

# ADA Branch: A Proud Heritage

Air Defense Artillery will carry with it into the new millennium a proud heritage. The "First to Fire" branch traces its lineage back to the American Revolution and the Coast Artillery Corps, the parent of both Field Artillery and Air Defense Artillery. But the Coast Artillery Corps' seacoast artillery gave way to antiaircraft artillery during World War II when air power rose from relative obscurity to become a decisive power.

## The Origin

The origin of the Air Defense Artillery (ADA) branch lies in the Coast Artillery Corps of the First World War; however, the origins of the ADA branch go deeper into Army history. As early as 26 September 1776, when COL Henry Knox recommended the creation of an artillery school to members of Congress, some concept of the importance and need for field and especially coast artillery existed. The U.S. Military Academy at West Point, N.Y., taught artillery courses as early as 1802 when the school began operation. The successful defense of America's coast by artillerymen at Fort Mchenry, MD, from a British naval assault in September 1814 emphasized the importance of artillery in national defense. Ten years later, the adjutant general of the U.S. Army authorized the creation of a school just for artillery instruction, the Artillery School for Instruction at Fortress Monroe, VA. For 10 years the school remained in operation, training three-quarters of all active artillery personnel. Despite the school's success, limited funds forced its closure in 1834.

More than 20 years later, on 29 December 1857, the adjutant general's office re-established the Artillery School at Fortress Monroe. The Civil War caused the suspension of instruction at the school; however, at the war's end, the school re-opened as The Artillery School of the United States Army.

## Coast Artillery Corps

In 1901, the Coast Artillery Corps was organized to defend the United States using coastal forts. Coast Artillery corpsmen manned guns from six to 16 inches in caliber. The gunners also manned mobile tractor-drawn and railway artillery to supplement fixed defenses.

In 1906, the Department of Artillery of the United States Army became the Department of Coast Artillery. The mission of the Artillery School changed to one of preparing officers and enlisted men for duties pertaining to seacoast gun defense. A year later, in 1907, the War Department issued General Order No. 24, separating the Coast Artillery and Field Artillery. The same year, the War Department authorized the reorganization of the Artillery School at Fortress Monroe as the Coast Artillery School.

## World War I

By the early 1900s, the United States had become a world power and was projecting that power overseas. With America's entry into World War I in 1917, the secretary of war, Newton D. Baker, sent an advisory board of officers, under the direction of COL Chauncey B. Baker, to France to determine how best to employ American forces in Europe. Baker recommended not only the creation of antiaircraft artillery (AAA) service but also a school to train air defenders. Baker based his recommendations on the significant threat that air power posed to the Allied forces.

The American air defenders soon distinguished themselves with their excellent marksmanship: the AAA service used only one twentieth as much ammunition as their British allies to shoot down each German plane. B Battery, 1st AAA Battalion, set the best engagement record of any unit, U.S. or Allied, when they used the mobile French 75mm gun to shoot down nine German planes in a 118-day period. Americans also distinguished themselves in the training of artillerymen and in the development of tactics. In 1918, a short course in antiaircraft artillery at the Coast Artillery School prepared selected officers for admission to the American Antiaircraft School at Arnouville-les-Gonesse, France. These well trained air defenders developed the basics of modern air defense: mass, mix, mobility, balance and overlapping fires and defense in depth.

After the war, all U.S. AAA units were demobilized, and the AAA ceased to exist until 1920. Between 1920 and 1921, the government reestablished the AAA service and organized it into six regiments. These regiments covered critical harbor defenses and priority installations such as the Panama Canal. The Coast Artillery School resumed normal peacetime operations and Coast Artillery leaders more than ever the importance of antiaircraft artillery. The school offered courses in antiaircraft and heavy artillery. Coast Artillery leaders stressed not only training but also research and development and intellectual freedom among its designers and tacticians. Because money was not available to field or actually produce weapons, designers could let their minds run free, and they developed many improved weapons designs such as the 90mm gun that went on to serve the AAA service admirably throughout World War II.

By 1930, a new emphasis was placed on antiaircraft artillery, giving it equal tactical merit with seacoast artillery. By 1938, additional emphasis was placed on the procurement of antiaircraft material when the War Department appropriated \$800,000 for mobile antiaircraft guns and mounts. As the possibility of the United States' involvement in another world war grew, more and more training exercises occurred. During one pre-World War II exercise in August 1939, D Battery, 260th Coast Artillery (AA), District of Columbia National Guard, successfully defended its position by using its single weapon, a 90mm antiaircraft gun, as an anti-tank weapon.

## World War II

Antiaircraft artillerymen fought to the last ditch on Bataan; then, racked with malaria and dysentery, marched off to one of the hell holes the Japanese called prisoner of war camps. When enemy planes shrieked down North Africa's "Stuka Valley," scattering infantrymen to the shelter of foxholes, the antiaircraft artillerymen ran to man their 40mm guns. They could never stop V-2 rockets, but they shot down better than 80-percent of V-1 "buzz bombs" headed for London.

Antiaircraft gunners saved the beleaguered beachhead at Anzio by shooting down so many enemy planes that the Germans suspended daytime air raids. They drove M-16 half-tracks onto Omaha Beach and shot up German pillboxes and gun emplacements. General Omar Bradley said his troops never would have made it off the beach without them. They defended the seaports, airfields and railheads that sustained Allied armies in their drive across Europe. When the chips were down at the Battle of the Bulge, they used their 90mm guns to stop onrushing Tiger tanks.

They went "island hopping" across the Pacific with MacArthur and Nimitz, with frequent stopovers at "exotic isles" like Guadalcanal, Iwo Jima, the Philippines and Okinawa. They defeated kamikaze attacks and everything else the Japanese could throw at them.

## The Cold War

In the late 1940s and early 1950s, with the advent of high-performance jet aircraft, the possibility of a Soviet-manned bomber attack against the United States emerged. This brought resurgence in air defense activity. Numerous antiaircraft units, equipped with both heavy and light guns, were added to the Army inventory. For the first time, light antiaircraft battalions became organic to Army divisions. Heavy antiaircraft artillery gun battalions were deployed around critical assets with the United States. As the threat against each defended asset was perceived to be one or more manned bombers carrying nuclear weapons and flying at extremely high altitude, the short-range guns and heavy antiaircraft guns systems were eliminated in favor of long-range air defense missile systems.

The AAA School at Fort Bliss focused on the development of surface-to-air missile (SAMs). The First Antiaircraft Artillery Guided Missile Battalion was created to assist the Army Service Forces in this project. The battalion participated in the first American firing of a captured German V-2 rocket at White Sands Proving Ground, N.M., on 16 April 1946. On 11 June 1946 the AAA School came under the command of the newly established Antiaircraft Artillery and Guided Missile Center, Fort Bliss. On 1 November 1946, the War Department directed the redesignation of the AAA School to the Antiaircraft and Guided Missile Branch. The firing of the first all-American missile - the WAC Corporal - highlighted the early part of 1947, and air defense artillerymen quickly earned the name of "missilemen". By the mid-1950s, both Nike and Corporal missiles reached an operational state. The Nike Ajax was the forerunner to today's family of U.S. Army guided missile. It represented a major breakthrough in technology that solved the main problems in air defense of detecting, identifying as friend or foe and engaging and destroying enemy aircraft. The system included advanced radar technology that could direct the missile to targets as high as 60,000 feet - twice as high as our best AA gun could reach.

When the nuclear intercontinental ballistic missile capabilities increased, the perceived Cold War manned bomber threat against the United States decreased. This led to the elimination of long-range missile defenders throughout the United States. Rather than defending American cities, Air Defense Artillery planners concentrated on defending American maneuver forces and combat assets. Air Defense Artillery's antiballistic missile potential was not seriously explored until three decades had passed.

## Korean War

Hawk surface when North Korea launched its surprise attack across the 38th parallel, an all-volunteer anti-aircraft task force airlifted from Japan to South Korea was the first American unit on the ground. Within hours of arriving at Suwon Airfield, they shot down two enemy planes, the first organized American resistance of the war. The U.S. Air Force quickly achieved total air supremacy over the Korean Peninsula. Anti-aircraft artillery shifted from an air defense mission to a ground support mission.

Anti-aircraft searchlights illuminated contested ridgelines so U.S. and UN units could bring their automatic weapons to bear. The 90mm gun batteries conducted indirect fire missions. The enemy called the falling rain of shrapnel "Whispering Death." Anti-aircraft half-tracks supported Infantry assaults against Heartbreak Ridge, Porkchop Hill and other battle-scarred terrain features that had no names. And when an unexpected Chinese onslaught broke through and encircled U.S. and UN forces on the Yalu River and Chosin Reservoir, they blasted escape routes through frozen mountain passes leading south.

## Vietnam

Hawk surface-to-air missile batteries guarded U.S. airfields and major installations, but North Vietnamese MiGs never ventured south of the demilitarized zone. Air Defense Artillery's automatic weapons battalions and ADA soldiers who served in them won't be forgotten by field artillerymen who watched a Quad .50 stop an NVA sapper attack in the wire. They'll be remembered by the Cavalry platoon leader who rallied his unit while Vulcans stood off a Viet Cong ambush and by the Infantry platoon leader who watched Dusters break up an NVA ground attack. ADA crewmen participated in every major American campaign during the conflict in Southeast Asia. Some reached the outskirts of Phnom Penh. They fired up more than four million rounds of Duster ammunition and more than 10 million rounds of Quad .50 ammunition.

Each ADA battalion won either a Presidential or Meritorious Unit Citation and ADA soldiers won more than 450 medals for valor, including the Medal of Honor, and more than 1,000 Purple Hearts.

## Armed Forces Expeditions

Twice in one decade armed forces of the United States deployed to low intensity conflicts in the Caribbean area to confront infiltrating puppet governments or to shore up fledgling democratic governments.

**OPERATION URGENT FURY.** On 25 October 1983, American forces launched a parachute and heli-borne assault against Cuban and local forces on the Caribbean island of Grenada. The initial assault echelon included four Stinger teams and a headquarters element, all from the 3d Battalion, 4th Air Defense Artillery, 82d Airborne Division. Each ADA paratrooper carried one Stinger and a PRC-77 radio. The follow-on echelon of Operation Urgent Fury consisted of 27 Stinger teams, combat and combat support elements from the 3d Brigade, 82d Airborne Division. The Stinger teams defended the airhead at Point Salinas Airport, the division support command and the division headquarters. One Stinger team deployed to Pearls Airfield to provide air defense for 3d Infantry Brigade elements. As part of Operation Urgent Fury, ADA units proved that they could deploy rapidly and that air defense elements are an integral part of the combined arms.

**OPERATION JUST CAUSE.** On 20 December 1989, Stinger teams and towed Vulcan gunners from the 3d Battalion, 4th Air Defense Artillery, 82d Airborne Division, and elements of the 2d Battalion, 62d Air Defense Artillery, 7th Infantry Division, landed on the isthmus of Panama for Operation Just Cause the restoration of democracy to Panama. With the Panamanian air force destroyed on the ground, the Vulcan gunners lowered their sights, shooting up, among assorted targets, the Panamanian Defense Force (PDF) 8th Combat Infantry District Headquarters at Fort Spinar, the PDF Naval Infantry Headquarters at Coco Rico and two PDF 118-foot Vosper gun ships. Elements of C Battery, 2-62 ADA, engaged the naval headquarters building in Coco Solo with their Vulcan guns in the direct fire mode. They became the first ADA troops in history to use the Vulcan weapon system in an offensive role.

As Operation Just Cause proceeded, the air threat lessened. Vulcan gunners, when not required in primary mission roles, assisted in processing enemy prisoners of war. Paratroopers of A Battery, 3-4 ADA, acting as infantry, were airlifted onto a hilltop and secured a television repeater station. As part of Operation Just Cause, ADA units proved that they could deploy rapidly as part of joint service operations.

## Gulf War – 1990

At the beginning of the 1990s, Middle Eastern countries, long at war, sought to settle their differences with overt actions. At the request of Saudi Arabia, multinational coalition forces headed by the United States were deployed to Saudi Arabia to protect its borders.

**OPERATION DESERT SHIELD.** On 7 August 1990 Stinger air defense missile teams were inserted with the U.S. XVIII Airborne Corps field headquarters within 24 hours of the decision to deploy U.S. forces as part of a multinational force. Giant C-5As and C-141s were soon depositing Patriot units of the 11th Air Defense Artillery Brigade to defend the huge air base at Dhahran, Saudi Arabia. They were followed by air and sea deployment of ADA units from around the world. In addition to Patriot and Hawk fire units, divisional Vulcan, Stinger, Chaparral and Avenger fire units continued to arrive in the theater with their supported units. As the coalition forces continued their buildup, ADA task forces were formed from 11th ADA Brigade and 32d Army Air Defense Command units to protect the XVIII Airborne Corps and VII Corps. American and Dutch NATO Patriot units were sent to Turkey to protect air bases. Iraq refused to relinquish Kuwait and coalition forces prepared to use force

**OPERATION DESERT STORM.** On 16 January 1991, Operation Desert Shield became Operation Desert Storm as coalition forces began overt air operations against Iraq. Dutch, American, and Israeli Patriot fire units were rushed to Israel as Iraq, in an attempt to escalate the conflict, rained Scud missiles down on Haifa and Tel Aviv. Iraq also launched Scud missiles at Riyadh, Dhahran, and King Khalid Military City in Saudi Arabia. Patriot missile systems became the "high tech" heroes of the Gulf War. Although they were not originally designed for theater tactical ballistic missile (TBM) defense, emergency updating of Patriot missiles and software enabled Patriot missiles to successfully engage descending Scuds. Between 16 January and 22 February 1991, Iraq fired 78 Scud missiles at military and civilian population centers. During the "Battle of Riyadh," alone Patriot batteries intercepted and destroyed 17 Iraqi Scuds in simultaneous engagements. The Desert Storm ground war commenced a few hours before dawn on 24 February. Divisional ADA fire units were integrated throughout columns of their supported divisions as coalition forces crashed into Kuwait and Iraq. The air defense umbrella formed by the task forces leap-frogged through Iraq and Kuwait in one of the fastest corps advances since World War II. The Iraqi air force never got into the action and the war was over in 100 hours.

### Operations Other Than War

After the end of the Cold War, ADA soldiers participated in numerous peacekeeping missions, including operations in Panama, Somalia, and Haiti. Besides safeguarding deployed U.S. forces from possible air attack. ADA Avengers and Bradley Stinger Fighting Vehicles patrolled the strife-torn streets of Bosnia and defended NATO airfields during the crisis in Kosovo. And in the deserts of Southwest Asia, ADA Patriot task forces continued their constant vigil against Iraqi aggression.

### Homeland Air Security

Following the September 11, 2001, terrorist attacks, ADA Avenger and Sentinel Radar units deployed to Washington, D.C., to protect the National Capital Region from airborne terrorist attacks, a mission that continues today. Images of Avenger missile turrets with the Washington Monument or Capitol Building in the background became symbols of America's resolve to win the worldwide War on Terror.

### Operation Iraqi Freedom

During the war in Iraq, U.S. and Kuwait Patriot missile batteries intercepted and destroyed every Iraqi ballistic missile launched at Kuwait or at coalition forces fighting inside Iraq, except those whose trajectory caused them to impact harmlessly in empty desert or open ocean. During one dramatic engagement, a U.S. Patriot battery was credited with saving the coalition ground forces headquarters from a direct hit by an Iraqi ballistic missile. Meanwhile, ADA Avenger and Bradley Linebacker units fought their way into Baghdad with U.S. maneuver forces. In case Iraq had decided to launch missiles at Israel as it did during the 1991 Gulf War, a U.S. Patriot task force deployed to help defend Israel from possible missile attacks. Other Patriot fire units also deployed to neighboring Jordan as a precautionary measure.