

ADA

October-November-December 1997



DUTY IN PARADISE

Snow-capped volcanoes, lava scrub deserts, grassland savanahs and tough, realistic combined-arms field exercises make Hawaii a tropical training paradise

Page
Eight

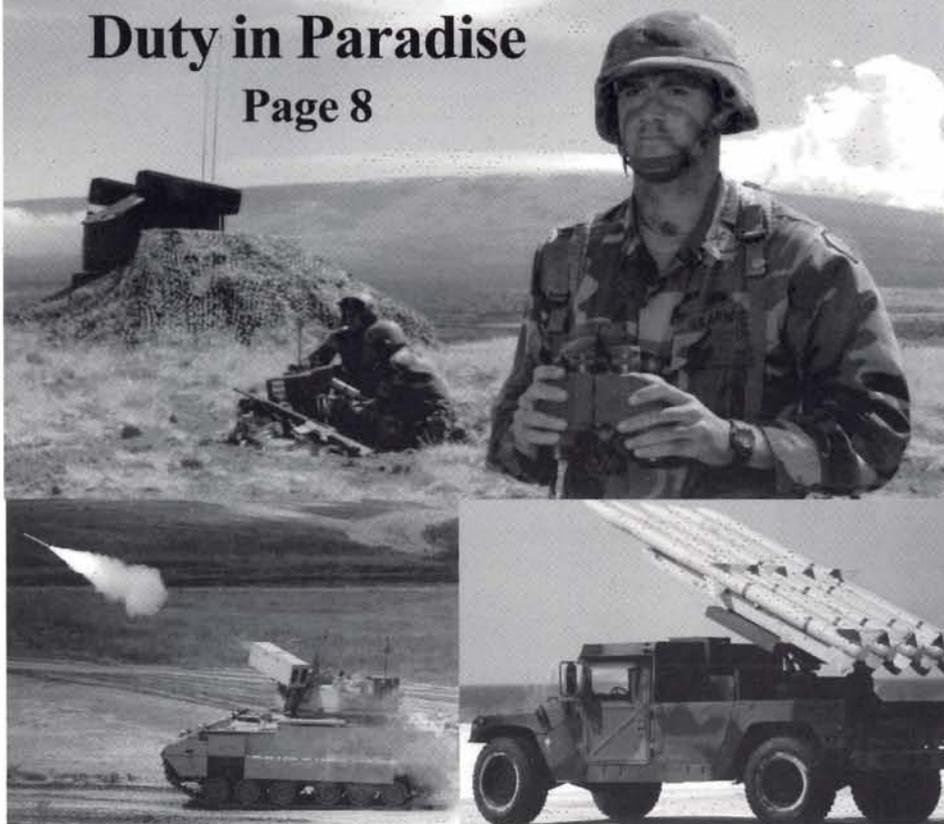
ADA

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Duty in Paradise

Page 8



Linebacker and Appliqué

A Platoon Leader's Testimonial

Page 3

Expanding SHORAD's Engagement Envelope

Page 5

Intercept Point
Page 1

Stripes
Page 2

ADA Association
Page 49

Opinion
Page 47

ADA Digest
Page 51

FEATURES

OPMS XXI
Page 16

Renegade Strike
Page 21

Patriot Games
Page 26

ABCA Standardization Program
Page 34

Operation Hurry Up!
Page 35

Foreign Military Interaction Program
Page 45

Blair Case
Editor

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By order of the Secretary of the Army:
DENIS J. REIMER
General, United States Army
Chief of Staff

Official:

JOEL B. HUDSON

FRONT COVER



Dennis McElveen's photograph shows a 1-62 ADA Stinger team maneuvering during a combined arms exercise on the Island of Hawaii.

Conducting the Task Force XXI Advanced Warfighting Experiment was like panning for gold. When the gravel and debris were washed away, a few bright shining nuggets remained, and the nugget that glittered brightest was the Task Force XXI ADA Battery. The U.S. Army Training and Doctrine Command (TRADOC) charged Task Force XXI, a fully digitized brigade task force, to demonstrate the impact of digital information age capabilities, connectivity and new technologies on all battlefield operating systems within a brigade task force, and their connectivity to all external elements normally associated with a brigade task force in combat operations. The Task Force ADA Battery, which consisted of Alpha Battery, 1st Battalion, 44th Air Defense Artillery,

systems and their “trigger pullers” had enhanced situational awareness and more precise target information.

Our Task Force XXI air defenders shot down 124 of 169 enemy aircraft for a kill percentage of 73 percent. They also set a single mission record by destroying 17 of 18 enemy aircraft. Their performance drew accolades from TRADOC commander General William Hartzog and other high-level Army leaders. The air defenders also earned the respect of the forces they supported and opposing force pilots. Perhaps the most amazing thing about the battery’s achievement, however, is that it almost did not happen.

The road to war that led the battery to its successful demonstration of ADA capabilities in Task Force XXI

INTERCEPT POINT

*by Major General John Costello
Chief, Air Defense Artillery*



and its attachments, leveraged information age technologies, high-tech weapon systems and capabilities of ordinary — that is to say, superb — air defense soldiers to record record-high kills and record-low expenditures.

Task Force XXI rumbled across the National Training Center in April, but the enormous consequences of the crucial advanced warfighting experiment grow more apparent day by day. Air defenders rolled into simulated combat with a battery headquarters element, two Linebacker platoons, one Avenger Slew-to-Cue platoon, one Stinger section, Sentinel radars and a Forward-Area Air Defense Command and Control (FAAD C²) section (plus) that consisted of three FAAD C² nodes.

Highly trained soldiers and the synchronization of four Task Force XXI ADA system initiatives (Sentinel, Avenger Slew-to-Cue, Bradley Linebacker and FAAD C² with the Enhanced Position Location Reporting System) permitted the ADA Battery to reach 21st-century performance levels. Simply put, these ADA systems were tied together with latest technology so they could talk to each other faster and more accurately than ever before possible. The bottom line is that ADA

had to be paved first. TRADOC initially planned Task Force XXI without an organic ADA battalion. This challenged air defenders to demonstrate that organic ADA battalions will be sorely needed on 21st-century battlefields to counter an evolving air threat, including tactical ballistic missiles, cruise missiles and unmanned aerial vehicles, that daily grows more menacing.

Building support for Air Defense Artillery’s inclusion in Task Force XXI was not an easy task in an Army rapidly downsizing. The Air Defense Battle Lab Support Element played a vital role in convincing Force XXI planners that short-range air defense systems will be, if anything, more critical to the division in the 21st century than they are now.

The Support Element evaluates concepts, coordinates testing, conducts new weapon system experiments and advises sensor ADA leaders on courses of action. In 1994, the Task Force XXI concept, then known as Brigade 96, was announced. When the Support Element learned that air defense was not included as part of the Brigade 96 concept, their extensive experimentation with ADA initiatives took on

even greater urgency. The Support Element produced irrefutable evidence that the air threat to the division remains serious and demonstrated that only ADA units can effectively counter the full array of aerial threats certain to be present on 21st-century battlefields. I presented this evidence to a “four-star” force-protection board at TRADOC headquarters, and General Hartzog decided to include Air Defense Artillery in Task Force XXI. At the time, the combat-arm branches had submitted hundreds of initiatives to TRADOC for approval. The Air Defense Battle Lab Support Element

participated fully in the successful campaign to ensure all ADA initiatives made the cut.

Task Force XXI demonstrated that Air Defense Artillery, which has a 50-year head start in digitization, remains the technological vanguard of Task Force XXI. The Task Force XXI ADA Battery exploded 20th-century paradigms and shot down any doubts about Air Defense Artillery’s place on 21st-century battlefields

Major General John Costello commands the U.S. Army Air Defense Artillery Center and Fort Bliss, Texas.

STRIPES

by CSM Wilbur V. Adams Jr.



Command Sergeant Major Jeff Jordan, the great soldier I’ve just replaced as the ADA command sergeant major, referred to his office, which I’ve just taken over, as his headquarters building “foxhole.” However, the view from the third floor of headquarters is a good one. From my window, I see a bright future for Air Defense Artillery and ADA soldiers.

We are rapidly rearming the “First to Fire” branch with new weapon systems designed for the 21st century. But the most important thing the branch has going for it is that we’ve managed to retain superb, highly trained and highly motivated ADA soldiers at every level in every military occupation skill.

ADA soldiers are performing vital missions around the world. Avengers and Bradley Stinger Fighting Vehicles patrol the strife-torn streets of Bosnia and, in South Korea, air defenders face a fancical and numerically superior foe across a few strands of barbed wire. Our Patriot soldiers continue to bear the burden of frequent deployments to Southwest Asia.

Seeing how hard air defense soldiers train and how willingly they accept hardships and endure frequent deployments fills me with pride and optimism. But there’s no doubt that today’s increased operating tempo has taken its toll. However, the emphasis we’ve placed on new weapon systems is about to shift to creating a

better life for ADA soldiers. During the past fiscal year, for example, we managed to acquire special reenlistment bonuses for all our MOSs except 14J. Three ADA military occupation skills are included in the Bonus Extension and Retaining Program, and every ADA MOS, except 14E and 14T, comes with a college fund. Most of our military occupations are recruiting and retaining above Army average.

But we can’t let our guard down. We need to keep our good soldiers in the Army and wearing ADA insignia. Remember that recruits still join the Army in search of a life filled with purpose and direction. This, after all, is what the recruiting poster promise, and that’s what Air Defense Artillery must deliver. This means ADA leaders at every level must make it their mission to indoctrinate our young soldiers in basic Army values—the things that make a soldier special—and prepare them to assume future leadership roles.

If we fail, the Army fails. If we succeed, the Army succeeds. I know that I can count on all of you to help carry the high standards set by ADA NCOs and enlisted soldiers forward into the 21st century.

Command Sergeant Major Wilbur V. Adams Jr. recently replaced retired Command Sergeant Major Jeffery G. Jordan as the U.S. Army Air Defense Artillery School command sergeant major.

Task Force XXI



LINEBACKER AND APPLIQUÉ

A Platoon Leader's Testimonial

by First Lieutenant Michael J. Malpede

National Training Center Rotation 97-06 was the first Bradley Linebacker rotation as well as the culminating event of the Task Force XXI Advanced Warfighting Experiment. Going into the rotation, the soldiers of the 1st Platoon (Bradley Linebacker), Alpha Battery, 1st Battalion, 44th Air Defense Artillery, 4th Infantry Division, knew their performance would significantly affect, for better or worse, the future of divisional air defense. Many force structure decisions that will affect divisional air defense battalions in Army 2010 are still to be made, but at the end of the rotation, we knew one thing for certain: we had combined the capabilities of the Bradley Linebacker and the Appliqué computer to kill more aircraft than had ever been destroyed in any previous National Training Center rotation.

As Task Force 1-23 Infantry advanced toward the enemy, its leaders were at first completely unaware that

hostile F-16s were circling more than 30 kilometers away. However, each Bradley Linebacker crew tracked the enemy aircraft as they continued to circle. The Bradley Linebackers made their first confirmed kills as the hostile aircraft made their first pass. The second air attack produced identical results. Two hours into the battle, the Bradley Linebackers engaged their first Mi-26s. With the battle barely underway, the Bradley Linebacker had already proven itself, and for the rest of the rotation, it was an asset feared by opposing force pilots.

As the advanced warfighting experiment continued, the Bradley Linebacker crews began to feel the pinch of around-the-clock operations. It was difficult for us to implement sleep plans due to the continuous operations and the heavy task force's continuous movement. Face-to-face interaction between platoon leaders and squad leaders became almost nonexistent. This is where the

Task Force XXI

Appliqué proved itself as the primary command and control tool for Task Force XXI leaders. The somewhat bulky computer is mounted on the floor between the Bradley Linebacker gunner and commander. It gives the commander enhanced situation awareness by displaying the location of every vehicle on the battlefield.

The Appliqué allowed me, as a platoon leader, to digitally send out orders, graphics and free-text messages to my fire units. When squad leaders could not come to my location to receive an operation order, I sent them copies over the Appliqué. The Appliqué allowed me the unprecedented advantage of actually "seeing" my fire units on the battlefield and their positions in relation to every other task force vehicle on the battlefield. This allowed me to quickly adjust air defense coverage by simply glancing at the icons on the display.

The Appliqué also improved the logistical fight. It cut missile resupply in half since it gave the platoon sergeant a 10-digit grid location for each fire unit. He just followed his computer icon on the display screen until his icon reached the fire unit's icon. This also cut casualty evacuation time in half. Once the order to move was given, the Appliqué allowed us to almost immediately link up with company teams, day or night.

The computer's sending and receiving range is currently limited to the range of the Single Channel, Ground and Air Radio System-Improved Product; however, once the Enhanced Position Location Reporting System is installed, the Appliqué will quickly become the air

defender's best friend. In short, the Appliqué greatly enhances air defense planing and employment.

On today's fast moving and ever-changing battlefield, the Bradley Linebacker and the Appliqué are a lethal force, a combination that allows air defense commanders to quickly adjust to changing situations and keep up with the battle. The Bradley Linebacker dramatically our ability to take the fight forward. Its shoot-on-the-move capability and its elimination of the need to dismount Stinger teams means that air defense units are farther forward and at 100-percent coverage at all times. The simplified handheld terminal unit gives the Bradley Linebacker commander and the task force near real-time information on the location of enemy aircraft out to 40 kilometers. The system's slew-to-cue capability allows the Bradley Linebacker gunner to slew directly onto known targets and visually identify them outside the maximum engagement range, allowing him time to make the right decision. These capabilities are enhanced by the situational awareness that the Appliqué provides. These two systems will allow us to kill aircraft more effectively and keep short-range air defense alive well into the 21st century.

First Lieutenant Michael J. Malpede is 1st Platoon Leader, Alpha Battery, 1st Battalion, 44th Air Defense Artillery, 4th Infantry Division, Fort Hood, Texas.



Captain Chris Colombo, Sergeant First Class Dennis Eimer, First Lieutenant Mike Malpede and Staff Sergeant Kevin Hartsfield pose for photographers at the end of the Task Force XXI Advanced Warfighting Experiment.

ADA BATTLE LAB



The experimental Division Air Defense Launcher employs a Multi-Functional Optical System that may eliminate positive visual identification requirements imposed by current doctrine and permit short-range air defense systems to engage targets at maximum range.

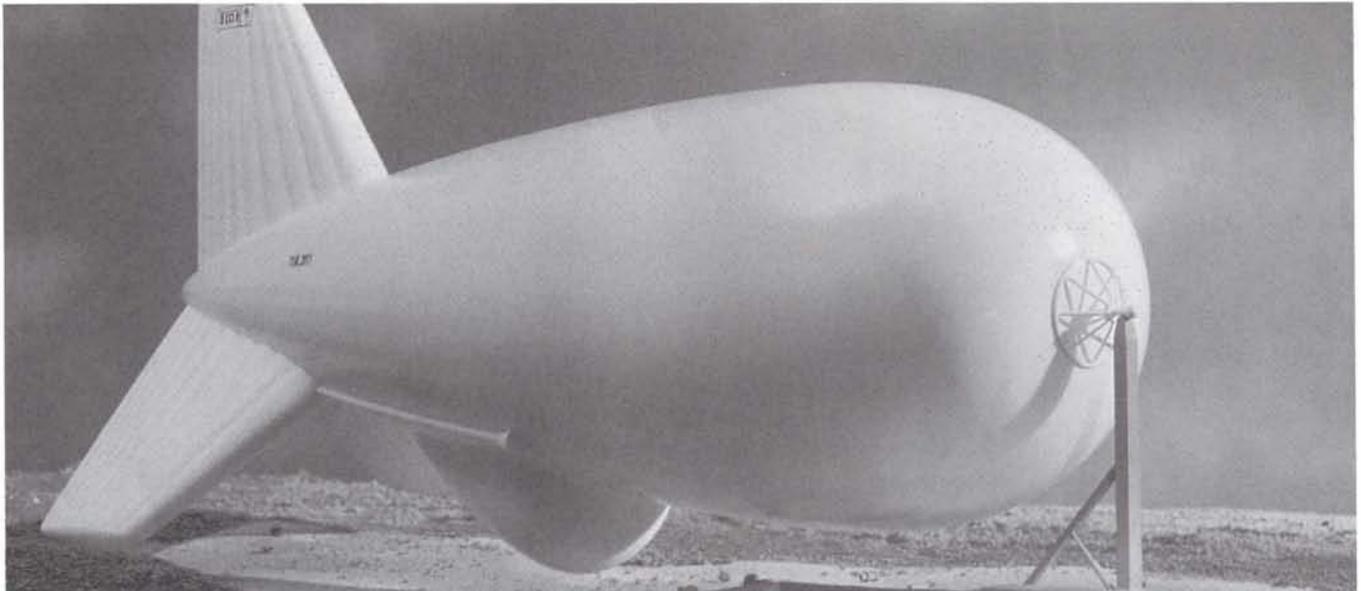
Expanding SHORAD'S Engagement Envelope

by Captain Sean Kushner

An air defense soldier peers off into the distance, scanning just above the horizon. The fate of the 1-173's "Delta Dogs" depends upon this 19-year-old's skill and determination. Charged with providing aerial flank security for Delta Company, the soldier strives to ensure that no one targets or shoots at our ground forces from the air. Eventually, he receives a track report over the Forward Area Air Defense Command and Control (FAAD C³) network. As he slews his Avenger turret to the cue, he strains even harder to catch a glimpse of the target.

Suddenly, he sees it: a faint glint near the crest of a hill 10 kilometers away. Is this the intended target? He waits and watches. The glint gets closer. At eight kilometers, he can make out wings. At six kilometers, he can tell it's a manned aircraft. Is it hostile? Now at four kilometers, he is sure he is tracking a Su-25 Frogfoot as it approaches Delta's flank.

His heart pounding wildly, the soldier quickly launches his Stinger missile. Too late! The Frogfoot launches its air-to-ground missiles, destroying several of Delta's



Air defenders hope to demonstrate that the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System, above, can transmit over-the-horizon target data through FAAD C² systems, right, to short-range air defense units.



tanks. If only the Avenger soldier had been able to engage the target a little sooner!

Short-range air defense (SHORAD) units train to engage aircraft that are fast, inbound and attacking friendly positions. Despite their weapons' capability to hit enemy air targets several kilometers before they are in visual range, SHORAD soldiers must make a positive visual identification of hostile air targets before firing. The identification criteria established in Joint Chiefs of Staff Publication 3-56.23 that has allowed high- to medium-altitude air defense (HIMAD) systems to engage targets without visual identification is the same criteria that governs the control of SHORAD weapons. However, in the past, SHORAD has lacked the capability to apply all of the existing hostile criteria and, by default, has been restricted to only the visual identification criterion. Hence, this inability to use external identification is the limiting factor that prevents SHORAD weapon from engaging targets at maximum range.

With technological advancements in the development of fixed-wing and rotary-wing aircraft, cruise missiles (CMs) and unmanned aerial vehicles (UAVs), the cost of not engaging these targets at maximum range will be paid for with lives. But there's a solution. Air Defense Artillery has fielded technologies that vastly improve the identification process; it's up to us to demonstrate that the technologies work. To that end, the Air Defense Battle Lab Support Element, in early December, will conduct an experiment (Live-Fire Experiment II) designed to provide the proof of principle

required for external identification engagements. Additionally, this experiment will look at technologies with the potential to increase air and missile defense coverage for the division.

Live-Fire Experiment II has four major objectives. First, the Multi-Functional Optical System (MFOS) testbed prototype will demonstrate its ability to detect, track and classify evolving threats, including CMs and the UAVs, we expect to encounter in the close battle area. This will show the maturity of existing electro-optical technologies to meet the SHORAD combat identification requirements and, potentially, supplement the Sentinel. Second, the Air Defense Battle Lab Support Element will examine how SHORAD fire units will use current and near-future technologies such as the Forward Area Air Defense Command and Control (FAAD C²) system, the Sentinel radar, the Divisional Air Defense Launcher (being developed by the U.S.

Army Aviation and Missile Command (AMCOM) Research, Development and Engineering Center) and the Joint Land Attack Cruise Missile Elevated Netted Sensor System (JLENS), an aerial sensor, formerly called the Aerostat, that is designed to engage air targets beyond visual identification range in accordance with current joint doctrine.

Simply put, increased capabilities in target identification mean that SHORAD units could apply existing doctrinal hostile criteria used by HIMAD units to engage targets. This examination will also test the correlation of target information obtained by the fire unit and the target information broadcast over the FAAD C² network. Third, the Air Defense Battle Lab Support Element will demonstrate how the Army can incorporate and connect a low-cost, large balloon-like aerial sensor, the JLENS, through FAAD C² to SHORAD fire units. This connectivity demonstration will lead us to more robust experimentation of overhead sensors at later dates. The experiment will culminate with a live-fire presentation to determine if the Divisional Air Defense Launcher, cued by a Sentinel through the FAAD C² network, can conduct an extended-range engagement.

The MFOS optical cameras (visible and infrared) can detect and track unresolved targets. With the latest active and passive electro-optical sensors, MFOS will provide combat identification to enable SHORAD soldiers to commit their weapons beyond visual identification range. If the imaging cameras cannot classify targets, MFOS will measure vibration signatures to classify targets. The Army can integrate the MFOS with any of the Sentinel, Avenger, and Bradley Linebacker units using the FAAD C² application.

New technology often creates a need to assess how we apply doctrine to weapon systems. Past SHORAD weapon improvements include the integration of sensor data, missile seeker improvements and improved optical systems to counter small infrared signatures. But none of these improvements changed the SHORAD paradigm that engagements are withheld until the target is visually identified. Success in the Live Fire Experiment II in December might mean the SHORAD units could apply hostile engagement criteria that in the past have only been used by HIMAD units. In other words, improved technologies will allow SHORAD units to identify and, therefore, engage targets beyond visual identification range. This will revolutionize SHORAD's capabilities to extend force protection.

The JLENS's primary role is to expand the battlefield commander's ability to defeat enemy UAVs and CMs. CMs and UAVs capabilities have increased along with their worldwide availability, greatly stressing

existing detection systems. Current surfaced-based defensive systems countering low flying CMs are limited to line-of-sight engagement. From the JLENS advantage point, the horizon extends vastly and gives the battlefield commander the ability to support broad area defense against CMs and UAVs. The system's other significant mission will be to provide a target information link for air defense systems and relay mid-course guidance commands to the missile. The JLENS could provide the Army a dedicated aerial platform that can furnish much of the information now available only from the Air Force's multimillion-dollar Airborne Warning and Control Systems at a small fraction of the cost. The Divisional Air Defense Launcher uses the Humvee as a platform and the Advanced Medium Range Air-to-Air Missile (AMRAAM) as its weapon system. The AMRAAM has an extended range capability and an active seeker. With cueing from the Sentinel radar through the FAAD C² network, the Divisional Air Defense Launcher could remove previous engagement limitations and extend the region of influence of a weapon system over great distances.

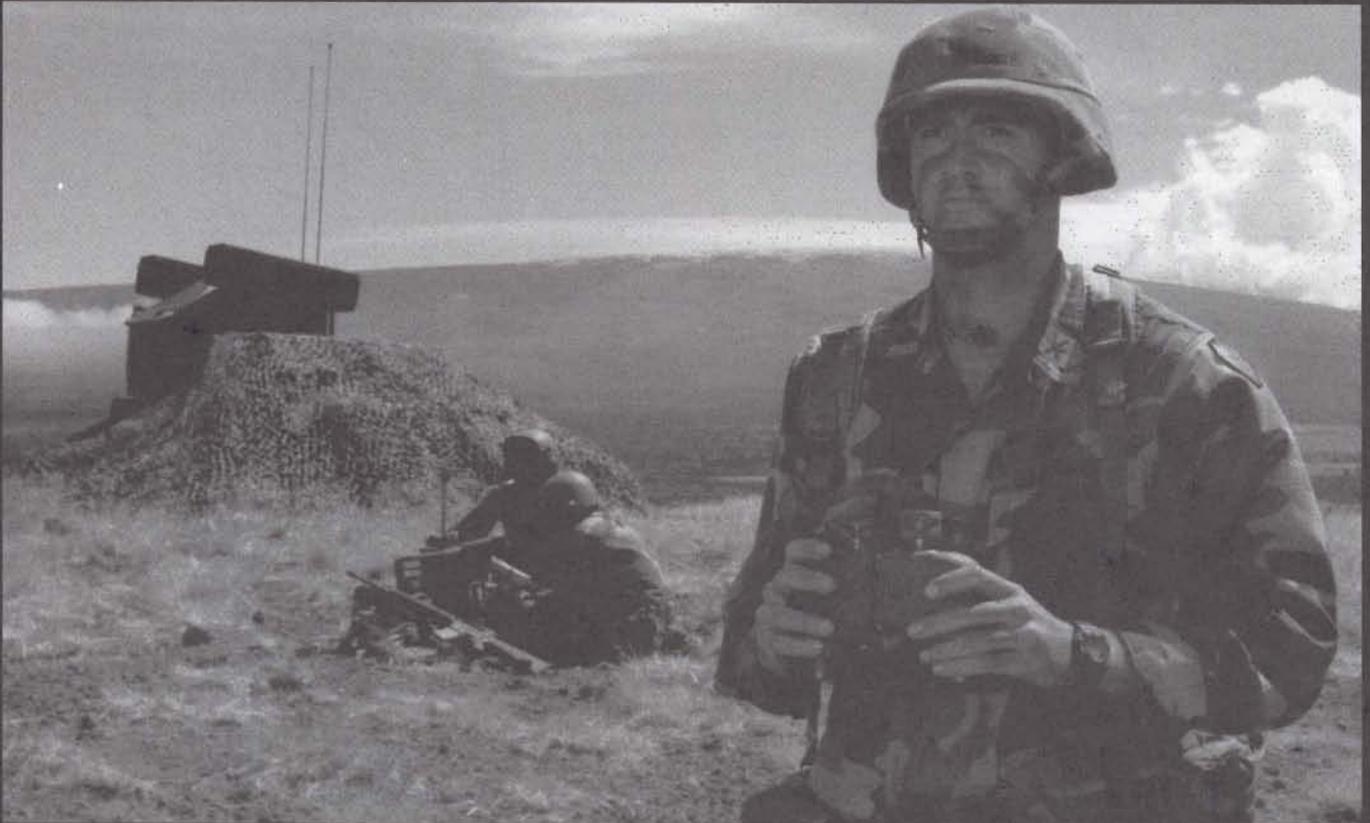
Expected Live Fire Experiment II payoffs include: the capability of electro-optical sensors to detect, track and classify evolving close battle area threats; software and hardware enhancements to FAAD C²; SHORAD fire units permitted to engage beyond visual identification range; a proof of principle for JLENS information feeds to SHORAD fire units; and insights into the Divisional Air Defense Launcher's capability to conduct an extended range, line-of-sight engagement. The Support Element plans to use the experiment's results to revolutionize SHORAD engagements and enhance force protection in the close battle area. A major SHORAD improvement is available now at low risk and low cost. Correlating fire unit information with "told-in" identification from FAAD C² will allow SHORAD systems to exploit their full-range capabilities.

Remember that soldier defending Delta Company's flank? Suppose now FAAD C² tells him a hostile target is inbound. He pushes the slew-to-cue button, rotating his turret to the precise azimuth and elevation. A computer automatically correlates information from his laser range finder with FAAD C² data to ensure that he has the proper track. Suddenly, he sees the faint glint near the crest of the hill. He gets missile tone and lets his Stinger fly. The ensuing eruption of a fireball six kilometers away acknowledges a successful engagement. The Delta Dogs can continue their mission with greater force protection.

Captain Sean Kushner is assigned to the Air Defense Battle Lab Support Element, Fort Bliss, Texas.

DUTY IN PARADISE

NO MORE SAME OLD STUFF



*by Major Martin C. Smith
Photos by Dennis McElveen*

Soldiers never complain about duty in paradise, at least not while lying on the beach observing yet another fantastic Pacific sunset. However, 25th Infantry Division and 1st Battalion, 62nd Air Defense Artillery, soldiers never forget why they are deployed in the middle of the grand Pacific Ocean. Near the beaches of Waikiki and warships at their Pearl Harbor berths, Schofield Barracks is surrounded by tropical beauty—palm trees, world-class beaches, crashing surf—and some of the toughest, most physically challenging training areas on the face of the earth. Their mission is to be ready—today, tomorrow and every day—to fight America’s wars.



The 25th Infantry Division (Light) has a primary mission of rapidly reinforcing U.S. Forces in Korea should North Korean forces take the fatal step of crossing the 38th parallel. Additionally, the division is prepared to deploy on contingency missions worldwide as a lethal yet stealthy element of the country's strategic forces. Factually, the division accomplishes the later mission every day. Routinely, the division and its air defense forces are deployed to more than 30 nations across the Atlantic and Pacific in support of our friends and allies. Accomplishing this task requires superb junior leaders and soldiers with the skill and the will to fight under the most austere conditions. Fighting takes place at the lowest levels, usually out of sight of battalion, company and battery commanders.

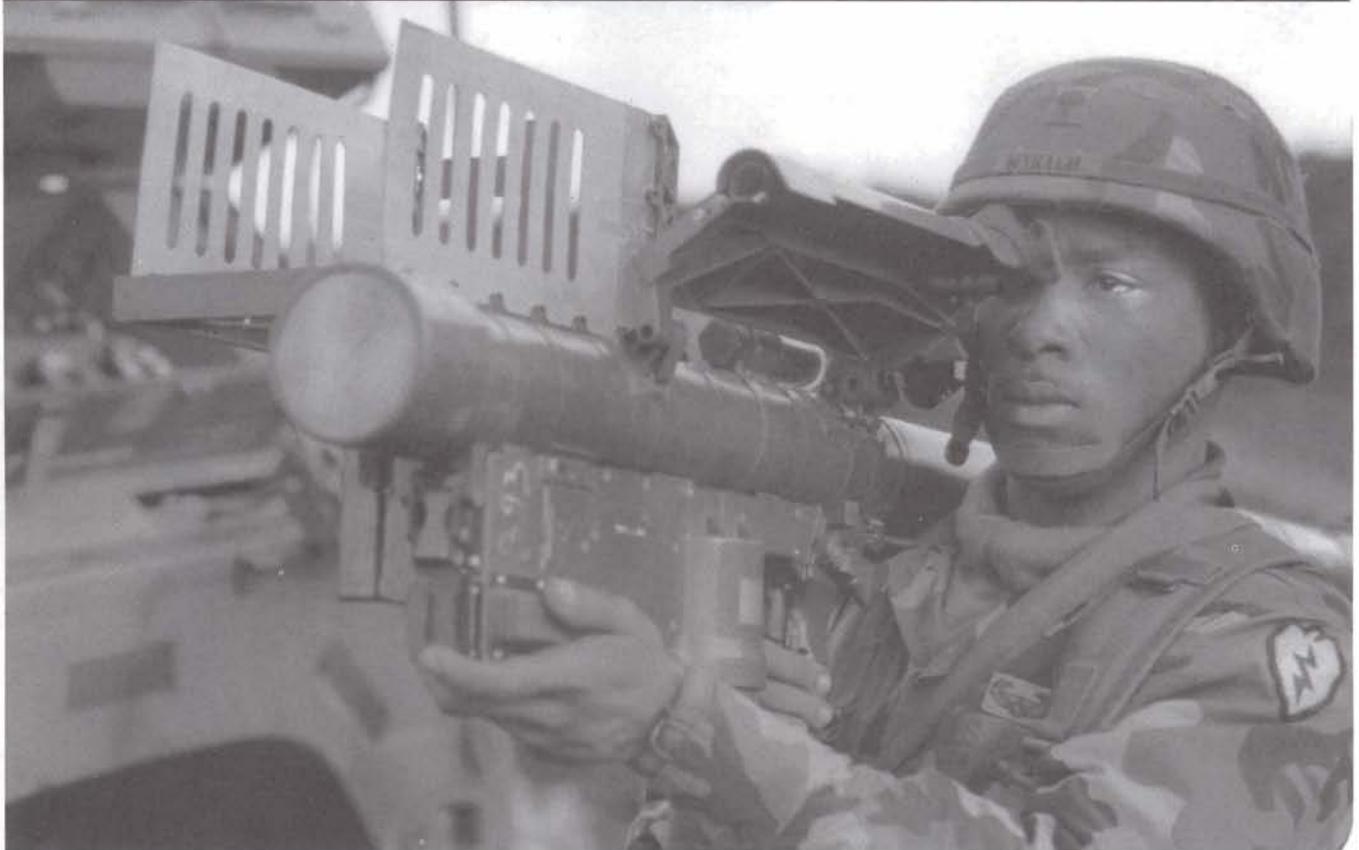
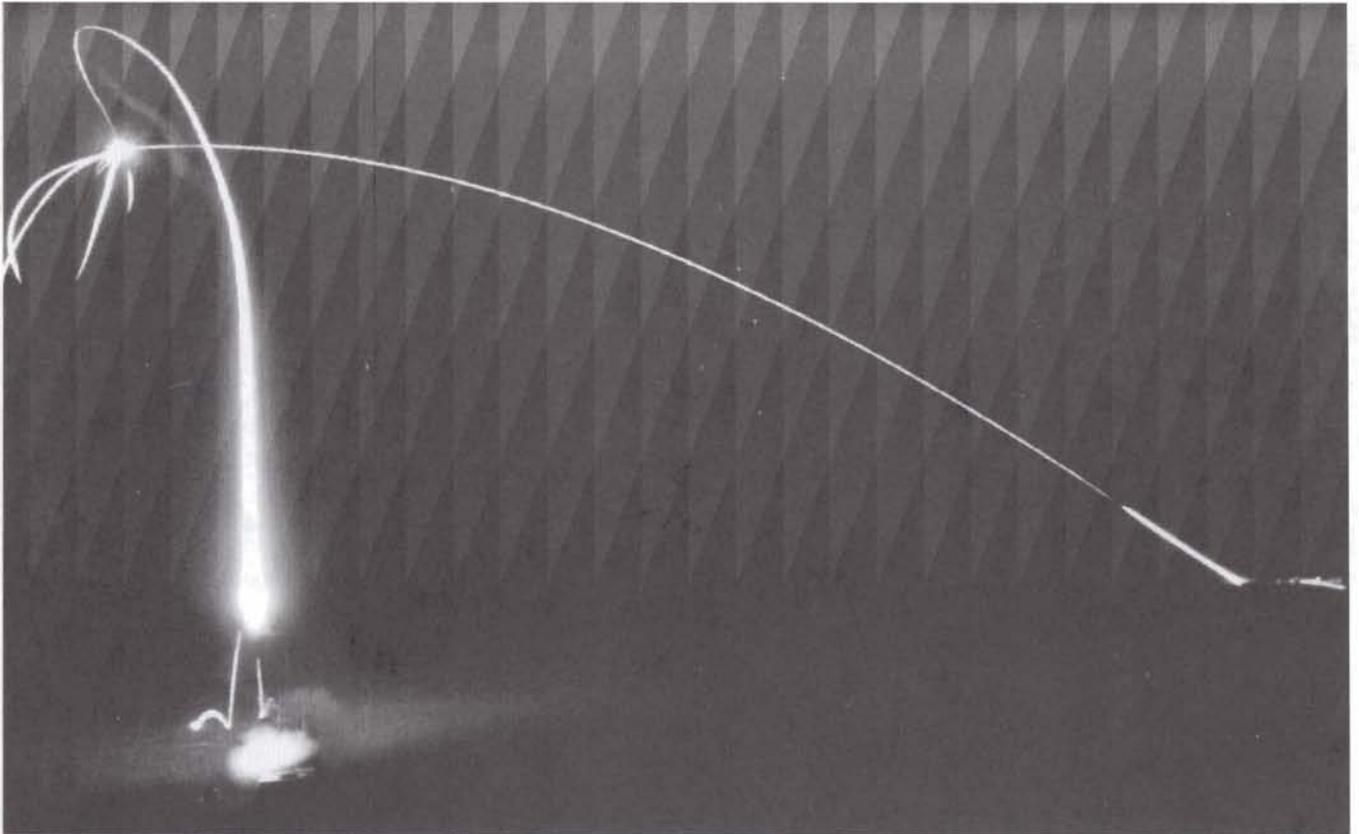
Lightfighters of the 25th Infantry Division assigned to ADA positions in 1-62 ADA require tough, specialized training to accomplish their demanding mission. Our soldiers are habitually employed in close restrictive terrain, and the close-in fight on urban terrain provides special challenges. Food, water, rest and shelter are limited quantities for these soldiers. Our reliance on tough physical fitness, discipline, rigorous standards and demanding training ensures our capacity to perform under the most difficult conditions.

However, light air defenders are not supermen. They get tired while operating in their two-man teams, become sick and lose their effectiveness like other soldiers, and if used improperly, may die at alarming rates. On the other hand, when they are used effectively by maneuver force commanders trained in the art of warfighting under light and/or special conditions, our soldiers can be a formidable force that challenges any foe. Success in this endeavor mandates maximized

integration of the wide variety of battlefield operating systems.

These requirements laid the foundation for 1-62 ADA's most recent live-fire exercise, which was conducted in the mountains of the Pohakuloa Training Area on the Island of Hawaii. About the size of Connecticut, the "Big Island" of the Hawaiian Chain has snow-covered mountains, active volcanoes, tropical rain forests, rolling "Texas-like" pastures and lava-covered deserts. The training area is just off Saddle Road, a passage the Army built in 1942 to rapidly shift troops from one side of the island to the other in the event of attack. This narrow, winding, two-lane road runs more than 20 miles up hill from the shoreline to one of the most desolate areas on earth. The road cuts between two active volcanoes, Mauna Kea and Mauna Loa, which tower over the training area. The two mountains rise to 13,677 feet above sea level (or 32,000 feet from ocean bottom). They are the world's largest mountains in terms of cubic tons of rock. A perfect setting for lightfighters.

Our goal were to maximize combined-arms aspects of the exercise by integrating as many battlefield operating systems as possible. We admitted traditional annual service practice was not what our soldiers needed to survive on modern battlefields. We could not accept anything less than a fast-paced exercise that challenged our teams in every way: physically, mentally, technically and tactically. The "same old stuff" wouldn't cut it any longer. Every team would flow through a week-long adventure of situational exercise (STX) lanes, nuclear-biological-chemical challenges, air assaults, and day and night land navigation problems that would culminate with the opportunity to fire



1-62 ADA Avenger (top) and Stinger (bottom) teams supplied the thunder and lightning of Exercise Bronco Thunder.



Exercise Bronco Thunder's highly realistic, combined-arms live-fire exercise required intense coordination. coordination.

a Stinger missile under totally tactical conditions. The exercise would also incorporate Stinger raids employing air assaults and live suppression of enemy air defense (SEAD) artillery fires with some 105mm howitzer rounds impacting within 500 meters of Stinger team positions.

The exercise, just as surreal as the terrain, was a coordinated effort between 1-62 ADA, 2-5 Infantry, 3-7 Field Artillery and 1-25 Attack Aviation Regiment. Each unit worked diligently for more than five months to coordinate an event designed to minimize "sanitized" conditions while maximizing an integrated combined-arms assault. The exercise, named Bronco Thunder, was more than just another Stinger firing or infantry platoon live-fire lane. The event was designed to test the battalion's ability to deploy and conduct combined-arms live-fire training on doctrinal concepts under the most realistic conditions.

Bronco Thunder consisted of three distinct phases: a live-fire exercise (LFX) and combined-arms live-fire exercise (CALFEX), an air assault operations and a Stinger/Field Artillery combined-raid LFX. Our platoons rotated through these phases over a three-week period with interspersed, periodic training on small arms ranges. The LFX/CALFEX phase represented the first time a dismounted Stinger had been fired while totally

integrated into an infantry platoon assault. Ten 1-62 ADA Stinger teams rotated through 10 separate rotations with all of the 2-5 Infantry platoons in a true combined-arms live fire that combined the effects of howitzers, mortars, attack helicopters and air defense systems in a box the size of three football fields.

The Stinger team provided air defense as the infantry platoon breached an obstacle fronting the final objective. After the objective was secured, another air attack occurred during which the infantry platoon engaged using combined-arms, forward area air defense principles on which they had received instruction and conducted prior training. The CALFEX was a powerful demonstration of the contribution of air defense to the combined arms team. The Stinger team maneuvered with a support-by-fire squad, and the effects of Stinger were visible to all from close range. It also gave the Stinger team the opportunity to appreciate the effects of impacting mortar and artillery fire, close air support from attack aviation and small-arms and machine-gun fire. Our Stinger teams found focusing on firing a missile in the midst of this activity extremely challenging, but it provided the teams with realistic conditions that could not be replicated short of combat.



The three-weeks of Bronco Thunder featured more than 50 airlifts and a series of combined Stinger/Artillery raids.

The battalion also executed tactical scenarios for other firings that ran the gamut of Stinger doctrinal employment: Day Static, Night Static, Day and Night Convoy, and Day and Night Remoted. Our Stinger teams occupied air defense positions as part of a tactical mission, received early warning and tactical, and engaged when required. All sanitized peacetime constraints were totally eliminated.

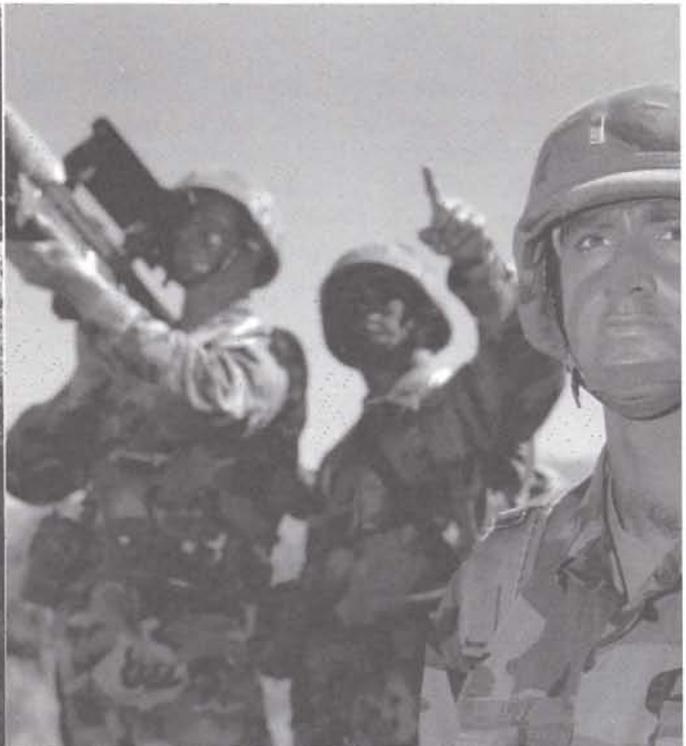
The air assault operations phase saw every platoon rotate through an intensive regimen of air-assault training. A typical platoon rotation through this phase started with a fragmentary order to the battery commander that required one of his platoons to go into pickup zone (PZ) posture at a specific time. Here, the platoons prepped their equipment and effected a link-up with the air crews. After coordinating with the pilots, the platoon leader issued his platoon a detailed air mission brief and conducted rehearsals. After a final equipment inspection, the day air assault took place. The daylight phase concluded with an after-action review led by the lane observer/controller and the platoon leaders. After the after-action review, the platoon again went into PZ posture and executed the same sequence of events at night. During the three-week exercise, the battalion conducted 56 lifts.

The final of the exercise was the most difficult to plan. It was a combined Stinger-Field Artillery raid in

which artillery fires, with rounds impacting within 500 meters, were used to simulate hostile SEAD fires for the Stinger team. 1-62 ADA had executed Stinger raids at the Joint Readiness Training Center, Fort Polk, La., four months earlier and had developed a battle drill for both the staff and batteries that outlined specific criteria and planning considerations for its execution. This was the first time it would be executed as a live fire.

The mission got under way with close coordination between 1-62 ADA, 3-7 Field Artillery and the air crews involved. The result of this planning was a detailed time line that covered all actions from assumption of PZ posture to ultimate extraction of both the guns and the Stinger team. Concurrent to the planning, the Stinger team has been placed in isolation and given as much information as then available about the pending mission, including all ground and air threat data, a proposed time line, and a tentative landing zone site and firing position. Using this information, they conducted rehearsals and detailed planning with the 105mm howitzer crews.

At 0630 hours, the Stinger team and 105mm howitzer crews went into PZ posture. The first insertion was of the gun crews at 0171. They were ready to fire within 15 minutes. The Stinger team was then inserted and moved to a missile cache. After performing critical checks and drawing additional small-arms ammunition,



"Tropic Lightning" air defenders spent the three weeks of Bronco Thunder in Hawaii's rugged lava-scrub desert.

they maneuvered to their assigned location and reacted to the early warning. The guns fired their mission, which also simulated SEAD for eight minutes. The team then engaged a target and prepared for extraction out of the area of operations. During the extraction, the team spotted a small patrol and engaged it with small arms. They reached the LZ and were extracted. Another aircraft simultaneously extracted the guns. The operation was extremely successful, served to validate the battle drill and improved the ability of the battalion staff to conduct detailed coordination with external units.

To be effective in battle, a soldier must have confidence in both his equipment and in his ability to use it. Knowing how to use a weapon effectively is more than

just mastering its technical aspects. Technical considerations must be combined with an environment that truly replicates combat and all the factors that contribute to the fog of war: live rounds impacting in close proximity, limited visibility, planning snafus, smoke, worries of fratricide . . . the list goes on. True confidence is achieved when, in the midst of these conditions, soldiers execute. Bronco Thunder's most important accomplishment was its ability to provide such an environment.

Major Martin C. Smith is the S-3, 1-62 ADA, Schofield Barracks, Hawaii. **Dennis McElveen** is the chief of photography for the Air Defense Artillery Test Directorate, Fort Bliss, Texas.

Combined-Arms Live-Fire Exercises

The Only Way to Shoot!

by Lieutenant Colonel Jeffery C. Horne

Training as a combined-arms team is one of today's Army's basic fundamentals. We often take our units to the field as part of the Brigade Combat Team with all battlefield operating systems fighting and maneuvering together on the battlefield. However, how often do we do this on home-station training grounds under live-fire conditions with all the combined arms engaging targets? Sadly, the answer is not often enough. True, many of us accomplish the task at the National Training Center, Joint Readiness Training Center or Combat Maneuver

Training Center, but we cannot accomplish this task very often. The reasons are resources and safety constraints. Clearly, these reasons are all valid; however, our collective goal must be to eliminate the resource challenges and mitigate the safety risk to a point that realistic combined-arms live-fire exercises become a reality for our soldiers. For no matter how many times you hit the training areas with multiple, integrated laser engagement systems, you'll never really know the burden of battle until you execute the same maneuver with live ammunition.

One of the most basic tenets of our training philosophy, based on mission essential tasks lists and articulated in Field Manual 25-100, *Training the Force*, is that by focusing on the basics we ensure that every task undertaken is accomplished to standard. Establishing this environment promotes good discipline, trust and confidence in the chain of command and their equipment. In the area of marksmanship, leaders often mistake this confidence as being a sole function of mastering the technical aspects of firing weapons. Clearly this is the first step in the marksmanship process, but certainly not the last. Once basic range qualification is complete, we must move on to Phase Two, "Applied Marksmanship." Phase Two requires us to train soldiers in the "one shot, one kill" philosophy while also ensuring they master suppressive fires. Air defenders must know how to integrate into this environment and master it to protect the force and prove their value to the combined-arms by bringing additional firepower to the battlefield.



Lieutenant Colonel Jeffrey C. Horne, 1-62 ADA commander, escorts Lieutenant General Kui Fulin of China through a Bronco Thunder training site. The deputy chief of the Chinese army's general staff was part of a contingent that visited U.S. Army installations in Hawaii and the continental United States.

“Our goal was to maximize combined-arms aspects of the exercise by integrating as many battlefield operating systems as possible.”



Displaying this mastery in conditions as close to actual combat as possible is the basis for the combined-arms live-fire exercise (CALFEX). Our goal must be to fire as many rounds as possible while engaged in infantry standard tactical missions in the context of a synchronized battlefield operating systems battle.

CALFEX training calls for progressive, day and night iterations conducted at various levels (dry fire, blank fire and then live fire). Training at each level must be conducted to standard in an environment that may not perfectly replicate the actual battlefield, but comes as close to it as safety concerns allow. Clearly, this requires total cooperation from the maneuver force, slice elements and, most importantly, commitment by the leaders involved. The end product is the most satisfying event imaginable: all systems firing in concert . . . ground targets being literally destroyed . . . aircraft being shot from the sky . . . and artillery projectiles raining from overhead. It's truly a sight to behold. Clearly, resources and cooperation are the essential ingredients of the CALFEX recipe; however, the key element is the commitment and visions of the leaders involved. Obstacles often will appear at the most inopportune time, but the commitment of senior leaders must never waiver. The end product is too valuable.

1-62 ADA committed more than a third of its basic missile allocation to our first large-scale CALFEX lanes during Bronco Thunder. Every platoon sergeant, platoon leader, commander and field-grade officer served as a controller during one or more of the 68 iterations of practice and live-fire operations. Most team members and junior NCOs also participated. The very best soldiers engaged aircraft at the height of a battle involving incoming artillery, friendly mortar and artillery counter fire and attack aviation. Some conducted a fully tactical air-assault Stinger raid. These events occurred in a constricted range area and cost the Army no more

than if all units had fired separately. The benefits were profound.

The toughest nut to crack and the key to making these training events happen is attaining the necessary level of commitment. Infantry, Armor, Field Artillery, Aviation and ADA battalion and brigade commanders must agree to a single scenario. It may be difficult to persuade maneuver commanders that involving so many planners and fighters into their live fires will provide that much extra “bang for the buck” or that the intense coordination required will produce more than a “few extra special effects.” They often may be detoured by what they perceive as a need for excessive safety precautions. They may feel it may actually detract from their training. Nothing could be further from the truth, and most commanders are very amenable to the suggestion. All we have to do is be aggressive and provide ideas and solutions to problems. We were lucky to have visionary leaders who supported Bronco Thunder and had the tenacity to pull it off. Our hats are off to the great leaders of 2-5 Infantry, 3-7 Field Artillery, 1-25 Attack Aviation and their great support elements. They made it all happen. The benefits of this training have flowed into other follow-on events. We are a tough team that watches out for one another.

Today's Army possesses the finest soldiers in the world. Our doctrine and training philosophy focuses our efforts to ensure a “train-as-you-fight” mentality. Our challenge is to make it happen, train tough, keep our soldiers fit, motivated and disciplined. Combined-arms live-fire exercises make this concept reality.

Lieutenant Colonel Jeffery C. Horne commands the 1st Battalion, 62nd Air Defense Artillery, 25th Infantry Division, Schofield Barracks, Hawaii.

CAREERS



OPMS XXI

WHAT IT MEANS TO YOUR CAREER

by LTC Jack E. Faires

Twenty-first century technology will bring changes in high-end equipment that will enable the Army to deploy faster; better detect the movement, size and capabilities of enemy forces; and outmaneuver and overpower any adversary. But what type of officer corps do we need to lead these high-tech soldiers into the coming millennium? What type of officers do we need managing our Army's resources, procuring the best possible equipment and representing the field on Department of the Army and joint staffs? What type of officers do we need for a Total Quality Force?

To answer these questions, General Dennis J. Rimer, Chief of Staff of the Army, chartered the Officer Personnel Management System (OPMS) XXI Task

Force and selected Major General David H. Ohle to head a year-long effort. The revised OPMS went into effect October 1, but full implementation will gradually take place over the next five years.

This article outlines the basic recommendations of the OPMS XXI Task Force and describes how OPMS XXI will affect ADA officers. General Reimer has approved OPMS XXI in concept for implementation, and the OPMS XXI Task Force has developed an implementation plan. You may consider the contents of this article as an interim report.

OPMS XXI is the third major officer personnel management study conducted since the Army War College's 1970 study on professionalism. The follow-

CAREERS

on studies (OPMS I and OPMS II) were conducted in 1971 and 1983, respectively.

OPMS I recommended the centralized command selection process, designated command tours, created primary and secondary specialties for officers and abolished the Chemical Corps. These recommended changes were fully implemented by July 1974.

OPMS II established single branch development, functional areas not related to any branch, multiple career tracks and a revised officer classification system. The results of this study were approved in 1984; implementation has been in place since 1985.

The OPMS XXI Task Force began by looking at the current management system and all the changes that have occurred since its implementation. These changes, generated by force reductions, declining resources, increased statutory requirements, unit operational tempo and the explosion of Information Age technology, just to name a few catalysts, placed burdens and demands on the Officer Personnel Management System that it was never designed to handle. The question followed: Is the current system adequate for today's environment, and can it meet the needs of the future? The task force concluded that, without significant changes, the present system could not meet tomorrow's needs.

OPMS XXI Design

To help shape the officer corps for Army XXI and the Army After Next, the task force developed a three-part design criteria:

- Enhance the Army's **warfighting capability**. Increase "branch qualification" time for majors. Reduce turbulence in the Operations Career Field.

- Provide all officers a **reasonable opportunity** for success. Redistribute promotion opportunity. Make targeted changes relating to command opportunity.



I want you to chart the course for building an officer corps that can effectively shape, train, and lead the Total Army into the 21st century. OPMS XXI must be a 'win-win' system for both the Army and the individual officer.

General Dennis J. Reimer
Chief of Staff, U.S. Army

- **Balance grades and skills** at the field grade level. Reduce upward grade substitution. Increase level of fill at all grades. Improve colonel-level experience.

OPMS XXI Options

After briefing the Chief of Staff in October 1996, the task force began developing the characteristics of the next OPMS, defining the problems and designing options for a new Officer Development System. In January, Major General Ohle briefed General Reimer and the OPMS Board of Directors, which consists of Title X four-star generals, on four possible options.

Those options ranged from simply "tweaking" the current system to reorganizing the Army Competitive Category into four distinct career fields of similar functions and disciplines aligned with battlefield requirements outlined in *Army Vision*

2010. Under the four career field option, the Army would access newly commissioned officers directly into career fields, which would serve as personnel management grouping for promotion, development and assignment purposes only.

During an April 1997 in-progress review, the Army Chief of Staff asked the task force to further develop the four career field option. Under this option, today's company grade officer development and personnel management remain generally unchanged. Career fields commence for officers selected for major.

Four Career Fields

OPMS XXI's four career option means the Army will no longer have to sacrifice exceptional officers whose talents lead them along divergent paths. Instead, officers will be able to choose career avenues best suited to their capabilities.

The **Operations Career Field** supports organizational units with officers qualified by training, education and experience in Army operations. It is composed of

CAREERS

officers in the Army's 16 branches and two functional areas, Functional Area (FA) 39 (Psychological Operations and Civil Affairs) and FA 90 (Multifunctional Logisticians). Officers in this career field will retain their functional area assigned during the year five functional area designation process; however, most will not serve in it once assigned to this career field. This functional area indicates special aptitudes and skills that may provide flexibility for future duty assignments at the field-grade level.

The **Information Operations Career Field** responds to 21st century Information Age requirements. It brings together related disciplines with associated functional areas and creates several new ones. Officers within this career field will continue to be assigned throughout the Army in table of organizational and equipment (TOE) and table of distribution and allowances (TDA) organizations. They will perform a wide variety of information operations missions and tasks. The functional areas in this career field are FA 30 (Information Operations); FA 34 (Strategic Intelligence); FA 40 (Space Operations); FA 46 (Public Affairs); FA 53 A, B and D (Systems Automation and Telecommunications Officer); and FA 57 (Simulations). With the exception of FA 46 and FA 53 A and B, the functional areas are new.

The **Institutional Support Career Field** focuses on the increasingly technical and complex nature of running the Army as an organization. The emphasis in this career field is management, planning and programming of Army resources, both near-term and into the future, by projecting requirements and developing capabilities in the mid- and long-term.

The functional areas in this career field are FA 43 (Human Resource Management); FA 45 (Comptroller); FA 47 (U.S. Military Academy Permanent Associate Professor); FA 49 (Operations

Research/Systems Analysis); FA 50 (Strategy and Force Development); and FA 52 (Nuclear Research and Operations). The Institutional Support Career Field has two new functional areas; FA 43 and FA 50.

The **Operational Support Career Field** strengthens current readiness while building the future force through its liaison, procurement, programming and development specialties. This career field contains the Army Acquisition Corps, which includes FA 51 (Research, Development and Acquisition), FA 53C (Systems Automation Acquisition), and FA 97 (Contracting and Industrial Management); and FA 48 (Foreign Area Officer).

Why Career Fields?

The task force developed these career fields within the Army Competitive Category (ACC) by grouping interrelated branches and functional areas into occupational categories. Each career field has its own distinct development track. This will provide the opportunity to develop officers with warfighting skills and officers with specialty skills. Additionally, officers will compete for promotion within their career field, much as Acquisition Corps officers do today. This will end the "dual tracking" promotion system of today in which an officer counts both within his branch and functional area for promotion.

Throughout the OPMS process, warfighting remains job number one for our Army and the task force's primary focus. However, we also need to create viable alternative career paths for those officers who have the skills the Army needs for the 21st century, but who choose not to follow the traditional command path.

Today, if you do not follow the traditional command path (i.e., resident Command and General Staff College, executive officer/S-3 and battalion command), your chances for continued service past the grade



There are three battlefield functions in the Army After Next: information operations, battle command and battle support. So if that's the way we're going to fight, then let's manage like we're going to fight.

Major General David H. Ohle
Director, OPMS XXI Task Force

CAREERS

of major are significantly decreased. Despite the needs of the Army and the desires of the officer, the traditional command track forces all officers to pass through the "eye of the needle." Army 2010 requires officers with special skills, education and training to be tracked differently than we do today, beginning at the grade of major. These officers should be allowed to focus and concentrate their efforts in their related fields of expertise to provide our Total Quality Force with a diverse bench of world-class officers.

Impact on Air Defense Officers

First, how might the career field designation process work? As officers approach selection for promotion to major, they will submit a career field preference statement indicating where they would like to be managed and developed for the rest of their careers after they are selected to major. Among other things, this designation process will take into account the officer's preference, manner of performance, rater and senior rater input from the new officer efficiency rating and needs of the Army. A board of officers, separate from the major promotion board, will recommend where officers can best serve the Army.

The majority of officers selected for major and somewhere near one-half of ADA officers will be designated to serve in the Operations Career Field. Those officers will serve in branch assignments (in operational units as S-3s, executive officers, commanders, etc.) and functional integrator jobs. These functional integrator positions will help officers gain broadening experiences outside of the branch and will help the Army develop a cadre of officers capable of integrating Army systems.

If you are placed into the Operations Career Field, your time with troops will increase. Three years in an operational unit, including up to 24 months in a branch qualifying position as a major, will be the norm. This will help reduce turbulence, increase experience and enhance warfighting capability.

Next, all officers, regardless of their career field, will have a reasonable opportunity for success. Promotion opportunity for all career fields to lieutenant colonel will be just about the same. Promotion opportunities for former battalion commanders to colonel will be less than they are today, but opportunities for promotion to

colonel in the other career fields will be significantly greater than they are today.

Additionally, all command slots are in the Operations Career Field. With fewer officers in the Operations Career Field than today, selection opportunities for battalion-level and brigade-level command will increase for those officers who remain. Up to one-half of the ADA officers selected for major will serve in career fields other than the Operations Career Field. This includes those designated for the Army Acquisition Corps. These officers will become world-class specialists serving repetitive assignments within their designated functional area as well as serving in functional integrator positions (formerly known as branch immaterial positions). Commitment to developing these required experts will improve the Army's experience in critical skills required to shape and prepare our Army for the future.

Finally, the Military Education Level (MEL) 4 proposal impacts all officers. If approved, all officers selected for major will attend some form of resident Command and General Staff College. The U.S. Army Training and Doctrine Command (TRADOC) will study this proposal during the next year.

Implementation

The task force has prepared a final set of recommendations for the Chief of Staff's approval and has developed a strategy for the Army to implement these changes. The final report was completed prior to implementation, which began 1 October 1997. However, the Army will not implement every piece of the new officer development system this fall. The current implementation plan occurs from FY 98-FY 02. Some key pieces of the plan will take effect almost immediately. This includes restructuring and re-coding authorizations, developing life-cycle functions by proponents and educating the Officer Corps on OPMS XXI initiatives. Other facts will take longer to implement. For example, transitioning field grade officers to career fields will take four years.

The implementation plan is intended to transition the Army to the new career field based management system in a time period that provides officers reasonable alternatives and adequate time to react. To accomplish this, a few general guidelines were developed and

CAREERS

Officer Personnel Management System XXI Career Field Implementation Schedule

Year Group	Career Field Designation	LTC Promotion (New System)	COL Promotion (New System)	Remarks
80	FY1999		FY2001	First affected year group.
81	2000		02	
82	01		03	
83	01		04	
84	02		05	
85	02		06	
86	99	FY2002	07	First year group promoted to LTC under new system.
87	00	03	08	
88	01	04	09	First year group to fall completely under career field system as field grade officers.
89	99	05	10	
90	00	06	11	
91	01	07	12	(Note: Officers in year groups older than 1980 will transition to career fields through a voluntary process during transition years FY 99 thru FY 02.)
92	02	08	13	

proposed. First, officers will be designated into a career field so that they have two years available for service in their career field before being considered by a promotion board. This attempts to provide officers with experience in their career field prior to their next promotion board. Second, for those officers who cannot meet the criterion above, career field designation will occur after their second opportunity to be selected for battalion command. This is to ensure that all officers who "grew up" under the old OPMS a fair opportunity to command prior to career field designation.

Before any of these initiatives can be implemented, however, the Army must prepare to manage officers under the new system. This involves many tasks. It includes: determining final career field designation board and promotion board procedures, designing and distributing career field preference statements, updating the design of the Officer Record Brief (ORB) to reflect career field information and educating the Officer Corps. All of this takes time, which is why the first career field designation boards will not occur until FY 1999. The initial career field promotion boards for colonel and lieutenant will convene in FY 2001 and 2002, respectively.

Review Process

Longer-range objectives and decisions required that the task force build an adaptable plan. Officer Development Action Plans (ODAPs), one for each career

field, will assist with the development and management of career fields. Each ODAP will group sets of related issues for further development, decision or implementation in a logical sequence synchronized with other affected ODAPs. Each ODAP will have a proponent charged with executing that ODAP and monitoring its progress. For example, TRADOC will be the proponent for the Officer Professional Career Field (OPCF.) Further, ODAPs will include a long-range piece that identifies potential events or actions that could trigger the Army to change how it implements the ODAPs or completely alter the nature of the ODAP itself.

A transition team of current OPMS XXI task force members will remain behind to oversee the implementation of the new system and ensure a smooth "hand-off" to proponents. The goal is to create a "win-win" system for both the Army and its officer corps, balancing the Army's diverse personnel requirements while providing Army XXI with a technically and tactically competent officer corps. One thing is certain: The officer development system approved by the Chief of Staff will be a flexible system—one best suited for the Officer Corps, the Army and the Nation.

Lieutenant Colonel Jack Faires served as the ADA branch representative and strategic planner to the Army Chief of Staff for the Army's Officer Professional Management System (OPMS XI) Task Force. He is currently a National Security Fellow at Harvard University.



RENEGADE STRIKE

ADA Platoon Contingency Assessment

*by Lieutenant Colonel Charles A. Anderson
and Major Jeffrey A. Cobb*

Trouble erupts in Southwest Asia or, perhaps, the Korean Peninsula. An alert order reaches your division or corps emergency operations center. Phones ring, adrenaline pumps, confusion reigns and worried looks cloud the faces of soldiers and families as their hands separate with last minute glances and words of reassurance: "The alert is for training only." Within minutes, the first sergeant, carrying a clipboard on which the deployment standing operating procedures (SOPs) and time lines are laminated, calls off names to account for all soldiers assigned to the ready brigade. The orderly, systematic and carefully detailed sequence of activity necessary to deploy a force, at a moments notice, is underway.

The scenario above describes a way of life in the 1st Cavalry Division, Fort Hood, Texas. Soldiers deploy under strict time lines and "no-notice" conditions in

response to our nation's call. To the "First Team," this is routine and expected. The 1st Cavalry's training focus is "Balanced Readiness," a phrase that suggests that soldiers, leaders and units must balance individual, crew, unit, family, equipment and facility readiness. Families that are self-sufficient when their spouse deploys, soldiers who are personally trained, crews and units that can operate collectively, equipment that is fully mission capable and home-station facilities optimally postured as a strategic deployment platform are the essential ingredients of warfighting readiness.

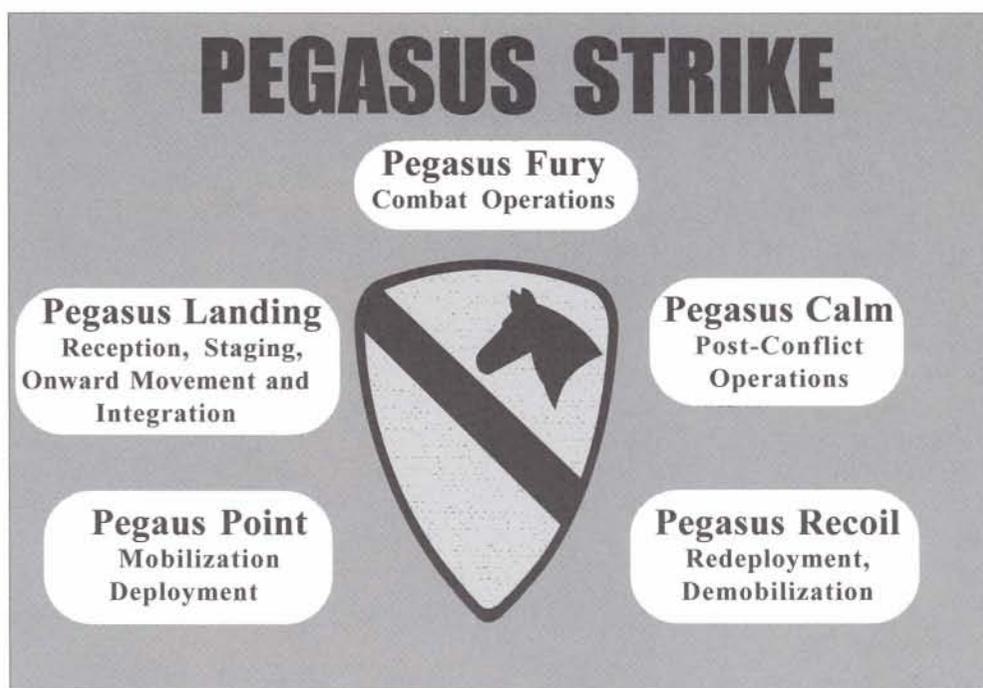
A unit may shoot distinguished crews," but if its family support group is ineffective, and if its equipment is non-mission capable, that unit cannot and should not deploy. Units must achieve balance in all areas of warfighting readiness to deploy, engage and defeat a hostile, mobile and lethal enemy. We as leaders cannot

accept anything less, nor can our nation. The 1st Cavalry Division ethos evolves from five key operating procedures commonly referred to as “Pegasus Strike” Pegasus Strike is embodied in five sub-documents: Pegasus Point, Pegasus Landing, Pegasus Fury, Pegasus Calm and Pegasus Recoil.

Pegasus Point prescribes the state of readiness for all individuals, crews and units prior to deployment and the actions and standards required to deploy a force of varying size by rail, air, ship or any combination of these modes of travel. Additionally, Pegasus Point details the pre-positioned sets of equipment in two of the First Team’s contingency areas. Pre-positioned fleets of armored vehicles significantly reduce the time lines for a relevant combat force to be on the ground poised to conduct operations. These short time lines have, in essence, transformed the readiness standards of a heavy division to replicate those characteristic of a light force.

Pegasus Landing focuses on all the actions required to build combat power once the unit arrives in the contingency area. The unloading of equipment or drawing of pre-positioned equipment must be accomplished quickly and with precision. Sets, kits, and outfits must be linked-up with the right equipment. Soldiers must perform by-the-book preventive maintenance checks and services (PMCS) so that their equipment will function in combat. Pegasus Landing guides the unit from the moment the troops land in country through movement to a tactical assembly area to be fully integrated into the force structure and the current plan.

Following Pegasus Landing is a third document that we have all grown accustomed to as the Tactical SOP, or in First Cavalry lingo — **Pegasus Fury**. Pegasus Fury lays out all the procedures the division, brigade, or battalion uses to command and control and logistically support a fight. Pegasus Fury prescribes the way the division fights. After the fight, **Pegasus Calm** prescribes the procedures to consolidate after combat operations have ceased and to prepare for redeployment.



And last, **Pegasus Recoil** documents the procedures to redeploy soldiers and equipment safely back to home station, to include integration of the soldier back into the family, unit and local community. These documents briefly discussed are not explained in the manner nor depth they deserve. Countless staff hours, terrain walks and after-action reviews from actual deployments are embodied in these professional manuals. If you pull from Pegasus Strike the specified, implied and essential tasks required to deploy, fight and redeploy, you have laid out the battle tasks required to meet your mission essential task list. The 4-5 ADA has captured these tasks and intertwined them in a scenario-driven, performance-oriented external evaluation (EXVAL). This training event has become the basis from which we train and assess balanced readiness in the battalion.

ADA battalions fight platoons and sections. We monitor the readiness of the battalion by how well we can deploy and fight platoons. The platoon EXEVAL, or “Renegade Strike,” takes a platoon from Pegasus Point through Pegasus Recoil. The platoon is put to the test in a four-day exercise where balanced readiness is evaluated and discussed in candid after-action reviews, and similar to our combat training centers, the platoon is handed a take-home packet to use for planning future training.

On D-Day minus 14, the platoon receives a country brief and a “road to war.” The battalion S-2 briefs the platoon on the political, military, cultural, economic,

climate and terrain aspects of the contingency area. This adds to the scenario and to soldiers' knowledge of contingency regions in key areas such as sea and airports of debarkation, and familiarizes them with opposing force capabilities and limitations. The road to war blends actual incidents in the contingency area with notional events to drive the division's deployment time line. The battalion's S-3 discusses the deployment readiness of the division and battalion, provides the rules of engagement for the next two weeks and explains the goals for the exercise. The standard goals are as follows:

- Conduct the exercise safely.
- Maintain accountability of all sensitive items and platoon equipment.
- Get better every day.
- Maintain the "Warrior Spirit."
- Immerse yourselves in the scenario (you are in Korea, not Fort Hood).

The scenario is critical to the success of the Renegade Strike program. Platoons that immerse themselves in the scenario will do better on the evaluation than those that do not. This is true because, unless the platoon plays the exercise to the fullest extent possible, its soldiers and leaders will fail to execute all of the tasks necessary to survive in combat. This is the last time that the battalion and platoon will discuss Fort Hood training areas. From this point on, the scenario is in place.

Prior to D-Day, platoon leader and platoon sergeant conduct thorough pre-combat checks and inspections to insure the platoon is prepared for the deployment. The platoon leader aggressively manage all of his available assets (personnel, weapons and equipment) to make certain that they are ready to go on D-Day. The platoon leadership is allowed to replace deadlined equipment up to D-Day. Afterward, any deadlined equipment will add to the stress of the scenario. The platoon must deploy with all its assigned equipment (both platoon and personal). If a platoon falls to properly conduct its checks and inspections, but instead deploys without all its combat equipment, it will pay the price during the exercise. Platoons are not allowed to return to the motor pool to pick up forgotten equipment (it is a long way from Korea back to Fort Hood).

D-Day begins with a 0400 recall (battalion to battery to the platoon), a N+4 brief and an inspection of soldier readiness packets, including powers of attorneys, wills, family care packets and privately-owned vehicle inspections sheets. The evaluation team on DAY 1 consists of the battalion S-1, S-2, S-4, BESO,

battalion maintenance officer and S-3. Since the battalion looks at this exercise as the thermometer of readiness, the primary staff principles are the senior observers/controllers (OCs).

At the N+4 brief, the platoon leader briefs the battalion commander and S-3 on the deployment status of his platoon (personnel, equipment, weapons, etc.). This is his or her last chance to substitute for deadlined equipment. The S-3 or Renegade Strike team chief briefs the platoon members on their tasks for the day. There is tension in the air, and there is no discussion of a training exercise: the platoon is preparing to depart for Korea the following morning.

Day One

Day One is packed full of inspections to assess whether the platoon is ready to deploy. The platoon lays out all of their equipment while the battalion S-4 verifies hand receipts and shortage annexes. The battalion maintenance officer checks dispatches and performs a technical inspection on all the platoon's vehicles to determine if they could pass a joint inspection prior to loading on a ship or aircraft. The battalion training NCO inspects weapons zero, qualification and cleanliness. The S-2 gives the platoon a written test on the country they were briefed on two weeks prior to being recalled. The battalion S-3 has a series of hands-on skill tests, including cold-starting single-channel, ground and air radio systems (SINCGARS), operating enhanced position location reporting (EPLR) systems, identification, friend or foe (IFF) equipment, and Map Reading 101. Additionally, the "A" and "B" bags prescribed in Pegasus Point are laid out and inspected for accountability, serviceability, and cleanliness. At or near the end of DAY ONE, the staff collects the soldiers and leaders of the platoon for their first after-action review on what happened, what should have happened and what could they do to be better. The platoon now scrambles to correct all deployment deficiencies discovered during the numerous inspections. Any vehicles deadlined by the battalion maintenance officer must be fixed prior to 0600 on Day 2, or be towed to the seaport of debarkation.

Day Two

On Day Two at 0600, the platoon loads their equipment on HETTS, or self-deploys, as is the case with Avenger and light Stinger platoons, for transport to the field site. In the scenario, the HETTS are "transport ships," and when the platoon links-up with their equipment in the local training area, the platoon is considered to be "in country." Security is critical as the platoon is

well aware of the special operating forces threat to the Port of Pusan. Here they draw their equipment and ammunition from an evaluator playing the role of a “line boss” characteristic of the Army War Reserve (AWR) in Kuwait or Korea. The platoons do another PMCS and perform the 13 critical checks on the issued field-handler trainers (FHTs). The importance of the platoon’s ammunition vehicle comes to light here. If they fail to deploy with this vehicle, the ammunition draw may take several additional hours to complete (one platoon had to make five trips from the Class V yard to the assembly area). After they draw their equipment they move to an assembly area where they meet the task force commander for the first time.

The task force commander is the senior evaluator. He gives the platoon a fragmentary order (FRAGO) to provide air defense protection of the task force as it moves to a forward assembly area. This road march is anywhere from 16 to 30 kilometers in distance. The road march for the platoon is not on a “hard ball” road but over challenging terrain spotted with enemy snipers, special forces and natural and man-made obstacles. Both the platoon and the opposing forces are equipped with multiple, integrated, laser engagement systems (MILES) and blank ammo to generate realism in the scenario.

At the forward assembly area the platoon leader issues another platoon operation order (OPORD) for the purpose of moving the platoon to an attack position. The OPORD has the task force performing a deliberate attack. The deliberate attack has an obstacle breach requiring the ADA platoon to provide near-side and far-side air defense protection. The lanes are clearly marked and blue antitank mines are spread throughout the zone. After the attack the platoon leader links-up with the task force commander and receives another FRAGO to occupy hasty defensive positions. The platoon leader goes through the troop leading procedures and designs a hasty defense. Throughout all the action, the platoon leader is challenged with casualties, maintenance, recovery, ammunition distribution issues, and the task of passing early warning to the task force. There is limited rest, and sleep plans are key to safety and being at the right place at the right time. PMCS, ammunition, and Class I resupply are also in the scenario and the platoon leadership is assessed on how well they sustain these tasks in a combat zone. Leaders must establish work priorities for every mission to ensure that the platoon can accomplish all its required tasks.

There is no admin time to feed soldiers. If the Class I arrives as the platoon is preparing to move out, the

mission takes priority and the platoon sergeant must feed crews in position (this is no easy task at 2200 hours). If the OPFOR destroys the LOGPAC vehicle, the platoon eats MREs. The battalion maintenance officer again visits the unit in the deliberate defense and checks field maintenance. During hours of darkness, the platoon is challenged on movement with night-vision goggles, night land navigation and the occupation of an assembly area with a task force. However, based upon intelligence sources, the platoon is directed to conduct a landing zone denial mission in anticipation of a night insertion of AN2 Colts and special operating forces. Before dark, the platoon is hit by a team of special forces and tasks such as casualty evacuation, SPOT reports, prisoners of war and captured documents are all part of the scenario and must be accomplished to standard.

Day Three

Missions continue throughout the two-and-one-half days of Pegasus Fury. After action reviews are given after every major task is completed, and platoons who fall below the standard are “re-cocked” to perform the mission again. Throughout the phases of Renegade Strike, the platoon is confronted with many force-protection tasks, including a chemical attack and occupation of improved fighting positions. These two tasks are further developed with engineer support from the engineer brigade and the decontamination (DECON) platoon. The platoon leader coordinates with the engineer platoon leader and his weapon systems get dug-in during the deliberate defense. After the counterattack, the task force is hit with a persistent chemical agent and the platoon leader coordinates with the task force commander for a DECON site. The platoon leader tactically moves his unit, using check points, a start point, a release point, rally points, primary/alternate routes, and risk assessment. The DECON platoon decontaminates the platoon’s equipment; however, the platoon is still challenged with mission-oriented protective posture (MOPP) suit exchange and unmasking procedures. During this portion of the Renegade Strike, the battalion chemical officer is the OC and provides feedback at the after action review.

Day Four

On Day Four, following the final mission (normally on or about 1200 hours), the senior OC conducts a final after-action review for the platoon. This comprehensive after-action review is designed to set the stage for the Pegasus Calm portion of the exercise. Battery commanders attend the after action review. Following

the after action review, the S-3 gives the commander an overview of the platoon's performance, and areas that could be improved and retrained prior to returning from Korea and executing the tasks required in Pegasus Recoil. Battery commanders get a 24-hour period outside the evaluation to train platoon leaders and platoons. They welcome this opportunity and ensure that time is well-spent on improving the platoon's shortcomings prior to redeployment.

Hot Wash

During Pegasus Recoil, the platoon follows prescribed tasks outlined in the field SOP on recovering equipment and personnel. A three-day recovery, including equipment inventories and maintenance checks, is the primary activity for the platoon. After all the training is complete the platoon is given a "hot wash" on all evaluated individual, leader, and collective tasks. This hot-wash is conducted at a standard time and place on Friday, and involves all of the OCs. This is not an after-action review, but rather a detailed, brutally honest assessment of the platoon's performance during the entire Renegade Strike exercise. The Renegade Strike Team and the battalion staff provide the battalion commander the results of the platoon's assessment.

The S-3 presents the platoon leader and platoon sergeant with one last task prior to the end of their Renegade Strike—a letter home to the parents of a soldier killed-in-action during the deployment. This letter may result from a death of a soldier who performed honorably in the defense of his nation or maybe a death that resulted from inaction on the part of the leadership. The letter normally focuses on the latter. This helps to hammer home the seriousness of what we do for a living and serves to remind the leadership that every decision that they make or fail to make has results.

The difference between the Renegade Strike and traditional platoon EXEVALs is that the scenario rather than a script drives tasks to be accomplished. This scenario is flexible and may be adjusted by the Strike Team Chief to meet the abilities of the platoon. MILES, blank ammo, a line boss, a task force commander and DECON and engineer platoons are all part of the training experience. The tasks are pulled from the Pegasus Strike construct and associated ADA mission training plans (MTPs). The fog of war and an aggressive OPFOR challenge the platoon at every turn. How well platoon leaders exercises troop leading procedures determines success.

Platoon-focused training is the essence of contingency-based, air defense collective training. Platoons in the band of excellence perform well at the National Center and during rotations to Kuwait. The Pegasus Strike construct is a process that must be ingrained in the minds of our leaders and assessed during all collective training. Training begins in the classroom and the meticulous tasks of soldier readiness, including shots, power of attorneys, wills and family care plans must be done correctly. Troop leading procedures, reconnaissance, defense design and tactical movement may be done on the terrain board. Proficiency on the IFF programmer, SINCGARs, and crew drills are motor pool tasks and can be accomplished during Sergeant's Time. If most training and SOP practice are performed in garrison, the platoon can conduct one field training exercise prior to the Renegade Strike. One carefully planned field training exercise can provide the training effect desired.

The 2-5 ADA's Renegade Strike Program is a tough, realistic, performance-oriented evaluation of a platoon's ability to execute all aspects of the 1st Cavalry Division's Pegasus Strike construct. Leaders and soldiers are challenged at every turn. The OPFOR maintains its constant presence. When the platoon seems to be comfortable with its current mission posture, the senior OC provides a change of mission. The platoon must continue to improve their positions and execute their priorities of work. The OCs observe and evaluate every move during the exercise. After action reviews highlight, sustain and improve the platoon in all areas. Platoons are mentally and physically drained at the end of their Renegade Strike experience, but to a man, they maintain their warrior spirit. The First Team's air defenders are prepared to execute, and much of their success during recent deployments to Kuwait and the National Training Center came as a direct result of lessons learned in the "Republic of Korea" on a Renegade Strike.

Lieutenant Colonel Charles A. Anderson commands 4-5 ADA, Fort Hood, Texas. **Major Jeffery A. Cobb** is the 4-5 ADA operations officer.

PATRIOT GAMES



In a world that seethes with racial, ethnic and religious strife, survival depends on quality training and constant vigilance

by Captain Charles L. McMurtrey III

Privates First Class Dennis Timlick and Damiana Plain watched as Mr. Abdul slowly maneuvered his old dilapidated truck through the barriers that led to the entry control point that defended their Patriot site. Everyday like clockwork, Abdul showed up to clean the site's porta-johns located directly to the right of the billets that housed soldiers manning the Patriot initial readiness position (IR) site.

"How are the guardians of freedom doing this fine afternoon," Abdul asked as the vehicle ground to a stop outside the vehicle search area.

Timlick answered, "Not too bad except for the heat and the lack of action.

With that, both soldiers began a routine search of the vehicle while Abdul patiently waited to the side under the cover of the overwatch guard. As was his nature, Abdul continued to discuss the weather and all of Allah's plans for him. He had been doing this for the last three days, and the soldiers knew all of Allah's plans for Abdul by heart.

With the vehicle search completed, the relief commander waved him through, and the escort detail fell in alongside the truck. Suddenly, tires screamed, and the truck swerved out of control, heading straight for the radar. The escort detail began chasing Abdul's truck and had just about caught up to it when a thunderous roar brought them all up short.

"FREEZE!" shouted the observer-controller. "You all are dead," he pointed at four soldiers. "And you two are wounded."

While this chilling incident may appear to have occurred in Southwest Asia, in actuality, the soldiers involved were safely located at the Babenhausen Patriot tactical site in Babenhausen, Germany. They were part of Task Force 1-7 ADA and in training for their upcoming deployment to Southwest Asia. Abdul and the observer-controllers were members of the 7th Army Training Command (ATC) whose mission was to test and certify the task force prior to its deployment.

The 1996 Khobar Towers bombing, in which 19 U.S. airmen were killed and more than 105 personnel were seriously injured, had sent shock waves rumbling throughout the air defense community. Air de-

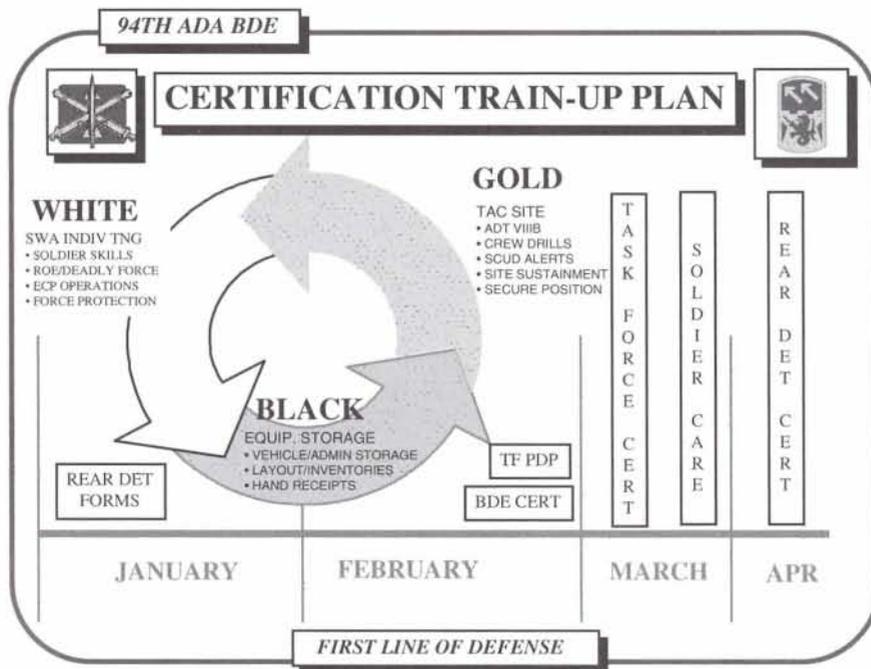
fenders have maintained vigilance in Saudi Arabia and Kuwait since the end of the Persian Gulf War in February 1991. Until the Kobar bombing, most acts of terrorism against U.S. forces in Southwest Asia had been limited to less politically stable middle eastern countries; now terrorists had struck in Saudi Arabia. It was with this threat of terrorism in mind that the soldiers of Task Force 1-7 ADA began preparing for their deployment to Southwest Asia.

Patriot deployments to Southwest Asia ensure that a credible defense against tactical ballistic missiles is maintained around the clock, 365 days a year. Patriot deployments also symbolize the U.S. commitment to the government of Saudi Arabia and to the maintenance of stability in the region. Task Force 1-7 ADA soldiers were scheduled to supply a crucial part of that defense for the next few months.

The 94th ADA Brigade task force is composed of the 1st Battalion, 7th Air Defense Artillery, Kaiserslautern, Germany, and the 5th Battalion, 7th Air Defense Artillery, Janau, Germany. Rounding out the task force are the 94th Brigade's Headquarters Battery and elements of the 413th Signal Company, both from Darmstadt, Germany. Both air defense battalions and the brigade's Headquarters Battery had recently completed a series of grueling NATO tactical evaluations that had validated their performance on critical tasks taken from the air defense mission-essential task list. These evaluations had confirmed that the 94th ADA Brigade soldiers are, in fact, the "First Line of Defense" in Europe. However, the terrorist threat in Southwest Asia poses a distinct threat to soldiers that requires extensive force protection preparation and training.



A/1-7 soldiers search a potential terrorist at a Patriot initial readiness position.



The 94th ADA Brigade began its preparation in August 1996 by providing proposed task-force guidelines to 1-7 ADA and starting the initial mission analysis. The initial training began in October 1996 after 1-7 ADA had completed its NATO tactical evaluation. At that time, it was agreed that both battalions, beginning in January 1997, would adjust their Red, Amber and Green monthly-training cycles to include a Black, White and Gold training-week. The adjusted cycle allowed the units to focus on maintenance and storage during Black Week, guard force operations during White Week and force protection and tactical operations during Gold Week.

The task force's deployment preparation also included the deployment in November 1996 of a force protection site survey team to Southwest Asia at D-150. This deployment afforded selected task force leaders an opportunity to visit all the sites, walk the ground and interview the leaders on the scene. The force protection survey at D-150 also gave the task force time to put together a plan that served as the base document for all upcoming training, which started at D-100.

The preparation also included coordination in December 1996 with the Army's premier force protection trainers: observer-controllers assigned to the Combat Maneuver Training Center, Hohenfels, Germany. The 7th ATC, in conjunction with the Combat Maneuver Training Center, which spearheads the force protection training and certification of units before they deploy to the Bosnian Theater of Operations, was tasked by General William Crouch, Commander-in-Chief, U.S. Army Europe, to train and certify the task force.

A senior observer-controller stated, "We have traveling road shows instructing and certifying unit force protection and STX [situational training exercise] lanes at Fort Bragg, Fort Riley and Fort Hood before they rotate to Bosnia." These same instructors conducted a January 1997 "Train the Trainer" seminar for the task force on vehicle search, personnel search, rules of engagement and guard force administration. The training also included infantry tactics and the proper way to set up and conduct a STX lane.

Lieutenant Colonel Michael P. Locke, Task Force 1-7 ADA commander, said,

"After the trainers returned from the 7th ATC seminar, we immediately set up our lane training and began instructing our commanders of the relief, sergeants of the guard and officers of the guard on the procedures learned." Success or failure of the lane training was also tied to the proper construction of those lanes. An integral part of the lanes is the construction of bunkers and providing the correct equipment (mirrors for vehicle searches and multiple integrated laser engagement system gear for all players).

"The force protection survey in November was essential in establishing the quality of the layout of the lanes," said Task Force 1-7 ADA Command Sergeant Major Henry Bacon. "It helps put the soldier in the right mind-set necessary to conduct the training, [by] becoming certified and ultimately surviving a terrorist attack,"

The task force STX lanes were certified by the 7th ATC in January 1997. This certification allowed the task force to begin training all the soldiers on Southwest Asia force protection. The task force S-3, Major Rich Brisbane, spoke of the difficulty of coordinating task force activities and training since the force was separated geographically by more than 150 kilometers.

"It was essential that the trainers come from both battalions to ensure that the standard and quality was mirrored in both locations," Brisbane said. Although the separation posed training challenges, it was ideal for simulating the distances and command and control challenges the task force would face in Southwest Asia.

The commander of 6th Battalion, 52nd Air Defense Artillery, Lieutenant Colonel Keith McNamara, whose battalion had been in Southwest Asia during the Khobar

Towers bombing, traveled to the task force from Ansbach, Germany, to give detailed officer and NCO professional development (OPD/NCOPD) briefings. They included the ever present dangers and responsibilities all soldiers face while deployed in Southwest Asia.

“We’ve seen force protection up close and personal,” McNamara said. “We experienced what happens when it goes right because of the training, and we’ve seen what happens when it goes wrong. The challenge is to remain constantly vigilant.”

The task force also sent primary vehicle operators (drivers) to the Counter-Terrorist Driving School in Stuttgart, Germany. The drivers trained on vehicles the task force received from the U.S. Air Force at Sembach Air Base, Germany. This allowed the task force’s drivers to train on the type of vehicles they would be driving in Southwest Asia.

The surveys continued, and outside sources provided vital insight into the upcoming rotation. The mission and threat analysis neared completion and was constantly updated with assistance and support from the U.S. Army Europe Force Protection Cell. Leaders modified the troop-to-task requirements developed for each site after the final Southwest Asia site survey to verify that adequate personnel were available and

trained for each task (air defense crews, guards, maintainers, etc.).

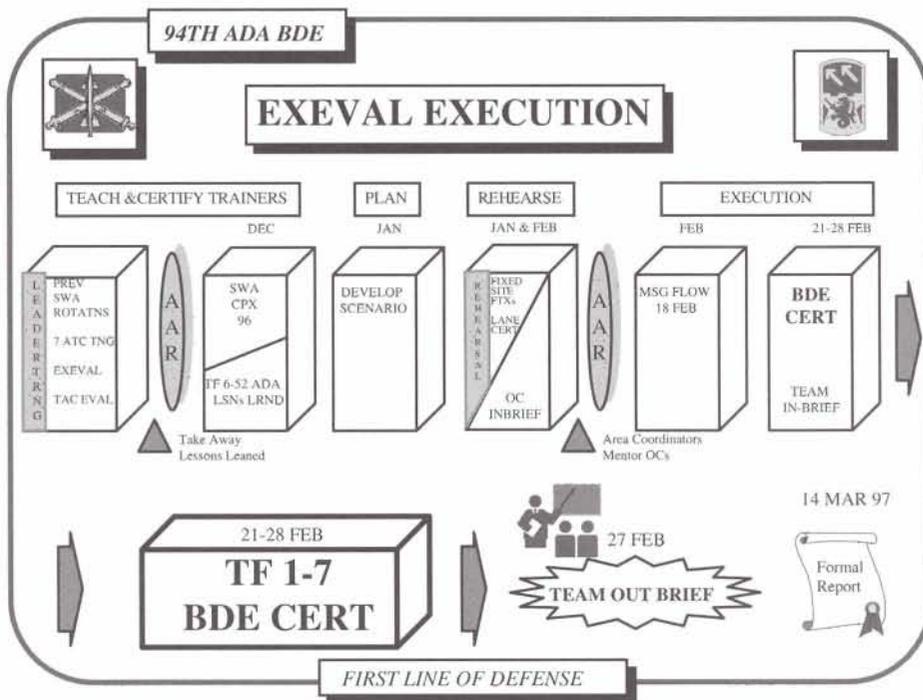
Lessons learned from the Downing Report, Army chief of staff messages (“Reimer Sends Messages”) and Task Force 6-52 after-action reviews (AARs) that related to force protection were combined with the 7th ATC Mission Training Plan (White Paper) for Battalion/Task Force Stability Operations to ensure all soldiers trained on the right tasks to the correct standard. The training tempo increased until it was time to face a new challenge.

That challenge was to begin preparing for the brigade certification and the final 6th ATC task-force certification. Maintaining the standard that units train one level down and evaluate two levels down, the brigade would certify the batteries while the 7th ATC would certify the task force for deployment. Following the Commander-in-Chief Europe’s Eight-Step Training Model (Plan the Mission, Train the Leaders, Conduct the Recon, Issue the Plan, Rehearse, Execute, Conduct After-Action Review and Conduct Retraining), the task force was ready for the Execution Phase of the model.

The Patriot task force had completed the planning and leader training with the troop-to-task mission analysis and observer-controller certification conducted by the 7th ATC. Reconns started in November 1996 and continued through February 1997 with the publication and distribution of the brigade and task force operation orders in January 1997. Rehearsals conducted during the STX lane-training were followed by the Southwest Asia Command Post Exercise that was conducted in December 1996 at the 94th ADA Brigade Headquarters.

The Southwest Asia Command Post Exercise replicated all operations cell and command post communication lines, and included status boards and command post manning requirements currently used in Southwest Asia. It was the first task-force-level event that brought together leaders from 1-7 ADA, 5-7 ADA, 413th Signal Company and the brigade’s Headquarters Battery.





Patriot battery (with all the weapon system's fire-control and launcher equipment) operational at the Kaiserslautern and Hanau areas with the remaining units providing command and control and force protection at their sites.

On 24 February, all units would cease operations, travel back to their home stations and prepare to rotate to the initial readiness positions for "heavy" air defense training. This allowed three of the five units to train heavy on force protection for two days and then rotate to their respective initial readiness positions on 25 and 26 February 1996 for air defense training.

Preparing for the execution phase, the task force replicated operations areas by substituting Kaiserslautern for one area and Hanau for the other area it would soon occupy in Southwest Asia. Both locations had Patriot IRP sites within 35 to 45 minutes, including a substitute remote Patriot IRP site at Babenhausen, Germany. The task force moved into these areas and began site improvement. They built entry control points, near and far bunkers, and static posts. Units also built and designated vehicle search areas, personnel containment areas and Scud bunkers.

All sites had separate billeting areas located 10 to 45 minutes away from the tactical sites; thus replicating the distances required to travel to site from various locations in Southwest Asia. Each site also replicated communication requirements by having UHF/DSN links to all units and operations cells. These lines were used to simulate STU-III, KY-68 and the Central Command Execution Net communications links. These elements were designed to certify the batteries and allow the task force to rehearse for the 7th ATC certification; moreover, they represented an unprecedented replication of the Southwest Asia mission tasks, conditions and standards (long-haul procedures, Scud alerts, etc.) outside of the Southwest Asia theater.

The brigade certification was designed to stress not only force protection but air defense operations. The certification began with each unit at its designated site and ready for action not later than 0500 on 22 February 1996. The scenario was designed to have one full

The first two units on the full-up IRPs would have one day of heavy force protection and one of heavy air defense training. The training combined normal site routine with expected vehicle traffic (deliveries, garbage, etc.) to unexpected "injects" with vehicles and personnel. The brigade provided "civilians on the battlefield" with access badges (some approved and some not) and vehicles. Civilians would enter the site and perform as expected to test vehicle and personnel search procedures, or would cause trouble to test our soldier's adherence to the rules of engagement. Civilians acted as snipers, local national representatives and demonstrators. They also acted as *Peoples News Network* reporters to test responses to possible interviews.

To ensure that the air defense crews were prepared for the mission, Major General John Costello, Chief of Air Defense Artillery, dispatched a team of experts from Fort Bliss, Texas, under the control of Lieutenant Colonel Francis G. Mahon, the 3rd Battalion, 43rd Air Defense Artillery commander, who acted throughout the brigade certification and 7th ATC certification as the senior air defense observer-controller. His team consisted of soldiers from his own battalion and the 5th Battalion, 52nd Air Defense Artillery, Fort Bliss, Texas. All of these soldiers had recently redeployed from the Southwest Asia.

An air defense evaluation section was aligned to each full battery IRP. These sections consisted of an evaluator for engagement control station operations, launcher operations and command post operations and proce-

dures. Troop proficiency training and on-line training mode scenarios were conducted, evaluated and tied into the launcher crew drills (hot crew) and reporting procedures through the command post. Scud alerts occurred in conjunction with force protection injects to review tested-unit procedures, ground defense reactions and awareness.

Captain Charles Crowder, the D/5-52 ADA commander, said, "It is obvious that the units have been training for this deployment. My unit just got back from Southwest Asia as the reduced readiness battery unit for 2-1 ADA's deployment. The terrain separation and IRPs are the closest I've seen for realistic training."

Mahon said, "This is a great opportunity to set a new standard for Southwest Asia pre-deployment training. I think in the future, all units will go through this type of certification process."

Preparing Task Force 1-7 ADA for deployment posed a daunting planning and coordination challenge. The 94th ADA Brigade S3, Major John Rossi, summed up the challenge: "We had to coordinate the arrival and integration of Fort Bliss evaluators from 3-43 ADA and 5-52 ADA, 69th ADA Brigade evaluators from 6-52 ADA, 7th ATC force protection observer-controllers, support personnel and civilians on the battlefield totaling over 100 soldiers. Additionally, we had to ensure that over 650 soldiers from the task force were in position and prepared to start the certification.

"It also included providing the basic scenario for the certification, in-briefs/out-briefs, life support, vehicle support and land training area support throughout the entire 16-day certification process," he continued. "This all had to happen exactly on time and be flexible enough to include adequate re-training time."

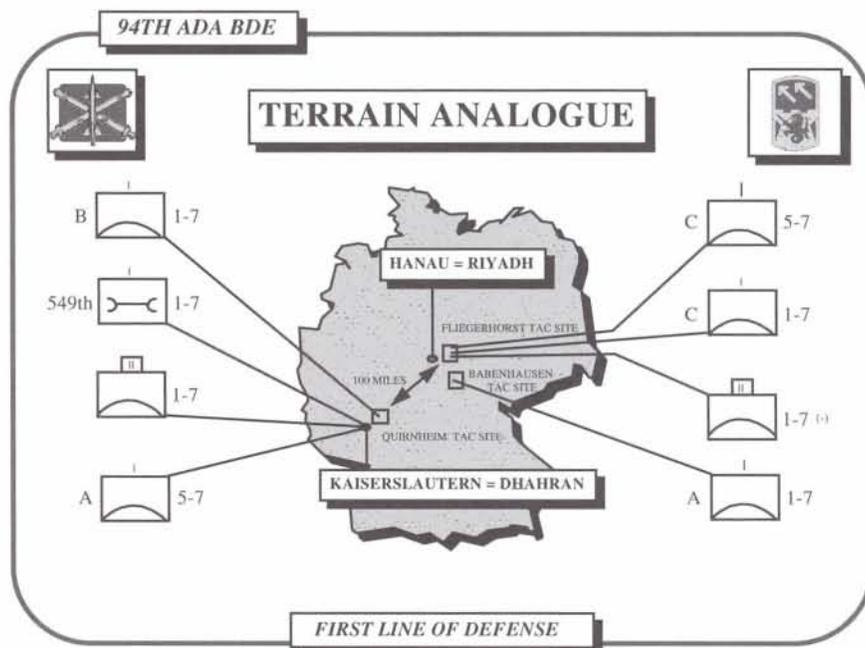
The brigade certification lasted from 22 to 28 February 1996 and the task force was rated in a "T" in all areas. Led by Mahon, the task force and brigade conducted an extensive and formal AAR on 28 February 1997, followed by immediate re-training and final positioning of units in as they made their final preparations for the 7th ATC certification. The certification by the 7th ATC, commanded by Brigadier General

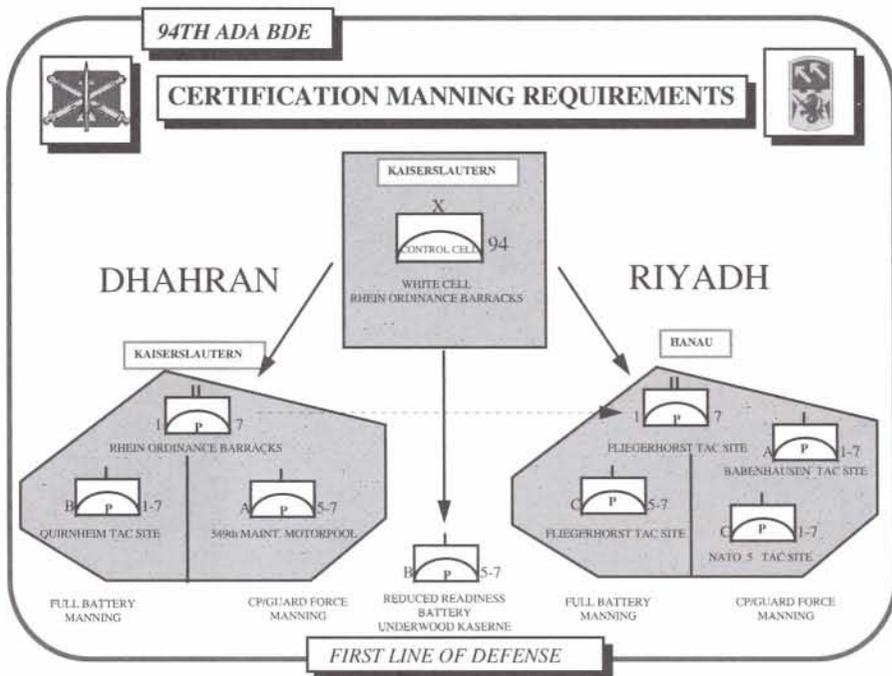
John Casey, would be the capstone event before Task Force 1-7 ADA deployed.

At first, there was some growing pains to resolve between the task force and 7th ATC personnel. None of the observer-controllers had ever evaluated a Patriot battery, let alone a high- to medium-altitude air defense task force. The observer-controllers' lack of familiarity, combined with the fact that only a handful of the task force's soldiers had ever been through a National Training Center or Combat Maneuver Training Center rotation, generated some misconceptions on just what the two parties could expect from each other.

During the initial planning stages in January and February 1997, both sides expressed concerns on how to actually certify the task force. The first suggestion involved bringing Task Force 1-7 ADA down to Hohenfels and putting its soldiers through the same "box" exercise scenario other units experienced before deploying downrange to Bosnia. While this would have satisfied some of the force protection issues, the Bosnia scenario would not match what the soldiers would face in Southwest Asia.

Since the 7th ATC had never evaluated a Patriot task force before, it was decided that at least two site surveys were necessary to ensure both parties understood how to tailor the certification to meet the specific mission requirements. First, the 7th ATC sent representatives to visit the Fliegerhorst IRP in Hanau to get





a general idea of what a standard Patriot IRP looked like, observe a Patriot unit and see the kind of manning expected in Southwest Asia. This was followed by a 7th ATC leader recon to Southwest Asia. They toured the Patriot tactical sites and saw firsthand the sites the Task Force 1-7 ADA would occupy.

During these two site surveys, the 7th ATC leaders gained a great appreciation for the large battle-space and distances between individual Patriot fire units. It also served to demonstrate the sometimes mutually exclusive responsibilities between the air defense mission and force protection requirement. A senior analyst said, "I never realized just how much area a Patriot unit occupies. The distance from the launchers to the fire control area is huge."

With these lessons learned, the 7th ATC formulated a course of action to devise the most comprehensive and challenging certification process that any Patriot task force had ever received. The 7th ATC nicknamed the exercise, which lasted from 2-8 March 1997, "Patriot Games," an allusion to the Patriot system, an Irish Republican Army ballad and a movie by the same title. The 65-member observer-controller team led by Lieutenant Colonel Ted Cook, the senior observe-controller, was one of two maneuver task-force sized element teams stationed at the Combat Maneuver Training Center that conducts both force-on-force and peace-support rotations. Cook's team also included six Vipers audiovisual cameramen and five civilians to portray civilians on the battlefield. Rose said, "This was the first time that the Combined Arms Training Center and the

box had moved to a separate location to conduct a rotation. It provided some interesting challenges that we had never faced before. The biggest was coordinating the team over the large distance that separated the task force. In the box, everything is much closer."

The team divided itself between the two locations and immediately began 24-hour operations to both challenge and stress the units as well as observing and recording the results. The units had to face a wide spectrum of challenges that ranged from a hunting party outside the perimeter, to civilians on the battlefield who went over the wire down range in the launcher area. The activities and conditions established

by the observer-controllers ensured that everyone from the battery commander to the soldier transporting hot chow to the site had to stay alert and be prepared for the unexpected. "Our goal was to replicate exactly what they would face in Southwest Asia, especially the boredom," said Cook.

The first day was spent getting all the units, 7th ATC support personnel and civilians on the battlefield into position and giving team in-briefs. The next two days were spent on nonlethal injects, vehicle and personnel searches and site security; in essence, establishing a routine designed to create complacency. Captain Earnest Boyd, C/5-7 ADA commander, said, "It was amazing how 'real-life' it was. It was nothing like the tactical evaluations or ARTEPs [Army Training and Evaluation Programs] that we have all experienced before. There were no snipers, bombs or incidents, only the steady monotony of everyday operations. At first we were keyed up, but soon the routine was established and everyone relaxed."

The observer-controllers ensured that the same vehicles and drivers were used for deliveries and that they followed established time schedules. The soldiers grew used to having the observer-controllers and the ever-present Abdul around. Except for minor injects, such as the difficulty of overcoming the language barrier at the entry control point, it was a settling-in time.

Day four was spent in a transition between non-lethal and lethal injects and the midpoint AAR. The task force leaders and observer-controllers reported into

Darmstadt and prepared for the AAR. Wells said, "The task force gets the exact same product that any unit rotating through the box would get; AARs after each incident, one midterm task force AAR and the final task-force AAR, all of which includes audiovisual replay of the incidents. Throughout the first two days, all of the observer-controllers sent in updates, and we combined those with video received from the Viper teams to produce a multimedia AAR."

Colonel Kevin T. Campbell, 94th ADA Brigade commander said, "This level of professionalism coupled with the detail of the AARs not only ensured outstanding training and preparation for Southwest Asia, but provided an excellent OPD/NCOPD tool on how AARs are given."

"We experienced how training should be accomplished: train, conduct AAR, stop training and walk through corrective actions, train again to standard and conduct a final AAR," said Captain Kyle Foley, the A/1-7 ADA commander. "Instead of the NATO tactical evaluation mind-set, our soldiers felt like they were conducting training instead of being evaluated."

The next two days combined all tasks with potentially lethal and nonlethal injects and solutions. Soldiers at some sites were more successful than others in dealing with the injected threats. While one site's guard force stopped the suicide bomber before he passed the entry



Private First Class Mark Sanders mans an overwatch bunker.

control point, another site's force failed to detect the explosive device hidden in the vehicle and allowed the driver to speed past the escorting soldiers to deliver his load of destruction to the radar area.

The A/1-7 ADA's commander of the relief said he could not believe how fast everything happened. "We had Mr. Abdul covered, and searched his vehicle thoroughly. We missed one container, the one that held the bomb. He seemed just like a regular type of guy, always talking about his family and how great it was to have Americans here with Patriot to keep Saddam Hussein in check. I never would have thought that he could do this to us."

Afterward, with four soldiers dead, two wound and the radar destroyed, a sergeant said, "The learning curve is steep, but I'm glad to train for it here and still have my soldiers around to learn from our mistakes."

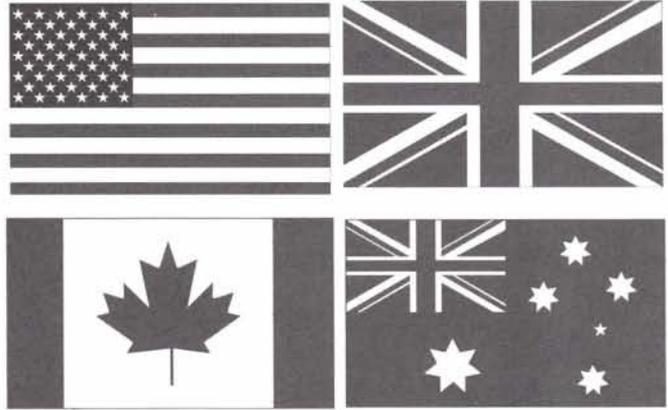
The last day was spent in the final Task Force 1-7 ADA AAR which recapped everything that had happened over the last six days. The 7th ATC commander told the leaders, "This certification included not only force protection issues, but also observing unit site routines, command and control, Scud alert procedures and NBC [nuclear, biological and chemical] operations. You must remain ever vigilant. You have trained for this rotation and learned from your mistakes. I believe you are prepared for this mission."

In the past two decades, more U.S. service members have died in terrorist attacks than in combat. In a turbulent world filled with ethnic, religious and cultural strife, we can only expect the 21st century to offer more of the same. News coverage that has made Patriot a high-profile weapon system also make its a tempting terrorist target. Therefore, we must train to counter terrorist attacks as rigorously as we train to counter tactical ballistic missiles. It is up to us to protect ourselves as we carry out our mission of protecting the force. With the arduous training behind them, the soldiers of Task Force 1-7 ADA is prepared for the dangers that await them in Southwest Asia. The training base is established, and now is the time to perform

Captain Charles L. McMurtrey III is the electronic missile maintenance officer for the 94th ADA Brigade, Darmstadt, Germany. His section was responsible for developing the scenario and master events list for the brigade certification of Task Force 1-7 ADA. McMurtrey previously commanded C/1-7 ADA, Kaiserslautern, Germany. His next assignment is as an intern on the Joint Staff in the J8 Directorate.

ABCA

STANDARDIZATION PROGRAM



by Lieutenant Colonel M.W. Burdick

Although the American, British, Canadian and Australian (ABCA) Armies Standardization Program is one of the oldest extant military agreements between any group of nations (tracing its origins back to 1947), there may be some lack of awareness in our respective armies of the important work the program accomplishes. The program is designed to achieve the highest degree of interoperability amongst the armies of these English-speaking nations (New Zealand has observer status), either through the standardization of procedures and equipment or by the declaration of national positions and standards.

ABCA's aim is **"To ensure that armies achieve agreed levels of standardization necessary for two or more ABCA armies to operate effectively together within a coalition, primarily in low- and mid-intensity conflict."** ABCA's work concentrates on the key areas of standardization required for coalition operations up to corps level. ABCA working groups meet annually and are hosted by the respective nations in turn. The next ABCA Air Defense working group will convene in the United Kingdom in March 1998. Additionally, every two years ABCA conducts formation-level exercises to evaluate its work and to ensure that the overall direction is maintained. The next exercise will take place in November 1998 in Australia. This command post exercise will integrate an Australian divisional headquarters with Canadian, U.S. and U.K. brigade headquarters in an operation-other-than-war scenario with the brigades dispersed over a very wide area.

The ABCA agreement signed by the four full-member nations allows members access to each other's research and development programs, equipment and exercises. Access is not restricted to the three armed services but extends to the wider defense

community, including defense industries. This service is generally under-utilized, and the following three provisions deserve greater prominence:

Standardization List. This affords access on request and with minimum justification to nominated research and development programs.

Reciprocal Use of Material Loans. Other armies' equipment may be borrowed for test, evaluation and development purposes at no cost, other than transportation to and from ports of embarkation.

National Exercises. Armies may participate in other nation's exercise at force levels commensurate with that of the exercise and as agreed with the exercise sponsor.

These components of the program can contribute significantly to the successful conduct of coalition operations by improving the interoperability of ABCA armies. The ABCA Armies Standardization Program is designed to be responsive, cost effective and focused on achieving standardization across the functional areas of the battlefield. We invite you to discuss any aspect of the program with ABCA representatives at the U.S. Army Air Defense Artillery School, Fort Bliss, Texas.

ABCA Air Defense Representatives

United Kingdom	Canada/Australia
Lt. Col. M.W. Burdick	Major K.D. Hynes
British Liaison Officer	Canadian Liaison Officer
DSN 978-1505	DSN 978-4360
(915)568-1508	(915)568-4360
United States	
Capt. Joe Wicker	
U.S. Army	
DSN 978-5603	
(915)568-1882	

Who would have thought, that by firing a few shots at Quemoy and Matsu, that we would have created such an earth shattering storm. — Mao Zedong

Once the sun sank behind the horizon not much flew, the dark sky was virtually empty, and any blip that appeared on the scope jumped out at you. At 2000, Bravo Battery's Target Acquisition Radar operator reported a target to First Lieutenant Bob Mackintosh, the fire control officer. The aircraft that appeared on the scope had just taken off from the Chinese mainland and was headed due east across the strait.

Mackintosh rang the battalion's Army Air Defense Command Post and reported the target's coordinates, altitude, size and direction of travel. The procedure was to update the target status report once a minute. Bravo Battery was already on three-minute alert, so the Nike-Hercules missiles were up and ready to fire before the target came within range of the Target Tracking Radar.



OPERATION HURRY UP!

by Blair Case

Since the missiles had a range of about 75 miles and the Taiwan Strait was only about 80 miles wide, it took only a few moments for the aircraft to come within range.

Mackintosh phoned in more precise data to the command post. The target was a twin-engine bomber headed straight for Taipei, the capital city of Taiwan. The rules of engagement were simple; perhaps too simple. Nationalist Chinese and U.S. Seventh Fleet aircraft and commercial airliners traversing the airspace had proper identification codes. Mackintosh would order the battery's Nike-Hercules launched at any aircraft that failed to respond correctly to identification, friend or foe (IFF), interrogation.

The soldiers of Bravo Battery had spent long months in a desert half a world away training for this moment. They had complete confidence in themselves and utter faith in the lethal surface-to-air missiles poised on their launching pads. "Lock on," announced the Target Acquisition Radar operator. Mackintosh swallowed hard and initiated the countdown to launch.



Suddenly, a panicked “HOLD FIRE! HOLD FIRE!” came over his headset. The Air Force Air Defense Command System had suddenly realized that Bravo Battery, 2nd Missile Battalion, 71st Artillery Regiment, was about to start a war.

Later, the air controllers explained that the Communist Chinese and

Nationalist Chinese had a “gentleman’s agreement.” An imaginary line called the “Davis Line” ran through the middle of the Taiwan Strait. Under terms of the gentleman’s agreement, Communist Chinese aircraft that crossed the line but turned around and made it back across the line before Nationalist fighter planes arrived would not be engaged. They had not warned the air defenders about the gentleman’s agreement because they had not taken Nike-Hercules’ extended range and quick reaction time into account. Bravo Battery had locked on to the approaching bomber and started its countdown before the Taiwanese had time to get their interceptors off the ground.

“I was in Delta Battery during the bomber incident,” recalled Dave O’Connell. “Each fire control van had a early warning plotting board. I manned it during red alerts. I used a set of head phones and received information such as coordinates, altitude and number of enemy aircraft. Usually they flew MiG-15s and MiG-17s off the mainland to the Davis Line (a green line on our board that was actually located in the middle of the Taiwan Straits) then turned and mostly flew up and down the line—kind of a game of chicken. On that day Delta Battery was also at red. Although we had the bogey on the acquisition radar, it was not close enough for us to acquire and lock. You could hear the cross talk on the headphones. When Bravo Battery got the lock, our fire control officer uttered a definite ‘Old Army’ expletive. We were a pretty gung-ho unit, and, of course, all the young officers wanted to be the ‘first to fire’ a Nike Hercules missile at a hostile target. When the order to hold fire came through the headset, it almost blew my eardrums out. I was 20 years old at the time,” O’Connell said, “and it was so long ago”

The stage for the incident had been set nearly a decade earlier. In 1949, the Nationalist Chinese under Chiang Kaishek were defeated on the mainland by Mao



The Army deployed Nike Hercules missiles to protect Taiwan air space against Red Chinese aircraft.

Zedong’s communist forces. The Nationalist Chinese government, the Kuomintang, fled across the Taiwan Strait to Taiwan (which Westerners then called Formosa). More than a million of Chiang’s soldiers crowded onto the island. They fully expected Mao’s victorious forces to pursue, but the United States sent its Seventh

Fleet into the Taiwan Strait and Mao’s forces were soon bogged down in the Korean War.

The Nationalists on Taiwan still occupied China’s United Nation’s seat, and Chiang’s soldiers dreamed of returning in triumph to the mainland. During their retreat, they had managed to hold onto three small islands (Quemoy, Matsu and Wuchiu) that were located right on mainland China’s doorstep. They soon began using the tiny islands as staging areas for commando raids on the mainland. In 1958, five years after the end of the Korean War, the mainland Chinese grew impatient and began shelling Matsu and Quemoy (actually, a group of four isles that the Taiwanese call the Kinmens). Wuchiu was so small and insignificant that Mao apparently considered shelling it a waste of ammunition. To many, the bombardment seemed a prelude to an invasion of Taiwan. Since U.S. President Dwight D. Eisenhower had signed the 1955 Formosa Resolution, pledging the United States to protect Taiwan, it looked as though America was about to be drawn into another Asian War.

The Soviet Union sent an envoy to China who suggested that Mao might be pushing the Taiwan Strait confrontation too far. Mao replied that, should the Americans invade, his forces would retreat, drawing the Americans deep into the interior, where his forces would destroy them with nuclear weapons. Perplexed, the envoy pointed out that the Americans had nuclear weapons of their own. Mao replied that Chinese mothers could quickly make enough new babies to offset any casualties China might suffer.

Soon, the Seventh Fleet was back in the strait and plans to evacuate most or all of the 10,000 U.S. civilian and military dependents on Taiwan were underway. Military personnel, fighter wings, cargo planes and construction crews began pouring onto the island. Nuclear-capable U.S. Matador surface-to-surface mis-

siles had been on Taiwan for almost two years, and now, the Associated Press reported, although it was supposed to have been top secret, that construction crews were working around the clock to prepare emplacements for a new surface-to-air missile — the Nike Hercules.

U.S. Marine Air Control Squadron-1, which had been rushed from Japan to Taiwan, soon noticed something fishy. Communist Chinese aircraft seemed to know their IFF codes and were breezing right through the radar screen. Some members of the squadron suspected that a fellow marine named Lee Harvey Oswald, who had a reputation as a loner and often espoused leftist ideals, might be selling secrets to the Communists. But they could never prove anything, except that the IFF problems stopped when Oswald was transferred back to Japan. The marines in the air control squadron forgot about Oswald until they were called to testify about Oswald's activities before the Warren Commission following the assassination of President John F. Kennedy.

Back in the States, the mammoth U.S. Army Air Defense Command's Nike-Ajax and newly fielded Nike-Hercules battalions were deployed around major cities such as Boston, Baltimore, Washington, Chicago, Detroit, Los Angeles and San Francisco. The Nike-Hercules, later deployed to Europe, Alaska and Korea, had a much longer range than the Nike-Ajax and, unlike the older system, could be armed with nuclear warheads. Other Nike-Ajax units were making the transition to Nike-Hercules systems.

Their mission was to defend the continental United States against Soviet long-range bombers, a mission that the advent of intercontinental ballistic missiles would soon make obsolete. But during a decade in which Americans dug backyard bomb shelters and elementary schools conducted air raid drills, the mission was taken very seriously. The soldiers of the Army Air Defense Command, by all accounts, were wonderful, totally dedicated soldiers whose commanders, in decades to come, would remember them with fondness and more than a trace of nostalgia.

The summer of 1958 also was the summer that the Brooklyn Dodgers became the Los Angeles Dodgers and the New York Giants became the San Francisco Giants, so Army Air Defense Command units on the west coast probably felt their mission had grown considerably in importance. "Ike" was still president and, in the Soviet Union, Nikita Krushchev had just replaced Nikolai Bulganin. *The Defiant Ones*, with Sidney Poitier and Tony Curtis; *The Young Lions*, with



Marlon Brando and Montgomery Clift; and *Vertigo*, with James Stewart and Kim Novak, were playing at the movies. "Diana," by Paul Anka; "Volare," by Domenico Modugno; and "Splish Splash," by Bobby Darren were playing on the radio. Meanwhile, packages of Nike-Hercules units were in training at Fort Bliss, Texas. The Nike-Hercules trainees, a mix of draftees and professional soldiers, looked forward to completing their training and deploying, along with their wives and children, to various sites as Nike-Hercules equipment became available.

In August 1958, just as things appeared coming to a head in the Taiwan Strait, a Nike-Hercules package that would become the 2nd Battalion, 71st Artillery, was completing its training at Fort Bliss. The soldiers had already received orders to move to Alaska with their families and household goods for an accompanied tour. But in early September, the members of the package had their Alaska orders canceled and received orders for a classified, unaccompanied assignment in the Far East. Although the mission was classified, it didn't take a James Bond to figure out the battalion's destination was Taiwan.

The filler personnel for the Nike Hercules battalion primarily came from the 495th Nike-Ajax Battalion, Fort Bliss. This Nike-Ajax battalion had supported U.S. Army Air Defense Artillery School training and nuclear exercises in Nevada. They were trained for mobile Nike-Ajax strategic deployment missions. This mobile unit's experience would prove invaluable during the initial setup and laying of the batteries in Taiwan, since the cabling for the Nike-Ajax and Nike-Hercules was essentially the same. Most of the soldiers in the Nike-Ajax unit had less than two weeks notice that they would be leaving Fort Bliss.

The Army had earlier demonstrated, that C-124 Globemasters could move an entire Nike-Hercules unit, at least from White Sands Missile Range, New Mexico,



Chaplain Burt Webb conducts religious services for Nike Hercules soldiers on a Taiwan hillside.

to Florida. With detached units of the 82nd Airborne Division in support, members of the 495th deployed from C-124s and fired their Hercules missiles out over the Gulf of Mexico from Santa Rosa Island. But the 2nd Missile Battalion's Nike-Hercules equipment, including 48 launchers, went to Taiwan aboard a merchant ship. An advance party flew to Taiwan to make plans to receive the equipment and coordinate activities with the U.S. Army Military Advisory Assistance Group (MAAG) and the construction activities. They discovered armies of laborers at work on four launch sites west of

Taipei on the western slope of a small mountain range between the capital city and the coastline. An American construction firm was preparing Alpha and Delta Battery sites. Bravo and Charlie Battery sites were being prepared by Chinese army engineers with the help of U.S. Army Corps of Engineer advisors.

Although newspapers such as the *China Post*, Taiwan's only English-language newspaper, were reporting that Nike-Hercules units were on the way, the Army refused to make it official. As soldiers of 2-71 Artillery boarded a troop train destined for Seattle on 16 September 1958, Major General Sam C. Russell, the Fort Bliss commander, refused to say flatly that the battalion was headed for Taiwan.

In Seattle, the soldiers of 2-71 trooped aboard a Navy transport ship named the *Breckenridge* in full combat gear. The *Breckenridge* had been scheduled to take troops and dependents from San Francisco to Korea and Japan. The routing was changed to pick up troops of 2-71 in Seattle and transport them to Taiwan before delivering the other passengers to Korea and Japan. The *Breckenridge* took a northern route to in hops of avoiding Typhoon Ida, but Ida caught up with the *Breckenridge* and forced it to use more fuel than planned. The ship had to make an unscheduled port call

at Naha, Okinawa, to refuel before continuing the voyage to Taiwan.

On 15 October 1958, 15 days after leaving Seattle, the Breckenridge docked in the port of Keelung, Taiwan. The troops were met by MAAG representatives, local dignitaries and a Chinese band. A United Press International story on the front page of the *China Post's* Thursday, 9 October 1958, issue reported:

An American guided missile battalion landed today to reinforce the defense of threatened Formosa, defying repeated Communist demands for the withdrawal of U.S. troops from the area. The 703 men of the 2nd Missile Battalion marched ashore at Keelung. Their Nike-Hercules missiles had already been unloaded, and their officers estimated the battalion would be ready for action in about a week. The five-ton Nike-Hercules, an antiaircraft missile, can blast the fastest known plane out of the sky. It is capable of carrying an atomic warhead powerful enough to shatter an entire bomber fleet.

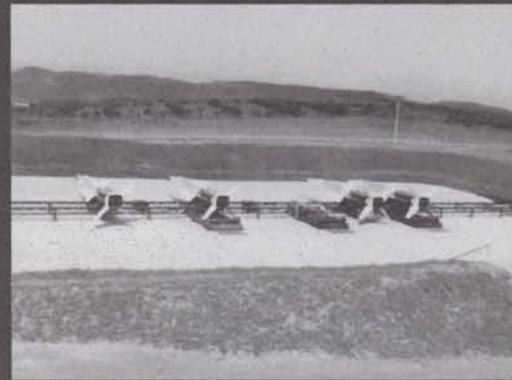
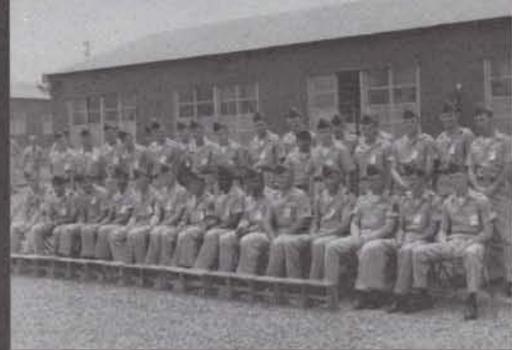
The battalion commander, Lieutenant Colonel Bernard I. Greenberg, told reporters that his mission was to defend the airspace of Taipei in case of enemy attack. "Give us an enemy plane, and we'll get it," he said. Greenberg refused to say whether any nuclear warheads had been brought to Taiwan (none had) or to confirm rumors that the Nike-Hercules equipment might eventually be turned over to the Nationalist Chinese.

"We disembarked at Keelung in full combat gear," said O'Connell, "including full field packs and weapons. We were loaded into the backs of five- and two-and-a-half-ton trucks. Along the way, Chinese packed both sides of the road to see the Americans. Some had big signs that said, 'Take Back the Mainland.' It was exciting and scary at the same time.

"Three of us were transported to the battery sites the next night to guard equipment," O'Connell continued. "We kept running into Chinese guards, and they kept running into us. It was pitch dark and foggy. We three Americans were sure glad to see daylight come."

Facilities

Buses took the Nike-Hercules soldiers from the port to the battalion headquarters area, where they were to stay until the battery sites were ready for occupation. The battalion's headquarters, which included the Army Air Defense Command Post, consisted of concrete block buildings that previously had been occupied



by a unit of the Taiwanese army. First Lieutenant Samuel Grant, the battalion's assistant S-3, had a bright future in Air Defense Artillery. He would go on to command Hawk and Chaparral/Vulcan battalions in the United States and Europe before retiring as a full colonel assigned to the Pentagon. But he found that running the Army Air Defense Command Post in Taiwan was like taking a step back in time.

"The command post was located at the base of a mountain right outside of Taipei. It wasn't nearly as automated as the Nike Hercules command posts back in the continental United States," he said. "We went back to doing things the way they did them in World War II. We used manual plotting boards. The NCOs who did the plotting stood behind the clear plexiglass and wrote backwards so that those of us in front of the plexiglass could read what they were writing.

"The room was dark except for two small desk lamps, and we sat at a dais in front of the plexiglass plotting boards. Our early warning came from the Air Force. We would plot coordinates that the Air Force gave us on the plotting boards. We watched all the traffic up and down the Chinese mainland. Sometimes planes would break off from the normal flow of traffic and head directly toward Taipei, and many times they came close to crossing the Davis Line, but they always turned back.

"We did have a couple of scares," Grant continued. Once a plane turned away from the Chinese mainland and headed straight toward Taipei. He kept coming until he reached the Davis Line, and we were about to engage, but it turned out to be one of our recon planes that had taken off out of Japan."

The firing batteries were carved out of existing farm land on the slope of the mountains. Alpha Battery was on the coast northwest of Taipei in Tam Sui. Bravo and Charlie Battery were adjacent to one another on mountain ridges near the Lin Kou Air Station, a U.S. Air Force electronic surveillance post. Delta Battery was further south in Young Mei, which lies between Hsin Chu and Tau Yaun.



General Maxwell D. Taylor

Major General L. L. Doan

The Operation Hurry Up veterans still argue over which battery became operational first. "According to my recollection says O'Connell, "it was Delta Battery that was ready to fire first. The date was October 23, 1958. I have an actual black and white photograph of that sign in my possession." After nearly 30 years, the issue is still considered highly sensitive, a topic best avoided.

Bravo Battery's experience was typical. The battery moved into its site, a leveled-off tea field on top of a mountain, on 11 October

1958. Each firing battery had a launcher platoon and a fire control platoon. The launcher platoon had a launch control trailer and four launcher sections, each with three launchers for the Nike-Hercules missiles. For several months into the deployment, the batteries could only have launched missiles manually from the Launch Control Trailer, since there were no cables long enough to connect the trailer to the Fire Control Van. The launcher sections were on above-ground hard-pads surrounded by berms, or revetments.

The fire control platoon manned the Integrated Fire Control System, which consisted of an Acquisition Radar, Target Tracking Radar, Missile Tracking Radar, Fire Control Van, Radar Van and Maintenance Van. Both platoons had mobile power provided by 45kw precise-power generators. The battalion headquarters operated the Army Air Defense Command Post, which controlled the activities of the firing batteries and communicated with the Air Force Air Defense System, which consisted of National Chinese F-86s and U.S. Air Force surveillance radars. Of course, there were also tactical aircraft of the U.S. Seventh Fleet in the Taiwan Straits.

The site consisted of a tent complex with concrete hard pads for the missile equipment. The 12-man squad tents had wooden floors and side walls and were furnished with desks, tables and chairs made locally out of Philippine mahogany. "Bravo Battery had one eight-hole latrine for the battery," Bob Mackintosh said, "which was periodically cleaned out by one of the local farmers with his 'honey buckets.'"

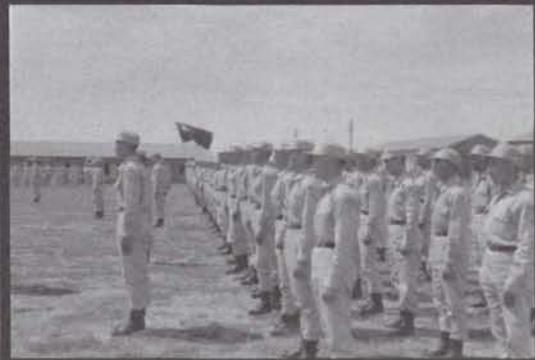
For months, no cyclone fencing was available for security fencing around the batteries. Soldiers spent as much time on guard duty as they did on operating the firing batteries. Some batteries had a system of 12 hours on alert, 12 hours on guard duty and 12 hours off duty. Local villagers swarmed through the site, picking tea leaves and browsing through the battery's refuse pile. Hundreds of laborers carrying dirt in two woven grass mats that hung from poles across their shoulders built the revetments.

"We had 50 guards from a nearby Nationalist Chinese division," remembers Mackintosh. "None of them spoke English. This made for a very dicey checking of the guard after night. The only sound they made as you approached was a 'click-click' as they loaded a round into the chamber of their rifle, which had a fixed bayonet. They meant business. The penalty if they did something wrong, or failed to protect their post, was death."

Enlisted soldiers stayed in squad tents. Officers at first moved into an eight-man tent with an English-speaking house boy who was supplied, it was said, by the Nationalist Chinese security agency. Later, they moved into four-man tents with potbellied stoves, inner-spring mattresses, wall lockers, foot lockers, arms chairs and small tables. There was generator power, but water had to be trucked in. House boys brought hot water for shaving every morning. The C-rations that the battalion had brought with it to Taiwan were soon replaced with meat and canned goods from the Taipei commissary. The Nike Hercules unit purchased fresh vegetables, milk and bread on the local economy.

Camera crews visited Bravo Battery on 18 October 1958 to film "Operation Hurry-Up" for "The Big Picture," a popular television show broadcast back in the states. CBS sent a news team the next day, and the following day the MAAG commander, Major General Doan, showed up with 100 reporters. The stream of dignitaries continued throughout the tour. General Maxwell D. Taylor, U.S. Army Chief of Staff, and General I. D. White, Commander U.S. Pacific, visited the Nike-Hercules batteries.

On 22 October 1958, Bravo Battery granted its soldiers passes to go to Taipei for the first time. The rainy season arrived a few days later. The Nationalist Chinese helped out by supplying the Nike-Hercules soldiers with rubber boots. "You grew six inches and 20 pounds heavier walking through the area from the buildup of wet clay on the bottom of your boots," said Mackintosh.



From their mountain top, soldiers of Bravo Battery watched the rice harvest transform the little valleys below the Nike-Hercules sites. Harvesters cut and thrashed the rice and spread it out to dry. Mackintosh took a ride in a helicopter and saw that Taiwan had been turned into a fortress. "Most of the fields were divided by bamboo bushes like hedge rows," he said. "From the air, you could see a row of foxholes behind every row of bamboo. The whole country side was pocked with foxholes, and even downtown there were concrete pillboxes in many places, such as bridge approaches."

Living Conditions

Taiwan is a subtropical island nearly 400 kilometers long and, at it widest, about 160 kilometers across. The west side of the island, where most of the people live, is flat and fertile, but on the east side facing the mainland mountains rise straight out of the ocean. At 3,952 meters, Taiwan's Jade Mountain is taller than Japan's Mount Fuji.

The Taiwan spring is warm and mild. Summer days are hot and sticky and the rain pours down in short, torrential afternoon thunder showers. Winter is cool, occasionally chilly, and the sky is filled with heavy cloud cover and frequent drizzle. Temperatures grow much colder at higher elevations. A monsoonal wind called the *hanliu*, blows in from Central Asia, driving before it stinging sheets of rain. Temperatures plummet, and nothing seems really dry.

"The weather varied from very pleasant to hot and humid and very, very wet and windy," recalls Mackintosh. During the rainy season, you never dried out. The wind on the mountain blew constantly and drove the rain into you and the equipment. Western Electric engineers saw problems caused by water being driven under the radar enclosures that they had never before encountered.

"You could drive down the mountain into sunshine while the mountain top stayed in a wind-driven rain cloud," he continued. "In February, it never got below 40 degrees, but with the wind, rain, living in tents and



Mission accomplished, soldiers of the 2nd Missile Battalion, 71st Artillery, turned their missile systems over to the Nationalist Chinese.

never drying out, it was colder than any assignment in Germany, Boston or Detroit."

"The wildlife in Taiwan was quite a shock to the unit," Mackintosh said, "even though we were used to West Texas rattlesnakes and scorpions—mainly because the sites were newly carved on the mountains and their habitat was disturbed. The cobras were prevalent; we were told that the deadly krait was in the area; I don't know if anyone ever

saw one; there were scorpions and centipede. The centipedes were not deadly, but their sting was very painful. It was not uncommon to hear someone scream out in pain in the middle of the night when they tried to brush off a centipede crawling over their body as they slept. When you touched the centipede, it would leave a welt the length of its three-inch-long body and cause excruciating pain for about 15 minutes. Of course, there were all of the other tropical insects."

Foreign Relations

The battalion enjoyed good relations with the Taiwanese, who considered the air defense soldiers the "great protectors" of their country and wined and dined them at every opportunity. Later in the tour, when 2-71 soldiers began training Taiwanese on the Nike-Hercules equipment, the Taiwanese soldiers treated the air defenders with the traditional respect Chinese reserve for teachers.

The battalion's relations with the MAAG, however, was very strained. "Prior to our battalion coming to Taiwan," Mackintosh explained, "they held a special relationship as advisors to the Taiwanese. After our arrival, our battalion received most of the attention from the Chinese military and the press. Being the only Army tactical unit (there was an Air Force Matador squadron in the south of Taiwan), we received privileges that the MAAG soldiers did not. For example, the officers club in Taipei, required whites or blues after 1700. Our officers were allowed to wear fatigue uniforms.

"The MAAG retaliated by making things more difficult than necessary," he continued. "For example, our vehicles went to town every day for supplies. They

would be dirty after going down the dirt mountain roads to get to Taipei. Before the vehicles entered the city, the MAAG said they must be washed. So the vehicles had to stop alongside the rice paddies and be washed, even though there were Chinese army wash racks that could have been used as you went into town.”

Training the Chinese

Once the Nike-Hercules defense was up and operational, the United States, as many had forecast, decided to turn the equipment over to the Taiwanese. One crew was trained on site at each firing battery, while two crews and the maintenance people were trained at Fort Bliss. “The crews were handpicked and all had the equivalent of an American high school education; however, they did not speak English and we did not speak Chinese,” Mackintosh said. “Each unit was provided interpreters. This made for especially tight quarters in the radar vans, with three U.S. operators, three Chinese operators and an interpreter. In Bravo Battery, the American operators soon picked up enough Chinese to give commands such as ‘Search left,’ ‘Up,’ ‘Down,’ and ‘Lock on,’ and the interpreters were asked to leave the van. We still used them when more thorough explanations were required.

“Everything the Taiwanese crews learned was by rote,” Mackintosh continued, “so they quickly picked up things, but if they messed up, it was almost impossible for them to recover. Hopefully, they came to fully understand what they were doing before we left.”

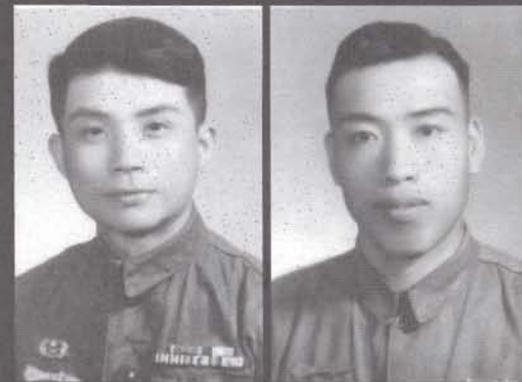
Rotation Home

The Taiwanese proved to be quick learners. In November 1958, the Taiwanese National Assembly issued the following message to U.S. servicemen:

On the basis of our traditional culture and friendship, our two nations have been taking a firm stand in antiaggression and anti-enslavement and fighting shoulder to shoulder for the cause of peace and justice.

Ever since Soviet Russia instigated the Chinese Communists to expand their armed rebellion and occupy the China mainland, thereby threatening the security of the whole world, your nation has heroically stood by us and resolutely supported us in the defense of Taiwan. For this we are most grateful.

The bombardment of the Kinmens and Matsu launched by the Communists is not only an imminent threat to Taiwan and Penghu but also a serious menace to the peace in the West Pacific. In pursuance of the Mutual Defense Treaty, your nation has been positively supporting us in our defense



and you gentlemen come to help us in our difficult fight against Communist aggression. We hold that the offshore islands, the Kinmens and the Matsu, are the front line of Taiwan and Penghu and the key to the West Pacific.

It is indeed well said in the recent joint communique issued by the U.S. and Chinese governments that 'they believe that by their united efforts in opposing aggression they serve not only themselves but the cause of peace.' We firmly believe that by arresting aggression through the united and concerted efforts of our two nations, we would vindicate justice and safeguard world peace.

In view of the great farsightedness and the friendly helpfulness of your nation in our common struggle, the National Assembly of the Republic of China, which exercises political powers on behalf of the Chinese people as a whole, desires to convey to you its profound respects by presenting to you this souvenir as an expression of their admirations and gratitude.

Most of the 2-71 returned to the United States on board the *Breckinridge* in August 1959. Some officers flew home and started phasing out as early as June to help set up the Okinawa Nike-Hercules defense, and a few stayed on a members of the MAAG. Many never received the Armed Forces Expeditionary Medal due them for their overseas tour of duty. Some thought the lack of recognition had to do with the classified nature of the orders that sent them to Taiwan; others thought it was because Greenberg, the battalion commander, committed suicide shortly before the battalion returned to the United States.

Operation Hurry Up was the first of what would turn out to be many overseas deployments for Sergeant Nat Lewis during a long career, but nearly four decades later, he still remembers the Taiwan operations as "special." "I finished up on Hawk and, after I retired, I worked on Patriot systems at Fort Bliss as a civilian," Lewis said. "But the Tawan deployment still stands out.

"It was my first time overseas," he added, "the possibility of combat seemed very real and everything—the different cultures—seemed new and exciting. The soldiers of the battalion were absolutely outstanding. We never had a single serious disciplinary action. Looking back, that seems absolutely amazing."

The bombardment of Quemoy and Matsu lasted only a few months, but the propaganda war continued, with each side firing cannisters containing propaganda at one another. Taiwan fired its propaganda cannisters on Mondays, Wednesday and Fridays; the mainland Chinese fired their cannisters on Tuesday, Thursday and

Saturdays. Everyone took Sundays off. Each side blasted each other with enormous loud speakers.

In October 1971, Taiwan lost its United Nation seat. A further blow came in 1979 when the United States withdrew its recognition of the Republic of China and recognized the Communist regime on the mainland. Chaing Kaishek died from a heart attack in 1975, and the Nationalist Chinese eventually abandoned their dream of retaking the mainland. Today, Taiwan officially remains a part of China and has not declared independence, a move that many fear might relight the tinderbox that nearly exploded in 1958. A movement for independence exists, but so does a sentiment for reunification with the mainland that would have been unthinkable in the 1950s.

When the Chinese conducted naval maneuvers in the Taiwan Strait in 1996, the United States reacted with declarations of support. But today, the Clinton Administration has proposed restoring China's favored nation trade status. On 1 July 1997, Chinese troops marched into Hong Kong to reclaim the glittering financial capital from the British after 156 years of colonial rule. Chinese leaders declared that the peaceful transition might pave the way for a reunification of Taiwan with the mainland. "It is an ardent aspiration of all China to settle the question of Taiwan in line with the policy of peaceful, reunification and 'one country, two systems,'" said China's President Jiang Zemin.

In the 1950s, however, reconciliation between Taiwan and the mainland seemed out of the question. Revisionists may down play the threat that China and the Soviet Union represented to the United States during the Cold War, but documents that have become available after the collapse of the Soviet Union confirm that the threat was very real. For a few months at the height of the Cold War, American soldiers of the 2nd Missile Battalion, 71st Artillery, stood on freedom's front line, and won a small but important victory in the fight against tyranny.

"Operation Hurry Up" is based on interviews with and materials furnished by 2-71 veterans. Robert Mackintosh supplied a written narrative, documents and newspaper clippings. David O'Connell read the completed manuscript and offered corrections and suggestions. Samuel Grant contributed photos of General Maxwell Taylor, Major General L. L. Doan and Chaplain Burt Webb. Other photos used in the article are from the collection of Nat Lewis.

FOREIGN MILITARY INTERACTION PROGRAM

ADA Soldiers Train With Cold War Adversaries

By Staff Sergeant Gina Baltrusch

The 69th Air Defense Artillery Brigade strengthened international friendships with air defense and artillery units of four Eastern European nations during a recent super-familiarization demonstration at the Leighton Barracks Simulation Center in Wuerzburg, Germany. The SUPERFAM joined the 69th ADA Brigade with air defense elements of Poland, Hungary, and the Czech and Slovak republics for an international simulation.

The 69th ADA's relationships with these nations through the Foreign Military Interaction Program supports President Clinton's Regional Airspace Initiative proposed at the 1994 Prague Summit. In January 1995, the four Visegrad countries took a big step toward interoperability when they agreed to a Pentagon proposal for establishing a unified Air Defense and Air Traffic control system.

"In the Air Defense Artillery arena, we will complement the Regional Airspace Initiative... by developing contacts with the Central and Eastern European nations of the former Warsaw Pact, enhancing the interoperability of participating nations and ensuring regional stability in Europe," said Colonel Dana F. Kwist, 69th ADA Brigade commander. "Initially, visits with these nations' air defense units were executed by Traveling Contact Teams under the Joint Contact Team Program. Friendship and mutual respect developed through a continuous ex-

change of ideas between the military counterparts. Bonds formed during those visits laid the groundwork for the simulation demonstration."

The SUPERFAM focused on developing cooperation and understanding. Inside the simulation center, a constant hum of conversation flew between the foreign air defense and artillery officers, interpreters and U.S. participants. Ringing telephones brought news from the "field," updating the command cell on developing situations. The computer-simulated scenario focused on peacekeeping, search and rescue, force protection, humanitarian relief and air defense operations in an international environment.

"What we're looking for are opportunities to make the most of visits that center on peacekeeping, search and rescue and humanitarian-type operations," said Kwist. "Some people say, 'How can you do that in air defense?' Air defense does have a part to play in peacekeeping missions.

"It's conceivable, for instance, that if you were doing peacekeeping operations or some humanitarian-type of action or had a hostile or belligerent party involved in the peace enforcement," Kwist explained, "you might very well be required to have air defense weapons that would be providing security while these humanitarian activities might be taking place."

Three days of familiarization with computer systems and procedures led up to the simulation play. "One of the biggest challenges we have is communication in five languages," said Captain Gerald Scott, 69th ADA Brigade plans and exercises officer. "The interpreters explain what we say, then they can talk amongst themselves in Russian, and the interpreters tell us what they decide."

"It is very beneficial to all of the forces here. This causes easier cooperation between our forces as we try to solve (scenario) problems quickly," said Polish Lieutenant Colonel Stanislaw Ruszczyk, operations officer for the Silesian Military District. Participants responded to developing situations in the scenario, practicing reporting procedures and joint decision-making methods. Some scenario events occurred "live," enacted on site by 69th ADA Brigade soldiers dressed in costumes. One air defense soldier disguised as a pregnant woman "went into labor" just outside the operations center.

Role-player events sparked interaction and often laughter as participants communicated by playacting what they could not express in a foreign language. "The



Colonel Dana F. Kwist, 69th ADA Brigade commander, right, presents an English dictionary to Polish Captain Stanislaw Pieniadz.

American military has proven to be very professional and possesses a great sense of humor—a common language for all the armies in the world,” said Czech Colonel Rostislav Lysoněk, Air Defense Radar Brigade commander. “I most enjoy the fact that this is the first time we [air defenders] have tried to solve the problems related to peacekeeping and peace-enforcement. Prior to this, our military does only pure combat actions. We appreciate the opportunity to learn. Although we have one unit involved in peacekeeping in the former Yugoslavia, the opportunity to practice the humanitarian aspects of military actions are still rare for our military. Basically, our objective is to learn common operations with other nations.”

Slovak Major Juraj Cisar, senior officer specialist, ADA Ground Forces, General Staff Headquarters, Army of the Slovak Republic, agreed that the event offered a learning experience for all delegations. “We’ve gained a new view of how to conduct operations and negotiate agreements in peacekeeping missions,” he said. “I’ve learned that it doesn’t matter what nation you work with, you can still go and find an agreement to solve any kind of problem.”

American forces also learned from the week-long international get-together. “The focus here is on cooperation. They want to not only pick up what they can from us, but are very willing to share how they would approach problems and how they do business,” said Scott. “One of the most surprising things I saw is how they approach decision-making. When we showed the other countries our U.S. Army decision-making model, it seemed that they reach conclusions the same way. They developed their operation by basically the same method. So, all along, we’re not all that different in the way we do things.”

“I’ve seen a willingness to cooperate between all the countries, to take a problem, to do their best at coming up with proper decisions and reach the best solution to each of the problems we’ve been faced with in this scenario,” added Lieutenant Donald B. Hyde Jr., 69th ADA Brigade deputy commander.

Last summer, several officers from each of the Visegrad nations stayed with two of the 69th ADA Brigade’s battalions—an Avenger battalion and a Patriot battalion. They lived and worked with U.S. air defense soldiers for three weeks.

“We rotated them through the different platoons. That gave them a very good look at how we actually do business, how our officers interact with the NCOs,” Hyde explained. “The more interaction we maintain at our level—not exactly at the diplomatic level, but a

relationship that fosters international cooperation—that just serves to cement our relationships. At the grass-roots level, our work with these East European countries can only serve to better relations and improve stability among all the countries in the region.”

International boundaries have dramatically changed since the fall of the Berlin Wall and the realignment of the former Soviet Union. Just as most Eastern European nations have adjusted their political and economic strategies for a post-Cold War Europe, the military dynamics in the world have adjusted to new regional realities. In less than a decade, have become friends and are testing the waters of cooperation.

“The partnership arrangements we have with the German units have taken the better part of 50 years to establish into the kind of strong partnerships that we have today, and they’re not to be minimized. We’re at the very beginning edge of that process with these four countries,” Kwist noted. “What we’re looking for is to build on friendship and to show that we’re a professional military, just like they are. That we’re the right people for them to call, just like we want to know that they’re the right people for us to call. We’re not interested in firing weapons—we’re interested in safe volumes of air over the top of civilian and military elements.”

“This simulation could be the very first step to work together to learn a lot from each other to learn about the way we do business—this friendship is beneficial for both our forces and the American Army,” remarked Hungarian Colonel Sendor Hadju, chief of Air Defense Artillery/Missiles, 2 Aviation and Air Defense Corps.

Operations other than war around the world frequently require cooperation between international military forces. Friendships established early can only enhance possible working relationships in the future, said Kwist. “With the smaller number of forces we have in Europe, the connection that we have with the local governments, not just with Germany, but also the ones outside Germany, become even more and more significant. If our forces, such as the 69th ADA Brigade, have good relationships with the air defense forces of neighboring nations, just like they do today with Germany, the Netherlands, Denmark and Belgium—those nations all have strong air defense elements,” Kwist said. “If we can create those same type of close relations with these four Visegrad nations, the safety and security of Western and Central Europe increases.”

Staff Sergeant Gina Baltrusch is assigned to the V Corps Public Affairs Office.

History has a habit of repeating itself. Paradigms continue to shift. Unfortunately, we continue to perpetuate the “safe” habits of yesterday by preparing for the next war based on our last success. The enemy, just like a pro football team, knows from bitter defeat what did not work in the last game will not work in the next and is unlikely to run the same set of plays (strategy or tactics) when it’s time for the re-match. Technology moves forward, providing new tools and creating new opportunities. The pro football coach studies game films and designs a game plan to offset his opponent’s strengths and capitalize on his opponents weaknesses. Our future adversaries are studying replays of the last war, one they

sustain the pilots who fly them. But without them, no nation could hope to be competitive on the modern battlefield.

Medieval kings were perfectly willing to parcel off bits of their kingdom a piece at a time, if necessary, to keep their gallant knights on the payroll because armored knights seemed invulnerable and invincible. Then entered the age of gunpowder and muskets. Suddenly, half-organized masses of low-bred, bare-footed peasants without armor or mounts and only rudimentary training could annihilate charging ranks of blue-blooded, armor-clad aristocrats and their gallant steeds.

OPINION

by Major Mike MacAlister

Our Day is Coming

lost. We cannot expect them to fight the next war like an instant replay.

I want to present two lessons from the past that cast a light on Air Defense Artillery’s future. They convince me, and I hope they convince you, that our future is bright. Simply put, “Our Day is Coming!”

Modern air forces, like the knights of armor in the Middle Ages, are fast approaching obsolescence. The similarity between today’s jet jockey and yesterday’s knight in shining armor are striking. Equipping a knight with a coat of armor, sword and a horse specifically bred to support his weight was expensive. Today’s aviator sports a specially fitted G-suit and pilots a multimillion dollar aircraft specially tailored to specific missions. Proficiency in riding, jousting, and wielding medieval weapons required years of apprenticeship and endless hours of expensive sustainment training. In medieval times, only the wealthiest of kings could afford to recruit, pay, train, arm and outfit knights for battle and, thereby, remain competitive on the battlefield. The same is true today of pilots; only the wealthiest nations can afford to purchase advanced aircraft and recruit, equip, train and

My point, here, is that gunpowder caused the paradigm to shift. Armored knights disappeared from the battlefield, the cost of warfare significantly declined, and the number of countries capable of effectively waging war grew. We see similar factors at work today. During the latter half of the 20th century, as the Gulf War demonstrated, no nation without a world-class air force could hope to prevail on the battlefield. Today, combinations of several pieces of relatively inexpensive technology are making nations that cannot afford squadron after squadron of high-tech combat aircraft competitive.

I believe that conventional combat aircraft are headed for museums, where they will reside alongside coats of arms and suits of armor. Tactical ballistic missiles, cruise missiles and, especially, unmanned aerial vehicles (UAVs) will soon be able to attack targets as effectively, or more effectively, than piloted aircraft. Since these pilotless aircraft cost a fraction of what conventional combat aircraft and combat pilots cost, they will have the same sort of impact on 21st century warfare that gunpowder and muskets had on

medieval battlefields. Pilotless air frames will empower third-world countries and terrorists the way gunpowder and musketry empowered medieval serfs and permit them to compete in airspace that once was the private domain of the world's affluent nations.

How will we counter the 21st-century air threat? The answer is with Air Defense Artillery. The advent of sophisticated tactical ballistic missiles, cruise missiles and UAVs represent a paradigm shift in warfare. Since only Air Defense Artillery can effectively counter these evolving threats, the branch's future is bright. In other words, "Our day is coming!"

Tactical ballistic missiles and cruise missiles represent a significant threat, but it's my opinion that UAVs, with their unlimited potential, will do the most to shatter the paradigm of warfare. The UAV's multiple capabilities make it an extremely lethal and extremely attractive weapon of choice. It is difficult to track, having little or no infrared emission source. Equipped with a ground-positioning system, on-board video capabilities and ordnance, a UAV becomes a kamikaze, the perfect precision-guided munitions platform. Such a UAV provides an "eyes-on" capability to the enemy. Many think that the appearance of UAVs overhead will quickly be followed by rain of lead from enemy artillery. I submit the rain of lead will fall not in the form of artillery rounds, since artillery batteries are limited in range, but in the form of massed UAV attacks. UAV's are like deadly fruit flies. They are inexpensive (quick to reproduce) and difficult to detect (low cross section). Their source of origin is difficult to identify; they can be assembled and launched from difficult to detect locations.

More than 200 UAV development programs are underway around the world. The UAV operator requires relatively little training to fly his airframe, since the computer chip can navigate for him. Anyone who can play a video game can operate a UAV; it takes highly-select individuals with exceptional aptitude years of expensive training to pilot conventional combat aircraft. The Iraqi air force sat the Gulf War out on the ground, or fled to Iran, because it could not afford to lose pilots or aircraft. A third-world country that invests in UAVs today will not hesitate to employ them against the United States in conflicts tomorrow. Massed attacks by swarms of UAVs is inevitable in future conflicts.

The Japanese understood the paradigm shift identified by General Billy Mitchell when he demonstrated that dive bombers could sink ships; the U.S. Navy did not. Someone once said that, if Congress had funneled

more money to the U.S. Navy prior to 7 December 1941, the Japanese would simply have sunk more battleships at Pearl Harbor. The United State's failure to recognize the paradigm shift resulted in a humiliating defeat.

As the new century approaches, a similar debacle is brewing. Pick a number . . . two, five or, perhaps, seven years from now. Some future adversary will gain, or already has gained, access to UAV technology. Somewhere, a future adversary is exploring UAV capabilities, perfecting UAVs tactics and working out UAV attack options. On some future "Day of Infamy," such an adversary will hand whoever is in port, on the airfield, or on the ground a devastating defeat. The only difference between Pearl Harbor 1941 and "Seaport XXI" or "Airport XXI" will be that CNN will be on hand to broadcast the attack live to a worldwide viewing audience.

We must be ready to counter UAVs. If I were Secretary of Defense, I would immediately double the number air defense battalions. As a minimum, we must completely field the Bradley Linebacker, Avenger Slew-to-Cue and all components of the Forward Area Air Defense Command, Control, Communications and Intelligence (FAADC³I) system.

We must also continue to experiment with, and field, advanced over-the-horizon target acquisition and identification technologies that will expand our engagement envelope. In addition, we must place a heavy emphasis on enemy UAV play in all battle command training programs and National Training Center rotations to develop and hone tactics, techniques and procedures for countering mass UAV attacks. Thanks to the branch's success in the Task Force XXI Advanced Warfighting Experiment, Air Defense Artillery is no longer the "Rodney Dangerfield" of combat arms. We must act as ADA "evangelists" and spread the ADA "gospel" throughout the Army and Department of Defense.

The UAVs have already taken off, and they are headed our direction. Only Air Defense Artillery can stop the 21st-century air threat. Therefore, our future is bright. Our day is coming.

Major Mike McAlister, an ADA officer, is an instructor in the Leadership Department, Command and General Staff College, Fort Leavenworth, Kansas.

ADA ASSOCIATION

The ADA Association's campaign to raise \$14.5 million to construct a new facility to jointly house the Fort Bliss Museum and ADA Museum has taken a dramatic turn. The Fort Bliss Post Exchange will move from its present location into a new building in 2000. Rather than spending hundreds of thousands of dollars to demolish the old Post Exchange building when it becomes vacant, the Army and Air Force Exchange System has agreed to turn the building over to Fort Bliss for use as a museum. This unforeseen development

Saudi Arabia and Israel during Operation Desert Storm. It will set new standards for Army museums.

Sam Hoyle, Fort Bliss director of museums, has inspected the Post Exchange facility and has pronounced it "amazingly adaptive" to museum functions. Once renovations, including the installation of a new power plant and air conditioning system are made, the building will accommodate all the displays, workshops, programs and activities envisioned in the original plan. In addition, Major General Costello hopes to relocate

Museum Gets a Home

by Major General (Ret.) John Oblinger



present us an instant victory in our long campaign to obtain an appropriate showcase facility for Fort Bliss and Air Defense Artillery.

The arrangement, engineered by Fort Bliss Commander, Major General John Costello, is a major coup for Fort Bliss, Air Defense Artillery and the entire El Paso region. The new Fort Bliss Museum will represent the Army and Fort Bliss during frontier times; during the horse cavalry days and during the two world wars, Korea and Vietnam. It will trace the evolution of Air Defense Artillery from the seacoast artillery batteries that defended American shores during the Revolutionary War to the Patriot battalions that engaged Scud missiles over

the Museum of the NCO, presently at Bigg's Army Air Field, in the new facility. Since renovation work will cost an estimated \$2 million, our fund-raising and grant-solicitation apparatus, with its various committees, will remain active until the necessary funds are raised. But now our goal—to raise \$2 million for building renovations—is imminently reachable. I'm highly confident that potential donors who found the original \$14.5 price tag intimidating, or unrealistic, will enthusiastically contribute now that the future of the Fort Bliss Museum is certain. We hope to reach our new campaign goal in time to begin renovations the moment the Post Exchange building become available.

ADA ASSOCIATION



Fort Bliss will convert the Fort Bliss Post Exchange building to the Fort Bliss Museum when the Post Exchange moves to a new facility in 2000. The ADA Association has launched a campaign to raise approximately \$2 million to renovate the Post Exchange building.

The Post Exchange building's strategic location—mere minutes from Interstate 10 and one of the finest travel camps in the United States—is absolutely superb. The building is situated in the middle of a “high-traffic” shopping area in the same complex as the Fort Bliss Inn, commissary, post office, banks, credit unions and the new Post Exchange site. The Fort Bliss Museum will instantly become a major regional tourist attraction, benefiting both Fort Bliss and the El Paso metropolitan area. We can count on a steady stream of visitors to the new Fort Bliss Museum.

The Fort Bliss Museum project merits the support of every ADA soldier, Fort Bliss civilian employee, military contractor, military retiree, private citizen and member of the El Paso business community. The all-volunteer Army has produced a superior fighting force, but the end of the draft has widened the gap between the Army and the civilian world. The new Fort Bliss Museum will help us rebuild the bridges that once existed between the military and the civilian populace.

Fort Bliss has long had a first-class staff of museum curators who will, at last, have a first-rate facility to showcase the Army and Air Defense Artillery. The new Fort Bliss Museum will set new

standard for military museums. It will safeguard the heritage and traditions of Fort Bliss and serve every air defense soldier as a constant source of education and inspiration.

The Fort Bliss Museum will also support the Army in its newly launched initiative to revitalize Army values—honor, integrity, selfless service, courage, loyalty, duty and respect—that have sustained American soldiers on battlefields through the centuries.

Major General (Ret.) John Orlinger, a former chief of Air Defense Artillery, is president of the Air Defense Artillery Association.



Major General (Ret.) John Oblinger, president of the ADA Association, accepts a \$500 check from members of the El Paso Business Consortium. The contribution will go to the Fort Bliss Museum project.

ADA DIGEST

First ADA Women to Command Battalions

Lieutenant Colonel Heidi V. Brown became Air Defense Artillery's first female battalion commander and the Army's first battalion combat arms commander on Sept. 30 when she assumed command of the 2nd Battalion, 43rd Air Defense Artillery, 108th Brigade, Fort Bliss, Texas. "It's incredible," she said. However, "It's not a novelty. Women are in a number of command positions throughout the Army."

Brown was one of four female lieutenant colonels, recently selected to command Patriot battalions, including Deborah Hollis, Beverly M. Stipe, and Barbara L. Treharne. The four are among 14 ADA officers selected to assume battalion command during fiscal year 1998. Their selection is particularly noteworthy because the other combat arms branches (Infantry, Armor and Field Artillery) do not offer combat battalion command opportunities to women.

"I always thought I'd branch transfer, but after a few years, I realized I liked what I did [in ADA]," said Brown. She said she recommends the branch to anyone seeking an exciting, challenging career using cutting-edge technology. ADA really has to be your "heart and soul," said Brown.

Hollis, who will assume command of the 1st Battalion, 7th Air Defense Artillery in Kaiserslauten, Germany, this summer, is now a budget officer with the Army's Deputy Chief of Staff for Operations. She majored in business administration at Texas College in Tyler, Texas.

Both Brown and Hollis started out as lieutenants in Hawk battalions, but in keeping with technological advances, both will command Patriot battalions. There have been many milestones in their careers.

"Battery command was a turning point in my staying ADA and staying in the military," said Hollis. Her battalion commander, then Lieutenant Colonel Roy Gortney, "was a great leader and mentor." He fostered a great command environment, said Hollis, and it "made the difference knowing there were great leaders and soldiers like that." She enjoyed the opportunity to



Lieutenant Colonel Heidi V. Brown accepts command of 2-43 ADA from Lieutenant Colonel Thomas W. Williams.

help form a new unit, Alpha Battery, 2nd Battalion, 7th Air Defense Artillery Brigade, "from scratch."

For Brown, battery command was "fantastic." She commanded the same unit in which she'd had a platoon and for which she later served as executive officer. Her brigade S-3 position at Fort Polk, La., was also a great challenge. Later, as a tactical officer at West Point, she enjoyed molding future leaders. Her greatest frustration was watching "her" cadets go off to operation Desert Storm without her.

"I was better trained than they were and would have traded places with them due to their lack of experience," said Brown.

The other two women command selectees, Treharne and Stipe, will command the 3rd Battalion, 6th Air Defense Artillery Brigade and 3rd Battalion, 2nd Air Defense Artillery Regiment, 31st Air Defense Artillery Brigade, respectively. Both units are at Fort Bliss. The other air defense artillery command-selectees are: Major Michael L. Bruhn, Major Kenneth Cox, Major Kent Friedrich, Lieutenant Colonel Barry Halverson, Lieutenant Colonel John C. Hamilton, Lieutenant Colonel Donald B. Hyde, Major Robert L. Jassey, Major Robert Lawrence, Lieutenant Colonel Steven E. Peters and Lieutenant Colonel Thomas Stanton.

— Army News Link

ADA DIGEST

Army Creates New Command

On Oct. 1, the Army created its newest major command—the U.S. Army Space and Missile Defense Command (SMDC). The Army redesignated U.S. Army Space and Strategic Defense Command, formerly a field operating agency of the Army Chief of Staff, to reflect its added responsibilities and missions. In its new role, SMDC serves as the Army Component Command to the joint U.S. Space Command, the specified proponent for space and national missile defense, the materiel developer for assigned programs and the Army's integrator for theater missile defense. The command ensures that Army warfighters have access to space assets and the products they provide to win decisively with minimum casualties. It also ensures effective missile defense to protect the nation as well as deployed U.S. forces and those of its allies.

SMDC has formed the Space and Missile Defense Battle Lab to focus the Army's space and missile defense efforts and has linked it with U.S. Army Training and Doctrine Command battle labs. The newly created Force Development and Integration Center in Arlington, Va., will perform the proponent functions of doctrine, training, leader development, organizations, materiel and soldier support for space and national missile defense.

Another organizational element, the Space and Missile Defense Acquisition Center in Huntsville, Ala., will centralize the command's materiel development, targets and test facility management into one overarching organization that will include the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) Project Office in Huntsville; the Ballistic Missile Targets Joint Program Office in Huntsville; the Army Space Program Office in Fairfax, Va.; the High Energy Laser Systems Test Facility at White Sands Missile Range, N.M.; and the Kwajalein Missile Range in the central Pacific. The director of this center is dual-hatted as the deputy commanding general of SMDC.

The command's Missile Defense and Space Technology Center remains in Huntsville as a center of excellence for missile defense technology and has added space technology development, as well. It continues to support the Department of Defense's Ballistic Missile Defense Organization, provides technical support to the Army Program Executive Office for Air and Missile Defense and develops technologies for expanding Army space programs.

The center's new Space Technology Directorate functions as the command's space technology scout by identifying new space technologies and applications. The center also is developing a long-range space research and development program. The Army Space Command in Colorado Springs, Colo., continues to support the warfighter with space-based products and capabilities and provides long-haul satellite communications through the worldwide Defense Satellite Communications System.

SOLDIER OF THE YEAR



U.S. Army Europe's Soldier of the Year, Specialist Clayton D. Diltz of I-4 ADA, receives his Meritorious Service Medal certificate from USAEUR Commanding General Eric K. Shinseki. (U.S. Army Photo by Arthur McQueen, USAREUR Public Affairs, 139th Mobile Public Affairs Detachment.)

COMING IN THE NEXT ISSUE!



OPERATION JOINT GUARD

AVENGER SOLDIERS OF THE FOURTH
BATTALION, THIRD AIR DEFENSE
ARTILLERY, PATROL THE STRIFE-TORN
STREETS OF BOSNIA-HERZEGOVINA

