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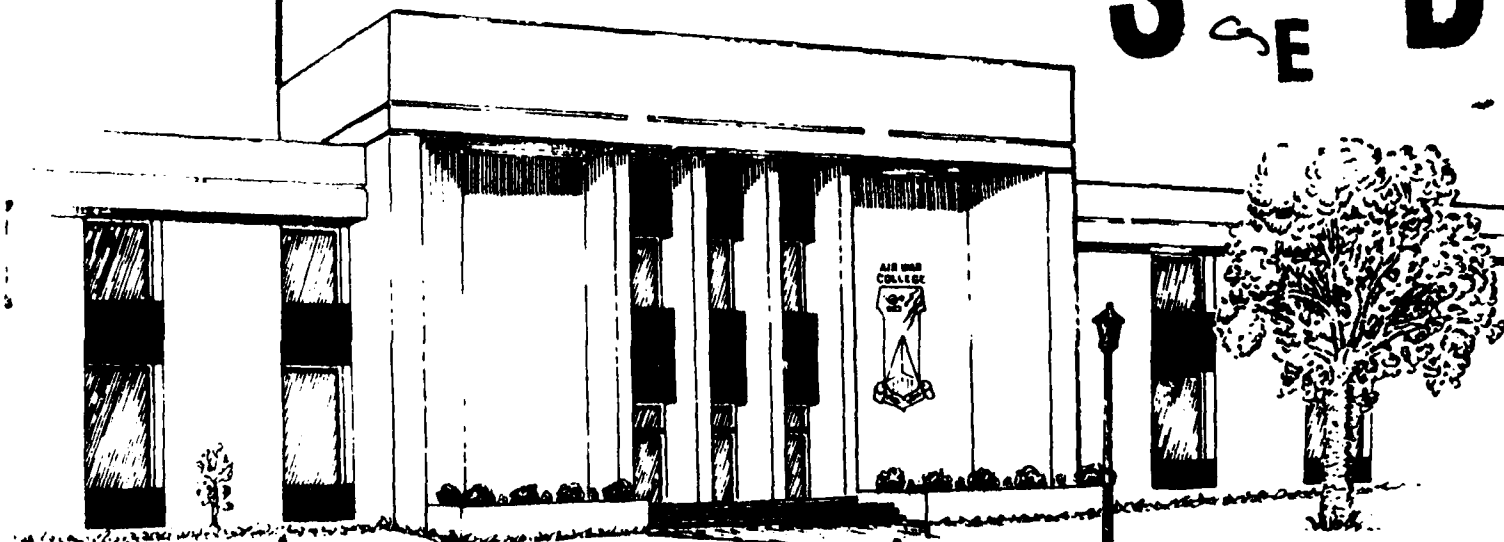
RESEARCH REPORT

AIR BASE GROUND DEFENSE: AN HISTORICAL PERSPECTIVE
AND VISION FOR THE 1990S

LIEUTENANT COLONEL WAYNE PURSER

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AIR UNIVERSITY
UNITED STATES AIR FORCE
MAXWELL AIR FORCE BASE, ALABAMA

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AIR BASE GROUND DEFENSE
AN HISTORICAL PERSPECTIVE
AND
VISION FOR THE 1990s

by

Wayne Purser
Lieutenant Colonel, USAF

A DEFENSE ANALYTICAL STUDY SUBMITTED TO THE FACULTY
IN
FULFILLMENT OF THE CURRICULUM
REQUIREMENT

Advisor: Colonel Denis P. McGrath

MAXWELL AIR FORCE BASE, ALABAMA

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EXECUTIVE SUMMARY

TITLE: Air Base Ground Defense: An Historical Perspective
and Vision for the 1990s

AUTHOR: Wayne Purser, Lieutenant Colonel, USAF

This work initially presents a brief historical perspective of air base ground defense (ABGD) in the United States Air Force (USAF) from its early beginnings in World War I (WWI), through the major conflicts of the twentieth century, to our present day capabilities. This perspective is to give the reader an appreciation of why we are where we are today. Efforts to create a viable ABGD system during and between wars waxed and waned along with the perceived threat and sense of urgency, thus affecting dedicated support, manpower, and funding. With this historical perspective as a foundation, the author proposes several recommendations for where our current USAF ABGD program needs to go in order to move us through the next decade with a credible deterrent and defense against the perceived threat across the entire spectrum of warfare. The author has based his recommendations in part on his own experience in the ABGD role, specifically in the Pacific Theater. Not intended to be an all-encompassing "fix-it" checklist, this work hits some of the key areas and provides food for thought toward enhancing our USAF ABGD capabilities. (FUC)

BIOGRAPHICAL SKETCH

Lieutenant Colonel Wayne Purser (B.A., Geography, Southern Illinois University, 1970; M.A.I., Management, Webster University, 1977) spent the first 15 years of his Air Force career as an aviator serving in various fixed- and rotary-wing aircraft assignments, including the T-38, CT-39, HH-1, HH-3, and HH-53, at various CONUS locations and three Pacific Theater countries. While serving in Southeast Asia as a Jolly Green rescue pilot, he was credited with 54 combat "saves" during the 1975 rescue operation of the United States (US) merchant container ship SS Mayaguez and crew. His staff experience includes Headquarters, Aerospace Rescue and Recovery Service (now 23rd Air Force) and Headquarters (HQ), United States Air Force, Pentagon. In 1986 Lieutenant Colonel Purser transitioned to the security police (SP) career field, commanding SP squadrons at Grand Forks AFB, N.D., and Kunsan AB, Republic of Korea. While at Kunsan, with air base ground defense as one of the primary SP missions, he gained an in-depth appreciation for the absolute necessity and the myriad difficulties of this vital mission, which prompted his study in this mission area. Lieutenant Colonel Purser's awards and decorations include the Air Force Cross, Meritorious Service Medal with three oak leaf clusters (OLCs), Air Force Commendation Medal with 1 OLC, Air Force Outstanding Unit Award with 4 OLCs, Combat

Readiness Medal, Air Force Recognition Ribbon, Air Force Expeditionary Medal, and Humanitarian Service Medal. He is a 1976 graduate of Squadron Officer School, a 1984 graduate of Armed Forces Staff College, and a 1989 graduate of Air War College.

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CHAPTER ONE

INTRODUCTION

"Without ground support there is no air support."

This oft-quoted phrase (original coiner unknown) probably best states the absolute criticality of the myriad "tail-to-tooth" functions required to discharge the overriding mission of the United States Air Force in employing aerospace forces--"gain and maintain freedom of action to conduct operations against the enemy." (1:2-11) Simply stated, the first priority of our aerospace force is air superiority. (1:2-12) It goes without saying the simple phrase "air superiority" encompasses varied aspects, i.e., principles of war (objective, surprise, economy of force, etc.) (1:2-5), roles and missions (i.e., offensive counter air, battlefield air interdiction, close air support, etc.) (1:3-2), and fundamentals of warfighting (man, machine, and environment). (1:2-4)

One of the key principles of war is that of security, as described in Air Force Manual 1-1, Basic Aerospace Doctrine of the USAF:

Security protects friendly military operations from enemy activities which could hamper or defeat aerospace forces. Security is taking continuous, positive measures to prevent surprise and preserve freedom of action. Security involves active and passive defensive measures and the denial of useful information to an enemy. To deny an enemy knowledge of friendly capabilities and actions requires a concerted effort in both peace and war. Security protects friendly forces from an effective enemy attack through defensive operations

and by masking the locations, strength, and intentions of friendly forces. In conducting these actions, air commanders at all levels are ultimately responsible for the security of their forces. Security in aerospace operations is achieved through a combination of factors such as secrecy, disguise, operational security, deception, dispersal, maneuver, timing, posturing, and the defense and hardening of forces. Security is enhanced by establishing an effective command, control, communications, and intelligence network. Intelligence efforts minimize the potential for enemy actions to achieve surprise or maintain an initiative; effective command, control, and communications permit friendly forces to exploit enemy weaknesses and respond to enemy actions. (1:2-6)

This description has implications vis-a-vis the degree and type of security airpower affords to ground forces as well as that security afforded by ground forces to airpower (read air assets, i.e., air bases, aircraft, etc.). It is this latter aspect that is the focus of this paper.

Because all that is encompassed in the term "airpower," specifically its readiness and sustainability, begins and ends on the ground, this tether, the dependence of our land-based air assets on permanent ground bases, has made the defense of our air bases critical to the employment of airpower. Presently, base protection falls into four major categories: air defense, ground defense, passive defense, and recuperation or base recovery after attack. (19:22) Within the USAF, security police forces are tasked with overall responsibility for air base ground defense of its installations, bases, and sites.

My overall hypothesis is that today's USAF ABGD program has made great strides in getting in the best shape

it's ever been in the history of airpower. However, despite the much improved health, we have a long way to go to make ABGD into a credible deterrent and viable defense network against the future ground threat. It is the purpose of this paper to focus on the ground defense aspect only, with an historical perspective to give some insight on how we got to where we are today and then focus on both near-term and long-range ways to improve our capability with recommendations on where we should go with ABGD into the 1990s.

By way of departure, base defense is defined in Joint Chiefs of Staff (JCS) Publication 2 as " . . . local military measures, both normal and emergency, required to nullify or reduce the effectiveness of enemy attacks on, or sabotage of, a base so as to insure the maximum capacity of its facilities is available to US forces." (2:1)

CHAPTER TWO

WORLD WAR I

Throughout the history of early US military aviation, our air bases were insulated, if not completely immune, from hostile ground action by enemy forces. (3:1) Such was the case during World War I where use of airpower saw little direct application save for the embryonic stages of aerial combat and reconnaissance. (2:1) It may be remembered that during WWI, both enemy and allied air forces enjoyed almost complete freedom from ground attack by opposing forces because most air bases were positioned well to the rear of the " . . . massive complex of trench lines which rarely shifted more than a few hundred meters." (3:1) Except for minor exceptions during operations in East Africa and the Middle East, there were no guerrillas, insurgents, unconventional forces, or any other irregular combatants to challenge the security of air bases or disrupt rear-area operations. (3:1) On the allies' side, General William "Billy" Mitchell recognized the criticality of offensive air power in general and specifically its use against the vulnerability of enemy air bases as a means to break the trench-war stalemate. A case in point was Mitchell's massing of air power and the allies' decisive victory against German air bases during the battle for the St Mihiel salient. (2:1)

THE INTERWAR YEARS

During the interwar years, US air base defense policy was based largely on our experience during WWI, never progressing beyond the interior-guard system because of the perceived lack of ground threat. Recognizing military aviation's expanding role, and thus the enhanced importance of air bases and their vulnerability,

as early as 1921, Giulio Douhet, an early and most influential prophet of air power, theorized that the only effective way to counter enemy air power was to destroy its [power] base on the ground (3:31), by stating "it is easier and more effective to destroy the enemies' aerial power by destroying his nests and eggs on the ground than to hunt his flying birds in the air." (3:29)

However, there were those of power and influence who held the prevailing dissenting view. In 1921 Lieutenant Colonel James E. Fechet, Chief of the US Army Air Service Training and Operations Group (later Major General Fechet, Chief of Air Service 1927-31) stated,

Aircraft mechanics and other technicians need not be infantry-trained...since their duties were entirely different from those of the Infantry [sic], they should receive only that portion of infantry training which would permit them to move in a military manner from place to place. In the event of a domestic emergency, enlisted men of the intelligence usually found in Air Service organizations could be quickly instructed and equipped to perform their part creditably. (3:1-2)

In 1927 the War Department formalized Fechet's views, which remained policy until just prior to the attack on Pearl Harbor. In November of 1941, "Major General Frederick L. Martin, Commander of the Hawaiian Air Force, complained bitterly to Major General Henry H. (Hap) Arnold,

Chief of the US Army Air Forces, objecting to plans of Lieutenant General Walter C. Short, Commanding General of the Hawaiian Department, to train Air Corps personnel for ground defense missions." (3:2) Apparently, Lieutenant General Short realized the importance of an ABGD mission, albeit too late. Disregard for Douhet's 20-year old warning and comfort with the WWI experience that air bases in the rear areas were immune from attack would prove all too costly to the US and its allies during the second global conflict of the century.

CHAPTER 3

WORLD WAR TWO:

THE BIRTH OF ABGD

As is so often the case, to (re)learn lessons of previous wars, the allies had to get their proverbial noses bloodied to fully realize their lack of preparation for war. Germany's new mode of mobile, lightning warfare--the blitzkrieg--found them literally smashing their way across Europe, overwhelming France, Norway, Denmark, Belgium, and the Netherlands, often using "paratroops and airborne forces to seize or destroy in advance [of the frontal-attacking German army forces] Allied air bases and other vital rear-area installations." (3:2) Lieutenant Colonel Roger P. Fox, USAF (Ret.), best states Germany's simple but extremely effective *modus operandi*:

At this point [circa 1941 after the fall of Crete], German tactics against allied air bases had become fairly standardized. Bombers attacked the base periphery from medium altitude to drive enemy [allied] anti-aircraft gunners to cover. Dive bombing and strafing kept the gunners and other defenders in their shelters. [German] paratroops then dropped on the airbase, and defenders coming up for air found themselves looking into the muzzles of German guns. Finally, transports bearing airborne infantry began landing on runways carefully spared by [German] bombers. (3:2) (Author's note: generally speaking, this is not unlike what might be expected as one of the many scenarios available in the present-day theater threat.)

It should come as no surprise that allied air bases were impossible to defend once the surrounding air space and land area fell to the enemy. World War Two (WWII) airfields

were nothing more than large fields with few if any physical barriers or organic defenses. Once the Germans seized the air base, they were free to use it for their own operations or destroy all the captured aircraft and facilities, thus denying further use by allies.

Probably the culminating blow was the 1941 loss of the island of Crete to the Germans and the attendant capture of the British air base at Maleme. This prompted British Prime Minister Sir Winston Churchill to review the British air base defense policy, ordering the Secretary of State for Air and the Chief of the Air Staff to rectify the Royal Air Force's (RAF) deficiencies in this area. Churchill's forceful words, emphatically stating that he would not tolerate a half-million [British] Air Force personnel without a combat role, ring true even today as we wrest with the issue of arming all air base personnel and examine their combat role in defending the air base when the "bad guys are on the wire." Churchill declared that all airmen would be trained, armed, and ready "to fight and die in the defense of their airfields . . . every airfield should be a stronghold of fighting air-ground men, not the abode of uniformed civilians in the prime of life protected by detachments of soldiers." (3:3) Today the Air Force is addressing this very issue as a means to enhance our air bases' ever-increasing vulnerability to ground attack.

Under Churchill's edict, responsibility for local air base defense fell to the British Air Ministry, which created the RAF Regiment in February 1942 to discharge the new mission. The Regiment reached a peak of 240 field and light antiaircraft squadrons of some 85,000 officers and enlisted personnel deployed to RAF airfields worldwide. Organized to handle every aspect of air base defense, the regiment was highly trained in both internal and external security defense measures, proving extremely effective in defense of British air bases. (4:5) A British post-war commission headed by Air Marshall Sir Arthur S. Barrett addressed base defense issues. Its written report explained why the RAF Regiment should remain a permanent and integral part of the British warfighting system: (British spellings used as in original text)

The security of air bases is a pre-requisite [sic] of successful air operations. . . it is the opening stages of a future war when we may expect to be on the defensive and when, if the lessons of the recent war are applied, the enemy will make the neutralization of our air power his primary objective, that the security of air bases will be most vital and most in danger. We cannot count next time on beginning a war with nine months inactivity. We must be organized and ready on D-Day to meet all forms of attack, including sabotage, airborne assault, infiltration by mobile ground forces or low flying air attack. (6:16-17)

Following the lead of our British allies, in 1942 Army Chief of Staff, General George C. Marshall, approved the formation of the first Army Air Forces (AAF) air base security battalions with an initial manning of over 53,000 men to defend US AAF beddown air bases. Follow-on planning

called for a peak total of 296 air base security battalions. However, by 1943, the allied powers had gained almost complete control of ground and air wars in both the European and Pacific theaters, sparking inactivation of the US air base security structure. All battalions were closed out following the Japanese surrender in 1945. The RAF, however, retained the air base defense regiment, thus affirming British recognition of the ongoing need for this vital mission. (3:4)

THE INTERWAR YEARS

The Air Force became a separate department and service by the National Security Act of 1947, coequal with the Army and Navy, subordinate to the Department of Defense. As the fledgling Air Force began to hammer out its own missions and responsibilities, a joint Army-Air Force agreement was reached in 1947 which stated "each department will be responsible for the security of its own installations. . . including protection against air, mechanized, and chemical threats." (3:4) The 1948 Department of Defense-level Key West Agreement identified roles and missions of each service, with base defense specifically identified as common to all services. The Agreement implicitly addressed the land combat mission of the Army (" . . . to seize, occupy, and defend land areas") (3:4) and of the Navy and Marine Corps (" . . . to seize and defend advance naval bases and to conduct such land operations as may be essential to the

prosecution of a naval campaign") (3:4). However, nowhere did the Agreement assign the Air Force the mission of defending its own air bases or, for that matter, even address an Air Force ground combat mission. Also missing from the Agreement was any direction how service-common installation defense would/should dovetail with area defense, primarily an Army responsibility. The Joint Chiefs of Staff, tasked by the Agreement for joint service doctrine, policies, and responsibilities, published in 1951 the first Joint Action Armed Forces (JAAF). This became JCS Publication 2, Unified Action Armed Forces (UNAAF) in 1959 (3:5), and was last updated in December 1986.

The JCS guidance in the 1951 JAAF (with no significant changes in the 1959 UNAAF) concerning joint base defense operations and planning was very broad (read vague) in nature, leaving the Air Force thrashing about for just where it stood on base defense responsibilities. Fox sums JCS direction as follows:

JCS Pub 2 defined base defense as one of several "special operations" not tied to a single Service. The new directive [UNAAF] required unified or specified commanders to assign responsibility for local base defense, define its areas, and see that proper relations were set up between area and local defense commanders. The commander of an area that encompassed an air base needed to give it overall protection against the interference or threat of near and distant enemy forces. Regardless of Service, the base commander was charged with local defense [a responsibility that remains even in today's Air Force]. He exercises operational control over forces of all Services while they were actively engaged in the local base defense mission. (3:5)

Missing from early JCS guidance were type and size of necessary combat forces and clear definition of geographical limits of the base defense mission. The lack of firm guidance, coupled with the many problems experienced as the Air Force became a separate service, led to failure to prepare for the ABGD mission as we entered the Korean War.

CHAPTER FOUR

THE KOREAN WAR

The US was surprised by the June 1950 North Korean invasion of the Republic of Korea (ROK) similar to its surprise in 1941. Thrust into a combat environment that threatened air bases, the USAF began to take immediate steps to overcome two basic shortfalls in air base security: 1) no ground defense forces to speak of and 2) poorly defined ABGD doctrine. (2:3) By December 1950 Air Police (AP) forces had expanded from 10,000 to 39,000 in an effort to beef up dedicated forces for ABGD. This group was to act as the cadre to outfit and train those airmen not directly involved in flight operations as infantry. (5:404) The Air Police units were initially equipped through a crash procurement program with basic infantry-type weapons, including machine guns, recoilless rifles, and armored cars. (3:5) However, the problem of ill-defined doctrine still persisted. We probably had the Strategic Air Command (SAC) to thank for formulating the ABGD doctrine which did exist. SAC, absent USAF-level doctrinal guidance, formulated its own ABGD concept, which USAF Headquarters review found to be in complete accord with the then-current Air Staff thinking and position. A passage from Fox's book best describes the SAC ABGD rationale and strongly implies it shaped basic Air Force ABGD doctrine:

The most lucid statement of prevailing Air Force base defense rationale appeared in the October 1952 edition of SAC Manual 205-2. It rejected the notion that the USAF ground defense mission conflicted with [US] Army functions, because self-defense is an inherent responsibility of all commanders. Moreover, normal Army campaign strategy and tactics for defending land areas inevitably left small areas or points open to attack by small enemy forces. Because the Army was and must remain an offensive force, its doctrine contemplated taking the defensive in an area only to reach a decision elsewhere. Consequently, the Army's limited and temporary defense role might well run counter to, or coincide only accidentally with, the USAF mission at specific air base locations. The Army in such instances could scarcely be expected to confine its operations to the defense of Air Force elements not vital to its own mission.

Conversely, SAC officials felt that success of the Air Force mission might require point defense of elements which the Army could not afford to protect. Further, as joint defense plans would most likely rely on distant troops, air installations would be vulnerable to surprise attacks pending their arrival, and these defensive forces might not come at all if an overriding Army offensive mission developed at the decisive moment. However, the SAC rationale held that ground defense must inescapably remain an organic USAF function. (3:6)
(Author's note: this text is quoted in toto to illustrate the doctrinal vision of early 1950s ABGD framers, since it has direct implications today vis-a-vis base defense roles-and-mission concerns of the US Army and Air Force).

It is interesting to note the above SAC rationale was in step with the views of Air Marshall Sir Arthur S. Barratt, head of the committee whose post WWII report recommended permanent retention of the ABGD British RAF Regiment (mentioned in Chapter Three) because of its invaluable success in the dedicated base defense role. (3:6)

Finally, near the end of the Korean War, the Air Force Council approved a statement of ABGD doctrine, implemented by Air Force Regulation (AFR) 355-4, Local Ground Defense of Air Force Installations, in March of 1953, which defined ABGD as follows:

[Local ground defense is] all measures taken by the local Air Force installation commander to deny hostile forces access to the area encompassing all buildings, equipment, facilities, landing fields, dispersal areas, and adjacent terrain from which the installation could be neutralized. [ABGD was envisioned to be an emergency mission only and not for] sustained ground defense operations. (3:5)

At the HQ USAF level, the Deputy Chief of Staff for Operations had overall responsibility for base defense while at the local level the base commander, through his provost marshall (now termed chief of security police), exercised command and control. The Air Provost Marshall [now Air Force Office of Security Police (AFOSP)] was charged with responsibility for security systems development and technical training of the security forces. (3:5-6) Although the Air Force attempted to plug the ABGD gap by throwing money, manpower, and equipment at a then-nonexistent base defense program, no formal training was initiated until January 1953 at now-closed Parks AFB, California. (2:3) Despite lack of doctrine and force structure, US and ROK air bases were not seriously threatened during the Korean War, which is surprising considering the vulnerability of our bases to North Korean guerillas. Fox documents this by stating:

With the end of the Korean War in July 1953, Far East Air Force (FEAF) assessed and documented its experience in a summary report. Among other things FEAF found that "effective security against sabotage and a workable ground defenses system was [sic] never fully developed on most Air Force installations in Korea" because plans "were not correlated with the threat...or were beyond the units' capability to execute effectively." This serious shortcoming, however, did not spell disaster, because in actual practice the main Air Force security mission was to protect resources from theft and

pilferage, not to defend bases from ground attack... at one air base during the first six months of the war the major portion of [Air Police] time was occupied by interior guard, prevention of thievery, ever present and always successful pilferage, trespassing, and securing property at unloading points or in transit. Author's note: having recently served as Chief of Security Police at an air base in the ROK, I can safely say things have changed very little if at all in this area . . . Although at times from 32,000 to 35,000 North Korean guerrillas were operating in United Nations territory, they ignored air bases as key targets. The FEAF report cited no air base attacks by guerrillas or other irregular forces and no aircraft lost or damaged by such action. Air bases were overrun or threatened when major enemy units ruptured the front, a contingency that was clearly an Army rather than a local base defense responsibility. (3:6-7)

THE INTERCONFLICT YEARS

Even though it took nearly the full three years the Korean War lasted, it appeared that by its end the Air Force had finally stepped up to the dire need for a viable ABGD system. By the war's end, the USAF had the doctrine, the force structure, training, and equipment to form the foundation for an active, dedicated ABGD capability. However, with air bases not seriously threatened during the Korean War, revised intelligence estimates, a new national strategy (3:7), and a postwar USAF budget reduction, the Air Force could not justify additional end strength for enhanced ABGD capability. The result was a decrease in USAF ABGD-dedicated manpower and a lower overall priority for the base defense program. (5:404)

The Air Force attempted to maintain a viable program, continuing ABGD training at Parks AFB for three years following the war's end. However, training was discontinued

in 1956 for several reasons. First, USAF requests for a large increase in ABGD-dedicated Air Police drew unfavorable congressional criticism during postwar defense appropriations deliberations. "And when USAF spokesmen, unversed in security and defense concepts, could not convincingly explain why the Air Force needed so many more policemen than the Army, Navy, and Marine Corps, only a prompt USAF pledge to reduce Air Police strength by 20 percent restrained Congress from imposing a statutory ceiling." (3:7) Secondly, because the Korean War had not concluded with a decisive US win but simply had ended with a cessation of hostilities, the will of the American people changed as they "became dissatisfied [since] a long, drawn-out, seemingly inconclusive conflict was alien to their nature." (7:6) At the same time, the national military strategy of the Eisenhower Administration changed to massive nuclear retaliation if our interests became sufficiently threatened. As it was envisioned, future war involving US forces would not be limited and protracted as it had been in Korea, but a relatively short war culminating in an immediate exchange of nuclear weapons. In light of this new strategy, refined intelligence estimates reflected that overt assaults by enemy ground forces were unlikely. They favored surreptitious attacks by clandestine special forces against US installations harboring our nuclear arsenals and delivery aircraft. (3:8)

This new philosophy prompted a fresh look at then current ABGD concepts, beginning with a 1957 Air Staff-level review of doctrine, which was found inappropriate and not in accord with the evolving national strategy. The final report identified several shortcomings, including implausible threats, manpower waste, unattainable training objectives, and too heavy reliance on early warning. Additionally, it condemned AFR 355-4 (the ABGD "bible") as "impractical, unmanageable, [and incapable of yielding] defense-in-being consistent with up-to-date estimates and war planning concepts." (3:8) Accepting the recommendations articulated in the final report, HQ USAF abandoned the concept of local air base defense against an overt threat external to the installation. It adopted instead a philosophy of internal reinforced security, which called for an expanded interior guard system to counter covert threats "inside the wire." Centering on protecting critical weapon systems, equipment, and facilities from sabotage, Air Police managed the security of key areas through strict personnel access control. Air Police personnel provided round-the-clock back-up response through small, mobile sabotage alert teams [akin to present day security response teams and armed response teams] with emergency reserve made up of off-duty APs. Air Force Regulation 205-5, Internal Installation Security Program, formally replaced AFR 355-4. Thus, for a number of reasons, political, economic, and military, the USAF ABGD mission simply went away.

The advent of the Kennedy Administration in 1961 brought a shift in national military strategy from that of "massive retaliation" to one of controlled, "flexible response." This required US military forces to meet the challenge across the entire spectrum of potential conflict. This shift was probably inevitable at the time since the all-or-nothing strategy of massive nuclear retaliation did not seem an appropriate way of dealing with the Soviet Union's policy of supporting wars of liberation and insurgency. The use of surrogates, puppets, and third-world actors was perceived as the most likely threat to US interests worldwide. It prompted our counter responses of placing military personnel in advisory roles to local government forces in hope of reducing the chances of involving US forces in future limited wars or conflicts. (2:5)

It's difficult to fathom the near blind luck we enjoyed in the area of ABGD through three twentieth-century wars. For whatever reason, be it lack of enemy capability or his failure to seize the opportunity, US owned/used installations have been relatively free from ground attacks, at least those serious enough to disrupt air operations. It was this lack of threat, real or perceived, that halted the evolution of a viable ABGD capability (again!). Although our luck held through the three wars, such was not the case during the Vietnam Conflict. As will be discussed in the next chapter, our unpreparedness upon entry into this

conflict caught us with our ABGD pants down. US forces embarked upon a new kind of warfare, a guerrilla-type war fought against enemy irregular forces, forces that could not be distinguished from the friendly, indigenous population, forces which posed a serious potential and demonstrated a lethal threat to US and Vietnamese Air Force (VNAF) air bases.

CHAPTER V

THE VIETNAM CONFLICT

It was like a phonograph needle skipping on a broken ground-defense record. The Viet Cong/North Vietnamese Army (VC/NVA) November 1964 attack on Bien Hoa Air Base, the very first of some 475 such attacks on 10 key air bases in the Republic of Vietnam (RVN) during the Vietnam Conflict (1961-1973) (3:iii), caught US and allied forces off guard. The Air Force was once again unprepared for the ABGD mission during this war. The US presence in RVN beginning in 1961 was to be in an advisory capacity only, assisting the RVN government in defeating the communist insurgents. However, neither the advisors nor RVN forces considered the impact of insurgency, guerrilla-type warfare on the security of air bases, thus failing to provide for an indigenous Army of the Republic of Vietnam/Republic of Vietnam Air Force (ARVN/RVNAF) or an organic USAF capability to defend the air bases. Until the March 1965 arrival of the first US combat ground troops, the US government had relied upon ARVN/RVNAF forces to provide the ABGD capability, a mission for which these forces proved unprepared.

During the US advisory phase of the war, the ARVN assumed responsibility for perimeter and external air base security with the RVNAF providing the internal security. However, with no real doctrine or concept of operations and

a system that was for the most part unplanned, uncoordinated and uncontrolled, these forces were ill-prepared to handle this critical mission. Because of this, it was fortunate the VC/NVA chose not to exploit RVNAF air bases in the early years. On the other hand, this was unfortunate in that the ABGD ARVN/RVNAF weaknesses to defend air bases against counterinsurgency were not exposed, lulling US forces into a false sense of security. It is interesting to note that service parochialism is not confined only to US military forces, but also affected ARVN-VNAF relations which further degraded coordination and RVN ABGD capability. (3:12)

As mentioned earlier, the lack of VC/NVA attacks on RVN air bases lulled USAF personnel into a general, though grossly mistaken, feeling of security. This caused USAF security officials to "concentrate their efforts on the development and refinement of internal [author's emphasis] security measures to counter the [perceived] cold war threats, [ignoring the requirement] to formulate base defense doctrine and tactics." (3:13) The US Military Assistance Command, Vietnam (USMACV), the Pacific Command (PACOM) subunified command in control of all US military forces, activities, and operations in the RVN, ordered only passive security measures be taken lest more active defense measures and the attendant stockpiling of required additional firepower provoke VC/NVA attacks. Despite concern at all levels (JCS, PACOM, USAF, Pacific Air Forces

(PACAF), and MACV) following stepped up Democratic Republic of Vietnam (North Vietnam) hostilities in late 1964 about potential vulnerabilities of US/RVNAF air bases, all key players continued to agree no US forces were needed for ABGD. (3:15)

The abject inadequacies of RVNAF ABGD capabilities were finally realized and best described by then US Ambassador to RVN. "Well D. Taylor, stating "the [01 November 1964 VC] attack on Bien Hoa marked a turning point in Viet Cong tactics" (3:16) and boldly " . . . demonstrated beyond doubt that RVNAF defense measures were inadequate, uncoordinated, [and] intrinsic to all US/RVN air base defense operations." (3:16-17) The Bien Hoa attack, in addition to other overt VC/NVA incidents, shattered US confidence in ARVN/RVNAF capabilities to defend RVN air bases. This prompted the limited deployment of US ground forces (Army and Marine) to assist in the defense of RVNAF air bases and US facilities, beginning in March of 1965. This arrangement did not work well however, since it tied down US offensive forces in a strictly defensive role. As VC/NVA penetration and stand-off activity against RVNAF air bases escalated, there was a lot of political pulling and hauling at the Departments of State and Defense, JCS, PACOM, PACAF, and MACV levels trying to resolve the ABGD issue. Finally, in a December 1965 letter, addressing among other things the mission of installation security,

General William C. Westmoreland, Commander United States
Military Assistance Command Vietnam (COMUSMACV), issued
these instructions to his commanders:

We must call upon all of our troops to perform not only in a defensive role around our installations, but also they must take certain additional measures which we all know to be essential in achieving real security. I have in mind the necessity for patrolling, for outposts, and for reaction forces.... I desire that all service units and all forces of whatever service who find themselves operating without infantry protection...will be organized, trained and exercised to perform the defensive and security functions which I have just discussed I reiterate that their participation in self-defense is not an optional matter, but an urgent necessity. (3:27-28)

Disseminating General Westmoreland's letter with his own interpretation to USAF units under his command, Lieutenant General Joseph H. Moore, Commander, Second Air Division, ordered his air base commanders to take "all feasible internal security self-defense actions" (3:28) while maintaining coordination with ground forces responsible for external defense. He also recommended increased Air Police manning of perimeter positions or establishing internal defense lines. Moore left out implementing instructions for Westmoreland's orders to establish patrols, outposts, and reaction forces as a means for external security, thus establishing USAF ABGD policy and practice lasting to the war's end that "local ground defense did not extend beyond the legal perimeter of its installations." (3:28) Fox best sums the situation:

Rejected alike by USA[rm]y and USAF and relegated whenever possible to the uncertain competence of RVNAF,

local external [author's emphasis] defense constituted an indeterminate element in the overall base defense function which, as a consequence, was a mission at odds with the concept of unified action prescribed by joint doctrine. Under this anomalous but enduring arrangement, our bases were for the most part unprotected by any external defense forces, so that the VC/NVA were largely free to mount attacks at times and locations of their choice. (3:28)

And so the ABGD die was cast for the remainder of the war. As it had been in the previous conflicts of this century, ABGD was hastily thrown together and conducted on a catch-as-catch-can basis. No strong, integrated program ever evolved due to a number of reasons, among them: 1) the lieutenant colonel SP billet on the USMACV joint staff was deleted in 1967, leaving no USAF spokesperson or advocate for base defense, 2) neither the US Army or USAF would assume responsibility for external air base security, 3) RVNAF did not do a credible job of external defense despite US advisory assistance, a program in and of itself poorly set up and controlled, 4) inability of USAF and RVNAF security forces to successfully coordinate a capable combined base defense effort, and 5) lack of USAF tactical ground intelligence. (3:159-165) Though the VC/NVA threat included sabotage, sapper infiltration, ground attacks, and shelling by standoff weapons, it was the latter two, rocket and mortar attacks, that presented the greatest hazard (3:162-169), principally because the enemy had nearly free range outside the base perimeter. Commander United States Military Assistance Command Vietnam had tried to fix the problem by

directing each installation be responsible for its own security, which sounded good on paper but in actual practice fell short of the mark.

Although long-term command and staff shortcomings appeared to be the bane of a credible ABGD capability during the Vietnam Conflict (3:171), our experience there did not go unheeded. As with all military operations, whether actual combat or wargaming exercises, there are always lessons learned. This was certainly the case following our withdrawal from South Vietnam in 1973 with our ABGD lessons learned freshly in mind, prompting a hard look at building a future, credible ABGD capability that was sorely lacking during the Vietnam Conflict.

CHAPTER VI

ABGD IN THE 1970s

Air Force concern with the ABGD mission did not decrease with the end of our involvement in the Vietnam Conflict as it had in previous wars. This was due to the USAF leadership's finally "waking up to smell the coffee" following the unpleasant experience of overall unpreparedness for the mission and the inability to generate or maintain a credible ABGD capability. The successful Israeli attacks on Egyptian air bases in 1967 also showed the vulnerability of air bases. (5:405) The need for refinements in doctrine and training drove clarifications and enhancement in these areas. A major change in ABGD formal training occurred on 1 August 1974 with the publication of AFR 206-2, Local Defense of US Air Force Bases. This document formally recognized the US Army's role in external air base defense, but stated, "However, in rare instances, it may be necessary to deploy [USAF] base defense ground-defense force members beyond the air base boundary, to provide a surveillance and reaction capability." (2:10) This significant change in USAF ABGD doctrine required training in ABGD responsibilities external to the air base in absence of or to assist the US Army to perform this mission. To meet this and other needs, the Air Force expanded training programs at the US Army's Camp Bullis, Texas, the location of the USAF ABGD

school. New courses were added to give senior non-commissioned officers (NCOs) and junior officers formal training in ABGD field training, training that had heretofore been given to enlisted personnel only. The ABGD school expanded other courses from only basic combat skills to other aspects of the ABGD mission, including "use of grenades, pyrotechnics and mines, armored personnel carriers, intrusion detection equipment, night observation devices and starlight scopes, weapons, patrolling, combat first aid, and the terrorist threat." (2:10) Included also was heavy weapons training on the 50 caliber machine gun, the 81 millimeter (mm) mortar, and 90mm recoilless rifle. Responding to and reflecting the most current thinking and concepts of AFR 206-2, the new USAF ABGD "bible", courses evolved to fill the need, emphasizing more hands-on field work and less classroom instruction.

In 1978 the after-action report from JCS exercise Bold Eagle 78 identified a need for better training of more senior NCOs and commissioned officers. The report outlined deficiencies in leadership of ABGD units deployed on this exercise. What evolved was a program to send USAF junior officers to the US Army's Basic Infantry Officers' Course at Ft Benning, Georgia, to prepare them as commanders of ABGD flights. Also, select NCOs attended the Basic NCO Course at Ft Benning. Officers learned platoon leader tactics while NCOs were taught skills necessary for flight, squad, and/or

fire team leadership, depending on grade. Although limited quotas for USAF students kept the program small, it was a success. Even with this program and the ABGD school at Camp Bullis, numbers of formal school graduates still fell short of requirements, prompting the need to share the shortage worldwide.

In that same year, HQ AFOSP staff personnel held a conference with representatives of the USAF major air commands (MAJCOM) to discuss ways to improve the overall ABGD program. As a result of the conference and the need to respond to the evolving threat, the new ABGD doctrine of distributed area defense (DAD) was born. This concept was radically different from conventional USAF SP thinking on how to defend air bases from ground attack. (8:17) The perceived threat was attack of air bases with more modern stand-off weapons, capable of longer ranges in delivery of nuclear, biological, and chemical weapons as well as conventional munitions. DAD was conceived to respond to this more capable stand-off threat.

The concept is a scheme of defense in which widely dispersed, relatively small units, moving out and about, distributed both laterally and in depth around an air base, seek to dominate a large area by taking advantage of two factors: the ability to see an enemy by correctly using terrain (target acquisition), and the precision of correctly employed integrated weapons systems. Since the defending units are small and their density low, the best means to gain mass, once an enemy's plan is revealed, is to maneuver firepower. Advanced technology enables the defending force to apply firepower much more effectively under this system. Therefore, a well-equipped defense force that is mobile and armed with area suppression weapons, capable of concentrating accurate firepower at long ranges in a short period of time can successfully defend an air base from ground attack. (9:5-6)

The DAD concept recognized that the external ABGD mission would fall to the Air Force if the Army were unable to cover it. Under this concept USAF SP forces would now provide both internal and external defense of their bases. Throughout 1979 and 1980, HQ AFOSP advocates briefed the USAF MAJCOM commanders in order to gain funding support for the program.

CHAPTER VII

ABGD IN THE 1980s

The decade of the 80s has turned out to be banner years for USAF ABGD. Beginning in 1980 HQ USAF approved the DAD concept, recommended funding to include an increase in dedicated ABGD manpower, and gave the program added emphasis by placing it under the air base survivability umbrella. Training at Camp Bullis was adjusted to meet the change in doctrine, teaching defense in depth, mobility of ABGD forces both inside and outside the legal boundary of the air base, and integrated firepower up to five kilometers outside the perimeter. New AFR 206-3, Air Base Defense Deployable Local Ground Defense Forces, spelled out how forces would be organized, equipped, and trained to support the DAD concept. To cope with the ever-present shortage of formally trained officers and senior NCOs, a DAD command course was added.

The increased activity attendant with the DAD concept quickly outgrew Camp Bullis, which could not adequately accommodate training on weapons and newly funded off-road vehicles. The flight path into San Antonio International Airport directly over Camp Bullis restricted 50 caliber machine gun and 81 mm mortar training. And finally, the US Army expanded its use of Camp Bullis, further restricting USAF use of the facilities. Facility inadequacies restricted training quotas, which contributed to the force-wide shortage of formally trained individuals.

While AFOSP and Air Training Command (ATC) attempted to solve these problems, several MAJCOMS opened their own training facilities to help fill the void. In January 1982 Military Airlift Command (MAC) started Volant Scorpion, their own ABGD school at Little Rock AFB, Arkansas. In April 1983 Tactical Air Command followed suit with Silver Flag Alpha at Nellis AFB, Nevada. PACAF developed a similar Commando Warrior program at Crow Valley Range in the Republic of the Philippines. These regional programs are still in being, filling a vital role in training and maintaining necessary ABGD skills.

The problems with Camp Bullis finally got four-star attention at the 1983 CORONA SOUTH Conference of USAF MAJCOM commanders. This precipitated an AFOSP-chaired working group to review what the total ABGD training requirements were and how best to fulfill them in light of the limitations at Camp Bullis. The working group concluded that the ABGD program needed a new initial training center (ITC) and several regional training centers, like those set up by MAC, TAC, and PACAF.

Efforts to decide on training center locations and associated costs were put on hold following an historic event in 1984. On 22 May the Chief of Staff of the US Army (CSA), General Wickham, and the USAF Chief (CSAF), General Gabriel, signed a memorandum of understanding (MOU) of 31 separate initiatives for joint USA-USAF force development.

Of direct concern to USAF ABGD were Joint Initiatives #8 and #9. Joint Initiative #8 addressed ABGD and directed "Army units to provide air base ground defense outside the base perimeter." (10:1) Joint Initiative #9 stated, "The Army and Air Force will execute a Joint Service Agreement [JSA] for the Army to provide initial and follow-on training for Air Force on-site security flights." (10:1) The responsibility for ABGD was squarely in the joint arena, with the Army tasked to directly provide external security and the Air Force to provide internal security, just as the USAF had wanted all along.

In response to the CSA-CSAF MOU edict to develop a joint service agreement for each initiative, a joint ABGD working group began negotiations in June 1984 to hammer out the details. These included doctrine, force structure, and training. By summer of 1985, JSAs for both initiatives were coordinated through the respective service staffs and signed by each chief of staff. Under JSA #8 and effective in October 1985, the US Army accepted external air base security and defense during Level 2 (company to battalion size) and level 3 (above battalion size) threats. The US Army's Military Police (MP) would conduct the mission under the Army's rear area battle doctrine.

The Air Force was required to defeat the Level 1 (small force) threat. The USAF air base commander had operational control of US Army and USAF ABGD forces except

during Level 3 threats, when all ABGD forces would fall under the US Army operational commander. (2:23)

Under JSA #9 and also effective in October 1985, the US Army accepted responsibility for initial and proficiency ABGD training for USAF personnel. Although the Air Force would retain its ABGD command course (for E-7 master sergeant through O-6 colonel) at Capt Bullis, the US Army would train annually approximately 7,000 personnel in grades of E-1 through E-7 and O-1 through O-3. To handle the increased training load, the US Army unilaterally conducted ITC site surveys, ultimately recommending Ft Dix, New Jersey, as best alternative. Office of the Secretary of Defense approved Ft Dix in June 1986. Routine US Army ABGD training of USAF personnel began in October 1987. To date, the system is working relatively well despite normal start-up deficiencies. Nearly all incoming USAF SP personnel are being trained in ABGD skills. The current structure is thus the best we've seen in filling our world-wide requirements in school trained ABGD forces.

CHAPTER VIII

RECOMMENDATIONS FOR THE 1990s

The foregoing perspective has been provided to give an appreciation of the haphazard way the ABGD program has developed throughout the years. It seems we progressed from the philosophy of "it's not raining so no need to fix the roof" to "it's now raining so we need to fix the roof quickly" to where we are now, "the threat of rain is so great we better fix the roof correctly before it clouds up." USAF ABGD is in the best shape it's been in our history. However, we have a long way to go in order to be able to meet the threat across the complete spectrum of warfare.

Over the past ten years, we have seen a global "explosion" (pun intended) in Level 1 terrorist threat activities against our resources, service personnel, and their dependents. This has shown that we must be prepared to exercise many combat options in protecting USAF resources and personnel through the entire spectrum of war. However, the 45,000 USAF and Air Reserve Component (Air National Guard and Air Force Reserve) security police cannot possibly defend the potential 200 overseas wartime operating locations alone. Although headed in the right direction, the USAF needs to create force multipliers for ABGD. The remainder of this paper will explore ways we can create these force multipliers to make us better prepared to meet the future threats throughout the entire spectrum of war.

CONCEPT AND STRUCTURE

Combat Philosophy

Since we must be able to fight from our air bases in a global or theater war, we must design, build, and maintain all overseas-theater bases as field fortifications. At present this is not the case. Other priorities, e.g., peacetime operating efficiencies, base beautification, matters of convenience, etc., seem to take precedence over combat preparedness and effectiveness. This author is personally aware of several recent incidents at two theater wartime bases involving underground laying of field phone lines and the tactical placement of defensive fighting positions (DFPs) and CONEXs (moveable field storage containers). Senior leadership within the theater (including a four-star general) denied these efforts to enhance ABGD capabilities because they interfered with base beautification efforts and "looked bad" for VIP visits. This kind of peacetime, form-over-substance thinking must give way to a philosophy where combat efficiency and effectiveness are the priorities.

Full-Time ABGD

Today our overseas air bases are set up to operate for peacetime efficiencies and convenience with USAF SP efforts directed toward peacetime security measures and law enforcement duties. ABGD efforts would not begin in earnest until there is an indicator, e.g., the intelligence network

sees the enemy massing for an offensive. At this time, security forces transition to partial or full ABGD posture. This is the way forces are currently trained and exercised. This philosophy has many drawbacks and inefficiencies. The capability of our security forces to transition to war-time posture, the most critical phase, and then maintain that posture is dependent upon many factors, e.g., formal and follow-on training, experience of leadership at all levels, frequency of exercises, etc. Emphasis on peacetime operations and duties often overcomes the real *raison d'etre* for in-theater forces--to be ready to fight if deterrence fails. ABGD exercises and training for combat often take a back seat. This coupled with the high turnover of personnel on one- or two-year unaccompanied tours results in reduced combat readiness and capability.

A better plan for in-theater wartime bases might be a scheme of full-time ABGD. This arrangement is practiced by the RAF Regiment at bases in Great Britain and appears to be working well. As envisioned, full-time ABGD posture would be maintained around the clock on a daily basis, not just during exercises and contingencies. Security forces at levels reduced from full emergency ops would man DFPs and ABGD command posts, conduct applicable training, and carry out normal routines in defense (messing, sleeping cycle, hygiene, etc.). This would serve to keep the blood flowing in the base defense network at all times, greatly

reducing if not completely eliminating the utter chaos of the critical transition to wartime ABGD posture. Additionally, this system would allow more and better continuity in ABGD training which so often loses its priority as we perform the everyday peacetime mission. This is, in my mind, a critical need if we are going to be ready to prosecute the ABGD mission under actual conditions.

Selective/Mass Arming

As has already been stated, SP forces alone cannot defend our air bases on a wartime footing, which will necessitate an increase in ABGD-dedicated manpower if the balloon goes up. The Resource Augmentation Duty (READY) program, AFR 35-45, exists to augment personnel in direct support of combat operations with those who are in noncombat specialties. This program does serve to provide some additional security personnel to man DFPs in the event a ground attack is considered imminent or occurs. However, this program can provide to ABGD only personnel that are not needed for other combat support efforts, e.g., aircraft fuel tank buildup, rapid runway repair, shelter monitoring, etc. There will probably not be enough READY augmentees for ABGD.

A possible solution is selective and mass arming of personnel of all specialities within the Air Force, depending upon the level of threat. I don't think anyone could argue with the premise that it is the right, if not the duty, of an aircraft maintenance crew chief, a civil

engineering rapid runway repair specialist, or a communications technician to have immediate access to an M16 to defend himself, his work area, and resources when threatened.

There are a number of reasons for selective/mass arming. First, every Air Force member has a stake in defense of the air base, and when a Level II or III threat lies just outside the perimeter, you can bet every able man and woman will be an air base ground defender. Second, professional security police forces simply don't have the manpower to protect every resource on every base. Third, air bases are going to be susceptible to penetration by enemy forces who speak and dress as Americans and the nationalities we are there to protect. This makes internal security an absolute must. Obviously the best people for this duty are owner/user personnel who work within the area every day and are familiar with the comings and goings of those inside the duty section.

I think it's time the Air Force assumes the philosophy of the US Army and Marine Corps--before training and working in a specialty, everyone is first trained in basic combatant skills, to include use of the M16 assault rifle. Selective/mass arming could be accomplished through positioning enough M16 rifles for the entire base population at various locations throughout the base, including the central and ancillary armories, aircraft maintenance facilities, aircraft shelters, and other support facilities.

These forces would be assigned to and serve along side of professional SP ABGD forces. Although there would be weapons qualifications and training obstacles to overcome, selective/mass arming would go a long way in providing a much needed increase in ABGD manpower as a major force multiplier.

Host Nation Support (HNS)

Under JSA #8 the US Army is responsible for providing forces for ABGD operations outside the boundaries of designated USAF bases and installations. A key consideration here is the Army has decided their JSA #8 Levels I and II responsibilities can best be met by the Army National Guard and Reserve military police combat support companies. Even assuming these forces were deployed to augment in-place MP forces at the onset of hostilities, which of course is doubtful, there will simply not be enough US Army forces to counter the threat external to every air base. This requires USAF ABGD personnel to take on some external security responsibility along with support from the host nation. It is not a new concept that ABGD defense is a truly joint/combined effort, which includes HNS. However, although HNS is presently the most significant contributor to defense of overseas operating locations (28), this area still needs stepping up to give us a credible external security capability. At present the Royal Air Force Regiment provides defense for US bases in Britain. We also

have a similar agreement with the Federal Republic of Germany for US bases there. This agreement provides for over 13,000 German territorial army troops dedicated to protect eight main operating bases, four aerial ports, and five communications sites by 1993. (28)

Although we may prefer to have only Americans defending American installations overseas, this philosophy is impossible to put in practice and still maintain a viable base defense network. Current end-strength limitations and a severely restricted fiscal defense environment dictate we turn to our host nations for support. And in my mind this is as it should be. Under the philosophy of burden sharing, these nations have a moral if not professional obligation to help defend US manpower and resources that are dedicated to protect their homeland and people. We, therefore, must increase to the fullest host nation support of our air bases by aggressively pursuing ABGD HNS agreements--fiscal realities and manpower constraints dictate there is no other viable option.

COMMAND, CONTROL, COMMUNICATION, AND INTELLIGENCE (C³I)

There are any number of key challenges surrounding C³I and ABGD. The following issues are those in which the author has personal experience and recommendations to enhance capabilities.

Collocated C³

At present, all USAF installations have an established Central Security Control (CSC) facility, which is manned 24 hours a day and directs all peacetime security operations. During wartime posture we must establish a 24-hour base defense operations center (BDOC) or combined defense operations center (CDOC) if host-nation/allied forces are employed. The BDOC/CDOC is the on-site tactical operations center for all ABGD operations. Its mission is to plan, direct, coordinate, integrate, and control base defense efforts of all organic and attached ABGD assets as well as nonorganic US Army, host-nation, and/or allied assets that fall under operational control of the base defense force commander. Presently, our overseas bases are required to construct and maintain a BDOC/CDOC which is separate from their CSC facility. (27) Common sense and budget efficiencies dictate these two facilities be collocated.

It would be fairly simple to rename CSC BDOC/CDOC and extend current CSC facilities to house BDOC/CDOC operations. There would be several advantages to this scheme. First, it would be more cost effective, eliminating one whole facility and some of the attendant manpower, equipment, and support. Second, the peacetime CSC function, normally housed in a soft structure, would be located in the hardened-for-wartime BDOC/CDOC facility. Third, since the

CSC function is manned 24 hours a day, it would serve to keep the blood flowing within BDOC/CDOC and provide an immediate and smoother, less chaotic transition-to-wartime posture. Fourth, the alarm monitoring capability of CSC would be available to the BDOC/CDOC personnel for immediate indication of "trouble" spots. And finally, BDOC/CDOC/CSC controllers would be better trained since these functions would be continuous.

Communications

The age-old problem of communications and interoperability is alive and well in the ABGD system. Extensive exercises prove that communications nodes and networks are easily exploited, degraded, and jammed. Equipment is old and lacks redundancy. Secure communications capability is minimal if available at all. (22:22)

Viable ABGD demands a joint/combined integration. This requires that all forces be able to talk to all others. Right now that is not possible. Because of interoperability problems, USAF and US Army ABGD forces can't talk to each other, nor communicate with host nation and allied forces in support of ABGD. It's time to take a clean-sheet-of-paper approach with interoperability as the watch word and provide all participating ABGD forces with the appropriate types of equipment, in the appropriate numbers, emphasizing redundancy and security.

Intelligence

Accurate and timely intelligence is necessary to plan for the successful defense of an air base. However, USAF security police have no training, no dedicated manpower, and no capability to provide ground combat intelligence beyond what they can get from other agencies. Heretofore, SP ground combat intelligence support is the investigations section within the law enforcement function which is not formally trained. The base defense force commander's intelligence staff works with the Air Force Office of Special Investigation and the Air Force intelligence network (usually at wing level) to get whatever information is available on the ground threat. Air Force intelligence emphasizes enemy air threats and activities, with little if any interest in the ground threat or anyone on the wing intelligence staff trained or even interested in this area.

At present no Air Force agency has as its primary mission the collection, analysis, and dissemination of ground combat intelligence. It's time the Air Force stepped up to this critical area and assigned dedicated assets to provide the necessary real-time intelligence to the base defense force commander so that he may posture his forces to best counter the ground threat.

WEAPONS AND EQUIPMENT

Overall, the USAF ABGD weapons inventory is in fairly decent shape, adequately serving the mission.

However, this area can be enhanced. This section will discuss some proposed changes in weaponry and procurement of additional equipment as force multipliers for the ABGD mission.

Weapons

The ABGD weapons requirement is constantly evolving. Despite a somewhat haphazard, "the-roof-is-leaking" procurement program required to quickly outfit security forces as a result of the Korean War and Vietnam Conflict, current and programmed weapons dedicated to the ABGD mission appear appropriate for the job with no major deficiencies. However, many of the weapons have been around for a long time and will soon need replacing with updated equipment. This section discusses where we are and provides recommendations for improvement of the ABGD weapons inventory.

One of the most important weapons for ABGD purposes is the personal or individual weapon issued to each ground defender. In the vast majority of cases, this will be a rifle. The requirements for the rifle are that it be accurate out to 300-400 meters, capable of single shot as well as automatic fire, lightweight, easy to handle, reliable, and preferably of North Atlantic Treaty Organization (NATO) standard caliber. The current in-service M16 rifle meets most of the above requirements. The only immediately available alternative is the M16A2, which is basically the same weapon but is lighter, has a long-life barrel with increased

range, and can fire the NATO standard 5.56 millimeter (mm) round. Although the US Army and Marine Corps are procuring this newer model, its advantages, when weighed against the plentiful supply of M16s and their adequate capability do not justify acquisition. It appears fiscally prudent to modify the current M16 to accept the NATO standard round and await the outcome of the Advanced Individual Combat Weapon project sometime in the 1990s and be in a position to take advantage of the latest technology at that time.

The ABGD 13-person squad and 4-person fire team need indirect fire support to hit the enemy when he is in defilade behind terrain features. In this situation the rifle-mounted grenade launcher appears the best weapon. The current in-service grenade launcher mounted on the M16A1 rifle provides a reliable, effective semidirect point and area capability with a wide range of ammunition, including high explosive, buckshot, and illumination/signal rounds.

Probably the most important weapon in the ABGD squad inventory is the direct fire suppression weapon. Here the requirement is for a very high rate of accurate, concentrated fire to suppress the enemy, thereby supporting squad and fire-team tactics. Accuracy is particularly important at long range as this not only allows enemy engagement beyond his rifle range but also prescribes how closely the gunner can provide covering fire for his own troops. This type of supporting fire is best provided by a light machine

gun with an accurate burst capability of approximately 1000 rounds per minute out to around 1000 meters.

The current M60 7.62mm machine gun possesses neither the necessary accuracy nor the required rate of fire and is too heavy for man-portable mobility. The only two reasonable alternative replacements are the FN MAG 240 and the M249 squad automatic weapon (SAW). Disadvantages of the FN MAG 240 are its old technology, its weight (at 24 pounds, it's a pound heavier than the M60), and its 7.62mm ammunition, any reasonable quality of which is heavy to carry. On the other hand, the FN MAG 240 is surgically accurate out to 1000 meters at 1000 rounds per minute rate of fire, is easily maintained in the field, and is used by a host of NATO and non-NATO countries and the United States Marine Corps (USMC). A probable favorite M60 replacement weapon is the M249 SAW, also used by the US Marine Corps. This weapon weighs only 15 pounds, fires the lighter standard NATO 5.56mm round at 750-1000 rounds per minute with sufficient accuracy out to 800 meters. Having seen this weapon in action, it is the author's personal choice as the M60 replacement.

The threat to air bases may include enemy use of light armored vehicles either as personnel carriers or fighting vehicles. The current ABGD requirement to defend against these threats is adequately met by the M72 light armor weapon (LAW), a 66mm shoulder fired, disposable round

with a maximum range of 1000 meters and an effective range out to 200 meters. Various alternatives to the M72 LAW are available, including the LMU 80, VIPER, and Swedish AT-4. The 84mm AT-4 won in competition with more effective range (500 meters) and penetration than the M72 LAW. It weighs 14 pounds compared with 7 pounds for the M72 and like the other light antitank weapons is not effective against the frontal armor of tanks. Although the AT-4 would represent a significant improvement in operational capability against light armored vehicles, the \$1000 cost per tactical round (versus \$300 per M72 A3 tactical round) would cost \$25 million to replace. The US Army (and the Marines) will acquire the AT-4. This is appropriate in light of the Army's responsibility for external ABGD. Presently, the M72 LAW provides USAF ABGD forces adequate capability against light armor and therefore should be retained for the foreseeable future.

As stated earlier, an enemy threat force could be comprised of light armor and other vehicles. This type of threat must be neutralized as far from the air base as possible to deny the enemy the opportunity to close and use its own direct fire weapons effectively. Therefore, ABGD forces have a requirement for a rapid-fire, relatively large caliber weapon of long range, capable of neutralizing enemy vehicles, including light attack vehicles, personnel, and fortified positions.

Currently, there are three weapons in or about to enter service that meet, in whole or in part, the ABGD heavy

weapons requirement. The first of these is the aging M67, 90mm recoilless rifle, a relatively lightweight (35 lbs), highly portable, breech-loaded, single-shot, crew-operated weapon which can be used in both the antitank and anti-personnel roles and is fired from the ground using the bipod or monopod. It can also be fired from a jeep-type vehicle. With the high explosive antitank round, it has a maximum range of 2100 meters and an effective tank killing range of 450 meters. In the antipersonnel role, it projects 2400 twenty-grain, fin-stabilized steel wire flechettes in an 8-degree cone out to a range of 300 meters. This is a truly devastating weapon in a counter attack situation on an airfield where wide open spaces are ideal for maximizing its shock effect. Although the 90mm recoilless rifle has been around for considerable time, there is no suitable replacement. This weapon should be retained in the inventory pending development of an adequate replacement.

The second weapon in the heavy weapons category is the elderly M2 Browning .50 caliber heavy machine gun. With a maximum range of 6800 meters and an effective range of 2000 meters, this weapon can provide excellent fire suppression against enemy troops and lightly armored vehicles. Additionally, this weapon can provide a limited air defense capability against low-flying aircraft. However, at approximately 120 pounds with tripod, the weapon is not easily maneuverable and requires careful sighting. It is more than

probable that this weapon can be replaced by the Mk 19 40mm grenade machine gun discussed in the next paragraph.

The third ABGD heavy weapon and the latest acquisition to the SP weapons inventory is the Mk 19 40mm grenade machine gun. This weapon has a range of some 2200 meters, although as its sight is obscured when elevated beyond 1400 meters it must be considered an area versus point weapon beyond 1400 meters. The Mk 19 provides very effective point suppression of light armored vehicles, prepared positions, helicopters about to land, and troops out to 1400 meters, and from 1400 to 2400 meters it is an effective area weapon. With its tripod and gun cradle, the weapon weighs in at 63.7kgs which, with one 48 round box of ammunition, requires between four and six men to deploy all items simultaneously. Clearly, its poor tactical mobility dictates very careful sighting. (In an attempt to improve its mobility, the USMC is developing a wheeled tripod.) An interesting feature is that unlike most heavy machine guns, the Mk 19, with the exception of attacking landing or departing helicopters, has virtually no ground- to-air capability. In light of this fact, the M2 .50 caliber heavy machine gun should be retained and used in those areas where antiaircraft point air defense fire power is at a premium.

It can be seen that there is some redundancy in the ABGD force's heavy weapons capability against both vehicle

and personnel targets. The 90mm recoilless rifle is undoubtedly more effective against light armor than the LAW, its range is significantly greater, and the use of the anti-personnel round makes it considerably more flexible in an airfield environment. Despite its limited range when compared with the M2 .50 caliber machine gun and the Mk 19, its light weight and high tactical mobility make it a very difficult weapon to do without. The M2, although a good weapon, is outperformed by the Mk 19 in most respects. While all three heavy weapons have their strong points, an attempt to maintain training expertise and operational capability on each one could prove costly and counterproductive. It may therefore become necessary to dispense with the .50 caliber machine gun, but before doing so the loss of its antiaircraft firepower should be carefully considered.

The ability to prearrange fires on distant targets or potential targets that may be hidden from direct view, together with a capability to produce smoke and overhead illumination, are vital to the successful accomplishment of the ABGD mission. This indirect fire capability for ABGD operations is best provided by a medium mortar weapon. The current in-service weapon is the 81mm mortar, capable of firing high explosive rounds out to a range of 4400 meters and smoke and illuminating rounds out to a range of 2100 meters. Improved ammunition with greater range is available, as is an improved plotting device. The recently

announced reusable training bomb with its 1/10 operational range offers significant savings in both ammunition costs and training time. The 81mm mortar adequately fulfills the ABGD requirement and with improved ammunition offering greater ranges should continue to do so for the foreseeable future.

While the 81mm mortar adequately fulfills the current requirement for supporting indirect fires, its capability would be much improved by the purchase of new ammunition and the electronic plotter. It is quite possible that savings accruing from the purchase of the new reusable training bomb, when combined with the savings in training time, could offset a large portion of these extra costs.

The intelligent use of mines can greatly assist ABGD forces by delaying the enemy's attempt to penetrate the base, inflicting casualties, providing a system of obstacles, and channeling him into areas where he can be easily destroyed. The tactical requirement for mines in ABGD is for dispersal in both the main defense area (MDA), three to five kilometers outside the legal boundaries of the air base and close defense area (CDA), inside the legal boundaries of the air base. In the MDA, mines should be used aggressively for area denial. In the CDA, they are required as an additional obstacle covered by fire. At present, SP forces are equipped with the Claymore antipersonnel mine, a horizontal effect mine which, when triggered either by trip wire

or detonation, explodes a spray of steel balls in an arc of 60 degrees out to a range of 100 meters. While the Claymore mine is a useful weapon in certain situations, it has a large danger radius (250 meters to the front and 100 meters to the rear) which makes it difficult to use on an air base without endangering friendly forces or unnecessarily inhibiting their operations

The layout of an air base, with its extensive perimeter and large restricted areas, lends itself more to the use of antipersonnel blast mines. Such mines, buried below the surface of the ground, could be deployed immediately adjacent to the perimeter in areas that are difficult for human, animal, or electronic surveillance. The danger area would be small and need not restrict activity on the base. Currently each ABGD flight is equipped with 88 Claymore mines. It is difficult to imagine how even half that number could be employed effectively given the current political constraints upon ABGD operations. Common sense dictates that the number of Claymore mines be reduced and that a surface/subsurface antipersonnel mine be introduced.

While the requirement for antipersonnel mines for ABGD is valid, the current in-service Claymore mine is not suitable for employment in many ABGD situations, particularly within the CDA. A surface/subsurface antipersonnel mine needs to be introduced into the SP inventory.

Sensors

Another critical ABGD force multiplier would be the acquisition of a tactical sensor system, which when deployed around the air base, would provide the operator with an electronic alarm and the capability to view the affected area at night. A sensor system like this would enhance sentry effectiveness and assist in placing more of our forces in a much needed response mode. Currently, the majority of our ABGD warfighting forces are dedicated to detection duties which are manpower intensive and limit response capability. Experience has shown that security forces employed in the detection mode, because of human frailties, do not perform very well. Long periods of vigilance during periods of low or no activity to hold one's attention lead to boredom, lethargy, inattentiveness, and at times sleeping on post. Sensors are not given to these weaknesses.

There are a number of tactical sensors now on the market that could be procured off the shelf and deployed around critical airfields and installations on a priority basis as the systems come into the inventory. Command and control to direct response forces could be handled in BDOC/ CDOC/CSC with no increase in manpower. A viable, complete sensor system would free valuable manpower to serve as mobile response forces, a task SPs have proven they can do very well if properly trained and exercised.

Another key sensor absolutely essential for ABGD forces is night vision equipment. Within the ABGD inventory now is a smattering of these devices, including night vision goggles and night rifle scopes. However, numbers now deployed are much too small to be effective. We expect the future threat to come under the cover of night, and therefore we must be prepared to fight at night. The Air Force should procure enough night vision devices so that each air base defender could be equipped to respond by being able to acquire and bring fire to bear on any attacker at night.

TRAINING

In the Air Force, training is our most important mission short of actual combat, and such is the case in USAF ABGD. The joint US Army/USAF ABGD training program at Ft Dix has come a long way in providing better ABGD training across the board and integrating Army and Air Force doctrine into a single, viable system. But we're not there yet. More needs to be done.

Although JSA #8 gives the Army/host nation the responsibility for security external to the air base, USAF ABGD assets need to be trained and employed in this area in the event Army/host nation support is not available, which can be expected in the early part of a conflict. As mentioned before the Army has decided that their JSA #8 Levels I and II responsibilities can best be met by the Army National Guard and Reserve military police support

companies. (29) Host nation support for ABGD often comes from the reserve forces of the particular host nation.

(22:9) Arrival of these forces is dependent upon the deployment flow and availability of airlift. At least for the initial stages of the next conflict, in-place USAF ABGD assets will have to go it alone, covering both internal and external security. The Air Force must recognize this tough reality and train for it.

Currently there is no formal training for the USAF leadership who will assume duties as the base defense force commander.

At present there is almost unanimous agreement among Army and Air Force ABGD planners that almost all US Air Force wing commanders, senior tactical commanders, and air base group commanders lack the experience, background, and training requisite to the effective exercise of OPCON [operational control] of ground forces engaged in actions [internal and] external to US Air Force installations. (22:15)

AFOSP is aware of these deficiencies and is addressing the problem, however, as of this date no training program is planned for USAF senior commanders. (27) For the time being the base Chief of Security Police will have to act on behalf of the defense force commander or sit at his right hand and make the appropriate recommendations. More aggressive effort needs to be made in this area.

Probably the best training ABGD forces can get is through well planned, realistic combat exercises. Now that JSA #8 and #9 have formalized that ABGD is a joint/combined operation, much more needs to be done in the area of

ABGD war games. Exercise "SALTY DEMO" at Spangdahlem Air Base, West Germany, in 1985, was probably the first realistic, integrated ABGD exercise under as-close-to-real wartime conditions as ever experienced. (18:54) This exercise was a real eye opener in that it showed that even a fairly moderate Soviet attack could reduce our ability to survive and operate, pointing out many areas in ABGD that needed fixing. Since then, other exercises have included ABGD scenarios as part of exercise play. "GALLENT EAGLE 88", a CENTCOM-scenario exercise held at George AFB, California, exercised USAF SP and US Army MP ABGD operations in the rear area. "CREEK WARRIOR 88", a part of the annual REFORGER exercise held in West Germany, included USAF SPs, US Army MPs, and host-nation support in the defense of Sembach Air Base.

These exercises are certainly a step in the right direction, but more can be done. More scenarios involving joint/combined ABGD need to be incorporated in future exercises, with well trained aggressors serving as opposing forces (OPFOR) tasked to disrupt all base activities, including sortie generation, to demonstrate the difficulties of operating in the wartime environment. For example, Exercise TEAM SPIRIT, held annually in the Republic of Korea, is the largest combat exercise of its type in the free world. Although ABGD scenarios have steadily been on the increase during TEAM SPIRIT play, theater leadership has not allowed the OPFOR free play to disrupt sortie generation as in a

real war. This, of course, is not realistic "train-as-we-will-fight" philosophy and lulls us into a false sense of security regarding our ability to successfully take the war to the enemy while simultaneously defending the air base. The Air Force needs to include ABGD scenarios in every air base exercise and permit realistic free play by OPFOR across the spectrum of base operations.

Many of the foregoing recommendations could be adopted with little or no cost, while some of the recommendations do have considerable associated costs, and still others will require extensive study to determine estimated expenditure for implementation. The low/no-dollar recommendations include: change in combat philosophy/full-time ABGD, HNS, dedicated ABGD intel, training, and collocated C3. For example, changing the base-level combat philosophy and moving to full-time ABGD simply means posturing for defense rather than for base beautification and convenience. This includes changes like permanent sandbag DFPs in appropriate positions, tactical placement of CONEXs for field storage, and serpentine approaches forced by staggered barriers at all high-speed accesses to the base. Other possible actions include "hardening" (sandbag bunkers/walls) critical facilities like key buildings, backup generators, vulnerable entrances/exits, etc. These are just a few examples of the myriad innovative, cost-free actions base personnel can take with the right mind-set and "combat" as the watchword.

Although not cost-free for our allies, increased HNS for ABGD of our air bases overseas is certainly a way of increasing external security by supplementing or replacing the US Army in this responsibility. It could also serve to free USAF ground defense personnel for their primary internal security mission. The shortfall in dedicated ABGD intelligence personnel could be solved by earmarking at least two (one for each 12-hour shift) wing-level intelligence people to work ground-defense related intelligence. Air Force Office of Special Investigations and SP ABGD intelligence personnel could work with the dedicated intel people as an ABGD minicell within the overall wing intelligence network.

The collocation of CSC/BDOC/CDOC is another low-cost action the base can take to enhance ABGD operations. Although there may be some man-hour expenditures, i.e., changing phone lines, radio antennas, sensor cable, etc., the collocation of ABGD C³ would go hand in glove with full-time ABGD and possibly free a facility for another use. Finally, there are many no-cost initiatives in the training area that could enhance ABGD. First, ensure an ABGD expert is attached to the wing exercise staff to include extensive ABGD play in all wing exercises. Air base operability and security police staff officers at echelons above wing (numbered Air Force, MAJCOM, AFOSP) can coordinate and enhance base-level ABGD play in all major exercises. To bridge the

ABGD training gap of senior-level base leadership, wing and/or base commanders could attend the current three-week ABGD Command Course at Camp Bullis. Not only would this prepare them for their roles in ABGD but educated these key leaders of the Air Force to the criticality of ABGD and hopefully gain vocal advocates for this mission area.

Two of the foregoing recommendations require more extensive study than is the scope of this paper. The issues of communication interoperability and base-level sensors require serious, in-depth study, probably in the joint arena. It is my recommendation that HQ AFOSP address these two issues with the US Army under the joint-initiatives umbrella and pursue possible solutions.

Three remaining recommendations, enhanced M16, M60 replacement, and selective arming do have some relatively significant dollar figures associated with implementation. The current 260,000 USAF M16s can be modified to accept the NATO standard round for approximately \$21M (about the cost of one F-16) as opposed to complete replacement with the M16A2 for \$119M. (34) Although the newer M16A2 is lighter weight with a better sight and longer range, modification for the M16 to accept the NATO standard round is more fiscally prudent.

As stated earlier the SAW appears the ideal replacement for the aging M60 .50 caliber machine gun. Cost of the SAW is \$1360/unit versus \$3900 for the M60. To determine

total program cost, AFOSP is considering having all MAJCOMs submit a precise, current inventory of M60s and proposed requirement for the SAW. (34)

Finally, selective arming is presently the highest cost recommendation. The MAJCOMs estimated requirements to selectively arm base personnel other than SPs total 187,750 M16s at a one-time procurement cost of \$22M and an annual operations and maintenance cost (additional combat-arms-training-and-maintenance manpower, ammunition, training) of \$77M. (34) Although the \$22M for 187,750 M16s could buy an F-16, and the annual \$77M could purchase almost four F-16s, these expenditures for enhanced ABGD through force multiplication are warranted since additional F-16s are of no use if the air bases they operate from are not adequately protected and subsequently overrun by the enemy.

The foregoing recommendations are not to be considered all encompassing but reflect some of the key areas in which the author has been personally involved and believes need attention. It is hoped that this study has provided some food for thought as we take on the myriad ABGD challenges of the next decade. It must be remembered that even though the primary mission of the Air Force is air power, it first takes "ground power" to facilitate that mission. And a viable ABGD capability is a critical portion of the ground power that affords the freedom to generate the air power that takes the war to the enemy.

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GLOSSARY

AAF	Army Air Forces
ABGD	Air Base Ground Defense
AFOSP	Air Force Office of Security Police
AFR	Air Force Regulation
AP	Air Police
ARVN	Army of the Republic of Vietnam
BDOC	Base Defense Operation Center
C ³ I	Command, Control, Communications, and Intelligence
CDA	Close Defense Area
CDOC	Combined Defense Operation Center
COMUSMACV	Commander United States Military Assistance Command, Vietnam
CSA	Chief of Staff (US) Army
CSAF	Chief of Staff (US) Air Force
CSC	Central Security Control
DAD	Distributed Area Defense
DFP	Defensive Fighting Position
FEAF	Far East Air Forces
HNS	Host Nation Support
HQ	Headquarters
ITC	Initial Training Center
JAAF	Joint Action Armed Forces
JCS	Joint Chiefs of Staff
JSA	Joint Security Agreement

LAW	Light Armor Weapon
MAC	Military Airlift Command
MAJCOM	Major Air Command
MDA	Major Defense Area
mm	Milemeter
MOU	Memorandum of Understanding
MP	Military Police (US Army)
NATO	North Atlantic Treaty Organization
NCO	Noncommissioned Officer
NVA	North Vietnamese Army
OLC	Oak Leaf Cluster
OPFOR	Opposing Force
PACAF	Pacific Air Forces
PACOM	Pacific Command
RAF	Royal Air Force
READY	Resource Augmentation Duty
ROK	Republic of Korea (South Korea)
RVN	Republic of Vietnam (South Vietnam)
RVNAF	Republic of Vietnam Air Force
SAC	Strategic Air Command
SAW	Squad Automatic Weapon
SP	Security Police (USAF)
TAC	Tactical Air Command
UNAAF	Unified Action Armed Forces
US	United States
USAF	United States Air Force

USMACV	United States Military Assistance Command, Vietnam
USMC	United States Marine Corps
VC	Viet Cong
VNAF	Vietnamese Air Force
WWI	World War One
WWII	World War Two