# ARMY AVIATION

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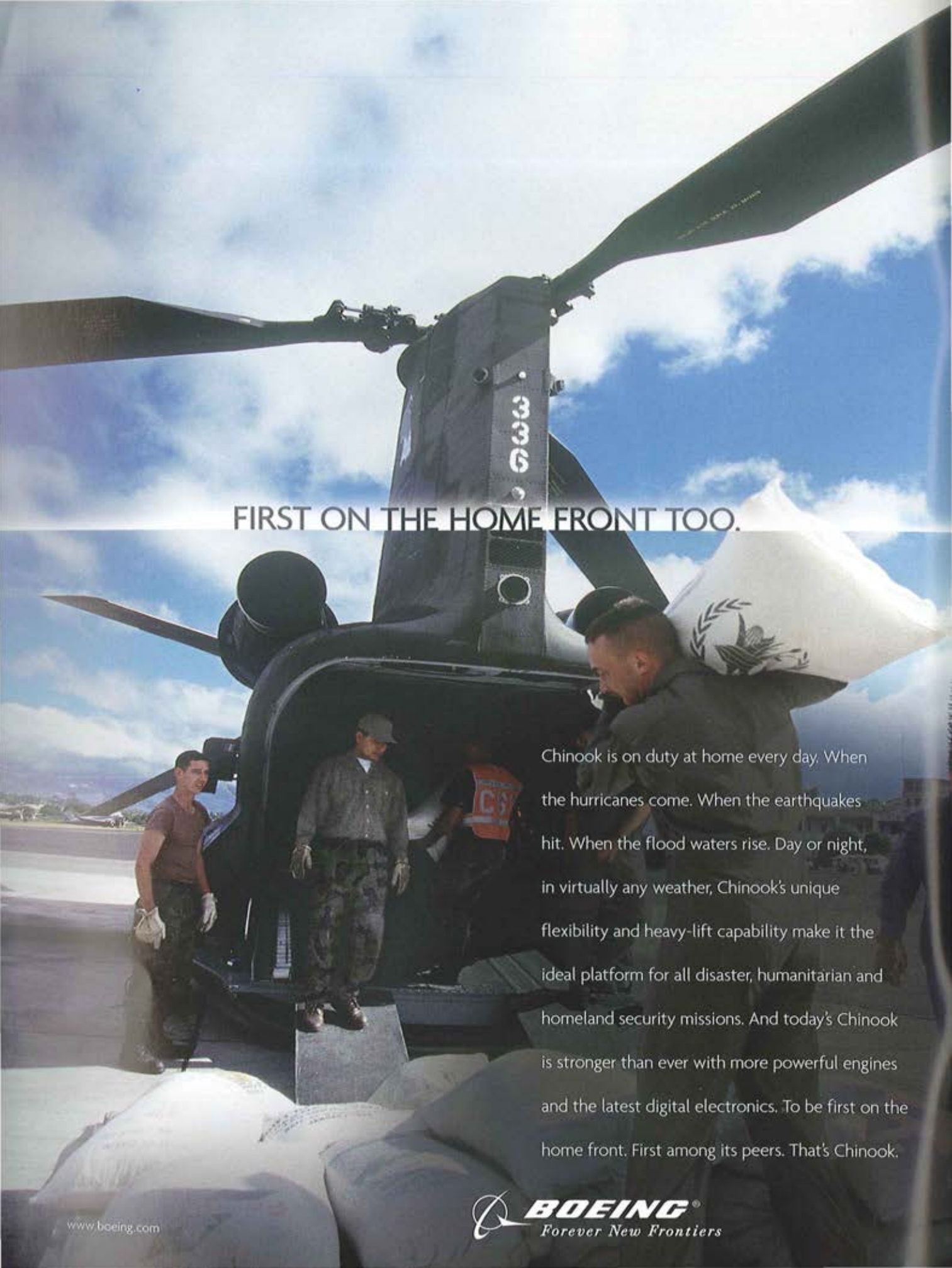
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# briefings

Members of the **160th Special Operations Aviation Regiment** celebrated the unit's 20th anniversary May 21 at Fort Campbell, Ky. Among the events at the celebration was the ceremonial return of the American Airlines flight attendant wings of Sara Low to her father, Mike Low. He had requested that the wings — worn by his daughter the day she was killed in the crash of American Airlines Flight 11 into the World Trade Center — be flown on combat missions in Afghanistan. They were, on more than 20 occasions. Other events included the presentation of awards to original members of the unit.

Former members of **Company H, 19th Special Forces Group**, or **5th SF Battalion, 19th SFG**, Colorado Army National Guard, are invited to a reunion during the weekend of Sept. 14-15, 2002, in the Denver, Colo., area. Please e-mail **coh5thbn@aol.com** or write to Co. H/5th Bn. Reunion, PO Box 31512, Aurora, CO 80012. You may also call Clyde Meeks at (970) 881-2672 (Ft. Collins area), Tom Olden at (719) 471-7925 (Colorado Springs area), Harry Owen at (303) 364-8041(Denver area) or Al Tucker at (719) 647-0359 (Pueblo area).

Two aviators — **CPT Christopher S. Baril** and **CPT Matthew W. Braman** — were among 27 recipients of the 2001 General Douglas MacArthur Leadership Award recognized during a May 22 Pentagon ceremony hosted by Army Chief of Staff GEN Eric K. Shinseki. Baril commands the Arizona Army National Guard's Company C, 1st Battalion, 189th Aviation Regiment, and is a full-time Guard technician in Phoenix. Braman is attending training with the 160th Special Operations Avn. Regt. at Fort Campbell, Ky., and will be assigned to the Regiment's 3rd Bn. in August. The MacArthur Award is given annually to Army officers who exhibit extraordinary leadership abilities and embody MacArthur's ideals.

The U.S. Army Research Laboratory has awarded **Frontier Technology Ltd.** a contract to develop a "smart" camouflage material. The so-called biomimetic camouflage will have the ability to "sense" its background and alter its color and patterns accordingly, much like a chameleon. Frontier is also developing a "stealth and safety" software prototype for the RAH-66 Comanche that will aid pilots in planning their missions. A real-time onboard system will aid aviators in choosing optimal routes to and from objectives, and will monitor and report on the aircraft's operating status.

The 3rd Battalion, 229th Aviation Regiment, at Fort Bragg, N.C., is slated to receive two TEAC Integrated Debriefing Stations and 25 VSC-80B airborne video recorders (AVRs) built by **TEAC America**. The AVRs will equip the battalion's AH-64A Apache attack helicopters.

**DynCorp Information Systems** has won an 18-month, $35 million Department of Defense (DOD) contract for phase two of the Transportation Coordinator's Automated Information for Movements System II (TC-AIMS II) Block 2. TC-AIMS II will integrate DOD's legacy logistics and transportation systems, and will support a common hardware suite to enable faster and more efficient unit deployments.

**Kelly Industries Inc.** is continuing to supply the New Jersey National Guard with pre-engineered metal storage buildings for use at armories throughout the state. The prefabricated 30-foot-square structures are erected on prepared concrete foundations, and can be put up in less than four days. The NJ Guard estimates that the structures have resulted in at least $10 million in cost avoidance by allowing the secure storage of equipment and supplies in all weathers. The Guard also estimates that the structures offered a 3 to 1 savings over the cost of traditional brick-and-mortar buildings.

The Federal Aviation Administration recently certified an Army C-12 aircraft equipped with advanced **Rockwell Collins** avionics systems. The certification has cleared the way for the Army to upgrade 21 C-12s to meet Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) requirements. The C-12 installation includes satellite-based navigation and flight display overlay capabilities to ensure navigation performance required by CNS/ATM. The aircraft will also be modified with expanded data-link capabilities to ensure enhanced air traffic management.

The founder of the Canadian electronics firm CAE, **Ken R. Patrick**, died June 1 in Victoria, British Columbia, at the age of 86. An ex-Royal Canadian Air Force officer, he founded Canadian Aviation Electronics, or CAE as it is now known, in 1947 in a vacant aircraft hangar at Montreal's St-Hubert Airport. Over the following decades he helped transform the company from a small specialty firm into an internationally known manufacturer of civil and military electronic systems, flight simulators and avionics. Today, CAE employs more than 6,000 people in Canada, the United States and around the globe. With annual revenues in excess of $1 billion, CAE is the world's leading supplier of civil flight simulators and second-largest independent civil aviation training provider, as well as the largest Canadian-based defense contractor.

Sikorsky Aircraft has appointed **Graeme Breen** its general manager of Australian programs. He will be based in the company's new office in Canberra. Breen has had a distinguished career in senior management positions in the private sector, as well as in the Australian Defence Forces — including positions with the Australian Defence Force Helicopter School and the Defence Acquisition Organisation, where he oversaw the modification and introduction into Australian service of the CH-47D Chinook helicopter. Most recently, he was general manager for marketing and strategic programs for Helitech Pty. Ltd., a specialist rotary-wing aircraft distribution, maintenance and training company formed following the management buyout of Bell Helicopter Australia.

**Rockwell Collins** has won a DOD contract potentially worth $40 million to provide avionics hardware for the U.S. Special Operations Forces (SOF) Common Avionics Architecture System upgrade program.

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# Aviation Soldiers, Moving Forward

By MG John M. Curran

OBJECTIVE FORCE

I wrote last year about this time on "Moving Out to the Objective Force," and highlighted some key reasons for aviation transformation — improving our readiness and ability to execute our missions in the future operational environment and replacing obsolescent fleets across all Army aviation components.

Unquestionably, events since then have only served to reinforce the impetus for our transformation and remind us that it is an absolute necessity to maintain our momentum as we move toward the Objective Force. As we look at what lies ahead in our future technology and operational templates, we know that Army aviation will require adaptive leaders possessing the technical expertise and the mental agility to operate successfully in the Objective Force environment. Not only must we address the transformation of the force in equipment and structure, we must also address how we access, train and develop our soldiers.

### Accessions: Getting the Right Soldiers

Our career life cycle begins with accessions, and it is essential that we select the right people for our branch.

We are in the early stages of updating the Alternate Flight Aptitude Selection Test (AFAST). We recognize that the current AFAST, last revised in 1988, is not optimized to test for the personal attributes required for operating our highly technical aircraft and associated equipment. When combined with future increasing mission complexity, this makes it even more important to have an effective testing program designed to identify potential candidates with the qualities and attributes essential for Army aviation warfighters.

### Developing Our Leaders

Our future aviation leaders must possess not only technical expertise in our platforms and mission equipment, but must also be adept in the application of our combined arms doctrine.

Key future enablers lie in the development of crew chief training programs to prepare soldiers to become aircrew members; in the implementation of Flight School XXI to provide better, more proficient aviators to our forces in the field; and, finally, in the revamping of the officer education system by consolidating the training of core competencies and moving more towards assignment-oriented training.

### Maintaining Relevancy

We are continuing our efforts to modernize today's active Army, Army National Guard and Army Reserve for tomorrow's Objective Force. Most Military Occupational Specialties (MOSs) associated with legacy aircraft have been recoded for our modernized fleet. Eligible soldiers trained in legacy MOSs are being programmed for MOS reclassification and training to ensure that we keep their skills relevant, while at the same time retaining their leadership and branch experience.

### Personnel Policy Transformation

The Army Development System XXI Task Force was chartered to conduct an in-depth study of current personnel-management policies and leader development, and make recommendations to effect necessary changes that will ensure relevance and readiness for the future Army.

Among the task force's approved recommendations is one requiring a single numerical branch identifier to align the officer, warrant officer and the enlisted branches. With a target of fiscal year 2005, all Army aviation MOSs will begin with "15" as a means to objectively improve assignment processes and subjectively unify the branch.

Commissioned and warrant officer MOSs already begin with the same two digits, but enlisted soldiers in Career Management Fields (CMF) 67 and 93 will change to a 15-series MOS, e.g., MOS 67T (UH-60 repairer) may be recoded to 15T; 93P (flight operations) may be recoded to 15P.

The Army Training and Leader Development Panel recently conducted its warrant officer study. Final recommendations are being prepared for the chief of staff of the Army. These recommendations could have positive, long-lasting impacts on warrant officer recruiting, education and retention.

We are well into the Officer Professional Management System XXI (OPMS XXI), which allows officers, entering field-grade level, the opportunity to serve in technical and specialized career fields other than operations. As part of OPMS XXI implementation, we are also looking to improve our soldiers' career life-cycle management. Working with the U.S. Total Army Personnel Command and the Army G1, we are actively pursuing ways to increase the operational experience of our lieutenants and captains, giving them more time in aviation units to better prepare them as future leaders at higher levels.

### Retaining Quality Soldiers

We have made tremendous strides in compensa-

tions to retain the best in our aviation force. Aviation Continuation Pay (the Aviation Bonus), previously limited to AH-64 and MH-47 warrant officers, was expanded and now includes UH-60, OH-58D, CH-47 and fixed-wing warrant officers within targeted years of service.

Special Duty Assignment Pay compensates our air-traffic controllers (MOS 93C) serving in controller positions around the world. Promotion rates for our branch have been consistently healthy for all ranks and, specifically for aviation warrant officers, have been on the rise for the past two years.

### Recruiting: Getting the Message Out

The aviation branch routinely has good success in recruiting from the civilian sector. Aviation CMFs continue to attract the best and the brightest in our enlisted force. In ROTC programs and at the U.S. Military Academy, the aviation branch is consistently the premiere branch of choice. Out-of-Service (nonmilitary) warrant officer flight application rates are healthy and in-service applications are rising.

I am asking all leaders to actively recruit from our own ranks and identify potential candidates for aviation warrant officer service. In-service recruiting serves to quickly establish for accession boards that the candidates are predisposed to service to the nation. It allows applicants to seek advice and recommendations from fellow aviators, and helps to perpetuate Army aviation's warrior ethic and sense of team within the branch and units.

### Our Soldiers Are Our Future

The human aspect of transformation must keep pace with the rapid changes in our technological environment. History is replete with examples where ultimately it was innovation, courage, and leadership rather than technology that made the difference in winning or losing in battle.

As aviation leaders, we are stewards of our own branch, and our efforts to actively recruit, properly access, consistently develop and retain quality soldiers are our imperatives crucial for continued success and commitment to excellence. As we make our technological leaps in transformation, we must ensure that we do not leave behind the soldiers who fix and fight those technologies.

❖❖

*MG John M. Curran is the commander of the U.S. Army Aviation Center and chief of the aviation branch.*

## Armed Forces Recognized With National Defense Service Medal

The Department of Defense has announced that service members on active duty on or after Sept. 11, 2001, are eligible to receive the National Defense Service Medal.

"The sacrifices and contributions made by the Armed Forces in direct response to the terrorism attacks on the United States and to the long-term resolution of terrorism merit special recognition," said Deputy Secretary of Defense Paul Wolfowitz. The NDSM may also be awarded to members of the reserve component who are ordered to federal active duty, regardless of duration, except for certain categories.

While no closing date has been established, eligible service members can receive the award immediately. The NDSM was first established by President Dwight D. Eisenhower in 1953, and was subsequently awarded for honorable active service for any period between June 27, 1950, and July 27, 1954, between Jan. 1, 1961 and Aug. 14, 1974, and between Aug. 2, 1990 and Nov. 30, 1995.

The NDSM is on the web at www-perscom.army.mil/ tagd/tioh/Awards/NATIONAL%20DEFENSE%20SERVICE%20MEDAL1.htm. — Army News Service


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# Virtual Simulation in Support of Army Aviation Training

By BG Stephen M. Seay

***The Army's Simulation, Training and Instrumentation Command (STRICOM) dedicates itself to providing soldiers the best possible testing and training solutions.***

Technology is key to this effort. Using technology that embraces simulation that is so life-like the soldiers react as if the scenario were real, STRICOM provides fixed and portable systems that take training to a higher level. STRICOM's goal is to get the training systems into the soldier's hands while the technology is still state of the art, and reinforce the theme to provide systems that allow soldiers to train as they fight.

## The Challenges

Emerging challenges to training the 21st-century soldier are numerous. One such challenge is diminishing land and radio spectrum available for live training exercises. Urbanization, airspace restrictions (noise and night flight) and environmental concerns restrict the ability to perform live training.

Another challenge is the increasing sophistication of weapon systems. The effective range of many new weapons far surpasses the boundaries of training areas.

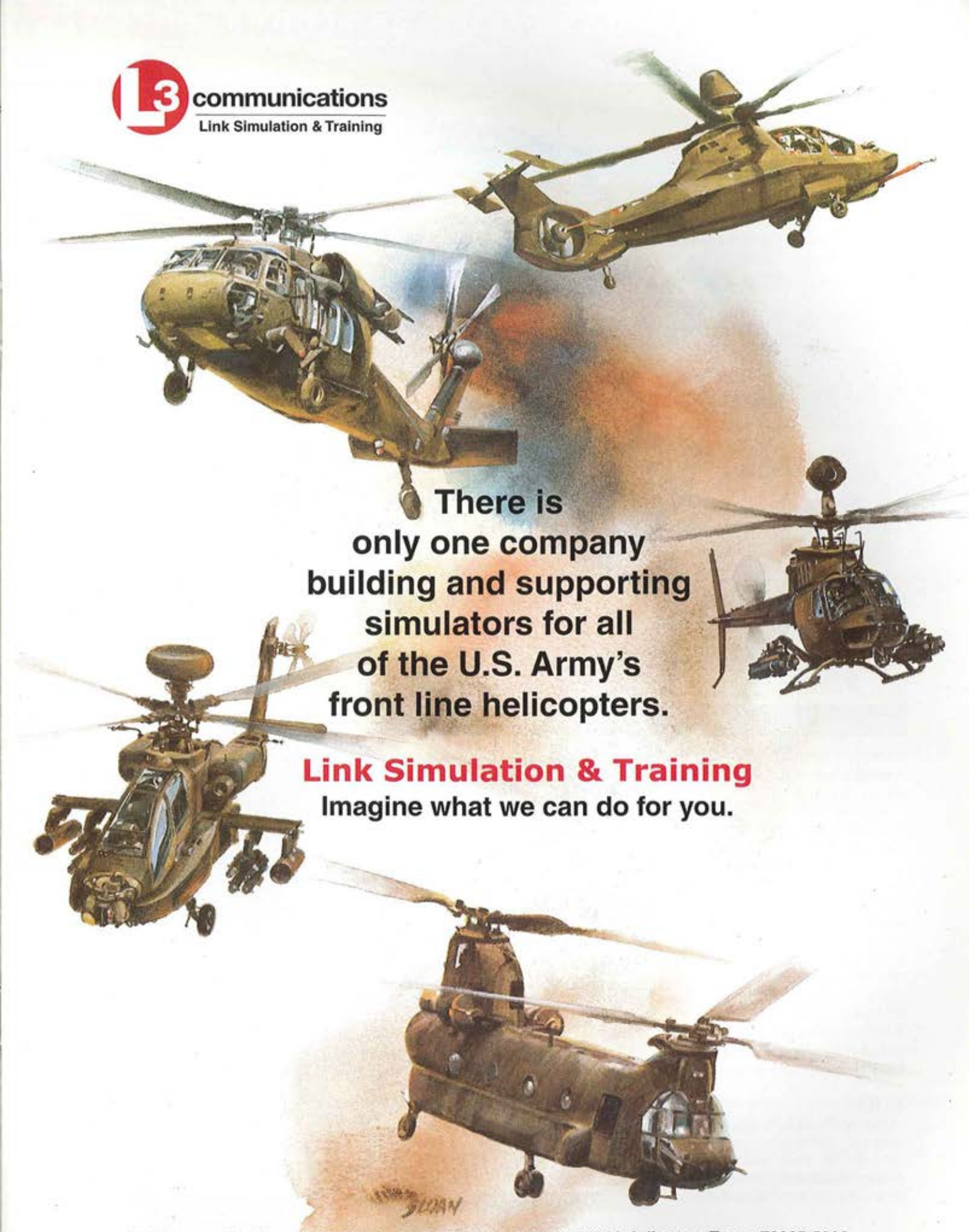
Finally, challenges arise from asymmetric threats and contingency operations. The military must have soldiers and leaders who adapt to a wider range of environments and tasks. Today, soldiers train for peacekeeping and stabilization operations like the one in Bosnia, small pivotal crises like East Timor, as well as large-scale conflicts such as Operations Desert Storm, Enduring Freedom and Noble Eagle. In light of the Sept. 11 tragedy, the U.S. military must identify and counter the creative use of simple weapons systems and consider that anything can become a weapon.

One approach to overcoming these challenges is to apply research for soldier training using virtual environments and advanced simulation interfaces (e.g., robotics). These interfaces support visual, aural, olfactory and tactical interaction with realistic virtual training scenarios to develop and maintain individual, crew and collective skills associated with Army operations.

## Aviation Virtual Simulation Training Systems

The Project Manager Combined Arms Tactical Trainer (PM CATT) develops and fields virtual simulation systems, enabling aviators to "train as they fight."

PM CATT's vision as "the Army's provider of integrated, interoperable virtual training solutions for the Army's transformation to Objective Force" guides its mission of providing products to the soldier on a daily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basis. Within PM CATT, the Product Manager, Air and Command Tactical Trainers (PM ACTT), supports Army aviation's virtual simulation products. PM ACTT produces synthetic flight-training systems for aviation, air-traffic control, air defense, intelligence and electronic warfare, and command and control.

PM ACTT's programs include various high-fidelity flight, weapons and combat-mission simulators, part-task trainers and maintenance trainers. Aviation systems include the Army's first collective mission trainer for aviation, the Aviation Combined Arms Tactical Trainer-Aviation Reconfigurable Manned Simulator (AVCATT-A).

PM ACTT also develops and fields simulations for the Army's helicopter platform project managers in Huntsville, Ala. Examples include the AH-64A Apache Combat Mission Simulator, the UH-60A/L Black Hawk flight simulator, the CH-47D Chinook flight simulator, and the OH-58D Kiowa Warrior cockpit procedures trainer-image generator and Crew Station Mission Equipment Trainer.

## AVCATT-A

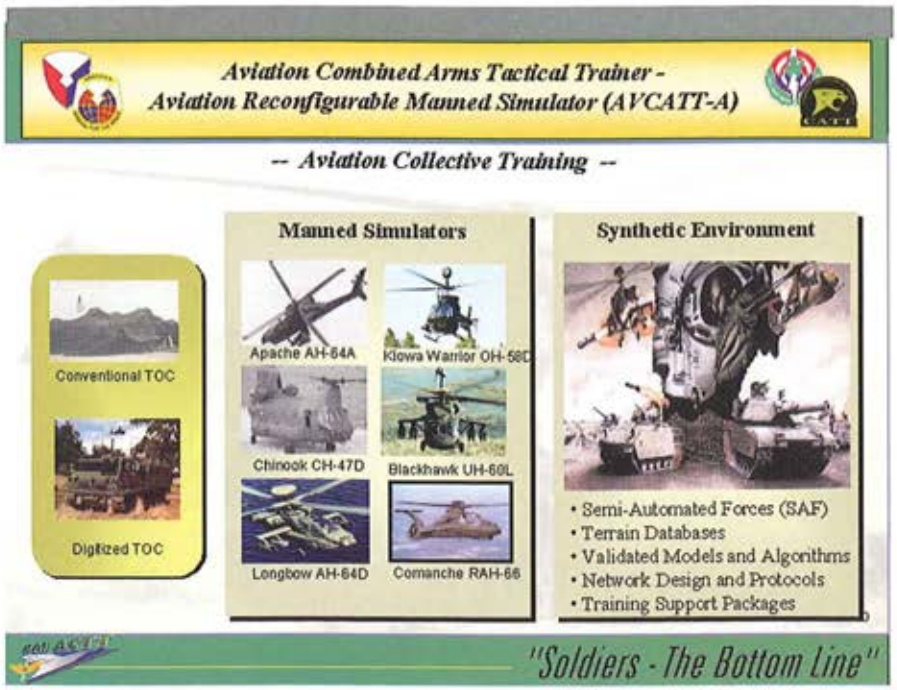
The AVCATT-A system is a dynamic, alternative instructional concept to train and rehearse, through networked simulation, in a collective and combined arms simulated battlefield environment. It is a critical element of the Combined Arms Training Strategy and supports institutional, organizational and sustainment training for active and reserve component aviation units worldwide.

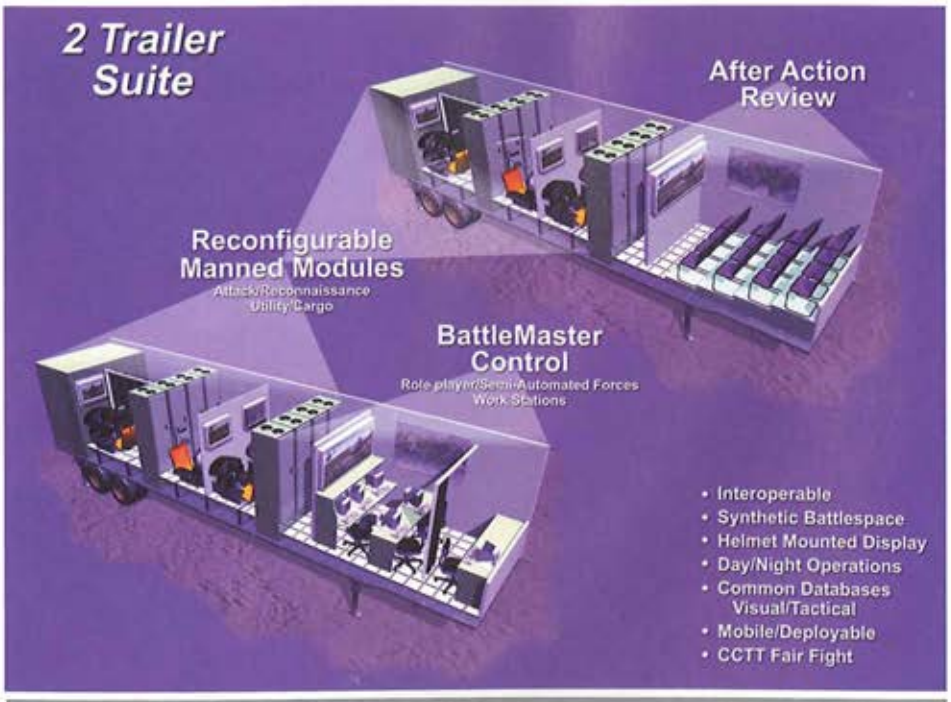
Collective and combined-arms simulation exercises provide commanders with an affordable capability to train individual tasks; to conduct unit collective training, rehearsals and mission essential task list training; and combined arms wartime mission performance requirements. AVCATT-A is a mobile, transportable, trailorized virtual simulation training system designed to provide aviation the capability to conduct realistic, high intensity, task-loaded collective and combined arms training exercises and mission rehearsals.

The AVCATT-A system interoperates with other simulation systems through local area networks (LANs) and wide area networks (WANs) using broadcast and multicast modes. The system operates using joint architecture and achieves fair fight interoperability with ground collective training systems like the Close Combat Tactical Trainer (CCTT).

The system includes an after-action review (AAR) capability, a battlemaster control (BMC) console, and workstations for ground maneuver, fire support (FS), close air support (CAS), logistics, battle command and engineer role players. This provides the capability to conduct collective training from team through combined arms levels.

Each AVCATT-A system reconfigures to the AH-64A Apache, AH-64D Longbow Apache, RAH-66 Comanche, OH-58D Kiowa Warrior, UH-60A/L Black Hawk and CH-47D Chinook. STRICOM begins fielding the first four of a planned 22 AVCATT-A suites to the active and reserve component in early 2003.



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## AH-64A Apache Combat Mission Simulator

The AH-64A Combat Mission Simulator provides transition and refresher training for experienced aviators in nap-of-the-earth flight, masking/ unmasking, engagement techniques, weapon systems operation and aircraft survivability equipment. The system enables Apache crews to develop tactical decision-making skills during realistic mission scenarios in a high-threat environment against interactive targets. There are currently 10 combat mission simulator units fielded worldwide.

The simulator is a two-cockpit system with separate cockpits for the pilot and the co-pilot/gunner, and includes on-board instructor operator stations. The capability of the two devices at Fort Rucker, Ala., includes independent operations for individual crewmember training, and integrated operation between crew and combat mission training. Correlated cockpit sensors simulation includes the Target Acquisition and Designation System, Pilot Night Visual System, Integrated Helmet and Display Sighting System, and pilot Video Display Unit.

The six-degree-of-freedom motion system pitches, rolls and yaws, and provides lateral, longitudinal and vertical transition. The motion system provides cues in response to actions taken by the flight crew, and for the following special effects: turbulence, rough air, runway roughness, landing impact, malfunctions, hover characteristics (including transition) and hostile weapon hit and near-hit effects.

The Army Tactical Digital Image Generator provides a generic visual database system. The visual system consists of digital image generators to create real-time scenes, out-the-window displays for each cockpit and sensor displays to provide FLIR, low-light-level TV and direct-view optics scenes. One ATACDIG image generator provides three channels for out-the-window scenes and pilot night-vision system, and another image generator provides single channel sensor imagery. A variety of enemy/threats and vehicles populate the visual database. The vehicles have the ability to track and fire upon the "own-ship" crew, providing realistic mission engagements.

STRICOM awarded a contract in May 2001 for the major upgrade and modernization of the AH-64A Apache Combat Mission Simulator. This upgrade supports the Army's plans for continued Apache "A" model training. The contract calls for completion of major improvements in applied technology and aircraft concurrency in February 2003. Upgrades to the main computation system include image generators, a visual database and out-the-window display system improvements, and modernized instructor operator stations to enhance supportability.

## LSMP for UH-60A/L and CH-47D Flight Simulators

To address pilot safety concerns, in 2001 STRICOM upgraded UH-60A/L and CH-47D flight simulators for the 8th U.S. Army in Korea. The upgrade included a geo-specific Korean database and correction of simulator cockpit concurrency deficiencies. STRICOM also updated a system at Fort Campbell, Kentucky in 2001.

In 2002 STRICOM awarded a Lift Simulator Modernization Program (LSMP) contract to complete the upgrade of remaining UH-60A/L and CH-47D flight simulators. The upgrades include rehosting simulation software onto new near-real-time simulation computers, and upgrading image generators and the virtual environment with improved mission function capability.

Additionally, the program provides database software for electronic-simulated environments; modernization of instructor-operator stations; and upgrading simulated aircraft avionics and other instruments and controls.

Aircraft in the current Army inventory include subsystems not found in UH-60A/L and CH-47D simulators. The upgrade program includes simulator concurrency updates to match respective aircraft subsystems, thus providing more realistic training to flight crews. The LSMP also provides for enhancement of all the utility and cargo helicopter flight simulators through technology insertion and concurrency upgrades.

## Enhanced Tower Operator Simulator

The Enhanced Tower Operator Simulator (ETOS) is a planned replacement for the outdated Data Automated Tower Simulator (DATS) in the U.S. Army Air Traffic Control (ATC) School at Fort Rucker. STRICOM awarded a contract in June 2002 for eight systems.

The ETOS supports air traffic control tower instruction in the ATC School. The simulator provides controllers the tools to improve situational awareness, decision making, effective communication, and workload management that encompass the core curriculum of the ATC School. The system also provides timely controller information and the supports necessary to accomplish safe separation requirements between aircraft and obstacles; provides visually verifiable weather conditions; and accomplishes expeditious and positive control of air traffic in a military control tower environment.

This simulator displays out-the-window tower-simulation scenarios in real-time display accuracy. Aircraft and ground vehicles respond to controllers' commands with a synthetic voice using state-of-the-art voice-recognition software. Capabilities include weather and seasonal environmental changes, accurate depiction of aircraft and vehicles; and aircraft characteristics including unique airborne military profiles. The ETOS also emulates radar informational data and the tower communication array.

## Special Operations Aviation Training and Rehearsal Systems

STRICOM provides training support to the special-operations forces (SOF) community. The training systems primarily focus on aviation simulators for the 160th Special Operations Aviation Regiment (SOAR) at Fort Campbell, Ky., and mission equipment trainers for the U.S. Air Force Special Operations Command at Eglin AFB, Fla.

STRICOM currently supports the 160th SOAR with trainers for the MH-60 Black Hawk and the MH-47 Chinook. These combat mission simulators (CMS) are the MH-47E and MH-60K. Recently, STRICOM contracted for a CMS for the AH/MH-6 "Little Bird."

These training devices maintain a very high level of concurrency with the actual aircraft. STRICOM accomplishes this through continuous block-update programs, modifying the simulators before or as the systems receive new hardware and software upgrades.

These simulators also include advanced aircraft system and simulation capabilities. The MH-47E/MH-

***STRICOM Simulation** cont'd on pg 26*

# From YUH-60 to Glass-Cockpit Simulator

By Bruce E. Bulger

Some aircraft have interesting "lives." So it is with tail number 21652, one of only five YUH-60 aircraft built by Sikorsky as a prototype for the Army's UH-60 material-acquisition process. This is the brief story of its "life."

YUH-60 21652 was used in the Black Hawk test and evaluation process in 1977. After the test, the aircraft wasn't much use to anyone except the Battle Damage Assessment and Repair (BDAR) instructors and students at the U.S. Army Aviation Logistics School (USAALS) at Fort Eustis, Va. Bullet holes and other ballistic damage make for a great BDAR trainer, but the circa-1976 aircraft wasn't

much good for anything else. The changes made after testing but before production never made it into this aircraft. Nothing was quite right. It looked like a Black Hawk, but was not representative of what was in the field.

The current UH-60 recapitalization program is the answer to the Army's original plan to build a new aviation system every 20 years. Recapitalization is another way of saying major overhaul or rebuilding. The Black Hawk recapitalization plan is designated the UH-60M and will utilize some components from the UH-60A and L models and some new components to give it better capabilities, more durability and 20 years more service.

The Systems Integration Laboratory (SIL) has a need for a cockpit test bed for the UH-60M project. The simulator testing must be done before we can go to full production. Problem is, there are no available assets suitable as a cockpit simulator cabin. By now I'm sure you see where this is going, but keep reading because there's more. This turns into a game of "having your cake and eating it too." USAALS still wants the BDAR trainer, and the SIL needs the cockpit for their simulator. Just like King Solomon, we decided to cut the baby in half.

Let the planning begin. We will need manpower to strip the unneeded components, brackets, plumbing, and wiring from the aircraft. Special fixtures are required to support the two pieces after the dissection operation. Some broken parts — like the green houses, chin bubbles, seat cushions and belts — will need to be ordered and installed. There will be special tools needed to cut the aircraft in two and all of this is, of course, on a short schedule.

Situational Training Exercises (STXs) are part of most maintenance MOS-producing courses at USAALS. The students get to hone the skills they acquired at the schoolhouse in a real-world environment. The cockpit removal project would make good use of many of them.

A 68B (Aircraft Power Plant Repairer) class removed both GE700 engines. One class of 67Ts (UH-60 Helicopter Repairer) removed the transmission and accessory modules, as well as all the hydraulics on the upper deck. Another 67T class removed flight controls from one aircraft, performed a 1,000-hour inspection, and installed them on the YUH project bird. Several 68G (Aircraft Structural Repairer) classes worked on patching bullet holes, repairing doors and removing brackets. A 68F (Aircraft Electrician Repairer) class removed all the old wiring and electrical components. All the class STXs were highly successful training events and benefited the Army's UH-60 SIL cockpit test-bed project.

There was still some work to be done before the cockpit would suit the needs of the SIL team. The pedals and power control levers, to name a few items, needed to be changed to the current fielded versions. Some of the less intact Live Fire Test and Evaluation (LFT&E) specimens at Aberdeen Proving Ground, Md., gave their parts to the cause. Army aircraft are like organ donors — they keep giving even after they no longer fly.

YUH-60 tail number 21652 has been proving concepts, training soldiers and now testing new equipment for more than 25 years. The real trick is that it is doing it in two places at the same time. Enjoy the cockpit at Fort Rucker. We will continue to train BDAR on the rest of it here at Fort Eustis. Quite an aircraft, eh?

❖❖

*Bruce E. Bulger is a USAALS battle damage assessment and repair project officer and Live Fire Test and Evaluation Team member at Fort Eustis, Va.*

# Advanced Mission Planning and Rehearsal Tools for Army Attack Aviation

By MAJ Steve Milton
and MAJ Richard Williams

## Introduction

"The winner of an engagement will usually be decided by the soldier or aircrew that gains surprise, acquires the target, and accurately fires the fastest."

This quote from FM 1-112, "Attack Helicopter Operations," unequivocally expresses the importance of "visual acuity" on the battlefield and shows Army aviation's foresight into what has evolved into two key enablers of the Objective Force: information dominance and situational awareness.

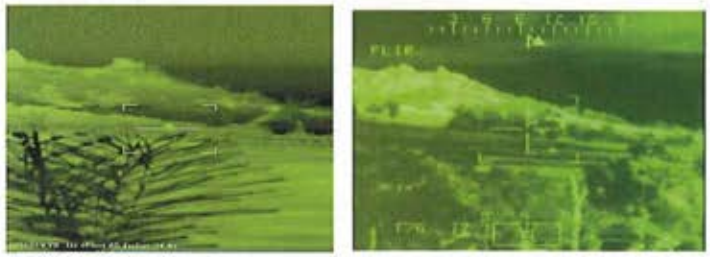
At the tactical level, Army attack aviators visualize the battlefield most often through onboard thermal forward-looking infrared (FLIR) sensors. Pilots and gunners use FLIR to navigate, orient on engagement areas (EA), acquire and identify targets.

While millimeter-wave radar has improved versatility, complex rules of engagement still require aircrews to visually confirm in FLIR before engaging targets.

Weather conditions and target-terrain relationships significantly enhance or degrade FLIR sensor performance. Degraded FLIR images make navigation, target detection and target identification difficult. Weapons' effective ranges generally exceed the warfighter's ability to detect and identify vehicular threats in FLIR. These factors increase target detection time and aircraft exposure time, and conversely decrease the advantages of standoff ranges.

## The Problem

At the tactical level, the Army does not have a fielded system capable of predicting FLIR performance or even the capability of providing predictive FLIR imagery of the battlespace. Warfighters using FLIR systems must rely on their own visual interpretations of the battlespace based on two-dimensional topographic maps and low-resolution visual animations.



Shows a side-by-side comparison of the AH-64 Apache TADS FLIR, in a medium field of view looking into the same engagement area, centered on 1 threat vehicle. Note the predicted IR scene (left) predicts what the warfighter's FLIR will actually see (right) at a given location, altitude and specified time-on-target.

## The Solution

Researchers at the U.S. Army Corps of Engineers' Engineer Research and Development Center (ERDC) in Vicksburg, Miss., have produced the first-ever capability to provide Army warfighters, in tactical or training environments, with predicted and accurate thermal FLIR scenes prior to mission execution.

Scene predictions are rendered on computer software that combines forecasted weather data, terrain and target data to produce static and animated predictive FLIR scenes that replicate the parameters of the user's sensor of choice (aviation and ground FLIR systems).

## Applications to Army Aviation

Recognizing the positive impacts this technology will have on legacy and Objective Force attack aviation, the Directorate for Combat Developments at Fort Rucker, Ala., sponsored an experiment in predictive FLIR technologies. The purpose of the experiment was to determine the military utility and benefit that physics-based, predicted IR scenes of the battlespace would have on the performance of Army attack helicopter pilots.

## The Experiment

The experiment was conducted at Fort Hood, Texas, from July 9 through 13, 2001, and was administered by the Aviation Test Directorate of the U.S. Army Operational Test Command.

The experiment measured whether predicted scenes improved mission planning (a pilot's ability to evaluate, rank order and select the best battle positions) and mission rehearsal (resulting in faster and more accurate target detection during mission execution).

Thirty AH-64A Apache pilots were cross-leveled and divided

between a Baseline Group and an Enhanced Group. Both groups were tested on the same mission profiles, and were given mission planning/rehearsal tools currently used in attack aviation [operations orders, topographic maps, operational overlays, and the Aviation Mission Planning System (AMPS) line-of-sight application].

Pilots were tested on their ability to properly rank order 10 potential battle positions in two separate engagement areas and detect enemy vehicular targets in eight target detection vignettes (with varying distances and terrain).

## Results

Predicted FLIR scenes improved pilot performance in all areas tested. In BP selection, Enhanced Group pilots showed 75 percent improvement over the Baseline Group in rank ordering and selecting the optimal BPs. In target detection, Enhanced Group pilots realized a substantial improvement in their ability to consistently detect targets with 41 percent fewer false detections and 61 percent fewer nondetections. Additionally, pilots in the Enhanced Group decreased their time required to detect a target by 6.5 percent on average, with the highest decrease in a single engagement of 32 percent (a 19-second reduction).

## Future Applications

Predicted FLIR technologies support the goals and objectives of the Army's Objective Force by enabling information dominance and improved situational awareness.

Specifically, this technology provides aviators with an immediate understanding of environmental and atmospheric effects on FLIR sensors for direct application in the mission-planning and rehearsal processes. Moreover, predicted FLIR allows warfighters, at the collective unit down to the individual levels, the capability to preview, in 3D, FLIR scenes of the battlespace.

The 3D terrestrial views in the thermal spectrum enable warfighters and mission planners to evaluate and select the optimum locations and times on target as they directly relate to terrain, weather and target arrays.

The capability is the first to combine high-resolution terrain data, vegetation effects, terrestrial line-of-site applications and target geometries in the IR spectrum into a medium that can be digitally rendered and delivered to the warfighter via a standard browser. By taking vegetation into consideration, delivery software greatly enhances mission-planning and rehearsal products under development — such as the Joint Mission Planning System and the AMPS.

## Conclusion

Overall, predicted FLIR scene technology demonstrates significant military worth and utility to aviation warfighters, improving mission planning, rehearsals and execution. ERDC researchers contend that this technology can be applied to legacy, interim and Objective Force aviation and ground-combat vehicles, and serve as a key enabler to the tactical capability of joint collaborative mission planning and rehearsal within a digital (on-board) environment.

*MAJ Steve Milton is a research and development coordinator at the Engineer Research and Development Center in Vicksburg, Miss. MAJ Richard Williams is a test and evaluation officer at the Aviation Test Directorate, Operational Test Command, Fort Hood, Texas.*

# AH-64A BUCS Training

By David M. Johnson and Michael Couch

**Unlike other fielded Army helicopters, the AH-64 Apache has an emergency back-up, electro-hydraulic, fly-by-wire system available to the crew in the event of a jammed or severed flight control. This back up control system (BUCS) allows the crew to bypass damaged mechanical flight controls and safely land the aircraft. The BUCS can be found on both A- and D-model Apaches.**

In the AH-64A normal flight control inputs from the pilot or copilot/gunner (CPG) are relayed to the hydraulic servo-actuators, which control the flight surfaces, using mechanical linkages (push-pull tubes, bellcranks, etc.). If this mechanical system is jammed or severed by combat damage or maintenance problems, the BUCS will recognize the problem and enable fly-by-wire control of the affected axis.

The BUCS uses linear variable differential transducers (LVDTs) to signal flight-control position, and shear-pin-actuated decouplers (SPADs) to separate flight controls from the mechanical linkages. Eight LVDTs are located in the cockpit to sense flight-control positions from the pilot and the CPG. Other LVDTs transmit the servo-actuator positions to the Digital Automatic Stabilization Equipment Computer (DASEC). Among its other functions, the DASEC recognizes problems with the mechanical control system and enables the BUCS. SPADs are located at the base of each control axis (cyclic longitudinal, cyclic lateral, collective and pedals) for each crew station. There are eight SPADs in all.

When a jam occurs, either crewmember can decouple, or "break out," of the jammed axis by pushing hard on the affected flight control and breaking the SPAD on that axis. As soon as the SPAD is broken the BUCS is enabled. All other undamaged axes will continue to function normally using mechanical linkages. The crew can safely land the helicopter.

In the event of a severed control linkage, the DASEC recognizes the mistrack between the flight-control position and the position of the hydraulic servo-actuator. With sufficient mistrack (17.5 percent, or approximately two inches of control movement), the

*The back up control system (BUCS) allows the crew to bypass damaged mechanical flight controls and safely land the aircraft.*

DASEC automatically enables the BUCS for the defective axis. All other undamaged axes will continue to function normally using mechanical linkages. The crew can safely land the helicopter.

In response to a series of incidents and mishaps involving the AH-64A, the Army determined that pilots need training in the detection and diagnosis of flight-control problems and correct operation of the flight controls when the BUCS is engaged. It is precisely this kind of training that cannot be performed in the helicopter for reasons of safety and cost. Apache pilots now receive training using the only AH-64A simulator currently in the Army inventory capable of simulating the BUCS.

The simulator is located at the Army Research Institute for the Behavioral and Social Sciences (ARI) at Fort Rucker, Ala., and it's called the Simulator Training Research Advanced Testbed for Aviation (STRATA) training device. The purpose of the training is to familiarize Apache aviators with the conditions that require the use of the BUCS, how such conditions can be detected and, most importantly, what must be done to control the aircraft and get it safely on the ground.

A memorandum of agreement among the Apache Product Manager's Office (PMO) at Redstone Arsenal, Ala., the Aviation Training Brigade (ATB) at Fort Rucker and ARI established the formal mechanism whereby BUCS training is delivered to every student in the Apache Aviator Qualification Course (AQC). The PMO provides funding plus Apache expertise, while the ATB provides students and instructor pilots (IPs). ARI provides simulator time, engineering expertise, operations and maintenance and expertise in the Apache BUCS.

***The STRATA training device is a fixed-base, full-mission simulator for the A-model Apache.***

As of March 2002, 342 Apache AQC students, 68 IPs and 20 students from the AH-64A Maintenance Test Pilot (MTP) course have received BUCS training. The AQC unit supported is Company D, 1st Battalion, 14th Aviation Regiment. The MTP unit supported is Co. A, 1st Bn., 223rd Avn. Regt. To date, no student has missed training as a result of simulator failure, power outage or personnel unavailability.

## Simulator

The STRATA training device is a fixed-base, full-mission simulator for the A-model Apache. The pilot and CPG cockpits were taken from aircraft 83-23789, the rest of which was scrapped. CAE Corp. designed, built, operates and maintains the Apache research simulator at the STRATA facility. The simulator, which boasts a modular design capable of software modification, uses the hydraulic CAE digital control loading system to simulate all of the flight-control characteristics of the AH-64A, including BUCS.

A G-seat and active five-point shoulder harness provide acceleration, deceleration and motion cues. All controls, instruments and displays are functional and integrated with each other. Both cockpits are provided with three 100-inch, rear projection visual displays providing each station with a 176-degree horizontal by 45-degree vertical out-the-window field of view. What the aviators see out their windscreens is a highly detailed, geo-specific terrain database rendered by three CAE MedallionTM image generators, which are capable of presenting 16,000 polygons per frame at a rate of 60 frames per second.

## BUCS Training Procedures and Strategy

Currently, BUCS training is "familiarization" training only. There are no recorded tests of performance. AQC students are provided with BUCS instruction in order to expose them to potential flight-control malfunctions and the accompanying corrective procedures. Students arrive for the BUCS training after having already logged time in both the Cockpit Weapons and Emergency Procedures Trainer (CWEPT) and the actual helicopter. They also receive classroom instruction in the BUCS from ATB academic instructors. This prerequisite flight line and classroom experience is important, allowing the students to concentrate on the detection of a malfunction and the appropriate course of action, while continuing to fly the aircraft.

Each BUCS training period lasts 90 minutes and "stick buddies" train together. They first perform a standard, by-the-book BUCS test. Then each student in

turn picks the aircraft up to a hover and "flies" a traffic pattern to a landing. This is done to familiarize students with the simulator and get them into a flight-oriented frame of reference. Next, each student is given an opportunity to operate the simulator with Digital Automatic Stabilization Equipment (DASE) turned off. This shows students how the aircraft performance qualities are degraded, but still flyable, with all BUCS axes engaged. When the BUCS is engaged on an axis, there is no DASE on that axis.

After the warm-up, students participate in a series of instructional scenarios during which all the training points required by the ATB program of instruction are presented. Training points include jammed controls, severed controls, crew contention, hydraulic system malfunctions, related warning indicators, operator actions and feedback for both cockpits. In all, the crew performs 46 tasks in both the pilot and CPG stations.

All AQC instruction is provided by an ATB IP who has been trained on the BUCS in the STRATA device at ARI. Michael Couch provides instruction of the IPs and the MTP students.

The instructional strategy used is the classic "crawl, walk, run." At the beginning of the training period, the IP alerts the crew to what malfunction is going to be invoked, describes its identifying features, describes what should be done and in what order, and then, after invoking the malfunction from the instructor interface console, walks the crew through it step by step. Verbal instructions are provided before and during the training event. Feedback is provided after the event, along with the opportunity for questions.

Instruction proceeds in this fashion, training point by training point. As the crew's mastery of the BUCS improves, the pace speeds up, the instructor scaffolding is thinned and the criterion level of performance expected by the IP rises. By the end of the training period, the IP merely invokes malfunctions of whatever kind, at will and with no warning, and the crew detects the malfunction and reacts appropriately with a minimum of instructor interference. The pacing of instruction depends upon the speed at which the crewmembers demonstrate through cockpit performance that they understand what they are being taught. Crews that are quick to learn may receive additional practice or increased flight training.

## Future Directions

BUCS training currently takes place during virtual daylight using flight instruments and visual flight techniques. Future plans call for providing BUCS training during virtual night missions using the Apache's forward-looking infrared (FLIR) sensor systems. Specifically, these are the Pilot Night Vision System (PNVS) and the Target Acquisition and Designation Sight (TADS) FLIR.

In 2001 the Army awarded a contract to the team of TRW/CAE to upgrade seven Apache Combat Mission Simulators (CMSs) worldwide. As a part of this contract CAE has proposed upgrading them to support BUCS training. The Directorate of Training Doctrine and Simulation (DOTDS) at Fort Rucker asked ARI for detailed information about the current program of BUCS training. ARI has provided engineering information, instructional content, instructional strategy, and acceptance test procedures in order to implement a BUCS simulation and training capability in the CMSs that meets or exceeds the training currently provided in the STRATA device. If funded, Apache aviators in CMS simulators worldwide will be able to receive BUCS training.

*David M. Johnson is a psychologist at the Army Research Institute for the Behavioral and Social Sciences at Fort Rucker, Ala. Former Apache instructor pilot Michael Couch is an Apache subject-matter expert at ARI.*

# FRONTLINE

## Aviation Maintenance in "Majavia"

By CW4 Thomas Jackson and MAJ David Bingham

It was the ninth day of the campaign. The U.S.-led coalition forces had pushed the "Krasnovians" back to within sight of their border. The U.S. Brigade Combat Team (BCT) was putting the final touches on a plan to attack to restore the international border.

During the OPORD the S2 presented the following information on the enemy: "The 37th Motorized Rifle Division (MRD) has established a defense weighted to the south. Countermobility efforts will also be located along the northern wall to push attacking forces to the south. Expect the enemy to have at least 48 to 60 hours of engineer preparation time for the defense. Nonpersistent chemical munitions will likely be used to disrupt attacking formations, shape the battlefield and limit mobility of attacking forces."

The S3 approached the map and continued the OPORD with the commander's intent.

"The commander's plan calls for the following: an attack company to conduct a deep attack to attrit the 25th IMRB south by 30 percent to deny its ability to execute CATK, two UH-60s to insert COLTs to call fires on the Northern MRC. OH-58Ds will conduct an area reconnaissance of the defense and identify the best Point of Penetration (POP) for the Brigade Combat Team (BCT). A UH-60 will put a four-hour Volcano along Phase Line Crystal to protect the BCT's northern flank. A platoon of CH-47s is on standby to perform emergency class V resupply and casualty evacuation (CASEVAC)."

The BCT integrated aviation throughout the ground tactical plan to achieve the destruction of the "Krasnovian" forces and restoration of the international border. As the aviation maintenance manager how do you ensure that the commander has the necessary assets to defeat the enemy?

This article addresses some of the most common mistakes that maintainers make while at the National Training Center, and some techniques for avoiding those problems.

The primary goal of every aviation maintainer is clearly expressed in FM 3-04.500:

"Aviation maintenance activities are organized to provide commanders with the maximum number of safe, mission-capable aircraft. These activities must be dedicated to fast, continuous, and reliable aviation maintenance support in the highly mobile, integrated battlefield."

At the National Training Center (NTC) at Fort Irwin, Calif., we have observed several trends that cause units not to meet this goal.

### Trend Number 1:

**Units deploy with insufficient equipment.**

Units arrive at the NTC and discover that tools required for a repair did not get packed. Commanders are caught by surprise because the tool or test set they thought they had is not present. There have been several reasons why: A subordinate did not think it was needed; members of a supporting unit promised to send the test set with its slice, but changed their minds and did not inform the deploying commander; it was on the packing list, but was overlooked.

The key to success is leader involvement before deployment. In-Progress Reviews (IPRs) with key leaders are critical to the success of the deployment. Ensure that the officers and NCOs that attend the IPRs are going to be part of the deploying maintenance team. Do not accept the soldier from S3 shop that is ETSing in two months and will be out of the army when the unit arrives at the NTC.

It is critical that all sections of the maintenance team understand the types and number of aircraft deploying, and what equipment must deploy.

It is also important to treat your deployment to the NTC as you would a protracted war. Plan as if you were deploying to a Third World desert country. Do not plan on receiving any maintenance support from the NTC or Barstow-Daggett Airport. Front-load as much maintenance as you can before deploying. Units that stop training flights at least a week before deploying and use that week to concentrate on maintenance have the best mission-capable rates at NTC.

**The primary goal of every aviation maintainer is clearly expressed in FM 3-04.500.**

There is a method to speed up the supply system at no cost to the unit. Before deploying to the NTC, develop a wish list for repositioned parts. Submit the list through the home station Logistics Assistance Representative (LAR) to the U.S. Army Material Command (AMC) 120 days prior to the rotation, requesting the relocation of the parts to the Defense Department San Juaquin Center (DDJC). AMCOM will reposition the parts if available.

If the unit wants to preposition ordered assets to assist with the deployment, a holding area is available at the Fort Irwin Single Fund Warehouse, building 934 (W80WKN). Contact the Accountable Officer before your deployment to arrange for holding the ordered class IX items.

For receiving Class IX air at NTC, the Division Aviation Maintenance Officer (DAMO) or Material Management Center (MMC) aviation representative needs to make contact with the NTC MMC Support Operations Officer (SPO) Class IX Accountable Officer. This is to establish approval for an A Direct Support Unit (A-DSU) (W80QJK) warehouse personnel to assist you with your Class IX air mission. This is not automatic and you must make contact to set up the capability. After obtaining approval, the supplemental address (W80QJK) may be used. A list of aviation unit Department of Defense (DOD) Activity Address Codes (DODAACs) must be provided to the MMC Class IX section. Aviation Class IX will be requisitioned using only home-station DODAACs.

Aviation Class IX repair parts will not be received, issued or turned-into A-DSU. To ensure that this does not happen, an Aviation Class IX representative (clerk) must meet every delivery truck. This will also ensure that accountability and control of aviation repair parts is maintained.

The assistance that will be provided is the downloading of parts from delivery trucks. The Division Supply Support Activity (DSSA) staff will assist on a non-interference basis that does not prevent them from accomplishing their ground/ common Class IX mission. If your Aviation Class IX representatives need more assistance than can be provided, you will be responsible for any overtime costs associated with moving Aviation Class IX parts. NTC does not have an Aviation Class IX Air Mission; A-DSU is not a stock/store facility for Class IX Air.

While at NTC, units should have a "rear aviation cell" receive the 2765-1s from elements located inside the training area via Tactical Local Area Network (TACLAN), Mobile Subscriber Equipment (MSE) or hard copy. The rear Aviation Maintenance Officer (AMO) will do the research — Federal Logistics (FEDLOG), Visual Logistics Information Processing System (VLIPS) — then enter the requisition into Defense Emergency Supply Expert System (DESEX).

After entering the data, fax or call the National Inventory Control Points (NICPs) just as if it was a home station code Aircraft On Ground (AOG). Using the project code "EAG" (if applicable), home station DODAAC with signal code J, supplemental address W80QJK, the parts will be pulled from depot stocks and shipped quickly.

We recommended that a home station tactical Standard Army Retail Supply System Level 1 (SARSS-1) box be loaded with a home station temporary aviation DODAAC, and 2765s or Unit Level Logistics System-Aviation (ULLS-A) disks be processed through the system to allow for BCT asset visibility and tracking.

By using MSE and TACLAN, units can order and receive parts quicker through BCT MMC channels by Blocked Asynchronous Transmission (BLAST) the data to the home station SARRS-2, with W80QJK as the supplemental address. This process will allow your MMC Aviation representative in the D-Rear to monitor high-priority requisitions and process "AOG" parts as applicable.

If the entire unit is not deploying, the maintenance commander and the Production Control (PC) officer must have a detailed list of what equipment is being deployed and even more important what equipment is being left behind. Ensure that first-line soldiers are completing Pre-Combat Inspections (PCIs). Spot-check their inspections. Review all Test, Measurement and Diagnostic Equipment (TMDE). Just because the torque wrench is packed does not necessarily mean it will not expire and have to get calibrated half way through the rotation.

During this planning phase it is also important to determine the flow of support personnel and equipment. Hand-carried equipment is put on the C-5 with the aircraft, is railed or is in the back of the forty-foot sea-land van. A Maintenance Test Pilot (MTP) on Technical Inspector (TI) orders with a couple of crew chiefs should accompany the first aircraft into theater. Echelon the maintenance support to the last aircraft deploying as well as the first. Consider the flow of aircraft into theater and how to support the commander with the maximum number of safe, mission-capable aircraft during RSOI.

## Trend Number 2:

**Maintenance personnel have poor tactical situational awareness.**

Maintenance soldiers deployed to the NTC all too frequently simply perform the same duties they do in garrison, without any idea of the unit mission or even when aircraft will depart on missions. Maintenance Command Posts (CPs) fail to put out orders, battle track and disseminate tactical information.

Units must fix problems as they arise. Continually deferring maintenance "until we get home" is a recipe for failure. Always make plans for the next 24 hours — but the trick here is to integrate the tactical situation into the task force and brigade plans. Are we attacking or defending? What happens if the defense fails? This can effect your decision to start deferred maintenance tasks. It also should effect your priorities of work; which aircraft to work on, which one to save until you have a larger window of opportunity. Is it wise to start a complicated lengthy job the same time the brigade is defending? What is the plan to displace rapidly should the brigade's defense fail? Is there a plan to move forward with the success of the brigade's attack? Maintainers must understand the tactical context in order to tailor their resources.

During the Military Decision Making Process (MDMP) the staff identifies the assets they need for their plan. The maintenance company needs to be included in the tasks to subordinates so as to prioritize its efforts.

Maintenance test flight (MTF) areas should be integrated into the A2C2 plan. Ideally, MTF areas are predesignated by the unit on the battlefield and are activated as required through the Aviation Control Order (ACO). Although the NTC has an identified permanent MTF area (Coyote Lake), this area may not be the logical choice tactically. MTFs are competitive after deploying to the field. Ensure the ACO is understood by the MTP's for the MTF needs.

## Trend Number 3:

**Units fail to prepare for and keep up with desert maintenance.**

What can you do to help fight off the effects of the desert? Before coming to NTC ensure the engines are clean (hot and cold sections). Prepare in-flight HIT check baselines. Ensure pilots know how to do them correctly. This will prevent spending extra time on the ground, which results in dust ingestion.

Flushes are one of the most important preventive-maintenance tasks. We encourage water-only flushes every 10 to 12 hours. Clear-water flushes do not need to be captured, but gas-path flushes must be captured. We recommend the use of baby pools or galvanized metal oval tubs placed under aircraft to capture flush fluids. The captured fluid can then be left out to evaporate in the pool or poured into drums for disposal later. Units should bring 55-gallon drums to put the gas path in for later turn in to brigade's hazardous materials team.

Main and tail rotor blades wear quickly in a sandy environment. Look up blade repairing/spot painting in your aircraft's TM. The two-part epoxy-polyamide applied with a small roller lasts longer than flat black spray paint and "Mopp-and-Glow." Paint rotor blades after every mission. Ensure pilots are conducting a thorough post-flight to alert maintenance personnel early to blades needing repair. Assemble kits with all the parts to replace blades and tip caps.

TB 55-2840-248-20-17, "Sandy Environment and/or Combat Operations for T700 Engines," recommends that T700, 701 and 701C "...Normal on-aircraft compressor cleaning in sandy or dusty/dirty environments should be performed every 50 engine hours. Hot-section cleaning of engines should be accomplished at 50 hours or sooner, depending upon hot section component condition." Keep the aircraft as clean as possible, and do not let dust and dirt accumulate.

Best maintenance actions are proactive. Bearings, seals and rotor blades take tremendous abuse at the NTC. Use "pressure bug sprayers" to direct water flow on spherical bearings to get the sand out to ease the pitting/ erosion/wear. Keep all surfaces that come into contact with seals as clean as possible (wipe them down after each flight — struts, servos, rod-end bearings). Use organic assets — pressure washers from the motor pool and NBC decontamination sprayers from the NBC section or FSB work great to keep hydraulic decks and flight controls clean. If there is binding in flight controls the cause is probably sand and the cure is to clean them regularly. Extend and wipe servos with hydraulic fluid dampened rags/towels to clean and protect seals.

Once the "hostilities" have ended the maintenance manager's job is still far from over. The next big hurdle is the plan to flow aircraft back to home station. Do not allow pilots to take short cuts in a rush to get home. Do not allow current maintenance faults to be deferred until the aircraft is flown back home. Echelon maintenance assets to support the redeployment just as you did deploying to NTC. What maintenance assets are pushing and who is receiving?

Though this article is intended to help units win the maintenance battle at NTC, it certainly doesn't amount to an all-inclusive checklist for success. The Eagle Team Web page, www.irwin.army.mil/ eagle /Default.htm, contains a wealth of information. If you have any questions about your upcoming deployment, do not hesitate to contact us here at the Eagle Team — (DSN) 470-4462, or via e-mail to **eagle18 @irwin.army. mil** or **eagle26@irwin. army.mil**.

*CW4 Thomas Jackson and MAJ David Bingham are aviation maintenance trainers at the National Training Center.*

# The Best-Kept Secret in Army Aviation

By MAJ James J. Walton


The battalion headquarters is located in its own fenced compound, marked by a traditional Honduran sign.

The title of this article is the "claim to fame " for the 1st Battalion, 228th Aviation Regiment, and we make no excuses for it. If you wish to tax your leadership, organizational and interpersonal skills, and if you want to execute your real-world mission every day of the week, then Soto Cano Airbase, Honduras, is the place for you.

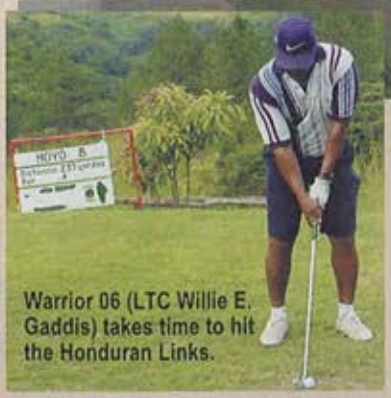
## Why Honduras?

The answer is simple: The battalion's mission is to "conduct aviation operations throughout U.S. Southern Command's area of responsibility."

"And what is USSOUTHCOM's AOR?" I hear you ask. It's Central America, South America and the Caribbean. Although Antarctica is shown on the map as being in our AOR, we do not expect to be sent there anytime soon.

Utilizing some of the oldest UH-60As and CH-47Ds in the active Army, the battalion executes a 4,400 annual flying hour program. Some 1,000 of those hours are dedicated to our four CH-47Ds, while our 12 UH-60As and four UH-60A medevac aircraft execute the remaining hours. It's not an easy task for any unit, let alone for one that flies in the mountains, jungle, over salt water, near volcanoes and in an area where the IFR structure is "second to all."

Soto Cano is located on a Honduran air base.



Warrior 06 (LTC Willie E. Gaddis) takes time to hit the Honduran Links.

The majority of the battalion is located on the Honduran Air Force Academy's base, 30 nautical miles (straight line distance) northwest of the capitol city of Tegucigalpa (commonly called "Tay-goose" by the service members here). The drive can take more than an hour and a half (anyone ever traveling from K-16 to Yongsan may be able to express a similar time warp). The roads are dangerous, and we are not permitted POVs in-country. The base is fully enclosed and encompasses an 8,008 foot, C-5 capable runway.

A two ship UH-60A detachment, called the "C2 Detachment" is located in Puerto Rico. This 15-soldier unit flies VIP, counter-narcotics, disaster-relief, humanitarian-assistance and exercise-support missions. Theirs is a three-year PCS tour, for which they receive credit for a long-overseas tour.

The primary U.S. military presence on Soto Cano AB is Joint Task Force Bravo. Established in the early 1980s, JTF-B has been a forward operating base for U.S. military training, disaster-relief, humanitarian-assistance and combat operations throughout Central America. Commanded by an Army colonel and manned by members of the Army, Air Force and Marine Corps (it has been a while since a sailor has occupied a position), JTF-B consists of Army Forces (ARFOR), Air Force Forces (AFFOR), Joint Security Forces (JSF) and a Medical Element (MEDEL).

Most of JTF-B's members are here on one- to six-month TDYs, while the AFFOR personnel, selected leaders and selected members of the joint staff are here for a year. All 1-228 Avn. soldiers, however, PCS here for a fun-filled, one- year unaccompanied tour. Soldiers receive credit for a short overseas tour, complete with an overseas ribbon and a possible PCS award.

The base is considered a closed post and is monitored/ guarded by Honduran soldiers, as well as by members of the Joint Security Force (JSF). There is a six-mile perimeter fence (much still has concertina wire across the top of it) surrounding the base, with an excellent five-mile "running trail." Do not, however, run the perimeter road after dark. Honduran guards are taught to shoot first and ask questions later. It may sound scary, but it really just adds to the atmosphere of the base.

Situated at 2,040 feet MSL in a 20-by-12-mile "bowl" surrounded by 4,000- to 6,000-foot mountains, Soto Cano's weather stays pleasant year round. Temperatures rarely go above 100 degrees, and the rainy season provides heavy rain showers at night, seldom during daylight. And a constant 5 to 25 mph breeze allows for a pleasant "wind chill reduction" factor.

## Alert, Upload and Deploy

"You call, we haul" is the motto of many units in the Army, but few do it as often as we do, across so many international borders. Although 90 percent of our missions are in Central America, once or twice each year the battalion deploys aircraft to South America and/or the Caribbean for such things as counter-drug, disaster-relief and exercise-support missions. Recent deployments include Antigua, Nicaragua, Belize, Costa Rica, El Salvador and Guatemala.

We deploy in different ways. The primary method is to self-deploy. Using UH-60As, CH-47Ds and medevac aircraft, we can self deploy almost anywhere in the AOR — given enough time, that is.

At least once a year we are able to deploy aircraft via strategic airlift.

Finally, we can execute a sealift, when required. There are a few shallow-water ports along Honduras' north shore that can accommodate various ships. We execute the normal breakdown, shrink-wrap, upload and allow our aircraft to receive a pleasant cruise through the Caribbean, Atlantic or South Pacific oceans.

## Aeromedical Evacuation Operations

Attached to 1-228 Avn. is a detachment of four UH-60A air ambulances — they're a true part of the Winged Warrior Battalion.

Where the battalion goes, so goes "medevac." But Americans are not the only ones that benefit from our medevac capability. Whether they are hoisting locals from atop ruptured volcanoes following earthquakes in El Salvador, from rooftops following a major flood in Honduras, or receiving them from the Medical Element (MEDEL) pad on base, the medevac detachment is one of the favorites of host-nation civilians in-theater.

## Search and Rescue Operations

Although not a frequent occurrence, in recent years we have been involved with some interesting joint and combined search and rescue operations. When the chief justice of the Honduran Supreme Court disappeared in a civilian helicopter, 1-228 Avn. responded "the fastest with the mostest." Although the battalion had assets deployed in Belize at the time (following Hurricane Keith in 2000), we were able to send daily flights to the suspected crash sites. Following a few days with no luck, a P-3C Orion joined us for the search. The Air Mission Commander guided the Orion across the Caribbean, searcing for any signs of the missing helicopter.

We were also able to lend a needed hand a few years ago when pirates (yes, I said "pirates") attacked a Dutch family that was sailing around the Caribbean. Although the parents were killed, the young son survived the attack. Winged Warrior aircraft found the vessel and medevac aircraft lifted the boy from its deck and flew him to safety.

## Drugs, MOMEP and Other Missions

We are also an integral part of CINC SOUTHCOM's counter-drug plan. We have deployed personnel to Columbia to help train their pilots and mainte-

nance personnel, and we helped self-deploy Columbian UH-60Ls from the plant in Connecticut all the way to Columbia.

We also fly at least 450 hours, annually, locating go-fast boats, inserting TRT Teams and host-nation personnel to conduct raids, takedowns, eradication, roadblocks and so on. Although the ARFOR commander of JTF-B is the task force commander for these missions, the air mission commander and crews from 1-228 Avn. play one of the larger roles in mission accomplishment.

Although you may not have heard of 1-228 Avn. before reading this article, you may be aware of our participation in MOMEP, the monitoring of the border between Ecuador and Peru for a portion of the late 1990s. If that doesn't ring a bell, in 1998 the battalion lent valuable aid throughout Central America in the aftermath of Hurricane Mitch.


Dusk settles over the CH-47 clamshell.

If you ever rode in a helicopter in Panama following the 1989 invasion, chances are you flew aboard one of our aircraft. The 1999 expiration of the Panama Canal Treaty prompted the battalion's move to Honduras, where we already had a company (+).

## Not a Vacation

Although we do not have tents in which to deploy to the field, and must often go TDY to four-star hotels and established airfields, all is not rum and coke in this tropical paradise:


Entrance to the battalion headquarters, with Warrior 06's mode of transportation.

- The battalion has the oldest aircraft in the active Army.
- We are thousands of miles away from a sister aviation unit, and our higher headquarters (U.S. Army, South) is in Puerto Rico.
- We cannot always count on the weekly USAF cargo flight to deliver our repair parts, fresh dairy products and maintenance parts.
- Bathrooms are located 5 to 100 meters from our hooches, and 10 of the 63 satellite TV stations are sometimes unavailable.
- We are located on a base that does not belong to the United States, and are in a country that will not grant us a Status of Forces Agreement.

But we still love it here, and you will too.

## The Place to Be

If you have to do a one-year unaccompanied tour, and you are in an aviation-related MOS (or anything normally found in an HHC), why not make your next tour Honduras? Time-shares are not available. See your Branch Manager for details. Feel free to visit our website at **www.usarso.army.mil/1st_ 228th/ default.html**.

*MAJ James J. Walton served in Honduras as the executive officer of Company D, 1st Battalion, 228th Aviation Regiment, from 1997 to 1998; was the battalion S3 from 2000 to 2001; and is currently finishing his 2001 to 2002 tour as the battalion executive officer.*



## arrivals/departures

### COLONELS

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**STRICOM Simulation** *cont'd from pg 14*

60K CMS includes air refueling capability; Terrain Following/Terrain Avoidance Radar simulation; a voice and data recorder; wide-angle, continuous, collimated visual display systems; and mission preview/mission rehearsal capabilities.

This high level of concurrency with the actual aircraft and advance training capabilities ensure positive training transfer when pilots receive initial qualification in these aircraft, and effective execution of mission planning/rehearsal activities.

STRICOM and the 160th SOAR work together constantly taking advantage of advanced technologies in the SOA community with the conventional Army. These areas include mission playback, mission preview and visual database development.

## Conclusion

STRICOM is ready to support Army and joint training, testing, instrumentation and simulation needs for the Army's transformation to the Objective Force.

The command supports the transformation team by pushing new technologies permitting Army trainers and strategists to look at systems that do not yet exist — technologies for evaluation of designs and battlefield capabilities tested in simulation. In addition, STRICOM stands ready to support today's and tomorrow's Army aviators.

For STRICOM, putting the power of simulation into the hands of America's soldiers is its mission focus.

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*BG Stephen M. Seay is commander of the U.S. Army Simulation, Training and Instrumentation Command in Orlando, Fla.*

*MAJ Malcolm McMullen and Mr. Bernard Gajkowski contributed to this article.*

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# Developing New Maintainers

By Mark Jones

GEN Maxwell Taylor, famed World War II commander of the 101st Airborne Division, said: "Professional competence is more than a display of book knowledge or of the results of military schooling. It requires the display of qualities of character which reflect inner strength and justified confidence in one's self."

Developing professional maintainers is leader business. The U.S. Army Aviation Logistics School (USAALS) is responsible for training initial-entry training (IET) students to become fully qualified members of helicopter maintenance teams.

Graduates of IET schooling at USAALS are trained to the apprentice level. They are exposed to a variety of technical material about their military occupational specialty (MOS) and the hardware that they will maintain, and they are prepared to work under the supervision of a more experienced, senior maintainer. The tasks that are taught in IET are critical ones, but all critical tasks are not trained in IET.

## The Process

The critical task list is initially developed during the weapon system development and continuously updated. The tasks trained in IET have been approved by senior NCOs experienced in the MOS being boarded. The Task Selection Board (TSB) selects the tasks that are relevant to the MOS and are deemed to be critical to job performance. The most critical are taught in the IET course while others are deferred to the unit.

## The Tools

To determine which tasks the IET soldier is trained in is key to the individual's professional development and future assignment. One of the most overlooked resources is the Individual Training Records (ITR) (DA Form 5286-R); and Continuation Sheet (DA Form 5286-1-R).

The ITR should be one of the key documents asked of a new soldier in-processing the unit. The ITR is kept with other important training and qualification documents, sealed inside the Individual Personnel Records Jacket (IPRJ). The "dash 1" is equally, if not more, important. The "dash 1" includes instructor comments regarding the individual's overall proficiency, ability to work in groups and/or alone, leadership potential, and other relevant observations which are invaluable during initial unit assessment of the soldier's training.

The information contained in the ITR is critical--it identifies exactly which critical tasks were taught to the soldier in IET. This information enables the unit trainer to establish an individual development plan to develop the IET soldier into a journeyman mechanic.

## Gaining Unit's Responsibility

The ITR is one document every first sergeant should be keen to review. The ITR is reviewed and compared to tasks in the Soldier's Manual and Trainer's Guide. The results of this comparison enable the unit commanders to determine which tasks the soldier has been trained in and which ones are needed for the duty position to which the soldier will be assigned.

## The Soldier's Responsibility

The soldier's responsibility is simple and straightforward: to safeguard the ITR, until arriving at the first unit of assignment, and then relinquish the records to the gaining unit first sergeant.

## Conclusion

The IET soldiers are at the bottom of the experience ladder, but are the most current in terms of task experience. With the use of the ITR, aviation maintenance unit commanders will be able to integrate the initial entry soldier into their overall training strategy. To mold them into a cohesive member of the maintenance team will require intensive management through a systematic training process that begins when the soldier presents the 5286-R and 5286-R-1 to the unit first sergeant, and ends when the soldier receives a discharge.

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*Mark Jones is the chief of the Training and Operations Division, U.S. Army Aviation Logistics School, at Fort Eustis, Va.*

*Briefings continued from pg. 3*

**Electro-Radiation** has won a Lockheed Martin contract to integrate and demonstrate technology that mitigates the vulnerability of GPS when used in precision-guided munitions. The U.S. Army Tank-Automotive Command provided initial funding for the research, which is being directed by the Lockheed Martin Integrated Systems Rapid Response CECOM Program Office.

The Defense Advanced Research Projects Agency (DARPA) has awarded **Northrop Grumman's Integrated Systems Sector** $3 million to study an unmanned combat armed rotorcraft (UCAR) that will provide enhanced attack and reconnaissance capabilities for the Army. Upon completion of the year long UCAR concept-development phase, DARPA will select two contractors for a preliminary design concept development effort, which is expected to last nine months. This will be followed by the development and test of two demonstration vehicles and, ultimately, by the development and test of a final system concept. The program is scheduled to transfer to the Army in 2009.

The June American Helicopter Society conference and exhibition in Montreal featured a demonstration by **CAE** of its Medallion-S visual system. Chosen last year for the upgrade of the Army's AH-64A combat mission simulators, Medallion-S offers the dense 3-D cultures and sharp photo textures required to provide aircrews with accurate low-level flight cues.

**WestWind Technologies** has been awarded a $3 million U.S. Army Operations Support Command contract for the production of installation kits for the CH-47 Chinook engine-upgrade program. The firm has already built some 180 kits, and this follow-on 25-month contract is for additional electrical and mechanical kits required to install the new T55-GA-714A engines.

On May 31 the **U.S. Army Aviation Technical Test Center** at Fort Rucker, Ala., resumed its "Lead the Fleet" flight-test program, which the organization ran from 1986 until funding constraints interrupted the work in 1995. ATTC crews and aircraft, based at Cairns Army Airfield, will initially work with AH-64A, UH-60A/L and CH-47D aircraft, though the AH-64D and OH-58D will ultimately join the ATTC stable. The program's main features are controlled conditions and flight profiles that offer the chance to examine how the aircraft, their systems and their hardware hold up over time and in varying conditions.

ARMY AVIATION

# BOOK REVIEW

## Falcon Brigade: Combat and Command in Somalia and Haiti

By Lawrence E. Casper. Boulder, Colorado: Lynne Rienner Publishers, 2001.
278 pages; maps; photographs. $35.
Reviewed By MG Ben L. Harrison, USA, (Ret.)

Perhaps the most important thing I can say about Falcon Brigade is that it is interesting, informative and enjoyable. All the reviews I read on the Internet gave it the maximum rating of five stars. Adding to my pleasure was reading about aviators I know, including author Larry Casper, Jim Kelley, Lee Gore, Russ Forshag and John Bendyk, and about their fine professional noncommissioned officers and soldiers. Solid lessons learned and relearned are presented at the conclusion of the book, and I am most pleased that not one time did Larry use the buzzword of our times, "Transformation."

The author breezed through the 10th Mountain Division headquarters at Fort Drum, N.Y., in eight days and proceeded to his new command, the 10th Aviation Brigade in Somalia. Ten days later, on Oct. 3, 1993, he got the now world famous message, "Black Hawk down!"

The author does an excellent job of setting the political, cultural and United Nations military stage in Somalia. It is enlightening to see the entire "Black Hawk Down" saga put into perspective. Listening to the intense, worried and some undoubtedly frightened radio transmissions during that night of Oct. 3/4, Casper concluded that "nothing could replace voice transmissions when you are in the middle of a fray ... and the importance of steadfast, quality leaders."

Casper commanded the Falcon Brigade, which comprised U.S. Quick Reaction Forces. These were mostly 10th Mtn. Div. assets in Somalia — including an infantry battalion. The 10th Mtn. had only two infantry brigades; both had done "their tour" in Somalia, so now it was the aviation brigade's "turn." This is consistent with doctrine, but the sad fact is that the aviation brigade has never been organized, staffed or equipped to adequately perform this function. This was painfully apparent when Casper had to deal with soldiers — and sometimes diplomats — of the 22 nations in the U.N. force in Somalia.

As U.S. military participation in U.N. Command Operation Continue Hope wound down, the 10th Avn. Bde. happily set sail for home after eight months in Somalia. Back at Fort Drum in April 1994, an intense five-month program of recover, refit and retrain was begun. Two thirds of the unit's Black Hawks were in scheduled maintenance or rebuild. At this same time the remaining UH-1 Hueys and the OH-58A/Cs Kiowas were being turned in.

Casper makes an astute and very critical observation that by losing our $293 per hour OH-58A/Cs the Army has terribly restricted the capability and flexibility of aviation to serve the tactical commander with a small number of $1,626 per hour Black Hawks! The Army, and especially aviation brigade liaison teams, needs a small helicopter for utility missions and command-and-control aircraft in operations other than mid- and high-intensity war.

The alert for possible operations in Haiti arrived on July 31, 1994, just four months after the brigade returned from Somalia. Casper offers no explanation why the 10th Mtn. Div. was selected for this mission. Again, he does an excellent job of detailing the international political situation that led President Bill Clinton to order U.S. military forces into Haiti.

The Haiti mission was unique in many ways, but the most fascinating for contingency decision-makers and planners is the use of an aircraft carrier as the primary staging base. Once the decision was made to use an aircraft carrier and the 10th Mtn. Div. planners started developing the details for training, carrier qualifications, and equipment preparation and loading, they found that a decision had not been made as to which carrier would be used. They also found that no two carriers in the U.S. Navy are the same in construction and deck space. The 10th Avn. Bde. deployed to conduct training on the USS Roosevelt still not knowing which carrier would be used for the actual operation.

Falcon Brigade continues to be an exciting "page turner" book as Casper and the soldiers of the 10th Mtn. Div. meet challenge after challenge in air assaulting 2,000 soldiers and their equipment from the deck of the USS Eisenhower. The battle environment was permissive, but such was not the case for the heat, humidity, insects, filth and interservice struggles to occupy and operate the Port-au-Prince airport.

Political and military decision-makers at all levels will find this book an enjoyable read and a very valuable resource.

The book is available from Lynne Rienner Publishers, 1800 30th Street, Suite 314, Boulder, CO 80301. The firm can be reached by phone at (303) 444-6684 or FAX to (303) 444-0824. You may also visit the website at **www.rienner.com.**

# people on the move

*Editor's Note: Army Aviation is seeking good-news announcements of aviation-related professionals who are on the move. If you or your organization have an upcoming change of leadership (at the battalion or squadron level, or higher for MTOE and TDA units), please forward the information to Barbara Ross, care of the AAAA National Office.*

**The Department of the Army has announced the assignment of the following general officers:**

**BG William B. Caldwell IV** is being assigned as senior military assistant to the deputy secretary of defense, Washington, D.C. Caldwell is currently deputy director for operations, J-3, U.S. Pacific Command, Camp H.M. Smith, Hawaii.

**BG Timothy M. Haake** is being assigned as deputy commander in chief for mobilization and reserve affairs, U.S. Special Operations Command, MacDill Air Force Base, Fla. Haake is currently director of legislative affairs (individual mobilization augmentee), for the same organization.

**BG Janet E. A. Hicks** is being assigned as commanding general, U.S. Army Signal Center and Fort Gordon, Fort Gordon, Ga. Hicks is currently director of command, control, communications and computer systems, J-6, U.S. Pacific Command, Camp H.M. Smith, Hawaii.

**BG Carroll F. Pollett** is being assigned as commanding general and deputy chief of staff, information management, 5th Sig. Cmd., USAREUR. Pollett is currently deputy director of operations (D3), Defense Information Systems Agency, Arlington, Va.

**BG Marilyn A. Quagliotti** is being assigned as deputy director for operations (D3), Defense Information Systems Agency, Arlington, Va. Quagliotti is currently commanding general and deputy chief of staff for information management, 5th Signal Command, U.S. Army, Europe, and Seventh Army, in Heidelberg, Germany.

**BG Gratton O. Sealock II** is being assigned as deputy commanding general, U.S. Army Cadet Command, Fort Monroe, Va. Sealock is currently defense attaché, U.S. Defense Attaché Office, Beijing, China.

**BG Robert M. Williams** is being assigned as commanding general, 7th Army Training Command, USAREUR. Williams is currently deputy chief of staff, G-2/3, Allied Command, Europe, Rapid Reaction Corps, Germany.

**Secretary of Defense Donald H. Rumsfeld has announced that President George W. Bush has made the following Army officer promotion nominations:**

**To Major General (active Army):**

**BG Dorian T. Anderson**, currently director of the Officer Personnel Management Directorate, U.S. Total Army Personnel Command, Alexandria, Va.

**BG Guy M. Bourn**, currently commanding general, III Corps Artillery, Fort Sill, Okla.

**BG John M. Brown III**, currently deputy commanding general for transformation, U.S. Army Training and Doctrine Command, Fort Lewis, Wash.

**BG Ronald L. Burgess Jr.**, currently director of intelligence, J-2, U.S. Southern Command, Miami, Fla.

**BG William B. Caldwell IV**, currently deputy director for operations, J-3, U.S. Pacific Command, Camp H. M. Smith, Hawaii.

**BG Kevin T. Campbell**, currently director of plans, J-5, U.S. Space Command, Peterson Air Force Base, Colo.

**BG Ann E. Dunwoody**, currently commanding general, 1st Corps Support Command, XVIII Airborne Corps, Fort Bragg, N.C.

**BG Jeanette K. Edmunds**, currently director of sustainment, Office of the Deputy Chief of Staff, G-4, U.S. Army, Washington, D.C.

**BG Dennis E. Hardy**, currently director of force management, Office of the Deputy Chief of Staff, G-3, U.S. Army, Washington, D.C.

**BG Galen B. Jackman**, currently director of operations, J-3, U.S. Southern Command, Miami, Fla.

**BG Ronald L. Johnson**, currently commanding general, U.S. Army Engineer Division, Pacific Ocean, Fort Shafter, Hawaii.

**BG John F. Kimmons**, currently director for intelligence, J-2, U.S. Central Command, MacDill Air Force Base, Fla.

**BG James A. Marks**, currently commanding general, U.S. Army Intelligence Center and Fort Huachuca, Ariz.

**BG Stanley A. McChrystal**, currently chief of staff, XVIII Airborne Corps and Fort Bragg, N.C.

**BG David F. Melcher**, currently commanding general, U.S. Army Engineer Division, Southwestern, Dallas, Texas.

**BG Thomas G. Miller**, currently deputy commanding general, First U.S. Army, Fort Gillem, Ga.

**BG Robert W. Mixon Jr.**, currently deputy commanding general and assistant commandant, U.S. Army Armor Center and Fort Knox, Ky.

**BG James W. Parker**, currently director, Intelligence and Information Operations Center, U.S. Special Operations Command, MacDill Air Force Base, Fla.

**BG Elbert N. Perkins**, currently director of materiel, Office of the Deputy Chief of Staff, G-8, U.S. Army, Washington, D.C.

**BG Kenneth J. Quinlan Jr.**, currently chief of staff, V Corps, U.S. Army, Europe, and Seventh Army, Germany.

**BG Fred D. Robinson Jr.**, currently commanding general, U.S. Army Operational Test Command, Fort Hood, Texas.

**BG Stephen M. Speakes**, currently chief of staff, III Corps and Fort Hood, Texas.

**BG Carl A. Strock**, currently director of military programs, U.S. Army Corps of Engineers, Washington, D.C.

**BG Antonio M. Taguba**, currently commanding general, U.S. Army Community and Family Support Center, Alexandria, Va.

**BG Alan W. Thrasher**, currently commanding general, XVIII Airborne Corps Artillery, Fort Bragg, N.C.

**BG Randal M. Tieszen**, currently deputy commanding general and assistant commandant, U.S. Army Aviation Center, Fort Rucker, Ala.

**BG Bennie E. Williams**, currently deputy commanding general, 21st Theater Support Command, U.S. Army, Europe, and Seventh Army, Germany.

**BG Walter Wojdakowski**, currently as assistant division commander (forward), 24th Infantry Division, and deputy commanding general (south), First U.S. Army, Fort Jackson, S.C.

**To Major General (Army Reserve):**

**BG Edwin E. Spain III**, currently commander, 359th Signal Brigade, Fort Gordon, Ga.

**BG George W. S. Read**, currently commander, U.S. Army Reserve Readiness Command, Fort Jackson, S.C.

**To Brigadier General (Army Reserve):**

**COL Larry Knightner**, currently commander, 81st Regional Support Group, Fort Jackson, S.C.

**COL Dennis E. Lutz**, currently commander, 656th Area Support Group, Willow Grove, Pa.

**To Brigadier General (Army National Guard):**

**COL Rex E. Thompson**, currently commander, Detachment 1, 32nd Army Air Missile Defense Command, Orlando, Fla.

**President George W. Bush has nominated the following Army officers for promotion to the rank of brigadier general:**

**COL Clinton T. Anderson**; currently chief of the Strategic Initiatives Group, J-5, Joint Staff, Washington, D.C.

**COL Michael D. Barbero**; currently the executive assistant to the commander in chief, U.S. Joint Forces Command, and supreme allied commander, Atlantic, Norfolk, Va.

**COL Salvatore F. Cambria**; currently the executive officer to the commander in chief, U.S. Special Operations Command, MacDill Air Force Base, Fla.

**COL James A. Cerrone**; currently the chief, Joint Exercise Division, J-7, Joint Staff, Washington, D.C.

**COL Robert W. Cone**; currently the director, Joint Advanced Warfighting Program, Institute for Defense Analysis, Arlington, Va.

**COL Russell Frutiger**; currently special assistant for general and flag officer matters, Joint Staff, Washington, D.C.

**COL William T. Grisoli**; currently the deputy director, Army Transformation Office of the Deputy Chief of Staff, G-3, U.S. Army, Washington, D.C.

**COL Carter F. Ham**; currently the deputy director, J-8, U.S. Central Command, MacDill AFB, Fla.

**COL Jeffery W. Hammond**; currently the executive officer to the deputy chief of staff, G-3, U.S. Army, Washington, D.C.

**COL Thomas M. Jordan**; currently the executive officer to the commander in chief, United Nations Command and Combined Forces Command, and U.S. Forces, Korea.

**COL Daniel J. Keefe**; currently the executive officer to the vice chief of staff, U.S. Army, Washington, D.C.

**COL Richard L. McCabe**; currently the chief, Air and Missile Defense, Space Division, Force Development Directorate, Office of the Deputy Chief of Staff, G-8, U.S. Army, Washington, D.C.

**COL Marvin K. McNamara**; currently the deputy director, Joint Theater Air and Missile Defense Organization, Arlington, Va.

**COL John W. Morgan III**; currently the chief, Middle East Division, J-5, Joint Staff, Washington, D.C.

**COL Michael L. Oates**; currently the executive officer to the secretary of the Army, U.S. Army, Washington, D.C.

**COL Mark E. O'Neill**; currently the executive officer to the commanding general, U.S. Army Training and Doctrine Command, Fort Monroe, Va.

**COL Joseph E. Orr**; currently the deputy assistant director, J-5, USCENTCOM, MacDill AFB, Fla.

**COL Robert M. Radin**; currently the chief, Logistics Operations Division, J-4 and 7, USCENTCOM, MacDill AFB, Fla.

**COL Jose D. Riojas**; currently the executive officer to the chief of staff, U.S. Army, Washington, D.C.

**COL Curtis M. Scaparrotti**; currently the deputy, Joint Operations, J-3, Joint Staff, Washington, D.C.

**COL Mark E. Scheid**; currently the chief, Plans Division, J-4 and 7, USCENTCOM, MacDill AFB, Fla.

**COL James H. Schwitters**; currently en route to USCENTCOM, MacDill AFB, Fla.

**COL John F. Shortal**; currently the executive assistant to the commander in chief, UNC/CFC and USFK.

**COL Louis W. Weber**; currently the commander, Operations Group, U.S. Army National Training Center, Fort Irwin, Calif.


COL Sylvester C. Berdux Jr., (Ret.)
AAAA Representative to The Military Coalition (TMC)

### Senate Approves Concurrent Receipt Amendment

On June 19 the Senate adopted an Armed Services Committee amendment to the fiscal year 2003 Defense Authorization Bill that would eliminate the Department of Veterans Affairs (VA) disability compensation offset to military retired pay for all disabled retirees with 20 or more years of service, effective Oct. 1, 2002.

Many thanks to all the people who sent more than 17,000 messages to Congress on this subject through The Retired Officers Association (TROA) Web site.

As originally drafted, the Senate bill contained a provision similar to that passed by the House in May, which would phase out the offset over five years, but only for retirees with 20 or more years' service and disability ratings of 60 percent or higher.

The new "full concurrent receipt" amendment, sponsored by Senate Armed Services Committee (SASC) Chairman Carl Levin (D-MI) and the rest of the SASC, was adopted by voice vote.

Senate leaders hope to complete action on a long list of other defense bill amendments before leaving for the Independence Day recess. That will set the stage for the real test this month, when House and Senate leaders will sit down to resolve the differences between their two versions of the bill — with the House's phase-out plan as the floor and the Senate's "full" concurrent receipt plan as the ceiling.

The Military Coalition (TMC) and TROA are very grateful to many in the Senate for helping pave the way for the successful vote. Special thanks in particular go to Levin and ranking Republican John Warner (R-VA) and Senators Tim Hutchinson (R-AR), Harry Reid (D-NV), John McCain (R-AZ), Bob Smith (R-NH) and Max Cleland (D-GA).

### Administration Issues Veto Threat

TMC and TROA were extremely disappointed, to say the least, at the contents of a June 19 letter sent to Congress by the Office of Management and Budget. The letter threatened a possible veto of the FY 2003 Defense Authorization Act if that legislation proposes eliminating the VA disability compensation offset to military retired pay. The letter asserted that President George W. Bush's advisers would recommend a presidential veto if the final Authorization Act includes either the Senate plan to eliminate the offset immediately or the House plan to phase in partial elimination for severely disabled military retirees.

The Bush Administration's opposition to this long-overdue initiative is nothing new. No administration of either party has ever supported providing any relief from the current unfair practice, in large measure because of the cost. But threatening to veto the defense bill if it provides any relief to disabled retirees is a new low.

At a time when the country has been particularly sensitized to the sacrifices of those who serve in uniform, both TMC and TROA find it difficult to conceive that the president would veto the defense bill for the express purpose of denying disabled military retirees their earned retired pay.

Should this actually occur, TMC, TROA and all other military and veterans associations would expect the 83 percent of senators and 90 percent of House members who have signed their names as cosponsors of this important legislation to back up those signatures and override any such veto. But any possible need for that is still at least a month away.

In the meantime, AAAA members and others should write the White House to let the president know how far wrong his advisers have gone on this issue. You can send a TROA-prepared message via TROA's Web site (www.capwiz.com/troa/ home). Just click on the "Don't Veto Concurrent Receipt" action alert link, then click the "Go" button.

### Panel Considers Veterans' Bills

Currently, rules governing eligibility for burial in Arlington National Cemetery (ANC) are administered by Army regulation, and waivers that were granted in certain cases have caused considerable controversy among veterans in the past. In recent years, the House of Representatives has overwhelmingly endorsed bills that would set the ANC burial rules in law. But the Senate has rejected those measures because they did not allow for exceptions to the rules.

Now a draft bill being considered by the House Veterans Affairs Committee (HVAC) would allow an exception only for a citizen whom the president determines had performed extraordinary service, acts or contributions to the armed forces. Some have associated this provision with entertainer Bob Hope.

Otherwise, the bill would restrict ANC burial to members of the armed forces who die on active duty; retired members of the armed forces, including retired National Guard/Reserve members who served on active duty; veterans awarded the Purple Heart, the Silver Star or a higher decoration for valor; former prisoners of war; National Guard/Reserve service members who served on active duty and have qualified for retirement, but have not yet retired; the president or any former president; and certain family members of the above-listed eligibles.

The HVAC Benefits Subcommittee also heard testimony on other veterans' bills, including:

- H.R. 3173, introduced by Rep. Luis Gutierrez (D-IL), which would allow optional purchase of increased Servicemen's Group Life Insurance (SGLI) up to $1,000,000 and upgrade protections for deployed service members under the Soldiers' and Sailors' Civil Relief Act against eviction from a leased house or apartment.
- H.R. 3771 (Rep. Joe Crowley, D-NY), a bill that would allow monetary benefits paid to veterans by states and municipalities to be excluded from income for purposes of VA pension benefits eligibility determinations.

The Benefits Subcommittee also reviewed a bill (H.R. 3735) that would improve the administration of overpayments to veterans, and another (H.R.4042) that would prohibit collection of additional charges for prepaid housing loans guaranteed by the VA.

### Military Homeowners Capital Gains Tax

Efforts continue to find a way to grant relief for military members and foreign service employees who can face substantial tax bills if they sell their homes after being assigned away from the home for more than three years immediately before the sale. Despite support from senior members of Congress, the Office of Management and Budget, the State Department, and senior Defense and Service leaders, the outlook for legislative change remains uncertain.

The Taxpayer Relief Act of 1997 allowed homeowners to exempt up to $250,000 ($500,000 per couple) in capital gains from federal income taxes for a home occupied as a principal residence for at least two of the five years preceding the sale. But it inadvertently penalized service members assigned on orders away from their homes for more than three years by repealing the previous capital gains "rollover" rules in these cases and making no new provision for military assignments.

There have been efforts ongoing since then to make a legislative fix. In 1999 Congress passed an omnibus tax bill containing relief for uniformed and foreign service members (among many other provisions), but it was vetoed by President Bill Clinton for other reasons.

Sen. John McCain (R-AZ) introduced a bill (S. 1678) late last year which, along with several other bills (including S. 1755 in the Senate and H.R. 1596 and H.R. 356 in the House), would amend IRS rules to exempt time away from home on military orders from counting against the "two-of-the-last-five-years" residency test. But Congress recently has resisted large omnibus tax bills in favor of more limited issue-specific bills. Unfortunately, the military homeowner tax issue has not "made the cut" for inclusion in the more recent legislation, such as the economic stimulus bill passed early this year.

Recently, TMC, TROA and foreign service representatives tried a different tack, meeting with Treasury and IRS officials to explore the possibility of fixing the problem with an administrative rules change as part of an IRS rules update expected later this summer. While IRS and Treasury officials didn't completely rule it out, their initial response was not optimistic that this could be done without a law change. TMC is hoping to persuade Department of Defense (DOD) and State Department officials to weigh in with Treasury in support of the idea.

Barring that, TMC will continue seeking to attach the military homeowner relief provision to any tax bill that Congress considers.

### QRMC Report on Retiree Post-Service Earnings

About 20,000 service members retire each year (at the average age of 43). Most enter second careers and, according to the recent report issued by the Ninth Quadrennial Review of Military Compensation (9th QRMC), they're relatively happy with their lot in life.

The 9th QRMC examined, among many other issues, how military retirees' post-service earnings compared with those of civilians with like backgrounds and work experience, and whether retirees were satisfied with their military experiences and post-service lives.

The QRMC found that retirees' earnings in their first jobs following retirement were lower than what they made in their final military positions and lower than the earnings of civilians with similar experience and education. They also observed that "more recent retirees earn civilian wages that are considerably lower than those of retirees who

***Legislative Report** continued on page 30*

***Legislative Report*** *continued from page 29*

separated from the military in the 1970s."

Officers retiring between 1990 and 1994 earned 30 percent less than their civilian peers, and enlisted members retiring in the same period earned 37 percent less. About 30 percent of 1990-1994 retirees believed their military careers hindered their chances of earning comparable civilian wages, while only 17 percent of 1971-1974 retirees felt that was true.

The report speculated on a variety of additional reasons for the difference, including limited transferability of some military skills to private employment; general economic conditions; a tendency to retire in lower-cost (and lower-paying) areas of the country; and retirees opting for more satisfying work, more flexible work schedules, or better fits with their spouses' employment versus better-paying jobs.

While their post-service earnings were less, the QRMC reported that military retirees' total earnings rise above the average of civilian peers when military retired pay is added to the equation.

It also found that the overwhelming majority of retirees were satisfied with their military careers and post-retirement lives, that most felt they were better off than when they were in the military, and believed they were doing as well as or better than their civilian peers.

The report recommended further study of the reasons for the apparent decline in second-career earnings.

## Wings of Victory Chapter

COL Jeffrey S. White *(right)*, commander of the 12th Avn. Bde. in Giebelstadt, Germany, presents the Order of St. Michael Bronze Award to CW5 Eric Von Linderman, the 12th Avn. Bde. standardization officer and a member of AAAA's Wings of Victory Chapter.

## High Desert Chapter

The Annual AAAA High Desert Chapter Aviation Ball held April 2 at the National Training Center Leader's Club at Fort Irwin, Calif., was a smashing success!

Thanks to the efforts of MAJ Dave Bingham, CPT Rich Gordon and members of the Eagle Team, the formal event drew 129 guests. BG Randal M. Tieszen, deputy commanding general of the U.S. Army Aviation Center at Fort Rucker, Ala. was the guest speaker.

Tieszen spoke of his recent visit to the aviators fighting terrorism in Afghanistan.

Specifically, he talked about the outstanding job that aviation soldiers and aircrew members of the 3rd Battalion, 101st Aviation Regiment, were doing, especially in the integration with ground maneuver forces in direct combat with al-Queda and Taliban forces.

Following Tieszen's comments, LTC Crutchfield presented Bronze Order of Saint Michaels to the following individuals: COL Louis W. Weber, MAJ William Goforth, MAJ William L. Shepherd, CPT Nick Arata, CPT Ronald Lukow, CPT Mark Baril, CW4 Robert Bright, CW3 Timothy Livesay, CW2 Michael Fiala, SGM Kevin R. Krum, 1SG Mateo Alba Jr., MSG John Pablo (Ret.), and 1SG Arnold Ramirez (Ret).

COL Gary S. Patton, the deputy commander of NTC's Operations Group, was awarded the Bronze Order of Saint Michael in a separate ceremony at his office on April 26.

The next High Desert Chapter AAAA Ball is tentatively scheduled for Feb. 15, 2003.

**LTC Crutchfield presents the Bronze Order of Saint Michael to MAJ Lee Shepherd as COL Louis Weber, commander of NTC's Operations Group, looks on with the other award recipients.**

***(Left to right)*** **BG Randal Tieszen, COL Louis Weber (commander of NTC Operations Group and Bronze Order of Saint Michael awardee), and LTC Anthony Crutchfield.**

**Bronze Order of Saint Michael awardees *(left to right)* MAJ William Goforth, CPT Mark Baril, 1SG Mateo Alba Jr. and CW2 Michael Fiala.**

**LTC Crutchfield awards the Bronze Order of Saint Michael to SGM Kevin Krum.**

**Bronze Order of Saint Michael awardees (left to right) CPT Ron Lukow, MAJ Lee Shepherd, and CPT Nick Arata.**

***(Left to right)*** **COL Gary S. Patton, NTC Deputy Commander of Operations Group, is awarded the Bronze Order of Saint Michael by LTC Crutchfield.**

**Bronze Order of Saint Michael awardees *(left to right)* Mr. John Pablo, CPT Nick Arata and Mr. Arnold Ramirez.**

# NEW MEMBERS

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# AAAA NEWS

## Naval War College

Several Army aviators attended the Naval War College this past year and graduated on June 14. The Command Naval Warfare (CNW) and the College of Naval Command and Staff (CNCS) both award a masters of arts degree in National Security and Strategic Studies.
Row 1: **COL Wilfred Brown** (senior Army advisor), **LTC Rich Enderle** (CNW), **MAJ John Gass** (CNCS) and MAJ Mark Weiss (CNCS).
Row 2: **LTC Mark McKearn** (CNW), **MAJ Thomas Drew** (CNCS) and **MAJ Rob Willis** (CNCS).
Not pictured: **LTC John Burns** (staff and faculty).

## ❖CFC❖CFC❖CFC❖CFC❖CFC❖CFC❖CFC❖CFC❖

The AAAA Scholarship Foundation, Inc. (AAAASFI) is now part of the Combined Federal Campaign (CFC), a workplace charitable fund drive conducted by the U.S. Government for all federal employees. It is the single largest workplace fund drive in the country, raising approximately $195M in pledges annually.

In 2001, the AAAASFI received a total of 197 applications and awarded 110 grants and loans totalling $194,500. These awards are made on the basis of academic merit only and the applications are scrubbed to remove all references to the names and ranks of their AAAA member relative.

Don't forget, all overhead costs are borne by the AAAA so that 100% of your contribution (net CFC charges) go directly to AAAA Scholarship Foundation, Inc. awards. Help us reward more of these outstanding students with larger awards.

*Tax-deductible donations may also be made directly to the*

*AAAA Scholarship Foundation, Inc.*
755 Main Street, Suite 4D, Monroe, CT 06468-2830
E-Mail: aaaa@quad-a.org Telephone: (203) 268-2450
FAX: (203) 268-5870

**Combined Federal Campaign**

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## ARMY AVIATION ASSOCIATION OF AMERICA (AAAA)

755 MAIN STREET, SUITE 4D, MONROE, CT 06468 ● PHONE (203) 268-2450 ● FAX (203) 268-5870

**Please check one:** ☐ **Change of Address:** ☐ **New Membership Application**

I wish to join the Army Aviation Association of America (AAAA). My past or current duties affiliate me with U.S. Army Aviation and I wish to further the aims and purposes of the AAAA. I understand that my membership includes a subscription to AAAA's official magazine "Army Aviation", and that my membership will start on the subsequent first of the month. Contributions or gifts to AAAA are not deductible as charitable contributions for federal income tax purposes. Dues payments may be deductible by members as ordinary and necessary business expenses.

Rank/GS Grade _____ First Name _____ MI _____ Last Name _____ Sex _____

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( ) Area Code Office Phone _____ ( ) Area Code Residence Phone _____ ( ) Area Code FAX _____

Consent: ☐ I do ☐ I do not consent to the publication or release of the above information to third parties.

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Citizenship _____ Nickname _____ Spouse's Name _____

Date of Birth (Mo/Yr) _____ Social Security No. _____

membapp.i31 08/22/01

### AAAA ANNUAL DUES

Applications other than those listed below:
( ) 1 yr, $26; ( ) 2 yrs, $47; ( ) 3 yrs, $70
Full-Time Students; Enlisted; WO1s; GS-8 DACs & Below; Wage Board 12 DACs & Below:
( ) 1 yr, $15; ( ) 2 yrs, $27; ( ) 3 yrs, $39
Add $5 per year if you have a foreign, non-APO address.
Add $15 if your check is drawn on a foreign bank.

☐ Check enclosed payable to "AAAA" or charge to
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Date: _____

**Check (✓) Your Professional Qualification:**

( ) Army Active Duty
( ) Army AGR (ARNG)
( ) Army AGR (USAR)
( ) DA/DOD Civilian
( ) Army Nat'l Guard
( ) Army Reserve
( ) Army Retired
( ) Foreign Military Service
( ) Foreign Defense Industry
( ) Other US Military Service (Active)
( ) Other US Military Service (Retired)
( ) US Defense Industry
( ) US Defense Industry & Military Retired
( ) Consultant
( ) Publishing/Other Assn.
( ) Other _____

Are you a former AAAA member? ☐ Yes ☐ No
If yes, what year did you join? _____
Chapter Affiliation Preferred _____
Print Name of Recruiter _____

# Isn't it time

## to give to those who give the most?

At the AAAA, our mission is to support and advance individuals involved with U.S. Army Aviation. AAAA local Chapters play an integral part in providing that support. One of the most significant ways a Chapter can help its members is through the AAAA Scholarship Foundation matching fund program.

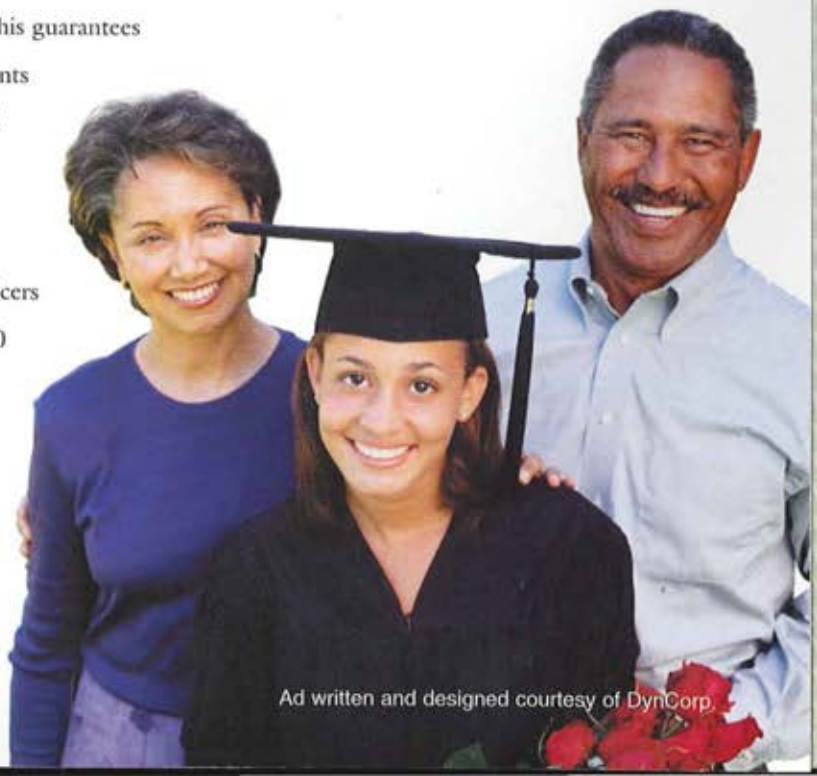
Chapters participate by donating from $1,000 to $5,000 in any given year. These donations are matched, dollar for dollar, by the AAAA Scholarship Foundation, thereby doubling the amount awarded. If your Chapter has a membership of 100 or less, the minimum donation for matching is set at $500. Chapters raise funds in many different ways, including car washes, golf tournaments, dinner dances and more. Results vary, but one thing remains constant. Scholarship recipients get the funds they need to achieve their educational goals. And the best part is that Chapters can designate that their applicants have the first opportunity for these awards. This guarantees that at least one of the Chapter's applicants will receive a $1,000.00 or larger award!

To learn more about how your Chapter can participate in the matching fund program, contact your local Chapter officers or the National office at (203) 268-2450 or aaaa@quad-a.org.


**AAAA Scholarship Foundation**

www.quad-a.org

(203) 268-2450



Ad written and designed courtesy of DynCorp.

## Magnolia Chapter Elects New Officers

The Magnolia Chapter recently held its Spring meeting at Camp Shelby, Miss. CW5 Randy "Never Quits" Jones was the guest speaker and more than 25 new members were signed up for the newly formed Mississippi Chapter. ***Go Magnolia!***

Soldier of the Month Presentation: *(Left to right)* CPT Glen Flowers, commander of Company K, 185th ATS; SGT Alan Newby, Soldier of the Month for February 2002; CW5 Randy Jones.

*(Below Left to right)* 1SG Mike Ingram of Co. K 185 ATS, recipient of the Bronze Order of St. Michael; CPT Glen Flowers; CW5 Randy Jones.

*(Left to right)* MAJ Mindy Barbe: 1SG William Harper of Co. G, recipient of the Bronze Order of St. Michael; CW5 Randy Jones.

*(Left to right)* MAJ Mindy Barbe, commander of Co. G, 185th ATS; CW4 Peter O'Shea, recipient of the Bronze Order of St. Michael; CW5 Randy Jones.

AAAA's Magnolia Chapter elected three new officers during its April 22 meeting in Tunica, Miss. LTC Gregory L. Kennedy took over the reins of the chapter presidency from LTC James G. Young, CPT Walter G. Jordan replaced CW3 Joel Jasper as vice president for programs and awards, and CPT James B. Haynie took over as VP for membership from MAJ Dane Powell.

Outgoing Chapter president LTC James G. Young (*left*) and incoming president LTC Gregory L. Kennedy.

## Voodoo Chapter Activation


On May 18 AAAA's newest chapter was activated at the Louisiana Army Aviation Support Facility in New Orleans.

Some 25 members were present for the first meeting of the Voodoo Chapter, and elected the following officers: COL Barry D. Keeling (president), LTC Garrett P. Jensen (senior vice president), CPT John Ballard (treasurer), CSM Everett (secretary), CW4 Jim Lee (VP, membership), MAJ Brad Kleinknecht (VP, fund raising), 1LT Shane Devlin (VP, social) and MAJ Dave DeHoog (VP, scholarships).

The members agreed that the chapter's mission will be to build esprit d'corps within the aviation community and build positive notoriety for the organization. The chapter president then shared highlights of the recent AAAA convention, which he attended. He also spoke of the opportunities to compete for awards at the national level and to sponsor a local awards program.

*CALL FOR PAPERS*

# AAAA AVIATION, ELECTRONICS, AND SURVIVABILITY SYMPOSIUM

**Eatontown, NJ - November 5-7*, 2002**
**Sponsored by the Army Aviation Association of America (AAAA)**
**And the AAAA Monmouth Chapter**

The Army Aviation Association of America, Inc., is pleased to announce the AAAA Aviation, Electronics, and Survivability Symposium. This year's theme is "Aviation and Electronics at War…Maintaining the Decisive Edge for the US Army." The Symposium will be broken down into sessions, covering the following topics.

- Battle Command
- Survivability
- Aviation Digital Enablers, e.g., Man-Machine Interfaces, Training, Air Traffic Control, etc.
- Aviation Intelligence, Surveillance, and Reconnaissance (ISR)
- * Intelligence, Electronic Combat, and Information Warfare - Classified Session

If you are interested in presenting an unclassified paper for this year's Symposium, please consider the following:

- A draft presentation in the form of an abstract and presentations slides must be submitted on or before 13 September 2002 to the Technical Chairman, Mr. Edward Bair, PEO Intelligence, Electronic Warfare and Sensors, ATTN: SFAE-IEW&S, Fort Monmouth, NJ 07703; Telephone: (732) 427-2153; FAX: (732) 427-4167.
- Paper selection will be made and participants notified by 27 September 2002.
- The presentation should be based on a presentation time of approximately 30 minutes with an additional 10 minutes provided for questions and answers.
- Adequate meeting room facilities and audio/visual equipment will be available at the Sheraton Hotel, Route 35 and Industrial Way East, Eatontown, NJ 07724.

Registration and an Early Bird Reception will be the evening of 5 November. All AAAA sessions and events will be non-classified and will be held at the hotel to encourage broader attendance and exchange within the community of individuals involved in aviation, electronics and survivability equipment development. Sessions begin on Wednesday morning, 6 November, and conclude on Thursday afternoon, 7 November.

* The Association of Old Crows (AOC) Monmouth Chapter will host a CLASIFIED, off-site technical session on Thursday afternoon, 7 November, at the Myer Center, Fort Monmouth, NJ. Bus transportation will be provided from the Sheraton Hotel to and from the Myer Center to facilitate access to Fort Monmouth. The AOC classified technical session co-chairman is Mr. Anthony Lisuzzo, ATTN: AMSEL-RD-IW, Director, Intelligence and Information Warfare Directorate, CECOM, RDEC, Fort Monmouth, NJ 07703; Telephone: (732) 427-5556; FAX: (732) 532-5003.

***See AAAA Website : www.quad-a.org for Symposium Abstract.***

# AAAA NEWS

## FUNCTIONAL AWARD NOMINATIONS

See our website www.quad-a.org or contact the AAAA National Office at (203) 268-2450 for nomination forms for these awards. Membership in AAAA is not a requirement for consideration.

**Suspense September 1**
**(Awards Period Encompassing**
**August 1 Through July 31):**
Aircraft Survivability Equipment (ASE) Award
Avionics Award

**Suspense October 15**
**(Awards Period Encompassing**
**September 1 Through August 31):**
Army Aviation Air/Sea Rescue Award
Army Aviation Fixed Wing Unit Award
Army Aviation Medicine Award
Army Aviation Trainer of the Year Award
Army Aviation Air Traffic Control Manager of the Year Award
Army Aviation Air Traffic Controller of the Year Award
Army Aviation Air Traffic Control Facility of the Year Award
Army Aviation Air Traffic Control Company of the Year Award
Army Aviation Air Traffic Control Maintenance Technician of the Year Award

**Suspense November 7**
**(Awards Period Encompassing**
**November 1 Through October 31):**
Army Aviation Logistics Support Unit of the Year Award
Army Aviation Material Readiness Award for Contributions by an Individual Member of Industry
Army Aviation Material Readiness Award for Contributions by an Industry Team, Group, or Special Unit
Army Aviation Material Readiness Award for Contributions by a Small Business Organization
Army Aviation Material Readiness Award for Contributions by a Major Contractor

**Army Aviation Association of America**
**755 Main Street, Suite 4D**
**Monroe, CT 06468-2830**
**Phone: (203) 268-2450; Fax: (203) 268-5870**
**Email: aaaa@quad-a.org**

In February BG Gratton O. "Neal" Sealock II, an AAAA Life Member and currently the U.S. defense attaché in China, hosted the visit to China of a CAPSTONE class from the National Defense University in Washington, D.C.

The CAPSTONE course included two of his close aviation friends and fellow brigadiers, BG James A. Kelley and BG James H. Pillsbury. Kelley is the former assistant deputy chief of staff for operations at U.S. Army Forces Command, and at the time of the visit Pillsbury was the commander of the Defense Distribution Center.

The visit included official calls in Beijing at the U.S. Embassy, and with Chinese officials at the Great Hall of the People and the Ministry of Defence. Neal assures us that there was plenty of time for old aviator stories as the group was introduced to real Chinese food and fun, and contributed the following photos, taken during the visit.

***(Left to right)* Sealock, Kelley and Pillsbury in Tian Anmen Square, facing the Forbidden City.**

**The three visit the Great Wall.**

## Lost Members

Help us find our Lost Members. We'll give you an additional month on your AAAA membership free for each member you help us locate. Simply write, call or E-mail us with the Lost Member's current address. AAAA, 755 Main Street, Suite 4D, Monroe, CT 06468-2830. Tele: (203) 268-2450; FAX:(203) 268-5870; E-Mail: aaaa@quad-a.org.

Albright, John S., 2LT
Clavon, Terri, SGT
Johnson, Michael R., WO1
Keefe, Daniel J., COL
McIntosh, William A., WO1
McPeake, Aaron M., 2LT
Ruffner, Diane, Ms.
Sacia, John T., 2LT
Scott, Shane P., 2LT
Sherrock, Shannon K., 2LT
Walker, Christopher, CW3
Wynn, Milton E., MAJ

# AAAA Honors Doolittle Raiders By SSG Ruppert Baird

On April 21 surviving participants of the 1942 U.S. Army Air Forces raid on Japan led by then-LTC James H. Doolittle were honored by AAAA's Doolittle Chapter in Columbia, S.C., during the Raiders' 60th reunion. Fourteen raiders, five honorary raiders, an author of a book on the raiders, and dozens of raider widows and family members celebrated courage, patriotism, and friendship born in war at the event.

The reunions are a tradition inadvertently begun by Doolittle, who before the raiders launched their B-25 bombers from the carrier USS Hornet promised them: "When we all get to Chungking [China], I'm going to throw you fellows the biggest party you've ever had."

He was unable to fulfill that promise, but in 1945, Doolittle invited all the surviving raiders to his 49th birthday party in Miami. The three-day event was so much fun, they decided to do it every year. The first full-fledged reunion was in 1947, though a reunion of sorts occurred in North Africa in 1943. Reunions have been held annually ever since, except 1951 during the Korean War and during the Vietnam War in 1966.

The Raiders formed in January 1942 at Columbia Army Airfield, S.C., before moving to Eglin Field, Fla. So, it was natural that their 60th and possibly last large, public, reunion should occur there. The Celebrate Freedom Foundation spearheaded the reunion effort. Festivities included a weeklong air show, dinners, presentations, autograph and book signings, a 1940s-era big-band dance, and an anniversary parade down the state capital's Main Street, which included a fly-over of ten B-25s.

When the Reunion was announced late in 2001, Doolittle Chapter member COL Earl Yerrick contacted the Foundation with the chapter's offer to participate. It was readily accepted and the chapter was asked to provide escorts for any number of the surviving 23 raiders and the raiders' widows. Eventually, more than 30 escorts, including chapter members, Army personnel from Fort Jackson and Air Force representatives assisted the raiders over seven days.

*— SSG Ruppert Baird is an AH-64A technical inspector with the South Carolina National Guard's Detachment 1, Company L, 168th Aviation Regiment, and a full-time civilian sheet metal technician at the state's Army Aviation Support Facility. He is also the Doolittle Chapter's vice president-awards.*

A display of World War II-era militaria exhibited by a private collector in the hotel lobby.

Stork waves for the camera at the reunion.

A few of the at least 4,000 people who stood in line for hours to have the Doolittle raiders autograph books, posters, shirts, B-25 models and, in one case, a replica 500-lb. bomb!

Raider David M. Jones and his wife pose with their Jimmy Doolittle Chapter escort, Donald Munsch. Don is the chapter treasurer and the owner of American Air Pirate, an aviation outfitter.

South Carolina State Army Aviation Officer and Jimmy Doolittle Chapter member COL Lester Eisner and raider Roy Stork smile for the camera. Stork died 15 days after the reunion.

The Toast. Raider Davey Jones reads the manifest of those raiders who have passed on as the survivors drink a toast to their fallen comrades. At the final reunion, the last two raiders are to open an 1896-vintage bottle of brandy that accompanies the goblets, and drink the final toast. The brandy's vintage is the year of Jimmy Doolittle's birth.


Doolittle raider escorts and Jimmy Doolittle Chapter officers SGT Brett McLean (VP-programs), Don Munsch (treasurer) and COL Earl Yerrick (VP-scholarships) pose with raider Davey Jones.

# AAAA NEWS

## New Chapter Officers

**Flying Tigers Chapter:**
CSM Dennis P. Jensen, Sr. Vice President.

**Phantom Corps Chapter:**
LTC Otis L. Brown, II, VP Scholarships.

**Talon Chapter:**
CPT Joel S. Magsig, Treasurer.

**Winged Warriors Chapter:**
MAJ Kent L. Sylvester, Sr. Vice President; CPT Richard E. Stanfield II, Vice President Awards; 1LT Michael W. Cerchio, Vice President Special Projects.

## Aces

The following members have been recognized as Aces for their signing up five new members each.
Mr. Joseph A. Caines
COL Norb Patla, Ret.
CW3 Richard H. Tanner
MAJ Wiley C. Thompson

## New AAAA Life Members

CPT Gregory E. Crawford
CPT Jason S. Davis
SFC Ronald L. Hardy, Jr., Ret.
COL Douglas I. Smith, Jr., Ret.

## AAAA NCO of the Quarter

A Chapter Program to Recognize Outstanding Non-Commissioned Officers on a Quarterly Basis

**SSG Mayda I. Jorge**
4th Qtr. FY02
*(Narragansett Bay Chapter)*

## AAAA Soldier of the Month

A Chapter Program to Recognize Outstanding Aviation Soldiers on a Monthly Basis

**SGT Angie L. Harris**
March 2002
*(Indiantown Gap Chapter)*

**PV2 Oscar Jimenez**
May 2002
*(Iron Mike Chapter)*

**SGT Michael J. Kawan**
July 2002
*(Narragansett Bay Chapter)*

**SPC Melissa L. Jesuina**
August 2002
*(Narragansett Bay Chapter)*

## AAAA Non-Commissioned Officer of the Quarter

A Chapter Program to Recognize Outstanding Non-Commissioned Officers on a Quarterly Basis

**1SG Robert C. Leavitt**
3rd QTR FY02
*(Narragansett Bay Chapter)*

## New AAAA Order of St. Michael Recipients

COL John W. Marr, Ret. (Gold)
CW5 Claudio Facundo (Silver)
COL Jeffrey S. White (Silver)
CW5 Donald E. Beatty (Silver)
COL Kerry M. Brown (Silver)
LTC Barry P. Taylor (Bronze)
LTC Alan H. Ray (Bronze)
LTC Scott D. Zegler (Bronze)
LTC William S. Larese (Bronze)
CSM Eric J. Harris (Bronze)
CPT Jeffrey G. Bouma (Bronze)
1SG Marvin L. Blackshear (Bronze)
CW4 William A. Church (Bronze)
CW3 Randy E. Cupit (Bronze)
CPT Spencer C. Guida (Bronze)
CW4 Kevin R. Hayes (Bronze)
MAJ Jeffrey R. Holcomb (Bronze)
MAJ Justin Kidd (Bronze)
CW5 Thomas T. Struck (Bronze)
CPT Christopher Thompson (Bronze)
CW3 Gregory A. Lloyd (Bronze)
MSG Daniel Maust (Bronze)
SFC Brian M. Reeder (Bronze)
1SG John L. Chandler (Bronze)
CPT Joseph A. Dunlop (Bronze)
COL James S. McGhee (Bronze)
COL Alan L. Moloff (Bronze)
CPT Courtney P. Cote (Bronze)
Elton T. Gordon, Jr. (Bronze)
SGM William J. Baker (Bronze)
COL Steven W. Swann (Bronze)
LTC Christopher R. Philbrick (Bronze)
MAJ Christopher M. Knapp (Bronze)
CW3 Thomas E. McClellan (Bronze)
CW3 Todd M. Boyd (Bronze)
SSG Kipp A. Katterheinrich (Bronze)
MAJ John J. Devillez (Bronze)
MAJ Scott Ross (Bronze)
MAJ Jeffrey Cheeks (Bronze)
LTC Craig E. Terry (Bronze)
COL James R. Callahan (Bronze)
CSM Larry D. Cook (Bronze)
LTC William D. Kuchinski (Bronze)
LTC Maureen C. Cantwell (Bronze)
CPT Charles L. Moore (Bronze)
CPT Chad E. Chasteen (Bronze)
CW3 Eugene K. Okita (Bronze)
COL Roger F. Hall (Bronze)
MAJ Michael D. Miller (Bronze)
LTC Jed L. Gload (Bronze)
LTC Joe D. Dunaway (Bronze)
CSM Tod Glidewell (Bronze)
CW4 Allen Jarouch (Bronze)
CW3 Jeffrey A. Moss (Bronze)
1SG Keith C. Little (Bronze)
1SG Keith C. Dawson (Bronze)
CPT Stephen J. Jobson (Bronze)

## In Memoriam

Theodore Homanick
CW3 Fred M. Jones

On June 5, members of the 3rd Squadron, 6th Cavalry, folded and cased the unit's colors in preparation for the transition from the AH-64A to the AH-64D Longbow Apache. After six years on the Korean Peninsula, the colors will go back to Fort Hood, Texas, where the 3-6 Cav. will stand up in July as an AH-64D unit, under the same name, for the Unit Training Fielding Program (UFTP). Following completion of UFTP, the 3-6 Cav. will return to Korea.

CSM Byong-Hyon Min folds the colors. At left is LTC Chuck Harrison (commander of 3-6 Cav.) and at right is COL Kevin Scherrer (commander of 6th Cav. Brigade). The folded colors were flown off in a Longbow Apache, symbolic of the unit's transition to the AH-64D.


- **Sep. 6-9.** National Guard Association of the U.S. (NGAUS) 124th Annual Conference and Exhibition, Long Beach, Calif. For information call (202) 789-0031 or visit following websites: **www.goldrush2002.org** or **www.ngaus.org**
- **Oct. 21-23.** AUSA Meeting, Marriott Wardman Park Hotel and the Omni Shoreham Hotel, Washington, D.C.
- **Oct. 21.** AAAA Scholarship Foundation Board of Governors Meeting, Marriott Wardman Park Hotel, Washington, D.C.
- **Oct. 21.** AAAA National Executive Board Meeting, Marriott Wardman Park Hotel, Washington, D.C.
- **Jan. 31-Feb. 1, 2003.** AAAA National Awards Selection Meeting, National Guard Readiness Center, Arlington, VA.
- **Jan. 31.** AAAA Scholarship Executive Committee Meeting, National Guard Readiness Center, Arlington, VA.
- **Apr. 9-12.** AAAA Annual Convention, Fort Worth, TX.

# Army Aviation Hall of Fame

*The Army Aviation Hall of Fame sponsored by the Army Aviation Association of America, Inc., recognizes those individuals who have made an outstanding contribution to Army aviation. The actual Hall of Fame is located in the Army Aviation Museum, Fort Rucker, Ala., where the portraits of the inductees and the citations recording their achievements are retained for posterity. Each month Army Aviation Magazine will highlight a member of the Hall of Fame. The next triennial induction will occur in the spring of 2004. Contact the AAAA National Office for details at (203) 268-2450*

## GEN Robert M. Shoemaker
## Army Aviation Hall of Fame 1983 Induction

Shoemaker's military career has been marked with conspicuous contributions to Army aviation.

During 1960 and 1961 he commanded the first experimental Aerial Combat Reconnaissance Company. In 1962 he served on the Tactical Mobility Requirements Board (the Howze Board) and later was sent to Vietnam to document Army aviation's accomplishments and potential. From 1963 to 1965 Shoemaker played a key role during tests of Howze Board concepts with the 11th Air Assault Division. When that division was redesignated the 1st Cavalry Division and deployed to Vietnam in 1965, he served with distinction in combat as commander of the 1st Squadron, 9th Cavalry, and 1st Battalion, 12th Infantry.

Shoemaker returned to Vietnam for a third tour in 1969-1970 as brigade commander, chief of staff and assistant division commander of the 1st Cav. Div.

At Fort Polk, as commanding general of the 1st Cav. Div. and, later, of III Corps, Shoemaker brought on line the Army's first air cavalry attack brigade. His military career, culminating as commanding general of U.S. Army Forces Command, involved many pioneering efforts in the development of tactics, equipment and concepts that are now the cornerstones of Army aviation.

Scene created using the Harmony® image generator

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Now, more than ever, well-trained armed forces are vital to the security of free nations around the world. We must "train like we fight" to ensure that our forces are prepared for the challenges that lie ahead. Simulators play a key role in providing safe, cost-effective training, and the effectiveness of the simulator depends on the quality of its visual system. The visuals must look real, or the training is compromised.

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