



# ADA

*Yearbook 2004*



*Air and Missile Defense Transformation Follows Operation Iraqi Freedom Triumph*



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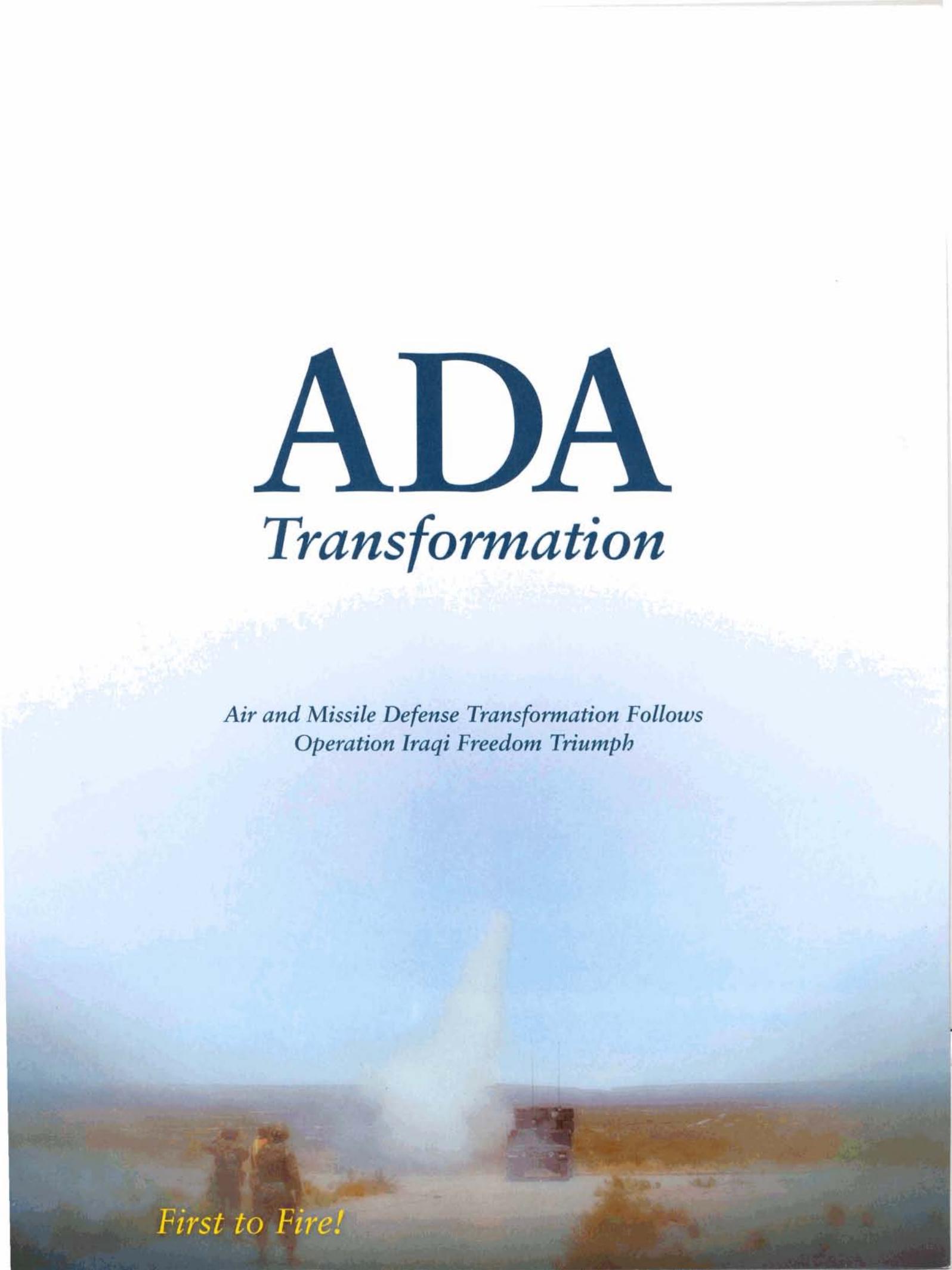
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# ADA

## *Transformation*

*Air and Missile Defense Transformation Follows  
Operation Iraqi Freedom Triumph*

*First to Fire!*

A painting of a desert landscape. In the foreground, two soldiers in camouflage uniforms are visible. In the middle ground, a missile is being launched from a mobile launcher vehicle, creating a large plume of white smoke and fire. The background shows a vast, flat desert under a clear blue sky.

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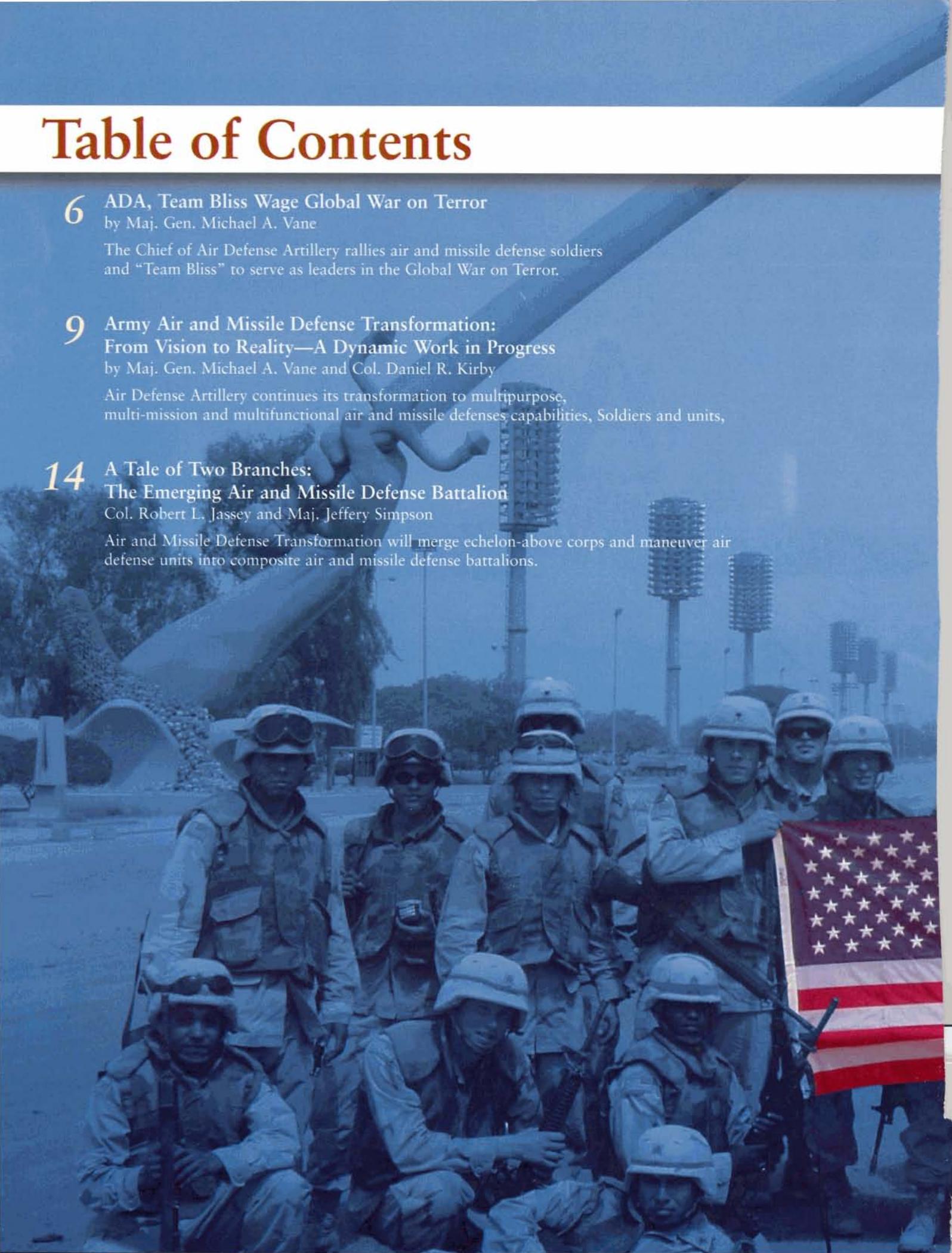
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# **ADA, Team Bliss Wage Global War on Terror**

**Altered Threat Environment Impacts  
Air Defense Artillery Center**

by Maj. Gen. Michael A. Vane  
Chief of Air Defense Artillery

The world has changed dramatically since Sept. 11, 2001, when 3,000 citizens were killed in the World Trade Center, the Pentagon and in a field in Pennsylvania. Since that time, the citizens of this nation as a whole have come to realize that there are forces out there in the world who hate us — not just figuratively, but forces that want to see everything we stand for and care about destroyed.

They lurk in the shadows and venture out to hurt those whom civilized nations label “untargetable,” using combinations of technology and terror to oppress and influence anyone and any nation weaker than they.

Faced with this, we have had to show the world that we are more than a “shining city on a hill.” The shining city will not sit and wait for the forces of darkness to attack its gates again. We are taking the fight into the strongholds of the enemy, and we are dealing the enemy blow after blow, damaging it daily. But like a monster from mythology, for each head we cut off another grows.

We must not weaken as we strike again and again, probing and pushing to find the enemy’s weakest spots. The war is a bloody one and it is not nearing completion. We are a nation at war and the Army is carrying the majority of that load for our nation.

This is the first time in history that an All Volunteer Force has fought a protracted war. There are 1.4 million people in the active force, including 150,611 National Guard and Reserve service members on active duty.

We can maintain the force we need. Recruiting and retention is going well. Recruiting for active components is at 101 percent of the goal set for FY 04, the Reserve is at 102 percent and the Guard is at 88 percent. Retention is over 100 percent of the target goal. All of these men and women are volunteers who put their lives at risk when sent into harm’s way.

Secretary of Defense Donald H. Rumsfeld said recently, “the United States cannot use 20th century thinking to fight in the 21st century; capabilities should not always be equated with numbers — one smart bomb is better than 10 dumb bombs; and the country must think in 21st century terms about lethality, speed of deployability and usability of the military’s capabilities, rather than just the number of things.”

The war may seem far away from El Paso and Fort Bliss, but it is very real to those serving in war-torn Iraq.

As a power-projection platform Fort Bliss mobilizes and demobilizes Soldiers each week, but sometimes we do not seem touched by the violence outside of our borders. But every Soldier who comes through the CONUS (Continental United States) Replacement Center, trains with 5th Army or leaves the Air Defense Artillery Defense School—some 20,000 over the past year and a half—know that he or she may soon be facing hostile fire.

So, we must “feel” the war in our community support, in our installation staff and school support of our Soldier. The war is also felt in our Army’s transformation and is felt in the transformation of Air and Missile Defense, both as a part of transformation of the Defense Department and our joint forces.

The Army is rapidly moving to a modular, brigade-based Army to provide more flexible and adaptive support to the Joint Force commanders. We are transforming our Army while at war. Currently about 4,000 members of the 116th Cavalry Brigade Combat Team from Idaho, with augmentees from six other states, are training here prior to deployment to Iraq later this year.

A National Guard unit, the 29th Infantry Brigade from Hawaii, began arriving in August for mobilization training. The 35th ADA Brigade Headquarters and two Patriot batteries from the 2nd Battalion, 1st Air Defense Artillery, will be leaving later this year for permanent stationing in the Republic of South Korea. They will join the 1st Battalion, 43rd Air Defense Artillery, in country.

These are unusual times. We are transforming because this enemy is not the one we faced in the past, when our current organizations and equipment were fielded. The condition of this fight and the rules are different as well. The enemy is in our homeland as well as overseas. The enemy attacks our information networks as well as combat formations. Actions of individuals at home station, as well as overseas, are watched, catalogued and assessed for vulnerabilities. Every Soldier must think and act like a warrior and possess the warrior spirit — even when we access our e-mail (as technology is a weapon to terrorists) and as we enter or leave the installation. We must always be cautious and on guard.

The Congress and senior leaders of the Army have seen this and are investing in defense, in the Army, this installation and Air Defense Artillery in unprecedented

fashion. I thank our elected, business and military leaders for their foresight and support. It has been a combined Team Bliss and Team El Paso effort of unparalleled proportion that has helped to make this happen locally.

The structure of our Army is growing as well. There are 14,000 more Soldiers in the Active Component than a year ago. This growth will continue to increase. Stop loss is being used to keep existing teams together and to maintain cohesion – it is not about adding end-strength to the force. The air and missile defense force is also transforming – becoming more relevant – to meet the threat in today’s ever-changing world. The composition of our air and missile defense force will be even stronger and more relevant to the way we fight as a joint force.

It is a critical time for all of us, a time when we must all continue to adapt. Some missions will change, some will go away and some will stay the same. Air Defense Artillery provides protection of assets on the ground and must be capable of bringing down incoming ballistic missiles, cruise missiles, large-caliber rockets/mortars, and Unmanned Aerial Vehicles. The changes we see in the force structure — the establishment of units of action, Brigade Combat Teams — is a direct outcome of lessons learned from Operation Iraqi Freedom and other recent counter-insurgency missions around the world. The time has come to move fast, be more lethal, get in and get out of a hostile area with minimal loss of life.

Air Defense Artillery is changing as well. Our current Stinger-based systems are overmatched by today’s threat and not well integrated with our Patriot forces, which are sectored and cannot see 360 degrees around. Soon we’ll have forces that are tightly integrated with and capable of reaching out and defeating the enemy’s unmanned aerial vehicles, rockets, artillery, mortars and ballistic missiles before he can harm us. New surveillance and missile systems, such as the Joint Land

Attack Elevated Netted Sensor, Surface-Launched Advanced Medium-Range Air-to-Air Missile, Medium Extended Air Defense System and Enhanced Area Air Defense System. continue to demonstrate why Fort Bliss and El Paso are leading the joint community in Joint Air and Missile Defense capabilities. We are blessed with the best maneuver and airspace training areas in the world and the movement to put more units here is a good sign for all of us.

Some major alterations have already taken place or been announced, and some are still to come. At this crucial time, there is a need for warriors, tremendous role models and compassionate leaders comfortable with the rapid pace of change. We have such leaders in “Team Bliss” and “Team El Paso” who are not afraid of change, but welcome it as a challenge to meet the needs of a nation at war.



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# Army Air and Missile Defense Transformation

From Vision to Reality: A Dynamic Work In Progress

By Maj. Gen. Michael A. Vane and Col. Daniel R. Kirby



A Sentinel radar provides early warning at  
the national training center.



**Air and Missile Defense (AMD)**  
Transformation will change today's single purpose, stove-piped weapon systems and Soldiers to multipurpose, multi-mission and multifunctional AMD capabilities and Soldiers.

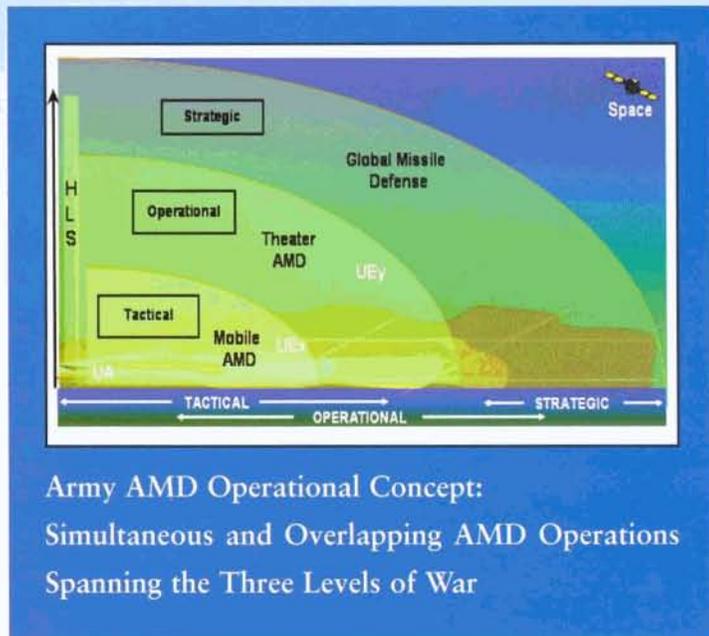


Army Air and Missile Defense (AMD) Transformation is both a journey and a destination. This journey is flanked by opportunity and challenge and will require the best from each of us to reach the destination announced in the AMD Vision just a little over a year ago:

*“Army Air and Missile Defense will provide joint and combined arms warriors with mission-tailored capabilities to dominate, enable and exploit the third dimension battlespace and integrate operational protection in support of Units of Action, Units of Employment and Joint Force Commanders in the Future Operational Environment.”*

All journeys begin with the first steps, and many of the seminal steps have been initiated. The journey has begun. It began last fall with the development of the Army AMD Vision Statement that focused the AMD Operational and Organizational Plan and Concept (O&O). The AMD O&O has been vetted with many senior leaders at all levels and services, receiving unanimous accolades from all as both visionary and necessary. The AMD O&O is nearing completion of worldwide staffing now and shortly will be approved by Headquarters, U.S. Army Training and Doctrine Command. Codified as TRADOC Pamphlet 525-3-01.94, the AMD O&O serves as the blueprint for the destination of our Army AMD Transformation and aligns our transformation to support both Army and Joint Transformation.

AMD Transformation is all about changing from current force single-purpose, stove-piped weapon systems and Soldiers to future force multipurpose, multi-mission and multifunctional Army AMD capabilities and Soldiers nested within an interdependent and joint AMD.



**Army AMD Operational Concept:**  
Simultaneous and Overlapping AMD Operations  
Spanning the Three Levels of War

Essential components of our Army AMD Transformation include responding to lessons learned—ensuring they do not become merely lessons observed and repeated—and conducting Joint AMD experimentation. AMD experimentation has also begun and will continue to be aggressively executed to identify opportunities and challenges to discern the optimum path forward and validate the way ahead. Recent experimentation has been focused on two imperatives: one on fighting the current war on terrorism (countering mortar rounds in flight) and the second on how best to initially tailor the AMD force by developing the Current Force AMD Battalion, a composite formation of Patriot and Avenger capabilities. Army AMD experimentation will continue on an accelerated pace in the coming years.

Another critical component of our Army AMD Transformation is analysis. Our analysis is being



The Medium Extended Air Defense System (MEADS) Combined Aggregate Program will merge Patriot and MEADS missile systems to achieve the MEADS capability early through incremental fielding.

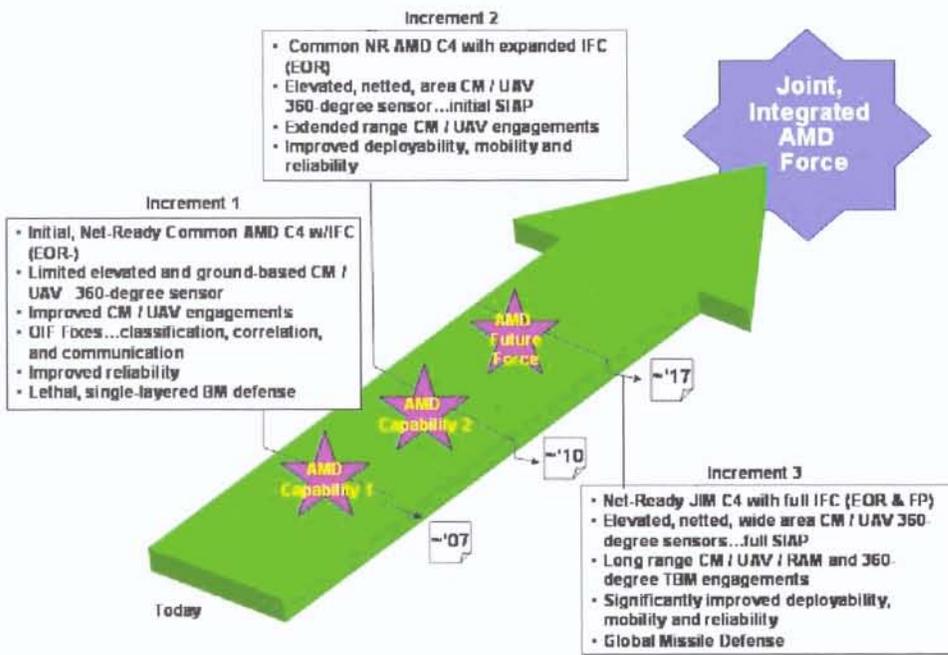
executed in accordance with the Joint Capabilities Integration and Development System (JCIDS) guidance. This process is different from past, service-centric analyses and actively involves inputs from joint participants up front. It follows a rigorous process that includes a Functional Area Analysis (FAA) that defines the tasks, conditions and standards required of Joint AMD, a Functional Needs Analysis (FNA) that defines the capability gaps contrasted against the tasks documented in the FAA, and a Functional Solutions Analysis (FSA) that identifies potential solutions across Doctrine, Organizations, Training, Materiel, Leader Development and Education, Personnel, and Facilities (DOTMLPF) domains to close those gaps documented in the FNA. These analyses, expected to be completed in early calendar year 2005, will provide the basis for documenting the essential capabilities to be developed for our future Army and Joint AMD formations.

Army AMD for the future force will be pursued in a “systems of systems” context, concomitant with the development of Joint AMD system of systems capabilities. Systems of systems allows warfighters to rapidly tailor requisite AMD capabilities into an organizational formation or task force to accomplish the AMD mission required by the operational prerequisites of Mission, Enemy, Troops, Terrain, Time and Civilian Considerations (METT-TC). Already approved and

ongoing capabilities developments will also contribute to Joint AMD systems of systems. These capabilities developments include the Surface-Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM), which is the first element of the Enhanced Area Air Defense System (EAADS); the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor (JLENS); and Patriot Advanced Capabilities-3 (PAC-3) Medium Extended Air Defense System (MEADS) Combined Aggregate Program (CAP). The objective of the Combined Aggregate Program is to merge Patriot and MEADS missile systems to achieve the MEADS capability through early incremental fielding of MEADS major end items.

Also included are Missile Defense Agency capabilities such as the Ground-Based Mid-Course Defense (GMD) and Terminal High Altitude Area Defense (THAAD) systems. The first GMD interceptors have been installed in missile silos at Fort Greeley, Alaska, and the system, which is designed to protect the continental United States against limited long-range missile attacks, may soon be declared operational on an emergency basis. On July 15, 2004, the THAAD system, designed to intercept incoming missiles at much greater altitudes and longer ranges than Patriot, successfully completed a System Flight Certification test of its Divert and Attitude Control System. THAAD flight tests are scheduled to resume later this year.

## SORC-Based, AMD SoS Capability Increments



Increment Two will be fielded on or about 2010 and builds the framework above the foundation established with the first increment. It adds greater capabilities and ensures the integration of the common Army AMD architecture into a common Joint AMD architecture. Finally, Increment Three completes the structure and architecture, acquiring the fully matured capabilities to defeat all aerial threats envisioned for the 21st century, including ballistic missiles, cruise missiles, unmanned aerial vehicles, rockets, artillery and mortars as well as commandeered aircraft.

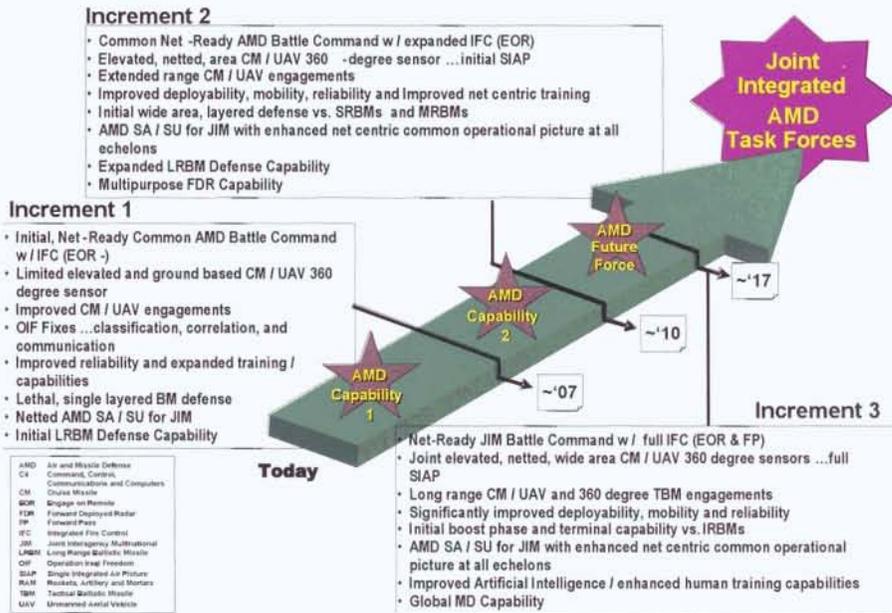
However, these capabilities, conceived initially as separate capabilities and thus separate programs, will be developed into an integrated program in three increments of capability. To ensure the right quantity of capability for the nation, these incremental capabilities will be fielded in formations determined essential in support of the current Department of Defense force-sizing construct known as 1-4-2-1: 1 – defending our Homeland, 4 – deterring potential adversaries in four forward areas; 2 – defeating the efforts of two potential adversaries in these forward areas, 1- while preserving the option to win decisively in one of these two areas.

As noted earlier, future Army AMD capabilities will be *born joint* as a result of the JCIDS and other joint concepts and processes, and developed in at least three increments of capability over time, dependent upon operational need, technical maturity, fiscal realities and other factors. Army AMD will be developed while “living within our means,” with both the personnel and equipment our available resources can procure, field, train and sustain ready for operations. Increment One will be fielded on or about 2007 and sets the foundation for Army AMD systems of systems, providing advanced capabilities while beginning the development of a common Army AMD Battle Command System with an Integrated Fire Control (IFC) Command, Control, Communications and Computers (C<sup>4</sup>) architecture.

The Program Executive Office Air Space and Missile Defense is moving out rapidly to align our weapons-centric systems to meet this Systems of Systems approach. It has already identified a management element for integrated fire control and is putting other management changes into place. The objective end-state is a capabilities-based system of AMD sensors, shooters and C<sup>2</sup> elements as opposed to our current weapon programs.

Army AMD Transformation is well underway and each AMD Soldier has an important role to play in ensuring its success. Framed by the concepts outlined in the AMD O&O, it will rapidly and definitively transform the current Army AMD force into a relevant, capable Joint AMD force necessary to fight and win in the future operational environment. It transforms Army AMD from today’s service-centric and independent AMD to a Joint, Interagency and Multinational (JIM) interdependent System of Systems AMD; from today’s static-point AMD to wide-area AMD over 360 degrees using jointly derived IFC; from single-purpose weapons focused on destroying enemy aerial platforms to multipurpose Sensor + C<sup>4</sup> + Shooter capabilities for Units of Action, Units of Employment, Joint Forces, and Homeland Situational Awareness/Understanding, Airspace Management and AMD. Most importantly, it transforms the Army AMD force from limited,

## Army Space and Missile Defense Phased Operational Evolutionary Acquisition Approach

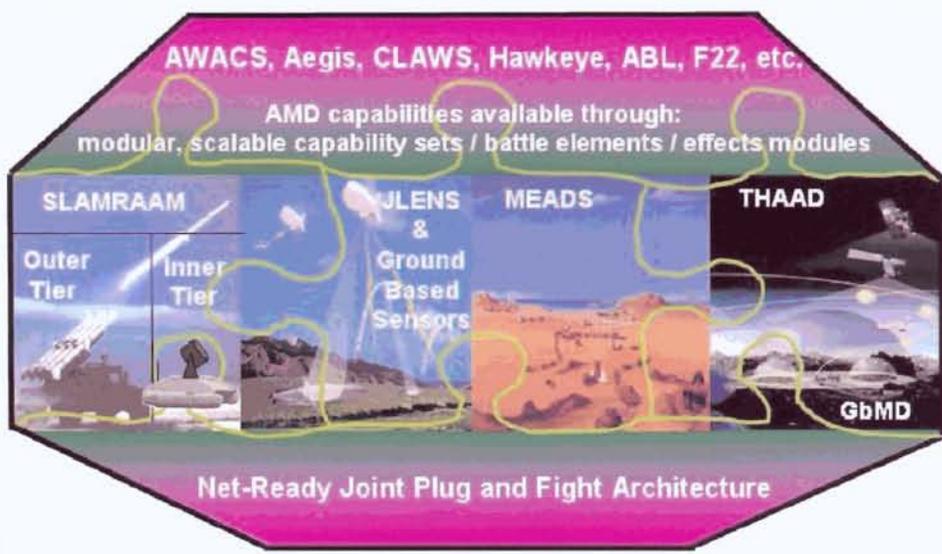


Defense Transformation, enabling the accomplishment of a majority of the operational goals outlined in the Defense Department's Transformation Planning Guidance. Our transformation ensures the success of Joint, Interagency and Multinational forces by enabling them to collectively and interdependently Dominate, Enable and Exploit the third dimension to integrate and contribute to operational Protection across the range of military operations.

single-purpose opportunities to an innovative force with expansive opportunities in support of the JIM force and our nation in a multitude of ways. In short, AMD Transformation and its associated change is an adventure. We live in exciting, dynamic times.

Like all adventures, our AMD Transformation will be marked with many diverse challenges. But we are up to the task, and we will not be distracted or deterred. Our AMD Transformation is an essential part of our nation's

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A Joint AMD Future Force System of Systems lies at the end of the journey to Army Air and Missile Transformation.

# A Tale of Two Branches

## The Emerging Air and Missile Defense Battalion

By Col. Robert L. Jassey and Maj. Jeffrey Simpson



During Operation Iraqi Freedom, Patriot fire units fought independently of maneuver air and missile defense systems, such as Bradley Linebackers and Avengers, but Air and Missile Defense Transformation will merge them into composite Air and Missile Defense Battalions.

Today, the U.S. Army Air Defense Artillery Center, Fort Bliss, Texas, and the Air Defense Artillery branch are in the midst of their largest transformation in nearly 30 years. We are embarked on this transformation because we are supporting an Army at War, because the threat is becoming more sophisticated and asymmetrical, and because we want to ensure that we afford our Joint Forces the very best protection we can provide. General Eric K. Shinseki, then Army chief of staff, said in October 1999 that to “adjust the condition of the Army to better meet the requirements of the next century, we articulate this vision: Soldiers on point for the nation transforming this, the most respected army in the world, into a strategically responsive force that is dominant across the full spectrum of operations.” This was the launching point for Army Transformation and the genesis of the transformation our branch is undertaking today.

In November 2003, ADA branch chief Maj. Gen. Michael A. Vane directed that a series of exercises be conducted to improve the interoperability of our air defense systems and provide the opportunity for all Air and Missile Defense (AMD) forces to experience and learn from the tremendous capabilities of our combat training centers. The lessons from these exercises were many, but the key point was that the branch remained composed of weapon systems that operated independently—in stove-piped fashion—from each other. Currently, Patriot forces and maneuver air and missile defense (MAMD) units can collocate on the battlefield, as they did during Operation Iraq Freedom, but can share very little information with each other. Analysis of Operation Iraqi Freedom lessons learned and the AMD Battle Lab’s work with Army transformation concepts has led us to a momentous conclusion. Our current Patriot and MAMD systems-centric organizations need to become capabilities-based composite AMD battalions that can integrate a variety of Joint and Army sensors and shooters under a common AMD battle command system with integrated fire control. The formation of composite AMD battalions will move us from point defensive systems to wide area defenses. This change will address many of our OIF lessons learned as well as provide the Joint Force modular and scalable organizations with

increased synergistic capabilities that can be tailored to meet specific needs.

Our Operational and Organizational Concept (TRADOC Pamphlet 525-3-01.94 O&O, *U.S. Army AMD Concept and Operational and Organizational (O&O) Plan for the Future Force*), commits us to the creation of a more modular and tailorable force, able to meet the many emerging threats of the future. We cannot remain a “Tale of Two Branches,” in which our Patriot and MAMD forces operate as if the other did not exist. Our Patriot and MAMD forces must interoperate and become modular AMD units to meet the Joint Force requirements of the future.

To complicate matters, our branch is in the middle of supporting Army Transformation through the force structure reductions of our MAMD battalions, both Active and Reserve components, to provide needed skills for the newly created Brigade Combat Teams (BCTs), formerly known as Units of Action (UAs). This shifting of skill sets and capabilities is critical to help our nation meet the demands of today’s threats. However, that does not mean we will settle for less AMD capability. By transforming our doctrine and our formations, and by introducing new material solutions, we can actually become more relevant and better prepared to provide the protection our nation and our military have come to expect from us. Clearly this will be a complicated process that will affect air defenders from a stationing, military occupational speciality (MOS), and training perspective for years to come. However, in the end, we believe our ability to provide AMD, contribute to situational awareness and understanding, contribute to airspace management, and provide force protection will be greatly enhanced. As a result, we are convinced that career and assignment opportunities for our AMD Soldiers will increase rather than decrease.

How will the branch fight in the future? In April 2004, the Army directed that the remaining MAMD forces be pooled at the Unit of Employment-y (UEy) level, which can be described as a mixture of force structure formerly known as corps and theater assets. UEs are forces at either the tactical echelons (UEx), such as divisions and corps, or at the operational echelons (UEy), such as echelons above corps (EAC) and theater.

From there, the concept is to tailor and package these forces to whatever the current threat and mission might require from battery teams protecting a dispersed BCT to large AMD task forces widely dispersed over the battlefield under the command of one of what will grow from two to three Army Air and Missile Defense Commands (AAMDCs). At the heart of all this change is ensuring the lessons from recent operations are incorporated across the domains of Doctrine, Organizations, Training, Materiel, Leader Development and Education, Personnel, and Facilities (DOTMLPF).

From a doctrinal and how-to-fight perspective, this is somewhat of a departure from the traditional MAMD support of divisions and Patriot support of corps and EAC missions. Army AMD has always been inherently joint—we must become more so. We must learn to optimize the numerous Joint and Army sensors on the battlefield and in the skies to ensure we can *See First*. By creating a common *Battle Command* system with integrated *Fire Control* we will integrate all those sensors into one common air picture, enhancing friendly protection and ensuring we *Understand First*. Great situational awareness and understanding, born out of a common *Battle Command* system capable of employing any weapon in our quiver ensures we can *Act First* and *Finish Decisively*. This will enable us to provide AMD task forces capable of providing area protection to an isolated BCT or an entire UEy formation.

Our branch is becoming more modular and we are redesigning our organization to optimize our capabilities and redefine our culture all at the same time. To do this will require great effort across the DOTMLPF. We will cease to be a bifurcated force and develop a new breed of AMD Soldier and leader. This Soldier must be able to operate the complicated architecture of computers and data links necessary to successfully conduct the most complex mission on the battlefield. The new leaders of this force must be able to think in three dimensions of battlespace and be able to proactively and simultaneously counter ballistic missile threats, low flying cruise missiles and other unmanned threats. AMD leaders and Soldiers will be able to distribute fires selecting the most efficient killer of the threat posed at a given time. Sometimes that will be a Patriot missile, sometimes a Surface-Launched

Advanced Medium Range Air-to-Air Missile (SLAMRAAM), or perhaps an Avenger, and in the future, possibly a weapon residing on a ship or being carried by an aircraft. This cultural shift also demands that all AMD Soldiers experience the training afforded by our Combat Training Centers along with the Foundation Forces of the future Army.

How will the AMD Battalions of the future look? Currently the Directorate of Combat Developments (DCD), U.S. Army Air Defense Artillery School, has submitted a Force Design Update (FDU) that articulates the organizational changes we need to make in the near future. Once approved, the FDU drives the establishment of the Tables of Organization and Equipment (TOEs) that form the basis of our formations. This FDU is currently out for worldwide review, and the interim force we will be transforming to is depicted in Figure 1.

We will have nine “pure” Patriot battalions with four batteries and six launchers per battery. Each battalion will have an organic Maintenance Company as well as more personnel to improve the unit’s self protection. There will be one pure Avenger battalion with three batteries of 24 Avengers per battery and a maintenance detachment. Finally, there will be four AMD battalions consisting of four Patriot batteries, one slew-to-cue Avenger battery (to be transformed into a SLAMRAAM battery in the near future); and a Maintenance Company configured to provide services and repairs to all systems in the battalion. The Avengers with slew-to-cue capability will help with force protection and provide a limited capability against cruise missiles until such time as we field SLAMRAAM. Our National Guard formations will be pure Avenger and transform to SLAMRAAM in the future. The organizations will be netted with battle management software to facilitate centralized control of engagement operations, and will integrate the Patriot and Sentinel sensors with other Joint sensors on the battlefield. This will allow the smaller air defense force to provide coverage over a larger area of operations than in the past. This interim step takes maximum advantage of our current Patriot Advanced Capabilities-3 (PAC-3), PAC-2 and Stinger-based forces while posturing us for the future. In the future we will create at least 16 AMD Battalions

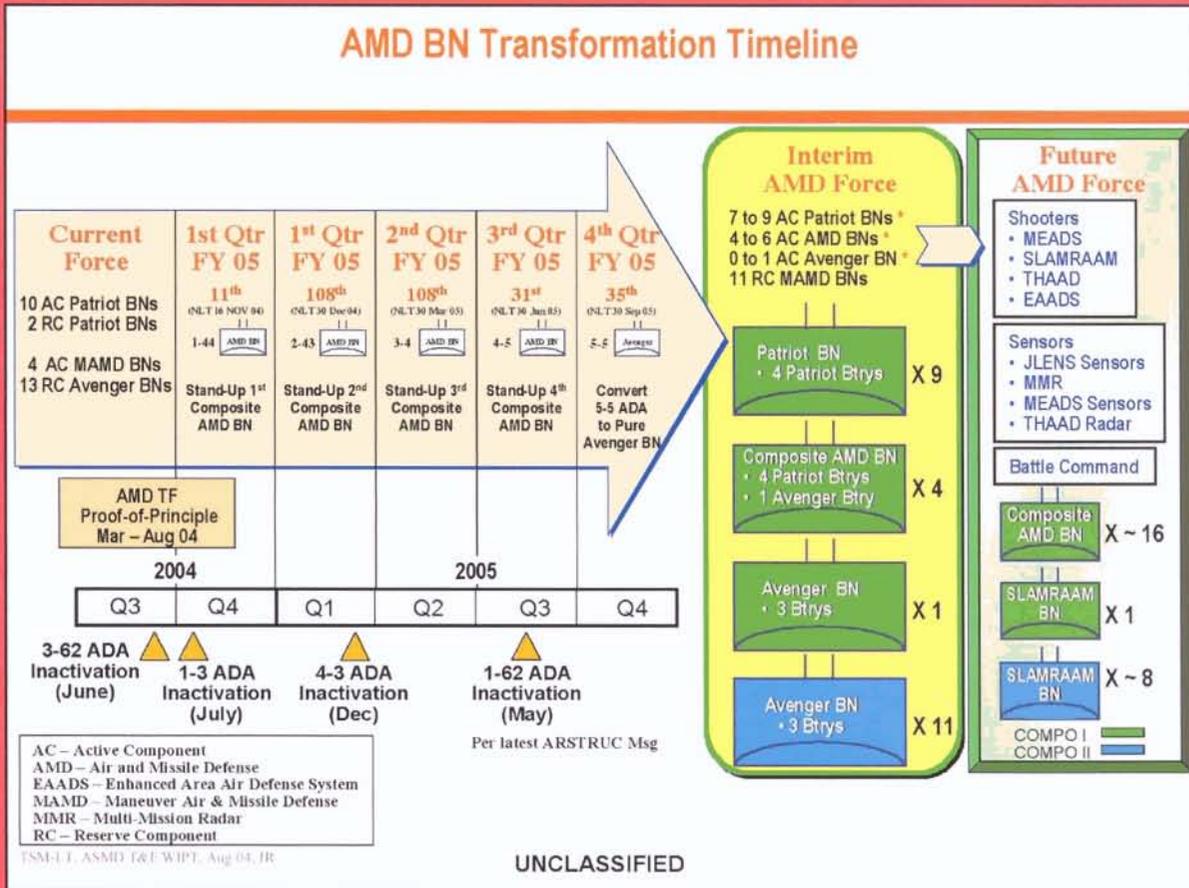


Figure 1. Air and Missile Defense Transformation Timeline

consisting of the Medium Extended Air Defense System (MEADS), Enhanced Area Air Defense System (EAADS), Terminal High-Altitude Area Defense (THAAD) system, and the Joint Land-Attack Cruise Missile Elevated Netted Sensor (JLENS).

AMD battalions and the FDU for our branch transformation will bring increased Patriot capability into the force by increasing the number of Patriot fire units available from 50 to 52. The inherent capabilities of Avenger slew-to-cue against cruise missiles—enhanced through sensor netting using both Patriot and Sentinel radars to expand the traditional MAMD battlespace—and our ability to conduct organic force protection will make us a force multiplier.

In the midst of changing our tactical formations, we are also firmly part of, and embedded in the BCTs the Army is creating. Air Defense Airspace Management (ADAM) Cells and AMD Cells are positioned throughout all UAs, creating significantly greater opportunities for ADA Soldiers and leaders. **The welfare and aspirations of ADA Soldiers and families is at the top of the AMD Transformation priority list.**

What isn't changing is our commitment to the Soldiers and leaders of the branch. We're exploring and redefining career paths, looking at new ways to grow and mature the highly talented and extremely competent officers and Soldiers of our future force. Although change can create great uncertainty and, sometimes, significant stress, in the final analysis, the needs of our Soldiers and families remain at the top of the list as we develop, analyze and execute transformation plans.

Although, as we write this, we would like to be certain of the exact timing of the changes we are making, the reality is we are an Army at War and an Army that is transforming on many fronts. There are many different factors that influence the overall AMD Transformation effort. The branch plan, as articulated in the FDU, is still in Army-wide review and some changes may result because of this. Actual effective dates (E-Dates) are driven by a combination of Headquarters, Department of the Army, direction as well as Forces Command, National Guard, and Combatant Commander input. However, we are working to transform these units over the next fiscal year. Decisions as to who will move where



SLAMRAAM represents a network-centric, System of System approach that helps optimize fire control by leveraging not only internal sensors but netted sensors across the extended battlefield.

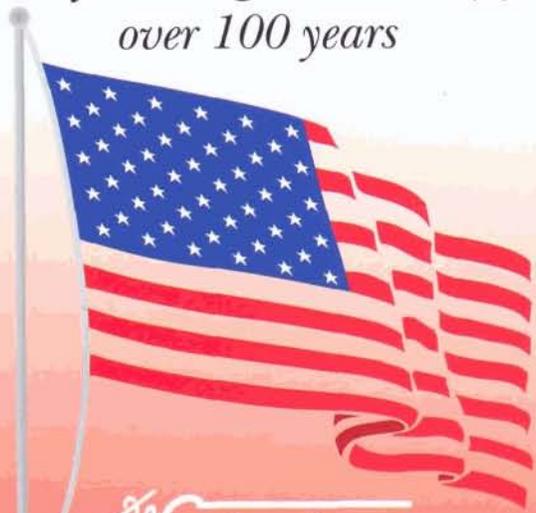
and when are still being worked and will be released at the appropriate time.

The time frame for transformation is also based on our ability to ensure our new formations will be fully combat ready. Today, new software, hardware and doctrine are under development, and they incorporate lessons learned from interoperability exercises that the 108th ADA Brigade, 2-43 ADA, 2-44 ADA and the New Mexico Army National Guard's 1-200 ADA began in November 2003. The 2-43 ADA is currently the proof-of-principle test battalion and has done a fantastic job in successfully integrating our Patriot and MAMD forces. We will continue to experiment with Task Force 2-43 ADA to identify, DOTMLPF gaps and solutions to apply across the force.

Air Defense Artillery, as a branch, is transforming with the rest of the Army to ensure we have a relevant and ready force to meet the needs of our nation and defeat the emerging asymmetric threats that we face today and will continue to confront tomorrow. We are supporting the Army through a force reduction to allow the Army to create new BCTs, and we are supporting modularity by creating innovative new ways to fight with current and future capabilities-based equipment. We are also optimizing our sensors and shooters through a common Battle Command System with integrated fire control. This change incorporates Operation Iraqi Freedom lessons learned and will provide the Joint Force with modular and scalable organizations with increased synergistic capabilities that can be tailored to meet specific needs. By matching these new formations with the tremendous talent of our officers and Soldiers, we will ensure that our nation and Joint Force can continue to enjoy the protection they have become used to, continue to demand and richly deserve.

*Col. Robert L. Jassey is the U.S. Army Training and Doctrine Command (TRADOC) Systems Manager-Lower Tier. Maj. Jeffrey Simpson works on Air and Missile Defense Transformation issues for the TRADOC System Management Office-Lower Tier (TSM-LT). The office is located at Fort Bliss, Texas.*

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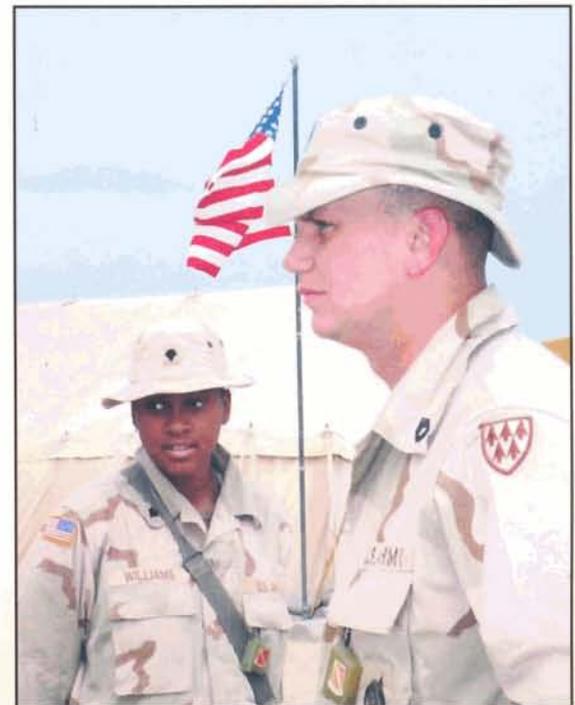
# The U.S. Army Air Defense Artillery Association

The Air Defense Artillery Association is a private, non-profit organization whose mission is to benefit active and retired Air Defense soldiers. The goals of the Association are to support Air Defense Artillery soldiers and retirees, to foster a spirit of unity and esprit de corps among members of the branch and to provide both moral and financial support to the Air Defense Artillery Museum and other programs of the Museums Division.



Visit our website ([firsttofire.com](http://firsttofire.com)) and use our secure Online Membership Form to join the ADA Association.

For more information on the Air Defense Artillery Association, call (915) 568-2711, email us at [fanninge@bliss.army.mil](mailto:fanninge@bliss.army.mil), or write to the ADA Association at P. O. Box 6101, Fort Bliss, Texas 79906.



# Missile Defense



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Upgraded Early Warning Radars  
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Theater High-Altitude Area Defense (THAAD)  
Ground-Based Radar  
Patriot Advanced Capability-3 (PAC-3) Radar  
High Power Discriminator  
Cobra Judy  
Cobra Dane  
Space Based Infrared System (SBIRS) Low

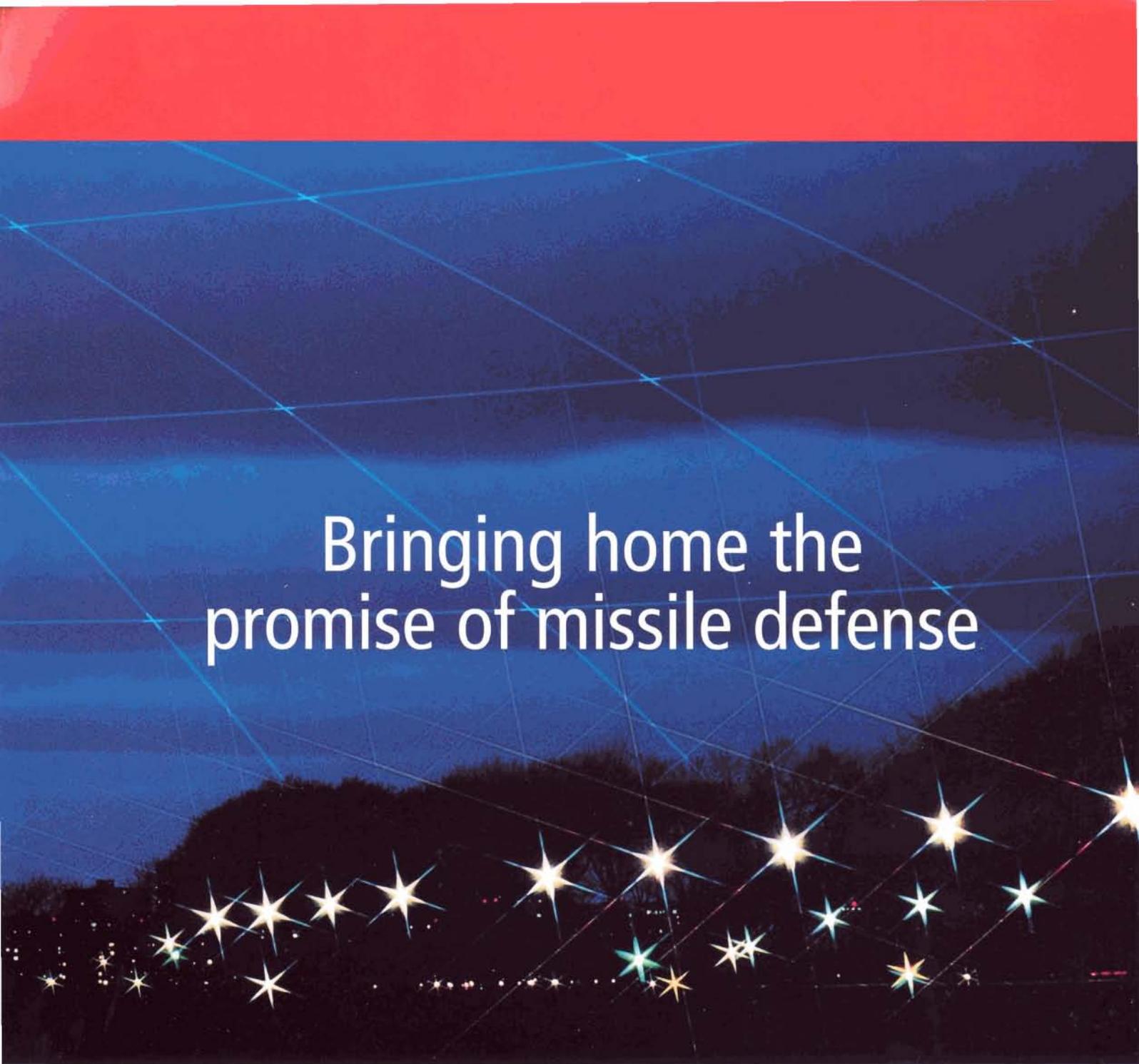
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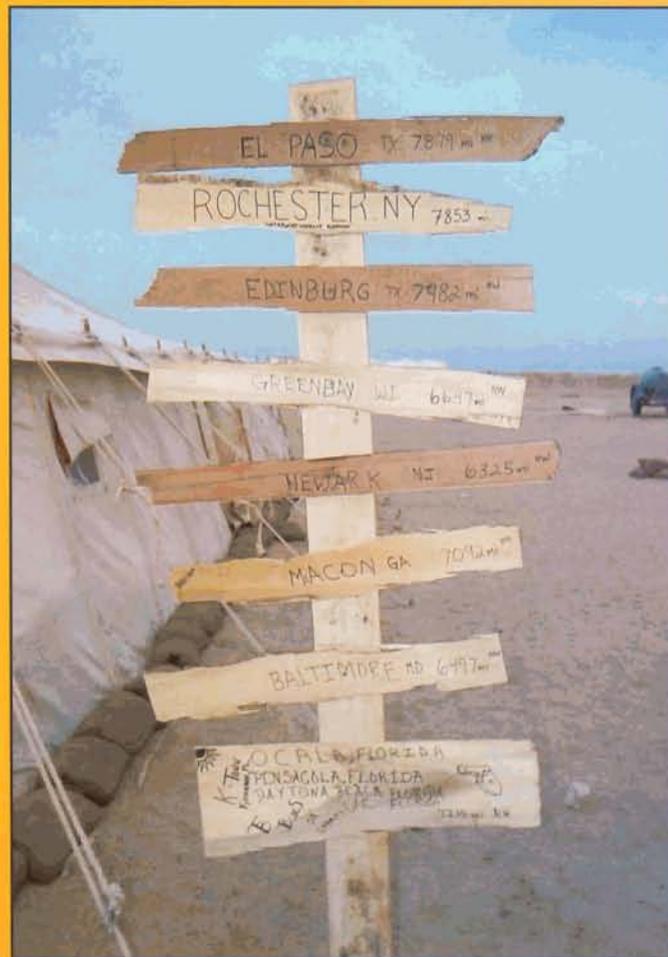
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# AMD Soldier Transformation

## the Way Ahead

by Lt. Col. Dave Bagnati and Major (P) Randy McIntire



In the midst of Army and Air and Missile Defense Transformation, the vast majority of Air Defense Artillery warriors were deployed to play pivotal roles in the Global War on Terror.



Modularity has spawned an increased demand for MOS 140A warrant officers and MOS 14J Soldiers.

**T**ransforming our Army and Air Defense Artillery while fighting the Global War on Terror (GWOT) has had a profound impact on our officers, Soldiers and their families. At a quick glance, it is easy to see how busy we are, not only as an Army, but as a branch that only represents 2.5 percent of the total force. Since the end of the Cold War and in the aftermath of the Sept. 11, 2001, terrorist attacks, the Army has deployed 18 divisions to Kosovo, Bosnia, Afghanistan, and Iraq for combat operations. Other U.S. forces, including ADA task forces, deployed to neighboring countries, including Jordan, Turkey and Israel, to act as powerful deterrents. As we write, more than 300,000 Soldiers are forward-deployed.

As America responded to 9-11, the vast majority of our ADA “warriors” deployed with either divisional units or the Patriot force. They have played a pivotal role in defending this great nation in support of our Army and our joint and coalition partners.

To characterize *where we have been* and *where we are going*—the “Way Ahead”—from a personnel perspective, it is imperative that we keep in mind the entire spectrum of factors that are influencing change in our branch. Of course, the most significant challenge we face is the high operational tempo (OPTEMPO) generated by our continued support of GWOT, the impending move of a Patriot brigade headquarters and battalion to Korea and the effects of transformation on the rest of the force.

As the Army continues to transform, so will Air Defense Artillery. Maneuver units formerly known as brigade, division and corps will develop into modular “plug and play” organizations capable of conducting joint and expeditionary operations.

These warfighting elements are now referred to as Stryker Brigade Combat Teams (SBCTs), Brigade Combat Team Units of Action (UAs), and Division Units of Employment (UEs).

Although all of the divisional ADA battalions will be eliminated from the division force structure, we will gain robust Air Defense Airspace Management (ADAM) Cells to support the warfighter at each echelon. These new billets provide an alternative to what has traditionally been viewed as branch qualification positions. In addition, this change has not only created new assignment opportunities and rewarding challenges for our officers and Soldiers, it has also generated growth at every grade (corporal through colonel) with the exception of lieutenant. Modularity also has spawned an increased demand for MOS 140A (Command and Control System Technician) warrant officers and MOS 14J (Air Defense Command, Control, Communications, Computers and Intelligence Tactical Operations Center Enhanced Operator/Maintainers) Soldiers. The demand for these skills currently exceeds the available inventory at certain ranks. At present, the future requirement for 140As is predicted to grow 103 authorizations while the future requirement for 14J is projected to increase another 221 NCO authorizations.

Future transformation includes merging Patriot, Avenger and Sentinel systems into composite Air and Missile Defense battalions to support Division UEx and BCT UAs operations. Units of Employment-y [UEy] level are a mixture of force structure formerly known as corps and theater assets. UEs are forces at either the tactical echelons [UEx], such as divisions and corps, or at the operational echelons (UEy) such as echelons above corps (EAC) and theater. This construct will provide officers and Soldiers with challenging troop leading assignments and continued opportunities to



The Air and Missile Defense Transformation will eliminate Bradley Linebackers but ADA Avengers and Sentinel radars will merge, along with Patriot fire units, into composite Air and Missile Defense battalions.

hone technical and tactical skills on a variety of ADA “shooters and sensors.” The Patriot force structure, by and large, will remain unchanged to meet an increased commitment to the Korean Peninsula.

As the Bradley Linebacker is phased out of the inventory, select officers, NCOs and Soldiers may either branch transfer or reclassify to assist the Army in meeting GWOT timelines and modularity requirements. This also serves to benefit Soldiers wanting to continue life on a track weapon system.

The most important message sent as a result of modularity is simple: the demand for those skills that ADA officers and Soldiers bring to the fight is a direct reflection of the confidence and respect that our combat arms counterparts place in us. **The demand for those skills that ADA officers and Soldiers bring to the fight is a direct reflection of the confidence and respect that our combat arms counterparts place in us.**

Providing yet more positive news is the Army’s rebalancing initiative to convert Reserve Component (RC) to Active Component (AC) positions, the development of an additional Army Air and Missile Defense Command (AAMDC) in the Pacific Command (PACOM) Theater, and the presidential decree establishing the Ground-Based Mid-Course Defense Brigade in Colorado Springs, Co. Consequently, the AC structure for our 14 series company and senior grade officers and NCOs will increase. We are a Joint-oriented branch and a joint oriented Army. Air Defense Artillery works with all services and is the epitome of the Joint Expeditionary mindset. As a result of our transformation efforts we will be more efficient and lethal on the battlefield, and we will be able to destroy the threat head-on while supporting the joint warfighters with a highly capable Air and Missile Defense force that is ready for any mission, any place, any time.

As most can imagine, the challenges associated with personnel management while the Army continues transition from a peacetime force to an Army at War are immense. A committed review of all personnel procedures and policies is ongoing to ensure relevant support to the warfighter. The personnel management focus has shifted from a traditional focus on individual needs to a mission first “unit/warrior-centric” mentality. Although professional development timelines, assignment preference and branch qualification are important, building and preparing units for combat take precedence. To ensure our continued success, developing Soldiers with the right skills and experience is imperative to building the combat “bench” for our Army.

To this end, this is great news for Air Defense Artillery and the military men and women who are committed to serving in the branch. Increased demand will drive future accessions and promotion and will keep us “Relevant and Ready” to defeat any future 3-D adversary.

*Lt. Col. Dave Bagnati and Maj. (P) Randy McIntire both work at Human Resources Command in Alexandria, Va. They serve as the Branch Chiefs for Air Defense Officers and Air Defense Enlisted assignments respectively.*

# Team Bliss & Army Transformation

## Changing the Way We Live and Train at Fort Bliss

By Col. Bryon E. Greenwald  
& Col. Kendal W. Cunningham





During an after-action review, Officer Basic Course students discuss what went right and what they could have improved during training exercises.

To support the Army Chief of Staff's intent to re-examine and challenge basic institutional assumptions, organizational structures, paradigms, policies and procedures, the U.S. Army Air Defense Artillery School—also known as the Air and Missile Defense (AMD) Schoolhouse—and Fort Bliss have undertaken numerous transformation initiatives. The goal of these transformation initiatives is to ensure that the AMD Force remains relevant to the Joint, Interagency, and Multinational Force and is ready to support our national interests at home and abroad.

The most critical link in the AMD transformation process was changing procedures in the DOTMLPF (Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities). A series of coordinated changes occurred across the DOTMLPF domains in an effort to advance relevancy and arrive at capabilities required to deter and defeat adversaries. Additionally, the AMD leaders met with the Navy and Air Force to discuss Operation Iraqi Freedom lessons learned and developed a strategy to tackle materiel, doctrine and training shortfalls.

The training programs at the AMD Schoolhouse have also undergone transformation to reflect the current asymmetrical and highly adaptive battlespace environment. To support the Army Chief of Staff's emphasis, the Fort Bliss AMD Schoolhouse now stresses that AMD Soldiers are warriors first and air defenders second. Hence, the 6th ADA Brigade established the Advanced Individual Training Warrior Field Training Exercise to hone warrior skills and incorporate the Army "Warrior Ethos" into all aspects of the training base. Advanced Individual Training Soldiers now receive increased training on the 40 Individual Warrior Core Tasks and the nine Warrior Collective Tasks in a contemporary operating environment, to include .50-caliber machine gun and boresighting instructions for the Avenger M3P machine gun in support of Operation Iraqi Freedom.

The AMD Schoolhouse has also created new functional courses for advanced training. Some of the new AMD training programs include the Patriot Master Gunner, Avenger Master Gunner Program and Top Gun



Sgt. 1st Class Steve Burnley, Officer Basic Course platoon sergeant, demonstrates how easily an improvised explosive device can be run over in the road.

programs. These programs focus on developing highly technical and tactically proficient AMD Soldiers. The new Joint Theater Air Missile Defense course, sponsored by the Theater Air and Missile Defense Organization, began in July 2004 and is designed to promote interoperability with all services. AMD leaders are also working to integrate Patriot and follow-on AMD systems into combat training centers to increase the AMD Soldier's familiarity with a joint battle environment.

Air defense leader development has also been transformed to adapt to the changing operational environment. AMD leaders now focus on training junior officers to function using a Joint and Expeditionary mindset. The Officer Education System introduced captains to Joint operations in the Captain's Career Course and Officer Education System programs of instruction now include Operation Iraqi Freedom lessons learned and feedback from deployed AMD and non-AMD units. Beginning in January 2005, Captain's Career Course students can also enroll in the master's of art degree in leadership program offered jointly by the University of Texas at El Paso and Team Bliss for which they receive credit for Captain's Career Course completion.

National Training Center and Joint Readiness Training Center observer/controllers assisted in the development of the Officer Basic Course Situational Training Exercise. Their experience and skill was used to incorporate warfighting tasks and lessons learned from Operation Iraqi Freedom and previous National Training System rotations. Combined training events

that included the Officer Basic Course and Advanced Noncommissioned Officer Course students focused on developing a better understanding of the roles and responsibilities of the platoon leader and the platoon sergeant, including mentoring, physical training, and military decision making process. The Officer Basic Course Field Training Exercise has also been revised to incorporate more Warrior Tasks and realism, including scenarios involving improvised explosive devices, rocket-propelled grenades and civilians on the battlefield.

The Noncommissioned Officer Education System (NCOES) has undergone similar transformation. All NCOES programs of instruction have been reviewed to remove Cold War training and focus on transformational training relevant to the current and future force. National Training Center and Joint Readiness Training Center OCs brief the NCOES courses on combat training center trends and lessons learned in Operation Iraqi Freedom and Operation Enduring Freedom. Their focus during situational training exercises includes route reconnaissance, convoy live-fire, involving improvised explosive devices, and reconnaissance, selection, and occupation of position. NCOES students are also given additional instruction on rifle marksmanship to improve their ability to teach and coach basic rifle marksmanship in the units.

Along with transforming procedures, training programs and leadership development, the AMD leadership has taken on an even greater challenge, restructuring the branch. The AMD leadership is



Fort Bliss CONUS Replacement Center Soldiers wait while their equipment is loaded on the aircraft taking them to Iraq.

currently working to shape and transform the ADA unit structure to create a modular, capabilities based unit design. The current concept is 16 AMD capabilities-based composite battalions designed to support Joint operations. The new composite AMD battalions would be capable of providing modular units capable of performing all AMD missions, including 3D situational awareness and situational understanding, airspace management, and force protection.

To retain its campaign qualities and still develop a Joint and Expeditionary mindset, the branch has also partnered with the U.S. Marine Corps to develop requirements for the Army's Surface-Launched, Advanced Medium-Range Air-to-Air Missile (SLAMRAAM) and the Marine Corps' Complementary Low Altitude Weapon System (CLAWS.) Both programs use High-Mobility, Multipurpose, Wheeled Vehicles as launch platforms for Advanced Medium-Range Air to Air Missiles.

The AMD branch has made great strides in transforming its communication network to leverage and enable interdependent network-centric warfare. Currently ADA leads the U.S. Army Training and Doctrine Command (TRADOC's) AMD Army Airspace Command and Control (A<sup>2</sup>C<sup>2</sup>) integration of the Future Combat System equipment in the Unit of Action and is a major player in developing the network fire trajectory clearance concept.

In order to explain the Army's intent for the future of AMD, the Strategic Planning Office developed and managed Strategic Command's (STRATCOM's) activities across the Fort Bliss installation. In

conjunction with the Fort Bliss Public Affairs Office, the Air Defense Artillery School's Strategic Planning Office told the Army's story so that the Army's relevance and direction were clearly understood and supported by the troops at Fort Bliss. The Strategic Planning Office also developed 10 themes with accompanying messages to market the branch and Fort Bliss to ensure future stability.

To parallel the Army's transition, the AMD leadership has made a great effort to transform Air Defense Artillery into a more fluid and adaptive organization. Procedures, training programs, leadership development and unit restructuring have all been transformed to meet the intent of "warriors first, air defenders second." These changes will positively shape the AMD branch of the future as a highly adaptable and interoperable force.

### Transformation at Fort Bliss

As the Army transforms so too does Fort Bliss. Under the guidance of Col. Bryon Greenwald, the garrison commander, Team Bliss has developed five easily identifiable strategic goals to focus planning and action: Power Projection, Infrastructure, Environment, Smart Business Practices and Well-Being. These five goals provide a target for leadership to identify and qualify initiatives. Every action within the 3,000-employee strong garrison relates to one of these five goals. If a job, function or idea does not support one of these strategic goals, it is eliminated. Nothing should allow us to break focus on our objective to make Fort Bliss a great place to serve and El Paso a great place to live.



Left, Soldiers of the 974th Quartermaster Company from Amarillo, Texas, return to Biggs Army Air Field after a tour of duty in Iraq. Right, Hundreds of estatic family and friends wave banners and flags while troops from the 974th form up on Biggs Army Airfield.

## Power Projection

Long recognized as a power-projection platform, Fort Bliss leads the Army in setting the standard for deployment and mobilization missions. Since March 2003, over 30,000 Active, Guard and Reserve Soldiers, as well as numerous civilians, contractors, and members of the other services, have deployed through Fort Bliss. Supporting Operation Iraqi Freedom, Garrison Command operates both a Fifth Army Continental United States (CONUS) Unit Mobilization Station and a Defense Department CONUS Replacement Center for individual non-unit replacement operations. With the able support of the 5035th Garrison Support Unit (U.S. Army Reserves) out of El Paso, Fort Bliss houses, feeds, maintains, trains and prepares National Guard and Reserve units for Operation Iraqi Freedom and Operation Enduring Freedom. This effort has transformed Biggs Army Airfield as well as McGregor and Dona Ana base camps into forward operating bases complete with an “in-country” look and feel, from concertina wire and sandbags to “Iraqi” villages and civilian role players on the battlefield. Equally critical to supporting Operation Iraqi Freedom is the operation of the CONUS Replacement Center. Operated by the 360th Adjutant General (AG) Battalion (U.S. Army Reserve)

out of Myrtle Beach, S.C., it is the nation’s only CONUS Replacement Center for individual replacement personnel deploying to Southwest Asia. With a capacity of 350 individuals per week, the Replacement Center has deployed over 15,000 Soldiers, sailors, airmen, Marines, Department of the Army and Defense Department civilians, and contractors since March 2003.

Fort Bliss is the largest maneuver post in the Army (1.1 million acres). At nearly twice the size of the National Training Center and over five times the size of Fort Hood, Texas, the immensity of the post is not only valuable as a training area, but also allows space for the operation of two award-winning deployment facilities: the Silas Copeland Air Deployment Facility, and the Robert Auger Rail Deployment Facility.

Located just a mile from unit motor pools on Biggs Army Airfield, the Copeland Air Deployment Facility sits at the end of the Army’s longest runway (13,572 feet). The Air Deployment Facility is day and night capable, with three air ramps, stadium lighting, and ample portable lighting. Combined with the runway and adjacent ramps, the airfield can accommodate 64 C-5s in a 24-hour period. The Rail Deployment Facility, which opened in November 2003, can process 320 railcars in 24 hours. Day or night, tactical vehicles and equipment

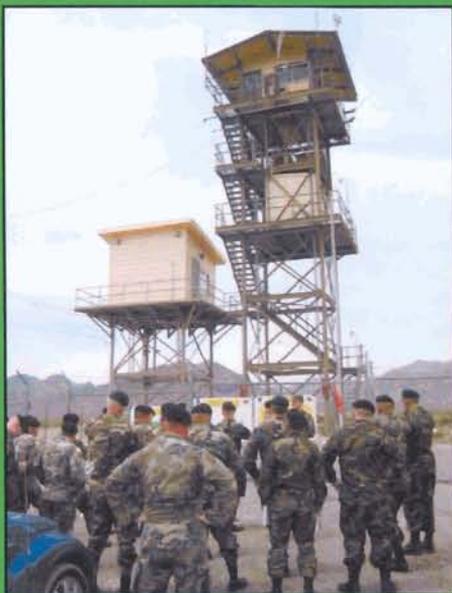
In just one year the U.S. Army Combined Arms Support Battalion, working with the Directorate of the Environment, has expanded Fort Bliss training areas by 294 percent.



are able to move from the unit motor pool, to the joint inspection area, and on to the railhead without interference from the civilian traffic, ensuring a faster, smoother deployment. The Fort Bliss deployment team was put to the test during Operation Iraqi Freedom when, in addition to deploying the vast majority of the Patriot force, it also deployed Task Force Viper (1-7 ADA) by air and rail (38 aircraft and 100 railcars) in less 96 hours. For this effort, Fort Bliss won second place as an installation in the Army's 2003 Deployment Excellence awards.

### Infrastructure

For power projection to succeed, there needs to be a flexible interaction between the skills provided by our Soldiers and capability provided by the facilities. As a large part of improving installation infrastructure to support the current and future force, the Directorate of Public Works and Logistics has been busy improving the living and working conditions on Fort Bliss. They spent over \$10M this year on billets renovations, which included replacing notorious "swamp coolers" with refrigerated air conditioning, removing carpet, installing



At left, visiting staff, commanders and sergeants major are briefed at the McGregor Forward Operations Base. At right, Sgt. 1st Class Delbert Taylor covers E Battery's medics as they move a "wounded" Soldier to a secure area during 5-52 ADA's convoy live-fire training at Doña Ana Range.

tile, repairing pipes and plumbing and refinishing rooms and common areas. No progress is more apparent, however, than in the tremendous modernization and restoration of Fort Bliss ranges. In just one year the U.S. Army Combined Arms Support Battalion, working with the Directorate of the Environment, has expanded the usable training areas by 294 percent. With some limitations, units now train across the majority of our 1.1 million acres, including atop the remote Otero Mesa. With 64 additional lanes for weapons zeroing and 40 more small-arms lanes for weapons qualification located at both McGregor Range and near Dona Ana, units can live at either base camp and qualify without traveling far.

Three new Global Positioning System-surveyed Land Navigation Courses located in varying terrain now support mounted and dismounted training. Other major changes include renovating accommodations for Phase II of the Basic Officer's Leadership Courses, building four Military Operations on Urbanized Terrain sites complete with live-fire "shoot houses," and improving dramatically the quality and capacity of McGregor and Dona Ana Base Camps (new plumbing, additional latrine buildings, complete interior renovations, satellite TV, new weight equipment, Internet cafés and a refurbished movie theater).

## Environment

With increasing urban encroachment on military bases across the United States, responsible environmental stewardship is absolutely necessary to preserve and expand the use of our impressive training areas. The Directorate of Environment has been instrumental in reducing the amount of waste produced on post by the implementation of several unique programs. One of the most impressive programs is Hazardous Waste Curbside Service, which saves Fort Bliss hundreds of thousands of dollars each year. This program, which incorporates documentation (waste profile, requests for sampling and analysis), pickup and transport of wastes and courtesy inspections, was combined with the Installation's Sustainability Center. In 2003, several processes were added to the Sustainability Center to include: parts

washer solvent distillation and maintenance, antifreeze recycling, oil and fuel filter washing/recycling and drum washing and reuse. Fort Bliss saves approximately \$250,000 a year in the parts-washer solvent distillation process alone. More importantly, this program saves units money and saves commanders and Soldiers time and worry over hazardous waste.

Besides minimizing waste and maintaining compliance with environmental laws, the Directorate of Environment furthers environmental stewardship through its Oil-Water Separator maintenance program. Under contract with Enviremedial Services Inc., the Oil-Water Separator processes up to 100,000 gallons of contaminated water in an eight-hour day and restores unit oil-water separators to working condition. After separating the oil, water, and sediment, the Department of Energy is initiating an innovative new pilot program that uses the clean sediment in adobe paving bricks. Xeriscape landscaping and beautification projects on post may all soon benefit from this revolutionary technology. These projects save units time and money, make life in the motor pool easier for Soldiers and are exemplary in their responsible conduct toward the environment and their ability to promote smart business practices.

## Smart Business Practices

Success in business does not solely depend on economic statistics: strategic professional partnerships are just as important. In one critical strategic partnership, the El Paso Water Utilities, the City of El Paso and Fort Bliss have embarked on a joint endeavor to promote water conservation through the expansion of reclaimed wastewater to Fort Bliss and the construction of a Joint Desalination Facility (JDF). In exchange for land at Biggs AAF on which the City of El Paso will build 25 soccer/physical training fields for use by Soldiers and El Paso civilians, the city and EL Paso Water Utilities will distribute reclaimed water to Fort Bliss. Through the strategic use of reclaimed water, Fort Bliss will be able to provide and maintain lush grassy areas for its parade fields, physical training fields and public recreation areas, while saving fresh water. In



Photo by Spc. Michael Garret

## All eyes on the ball

Children enjoy a game of soccer as part of the Youth Services Center summer sports program. Soccer is one of many activities offered throughout the year on Fort Bliss.

January 2005, El Paso Water Utilities will begin construction of the largest inland desalination plant in the world. This plant, built on Fort Bliss property and using both our brackish and sweet water, will produce an average of 27.5 million gallons per day and extend the availability of water to all El Pasoans through smart water management.

Saving money on electrical power is another smart business practice at Fort Bliss. We not only operate our own turbine generator that saves the post over \$2 million a year, but we are working with a private developer to harness the winds that whip through our training areas to produce low-cost electricity to homes and offices on Fort Bliss. In a very recent example of partnership, Texas Governor Rick Perry designated \$16.2 million toward the funding of an elevated interchange from main post to Biggs Army Airfield. Designed to support the stationing of the 4th Brigade Combat Team (Unit of Action), 1st Cavalry Division, at Biggs Army Airfield, this interchange will improve the flow of traffic between Fort Bliss and Biggs Army Airfield and reduce congestion on Fred Wilson Road, the road that bisects the two sides of the post.

## Well-Being

Better housing and an improved standard of community living is critical to Soldier and family well-being. Another exciting military partnership with the private sector involves the creation of a higher standard for military housing. The Residential Communities Initiative, or RCI, is a 50-year Army family housing construction and privatization partnership between the military and commercial housing developers. To combat

the generally dilapidated state of family housing, Fort Bliss has combined forces with GMH Military Housing, which will provide private sector expertise and over \$300 million in operating capital. In return, Fort Bliss will provide the developer with a long-term lease on the property, and Soldiers will rent the housing units using their Basic Allowance for Housing. In its current configuration, the project will demolish and rebuild 1,739 homes, while renovating another 1,013 new or historic homes over the next six to seven years.

Transformation and change are not strictly limited to physical structures. Physical fitness at Fort Bliss is undergoing dramatic change to provide Soldiers and civilians with new personal fitness opportunities and



photo by Master Sgt. Steve Miller

Chapin High School's first graduates, many of them children of Fort Bliss Soldiers, receive congratulations from El Paso Independent School District officials.



During his August 2004 visit to Fort Bliss, Secretary of Defense Donald Rumsfeld met El Paso civic leaders. Rumsfeld also spoke with Fort Bliss Soldiers, thanking them for helping with the war against terrorism.

more accurate measures of progress. While Soldiers are engaging in combativeness training and the new Army physical fitness regimen, multicolored PT Run Route Signs can now be seen around post, designating specific and accurate distances. A Civilian Fitness Program has also been established for Defense Department civilians interested in increasing their level of physical fitness. These participants undergo a complete a complete fitness assessment and evaluation to include flexibility, body composition, cardio-respiratory and absolute and dynamic strength. Physical fitness specialists trained at the Cooper Institute in Dallas, Texas, teach all these classes. Response to this program has been highly positive. Other programs made available to Soldiers and family members include aerobics, yoga and fitness kickboxing.

Fort Bliss has been the site of many special sporting events, hosting the Ladies Professional Golf Association tour as well as the World Sport Karate Federation/Sun City International Patriot Games. Fort Bliss will also be the site of the 2006 USA Weightlifting National Masters Championship. The future looks bright for varsity athletes, with \$102,000 currently allocated to fund the Varsity Sports Program, and negotiations are in the works between Fort Bliss and the El Paso Independent School District to allow for an additional athletic field at Stout Field with multi-usage.

A myriad of activities will soon be available to Soldiers and their families, including more than \$1 million in golf course and resort-related improvements. Other quality of life initiatives to look forward to include the opening of a Starbucks Coffee Shop, improvements to the bowling alley, a women's-only fitness club and a Blockbuster Video.

Finally, the commanding general and the garrison are working with city officials, business leaders and school superintendents to improve the quality of education in the community. It is our goal to raise SAT scores, reduce failure rates, improve Texas Assessment of Knowledge Skills (TAKS) scores and make schools safer and more effective for our military children. To that end, all three area major school districts (El Paso, Ysleta and Socorro) have pledged assistance with school transitions with the El Paso Independent School District going so far as to hire military spouses to work as transition counselors for military families inbound to Fort Bliss.

There is a lot going on at Fort Bliss. Transformation and change are occurring at every turn. In 6th ADA Brigade and at Garrison Command, Soldiers and civilians are working hard every day to ensure that Fort Bliss is a great place to serve and that El Paso is a great place to live.

*Col. Bryon E. Greenwald is the Fort Bliss garrison commander. Col. Kendal W. Cunningham is commander of the 6th Air Defense Artillery Brigade.*

# TAPS

Air and Missile Defense Soldiers Who Gave Their Lives  
in the Global War on Terror



*(as of September 4, 2004)*

**Spc. Genaro Acosta**

Age: 26 Hometown: Fair Oaks, California  
Unit: 1st Battalion, 44th Air Defense Artillery, 4th Division  
Killed when his Bradley Fighting Vehicle hit and detonated two improvised explosive devices while on patrol in Taji, Iraq, on November 11, 2003

**Spc. Jamaal R. Addison**

Age: 22 Hometown: Roswell, Georgia  
Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade  
Killed in an Iraqi ambush at Nasiriya on March 23, 2003

**Sgt. Edward J. Anguiano**

Age: 24 Hometown: Brownsville, Texas.  
Unit: Sgt. Anguiano was based at Fort Stewart but traveling with the Fort Bliss-based 507th, 11th Air Defense Artillery, which needed an extra mechanic, when it was attacked March 23, at An Nasiriya, Iraq.

**Staff Sgt. Daniel A. Bader**

Age: 28 Hometown: Colorado Springs, Colorado  
Unit: Air Defense Artillery Battery, 1st Squadron, 3rd Armored Cavalry Regiment  
Killed when a CH-47 Chinook helicopter crashed in Fallujah, Iraq, on November 2, 2003

**Lance Cpl. Thomas A. Blair**

Age: 24 Hometown: Broken Arrow, Oklahoma  
Unit: 2nd Low Altitude Air Defense Battalion, Air Control Group 28,  
2nd Marine Aircraft Wing  
Initially listed as missing in action after operations near Nasiriya, Iraq,  
on March 24, 2003; his remains were recovered on March 28, 2003

**Command Sgt. Maj. James D. Blankenbecler**

Age: 40 Hometown: Alexandria, Virginia  
Unit: 1st Battalion, 44th Air Defense Artillery, 4th Infantry Division  
Killed when the convoy he was in was attacked with an improvised explosive device and rocket-propelled grenades in Samarra, Iraq, on October 1, 2003

**Pfc. John E. Brown**

Age: 21 Hometown: Troy, Alabama  
Unit: 2nd Battalion, 44th Air Defense Artillery Regiment,  
101st Airborne Division (Air Assault)  
Killed when a grenade exploded inside his Humvee in Iraq on April 14, 2003

**Spc. Shawn M. Davies**

Age: 22 Hometown: Aliquippa, Pennsylvania  
Unit: C Battery, 4th Battalion, 5th Air Defense Artillery, 1st Cavalry Division  
Died of a non-combat related illness in Baghdad, Iraq, on July 8, 2004

**1st Sgt. Robert J. Dowdy**

Age: 38 Hometown: Cleveland, Ohio

Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade  
Killed after his convoy was ambushed in An Nasiriya, Iraq, on March 23, 2003

**2nd Lt. Seth J. Dvorin**

Age: 24 Hometown: Pennington, New Jersey

Unit: B Battery, 3rd Battalion, 62nd Air Defense Artillery,  
10th Mountain Division

Killed when an improvised explosive device exploded while he was conducting counter-IED operations along a supply route in Iskandariyah, Iraq, on February 3, 2004

**Pvt. Ruben Estrella-Soto**

Age: 18 Hometown: El Paso, Texas

Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade  
Killed after his convoy was ambushed in An Nasiriya, Iraq, on March 23, 2003

**Spc. Thomas A. Foley III**

Age: 23 Hometown: Dresden, Tennessee

Unit: B Battery, 2nd Battalion, 44th Air Defense Artillery,  
101st Airborne Division (Air Assault)

Killed when a grenade exploded inside his Humvee in Iraq, on April 14, 2003

**Pfc. Howard Johnson II**

Age: 21 Hometown: Mobile, Alabama

Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade,  
Killed in an Iraqi ambush at Nasiriya on March 23, 2003

**Pfc. Markus J. Johnson**

Age: 20 Hometown: Springfield, Massachusetts

Unit: D Battery, 4th Battalion, 3rd Air Defense Artillery,  
1st Infantry Division

Died when his Avenger rolled over in Al Anbar Province, Iraq, on June 1, 2004

**Spc. James M. Kiehl**

Age: 22 Hometown: Comfort, Texas

Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade  
Killed when his convoy was ambushed near Nasiriya on March 23, 2003

**Pfc. James P. Lambert**

Age: 23 Hometown: Hammond, Louisiana

Unit: B Battery, 3rd Battalion, 62nd Air Defense Artillery, 10th Mountain Division  
Killed April 14, 2003, near Baghdad in a grenade explosion that also took the life of  
Pfc. John Brown and injured two other service members

**CWO Johnny Villareal Mata**

Age: 35 Hometown: El Paso, Texas

Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade  
Killed when his convoy was ambushed in Nasiriya, Iraq, on March 23, 2003

**Pfc. Spence A. McNeil**

Age: 19 Hometown: Bennettsville, South Carolina

Unit: B Battery, 3rd Battalion, 43rd Air Defense Artillery,  
11th Air Defense Artillery Brigade

Died on March 9, 2003, from injuries sustained when the vehicle he was traveling  
in rolled over near Riyadh, Saudi Arabia on March 3, 2003

**Maj. Ronald D. Milam**

Age: 33 Unit: Former Patriot officer served in the Pentagon  
as military assistant to the Secretary of Army, Manpower and Reserve Affairs

Died Sept. 11, 2001, when high-jacked American Airlines Flight 77 crashed into the Pentagon

**Pfc. Cody J. Orr**

Age: 21 Hometown: Ruskin, Florida

Unit: B Battery, 1st Battalion, 44th Air Defense Artillery

Killed when his Bradley Fighting Vehicle was hit by an improvised explosive device and overturned while  
conducting a surveillance sweep north of Baghdad, Iraq, on January 17, 2004

**Pfc. Daniel R. Parker**

Age: 18 Hometown: Lake Elsinore, California

Unit: B Battery, 2nd Battalion, 44th Air Defense Artillery,  
101st Airborne Division (Air Assault)

Fatally injured when he was thrown from his vehicle after the driver swerved to avoid  
an oncoming vehicle in another lane in Mosul, Iraq on August 12, 2003

**Spc. Brian H. Penisten**

Age: 28 Hometown: Fort Wayne, Indiana

Unit: Air Defense Artillery Battery, 1st Squadron, 3rd Armored Cavalry Regiment  
Killed when a CH-47 Chinook helicopter crashed in Fallujah, Iraq, on November 2, 2003

**Pfc. Lori Piestewa**

Age: 22 Hometown: Tuba City, Arizona

Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade  
Killed when her convoy was ambushed on March 23, 2003, near Nasiriya, Iraq

**Staff Sgt. Andrew R. Pokorny**

Age: 30 Hometown: Naperville, Illinois

Unit: Air Defense Artillery Battery, 3rd Armored Cavalry Regiment  
Killed when his M113 armored personnel carrier threw a track, causing it to roll over  
in Al Asad, Iraq, on June 13, 2003

**Pfc. Richard H. Rosas**

Age: 21 Hometown: Saint Louis, Michigan

Unit: 3rd Battalion, 62nd Air Defense Artillery, 10th Mountain Division  
Killed when an improvised explosive device hit his patrol in Fallujah, Iraq, on May 25, 2004

**Pfc. Brandon Sloan**

Age: 19 Hometown: Bedford, Ohio

Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade  
Killed when his convoy was ambushed at Nasiriya, Iraq, on March 23, 2003

**Pfc. Brandon J. Wadman**

Age: 19 Hometown: Cape Coral, Florida

Unit: 2nd Battalion, 265th Air Defense Artillery, Florida Army National Guard  
Died when his vehicle rolled over in Afghanistan on May 5, 2004

**Sgt. Donald Walters**

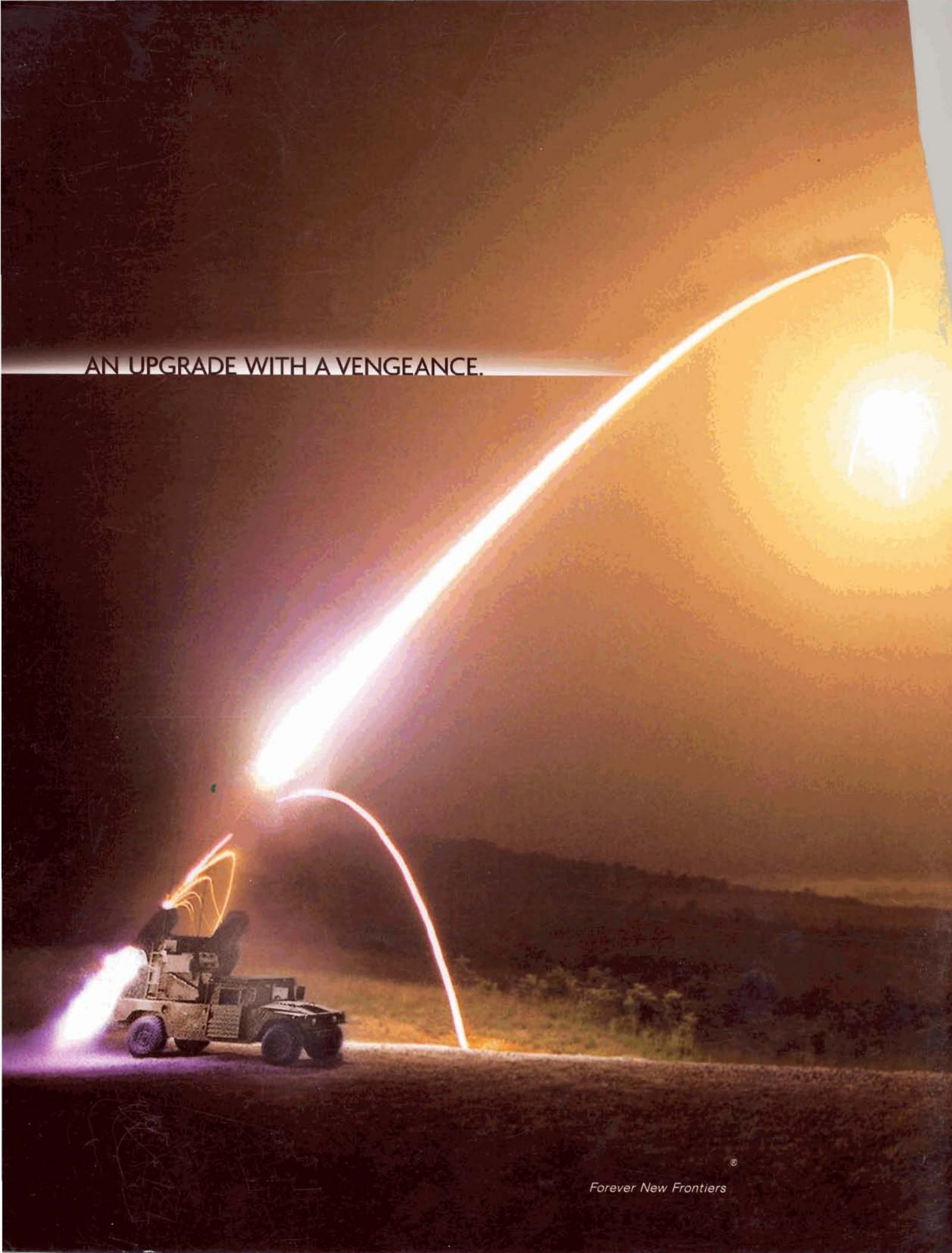
Age: 33 Hometown: Kansas City, Missouri

Unit: 507th Maintenance Company, 11th Air Defense Artillery Brigade

Sgt. Walters was one of eight Soldiers who died when their supply convoy was ambushed at Nasiriya, Iraq, on March 23, 2003. On April 12, 2004, Walters was posthumously awarded the Silver Star for his actions. In May 2004, the U.S. military changed his official status from Killed in Action to Prisoner of War-Murdered after an investigation found that he was captured and later killed by his unknown captors.



Soldiers of the 2nd Battalion, 44th Air Defense Artillery, 101st Airborne Division (Air Assault) conducted a traditional “incountry” memorial service in Iraq for Pfc. John E. Brown and Spc. Thomas A. Foley III.

A night-time photograph of a military vehicle, possibly a Humvee, firing a missile. The missile is in mid-air, leaving a long, bright, curved trail of light that arcs across the dark sky. The vehicle is positioned in the lower-left foreground, with its headlights and a bright light from the missile launch illuminating the scene. The background shows a dark, hilly landscape under a night sky. The overall color palette is dominated by the dark blues and blacks of the night, contrasted with the bright white and yellow-orange of the missile's light trail.

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