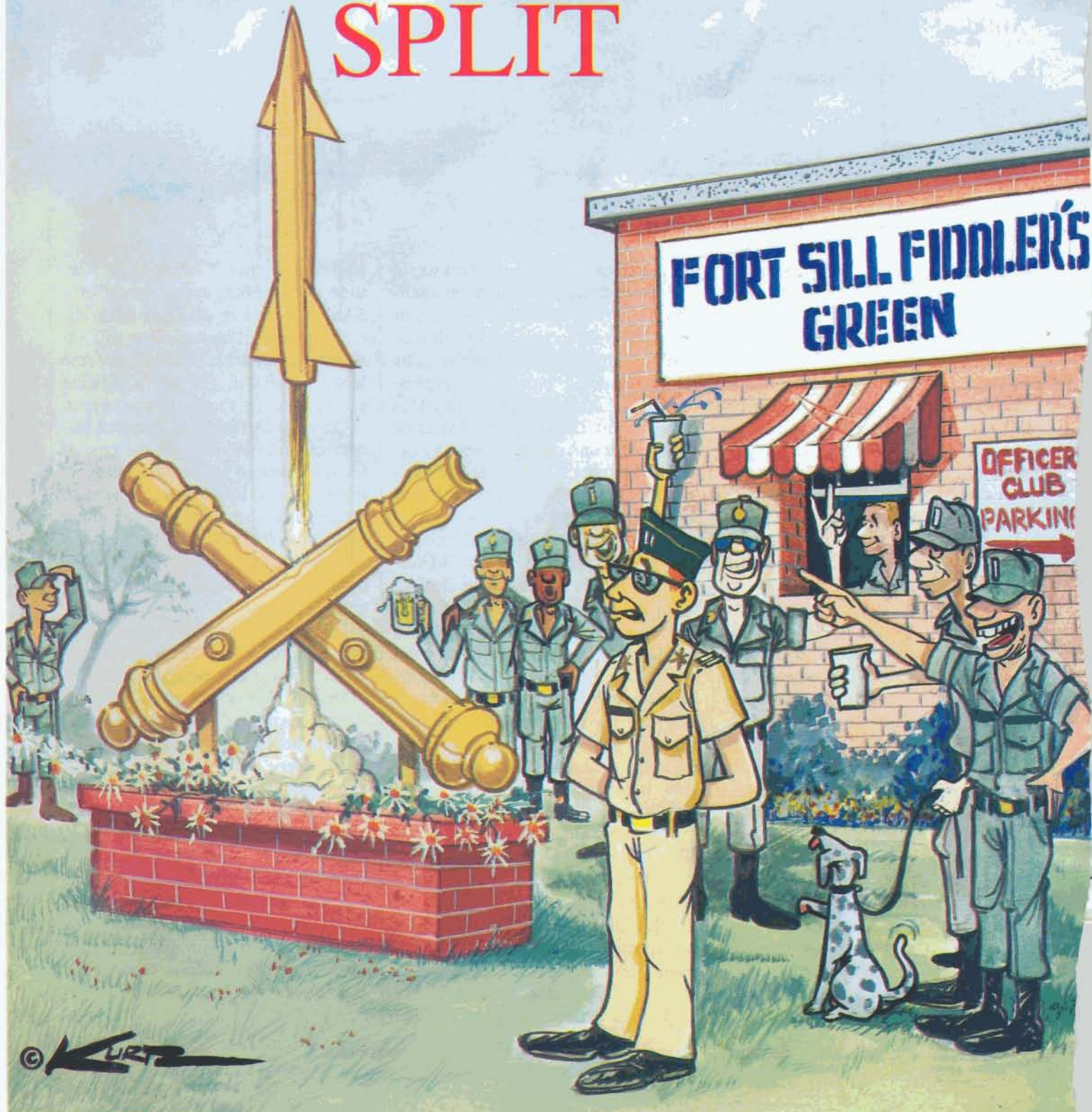


THE DAY THE BRANCHES SPLIT



It was a much talked about marriage from the very start. The two partners, it was said, had little in common. The similarity of materiel, which in the beginning had represented the greatest bond between the two 'arms,' had evolved along such diverse paths that it had become impossible to discern a fragment of commonality. So when the union was dissolved, the wonder was not so much that it had ended, but that it had lasted as long as it did.

In June 1968, when the Department of the Army issued General Order No. 25 separating Air Defense Artillery from Field Artillery, a parade was scheduled at the U.S. Army Artillery School, Fort Sill, Okla. The parade's purpose was to celebrate the creation of a new combat arms branch, but some soldiers who had chosen Air Defense Artillery thought the Redlegs seemed to be celebrating their departure a bit too much.

"All units at Fort Sill participated, including the battery that I commanded," recalls Col. Roy W. Tate, today the deputy assistant commandant of the U.S. Army Air Defense Artillery School, Fort Bliss, Texas. "The review was conducted with much pomp and enthusiasm. The soldiers, who had been prompted beforehand, cheered loudly when it was announced that Field Artillery was now a separate branch that no longer included Air Defense Artillery.

"Following the review, officers were invited to a special ceremony. A large replica of the Artillery insignia had been erected near the Officer's Club. After the officers had gathered around, the missile was launched from the insignia and went rocketing away. All the officers (except me) took off their insignia, replaced them with those without missiles and retired to the Fiddler's Green for refreshments and loud celebration.

"Afterward," Tate continued, "some of the officers noticed that I continued to wear what was now Air Defense Artillery brass, and there was considerable controversy as to whether or not I remained fit for command. Fortunately, this was resolved in my favor, but I felt more comfortable

when I was reassigned to Fort Bliss a few months later."

The parade marked the end of a rocky 22-year marriage between Coast Artillery (which included Antiaircraft Artillery as well as Seacoast Artillery) and Field Artillery. It was a much talked about marriage from the very start. The two partners, it was said, had little in common. The similarity of materiel, which in the beginning had represented the greatest bond between the two 'arms,' had evolved along such diverse paths that it had become impossible to discern a fragment of commonality. So when the union was dissolved, the wonder was not so much that it had ended but that it had lasted as long as it did.

The Army announced its decision to merge the Field Artillery School at Fort Sill, the Seacoast Artillery School at Fort Scott, Calif., and the Antiaircraft Artillery School at Fort Bliss, Texas, in the fall of 1946. The decision grew out of a March 1946 conference at Fort Sill. Representatives from the War Department; General Staff; Army Air Force; Navy; Marine Corps; Headquarters, Army Ground Forces; and all Army Ground Forces components attended the conference. Their most controversial proposal was to consolidate Coast Artillery and Field Artillery into one branch.

The Army had originally split Artillery into Coast Artillery and Field Artillery in 1907 because Field Artillery could follow other combat arms into the field while Coast Artillery was anchored to its seacoast fortifications. However, this argument no longer held true in 1946. Coast Artillery, its seacoast defense mission usurped by air power, was headed toward obli-

on, but its antiaircraft arm, in response to the ascendancy of air power, had evolved, gradually at first and then with increasing urgency as the United States entered World War II, into a highly mobile force.

Antiaircraft units, many of them equipped with self-propelled guns, followed American infantry and armor across Europe; dispersing, as required, to cover scattered headquarters and swiftly advancing spearheads; and converging, when necessary, to provide massed antiaircraft fire at decisive points of attack. The "Triple A" units frequently augmented Field Artillery by delivering direct fire against enemy counterattacks and fortified defensive positions.

With the post-war demobilization underway, the 1946 conferees judged that combining Coast Artillery with Field Artillery would conserve scarce manpower, provide more flexibility in officer assignments and improve morale and promotion potential, but intraservice rivalries also played a decisive role. Army representatives who attended the conference saw consolidation as a way of rescuing Antiaircraft Artillery from the clutches of the Army Air Force.

Army Air Force Commander Gen. Henry "Hap" Arnold had first advocated turning Antiaircraft Artillery over to the Army Air Force in 1943. During the North African Campaign, inexperienced U.S. antiaircraft crews shot up a number of friendly planes, and Arnold saw placing Antiaircraft Artillery under Army Air Force control as the only solution to the fratricide problem. Now the Army Air Force was about to become a separate service and wanted to take Antiair-

GENERAL ORDERS

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., *14 June 1968*

No. 25

AIR DEFENSE ARTILLERY BRANCH

Effective 20 June 1968, pursuant to the authority contained in Title 10, United States Code, Section 3063 (a) (13), Air Defense Artillery is established as a basic branch of the Army.

By order of the Secretary of the Army:

HAROLD K. JOHNSON,
General, United States Army,
Chief of Staff.

Official:

KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.



craft Artillery with it as it left the Army.

The Army, however, was not about to cede Antiaircraft Artillery to the Air Force without a fight. During the war, ground commanders discovered there wasn't enough antiaircraft artillery to go around when they really needed it, as during the North African Campaign when German aircraft had mercilessly bombed and strafed U.S. formations. Later in the war, when the Allied air forces had established air superiority, they learned that antiaircraft units could be easily converted to field artillery units. They envisioned the same thing happening in the next war and saw merging Coast Artillery, along with its antiaircraft artillery force, into Field Artillery as a way of saving a valuable asset.

Therefore, when Chief of Staff Gen. Dwight D. Eisenhower issued a cost-cutting decree in August 1946, the Army moved to integrate the two branches. In January 1947, War Department General Order No. 11 redesignated the Field Artillery School as the Artillery School (it was later to become the Artillery and Missile School) with the Antiaircraft Artillery School and Seacoast Artillery School as adjuncts. Three years later, in 1950, Congress passed the Army Reorganization Act to consolidate Field Artillery and Coast Artillery into one branch.

The Artillery School revamped its curriculum in the fall of 1947 to include common instruction on all artillery weapons. The problem was that Antiaircraft Artillery's automatic weapons and "ack-ack" guns had little in common with weapons employed by the Seacoast and Field Artilleries, and their successors were to have even less. The air threat was growing more sophisticated, and more sophisticated technology — surface-to-air missiles along with their complex target acquisition and guidance systems — was required to counter it.

The Army closed the Seacoast Artillery School in 1950 and disbanded Seacoast Artillery units or converted

them to Field or Antiaircraft Artillery that same year. Thereafter, only Field and Antiaircraft Artillery (called Air Defense Artillery after 1957) existed as part of the Army's artillery, but it was still a case of "mixing apples and oranges."

Because of the growing divergence of techniques, tactics, doctrine, equipment and materiel for the two artilleries, the Continental Army Command outlined a plan in 1955 to develop basic courses in Field Artillery and Antiaircraft Artillery for new officers. Integrated basic and advanced officer courses, which had been initiated in 1947, had failed to provide officers with adequate preparation to serve effectively in either artillery. With support from the Army's assistant chief of staff for training, the Continental Army Command created basic courses for the two artilleries in 1957, but reintegrated basic officer training in 1958 through 1961 because of the lack of officers and money. In the meantime, the Continental Army Command retained the integrated artillery advanced course for officers with five to eight years of experience because of pressure to maintain flexibility in officer assignments.

Soldiers faced with the dubious challenge of mastering both air defense and tube artillery soon began to see the establishment of a separate air defense branch as a natural and logical step. Tube artillery required officers experienced in the employment of howitzers and cannons, while air defense artillery required officers skilled in the highly technical and demanding environment of missile science. The consolidated officer basic course was producing, instead, officers particularly well versed in neither.

The pressure to end integrated training and form Field Artillery and Air Defense Artillery as two distinct combat arms continued to mount. Based upon the report of the Army Officer Education and Review Board of 1958, the Continental Army Command reintroduced separate basic officer courses in 1962 because of the

need for specialized training for new officers. Because the Army wanted flexibility to shift experienced artillery officers easily between Field and Air Defense Artillery units, the command retained the integrated advanced course. As a part of the advanced course, student officers received instruction at both the Artillery and Guided Missile School and the Air Defense School.

Vietnam emphasized the need for separation by taxing the Artillery and Guided Missile School's ability to crank out officers for the fire bases of Southeast Asia while concurrently maintaining free world air defense artillery employment. At the the direction of the Commanding General, Continental Army Command, the Artillery and Guided Missile School and the Air Defense School explored the desirability of dividing the artillery into two branches. Officer personnel policies and their effect upon artillery combat operations in Vietnam, as well as the responsiveness of the Artillery Officer Corps to meet future military requirements, were explored and evaluated.

The Army recognized that a growing division of doctrine, mission, training, equipment and techniques were evolving within the Artillery Branch as a result of the scientific advances within the military. This diversion of interest required a manpower pool with specialized characteristics. The Army concluded that two career branches could provide an improved response for the existing dual mission of the Artillery Branch and could better meet the anticipated professional requirements of future weapon systems while saving men and money.

In line with this, the authors of the Artillery Branch Study of 1966 concluded that integrated training "spawned mediocrity." The report cited "strong comments from commanders against assigning air defense officers to Field Artillery units in Vietnam since they have considerable difficulty in fulfilling Field Artillery officer responsibilities," incidents in

which air defense officers assigned to Field Artillery fire direction centers were involved in friendly fire incidents and evidence that Field Artillery officers assigned to air defense units were slow to master the intricacies of air defense systems.

A major problem was that the one-year tour of duty in Vietnam left little time for on-the-job training. Field Artillery commanders in Vietnam complained that they did not have the time to train an air defense artilleryman to be competent in Field Artillery. "A Field Artillery outfit in combat can absorb only a limited number of officers who do not have a thorough knowledge of what it takes to get cannonballs on the target," said one Field Artillery commander. "The truth of this comment is amplified by the one-year tour here in Vietnam. There is little or no fat in the TOEs; everyone has a job to do and there is little room for inexperienced understudies." Another Field Artillery officer complained that one air defense major he assigned as a field artillery battalion executive officer "took the attitude that he was qualified for a far more sophisticated weapon system and it was beneath him to dirty his hands with popguns, and furthermore, he did not know a thing about Field Artillery and wondered how he could be expected to learn all this new stuff in just 13 months."

But air defense commanders expressed an equally dim view of branch integration, with its requisite for cross training and cross assignments, and argued that they also needed "officers who could hit the ground running." "The assignment to this command of an officer whose training and experience are limited to Field Artillery does affect the operational efficiency of the unit to which he is assigned," observed the commander of U.S. Army Air Defense Command.

"The limited introduction to air defense materiel, tactics and techniques of operation presented to this officer during the Artillery Career Course does not provide him with sufficient

knowledge or background to become an effective member of the team," another air defense unit commander stated. "Detailed knowledge of his weapons is essential for any unit commander. In the case of an air defense battery commander, the complexity and sophistication of his materiel is such that it cannot be mastered quickly and easily."

However, anyone reading the Artillery Branch Study of 1966 cannot help but be struck by the perception that its authors, judging by the preponderance of data they devoted to career issues, seem to have viewed branch integration's adverse effects on officer efficiency ratings and selections for promotion as a more compelling argument for separation than integration's impact on unit readiness. By mid-1966, it was clear to the chief of the Artillery Branch, and just about everybody else, that all was not well with artillery officers' career progressions. On all the barometers of career success, including promotion lists and selection to senior service colleges, Artillery officers showed a lack of competitiveness with their contemporaries from Infantry and Armor by placing third. Reflecting this concern, the 1966 study devoted an entire chapter to an exploration of comments on officer efficiency reports. "His present limitation is his lack of technical experience with Field Artillery," decreed one Field Artillery rater. "The exacting requirements and scope of work imposed on a U.S. Army Air Defense Command battalion," wrote an air defense commander, "requires maximum continuing effort and production by assigned personnel and does not permit time for a slow progressive assumption of responsibilities, especially by an officer of his grade [captain] and term of service."

"The Artillery Branch Study of 1966 contains some arguments for separating Field Artillery and Air Defense Artillery that are based on doctrinal considerations," said Lt. Col. Thomas E. Christianson, U.S. Army Air Defense Artillery command historian.

"However, the tone of the report suggests that the desire to make Field Artillery and Air Defense Artillery officers more competitive with their contemporaries was paramount in the decision to separate Field Artillery and Air Defense Artillery."

Labeling the years of integration as detrimental to both Field and Air Defense Artillery, the authors of the study called for forming two separate branches. Having built up a head of steam, the move toward separation gained impetus. In 1967, the Department of the Army decided to separate advanced courses for Air Defense and Field Artillery. This decision was followed by the final decision to separate the branches and, in June 1968, the separation was established by DA General Order No. 25.

The immediate problem facing the Army was to identify which officers were to be in Air Defense Artillery and which in Field Artillery. The Artillery Branch Career Management Office conducted a comprehensive survey of officers' files, in the process considering personal preference. Each of the 25,000 files and the officers they represented were individually classified as either Air Defense Artillery or Field Artillery.

Meanwhile, a separate office was established for the career management of Air Defense Artillery officers below the grade of colonel within the Officer Personnel Directorate, Office of Personnel Operations, Department of the Army. Col. Joseph C. Fimiani was selected to head the newly established office. It managed the records of 7,000 officers and warrant officers when it opened for business on Dec. 1, 1968. The Enlisted Personnel Directorate, Office of Personnel Operations, Department of the Army, continued to guide the careers of noncommissioned officers and enlisted soldiers assigned to the new branch.

Many talented and visionary officers with a grasp of, or at least an intuition for, the evolving nature of warfare immediately volunteered for the

new branch. "I chose Air Defense Artillery," said Tate, "because my experience was all ADA, to include just having completed a tour in Vietnam with Hawk. Also, my father was Coast Artillery and the AAA connection had interested me in the business. Air Defense Artillery was, and is, more progressive, interesting and dynamic than Field Artillery."

Air Defense Artillery was somewhat at a disadvantage in rallying officers to its banner. The branch's main drawback was that the handwriting was already on the wall for the Army Air Defense Command (ARADCOM), headquartered at Ent Air Force Base in Colorado Springs, Colo.

ARADCOM had led an uneasy existence since its creation in 1950, then and always under the operational control of the Air Force. Its organizational pride was high during the 1950s when Americans nervously scanned the skies for Soviet bombers, dug bomb shelters and relied on the Nike missile sites that encircled the nation's major cities to save them from nuclear disaster. Then intercontinental ballistic missiles, which the Nikes could not counter, replaced long-range bombers as the chief threat, and ARADCOM's days were numbered.

In 1974, ARADCOM was dissolved, leaving but one Nike site in all of the continental United States. At least eight colonel and six general officer slots were gone forever. Many artillerymen, careerists worried about future promotional opportunities, apparently anticipated ARADCOM's demise. When the branches were separated, they besieged the Military Personnel Center with petitions opting for Field Artillery.

Another part of the problem was that, in their efforts to promote their own branch, Field Artillery officers in positions to influence future lieutenants frequently bad-mouthed Air Defense Artillery. For example, tactical officers at Fort Sill's Robinson Barracks, then home of the Artillery Officer Candidate School, told members of Field Artillery Officer Candidate

School Class 1-69 they were special because they were the first class to pin on the crossed cannons instead of the crossed cannons and missile insignia that now belonged solely to Air Defense Artillery. The implication was that the new branch was a haven for noncombatants, and that candidates who put Air Defense Artillery on their personal preference sheets for future assignments were looking for a way out of Vietnam.

Most air defense assets, it is true, remained in Germany, Korea or the United States, but Hawk batteries were deployed in Vietnam. And news that they were noncombatants would have come as a shock to the the M-42 Duster and Quad .50-caliber machine gun crews who were continuously and often heroically engaged with the enemy in some of the war's most savage fighting. But the stigma, however unfairly applied, plagued the new branch for nearly two decades, handicapping it in the intraservice recruiting wars until a renaissance of high-tech ADA weapons, changing threat scenarios and the "Scudbusters" of Operation Desert Storm gave the branch an altogether different image.

The first branch chief, Maj. Gen. George V. Underwood, went so far as to write a personal letter to all commissioned officers in air defense assignments, prophesying a bright ADA future and pleading with them to stay where they were. This had some effect, but in the end, the assignments desks had to categorically reject bids to go Field Artillery from officers with appreciable ADA experience. Otherwise, there would not have been sufficient talent to man the new branch.

None of this dampened the enthusiasm of the soldiers who were determined to build their careers in Air Defense Artillery. "New and eager, proud and proficient, the new Air Defense Artillery Branch comes into the Army as a combat arm with more than 7,000 officers and warrant officers on its rolls," wrote Lt. Col. Federick C. Dahlquist and Maj. David G. Sanford in an article they prepared while as-

signed to Air Defense Artillery Branch, Office of Personnel Operations. "With a link to its Coast Artillery heritage, the new branch will continue to perform its ever-alert mission of first-line defense of the nation — at home and abroad.

"Today the Air Defense Artillery Branch can look to the career development of its officers with a great deal of anticipation and enthusiasm," they added. "The branch can concentrate more objectively on a balanced career for its officers, knowing that its prime responsibilities lie in one path — that of missilery and radar electronics.

"Today's challenge is the continued employment of Nike Hercules and Hawk weapons in CONUS and in other critical defenses throughout the free world; the combat usage of the twin 40mm, self-propelled gun M-42 in Vietnam and the deployment of Chaparral and Vulcan weapon systems," they continued. "Sentinel and SAM-D [Patriot] are tomorrow's challenge. The quality and quantity of effort that will be demanded by these latest weapon systems are but a continuation of the demand for high quality and outstanding leadership demanded of air defense artillerymen in the past.

"The future, then, is unlimited for the Air Defense Artillery Branch," they concluded. "Its personnel can walk tall with the knowledge that their branch will lead the way in the field of missilery for the Army, and that they are members of an elite group."

In retrospect, one wonders if the optimism of soldiers who rejoiced in the birth of Air Defense Artillery would have burned as brightly had they a fuller knowledge of the trials and tribulations that lay immediately ahead: disillusionment and abandonment in Vietnam, the "hollow" Army of the 1970s, the task of rebuilding the all-volunteer force and the challenge of reshaping and rearming Air Defense Artillery to meet the ever-evolving threat. However, events were to prove their confidence in themselves and the branch well placed.

During its first quarter century of existence as an independent combat arm, Air Defense Artillery successfully shifted its primary focus from U.S.-based strategic defense against long-range bombers and point defense of upper echelon assets to force protection of the field army. It evolved from producing weapon systems based on off-the-shelf technologies already verging on obsolescence to fielding future-based systems that placed Air Defense Artillery a quantum leap ahead of the air threat. The branch is now well on its way toward tailoring the force for the expanded mission envisioned for it in the post-Cold War environment. While accomplishing this remarkable transition, the "First to Fire" branch succeeded in producing ADA soldiers and units whose competence, dedication, professionalism and performance under fire matched the unparalleled excellence of their weapon systems.

This achievement is all the more remarkable considering Air Defense Artillery's starting point. On June 20, 1968, the day General Order No. 25 created Air Defense Artillery, the Nike Hercules batteries of the U.S. Army Air Defense Command (ARADCOM) were still employed in defensive rings around the nation's great population centers, but the long-range bomber threat they were designed to defend against had been made irrelevant by the ascendancy of the intercontinental ballistic missile threat. In Europe, few believed that the "concrete artillery," the branch's static picket line of aging and immobile Nike Hercules surface-to-air missiles (SAMs), would do much to stop a Soviet onslaught. The United States had just fought one war, Korea, in which the air threat was insignificant and was engaged in a second, Vietnam, in which the air threat never appeared south of the Demilitarized Zone. It is not surprising that, for air defenders, the '50s, '60s and '70s were decades of neglect. "Korea and Vietnam set air defense back a decade each," said Gen. William DePuy, com-

mander of the U.S. Army Training and Doctrine Command.

During the years Air Defense Artillery's Duster and Quad .50 crews battled Viet Cong and North Vietnamese Army infantry in the rain forests and rice paddies of Southeast Asia, the Soviet Union refocused its air force from strategic defense to support of offensive operations. The air threat to the U.S. Army's maneuver forces grew tremendously stronger, and there was little growth in our air defense capabilities to offset it. Army Chief of Staff Gen. William C. Westmoreland warned, "We have gone so long without adequate air defense that we are headed for a potential battlefield disaster."

America's air defense capabilities were compared — not always favorably — to those of Third World countries. During the Yom Kippur War of 1973, the Army's assistant secretary for research and development pointed out that "Egypt alone has more SAMs along the Suez Canal than we possess in our total inventory."

Fortunately, 1968, the year of Air Defense Artillery's birth, was a pivotal year in many ways. Work was already underway on Improved Hawk and the technologies that would eventually mature into Patriot (see "The Story of Patriot,"), but, more importantly, the branch was preparing itself for the day ARADCOM would inevitably disappear. On March 28, 1968, an ADA "think tank" titled the Air Defense Center Team released a position statement:

"The severe low-altitude air threat to the U.S. field armies is best countered by relatively large numbers of simple short-range air defense artillery weapons employed in the division areas. Training and operational considerations dictate that the bulk of this air defense artillery, currently the Chaparral/Vulcan units, be organic to the divisions." It was the beginning of the shift to "active defense." Propelled by the certain knowledge that ARADCOM was destined for inactivation, the active defense concept

soon dominated branch thinking. Later the same year, the activation of the 6th Battalion (C/V), 67th Air Defense Artillery, the Army's first Chaparral/Vulcan battalion, not only put air defense back into the division, but, in a sense, put Air Defense Artillery "back into the Army." The successive deployment of Chaparral/Vulcan battalions soon put ADA liaison officers, who, in addition to their normal duties, served as effective ADA advocates, on every division staff.

Despite its "C/V" designation, 6-67 ADA deployed in 1969 to Fort Riley, Kan., to join the 24th Infantry Division *without* the Chaparral weapon system and without radars on their Vulcans. The First Vulcan Combat Team was evaluating the first production model Vulcans in actual combat. "With the development of Chaparral and Vulcan and the continued success of the M-42s and M-55s in Vietnam, it appears that the future of Air Defense Artillery will be strongly influenced by its forward area weapons," wrote Capt. John S. Wilson, the combat team leader. "Concrete sites, revolving radars and humming generators will no doubt continue to be identifying characteristics of air defense, but they will no longer dominate the air defense scene. Modern trends in forward area weapons have given the Army's newest branch an entirely new complexion. Air Defense Artillery again takes a place in the field with the combat soldier."

Killed during a rocket barrage on Feb. 23, 1968, Wilson didn't live to see his article published or his prophecy come true. During the Gulf War, divisional ADA units were fully integrated into the assault forces that smashed through Iraq's defensive barriers, and mobile Patriot and Hawk task forces provided a moving overlay to the majestic Operation Desert Storm scheme of maneuver. The branch owed its success to soldiers like John Wilson and other ADA leaders who persevered in times when they were little appreciated by civilian society at large, and endured when it seemed that for every

step the branch took forward, it took one or two steps backward.

In 1970, *Air Defense Trends*, as the ADA branch journal was then called, published photos of a self-propelled Hawk platoon in march order and an SP Hawk battery organizational chart with an article in which the author exclaimed, "Self-propelled Hawk is now a reality." The system, of course, was never fielded. Technological evolution, a fickle economy and changes in the threat environment practically guaranteed there would be false starts and promising beginnings that led to dead ends, but the branch learned, and often profited, from its setbacks.

For example, in 1975, the Safeguard anti-ballistic missile (ATBM) site, with its nuclear-armed Spartan and Sprint missiles in concrete silos near Grand Forks, N.D., went operational only to be shut down in February 1976 by SALT treaty limitations that placed severe restrictions on ATBM deployment. But a lot had been learned about the ATBM business, and exploration into ATBM technology continued. On Jan 19, 1991, the day after A/2-7 ADA (Patriot) made history by becoming the first to intercept a hostile tactical ballistic missile, a missile launched from Kwajalein Missile Range scored a kinetic kill of an ICBM in space.

In January 1985, 12 years after the Army picked Raytheon as the prime Patriot contractor, we deployed the first Patriot battalion (4-3 ADA) to Europe, but in August the termination of the Sergeant York Gun, which was to have become the mainstay of divisional air defense, shook the branch to its core. To understand the magnitude of the Sergeant York Gun crisis, one must only glance at the U.S. Army Air Defense Artillery School's 1981 draft table of organization and equipment (TOE) for the heavy division. The draft TOE (subsequently approved) was built on the assumption that Sergeant York would replace Vulcan. It listed 36 Sergeant York guns in three batteries and 24 Chaparrals in two batteries with Stinger platoons as-

signed to each gun battery and to one of the Chaparral batteries. It appeared the manpower slots programmed for Sergeant York would disappear with the weapon system.

But even the Sergeant York termination, which seemed such a disaster the day it was announced, worked to Air Defense Artillery's advantage by forcing the Department of the Army and the Department of Defense to take glaring deficiencies in forward area air defense seriously. The result was the formation of the Forward Area Air Defense Working Group at Fort Leavenworth, Kan., and the ADA Laydown Group at Fort Bliss, Texas, which produced the forward area air defense (FAAD) concept, a system-of-systems approach to air defense in the forward area.

Work on the FAAD system of systems, with its line-of-sight forward heavy (LOS-F-H), non-line-of-sight (NLOS), line-of-sight rear (LOS-R) and FAAD command, control, communications and intelligence (C³I) components, began during the final years of the Reagan buildup. At first, it proceeded with lightning speed, only to be slowed by budget cuts and the perceived requirements of a new threat environment following the collapse of the Soviet Union. In rapid succession, the Army quickly procured and tested Avenger (LOS-R), ADATS (LOS-F-H) and FOG-M (NLOS) prototypes.

Today, Avenger fielding is well underway. Funding for ADATS has been eliminated, but the requirement for an LOS-F-H system remains, and ADA leaders continue to argue for the eventual fielding of a LOS-F-H system. Meanwhile, the branch is rapidly fielding Bradley Stinger Fighting Vehicles (BSFVs) as an interim LOS-F-H system. The BSFV is no ADATS, but the Stinger missiles it employs are already world renowned (in Afghanistan, *Muhajideen* gunners used U.S.-supplied Stingers to score approximately 269 kills in about 340 engagements, a 79-percent kill ratio) and the BSFV places ADA Stinger

teams where they are needed most, near the forward edge of the battlefield. Funding for NLOS was at first withdrawn and then restored, although it may be fielded as a non-branch specific system. In April of this year, the FAAD C³I system successfully completed testing, and it now appears that the "First to Fire" branch will be the first to field a tactical C³I system as a part of ATCCS. The "objective" FAAD system is not yet in place, but what the branch now has in place is much better than what it started out with.

Operation Desert Storm, meanwhile, focused the nation's attention on the tactical ballistic missile threat and Patriot's success provided Air Defense Artillery the leverage its leaders need to field vital new air defense weapon systems in an austere budget environment. In September 1992, the Army awarded an industry team led by Lockheed Missile and Space Company a contract to demonstrate and test Theater High Altitude Area Defense (THAAD) system prototypes. Earlier this year, the Army chose six prime contractors to perform concept definition studies for the Army's proposed Corps SAM missile system. Corps SAM will be a light, mobile missile and aircraft defense system that can arrive in the theater by airlift ready to fight and then travel on the battlefield with forward combat forces. The Army hopes to replace Hawk with Corps SAM early in the next century.

The result is something that Air Defense Artillery has been striving toward ever since its creation: a unified theory of air defense that elevates and extends total air defense force protection against the whole spectrum of threat platforms across an entire theater of operations. Tailored to the new threat environment, the new theater missile and air defense concept is Air Defense Artillery's logical evolutionary destination. Through every phase of future operations, from early entry to decisive victory, theater missile and air defense assigns crucial missions to "First to Fire" soldiers.

The branch is progressing in arenas outside the parameters of the conventional battlefield. In 1991, Congress passed the Missile Defense Act, tasking the Department of Defense to begin initial deployment of a ground-based missile defense no later than 1996. The Army has assigned Air Defense Artillery the National Missile Defense (NMD) mission of developing and deploying NMD systems to defend the nation's heartland against limited or accidental ballistic missile attacks. The Army released requests for NMD ground-based interceptor proposals to industry in 1992. It has since awarded Raytheon a contract to develop NMD ground-based radar prototypes and BMD a contract to develop an NMD hollow-nose sensor. Last year, Air Defense Artillery's anti-satellite (ASAT) mission was revived and restructured to focus on technology development. The Army has since awarded TRW a contract to develop the ASAT battle management and control systems architecture.

Things are going well on the technological battle front, but Air Defense Artillery has also made progress in training and soldier care. On its 20th anniversary, the branch dedicated the "First to Fire" statue, a bronze replica of a Stinger team leader and his gunner, at Fort Bliss. Choosing Stinger rather than Patriot for the statue allowed ADA leaders to place the emphasis where it belongs, on ADA soldiers. When you ask NCOs who have literally grown up with the branch, they unanimously maintain that it is the quality of soldiers the branch has attracted rather than the quality of weapon systems it has fielded that makes the real difference between today's force and the "hollow force" of the 1970s. The strengthening of the NCO Education System, symbolized by the new Sergeants Major Academy at Fort Bliss, and the mid-'80s shift to small group instruction in the ADA Officer and NCO Advanced Courses are producing a new breed of ADA leaders who will guide the branch into the 21st Century.

In 1985, the Office, Chief of Air Defense Artillery, began the task of consolidating ADA military occupational specialties (MOSSs). Although MOS consolidation has been complicated by the transition to new weapon systems, it is gradually alleviating the promotion inequities that have historically plagued Air Defense Artillery. In the future, the branch will continue to be blessed with top-quality soldiers, and the growing influx of sophisticated training simulators will allow Air Defense Artillery to improve, rather than merely sustain, the training base.

Today the branch faces a new crisis: a force reduction of historic proportions brought on by the collapse of the Soviet Union. But for the most part, the branch is faring as well as could have been expected in the post-Cold War drawdown environment. The Army recently completed Total Army Analysis-2001 (TAA-01), which is a process that structures the Army within approved end strength figures. Air Defense Artillery fared well in comparison with other branches. In addition to retaining 44 Patriot batteries and three corps Avenger battalions in the active force, an air defense battalion will be retained in each active component division. We added a fourth battery to the divisional battalions in the contingency corps. The National Guard air defense structure, meanwhile, is experiencing real growth as the active force declines, more than doubling in size and fielding Patriot.

To cope with the downsizing, the Army is restructuring the division to adapt it to the new threat environment. Part of that effort is an ongoing divisional air defense study that will have dramatic impact on future configurations of Air Defense Artillery units and their placement in the force.

The branch has successfully resolved four issues of great importance to its immediate future. The first ADA issue involved inactivating 2-52 ADA (the exact date of the inactivation will be announced in the near future). However, in exchange, a U.S. Army Europe Patriot battalion will, instead,

be returning to the continental United States (CONUS). An announcement will be forthcoming soon as to the stationing and relocation time frame. The second and third issues, THAAD and NMD system funding and manpower, were also settled. The Army will provide THAAD force structure and the Army National Guard will be called upon to man about 73 percent of NMD slots.

Air Defense Artillery has come a long way since 1968, and there is still some stormy weather ahead, but the long-term future forecast for Air Defense Artillery is bright. Operation Desert Storm dramatically demonstrated that the excellence of ADA soldiers and ADA weaponry is unparalleled and that the branch's post-Cold War Army doctrine is soundly based on an absolute imperative — force protection. The collapse of the Soviet Union, far from creating a "new world order" in which democracies will coexist in peace and prosperity, has, at least for the moment, unleashed long-suppressed forces of upheaval, nationalism and ethnic strife. The worldwide proliferation of sophisticated air threat technology forces strategists to assign crucial roles, no matter what the scenario, to Air Defense Artillery.

Today, ADA soldiers remain on 24-hour alert in Southwest Asia and in Korea, where the Cold War hasn't completely thawed. Other ADA soldiers have just returned from Operation Restore Hope, the humanitarian mission in famine-ridden Somalia. In strife-torn Europe, ADA soldiers stand watch over a fragile "new world order." At home in the United States, ADA units are ever poised to deploy to contingency areas around the globe. And everywhere ADA soldiers and ADA units are held in high esteem.

The "First to Fire" branch has come a long way since its "Independence Day" 25 years ago. In 1968, Air Defense Artillery had a reputation to build; today, Air Defense Artillery has a reputation to maintain.