 JAN 1968 - 8 JUN 1969

TYPE ATTACKS	BIEN HOA	BINH THUY	CAM RANH BAY	DA NANG	NHA TRANG	PHU CAT	PHAN RANG	PLEIKU	TUY HOA	TAN SON NHUT	SITES	TOTAL BY TYPE
STANDOFF WEAPONS	37	38	2	41	15	4	23	22	1	27	59	269
STANDOFF WEAPONS/SAPPER	1	1					1					3
SAPPER	1					4	2		1			8
SABOTAGE				1								1
SMALL ARMS	56	48	3	15	5	122	115	45	49	33	47	538
MAJOR LAND ATTACKS	2									2		4
											TOTAL	823

APPENDIX II

[redacted]

GLOSSARY

AFM	Air Force Manual
AFR	Air Force Regulation
APC	Armored Personnel Carrier
ARVN	Army of the Republic of Vietnam
AUTOSEVCOM	Automatic Secure Voice Communication
CIA	Central Intelligence Agency
CICV	Combined Intelligence Center, Vietnam
CINCPACAF	Commander-in-Chief, Pacific Air Forces
COC	Combat Operations Center
COMUSMACTHAI	Commander, U.S. Military Assistance Command, Thailand
COMUSMACV	Commander, U.S. Military Assistance Command, Vietnam
CSAF	Chief of Staff, U.S. Air Force
CSC	Combat Security Control
CSCC	Central Security Control Center
CSP	Combat Security Police
CSPS	Combat Security Police Squadron
CSPW	Combat Security Police Wing
CT	Communist Terrorist
CTZ	Corps Tactical Zone
DOD	Department of Defense
e.g.	For Example
FAC	Forward Air Controller
FY	Fiscal Year
FWMAF	Free World Military Assistance Forces
H&I	Harassment and Interdiction
IGS	Inspector General Security
JDOC	Joint Defense Operations Center
LBR	Local Base Rescue
LFT	Light Fire Team
MACV	Military Assistance Command, Vietnam
MLR	Main Line of Resistance
mm	millimeter
NNW	North-Northwest
NVA	North Vietnamese

O&M	Operations and Maintenance
OPlan	Operations Plan
OSI	Office of Special Investigation
PACAF	Pacific Air Forces
PACAFM	Pacific Air Forces Manual
PF	Popular Forces
POL	Petroleum, Oils, and Lubricants
QRT	Quick Reaction Team
RADC	Rome Air Development Center
Recon	Reconnaissance
RF	Regional Forces
ROC	Required Operational Capability
ROK	Republic of Korea
RPG	Rocket Propelled Grenade
RTAF	Royal Thai Air Force
RTAFB	Royal Thai Air Force Base
RVN	Republic of Vietnam
SAT	Security Alert Team
SEA	Southeast Asia
SEAOR	Southeast Asia Operational Requirement
TACC	Tactical Air Control Center
TAOR	Tactical Area of Operational Responsibility
TDY	Temporary Duty
TSG	Thai Security Guard
TSNSA	Tan Son Nhut Sensitive Area
TSSE	Tactical Security Support Equipment
VC	Viet Cong
VNAF	Vietnamese Air Force
WRM	War Readiness Materiel