ARMY AVIATION

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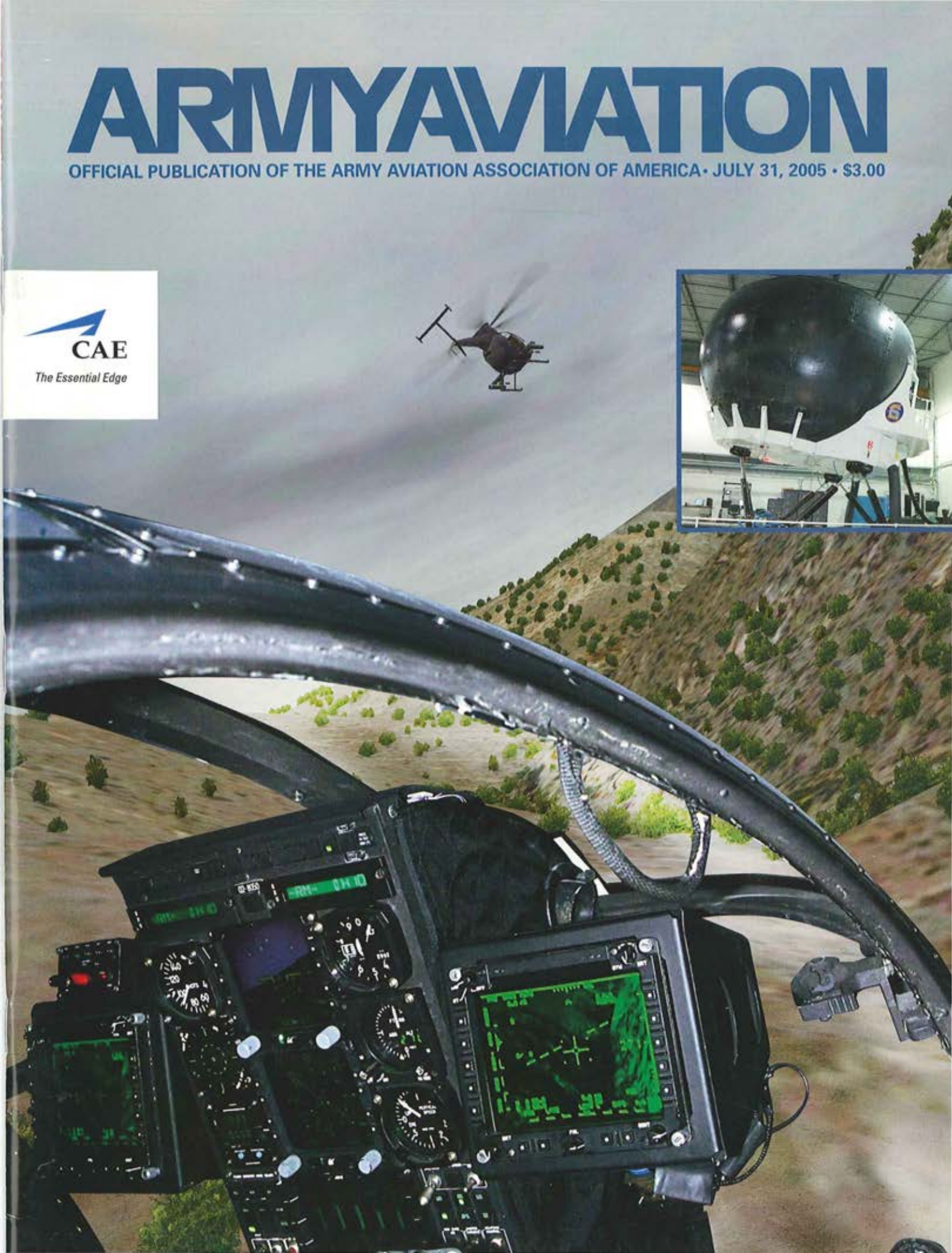

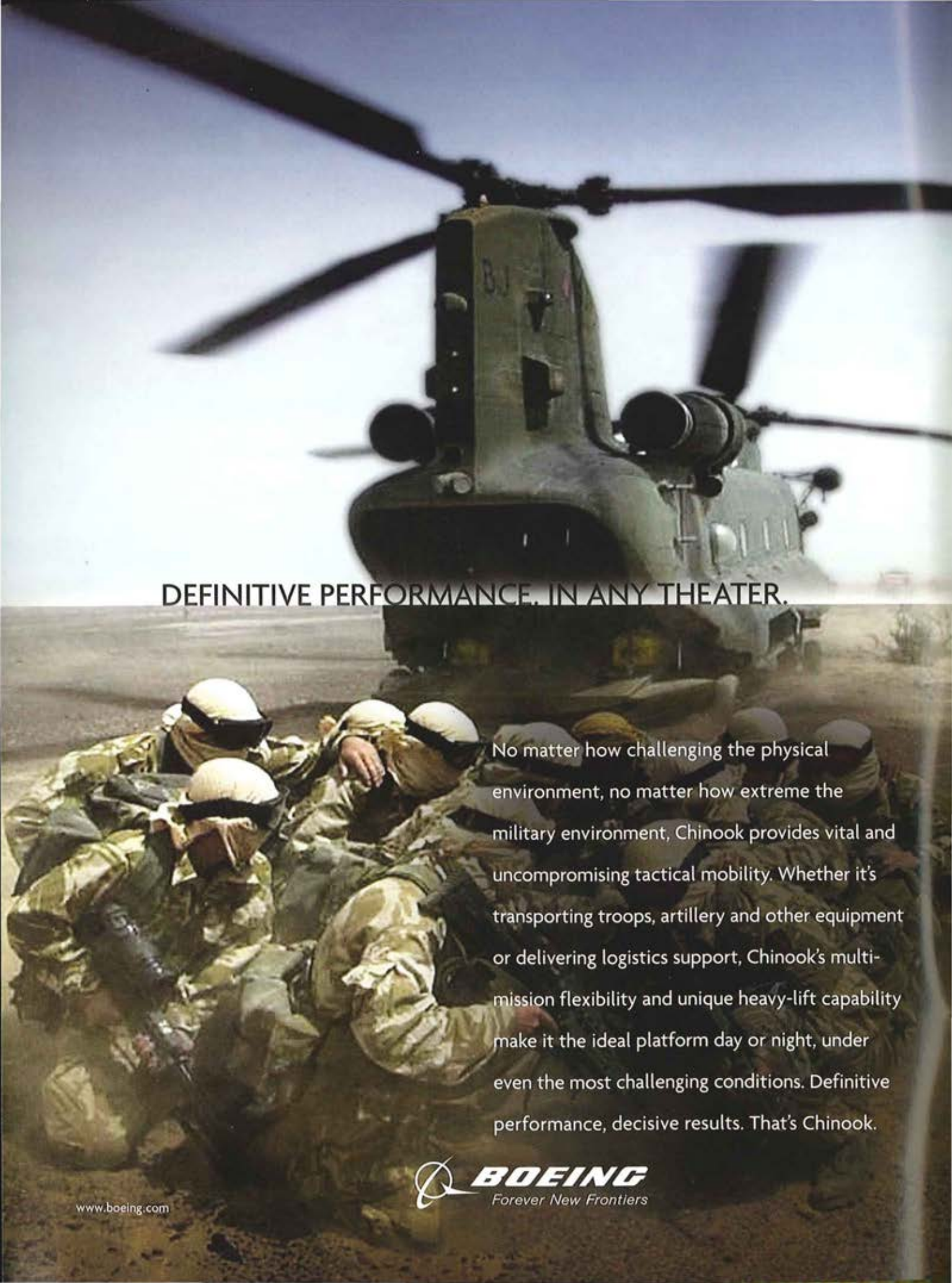

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ON THE COVER

Paid advertisement. CAE is one of the world's leading providers of mission rehearsal and training systems. On the cover is a view from the cockpit of the world's first A/MH-6 Little Bird combat mission simulator, which CAE recently delivered to the U.S. Army's 160th Special Operations Aviation Regiment. CAE is currently developing new MH-47G and MH-60K/L combat mission simulators for the 160th SOAR(A), which will feature an innovative common environment/common database (CE/CDB) architecture designed to significantly enhance mission rehearsal capabilities. *Caption provided by advertiser.*

Briefings...

LATE-BREAKING NEWS ANNOUNCEMENTS CONTRACTS

TH-67 Crash Kills Instructor

A Fort Rucker based TH-67 Creek helicopter crashed during a morning instrument training flight June 23 near Eufaula, Ala. **Michael Lee**, 58, of Enterprise, Ala., and a contract flight instructor with Lear Siegler, Inc., died in the accident and two student pilots were injured. As of June 24, one student was listed in stable condition and was expected to be released in days, while the other was listed in serious but stable condition and expected to fully recover. The accident is under investigation by Combat Readiness Center safety officials.

13-Inch UAV Completes 'Untethered' Free Flight

Honeywell Intl. of Phoenix, Ariz., announced June 6 that its 13-inch Micro Air Vehicle successfully completed its first untethered free flight at the MANTIC test facility near Laguna, N.M. The flight is a major milestone before delivery to the Defense Advanced Research Projects Agency and the Army. The MAV is small enough for a Soldier to backpack and is equipped with forward and downward-looking electro-optical cameras for daylight or infrared night operations. It is being developed as part of DARPA's MAV advanced concept technology demonstration program and is considered a top contender for the Future Combat Systems Class I family of UAVs.

HONEYWELL INTL PHOTO

CNN Provides Free Admission to Armed Forces

Turner Broadcasting System, Inc., is offering free admission for all U.S. military ID card holders who visit the Inside CNN Atlanta and Inside CNN New York attractions at the CNN Center in Atlanta and the Time Warner Center in Manhattan. All active, retired and reserve component members can visit the attractions at no cost, while spouses, children, siblings, or parents may enter at a discounted rate of $7 in Atlanta and $12 in New York. For hours and reservations in New York, call 1-866-4CNN-NYC. For Atlanta, call 1-877-4CNN-TOUR, or visit online at www.cnn.com.

Vietnam MIA Pilot & Passenger Found

The Defense Department POW & Missing Personnel Office announced April 13 the remains of two Army officers, missing in action in Vietnam, had been returned for burial with military honors. They are **WO Randolph J. Ard** of West Pensacola, Fla., and **COL Sheldon J. Burnett** of Pelham, N.H. On March 7, 1971, Ard flew his OH-58A Kiowa helicopter with three passengers, including Burnett, to an area on the Vietnam-Laos border. The helo was hit by enemy antiaircraft fire as it approached a landing zone in the Savannakhet Province of Laos. Two passengers survived the crash and evaded capture by enemy forces. Upon reaching friendly lines, they reported that Ard and Burnett were still alive but badly injured. After 11 days of heavy resistance, ground forces reached the crash site but found no trace of the men. Ard was buried in Alabama in March. Burnett was buried April 20 in Arlington National Cemetery.

American Airlines Offers Operation Hero Miles

American Airlines has launched Operation "Hero Miles" to provide flights to help bring wounded U.S. military personnel and their families together. With the support of passengers, between July and September 5, 2005, American Airlines will match every donated flight mile contributed to the program, one for one, up to 17,760,000 total miles. Visits with family and friends mean so much to these brave men and

***Briefings** continued on page 6*

ASE and Avionics Award Nominations Open

Nominations are now open for the annual AAAA Aircraft Survivability Equipment and Avionics awards. Suspense is August 15. Forms are available on the AAAA web site (www.quad-a.org) or by calling the AAAA National Office at (203) 268-2450.

AAAA Announces First UAVS Symposium

The first annual AAAA Unmanned Aerial Vehicle Systems Symposium will be held October 24-26 at the Crystal Gateway Marriott Hotel in Arlington, Va. Contact the AAAA National Office for details on attendance and exhibit opportunities, (203) 268-2450, or email: aaaa@quad-a.org.

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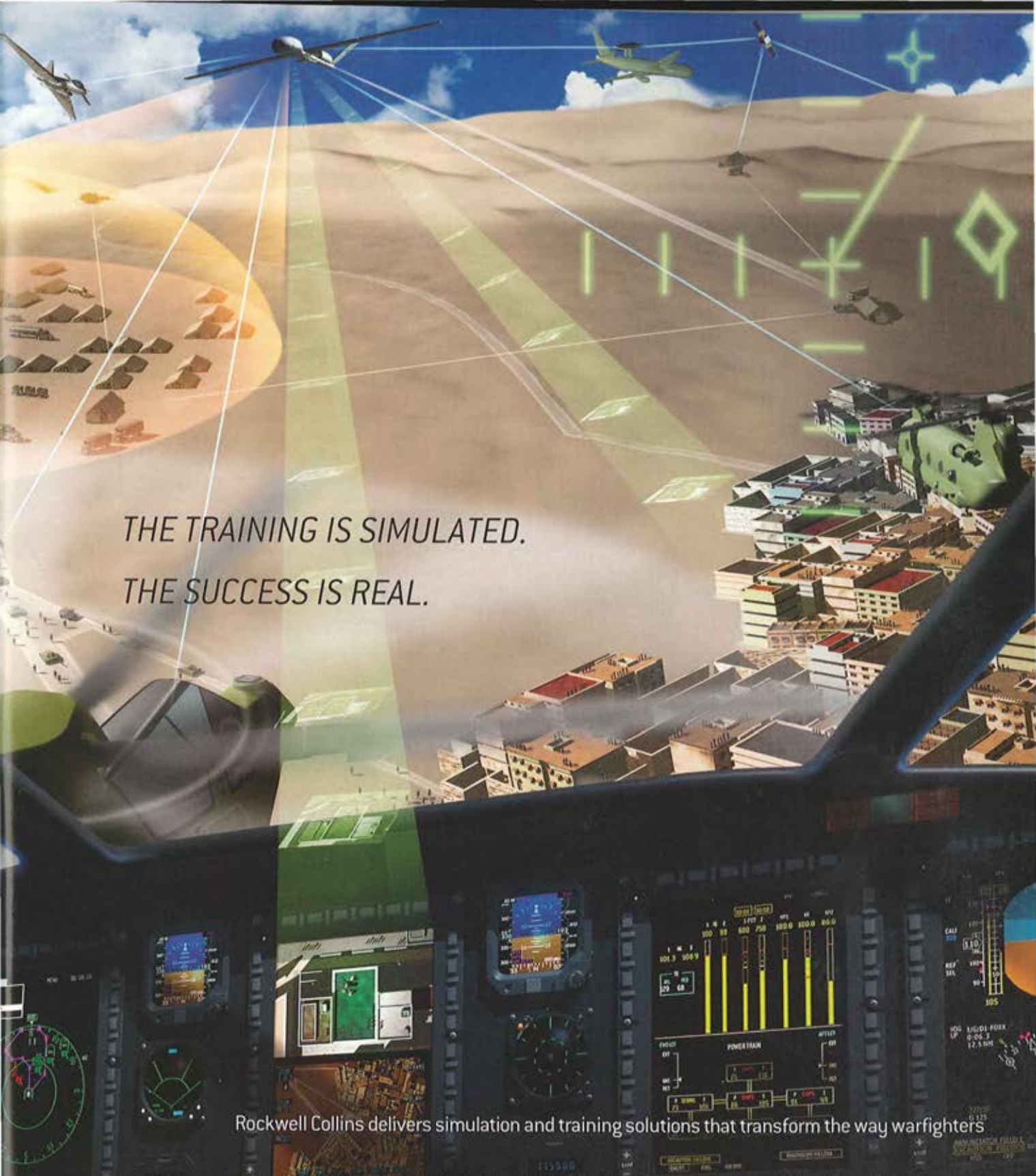
ARMY AVIATION is the official journal of the Army Aviation Association of America (AAAA). The views expressed in this publication are those of the individual authors, not the Department of Defense or its elements. The content does not necessarily reflect the official U.S. Army position nor the position of the AAAA or the staff of Army Aviation Publications, Inc., (AAPI). Title Reg® in U.S. Patent office. Registration Number 1,533,053. SUBSCRIPTION DATA: ARMY AVIATION (ISSN 0004-248X) is published monthly, except April and September by AAPI, 755 Main Street, Suite 4D, Monroe, CT 06468-2830. Tel: (203) 268-2450, FAX: (203) 268-5870, E-Mail: aaaa@quad-a.org. Army Aviation Magazine E-Mail: magazine@quad-a.org. Website: http://www.quad-a.org. Subscription rates for non-AAAA members: $30, one year; $58, two years; add $10 per year for foreign addresses other than military APOs. Single copy price: $3.00. ADVERTISING: Display and classified advertising rates are listed in SRDS Business Publications, Classification 90. POSTMASTER: Periodicals postage paid at Monroe, CT and other offices. Send address changes to AAPI, 755 Main Street, Suite 4D, Monroe, CT 06468-2830.



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Briefings...

Continued from page 3

women as they recover from their wounds. The minimum donation is 500 miles. Learn more about this program by visiting American's website at AA.com and completing the Miles for Heroes donation form.

CONTRACTS

General Electric Aircraft Engine, Cincinnati, Ohio, was awarded June 23 a $9.9M contract for the overhaul and repair of the entire T-700 family of engines. Work will be performed in Corpus Christi, Texas, and should be completed by Dec. 31.

DynCorp International L.L.C., Fort Worth, Texas, was awarded June 14 a $10.9M increment as of a $574.9M contract for the upgrade of 20 UC-35A aircraft to the UC-35A1 configuration. Work should be completed by Feb. 27, 2007.

Sikorsky Aircraft Corp., Stratford, Conn., was awarded June 13 a $7.2M contract for inlet assembly engines for the UH-60 helicopter. Work will be performed in Montreal, Quebec, and should be completed by Jan. 31, 2008.

Boeing Helicopter, Ridley Park, Pa., was awarded June 7 the following four delivery order contracts for mechanical transmissions for the CH-47 Chinook helicopter: $9.1M as part of an $18.6M contract and should be completed by Sept. 30, 2008; $21.7M as part of a $44.4M contract and should be completed by Oct. 30, 2008; $13.7M as part of a $28M contract and should be completed by May 30, 2010; $5.2M as part of a $10.6M contract and should be completed by Oct. 30, 2010. All work will be performed in Ridley Park.

Miltope Corp.*, Hope Hull, Ala., was awarded June 7 a delivery order amount of $12.3M as part of a $128M contract for internal combustion engine integration adapter kits. Work should be completed by Jan. 12, 2006.

Boeing Helicopter, Ridley Park, Pa., was awarded June 7, a delivery order amount of $8.6M as part of a $17.6M contract for rotary wing heads for the CH-47 Chinook helicopter. Work should be completed by Aug. 30, 2008.

Sikorsky Aircraft Corp., Stratford, Conn., was awarded June 3 two contracts for Black Hawk helicopter work: a $72.1M contract for project systems management for the UH-60M and a $35M contract for plus-ups of the UH-60L helicopters. Work should be completed by Dec. 31, 2007.

Rosemount Aerospace Inc., Burnsville, Minn., was awarded May 26 a delivery order amount of $7.2M as part of a $19.6M contract for indicator panels for the Black Hawk helicopter. Work should be completed by April 30, 2010.

Sikorsky Aircraft Corp., Stratford, Conn., was awarded May 26 a delivery order amount of $4.2M as part of a $5.9M contract for hardware for the UH-60 Black Hawk helicopter system. Work should be completed by June 30, 2009.

Lockheed Martin Corp., Orlando, Fla., was awarded May 23 a $35.7M contract for night sensor assembly parts for the AH-64 aircraft. Work will be performed in Orlando (78%) and Oswego, N.Y. (22%), and should be completed by April 30, 2008.

Northstar Aerospace, Bedford Park, Ill., was awarded May 20 a $5.3M contract for spare parts for the CH-47 helicopter. Work should be completed by Dec. 31, 2010.

Longbow L.L.C., Orlando, Fla., was awarded May 19 an $11.1M contract for Lifecycle Contractor Support for the Apache fire control radar. Work will be performed in Orlando (50%) and Baltimore, Md. (50%), and should be completed by Dec. 31, 2006.

* indicates small business

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AVIATION BRANCH
Out on the Screen Line of the Way Ahead

By BG E.J. Sinclair

Army Aviation Soldiers continue to distinguish themselves in the Global War on Terrorism with Reset and Transformation during this extremely challenging and historic time. There are several critical developments that will affect the future of the Aviation Branch that are requiring extensive effort, initiative and the dedication of the team here at Fort Rucker and across the branch. Our current main effort is the 2005 Aviation Functional Area Assessment. Other key developments affecting us are the transition of unmanned aerial vehicle systems (UAVS) proponency to Fort Rucker, Ala., and Secretary of Defense Donald Rumsfeld forwarding the Pentagon's recommendations to the Base Realignment and Closure (BRAC) commission on May 13. Each of these events are monumental and are drawing out the best efforts of the installation's leaders, staffs and directorates.

Aviation Functional Area Assessment

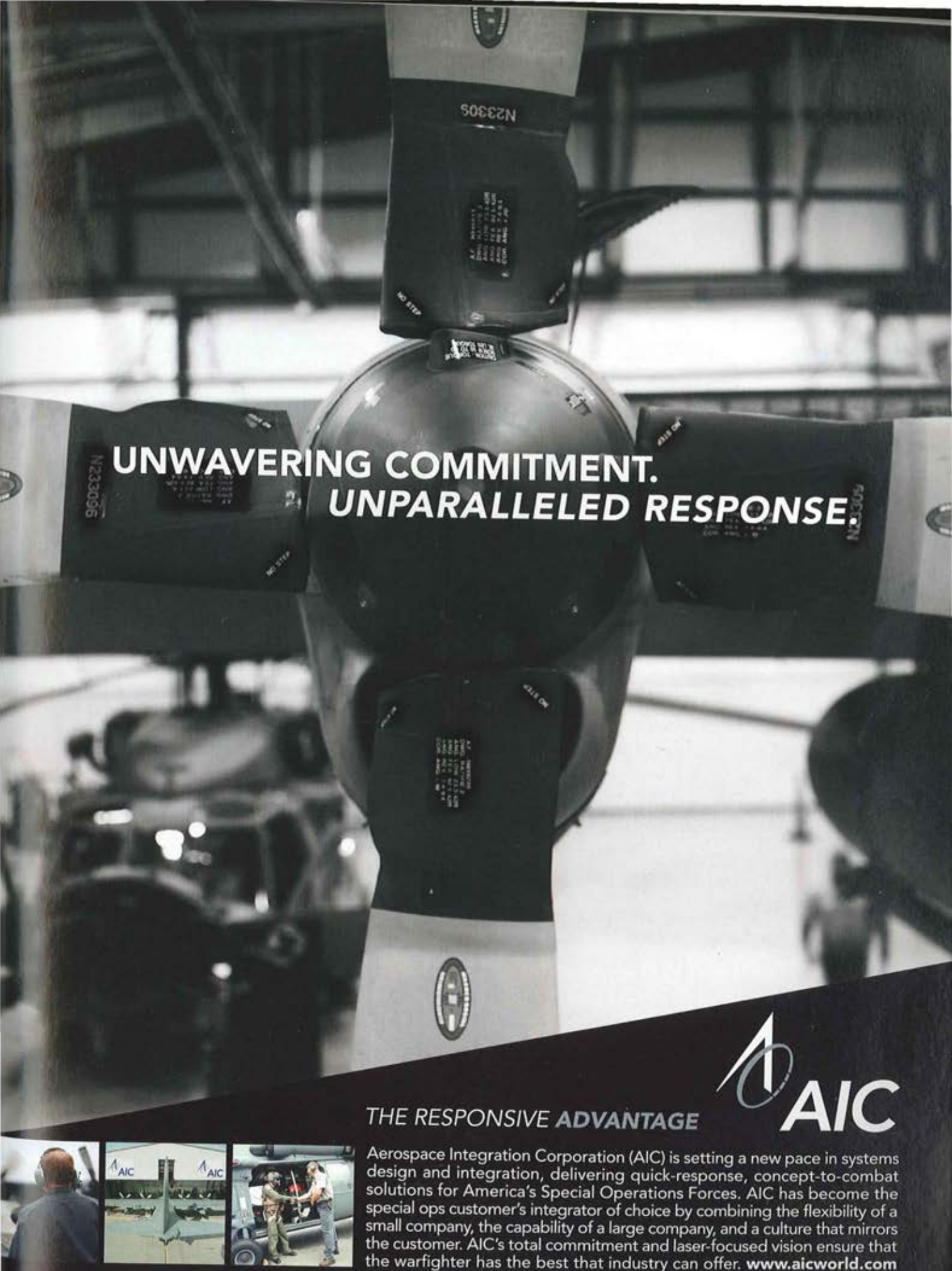
Functional area assessments (FAA) have historically served as intensive management forums, allowing senior Army leaders to identify and resolve issues that affect the execution of Department of the Army short-range plans and programs. FAAs also provide a teaching mechanism and forum for the horizontal and vertical exchange of information between the DA and major Army command participants, focusing primarily on the Army's ability to maintain readiness, force capability, and force modernization in the program objective memorandum years. Thanks to a tremendous effort led by the Futures Integration and Synchronization Team and each of the directorates, and the Training and Doctrine Command (TRADOC) System Managers, the 2005 Aviation FAA has been very effective in each of these areas.

Beginning in late March with a series of in-progress reviews, each of the participants focused on the branch's ability to maintain readiness and force capability while executing our modular force redesign and modernization efforts. Maintaining this balance requires an unparalleled depth of understanding of complex Army processes. This effort would be difficult enough during the normal two-year FAA cycle. Imagine the challenge with not only the Aviation branch, but also the entire Army transforming during this process and simultaneously fighting the GWOT.

The Aviation branch team has changed our fundamental organizational structure, training, maintenance, doctrine, developed and funded an extensive modernization plan, supported combat operations around the world, and has continued to embrace the proponency for UAVS. All of these changes have prepared us well for the FAA process, allowing the team to focus on the details.

As a result of this extensive bottom-up review across the entire doctrine, organization, training, materiel, leadership and education, personnel and facilities (DOTMLPF) spectrum, the Aviation branch has identified its strengths and weaknesses and laid out the way ahead. Furthermore, we've been able to bring these issues and recommendations to the attention of the senior Army leadership so they can help us reach our goals.

I would like to thank all of those who participated in this exhaustive review. I would particularly like to recognize the efforts and expertise of Mark Danielson of the Directorate of Combat Developments. His involvement is clearly evident in the final product.



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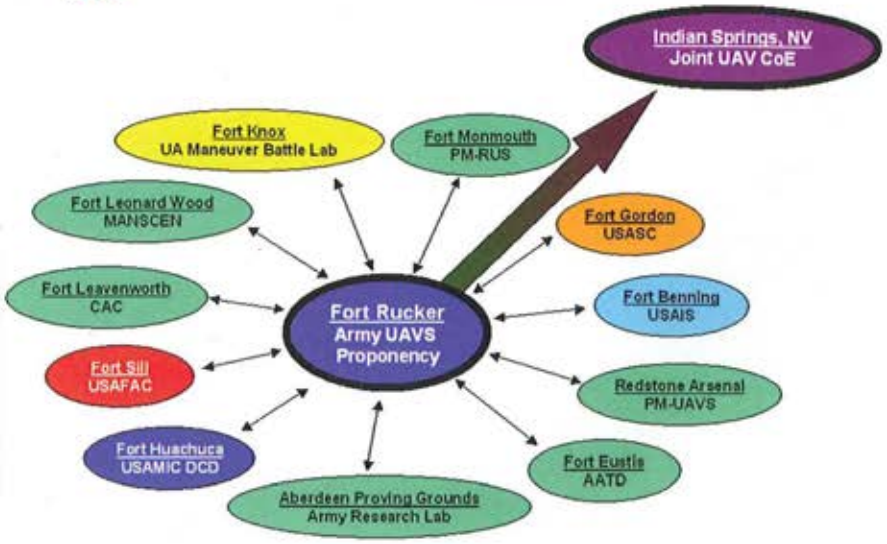
Army UAVS Activities

As the proponency for unmanned aerial vehicle systems, Fort Rucker will synchronize and coordinate efforts between other Army organizations and schoolhouses. And it will also be the Army's lead on matters pertaining to joint UAVS interoperability.



ARMY GRAPHIC BY WAYNE POLLARD

Unmanned Aerial Vehicle Systems Proponency

The Aviation Warfighting Center and the U.S. Army Intelligence Center are currently working together to transfer proponency of UAV systems from Fort Huachuca, Ariz., to Fort Rucker. Phase One of this two-phase process, the Transition and Formal Transfer phase, is well underway and will include the signing of a memorandum of agreement. Phase Two begins April 6, 2006.

The Army's UAVS Proponency at Fort Rucker will tie into more than eleven additional UAVS activity centers, including some of these commands: the Combined Arms Center at Fort Leavenworth, Kan.; the Depth and Simultaneous Attack Battle Lab at Fort Sill, Okla.; UAV Training and Simulation Center at Fort Huachuca; the Aviation Applied Technology Directorate at Fort Eustis, Va.; and the Program Manager for UAVS at Redstone Arsenal.

Fort Rucker will also be the site for UAV doctrine, training, standardization, and safety; as well as the TRADOC System Manager for UAV, the Air Maneuver Battle Lab, the Army Combat Readiness Center; and the Directorate of Evaluations and Standards. Collocation of the functions will further optimize UAVS development.

Additional, Fort Rucker will link with the national UAV Joint Center of Excellence (JCoE) at Indian Springs, Nevada. The JCoE will coordinate the development of common strategies; interoperability, standardization and architecture issues; as well as tactics, techniques and procedures.

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PHOTO BY JAMES BULLINGER / AAPI

BG E.J. Sinclair, surrounded by community and business leaders, former branch chiefs and friends of Fort Rucker, discusses the BRAC announcement with Alabama media on May 13.

Base Realignment and Closure

Under the proposed BRAC recommendations, Fort Rucker will be the new home of the U.S. Army Aviation Logistics School (USAALS) currently located at Fort Eustis, Va.; while re-aligning the U.S. Army Aviation Technical Test Center, based at Cairns Army Airfield, to Redstone Arsenal in Huntsville, Ala. Extensive synchronization efforts have begun to ensure a smooth transition once the recommendations are approved. President George W. Bush must still approve and present the final recommendations to Congress by November 7. Then Fort Rucker officials will have two years to initiate the process and six years to complete it.

The proposed realignment would bring Aviation operators and maintainers together. Though this merger has been discussed and debated for decades, finally all aviation training throughout the Army will be consolidated at Fort Rucker.

The net gain for Fort Rucker will be 449 Soldiers, 26 civilian positions, and about 5,500 students annually. The relocation of USAALS to Alabama will also bring $397.5 million in new construction to build three hangars, a headquarters complex, barracks and classrooms at Guthrie Field on Fort Rucker.

Special appreciation goes to the Friends of Fort Rucker, the local mayors and the great people of the Wiregrass for their support of our Soldiers and their families. Their tireless efforts are paying great dividends to Army Aviation now and in the future.

Summary

Army Aviation continues to distinguish itself in the Global War on Terrorism as we transform to make Army Aviation even more effective. We are proud of all Soldiers and units for the great sacrifices they have made. Job well done!

We still have a lot of challenges ahead in the GWOT, with Army transformation, in the Reset/Preset processes, and the repositioning of units. But I have confidence we will successfully meet those challenges as Army Aviation has always done.

"Above the Best!"

❖❖

BG E.J. Sinclair is the Army Aviation Branch Chief and Commanding General of the U.S. Army Aviation Center and Fort Rucker, Ala.

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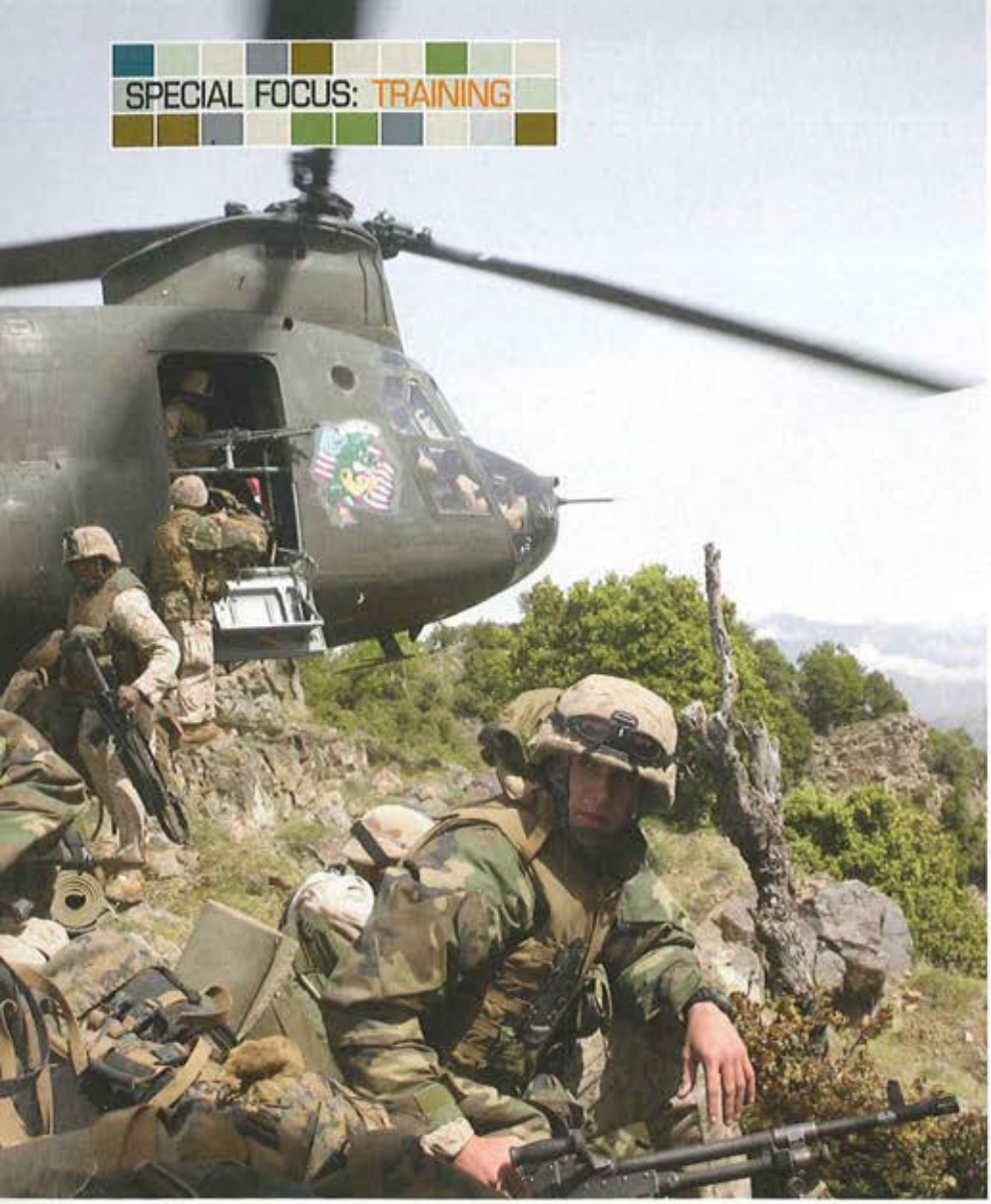

DOD PHOTO BY CPL JAMES L. YARBORO, USMC

The BAE is capable of planning and coordinating aviation missions in support of joint and coalition operations. U.S. Marines from Co. I, 3rd Bn., 3rd Marine Regt. exit a CH-47 Chinook helicopter May 7 while conducting security and ambush patrols in the Sarkani Valley of Afghanistan.

Manning, Equipping, Training and Deploying the Brigade Aviation Element

By Robert D. Carter and LTC Paul V. Marnon

"The Brigade Aviation Element, organized, equipped and manned to meet air ground integration and A2C2 needs of the transformed Brigade Combat Team."

The brigade aviation element (BAE) concept evolved as part of Army transformation and was identified as a solution for integration after the Aviation Task Force reviewed lessons learned from Operations Iraqi Freedom and Enduring Freedom, and countless combat training center (CTC) rotations. Across the board, aviation and ground maneuver continued to lack the synchronization desired by all. Historically, Army aviation provided liaison officers for short durations only; these LNOs were outstanding pilots, but lacked the proper equipment, air-ground integration and Army Airspace Command and Control (A2C2) training, and often the right number of people necessary to perform the required planning.

The BAE was developed to meet the modular needs of the brigade combat team (BCT) and the multifunctional aviation brigade (MFAB). The current operating environment (COE) demands well aimed fires, synchronized ground maneuver and integrated aviation operations. The BCT and the MFAB have been redesigned to meet these needs and the brigade aviation element has been established as an organic staff element within the BCT to ensure mission success.

The Army's senior leadership wanted to harness the air-ground integration synergy that existed with special operations forces; where the air and ground relationship is tightly interwoven, resulting in well planned and executed operations. Design analysis also looked at other staff organizations with proven track records. The fire support element found in the infantry brigade had similar capabilities. The BAE had to have all those attributes that made those other organizations successful.

These attributes include:

- A robust, mature, mission focused staff capable of 24 hour operations.
- A large enough organization to simultaneously conduct current operations and prepare future plans.
- A permanent presence, home station, RSOI, combat ops, stability & support ops, redeployment and regeneration.
- Providing embedded branch specific subject matter experts capable of coordinating and deconflicting laterally, to higher and joint.
- Providing Army battle command system (ABCS) connectivity and communications to facilitate the common operational picture; and communicate with supporting units.


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Mission of the BAE

The BAE provides an imbedded 24-hour operational capability to plan and coordinate aviation operations, UAVS operations and A2C2 throughout the BCT's area of responsibility. It helps set the conditions for the BCT's success through the combined arms integration of aviation into the commander's scheme of maneuver.

Organization of BAE

The BAE organization consists of a 6-man team, with a major as the officer in charge. A captain serves as the plans officer and second in charge, with a trained CW3 tactical operations officer. A 15P SFC serves as the operations NCO, a 15P SSG is the assistant operations NCO, and a 15P operations specialist rounds out the team. These Soldiers represent Army aviation as subject matter experts to the brigade combat team.

BAE Staff METL

The BAE staff mission essential task list includes:

- Plan and integrate Aviation operations with the ground scheme of maneuver.
- Integrate A2C2 in the BCT area of responsibility.
- Plan and request airspace control measures.
- Coordinate and synchronize aviation operations with the MFAB and the higher headquarters.
- Coordinate and deconflict UAVS operations.

In order to accomplish these essential tasks, the BAE must understand and be able to initiate planning that will be further refined by either the aviation brigade or battalion task forces. Key to success is the BAE's ability to conduct conceptual planning 96 to 72 hours out, while the brigade or battalion task force (TF) is conducting current operations. It cannot be overstated that what planning the BAE does conduct, it must be supportable by the aviation task force. This is accomplished by the BAE developing as close of a relationship with the aviation TF as it has with its own organic infantry battalion commanders and staffs. At the same time, ground units must seek out the BAE and ensure it fully understands the capabilities and limitations of the aircraft and crews supporting the ground commander. The BAE and the aviation organizations it supports is a partnership built on collaboration and teamwork.

Based on the wide breadth of knowledge required to plan these operations, the BAE must be comprised of officers, NCOs and Soldiers who are experienced, intelligent and fast learning professionals, ready for the challenge.

The BAE must be proficient in planning:

- Close Combat Attacks
- Mobile Strike
- Joint Air Attack Team
- Air Assault Operations
- Reconnaissance and Security Operations
- Unmanned Aerial Vehicle System Operations
- Army Airspace Command and Control
- Air Medical Evacuation Operations
- Command and Control UH-60 Operations
- Special Operations Aviation Employment
- Routine Air Mission Requests

BAE Training

As the BAE has transformed from concept to reality, the need for specialized focused training to address the full spectrum of operations was realized and has been delivered to numerous organizations.

First, several references were produced to provide a basis for the BAE's operations including: Training Circular 1-400 *Brigade Aviation Element Handbook*; a BAE reference library; an Army Knowledge Online-knowledge collaboration center; and numerous points of contact. To aid in the rapid fielding of a BAE to the 3rd Infantry Division, the USAAVNC developed a mobile training team (MTT) program, with other A2C2 and aviation planners to help train up their BAE. Today the MTT addresses critical training tasks to aid BAEs in learning and performing their duties, it provides immediate assistance to fielded BAEs, and is the interim training solution until a BAE resident course can be established at Fort Rucker. The MTT has supported the 101st Airborne Div. (Air Assault), the 10th Mountain and the 4th Inf. divisions, as well as delivering its instruction to the CTCs.

Currently USAAVNC, in conjunction with Computer Systems Corporation, is developing a resident course at Fort Rucker to address all of the training needs of the BAE. This course is intended to provide detailed instruction in air-ground integration, A2C2, joint airspace, targeting; the full

ARMY PHOTO BY SPC BRIAN HENRETTA

One of the mission essential tasks of the BAE is planning and integrating aviation operations with the ground commander's scheme of maneuver. Here, UH-60 helicopters of Co. B, 4th Bn., 3rd Avn. Regt., 3rd Inf. Div., approach a landing zone to pick up Iraqi troops from the 3rd Bde., 6th Iraqi Army Div. after a successful counterinsurgency mission in central Iraq on June 14.

ARMY PHOTO BY KIM ALLAIN

The BAE is a six-man team with aviation operation subject matter experts, knowledgeable in planning a multitude of missions. Here CW3 Robert Justison (left) and CW3 Dane Dougherty, UH-60 pilots with the 150th Gen. Spt. Avn. Bn., 42nd Inf. Div., prepare to execute a June 1 mission to Mosul, Iraq.

spectrum of aviation missions to include: attack, assault, general support, MEDEVAC, and UAVS operations; TAIS operator instruction, mission planning system, and communications systems instruction. The BAE course development is on track and is expected to be available for limited attendance in October, with full course implementation by next April.

The BAE and the Aviation LNO

The aviation brigade and its subordinate battalions continue to have their own embedded liaison cells. These organizations have not gone away and are still vital in the successful execution of aviation missions. The BAE does not replace this capability. The aviation commander will always have the responsibility to provide liaison to the supported unit; but with the BAE this liaison can be better focused and more productive. Once a relationship is established with a BCT, the aviation unit must develop a mutually supporting liaison plan for aviation planning and execution. Even with modularity, commanders and missions may be very different based on the combat operating environment.

With this said, the expectations of aviation planning conducted at the BCT must be understood and agreed upon, so that planning can be beneficial, meeting the timely needs of the ground commander, while retaining planning flexibility for the aviation TF commander. The BAE was not designed to develop stovepipe plans solely focused on conforming to the tactical scheme of maneuver without taking into consideration the Avn. TF's operational tempo, crew availability and potential to build combat power. If mission planning is not collaborative then the Avn. TF will not gain the benefits intended with the creation of the BAE.

Equipment

In order to take full advantage of the BAE's potential, critical equip-

ment was required. The BAE has to be able to link into the A2C2 network for airspace planning and deconfliction; air ground radios for line of sight and beyond line of sight communications as well as the ability to conduct automated aviation mission planning.

The Army Battle Command System that best allows the BAE to effect A2C2 operations is the Theater Integrated Airspace System or TAIS. Prior to transformation, TAIS only existed in air traffic service battalions and companies, as well as some division headquarters and in the Stryker BCT Air Defense Air Management Cells.

The TAIS allows the BAE to:

- Synchronize, visualize and deconflict airspace.
- Request, process and display airspace coordination measures from the airspace control order.
- Link to joint airspace management processes at the Battlefield Coordination Detachment.
- Interface with other Army and Joint Battle Command Systems.
- Display air tracks, if appropriate feeds are available.

Currently, the BAE and BCT's ADAM Cell share tactical communications equipment to include SINCGARS, air and missile defense workstation (AMDWS), air defense systems integrator (ADSI) workstation, and the TAIS workstation. This conglomeration of systems was conveniently packaged in the TSQ 282 ADAM vehicle. Due to the rapid fielding of the BAE, this equipment solution was necessary to allow the BAE to operate upon fielding.

In the future additional systems are being considered for issue, to include the VRC-100 ALE HF radio, additional SINCGARS radios, TACSAT 117F, GRC-240 UHF/VHF radio, and an Iridium satellite telephone.

In time, the BAE's capabilities will increase as equipment becomes available. Aviation mission planning tools are also necessary for the BAE to plan and deconflict both manned and unmanned aviation operations.

To enable the BAE to accomplish these tasks, the aviation mission planning system (AMPS) is being given to BAEs to facilitate their ability to digitally communicate. The planning products from the aviation TFs, as well as subordinate UAV units, will be processed and passed to higher A2C2 authorities via the AMPS for approval and synchronization.

In order to move about the battlefield, the BAE team will have two high mobility multi-purpose wheeled vehicles—currently they have one HMMWV. The two-vehicle capability will allow elements of the BAE to operate independently for liaison, planning, and tactical operation center and operations.

All of these equipment issues are part of the normal growing pains of rapidly fielded organizations. As doctrine and tactics, techniques and procedures mature, the BAE's equipment needs will be better defined and met to allow the BCT to fully exploit the BAE's capability.

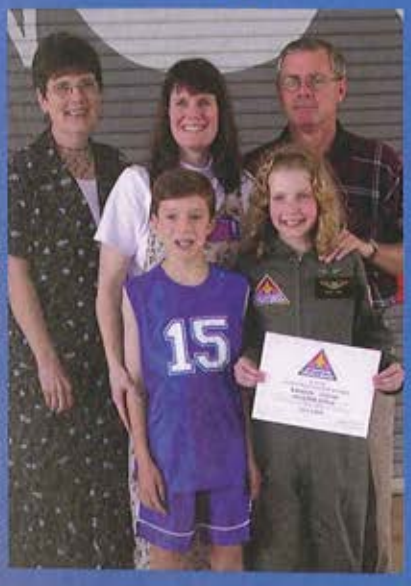
Summary

In the Army today, fully qualified BAEs are present in the transformed brigade combat teams of the 3rd Inf., the 101st Airborne, the 10th Mount. and the 4th Inf. divisions, and in the 48th BCT of the Georgia Army National Guard. When the Army completes transformation, a BAE will reside in every interim BCT and heavy BCT of the active and reserve components. Currently, the 3rd ID BAEs are the first BAEs deployed for OIF. These teams represent the first of many to bring aviation expertise to the BCTs in Iraq and Afghanistan. They have played a critical role in the development and success of the BAE concept and will help to further refine its future.

❖❖

Retired COL Robert D. Carter is the deputy director, and LTC Paul V. Marnon is the chief of the Doctrine Branch, with the Directorate of Training and Doctrine, U.S. Army Aviation Center, Fort Rucker, Ala.

Grandpas Help Expose Kids to Aviation



COURTESY PHOTO U.S. SPACE & ROCKET CENTER

Left: Ten-year-old Kristin Gogal, of Annandale, Va., a self-proclaimed "tomboy with a taste for adventure," won the Tennessee Valley Chapter's first Aviation Challenge essay contest. Gogal qualified based on her grandfather's sponsorship and member status with the TVC. The grand prize was an all expenses paid trip to the Aviation Challenge at the U.S. Space and Rocket Center in Huntsville, Ala. Kristin, known by her callsign "Tadpole," proudly displays her graduation certification and wings surrounded by (clockwise) her brother Johnny, grandmother Lee Ann Penman, mother Lisa, and her grandfather retired COL John Penman.

PHOTO BY WILLIAM HARRIS / AAPI

Right: Jocelyn Konitzer, of Evans, Ga., the granddaughter of AAAA president BG (Ret.) Tom Konitzer, attended the annual AAAA convention at Disney's Coronado Springs Resort May 8 to 12. The six-year-old Konitzer, along with her mother Christy, traveled down to Florida for the passing of the gavel between grandpa Konitzer and outgoing AAAA president MG (Ret.) Andy Andreson, and to visit the theme parks and take in the exhibit halls. The big draw was the exhibit hall, where kids like Jocelyn can get close-up looks and first hand experiences on live helicopters, mock-ups and simulators.

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Training Maintainers is a Team Effort

By MAJ Tom T. Huff and Alan Gott

Supporting the war effort with highly trained Soldiers is the focus of the U.S. Army Aviation Logistics School (USAALS) at Fort Eustis, Va. USAALS has teamed up with COL Cory Mahanna and the Utility Helicopters Project Manager's Office (UHPMO) at Redstone Arsenal, Ala., to provide state-of-the-art UH-60 training devices for Army aircraft maintainers. These new devices ensure that Soldiers arrive at their units ready to launch and recover our military's complex and capable helicopters.

Work Horse of Aviation

The UH-60 Black Hawk helicopter, first fielded in 1979 and a critical asset on today's battlefield, is the workhorse of Army aviation. Since February 2003, the Black Hawk fleet has flown over 696,640 flight hours with almost a third of those hours in hostile environments. More impressive is the fleet has flown more than 4.2 million hours since 1997. The Army Acquisition Objective 1806 modernizes the UH-60A, L and M model airframes for the critical fight against terrorism. The Army needs equally modernized training devices in order to prevail in its wartime missions. With the high operational tempos we no longer have the luxury of waiting until a Soldier gets to his or her unit before being trained.

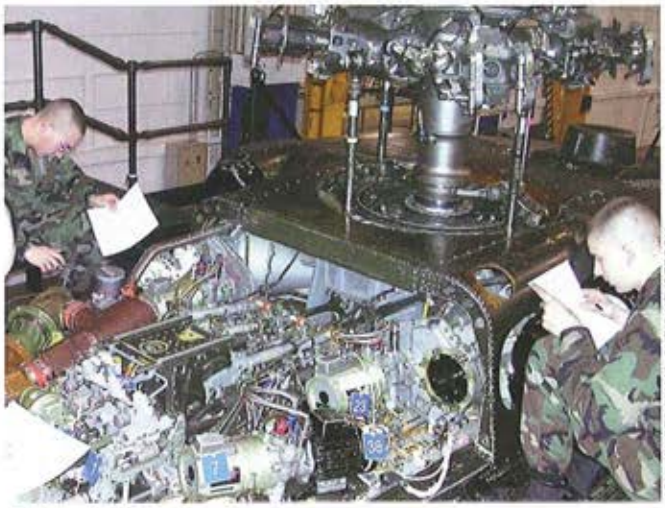
Training the Force

USAALS, led by COL Conway Ellers, has the mission to train numerous aviation military occupational specialties (MOS), to include: 15T aircraft mechanics, 15N avionics experts, 15F electronics, 15D power train, as well as ten other aircraft specific specialty MOSs. The school and UHPMO are changing the way we teach mechanics, bringing their training into the 21st century.

"Training Soldiers to the highest standard is our goal, and these new devices are valuable tools in achieving that goal," Ellers said.

Complex Training Devices

Recently eight Black Hawk avionic wiring system trainers, or BAWST, were fielded to USAALS. The new trainers have the look and feel of the UH-60 aircraft. They allow instructors, using a secured fault insertion panel located on the device, to insert up to 120 open or shorted wiring faults. Students gain a working knowledge of component identification, location, and about removal and installation, as all components are located on the trainer just as they are in the actual aircraft.



ARMY PHOTO BY MS. CHRIS HENDERSON

Soldiers train on a UH-60 Black Hawk helicopter maintenance trainer (BHMT).

For many years, USAALS used UH-1 wiring tables in conjunction with several UH-1 airframes to train basic tasks. Students received training on the theory of generic avionic systems prior to any hands-on training with the devices. However, with the retirement of the UH-1, these devices were no longer adequate, nor did they reflect the appropriate level of sophistication present in the modernized aircraft. The students had to regress in their training in order to understand the UH-1 manuals and the legacy systems. This was both confusing to the student and consumed valuable training time. As bad as this was, it was the only way a student could receive hands-on training.

USAALS, in collaboration with the UHPMO, developed a strategy to update the avionic trainers from the legacy UH-1 to the UH-60 BAWST. This enabled the avionic mechanic to receive required critical task training using modernized training devices. As technology changes, these systems can be updated and used well into the future. High quality trainers, like the BAWST, give Soldiers hands on training, giving them confidence and skills that make them an asset to their first units.

"Grasping the concept of wire maintenance on realistic trainers was the best training I have received so far," said PFC Erica Nyquist, a 15N student.

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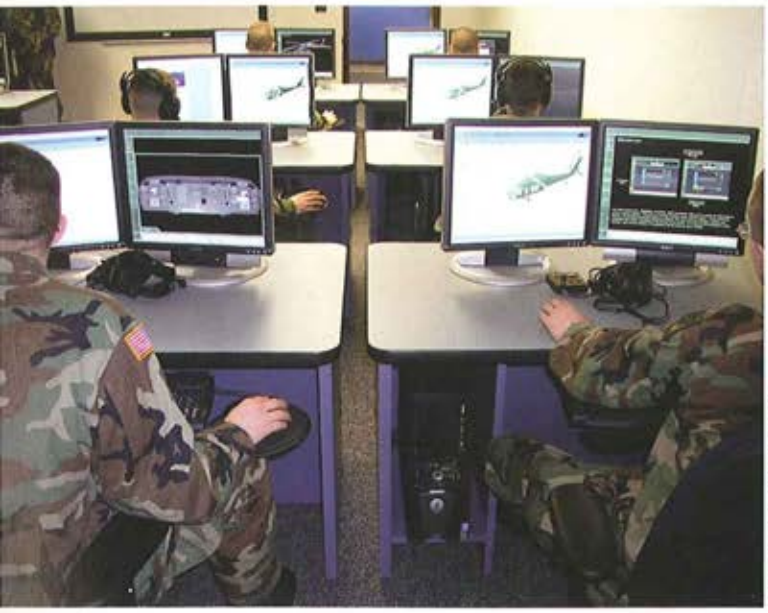
With the advancement of technology, aviation training has leaped into the 21st century.



ARMY PHOTO BY SSG FRANK RICK

Here Soldiers train in a new digital interactive multi-media instruction classroom with the Black Hawk Electrical System Trainer known as BEST.

Computer Savvy Soldiers

In addition to the BAWST, the UHPMO and USAALS are developing interactive multi-media instruction (IMI) that allows students to learn complex material at their own pace while under the supervision of instructors. IMI modules are being developed for the 15N, 15F and 15T classrooms. The most recent fielded multimedia classroom module was in January and was the Black Hawk Electronics System Trainer or BEST.

Other IMI classes under development are the electrical, landing gear, auxiliary power unit, main rotor, and the power train systems. Additional IMI will follow as funding becomes available. IMI classes have been developed and are in use for the maintenance test pilot course at Fort Rucker, Ala. Additional IMI classes to support the UH-60 aircraft qualification course are under development and will be fielded with a new state-of-the-art multi-media classroom in the future.

USAALS has seen outstanding results with an increase in average test scores from 87.9 percent to 94 percent in classrooms where IMI has been implemented. In addition, there have been no academic eliminations from courses using the IMI and recycle rates in those classes are virtually nonexistent.

"It (BEST) has helped me tremendously in locating things on the aircraft as well as showing me the steps of troubleshooting," said PV2 Heather Henderson, a recent USAALS student, "The graphics are amazing."

Training for the Future

Another new device specifically developed for UH-60 maintainers is the Black Hawk Landing Gear Trainer or BLGT. The BLGT is a stand-alone, three-dimensional device that allows students to train maintenance tasks and troubleshooting procedures on a full-scale mock-up of the UH-60 landing gear system. The BLGT is scheduled for delivery in the fall.

With the advancement of technology, aviation training has leaped into the 21st century. Maintenance training devices allow Soldiers to gain hands-on experiences without tying up valuable assets that are needed in the field, and provide a smooth transition from classroom to the flight line. The interactive multi-media instruction allows Soldiers to see how a procedure is done, giving them a better understanding before he or she has to perform that procedure on the aircraft. These improvements in training will produce better-trained mechanics, paying huge dividends in the maintenance hangar and on the battlefield for years to come.

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MAJ Tom T. Huff is the assistant project manager for Training Aids, Devices, Simulators and Simulations, Utility Helicopters Project Manager's Office, Program Executive Office for Aviation, Redstone Arsenal, Ala.

Mr. Alan Gott is the chief of the Advanced Learning Development Center, Department of Training, Plans and Evaluation, U.S. Army Aviation Logistics School, Fort Eustis, Va.

ARMY PHOTO BY MS. CHRIS HENDERSON

The newly fielded Black Hawk avionic wiring system trainer, or BAWST, helps students to gain a working knowledge in component identification and location, removal and installation.

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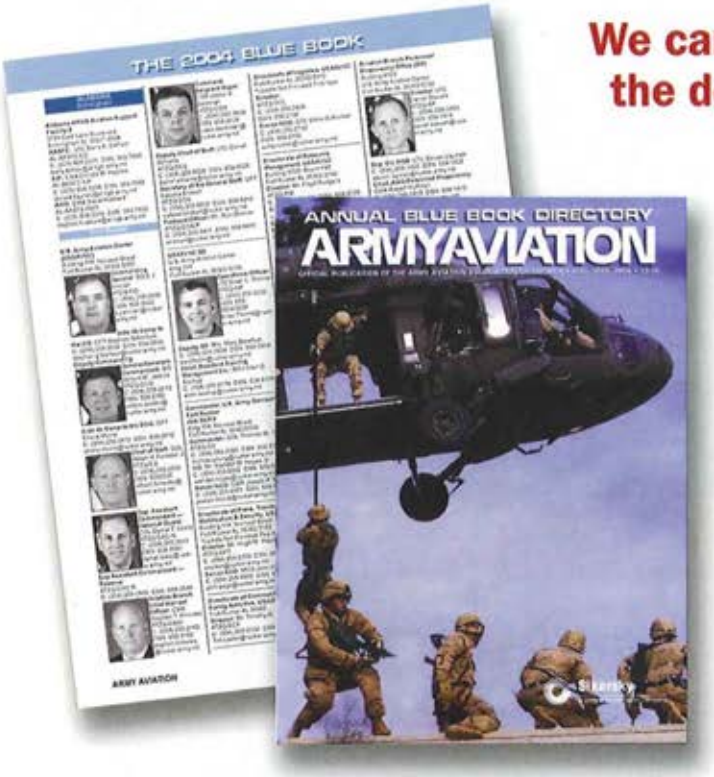

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MAINTAINING WIRING

The Veins that Keep Rotor Blades Beating

Story and photos by John C. Griggs

SFC Glenn Miller with AATD (left) and SSG Andrew Wells with USAALS test a handheld time domain reflectometer (TDR) on a wire.

It is well known that veins and vessels are passageways our body uses to circulate blood. If these paths become partially obstructed, pressure builds up until the wall eventually bursts and the result is a stroke. Proper care of veins and vessels is vital to the health of our bodies. Like the body's circulatory system, aircraft wiring and related components are critical pathways equally important to the health of aircraft.

When airframe wiring becomes compromised through neglect or environmental conditions, it will cause resistance in the wiring. Resistance causes heat and heat further deteriorates wiring, leading to system failures, and potentially, fire. There are approximately 2.5 electrical fires per month on military aircraft. This and other conductive path problems result in mission abort and have a significant effect on readiness.

For over 50 years, both industry and the military have used circuit testers and multimeters to check the health of wiring. This equipment determines if a conductive path exits, but cannot identify the location of the wire damage or the overall condition of the wire under test. Modern technological advances allow for more precise diagnostics of wire paths. Time Domain Reflectometer (TDR) equipment operates by sending a frequency or sets of frequencies down a conductor and picking up any reflection that is created due to degradation of the conductive paths. This is represented on the equipment by deflections on a trace (or line).

When TDR technology was first introduced, it was impractical for the average maintainer because of its large size and the difficulty in reading test results. Recent TDR advances now make them affordable, more user friendly and mobile, and capable of significant and immediate impacts on aircraft readiness.

Currently, the U.S. Army Aviation Logistics School (USAALS), represented by the Department of Aviation Trades Training, is teamed with the Aviation Applied Technology Directorate (AATD), which is collocated at Fort Eustis, Va., to test a new generation of TDRs. The goal is to find a durable, effective TDR for the battle damage assessment and repair (BDAR) kits and assist the acquisition process in obtaining and fielding the devices.

With the advances in technology, industry has managed to shrink both the size and price of TDRs, which are now just slightly larger than the AN/PSM-45A multimeter and cost less than $10,000. Some handheld TDRs display the actual trace while others list a digital readout in feet and inches to the location of the open or short condition. TDR trace and circuit data can be downloaded to a computer for review, comparison, or archival purposes in certain models. TDR capabilities can also be combined with multimeter and capacitance testers.

Hands-on tests reveal that TDR capabilities can make immediate impacts on the health of aircraft wiring, while saving valuable maintenance time and resources. Currently, maintainers use multimeters to find an open or short in a wire, then look for any obvious damage. They must cut wiring bundle ties while physically tracing the entire wire from end to end. If no obvious problem exists with the insulation, then entire wire segments are replaced, including all

bundle ties. This procedure can take days or weeks to complete.

With a handheld TDR, maintainers can identify the location of the break or short, cut the bundle ties up and down the harness six inches from the break, and look for any obvious damage. If there is no obvious damage, a splice can be applied in a one-foot section of wire where the TDR indicates the problem lies. This technology not only saves man-hours in troubleshooting and repairs, but also contributes significantly to BDAR capabilities, aircraft readiness levels, and safety.

In addition to technological advances like handheld TDRs, development of specific guidance and joint procedures for wiring maintenance leverages field experience across all services to benefit readiness. As a member of the Joint Council on Aging Aircraft, USAALS represents the Army's collective aircraft wiring experience to ensure our challenges are identified and procedures documented for the best sustainment strategy.

We are contributors to the following joint publications:

TSSG Wells (right) inserts the leads into the correct pins for a wire test while SFC Miller records readings on TDR.

TM 1-1500-323-23-1, Aviation General Wiring Practices Manual (AGWPM)

TM 1-1500-323-23-2, AGWPM - Round Connectors

TM 1-1500-323-23-3, AGWPM - Square Connectors

TM 1-1500-323-23-4, AGWPM - Fiber Optics

Additionally, in cooperation with the other services, USAALS is developing imbedded training videos to illustrate proper procedures for many key tasks in these manuals.

Summary

The operational tempos and contemporary operating environment we face today in Army aviation demands that we exploit the best technologies to meet readiness needs. Effective aircraft wiring maintenance is critical to the health and longevity of our fleet. Sharing lessons learned across the DOD and leveraging the newest equipment will allow maintainers to meet the needs of commanders. With a finger on the pulse of technology, USAALS will continue to team with multiple agencies and activities to improve how our aviation Soldiers are trained and equipped.

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John C. Griggs is a course manager with the Training Operations and Support Division, U.S. Army Aviation

PHOTOS BY SFC RONALD ALEXANDER

SELF RECOVERY

It Takes a Chinook to Lift a CH-47

By CPT Kenneth R. Darnall and CPT Gregory D. Pipes

Editor's note: *As of press time the findings of the accident board had not been released. The authors request that no implication or speculation of materiel failure be misconstrued from this article. We thank the authors and Task Force Sabre for sharing this story with Army Aviation magazine.*

It was a bright Afghanistan day on April 28 as the CH-47D Chinook helicopter from "Big Windy" Company F, 159th Aviation Regiment, took off from a forward operating base northeast of Bagram. As the aircraft was climbing out and departing the FOB, the first engine failed. The pilots immediately maneuvered the injured aircraft back around for a single-engine landing. As they lined up for landing, the worst-case scenario occurred and the second engine failed. Unable to make the landing site, the crew auto-rotated the descending giant into a wadi just short of the FOB's perimeter fence.

Fortunately the crew only suffered minor bumps and bruises; however, the aircraft did not fare so well. The hard landing ripped off three of the landing gear structures, destroyed the cargo-loading ramp, and caused extensive damage to the airframe's structural members.

As the information flowed back to Bagram Airfield, it became apparent that the recovery of this aircraft would require skill, intuition and creativity. After much deliberation, the command ruled out a one-time flight of the aircraft back to Bagram. A ground recovery was much too dangerous given the enemy situation, the roads and the additional damage it would cause the aircraft. The aircraft was in too good of a condition to be destroyed, and it was in close proximity of the FOB. Therefore, the logical course of action was to conduct an aerial recovery of the CH-47.

The first aircraft choice for the recovery was a contract Russian MI-26 helicopter for its obvious size. This helicopter with its lift capability could easily pluck the Chinook up and return it to Bagram. However, the process of acquiring an MI-26 was met with mechanical and contractual roadblocks and quickly became too time consuming.

The Task Force Griffin Commander gave Company B (Aviation Intermediate Maintenance), 7th Bn., 159th Avn. Regt. the go-ahead to perform a self-recovery of the CH-47. To our knowledge, such a feat had not been accom-

Following the removal of every possible item, they reduced the aircraft's weight down to 15,500 pounds.

plished for many years.

Given the mission and the environment, we knew that we had three major tasks to perform:

1. Remove over 16,000 pounds of components from the aircraft.
2. Determine how to securely hook-up the damaged aircraft to the lifting Chinook.
3. Ensure a safe landing and set-down area.

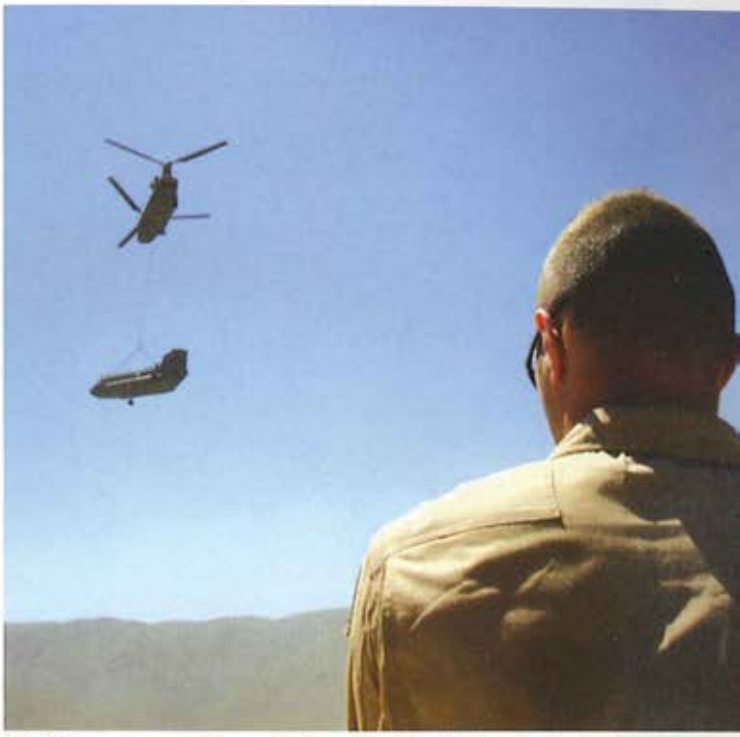
Representatives from the Army's Aviation and Missile Command and The Boeing Company provided us with a detailed list of removable items. Our downed aircraft recovery team (DART), led by SFC Ronald Alexander, was dispatched to the crash site. Alexander took with him four helicopter repairers, a 92F fuel specialist, and a team from the Kellogg, Brown and Root fire department.

Left: This composite photo shows the environmental challenges of recovering the CH-47D after its forced landing. The aircraft is resting uphill on about a 15 to 20 degree slope.

Below: Stripped of about 15,500 pounds of parts and pieces, the downed Chinook is ready for lifting. DART members scramble off the aircraft after hooking it to the recovery CH-47.

The aircraft was de-fueled and the repairers went about removing the heavy rotor blades, engines and transmissions. All non-airframe components were removed, then the seats, radios, soundproofing, fire extinguishers and avionics were disconnected. Unfortunately, they could not disassemble the ramp because of the aircraft's precarious position.

Following the removal of every possible item, they reduced the aircraft's weight down to 15,500 pounds



A DART member watches as the two "Big Windy" aircraft slowly lumber back to Bagram Airfield. Detailed planning and preparation significantly contributed to this moment.

— the upper limit for the performance planning of the lifting CH-47. The KBR team provided assistance in aircraft positioning.

When we set out to determine the method of rigging the downed aircraft, we were met with a variety of possible solutions. Our Universal Military Aircraft Recovery Kit (UMARK) provided no CH-47 rigging procedures.

Jonathan York, our AMCOM logistics aviation representative, recommended a four-point lift using the Chinook's lifting points at the base of the forward and aft pylons. Four slings would attach to these lifting points and feed into one clevis which, via a 100,000 pound capacity sling, would hook onto the recovery aircraft's center cargo hook.

Boeing engineers approved this method, which would not cause further damage to the airframe and guaranteed a level-flying attitude.

The safe return and set-down of the aircraft encompassed numerous safety and operational considerations. First, the set-down area had to be completely clear of all obstructions, equipment and FOD debris.

Second, the area had to have minimal impact on airfield traffic, since the damaged aircraft would likely remain at its touchdown point for a considerable amount of time.

Finally, the aircraft had to be placed on something that

PHOTO BY CPT GREGORY PIPES

Back home again, the recovered Chinook is carefully lowered to a specially prepared landing pad of 72 wooden pallets and 20 mattresses, to support and limit additional damage to the aircraft.

could support a one-legged Chinook. Such an open space is not easily found at Bagram Airfield. However, a new concrete pad at the end of the Task Force's flight line was selected as the set-down point.

The area was cleared of all FOD and construction of a suitable 35-foot by 13 foot landing pad was completed. The pad was made of four layers and included for the bottom layer eight 463L pallets (standard Air Force cargo pallets). The second layer was comprised of 36 wooden pallets, with the third layer containing another 36 wooden pallets, offset from the second layer. The final layer used 20 regular size bed mattresses.

We secured the pad with cargo straps across its full length and width. The pad was high enough so that the one remaining landing gear could rest on the ground while the remainder of the aircraft rested on the pad.

On May 11, after detailed planning and work, with everyone and everything in place, the recovery was executed. The DART members hooked-up the downed aircraft to the recovery helicopter, another CH-47D from "Big Windy," and watched as one Chinook lifted another.

The drogue chute attached prior to hook-up was torn off by concertina wire as the recovery aircraft picked up its oversized load. The single-point hook-up of the aircraft prevented it from flying in the most aerodynamic attitude. As a result of high winds and the sideways attitude of the aircraft, the recovery took much longer back to Bagram than expected.

In the end, the aircraft was set onto its pad and the recovery aircraft shut-down with less than 10 percent of its fuel remaining. We expected the pad to crush slightly under the aircraft's weight, but the pad remained fully intact and it was saved for future use.

We found much success using the "P4T3" (problem, plan, people, parts, tools, time and technical inspector) maintenance management method throughout the operation. And we put all of our work into a "gold book" of sorts that will hopefully serve future units in the same predicament.

Our many thanks go first to the crew that safely landed the aircraft, then to the AMCOM and Boeing civilians who guided us through the issues. Finally we credit the recovery aircrew that undertook a very dangerous mission, in hostile territory, and returned the aircraft safely to its unit.

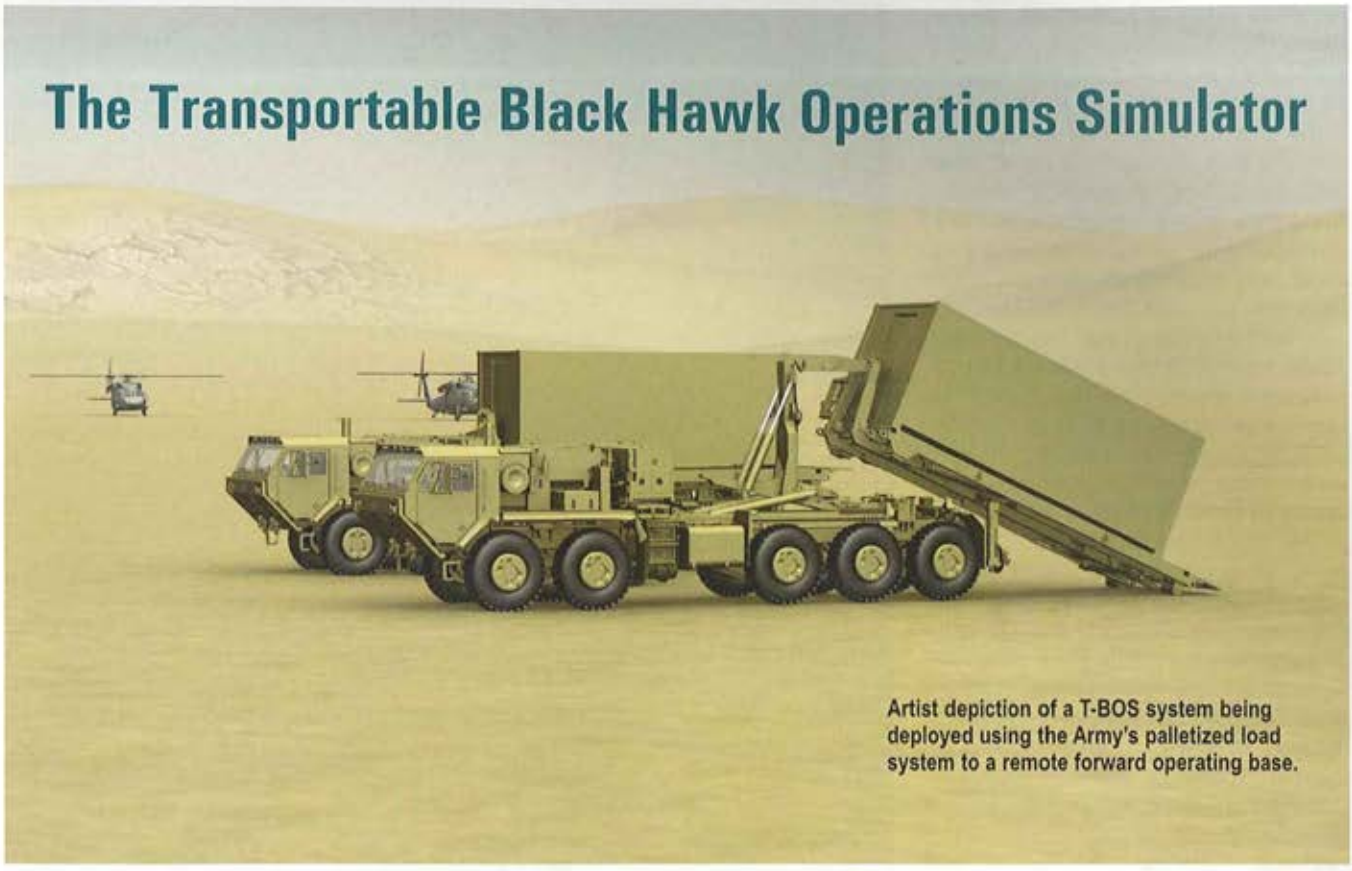
❖❖

CPT Kenneth R. Darnall and CPT Gregory D. Pipes are platoon leaders in Company B (AVIM), 7th Bn., 159th Avn. Regiment, from Giebelstadt, Germany. Both are assigned to Task Force Sabre at Bagram Airfield, Afghanistan, serving as part of Operation Enduring Freedom VI.

PHOTO BY CPT KENNETH DARNALL

The recovery flight crew making history from "Big Windy" are (l to r): SPC Shawn Gilley, crew engineer; CW3 John Sims, pilot in command; SSG Mike Wooden, flight engineer; CW2 Don Carlos Moniz, copilot; and SGT Matthew Crowley, door gunner.

The Transportable Black Hawk Operations Simulator



Artist depiction of a T-BOS system being deployed using the Army's palletized load system to a remote forward operating base.

GRAPHIC COURTESY OF THE VIZLAB

T-BOS

By William Nikonchuk and Michael J. Durant

The fielding of the UH-60M Black Hawk helicopter provides significant additional capabilities for Army aviation and more importantly for our ultimate customers, the commanders and Soldiers in the field. Although the size of the UH-60 airframe remains the same, there are long-awaited increases in maximum gross weight and power. Most notably, in addition to these critical performance enhancements, the UH-60M cockpit is digital, providing additional functionality and capability in terms of mission aids, communications and navigation systems for the crews who will fly it. This digital or "glass cockpit" as it is often called, also presents new and unique challenges for training and maintenance.

The radical change in cockpit capability and design from the analog consoles of the UH-60L to the glass cockpit of the UH-60M led the Utility Helicopters Project Office (UHPO) with the Program Executive Office for Aviation down a path to similarly modify its training plans and training devices to prepare for the transition. The Transportable Black Hawk Operation Simulator, known as T-BOS, was developed to support that transition, as well as the UH-60 flight training requirements that will evolve throughout the aircraft fielding and life cycle.

The T-BOS is as unique as the UH-60M aircraft itself and the capability and design of it parallels the fielding strategy of the helicopter. Like the aircraft, T-BOS provides a true multimission capability. The Army's fielding and transition from L to M model aircraft will not happen overnight. There will be a need for the foreseeable future to maintain the existing capability to train UH-60L crew members, and to provide qualification and sustainment training for the new UH-60M.

To meet both these training requirements the T-BOS is deployed with the hardware and software to

support both the L and M model configurations. The good news is that as a result of some very detailed requirement definitions and design, the T-BOS does not trade off performance to meet the multiple configuration requirements. The design that has evolved also provides the commander with the capability to rapidly relocate the device between garrison and field environments using organic equipment, and to configure the system as a high fidelity simulator for the UH-60L or UH-60M when it gets there. Setup time with the contractor maintenance team is eight hours and the configuration can be changed from L to M in less than four hours.

System Description

The T-BOS system is a containerized, modular flight simulator. Its rugged components provide a fully functional, immersive environment capable of supporting all required simulator tasks specified in Training Circular 1-212 (UH-60 Aircrew Training Manual) and the UH-60M critical task list. With an extensive library of existing terrain databases, it provides the capability for crews to perform mission planning and rehearsal in real-world tactical areas. It supports maintenance test pilot tasks, instrument flight training and all of the emergency procedures found in the existing fleet of Army flight simulators, as well as a host of new simulated 60M-unique degraded operations and failures.

Aircraft Concurrency

Because the T-BOS and UH-60M are being developed simultaneously, concurrency of the two had to be addressed. There are changes to the aircraft design and capability that T-BOS must stay in synch with. The UHPO saw this as a critical aspect of the T-BOS program and made concurrency of the training device and the aircraft a key performance parameter. The most efficient way for T-BOS to meet this requirement is to utilize the actual aircraft software. Therefore, the 60M configuration of T-BOS will run the aircraft operational flight program (OFP), which will greatly reduce the time and effort required to implement the software changes that have and will continue to emerge. The real OFP approach provides the highest level of glass cockpit functional performance and a near simultaneous integration of the aircraft and training system software releases.

In addition to OFP updates, there are other new subsystems and capabilities that will be included in the baseline T-BOS configuration. These include the AN/APX-118 transponder and the aircraft health usage monitoring system. All of these efforts are focused on maintaining concurrency in order to maximize the training effectiveness of the system. This ultimately leads to increased crew proficiency and enhances safety of flight.

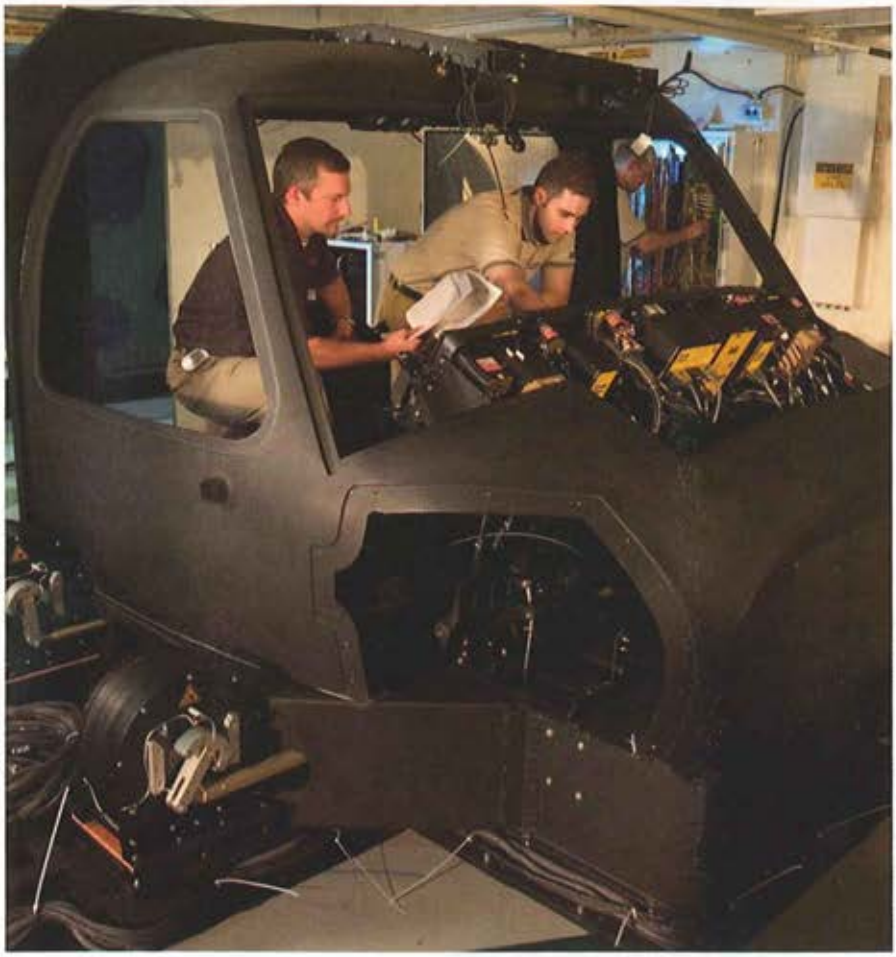


PHOTO COURTESY OF ROCKWELL COLLINS, INC.

Rockwell Collins engineers complete hardware installation and checkout tasks on the T-BOS at Redstone Arsenal, Ala. The T-BOS can be configured for both UH-60 L and M model aircraft training.

Modular

The key to the T-BOS's rapid conversion capability is the modularity of the design. The conversion from one configuration to the other includes a hardware swap-out of the main instrument panel, lower and upper console, and the flight control grips. This hardware change is what provides each configuration with the high physical and functional fidelity of the T-BOS normally found only in an FAA Level D equivalent simulator. On the software side, the two configurations are hosted simultaneously in the system, which automatically detects the model that the training system is in during the power-up sequence.

Transportable

Because the T-BOS charter was to give the commander the ability to take the training system virtually anywhere, the system is designed to be transported via ship, rail, military air, or by ground using the Army standard M1074 palletized loading system (PLS), or M925 and M1080/M280 prime mover and trailer. It can be

The task was to meet all mission requirements and to also optimize the balance between production cost, supportability and system performance.

deployed to operate autonomously with its own power and environmental systems, or it can use shore power and or heating/air conditioning when available.

The design is compatible with current divisional transportation assets and leverages existing key components in the Army inventory resulting in no plans for modifications to the unit's Table of Organization and Equipment. These requirements were derived from the system requirements document (SRD), which was developed and approved by the Directorate of Simulations (DOS), U.S. Army Aviation Center. DOS and the T-BOS program lead then drafted an Operational Mode Summary and the mission profile to provide the T-BOS team with additional insight into the concept of operations for the system.

Cost and Supportability vs. Performance

Through a series of extensive trade studies and market surveys, the T-BOS team evaluated all aspects of the T-BOS system design as well as other aircraft trainers. The task was to meet all mission requirements and to also optimize the balance between production cost, supportability and system performance. Applying the results of these studies, the collective experience of the team and the lessons learned from deployments involving similar systems in Operation Iraqi Freedom, the design team has settled on a configuration that will achieve this balance. The result is a high fidelity system that is also truly transportable, supportable and affordable to produce.

The cost goal is achieved through the use of simulated instruments and components that look and feel identical to the actual aircraft, augmented by a limited number of actual aircraft components. By limiting the use of flight-worthy hardware and actual aircraft avionics components, the T-BOS can leverage more commercially available components and avoid the expensive harnesses, busses and bus interfaces, and protocols found on the aircraft.

To meet the motion cue requirement, the T-BOS uses a multi-axis dynamic motion seat. The T-BOS visual system is compatible with existing UH-60 and CH-47 flight simulator terrain databases and provides an extremely wide field-of-view including chin window displays that take advantage of cutting edge commercial projector technology. The result is a cockpit, visual and motion systems that provide a level of immersiveness not typically found in a transportable device.

Conclusion

T-BOS will be the first simulator of its kind to complete environmental and transportability testing to validate those aspects of the system design. The first T-BOS is scheduled to deploy with the UH-60M program team to Fort Hood, Texas in July 2006 to provide pilot training for the Operational Testing phase of the aircraft fielding The T-BOS will also be part of the UH-60M aircraft fielding during the first unit equipped scheduled in 2008.

Keeping up with the configuration and schedule changes on the aircraft side will continue to be a challenge for the T-BOS team. But a challenge we look forward to taking on and completing...*on time and on target!*

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PHOTO COURTESY OF ROCKWELL COLLINS, INC.

The modular design of the T-BOS system allows for easy deployment. Here a T-BOS system, in the deploy configuration, is prepared for the program integration and test phases.

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Retired CW4 Mike Durant is a former MH-60 standardization instructor pilot and flight lead with the 160th Special Operations Aviation Regiment (Airborne). Today he is the T-BOS program and site manager for Rockwell Collins Simulation and Training Solutions, Huntsville, Ala.

Air-Ground Operations

TRAIN AS WE FIGHT

By COL Lee D. LeBlanc and LTC Christopher R. Shotts

Our wartime footing over the last few years should have caused us to evaluate our training strategies as an Army for air-ground integrated operations. Not that we have never trained integrated rotary wing and ground maneuver operations, but the frequency and tactics, techniques and procedures certainly requires our attention to ensure we train as we will fight. As training requirements change we have to consider whether training solutions should change and how.

The 4th Infantry Division is aggressively pursuing this very issue and has developed a training strategy leveraging current simulation capabilities. Unit operations and personnel tempo and mandated training requirements for deployment to current theaters of war make it difficult for the most resourceful commander to meet all training requirements for his organic capabilities alone, not to mention integrating reconnaissance, attack and lift aviation.

From an organizational perspective the Army is adding the brigade aviation element to the brigade combat team (BCT) to ensure synchronization of air-ground operations. There are ways and means to integrate air-ground training into our strategies and the time is now.

Commanders are realizing their training strategy must go beyond the BCT. We are a modular force and aviation has proven to be one of the most critical combat multipliers in any theater. MG Peter W. Chiarelli, commanding general of the 1st Cavalry Div., recently cited he did not lose a single tanker truck carrying oil and gas over the roads of Iraq because of Army aviation. 1st Cav. Div. convoys would not operate without Army air. What should our air-ground training strategy be? How do we train to an air-ground standard? What capabilities do we have to facilitate such training?

ARMY PHOTOS BY LTC CHRISTOPHER SHOTTS

A battlemaster (left) and an observer-controller working in the AVCATT provide invaluable training and feedback to aviation units undergoing pre-deployment training to locations like Bosnia, Kosovo, Afghanistan and Iraq.

The reality is convoys or ground maneuver forces in Iraq and Afghanistan are much less vulnerable to attack by an improvised explosive device (IED), vehicle borne IEDs, or ambush when helicopters are integrated into the scheme of maneuver. Whether flying cover for a convoy operation along a main supply route or supporting a cordon and search operation in an urban setting, aviation is engaged in the close fight.

We are a capabilities-based Army and expected to adapt to a changing contemporary operational environment. Therefore we have to train as we will fight. There are training solutions available right now, requiring some refinement, and we are aggressively pursuing integrated air-ground solutions.

How did we initially train air-ground? As opportunities presented themselves, some commanders have orchestrated close-fight live air-ground training; however that might have been the exception. We did not have a robust simulation capability that truly allowed us to train multi-echelon air-ground in an integrated constructive and virtual environment. For a number of years Fort Rucker has conducted limited air-ground integrated training as part of Aviation

Training Exercises (ATXs), limited only by the involvement of ground forces.

These ATXs prepared various aviation task forces (TF) for deployment to Bosnia, Kosovo, Afghanistan and Iraq. During the ATX pilots executed cordon and search, show-of-force, or crowd control missions, coordinating their efforts with the role playing ground force commander who commanded from a virtual vehicle station. Some scenarios were preplanned and rehearsed, while others were reactionary (such as quick reaction forces) in nature. The ideal role player was a future armor or infantry company commander who would deploy with the aviation TF. These ground role players used Operational Test Bed Semi-Automated Force computer and virtual monitors (or Stealth Viewer) to maintain situational awareness. Ground role players professed a much better understanding of the capabilities and limitations of aviation forces on the battlefield after the ATX. Our limitation at that time was both what we believed was a relevant training strategy and what technology offered; times have changed with both.

Current simulations for conducting air-ground integrated training have some limitations, but the more demands are levied to conduct air-ground training, the more the material provider is and will be asked to modify and provide technical solutions. The aviation community conducts collective training on the Aviation Combined Arms Tactical Trainer (AVCATT) while armor and mechanized infantry forces use the Close Combat Tactical Trainer (CCTT). There are other virtual and constructive simulations in some stage of development and/or assessment that will provide integrated training solutions. The Army is expected to decide and proceed with development of a virtual convoy trainer in the next twelve months.

An operational needs statement was recently submitted to Department of the Army for a virtual helicopter door gunner trainer. There have been demonstrations that facilitate aviation support of convoy operations by integrating the AVCATT and possible virtual convoy simulators. We have asked for these systems

The Directorate of Simulations is pursuing training solutions for improved integration of the AVCATT, here configured as a CH-47 cockpit, with the close combat tactical trainer to conduct better air-ground training.

be "fair fight" interoperable with both the AVCATT and CCTT with the intention of facilitating comprehensive air-ground integrated training. As we pursue training solutions we will continue to ask for improved integration of AVCATT and CCTT to conduct air-ground training.

There have been some successes in the integration of AVCATT and CCTT in the past year. Last August, the 3rd Inf. Div., in preparation for deployment to Iraq, developed an air-ground training strategy leveraging current technology to integrate their AVCATT and CCTT at Fort Stewart, Ga. The Exercises Division of the Directorate of Simulations at the Army Aviation Center, Fort Rucker, Ala., developed and supported a series of battalion level air-ground integration exercises.

These exercises were conducted in support of the aviation brigade and battalions from the 4th BCT at Fort Stewart. The training was limited by the ability of the two virtual simulators to work together on the National Training Center terrain database. At that time AVCATT and CCTT lacked common contemporary operational environment visual models (civilians, non-military vehicles, road side bombs). Terrain Databases lacked sufficient detail to conduct close combat attack in an urban setting. Despite the limitations of the simulators, the training was successful in helping the armor, infantry and cavalry battalion commanders to plan for and employ assault, attack and reconnaissance aviation in the close fight.

U.S. Army, Europe and 7th Army Training Command in Germany also hosted several proof of principal events to demonstrate CCTT and AVCATT interoperability. These efforts have confirmed to the acquisition community that the technology is capable of integrating air and ground virtual training systems.

Today the 4th Inf. Div. is executing air ground integrated training. Its aviation brigade is executing a gated training strategy and has aligned battalion level TFs (with AH-64, UH-60 and CH-47 assets) to support BCT training. The aviation brigade is coordinating air-ground integrated training at the platoon level by supporting scheduled platoon CCTT training events with aircrews in the AVCATT. The training is still

Units are leveraging the AVCATT to train as they will fight. AH-64 crews are able to practice collective gunnery, raising confidence of combat crews to coordinate air and ground fires. Fidelity of the AVCATT cockpits, with targeting sensor feeds (see Sensor View) allows the practice and refining of techniques and procedures with various repeats of danger close attack and other scenarios. Pilots and others operating within the virtual training environment can "see" the effects of successful enemy engagements (below).

restricted to maneuver on the South Western U.S. (NTC) or Fort Hood terrain databases; however, recent upgrades to the CCTT at Fort Hood allow better fidelity between the two simulators.

Tank, Bradley and AH-64 gunship crews are able to practice and coordinate collective gunnery tables in the AVCATT and CCTT simulators raising confidence of the combat crews to coordinate air and ground fires. Additionally, ground vehicle and helicopter crews are practicing and refining close combat attack techniques and procedures as they practice repeated runs of danger close attack scenarios.

AVCATT wasn't designed with the fidelity to be a collective gunnery table rehearsal tool, but commanders in the 4th Inf. Div. are leveraging the AVCATT and CCTT to train as they will fight; training command and control of fires and other gunnery maneuver tactics, techniques and procedures as a stand alone aviation element and when task organized with ground forces.

The 4th ID's approach to integrated air-ground is creative and clearly leverages simulation technology. We have asked the requirements and acquisition communities to use the 4ID training strategy template and areas of responsibility, in part, to help develop requirements common for both the AVCATT and CCTT terrain databases, as well as to help develop and assess future virtual simulations. Not as an end all, but to recognize that units are conducting air-ground training so we need to ensure we are meeting their requirements to provide a "good enough" interoperable training solution. We must take these lessons learned and better define requirements in order to reduce training limitations. However, commanders should not wait, but rather they should leverage what we have now to the best of their abilities to train as they will fight.

The benefits of linked virtual simulators supported by a robust semi-automated force allow our Soldiers to train as they fight. Air-ground training is still limited by the fidelity of the manned simulators, but the benefit of the training is significant when properly planned and tailored to the training audience. The Directorate of Training and Doctrine at Fort Rucker is currently developing aerial gunnery training packages for AVCATT in an attempt to exploit such collective training capabilities. Maybe we should consider air-ground AVCATT/CCTT gunnery tables?

Resourceful commanders are taking advantage of technology and laying the groundwork for air-ground training solutions by applying creative training strategies to ensure their warfighters are prepared.

Current systems and the projected fielding of the constructive simulation OneSAF Objective System will allow the commander to conduct comprehensive multi-echelon training with crews and battlestaffs in the same exercise fighting at platoon, company and battalion levels simultaneously. You will never have the perfect solution, but with creativity and a "good enough" solution air-ground training strategies are a reality now. We believe any discussion about requirements of virtual simulators for branch and non-branch specific systems should include both air and ground representatives at the table. This will ensure we are able to *"train as we will fight"*... as a modular force.

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Hard-Working Mechanics Keep Apaches Flying High in Iraq

Story and photograph by SPC Derek DelRosario

Most Americans are familiar with Rosie the Riveter, the World War II-era image of a woman in blue overalls, rolling up her sleeve, flexing her bicep, and exclaiming, "We can do it!"

Rosie symbolized how women didn't mind getting dirty to help the war efforts. Two women mechanics with Company D, 3rd Battalion, 3rd Aviation Regiment at Camp Taji in Iraq are forming their own version of this image today.

On the surface, SPC Melissa D. Crawford and SPC Damaris Young look very different.

Crawford, from Clifton, Texas, stands 6 feet, 1 inch tall and loosely wears a size "large-long" desert camouflage uniform top. Young, from Ocala, Fla., is 4 feet, 10 inches tall and wears a DCU top size "extra-small/extra-short."

What they do share, however, is that they are both hard-working mechanics doing their jobs in support of Operation Iraqi Freedom.

Crawford and Young had different motives for being helicopter mechanics.

"I have great pride for my country; I wanted to get deployed," Young said. "Working on helicopters is a great thrill for me. I am very interested in how helicopters work, and working on them also makes me feel important."

The 30-year old Crawford said her son inspired her. "We were driving by Fort Hood (Texas) one day, and my son was so excited to see a helicopter fly by," she said. "He wanted to see one up close, so I decided that I wanted to be a mechanic so that his wish would one day come true."

Young surprises most people when she tells them she maintains Apaches.

"No one believes me when I say I'm a mechanic. Some of my buddies tease me when I can't reach high places and need a stepstool," said the 22-year old Young. "But I'm a tomboy. I've been working with my dad on cars and motorcycles since I was a child."

Before joining the Army, Crawford wasn't really exposed to mechanics. She graduated with a bachelor's degree in computer science and held mostly office jobs. The extent of her experience was helping her father work on the car, but that was a far stretch from working on Apaches. She said she gained a lot of confidence as a mechanic during her first deployment in the early days of OIF.

SPC Damaris Young (left) and SPC Melissa Crawford, both AH-64D Longbow Apache mechanics with Co. D, 3rd Bn., 3rd Avn. Regt. don't mind getting dirty to help the war efforts.

"When I got my first certificate of achievement, that's when I felt like a real mechanic," Crawford said. "During the first deployment here in Iraq, the chain of command really noticed the hard work (the unit) put in, and they let us know how proud they were."

Working in an environment made up of mostly men was daunting at first for Crawford, but she now has a strong bond with her coworkers.

"They were scared of offending me at first, so they would often watch what they would say around me," Crawford said. "You have to have a sense of humor as a female in this line of work. We joke and laugh together now. They are like my brothers. To them I'm not just 'some female'... I'm Crawford."

The mechanics of Co. D must work together to handle their huge workload. The battalion is flying six times as much as they did before deploying, so team cohesion is needed to help maintain the Apaches.

"In a way, I have to prove myself as a mechanic," Young said. "I continue to work hard and hold my own weight, i don't mind getting dirty. I will do whatever it takes to get the job done."

Crawford understands that being a woman mechanic can bring labels. When someone challenges her abilities, Crawford lets her actions speak for themselves.

"You let them talk their trash, and then you correct them with action," Crawford said. "I've gotten used to the trash talk from people who think I can't do the job or handle it. I just show them up by working better and faster."

The entire company has been working better and faster, as the battalion puts in more than 2,000 flight hours a month — a feat that couldn't be done without the efforts of the mechanics.

"We play a huge role in the Apaches, they couldn't fully function without maintenance," Crawford said. "And without Apaches, it would all fall on the infantrymen. Apaches are needed to help (protect) convoys, prevent ambushes, and react to fire."

Young also recognizes the importance of mechanics to the aviation brigade, and the dedication it takes to support the mission.

"As a mechanic, working hard and staying motivated is essential for mission completion," she said. "The lives of those two (Apache) pilots are in our hands, as well as the soldiers they save when they support infantrymen on the ground."

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SPC Derek DelRosario is a photojournalist with the 100th Mobile Public Affairs Detachment, Texas National Guard, attached to the Aviation Brigade of the 3rd Infantry Division in Iraq.

This article is reprinted courtesy of the American Forces Press Service.

TRAINING WARRIORS

During Sustained Combat Operations: Deploying LCT to OIF

By MAJ John Vannoy and Randy Nielson

As a battalion commander responsible for the training and proficiency of your unit's aviators, today's recurring extended deployments pose a significant threat to training. Consider this possibility. Being able to deploy with a high fidelity flight simulator that you use to augment your deployed battalion's training plan, circumventing the need to waive annual training requirements. This opportunity would result in reduced risk to your new aviators in a hostile environment as they are being integrated into your aircrew-training program, and helps sustain the proficiency of your experienced aviators in emergency procedure, gunnery and instrument flight tasks.

The 2nd Battalion, 101st Aviation Regiment of the 101st Airborne Division (Air Assault) seized on such an opportunity. The Longbow Apache Product Manager's Office (LAPMO) recently deployed an AH-64D Longbow Crew Trainer (LCT) by U.S. Air Force C-5B Galaxy directly to their airfield in Iraq. The trainer was not only transported by air, it was positioned next to the yet to be established battalion headquarters, ready for training, prior to the arrival of the 2-101st Avn.

This article will provide insight to what deployed warfighter requirements are for an LCT, how it directly impacts on finite U.S. Army resources (i.e. blade hours and budget), unit considerations for the sustainment and movement of the system, and what can be expected for the LCT in the future.

An Army Aviation First

The 2-101st Avn. was not the only unit to take advantage of this opportunity. Three LCTs (including the 2-101st LCT), were successfully deployed to Operation Iraqi Freedom on March 30, constituting the first U.S. Army deployment of a high fidelity flight simulator into a combat theater.

These highly deployable systems were transported by air, sea and ground to two separate locations supporting the 1st Bn., 3rd Avn. Regt. and the 3-3rd Attack Reconnaissance Bn., as well as the 2-101st Avn. This mission was accomplished by direct support from the LAPMO to the battalion staffs in the planning, preparation and execution of the deployment.

System Characteristics

The Longbow Crew Trainer system is comprised of two 53-foot long trailers valued at approximately $15 million. The LCT is issued on the basis of one per AH-64D Longbow battalion at the completion of the Unit Fielding Training Program at Fort Hood, Texas.

PHOTO BY RANDY NIELSON

The two trailers have a unique purpose. The device trailer replicates the Longbow pilot and copilot/gunner cockpits and houses the instructor operator station. The support trailer provides power, an environmental control system, and a storage facility for components during movement.

As the highest fidelity attack helicopter simulator available to the U.S. Army, the LCT is a primary tool for AH-64D unit commanders and instructor pilots. The system supports initial aviator qualification, and individual and crew sustainment training in all aircraft systems, weapons, emergency procedures, flight and tactical tasks.

The LCT replicates the actual aircraft cockpit form, fit and function to the smallest detail, and it incorporates multiple geo-specific (terrain) visual database suites. These database suites support the correlation of all aircraft visual sensors, FLIR and radar with the aircraft's weapons and survivability equipment to the aviator's visual perspective. This is invaluable for mission specific training in a geographical area of operations.

Why deploy an LCT?

Back to back deployments, while invoking the commander's option to waive annual evaluations and training minimums, negatively impact a unit's readiness. The LCT provides the deployed units with the capability to train at no risk and at a low cost in a hostile environment. It provides a means to offset this impact and subsequent atrophy of pilot skills, which can occur during extended deployments. The system allows pilots and crews to maintain proficiency in instrument tasks, emergency procedures and gunnery skills.

The LCT helps commanders to effectively carry out combat missions, but also provide an opportunity to decrease the train-

PHOTO BY RANDY NIELSON

Top: LTC Russell Stinger (right), battalion commander, and CW4 Glenn Feist, standardization instructor pilot, stand in front of the 2-101st Avn. Regiment's Longbow Crew Trainer, operational two and a half days after arriving in Iraq.

Left: Members of the Longbow Apache Product Manager's Office assist the offload of the 2-101st Avn. LCT at the unit's forward deployment airfield.

Right: Here an aviator trains in the pilot station of the LCT with a geo-specific database for his unit's area of operation. The system is available for world-wide deployment.

Below: The Longbow Crew Trainer system fills the majority of space inside of a U.S. Air Force C-5B cargo plane.

PHOTO BY JAMES BULLINGER / AAPI

PHOTO BY RANDY NIELSON

ing time required to reset and posture their battalion's readiness once back at home station. This system permits him/her to evaluate crew coordination, provides a means to integrate and progress new aviators, and to train new tactics, techniques and procedures to counter evolving threat tactics.

Lastly, the LCT's capability to replicate brown-out conditions allows the commander to train his aviators in countering this environmental situation without risk to crew or aircraft.

Cost Benefit of Deployment

The cost benefit to the U.S. Army and commanders in deploying the LCT is provided through several different means.

First, the LCT in a deployed status costs the unit an estimated additional five percent of the cost of flying the aircraft. After flying the LCT for 58 hours, the unit will have paid for the cost of supporting the device with deployed contract logistics personnel. An additional 13 hours of LCT use will cover the cost of moving the system by sea to the Middle East, or 55 hours if deployed by C-5 aircraft.

For a total deployed training commitment of 68 hours of LCT use versus flying the actual aircraft, the unit has broken even on costs. After the initial 68 hours, every hour flown in the LCT versus an aircraft saves the Army thousands of dollars per hour and eliminates the risk of loss of the aircraft and crew to mishap or hostile fire during training.

Second, there is a significant savings realized in using the LCT to maintain gunnery skills over firing actual munitions from the aircraft. A single weapons load of six HELLFIRE K model and two L model missiles, 24 multi-purpose submunitions rockets, 14 point detonating high explosive rockets, and 300 HE dual-purpose 30mm rounds costs approximately $660,000.

To fire the same load in an LCT costs the Army only the time required to expend the load in the device and can be done multiple times without incurring the non-training time required to rearm the real aircraft.

This simple cost benefit analysis coupled with the reduction in risk to the battalion's assets when training with the simulator over the aircraft provides significant support for deploying the LCT.

LCT Movement Considerations

There are several mission unique considerations when deploying the LCT into a combat theater.

First, these systems are not Soldier supported for maintenance or parts, but require a logistics support contract to sustain them. A contract requires a minimum of four to six months lead-time. This time is partially driven by the need to find qualified contract people willing to deploy, and time to negotiate terms of the unit's unique mission-defined needs with the contractor.

The costs of deploying the LCT are the responsibility of the unit, while contract management, upgrades and reset of the system are the responsibility of LAPMO.

Second, since funding for deployable simulators are not included in a division's budget, each battalion desiring to deploy an LCT must forward an operational needs statement through their higher headquarters to garner command sup-

Training Warriors continued on page 46

WARRIOR HALL

A Flight School XXI Simulation Services Contract Update

By Scott Brookins

Aviation transformation demands a new training concept for Army aviators attending training at the U.S. Army Aviation Center, Fort Rucker, Ala. The legacy 1970's style pilot training does not meet the needs of a 21st century commander.

Previously, graduates from flight school arrived to their new unit with a readiness level 3 (RL-3) proficiency, requiring 40 to 70 hours of additional training with a unit instructor pilot prior to progressing and be designated as an RL-1 operational crewmember.

The new Flight School XXI provides the field commander with a new aviator, rated at the higher RL-2 level, who can progress to an RL-1 in as much as 50 percent faster time than an older legacy flight school graduate. Field commanders have verified that FSXXI graduates contribute to the mission as force multipliers much sooner than legacy graduates.

The FSXXI curriculum moves approximately half of the aircraft training time in the instruments phase, and the majority of advanced combat skills training time, into the student's go-to-war aircraft. Flight hours in the Phase I common core (primary & basic instruments), flying the TH-67 Creek helicopter, have been reduced by one-third, while flight hours in advanced aircraft (AH-64D, CH-47D, OH-58D and UH-60) have been doubled to increase the experience level of FSXXI graduates. In general, simulator hours for flight training have also doubled.

FSXXI Simulation Services is a long-term contractor-provided service program that will provide the simulation portion of the FSXXI curriculum. The Program Executive Office for Simulation, Training and Instrumentation (PEO-STRI) is responsible for administering the contract and monitoring the contractor's performance.

The simulation services contract is a turn-key operation where the contractor is paid for simulator availability. The main feature of the FSXXI Simulation acquisition strategy is that all simulators will be built, owned, operated and maintained by the contractor. Additionally, the contractor will be responsible for all logistical support, to include implementing technology upgrades into simulators and ensuring that simulators remain current with the latest aircraft hardware and software configuration.

The service consists of supplying a requisite mix of flight simulators and required operation and maintenance support for Flight School XXI initial entry and advanced aircraft tracks, graduate flight training, foreign military training, professional military education, pre-deployment aviation training exercise participants, and sustainment training.

The FSXXI simulation services contract (SSC) was awarded Sept. 25, 2003 and is a $1 billion plus contract over an expected 19.5 years. After an administrative delay of 118 days, work proceeded in January 2004. The steady state annual cost of the simulation services is $51 million. This translates to an average cost of $330 an hour in simulators of all types, compared to an average cost of $2,700 per hour of actual aircraft flight time.

ALL PHOTOS BY JAMES BULLINGER / AAPI

A contractor in his birds-eye perch high up in a simulation bay monitors five TH-67 Creek Operational Flight Trainers which are full-motion virtual simulators.

It also provides simulator devices in a fraction of the time of a standard acquisition procurement. Already initial deliveries are under way just 12 months after contract performance began. Estimates show that the FSXXI Simulation services contract will save the Army approximately $600M over twenty years compared to a standard simulator acquisition program.

The FSXXI SSC is required to support the following: FSXXI Phase I primary core training and Phase II advanced track training, aircraft qualification courses, professional military education courses (includes leader development courses), maintenance test pilot courses, instructor pilot courses, method of instruction courses, rotary wing instrument flight examiner course, Spanish-instrument refresher training course, advanced instrument flight rules training, pre-deployment aviation training exercises, and active and Reserve component sustainment training.

The SSC consists of three parts to provide: TH-67 Creek virtual simulators, advanced aircraft virtual simulators, and training support and management oversight capability. Simulators are scheduled, maintained, operated, upgraded and managed by Computer Sciences Corporation (CSC) with government oversight and approval. Major subcontractors on the CSC team include Flight Safety International, L3 Communications and Rockwell Collins (formerly NLX).

The request for proposal for this program was perfor-

mance based with the primary criteria of a sufficient number of TH-67 and advanced aircraft virtual simulators to train various numbers of students and courses as outlined in the requirements document. In response, CSC proposed the following mix of simulators to support this service:18 Reconfigurable Collective Training Devices (RCTD), 13 TH-67 Operational Flight Trainers (OFT), 7 TH-67 Instrument Flight Trainers (IFT), 1 AH-64D OFT, 3 CH-47 OFT, 2 OH-58D OFT, 2 OH-58D IFT, 8 UH-60 OFT, 3 UH-60 IFT.

The FSXXI simulators will be housed in two locations. The RCTDs will be located in the Seneff Aviation Warfighting Simulation Center (AWSC) located on Fort Rucker. These simulators will be linked to the aviation combined arms tactical trainer (AVCATT) suite, providing a 24 cockpit collective training capability at Fort Rucker. The remainder of the simulators (with the exception of the AH-64D OFT) will be located in Warrior Hall, a new facility located in Daleville adjacent to Fort Rucker.

Warrior Hall is a purpose-built complex consisting of two massive simulation bay wings, connected in the middle by an administration building. The 136,000 sq. ft. facility can house up to 40 full-motion simulators. Initially, 38 simulators will be operated in this building. The remaining two positions will be utilized for future requirements.

Construction started on Warrior Hall in May 2004 and in just 364 days after breaking ground the facility was turned over by the builder to CSC on May 20. Warrior Hall will house approximately 150 employees and will be capable of training 500-600 students per day. The grand opening will be in the fall with student training beginning in October.

Initial delivery and setup of the RCTDs began in February at Fort Rucker just 12 months after SSC performance started. The first RCTD initial operational capability (IOC) was declared shortly after March 31.

The first TH-67 simulator IOC will be reached by August 1, when 6 OFTs and 2 IFTs will be ready for training. The full operational capability (FOC) of the entire series of 20 TH-67 simulators will be reached in December.

The advanced aircraft virtual simulator IOC will occur in two stages based upon dates established to support the phases of FSXXI. The first IOC will consist of five UH-60 OFTs and one CH-47 OFT and is scheduled to be complete by Nov. 15. The second IOC stage will be completed by May 15, 2006 and will consist of two OH-58D OFTs, 3 UH-60 IFTs and one additional CH-47 OFT.

The interior of a TH-67 OFT is spacious and comfortable, with a computer console (on right wall) and overhead screens provide the instructor pilot, students and observers with autonomous ability to program, conduct and playback training.

Author Scott Brookins with PEO-STRI scans the cockpit instrument panel inside of the TH-67 OFT. The OFT's virtual projection graphics are high resolution with a seamless wrap-around field-of-view to provide near-realistic flight environments for pilot training.

A UH-60 Black Hawk OFT, an FAA level D equivalent simulator, undergoes installation inside of Warrior Hall. Note the bank of five video projectors, each with three separate lenses, positioned above the cockpit to provide wrap-around virtual view for the pilots.

Flight School XXI students will begin training in October in the new Warrior Hall simulation training facility in Daleville, Ala. Warrior Hall is a collaborative effort between CSC, PEO-STRI and the Army Aviation Center.

To support maximum schedule flexibility in providing so many simulators in such a short time period, the FSXXI SSC strategy includes continued use of advanced aircraft simulators currently located at Fort Rucker, including the UH-60 and CH-47 legacy simulators, OH-58D cockpit procedures trainer, AH-64D Longbow crew trainer (LCT), and the AVCATT. The UH-60 and CH-47 legacy simulators will be phased out at some point following the full operational capability of the FSXXI SSC. The FSXXI Simulation FOC is scheduled for Oct. 15, 2008, 61 months after contract award. The remaining seven RCTDs, three UH-60 OFTs, two OH-58D IFTs, and one CH-47D and one AH-64D OFT will be ready for training at FOC.

As of June, five RCTDs are operational in the AWSC and seven TH-67 OFTs and four UH-60 OFTs have been delivered and are undergoing installation in Warrior Hall. Two Aviation Officer Basic Course iterations have conducted training in the RCTDs to rave reviews by the students and instructors. Also, GEN Richard A. Cody, Army Vice Chief of Staff, had very favorable comments after flying as well.

The FSXXI Simulator Services capability only dreamed of just a few months ago with the Aviation Center and PEO-STRI is now becoming a reality. It offers an unprecedented approach to giving our aviators the best opportunity to gain a terrific amount of experience in their assigned "go-to-war" aircraft in a safe environment. This is virtual reality at its best.

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Scott Brookins is the Project Director for Flight School XXI Simulation Services at Fort Rucker, Ala., for the Program Manager Field Operations, Program Executive Officer for Simulation, Training and Instrumentation, Orlando, Fla.

The author thanks the CSC management representatives and LTC Christopher MacFarland with the Directorate of Simulations at Fort Rucker for assistance with this article.

AVIATION CAREER INCENTIVE PAY DISPELLING THE MYTH

By BG Thomas Konitzer

Author's note: *Last year we received a number of messages from the field regarding perceived inequities between Active, Army National Guard and Army Reserve aviators related to Aviation Career Incentive Pay (ACIP). For the past several months the AAAA leadership has been researching this topic and meeting with aviation leaders at the National Guard Bureau and with Reserve Component principals at the Department of Defense. This will be the first in a series of articles intended to separate myth from fact and discuss current DoD initiatives.*

What I'm about to say may surprise you. Army aviators do not receive "Flight Pay."

Aviation Career Incentive Pay (ACIP), erroneously referred to as flight pay, is not solely based upon performance of flight hours or proficiency in an Army aircraft[1]. The Aviation Career Incentive Act of 1974 created career pay to attract and retain aviators and reward them for professional commitment to the field. The number of hours spent flying is a training and readiness requirement and not a consideration for ACIP. An aviator who only flies 12 hours a year is paid the same as the aviator who flies 200 hours in the same period.

The reserve component (RC = Army National Guard or Army Reserve) aviator who participates in "drill periods" and approximately two weeks of annual training (AT) per year receives the same level of ACIP as the full-time Army aviator, however only for time spent in a military duty status. Since this period of time is typically 1/30th of the time that an active component (AC) aviator spends in a military duty status, it is referred to as "The 1/30th Rule."

Unfortunately the entry on the left-hand side of your leave and earnings statement or LES, which reads "FLY PAY", reinforces the myth. That computer entry, along with other widely held misconceptions about incentive pay, has indirectly added to misunderstandings across the Army about the nature of pay differences for Army flight crewmembers.

The ACIP privilege is afforded to aviators in the active Army component, the Army National Guard (ARNG) and the Army Reserve (USAR) who qualify for and participate in aviation as their primary career field. To remain qualified, a rated aviator must remain in aviation as their primary focus throughout their career. They must also maintain current a Class II flight duty medical examination regardless of duty assignment.

The ACIP system was originally designed to serve as an incentive to the Departments of the Air Force and Navy pilots to remain in aviation service. The Army's ACIP system is based loosely on those instituted by the Air Force and Navy in 1974 and implemented under Defense Finance authorizations.

To translate: the Army neither drives nor regulates aviation incentive pays, these specialty pays are regulated by the DOD Pay Manual. The Defense Finance Accounting System (DFAS) entry of FLY PAY on the Army LES is generic shorthand coding that simply helps to categorize the incentive pay for the aviation career recipient. It's an odd fit for the Army because the system is slightly different from the Army career path, but the DOD "pay manual" requires all aviators to use the same system.

Several assumptions were made to facilitate career planning. The first is that an aviation career for a commissioned officer was set at 25 years of aviation service. To this effect, several evaluation points or "gates" were built into the system: the 12-year gate (about the half way point) and an 18-year gate (the 3/4 point in a career).

These gates serve as validation points for the entitlement. The incentive pay increases in amount until the 6th year of aviation service, where it remains steady until the 14th year. As commissioned officers reach the later years in their aviation career (at 22 years) the ACIP pay starts to decrease in amount. After the 25-year point, only those actually assigned to operational flight positions are able to qualify for the incentive pay.

For warrant officers, things are a little different. They are viewed as the "technical experts" and while they have the same evaluation points (12 and 18-year gates), and the same increases for the first 6 years, their ACIP

rate does not decline at the 20th year and they may even qualify for continued entitlement until such time as they are medically disqualified, retired or removed from aviation service.

What about all those aviators serving in staff positions in divisions, corps, major Army commands (MACOM), and at the national level at the Pentagon, the National Guard Bureau and the Office of the Chief of the Army Reserve, etc.? You may be surprised to know that these aviators actually continue to receive their full entitlement to ACIP while serving in these positions.

Current regulations prohibit them from performing aviation service, but because the incentive pay is not connected to the performance of pilot duties, they continue to receive ACIP. Some might think that this practice is unfair to those in operational units whose duties are to pilot Army aircraft. However, this is not the case; and it further demonstrates that Army aviators receive the incentive pay for maintaining aviation as their primary career field. Army aviators assigned to high-level command and staff positions at MACOM and at the national level routinely perform critical tasks in support of the warfighter at the unit of action and execution level.

Very rarely do these positions have the added benefit of assigned aircraft and the requirement to maintain proficiency. While their expertise in aviation matters is required, proficiency in an actual aircraft is not. However, the ACIP system allows the aviator to serve in other non-aviation positions, with limitations, for up to four years (within the first 12 years after the Aviation Service Entry Date) to a maximum of 6 years (at the 18-year point) without affecting their entitlement.

While their expertise in aviation matters is required, proficiency in an actual aircraft is not.

For this purpose, special authorizations and coding for targeted positions requiring aviation expertise have been established on the Tables of Distribution and Allowances documents of the MACOMs and national level organizations where the need is greatest. Those key positions are coded to indicate that the aviator assigned to it is prohibited from performing operational pilot duties. The ASI or additional skill identifier code of G7 is used to identify those positions, which, because of their nature, may be credited with operational time or provide for a possible waiver, as listed in AR 600-105.

This is different from positions outside of aviation occupied by aviators who continue their authorization for ACIP for a limited time while attending staff schools, or while assigned to non-operational positions in other branches for command opportunities or to serve on staffs.

Another area of misconception centers on a perceived difference between ACIP for the active Army and the two-resourced reserve components. The fact of the matter is a CW3 or CPT in the ARNG or USAR who is entitled to the current maximum authorization of ACIP is receiving exactly the same remuneration for his or her aviation career as is his or her active Army counterpart for the time period that the person is in a military aviation career duty status.

If an RC aviator is in a military status for a multiple unit training assembly (MUTA), commonly known as a drill weekend, or possibly an annual training period or additional flight training period, then this career time is what is tabulated towards a pay period. Again, this is military aviation career duty, not associated with flying or flight hours. These are important differences to note. It does not matter if an RC aviator obtains or surpasses the monthly or yearly flying hour minimums of an AC aviator. Compensations are based on aviation career duty, not flying the aircraft. The "1/30th rule" pays RC aviators the daily earnings of incentive pay.

Your Army Aviation Association of America is working with the headquarter staffs of the Army and the Department of Defense to increase benefits for Army flight crewmembers at all levels and continuously tries to build on the momentum of past successes in ACIP increases. As for the "FLY PAY" on your LES that leads one to believe aviators get flight pay when they actually receive ACIP, this is presently being worked with the Office of the Secretary of Defense in order to correct the misconception that stirs the pot of concerns of equality for our RC aviators.

Every tool at our disposal is employed to bring the highest possible level of compensation attainable to our aviation professionals, commensurate with other services. We place the same emphasis on this aspect of aviator support as we do in endeavoring to bring the highest possible quality equipment and services to Army aviation.

This article is the first in a series intended to identify the different aviation career pays, their issues, the important actions and changes that are proposed in the system.

Stay tuned!

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Retired BG Thomas Konitzer is the president of the Army Aviation Association of America. He began working on this issue as AAAA's Senior Vice President last year.

Footnote:

1. Conditional ACIP is a pay status that requires the Aviator to perform aviation service with required flight minimums in an actual aircraft in order to qualify for the ACIP entitlement. Conditional ACIP occurs when a rated commissioned officer exceeds 25 years of aviation service; or an aviator fails to acquire the minimum time (in career years) required to pass a "gate" (12 or 18 year aviation service gate). In the ARNG, this is a common occurrence, since so many RC aviators stay beyond 25 years of aviation career service.

The Future

Of Aviation Logistics and Commissioned Officer Professional Development

By LTC Joe D. Dunaway

For more than two decades, aviation branch struggled to create a viable career path for our commissioned aviation maintenance officers (AMO). Although we have learned much and progressed significantly during the past 20 years, we have yet to identify a commissioned officer professional development system that creates the absolute "multi-functional aviator."

The ideal multi-functional aviator career model should: instill both sound logistics and operational understanding; provide ample opportunity for professional growth; and ensure similar potential for advancement across the branch. Limited by resources and driven by growing requirements at every turn, our current model is too inflexible, locked in the past and not clearly focused on nurturing the growth of multi-functional capabilities. To achieve this task we must overcome the mindset of our past and mentally transform.

The universal demand for aviation resources in our formations and the readiness of our fleet is at its highest requirement since forming the branch. We can no longer ignore the issue of creating a professional development model of equal stature.

PHOTO BY LTC WILLIAM MCGARRITY

Maintenance and logistical support are the life force that keeps aviation units operationally ready to execute missions as required. Soon all aviation officers will begin to receive logistics training in their officer basic and captain's career courses.

The Failure of AOC 15D and FA 90

Although AMOs are competitive through LTC and for selection to battalion command, success at levels beyond command are limited. Accordingly, we have mortgaged our officer's professional opportunities within the 15D area of concentration (AOC) and functional area (FA) 90 career fields.

Attempts to balance opportunity and success for the AMO have fallen short of initially intended goals and have served as a discriminator for most opportunities outside the logistics field. Often the 15D AMO received fewer operational assignments, and less flight time and experiences necessary to achieve real competitiveness within the aviation operational commands.

Since the addition of FA90 into the professional development system, a plan intended to improve command and promotion opportunities, it has failed to meet its mark of providing advancement to the senior officer levels. For the last 11 years our 15D/90 officers have competed for 477 multi-functional support battalion commands in FA 90. During this period, only five AMOs were selected to command a battalion, which equates to a less than one percent selection rate.

In retrospect, our 15D/90 officers have served in a wide array of multifunctional logistics positions away from our hangars, flight lines and Soldiers, who desperately needed their aviation logistics experiences and leadership. Although these actions provided the 15D/90 officers with superb training, skills and experience, it left most officers in a dead-end career path.

It's Not a "Lack of Quality" Issue

The branch has approximately 296 officers identified as 15D and/or FA 90. Not surprisingly with the quality of our branch officers, the AMO has remained competitive for promotion, schools and command. However that success is relative to the limited number of AMOs and is consistent only at levels below brigade command and promotion to colonel.

The branch selection rate for battalion command averages 19 percent, while the selection rate for 15D/90 officers averages 27 percent. However, of the 23 aviation officers selected to an operational brigade command, only one was a multi-functional logistics aviator.

Regarding attrition, AMOs have a low exit rate of 6.6 percent, compared to the 8.7 percent average across the rest of the branch. Although this is a positive trend, it remains extremely difficult to meet the more than 270 AMO requirements and the growing demands throughout our Force.

Promotions for AMOs remains on par with Army averages across most primary zone selection boards. Below the zone considerations to MAJ average 6.9 percent for our AMOs compared to the branch average of 5.8 percent, and 7.3 percent to LTC from recent selection boards.

Prior to the recent changes at the Command and General Staff College (CGSC) and the establishment of Intermediate Level Education, our AMOs sustained a 66 percent selection rate for "resident" among their peers, exceeding the typical 50 percent selection from within each year group. At the Senior Service College level, AMOs achieved an average of 14.8 percent selection rate among their peers in comparison to a 9 percent rate among the rest of branch officers.

These statistics portray some success, but are driven more by the Army's high demand for maintenance aviators and FA90 officers, than by a deliberate systematic attempt to advance multi-functional aviators. Further, these statistics do not translate into successful selection to multifunctional logistics commands and brigade operational commands for 15D/90 officers. In like manner, they do not thwart the need for change in the aviation officer professional developmental system.

PHOTO BY LTC JOE DUNAWAY

Today's challenges require officers to have tactical and logistical skill sets to rapidly deploy and be operationally ready within hours, as opposed to weeks and months.

Transformation and Change

In February 2004, the Aviation branch created a new career developmental model that eliminates Aviation officers from participation in the FA90 career field, and deletes the 15D AOC. In order to meet the demands of transformation and of our new modular, multifaceted, Aviation units of action (UA), our officers and future commanders require a solid tactical base equally complimented with a breadth of aviation logistics skills and experience. To this end, we must modify and overcome our current cultural mindset of *operational* versus *logistics*.

Our future brigade commanders will command UA formations comprising a complex array of highly advanced and logistics dependent combat assets. Our training base must address and balance both the operational and logistics skills necessary to develop a "multifunctional aviator" capable of execution and success at all levels.

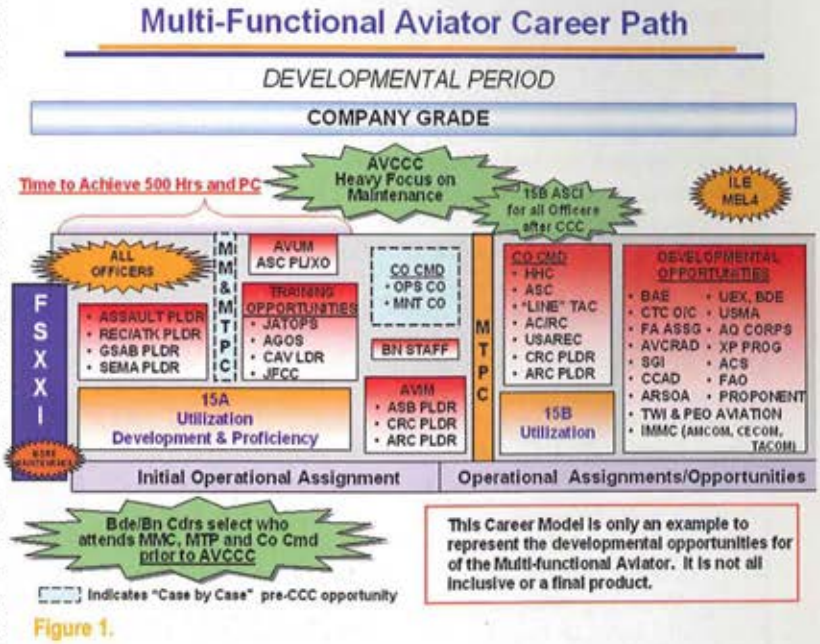
The Past

Prior to this change, our officer developmental model identified an AMO (15D) as one who completed either the Aviation (AVCCC) or the Combined Logistics captains career courses (CLCCC); as well as the Maintenance Managers Course (MMC) and the Maintenance Test Pilot Course (MTPC). Additionally, the Aviation Assignments Branch at the Human Resources Command (HRC) served as the primary source for identification and selection of officers to attend the MMC and MTP courses based on Army requirements - not necessarily in synchronization with officer skill sets and/or the needs of the "field" commander.

FA90 designation required attendance at the CLCCC, MMC or the Logistics Executive Development Course as a prerequisite, followed by the officer alternating between aviation and FA90 assignments. The design of this model simply took our AMOs further away from our operational core and limited future growth and opportunity.

The Future

Under the new career model, all commissioned officers receive a balance of both operational and logistics training and assignments throughout their career. This multifunctional developmental system begins with an officer's accession into the branch from the basic officer leadership course I and continues with an operational and logistics focus during the officer's developmental years (see Figure 1).



ARMY GRAPHIC

Figure 1.

Officers receive enhanced aviation logistics training as part of a "revised" Aviation Officer Basic Course. Following AVOBC and graduation from Flight School XXI, all officers proceed to an operational assignment to obtain a broad depth of tactical and technical aircraft training and combat situational awareness. Upon reaching operational proficiency (500 hours and pilot in command), and at the discretion of the battalion and brigade commanders, the officer then attends the AVCCC, which is re-tooled and enhanced with an aviation logistics training core similar to the current MMC.

Upon AVCCC graduation all officers will receive a

"15B" career field designation for their operational and aviation logistics training and skills. Then they are eligible to fill any Army requirements at the appropriate grade. This action eliminates the "discriminator" created by the 15D AOC and removes the "AMO" title. At this point, any AVCCC graduate will have the same base training and skills as the AMOs of today. Experience and proficiency in both logistics and operational skills will continue to develop with a balance of job opportunities.

Once back in an operational assignment following AVCCC, the brigade and battalion commanders will select those officers they desire to attend the appropriate MTPC. This additional skill will not require the officer to serve indefinitely in aviation maintenance positions, nor will it "discriminate" as did the 15D/90 designator. The MTPC serves to provide additional skills for officers at the discretion and needs of the brigade/battalion commanders. Our warrant officers will continue to serve as the unit's primary source of MTPs.

Figure 2.

Throughout an officer's company-grade development years it's imperative that both HRC and field commanders ensure that the officers rotate in and out of both operational and logistics positions. In accordance with Force Stabilization objectives, this developmental model will allow officers to remain in a single location, region or command while moving back and forth within the Aviation UA. This is clearly one of the most critical components of the developmental model and must be reinforced.

This developmental change will no longer require the Aviation branch to send officers to the CLCCC and allows our officers to focus more on Aviation logistics critical to our readiness. The Aviation MMC and the MTPC will remain open for attendance and valid for warrant officer training. By exception and in accordance with operational pre-requisites, brigade and battalion commanders may determine the need to send a pre-AVCCC officer to the MMC to meet critical needs within the new multi-functional aviation brigade (MFAB) structure.

What About Our Current 15D/90 Officers?

With this change, there is the likelihood for concern of our current trained 15D/90 officers and how it will affect their future opportunities. The full impact of this new model won't be fully realized until our first class of "multifunctional" AVCCC graduates reaches the Field Grade rank and potentially serve in brigade and battalion commands. Until then, we will have a period of transition as we remove the 15D AOC and FA90 identifiers from officer's records. Assignment and command opportunity for our current 15D/90 officers will continue to improve into the operational lanes as previously mentioned (see Figure 2).

Unlike the days of the "pure fleet" attack, assault and general support aviation brigades, the structure and mission of the new MFAB with its five separate and distinct aviation battalions are competitive command opportunities for all our officers, including command of the aviation support battalion (ASB). Aviation Soldiers comprise more than 50 percent of the ASB and the ASB's mission warrants the leadership of our aviation officers. The depth of skills and experience of our current 15D/90 officers will continue to be the bedrock for the expansion of our ASB into every MFAB.

Closing Summary

There is no doubt, this decision and transformation relies on dedicated and determined multifunctional aviation officers that will lead us into the future. Success requires a commitment on behalf of officers of all grades, in every corner of our branch. Just as the massive undertaking to transform our branch has met with many challenges, so will this transition.

Our Aviation Branch Personnel Proponency Office is leading the way with this initiative and receives the full support of the Army's senior leadership. The Aviation Center is working diligently to develop and implement necessary changes to the AVOBC and AVCCC courses, as HRC's Aviation Branch is implementing changes to all career management documentation.

Along with the priority to sustain a level of aviation logistics skills and expertise in all officers, the focus is to ensure all officers have the opportunity and training to compete for all commands at all levels. Although this change provides that "opportunity" and greatly improves the depth and skills of our entire officer population – selection to command and promotion at higher levels still hinges on individual performance.

In summary, removal of the 15D AOC and FA90 skill identifier is not the end of the AMO, in fact quite the opposite. This change provides greater promotion and command opportunity for all branch officers. Most importantly, it establishes a career model that instills within the officer the critical training, skills and experience necessary to preserve the highest level of individual and fleet readiness our branch must sustain in the joint and expeditionary forces of the future.

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LTC Joe D. Dunaway is the chief of the Aviation Branch at the Army's Human Resources Command in Alexandria, Va.

POTM
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 via e-mail to: editor@quad-a.org.*

The Chief of Staff, Army announced June 20 the following aviation general officer assignments:

BG Jeffrey J. Schloesser, director of the Army Aviation Task Force, Office of the Deputy Chief of Staff, G-3/5/7 to director of the Strategic Operational Planning Directorate, National Counterterrorism Center, Washington, D.C.

BG Stephen D. Mundt, deputy director of Force Developments, Office of the Deputy Chief of Staff, G-8, Army to director of the Army Aviation Task Force, ODCS, G-3/5/7, Washington, D.C.

BG William M. Jacobs, deputy commanding general and assistant commandant of the U.S. Army Aviation Center at Fort Rucker, Ala. to deputy director of Force Developments, ODCS, G-8, Army, Washington, D.C.

Changes of Command

The following changes of command have occurred at Fort Rucker, Ala.:

COL Thomas W. Young relinquished command May 25 of the U.S. Army Garrison to **COL William Larese**. Young is the military assistant to the Assistant Secretary of the Army for Installations and Environment in Washington, D.C. Larese was the G5 of the Army's Combat Readiness Center.

Forrester Assumes 2ID ADC-S

ARMY PHOTO BY HU-SON YOO

COL William H. Forrester, II (right) assumed the duties of assistant division commander for support (ADC-S) for the 2nd Infantry Division from BG Charles A. Anderson during a June 17 "Patch" ceremony at Camp Red Cloud (Uijeongbu), Korea. Forrester had served as the chief of staff of the Army Aviation Center, Fort Rucker, Ala. since 2003, after returning from Operation Iraqi Freedom and departing command of the 159th Avn. Bde., 101st Airborne Div.

160th Changes Regimental Commander

ARMY PHOTO BY RUTH FARWELL

COL Kevin W. Mangum assumed command of the Night Stalkers of the 160th Special Operations Avn. Regt. (Airborne) June 3 from **COL Andrew N. Milani, II** at Fort Campbell, Ky. Mangum recently served as the deputy commander of the Aviation Tactics Evaluation Group, Joint Special Operations Command, Fort Bragg, N.C. Today Milani is the chief of staff of the Army's Special Operations Command at Fort Bragg. Above (l to r) Milani, LTG Philip Kensinger, USASOC commanding general; and Mangum, who becomes the 10th colonel of the regiment, render a salute during the change of command.

LTC Jimmy L. Meacham relinquished command June 14 of the 1st Bn., 145th Avn. Regt., 1st Avn. Bde., to **LTC Mark C. Taylor**. Meacham moves to the chief of the Unmanned Aerial Vehicle Office with the Directorate of Combat Developments. Taylor recently served with the NATO Joint Forces Command in Naples, Italy.

COL Stephen R. Dwyer relinquished command June 20 of the 1st Avn. Bde. to **COL Michael J. Dixon.** Dwyer is the acting chief of staff of the Army Aviation Center pending retirement after 30 years of service. Dixon was the director of Training and Doctrine at Fort Rucker.

LTC John F. Dowd, Jr. relinquished command July 12 of the 1st Bn., 212th Avn. Regt., 110th Avn. Bde. to **LTC Mark F. Fassl**. Dowd moves to be the chief of the Force Development and Organization Div. with the Dir. of Combat Developments. Fassl previously served as the Eighth Army Aviation Officer in Korea.

COL Steven Semmens relinquished command July 21 of the 110th Avn. Bde. to **COL Daniel S. Stewart**. Semmens retires after 26 years of service and plans to head west. Stewart was the director of Aviation Proponency.

LTC Mark T. Jones is the new director of the Aviation Branch Personnel Proponency Office. Jones recently graduated from the U.S. Naval War College, Newport, R.I.

POTM continued on next page

Distinguished Flying Cross Award

WHITE HOUSE PHOTO BY DAVID BOHRER

Vice President Dick Cheney presented June 10 the Distinguished Flying Cross to **CW4 David B. Smith**, 1st Bn., 160th Special Operations Avn. Regt. (Airborne), Fort Campbell, Ky. Cheney presented the award during a ceremony held at MacDill Air Force Base in Tampa, Fla., during his visit to the U.S. Special Operations Command. Smith received the DFC for his actions during aerial flight as an MH-6M flight lead assigned to a joint task force during Operation Iraqi Freedom. Smith's mission focus and expertise led to the successful infiltration of 45 American Soldiers while taking fire in hostile territory from Sept. 4-5, 2004.

AAAA Honors USMA Cadet of the Year

PHOTO BY WILLIAM HARRIS / AAPI

The U.S. Military Academy class of 2005 Cadet of the Year is **Jeffrey M. Bonheim** of Springfield, Va. AAAA President BG (Ret.) Tom Konitzer and BG E.J. Sinclair, Aviation branch chief, recognized Bonheim's accomplishment as the academy's top ranked cadet who branched aviation during a May 24 ceremony at West Point, N.Y. He was presented with a bronze medallion trophy and certificate of achievement as this year's AAAA Top Cadet (USMA). In addition, Bonheim, an Operations Research major, also earned both the Superintendent's and the Commandant's award. 2LT Bonheim is now attending officer basic and flight training at Fort Rucker, Ala.

Training Warriors

continued from page 37

port for the requirement and obtain funding.

This approach is an issue that is being examined by the Army staff and the U.S. Army Forces Command to determine how deployable simulators will be funded in the future.

Third, the mode of deployment not only determines how soon a system is available for training, but also how road conditions and hostile activity may impact upon the system. While it is a deployable system, as with all simulators, the LCT is still comprised of complex components that are delicate in nature and can be damaged in movement.

The LCT is transportable by air on C-5 aircraft, by sea on roll-on/roll-off ships, and by ground on an M915A3 truck or commercial equivalent. Movement by air is preferred due to a chance of damage to sensitive components, but is very costly. Unless the unit is collocated at a major airfield, this mode will require continued movement by ground assets to the unit's assembly area. The least costly mode is by sea, then ground movement to final destination. Movement by sea presents only a low risk for damage to the system.

The LCT is a valuable and finite training resource that requires the commander and staff to consider risk to the system when determining the deployment mode of transportation.

Path Forward

In the near future, the capabilities of the LCT system may be expanded by the introduction of existing mature technologies. The capability to link the LCT to other simulators while deployed could aid in team training, training air-ground integration or in training for joint operations.

The lessons learned from these and other deployments will aid in improving the deployability of the device. The LCT may be adapted to fit within a C-17 allowing for more accessibility to both inter and intra theater strategic air transportation.

Finally, new database generation tools may be integrated into the system allowing the commander to develop geo-specific databases on site with near real-time source data providing a significant mission rehearsal capability. With a valid requirement all of these capabilities can be introduced to the system in the near future. Linking of the LCT to other LCTs has already been accomplished and linking to the Close Combat Tactical Trainer or similar systems has been evaluated and is technologically feasible.

Improving the deployability of the LCT requires a straightforward redesign of the trailer that houses the system. Several changes have been identified and will be introduced into the system. With each deployment of an LCT we will collectively learn more about the potential for this system. It is critical that the war fighter and product manager capture these candidate improvements and aggressively seek materiel solutions to maintain relevant flight simulation systems for the current and future attack aviation force.

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MAJ John Vannoy was the assistant product manager for Longbow Apache, Program Executive Office for Aviation, Redstone Arsenal, Ala. when he wrote this. Today he is the director of Test at the Reagan Test Site on Kwajalein Atoll in the Pacific Ocean.

Retired CW5 Randy Nielson is the technical development lead for the Longbow Training Device Team within the Longbow Apache Product Management Office, Redstone Arsenal, Ala..

NEW MEMBERS

AIR ASSAULT CHAPTER
FORT CAMPBELL, KY
Ms. Kelly Tyler
MAJ Bernard Warrington, Jr.
CW4 Jon C. Weston

ALOHA CHAPTER
HONOLULU, HI
MAJ Gregory A. Baker

AVIATION CENTER CHAPTER
FORT RUCKER, AL
WO1 Derek J. Abbott
WO1 Nicholas Tyson Bachert
1LT James E. Brant
WO1 Joseph S. Brown
WO1 Patrick J. Burg
2LT Clint E. Burleson
2LT Caralyn K. Cain
2LT Gregory M. Canfield
WO1 Joshua T. Chockley
WO1 Matthew J. DeGroot
1LT Taylor D. Dinehart
WO1 George E. Dobson
WO1 Jeffery C. Duncan
WO1 James A. Fields
2LT Alec L. Finlay
2LT Archibald F. Forsyth, III
2LT Brianne K. Galloway
WO1 Adam B. Garrison
WO1 Clinton J. Hall
WO1 Ryan A. Harmer
2LT Joshua C. Hayward
CPT James P.L. Holzgrefe
WO1 Roger A. Hood
2LT Jeremy N. Horton
WO1 Michael E. Howard
WO1 Michael A. Kicklighter
2LT Charles W. King
Mr. Terry L. Kuhn
WO1 Ryan S. Ladd
CPT Shaun E. Lewis
1LT Keith L. Maynard
2LT Adam W. McOmbir
WO1 Curtis L. Miller
WO1 Aaron G. Oakes
WO1 Kevin W. Oaks
WO1 William A. Parish
1LT Tyler B. Partridge
WO1 Justin C. Powers
2LT Christopher R. Renner
2LT Aaron J. Rettke
1LT Efrain Reyna
WO1 Francisco O. Rocha
WO1 Matthew S. Seegmiller
WO1 Brandon A. Shell
2LT Tracy A. Strickland
2LT Christina A. Thomas
WO1 Charles A. Villanida
WO1 Joshua T. Wanaka
WO1 Stephen D. Wells
1LT Brent T. Wiese
2LT Russell D. Zayas

BIG RED ONE CHAPTER
ANSBACH, GERMANY
CPT Jonathan M. Palin
CPT Michael M. Taylor

CENTRAL FLORIDA CHAPTER
ORLANDO, FL
Mr. Ronald Lee Bestt
Mr. Herman D. Groover

COLONIAL VIRGINIA CHAPTER
FORT EUSTIS, VA
Mr. Donald G. Lamury

CONNECTICUT CHAPTER
STRATFORD, CT
Mr. L. James Pelletier

CORPUS CHRISTI CHAPTER
CORPUS CHRISTI, TX
SSgt Daniel C. O'Dell

DELAWARE VALLEY CHAPTER
PHILADELPHIA, PA
Mr. Richard P. Golaszewski
MAJ N. Wesley Kimata, Ret.

GREATER ATLANTA CHAPTER
ATLANTA, GA
2LT Christopher M. Boyd
MAJ Larry Iwanski

IRON EAGLE CHAPTER
HANAU, GERMANY
CW5 Mark S. Bechtel

IRON MIKE CHAPTER
FORT BRAGG, NC
MAJ John H. Rasmussen

MICHIGAN GREAT LAKES CHAPTER
GRAND LEDGE, MICHIGAN
CW4 Dennis M. O'Brien, Ret.

MONMOUTH CHAPTER
FORT MONMOUTH, NJ
Ms. Carole M. Kortenhaus

NORTH COUNTRY CHAPTER
FORT DRUM, NY
CPT Casey A. Martinez

NORTH TEXAS CHAPTER
DALLAS/FORT WORTH
Mr. Dean E. Rose, Jr.

PHANTOM CORPS CHAPTER
FORT HOOD, TX
Mr. Jeffrey M. Basile
LTC X.L. Mays

PIKES PEAK CHAPTER
FORT CARSON, CO
LTC Andre M. Pennardt

RAGIN' CAJUN CHAPTER
FORT POLK, LA
MSG William P. Gammon

RISING SUN CHAPTER
CAMP ZAMA, JAPAN
CW5 Kenneth D. Collier

SOUTHERN CALIFORNIA CHAP.
LOS ANGELES, CA
2LT Alecia J. Jarvis

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Mr. Neil P. Brown

TENNESSEE VALLEY CHAP.
HUNTSVILLE, AL
Mr. Philip D. Anglin
Mr. Douglas P. Cole
Mr. Jason Curns
Mr. Rick Curns
Ms. Pamela Dillon
Mr. Anthony A. Fridelle
Mr. Scott Fulmore
CW5 Donald M. Haynes
Mr. Bryan Hurley
LTC Timothy C. Mays, Sr.
Mr. William M. Newby
Mr. Austin Newlin
Mr. Eric Rodriguez

UNIVERSITY OF NORTH DAKOTA CHAPTER
GRAND FORKS, ND
CDT Thaddaeus J. Solhjem

WASHINGTON-POTOMAC CHAPTER
WASHINGTON, DC
Ms. Margaret T. Blask
Mr. Adam Cohn
Mr. Gene Colabatistto
Mr. Stephen Day
Ms. Melyssa Ferber
Mr. Michael Griffin
Mr. Kevin F. Hunt
Mr. Kevin E. Keegan
Mr. Richard J. Kiehart
Ms. Stacie Rowell

WINGS OF VICTORY CHAPTER
GIEBELSTADT, GERMANY
SSG Derrick L. Mims

WRIGHT BROTHERS CHAP.
COLUMBUS, OHIO
CMSGT (R) Thomas J. Kelty

MEMBERS WITHOUT CHAPTER AFFILIATION
Mr. Ted Baldwin
Ms. Lynn A. Becker
Mr. Joshua P. Breto
Mr. George A. Caddy
Mr. John Fisher
1LT George B. Giles
Ms. Linda A. Hilson Pressley
Mr. James M. Kieran
Mr. Michael S. Knapp
CDT Robert E. Lelito
Mr. Robert B. Mason
Mr. Ed McKenna
Mr. Michael S. Moroz
Mr. Thomas C. Murphy
Mr. Joseph P. Nemeth
Mr. Sinclaire M. Scala
Mr. Larry J. Stack
Mr. Alan C. Stein
Mr. Gary L. Thomas
Mr. Ken Ward
Mr. Adolph E. Zimmer

Picatinny Arsenal Hosts First Aviation Day

Recognizing the need for the Army aviation community to understand Picatinny Arsenal's role, mission and contribution to the aviation warfighters' needs, Mr. John Hedderich, director of the Armaments Research, Development and Engineering Center (ARDEC) hosted the command's first Aviation Day on April 6. Attendees came to New Jersey from the aviation stakeholder agencies, including the Pentagon, Fort Rucker, AMCOM, AMRDEC, Fort Eustis AATD, Fort Belvoir NVESD, and Special Operations Aviation. The Monmouth Chapter, in conjunction with AAAA National, hosted an icebreaker reception for attendees the evening prior to the event.

Following a full day of briefings, everyone departed with a new understanding of "Picatinny, Home of American Firepower" and a feeling of accomplishment in finding better ways and possibilities to support the Aviation Warfighter.

PHOTO BY THEODORE SENDAK

Some of the participants pictured above to Picatinny's Aviation Day included such aviation notables as (seated at the table from the 9 o'clock position clock-wise): Dr. John Hall, Night Vision Labs; Herman Roberson, AMRDEC Advanced Concepts; Neale Bruchman, Apache PMO; MAJ Eric Vickery, G3 Aviation Task Force; Shelby Johnson, AMRDEC Advanced Concepts; Gregg Peters, ARDEC LNO at Redstone; LTC Susan Carlson, G4 HQDA; COL Steward Remaly, G4 Aviation Logistics; and George Dimitrov and COL William Gavora with the Applied Aviation Technology Directorate.

PHOTO BY CPT SHANNON RAE

Phantom Corps Chapter

MG James Simmons (left) deputy commanding general of III Corps and commander of Fort Hood, Texas, was presented with the Silver award of the Order of St. Michael during the 21st Cavalry Brigade Christmas Ball on Dec. 5, 2004. Phantom Corps Chapter President COL John Arnold made the presentation before an audience of more than 500 people in the Killeen Civic Center. Simmons was honored for his over 30 years of service to the nation, the Army, and Army Aviation.

ARMY PHOTO BY DOUG SCHAUB

Central Florida Chapter

The Bronze award of the Order of St. Michael was presented to *Dr. James T. Blake* during an Army birthday ball held June 11 in Orlando, Fla. Blake, a retired Army colonel and master army aviator, is the Program Executive Officer for Simulation, Training and Instrumentation in Orlando. He was recognized for his numerous aviation accomplishments during his active duty career, and for his leadership and accomplishments with Army aviation simulators and training device programs over the years and in his current position as the PEO-STRI. COL Kevin Noonan (left), Central Florida Chapter vice president for Military Affairs, presented Blake with the prestigious award, assisted by Dr. Michael Genetti, president of the AUSA Sunshine Chapter and co-host of the Army ball with PEO-STRI.

New Chapter Officers

Air Assault Chapter:
COL Warren E. Phipps, Jr., President

Colonial Virginia Chapter:
COL William M. Gavora, President;
SSG Jeff R. Loyd, VP Membership

Greater Chicago Chapter:
CPT Steven R. Gambichler, Treasurer

Morning Calm Chapter:
COL Pete W. Foreman, President;
LTC Charles L. Atkins, Vice President (Seoul Area)

Rising Sun Chapter:
CW5 Kenneth D. Collier, President

Distinguished Instructor

A Chapter Program to Recognize Outstanding Aviation Instructors on a Monthly Basis.

GS-09 Donald G. Lamury
(Colonial Virginia Chapter)

Aces

The following members have been recognized as Aces for their signing up five new members each.

CW5 Kenneth A. Donahue, Ret.
MAJ Jerry R. Gray
MAJ Benjamin H. Lacy, III

New AAAA Order of St. Michael Recipients

(Silver)

Matthew M. Serletic
COL John D. Burke
COL Dannis E. Livingston
COL Dale W. Clelland
COL Walter M. Golden, Jr.
COL William T. Harrison
COL Robert E. Landstrom
COL David J. Abramowitz
COL Steven P. Semmens
COL Robert A. Mangum, Ret.
MSG David E. Lizotte, Ret.
COL John S. Arnold
BG(P) Jeffrey J. Schloesser

(Bronze)

Nello P. Lopez
Richard Jackson
CW4 Craig A. Ernst
CPT Karl M. Wotjkun
MG Lloyd Austin
CW4 Joseph Sadowski
1SG Dwight Attheide
1SG Donald McGuire
1SG Donavon Perkins
SFC Vaughan Thompson
1SG Lawrence Dougherty
1SG Alexander Bautista
CW3 Thomas Oroho
1SG Jaime Aburto
LTC Paul Reist
MAJ Scott Dickey
MAJ Kevin Christensen
MAJ Scott Halverson
CSM Luis A. Baez Delgado
SGM James Parsons
CW5 William Goforth
SFC Robert Ortopan
MAJ Raymond Koop
SGM Lebert O. Beharie
CW4 Dennis Seymour
CW4 Robert Duffney
CW4 Charles Dodd
CW4 Carl Solida
CW4 William Stewmon
CW3 Carl Schoenwald
CW4 Ronald Thompson
MAJ Stephen W. Wilson
CW5 Dexter Chun
1SG Richard B. Lemke
MSG Christopher M. Pakutka
CW4 Brian K. McFadden
MAJ Michael P. Allard
CW4 Butch Daniel
Tommie Harding
James F. Carey
MSG Thomas M. Evans
CW4 David K. Wood
Donald Woodbury
CW5 Maurice N. Boisvert
MAJ Mitchel E. Hadad II
LTC Charles Dean
LTC Patrick E. Tierney
LTC Michael W. Drumm
Lawrence Beyer
COL Paul Amalfitano
CW5 Timothy O'Neill
LTC Wendell May
LTC Anthony Gray
CSM Bruce Smith
CW5 Leonard J. Eichhorn
CSM James W. Martin
MAJ Scott R. Alpeter
CW4(P) Mark Riddle
1SG Trefus E. Lee
SFC William G. Howard
CW4 Ted Tomczyk
MAJ Victor C. Lindenmeyer
CW4 Kenneth S. Morse
CW3 Cynthia L. Nielsen
1SG Jeffrey S. Paulson
MAJ Erik O. Gilbert
MAJ John Elliott
LTC Steven R. Busch
COL Ray Fitzgerald, Ret.
CW5 Steven C. Goetz
CPT Armando R. Munguia
CW4 Kenneth E. Elliott
MSG Alexander W. Barber
MAJ Gary L. Cunningham
MAJ Keith A. Flail
MSG Mark J. Hampton
SGM Joseph D. Harris
CW4 Donald R. Choate
MAJ Stuart S. Smith
LTC Christopher J. MacFarland
MAJ Kevin D. Williams
MAJ Timothy J. Leake
CW4 Richard L. Harmon
CW3 George K. Snyder
1SG Bradley W. Crumpton
1SG Foy P. Fields
1SG Keith V. Cooper
CSM Tonia T. Walker
CW4 Adrian Cerdedo
CW3 Joseph E. Hacia
COL Konrad J. Troutman
Jerry A. Krometis
James M. Boaz
CW4 William H. Hollingsworth
LTC Michael S. Sturgeon
MSG Annette Ortiz
LTC Dave Rodgers
LTC Kirk E. McIntosh
CPT Steven Dail
CPT Greg Hardy
SFC David S. Pitchford
CW3 Brent M. South
CW4 Susan L. Bowen

PHOTO BY CPT RICHARD MARTIN

Phantom Corps Chapter

MG Steven Best (left), commanding general of the 75th Division (Training Support), U.S. Army Reserve, assisted with the presentation of the Bronze award of the Order of St. Michael to *SGM Richard Ballard*, during a training brief at Fort Riley, Kan. on April 24. Ballard was the Sergeant Major of the 1st Bn., 291st Avn Regt., 3rd Brigade (TS) at Fort Hood, Texas. He was cited for his many contributions to reserve component aviation readiness, including coaching and mentoring battalion CSMs during post-mobilization training for Bosnia, Kosovo, Afghanistan and Iraq as well as during numerous unit annual training periods. Ballard was also instrumental in integrating training for RC air traffic service units as the Army's Air Traffic Services Command stood up its headquarters. Pictured right of Ballard are his brigade and battalion commanders, COL Michael Courts and LTC Bryan Bequette. Courts, with the Mid America Chapter, helped with arranging the OSM presentation. Today Ballard is the S3 Operations SGM with the 4th Inf. Div.'s multi-functional aviation brigade at Fort Hood.

PHOTO BY RENE BIDEZ / AAAA

Arizona Chapter

The Bronze award of the Order of St. Michael was presented to *John R. Rawling* by COL Ralph Pallotta, Program Manager for Apache Attack Helicopter, on May 10 on the exhibit hall floor of the AAAA Annual Convention in Florida. Rawling, who is the president and general manager of Robertson Aviation, LLC of Tempe, Ariz., was honored for his years of support to Army aviation, including the development of crashworthy fuel cells for Apache, Black Hawk and Chinook aircraft. Assisting with the presentation are retired LTC Gary M. Bishop (left), chapter president and director of Boeing's U.S. Army Apache Helicopter Program, and retired LTG Gus Cianciola.

PHOTO BY CW4 STEVEN SANDERS, RET.

Tennessee Valley Chapter

TVC President Bob Birmingham presented the Silver award of the Order of St. Michael to retired *LTC John W. Kavanaugh, Jr.* of Huntsville, Ala., during a private ceremony at the Redstone Arsenal on April 18. Kavanaugh has served the Army Aviation community for more than 39 years as an officer and Department of the Army civilian. He is the recipient of two Distinguished Flying Crosses, with more than 7,000 flight hours. Kavanaugh currently serves as the principal industrial and aviation safety manager in the Safety Office of the U.S. Army Aviation and Missile Command at Redstone Arsenal.

PHOTOS BY JAMES DONANDI

Greater Atlanta Chapter

Two awards of the Order of St. Michael were presented June 3 at the U.S. Army Forces Command at Fort McPherson, Ga. to two retiring aviation officers. LTC B.J. Leary, chief of the Aviation Branch, presented the Silver award to *COL Michael O. Grant* (in suit & tie above), for his 35 years of service to the nation, the Army, and to Army aviation. Grant served as the FORSCOM Aviation Division Chief. *LTC William J. Petree* (right photo) was presented with a Bronze OSM upon his retirement from the Army after 24 years of service. Petree was Grant's deputy Aviation Division Chief. Both men served as executive agents for inspections and assistance rendered to 76 aviation battalions and over 1,100 aircraft throughout the continental United States.

Tennessee Valley Chapter Holds Spring Bass Tournament

Thursday evening, April 21, the fishermen began to arrive at the Joe Wheeler State Park, near Rogersville, Ala., in anticipation of the TVC's annual spring bass tourney. The fellowship lasted to the wee hours and launch time came early at 5:41 a.m. Twenty boats entered the water for the two-day competition.

Day 1 yielded 60 bass weighing in at 90.8 pounds. First place went to Chuck Hemm and Pat Anderson with five fish weighing a total of 11.2 pounds. The big fish of the day at four pounds was caught by Peter Fowles and Josh Butler, who placed second with five fish totaling 9.4 lbs.

Day 2 greeted the 17 boats that launched with the challenges of brisk winds, cool temperatures and 3 to 4 foot swells on the Tennessee River. The team of Jim Rowland, Matt Boenker, Kevin Zylo and Stew Chen (pictured Right) with each of their "big catch" fish from Day 2) tied for first place with the team of Chuck Hemm and Ben Green, with both weighing-in with fish totaling 10.4 lbs. The total haul for Day 2 was 66 fish at over 100 lbs.

The award ceremony included a salute to those present who served in Afghanistan or Iraq and was punctuated with door prizes provided by the sponsors.

Thanks go to Tomahawk Tackle, Dynetics, Southwest Research, Inc., WESTAR, Redstone AAFES, Dick's Sporting Goods, Anderson Boats, SRI, SAIC, SRA International, Inc., Aerodyne, Avion, Secret Weapon Lures, Dynamics Research Corporation, Yulista, Bill Heard Chevrolet, and NP Precision Inc. for supporting the tournament.

Contact the TVC if you would like to join them for their 2005 Fall Bass Tournament.

PHOTO BY TOM GEOFFROY

Day 2 weigh-in: Jim Rowland, Matt Boenker, Kevin Zylo and Stew Chen

ARMY AVIATION ASSOCIATION

Attention AAAA Members!!!

send us your e-mail address

(especially your AKO Account)

Send to:

AAAA National Office

e-mail: aaaa@quad-a.org

PHOTO BY LIRA FRYE

TVC President Bob Birmingham (second from left) presents a check on behalf of the chapter for $500 to the Huntsville, Ala. Vets for Vets Club President Bill Lang on May 17th. Lang, along with VFVC vice presidents Pete Fast (left) and Jerry Campbell, helped to organize a car show to benefit the Redstone Arsenal's 2005 Army Emergency Relief campaign.

LEGISLATIVE REPORT

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

FLAG DESECRATION AMENDMENTS

In a June 14 report, the House Judiciary Committee once again approved a proposed constitutional amendment that would allow Congress to pass legislation prohibiting the physical desecration of the U.S. Flag.

H.J. Res. 10, sponsored by Rep. Randy Cunningham (R-CA) was approved in committee by a vote of 17-9. The Senate version, S.J. Res. 12, sponsored by Sen. Orrin Hatch (R-UT) was introduced in the Senate on April 14 and has been referred to the Senate Judiciary Committee for further action.

The Military Coalition (TMC) supports House and Senate approval of the proposed flag amendment so that the issue may be referred to the states where the people can decide on the issue. Passage of a constitutional amendment requires a two-thirds vote in both houses of Congress and ratification by three-fourths of the states. Proposed amendments have been approved by the House in four consecutive Congresses but were not approved by the required margin in the Senate.

CONGRESSMAN HOYER HEARS HEALTH CARE CONCERNS

A number of TMC partners and other veterans' groups attended a meeting on June 10 with House Minority Whip Congressman Steny Hoyer (D-MD) to discuss veteran and military health care issues.

It was stressed that quality health care is key to maintaining the all-volunteer force and, without it we can expect even more problems with recruitment and retention. A continuous health coverage option must be provided to National Guard and Reserve members. As a first step, TRICARE eligibility should be available to all Guard and Reserve personnel.

Other topics addressed included:

- Potential Medicare provider reimbursement rate cuts scheduled for Jan. 2006. If these cuts go through it could have a devastating impact on access to medical providers. [TMC backs legislation (S. 1081/H.R. 2356) to raise Medicare reimbursement rates]
- Concern over the impact of a new round of Base Realignment and Closing decisions and downsizing of military medical billets on access to health care.
- Proposed closing of VA facilities that provide mental health care services for Post Traumatic Stress Disorder (PTSD) and other conditions.
- Concern over VA plans to re-review over 100,000 PTSD cases, in light of an already large and growing backlog of un-resolved VA claims.

HOUSE PANEL CONSIDERS INSURANCE UPGRADES

TMC, along with other veterans service organization (VSO) representatives and government officials, appeared before the House Subcommittee on Disability Assistance and Memorial Affairs to present testimony on legislation to permanently raise the Service member Group Life Insurance (SGLI) coverage level to $400,000 and to consider H.R. 1618, a bill to establish disability insurance for traumatically injured service members.

Congress recently passed legislation for a special death gratuity for troops killed in combat or a combat-like event since Oct. 7, 2001, and a temporary increase to SGLI. Since the Iraq War Supplemental funding measure expires on September 30, Congress must enact permanent authority for the $400,000 SGLI coverage level. The Supplemental also established permanent authority for new traumatic injury insurance as a rider to SGLI.

A key issue was whether the $400,000 elective SGLI coverage should give a military spouse the right to refuse lower coverage chosen by a service member — a "spousal consent" clause. The Iraq Supplemental requires the Defense Department to obtain such consent. But ranking member Shelley Berkley (D-NV) said that the spouse consent provision should be eliminated in favor of spousal or next-of-kin notification. TMC's testimony also endorsed spouse notification as an equitable way to address a wide variety of family and dependent circumstances in the military today.

Rep. Rick Renzi (R-AZ) testified in support of his Wounded Warrior Service members Group Disability Insurance Act of 2005 (H.R. 1618). Renzi's intention is to ease financial burdens in the event of a traumatic injury, not to compensate those injuries. TMC and other VSOs support this view.

TMC reps have met with wounded troops at Walter Reed and heard first-hand accounts of families who incur financial hardships when families come to Washington and spouses leave their civilian jobs to support their wounded service member.

Other witnesses said they worry that the legislation for wounded troops could later be used to weaken the Veterans Affairs' disability compensation program.

Since permanent authority for the traumatic injury insurance program was included in the Iraq Supplemental funding law, it appears that the Subcommittee may only make technical modifications to the law. TMC recommended that the Veterans Affairs be required to report to Congress any additional disabilities that should qualify for the insurance including, potentially, severe mental health trauma.

DEFENSE BILL FACES DELAY IN SENATE

Before the Memorial Day recess, Senate Armed Services Committee leaders had hoped to begin Senate consideration of the 2006 Defense Authorization Bill (S. 1042). That didn't happen, and now it's uncertain whether the Senate will get to it before the July 4th recess.

The main reason is that Senate Majority Leader Bill Frist (R-TN) is concerned the bill would get bogged down with hundreds of amendments, particularly by senators anxious to keep military bases in their states off the base realignment and closure (BRAC) list. With lots of other work on the Senate's agenda, Frist hopes to get some kind of agreement on limiting amendments before he allows the defense bill to come up for action.

The House passed its version of the defense bill (H.R. 1815) on May 25. Once the Senate passes its own bill, House and Senate leaders will convene a conference committee to work out the differences between the two, and then the House and Senate will each need to pass that final version. History indicates the final deal probably won't be worked out before October at the earliest. But that timetable could be delayed even further if the Senate doesn't approve its version in July.

PENTAGON COMMITTEE TO CONSIDER RETIREMENT & HEALTH CHANGES

At a June 7 meeting, members of the Defense Advisory Committee on Military Compensation discussed their plan to develop a report to the Pentagon this September with recommendations for changing the mili-

tary compensation package.

The Committee will focus on three major areas: the balance between cash and in-kind compensation, the balance between current and deferred compensation, and flexibility of the system to meet force management goals in both peace and war for active and reserve components.

Given the repeated complaints of Defense Department officials that military health care and retirement benefits cost too much, it's not a surprise that the committee members indicated that they intend to look at possibilities for civilian-style retirement options that would shift emphasis toward longer service and 401(k)-style retirement benefits, and increased beneficiary payments for health care.

They said their recommendations likely would have little impact on the current force, but would be mostly prospective in nature. That's what happened in 1986, when Congress enacted the so-called REDUX retirement system that cut lifetime retirement benefits for post-1986 entrants by about 20 percent due to lower initial payments for 20-year retirees and reduced annual cost-of-living adjustments. By the late 1990s, lower retention among REDUX-eligible servicemembers prompted Congress to repeal that plan.

The Commission also will be looking at ways to adjust the Guard and Reserve compensation package to recognize the much bigger role those members now have in operational missions.

TMC will be following the Commission's progress with great interest. Our perspective is that there are good reasons why so many previous proposals to adopt more civilian-like retirement plans for the military haven't been successful. The main reason is that conditions of service for military members are so radically different from those of private sector workers.

Another is that the services are dependent upon promotion from within. Paying more benefits to people who leave service voluntarily (civilian-style vesting) while reducing retired pay for people who serve a career can leave the services vulnerable to losses of mid-career personnel, particularly during periods of high operational stress. Unlike civilian firms, the military can't just go hire more experienced Soldiers, sailors, airmen and Marines, but must spend many years and millions of dollars recruiting, training and growing those replacements.

Fortunately, Congress has been considerably more attuned to such issues in sorting out which changes make sense and which ones don't.

WHAT'S CONGRESS DOING FOR YOU THIS YEAR?

The annual National Defense Authorization Act (NDAA) is the biggest single vehicle for enacting personnel, compensation and benefits changes and improvements. The House passed its version in May, and the Senate hopes to finish up its version in July. (Not known at press time)

As each bill has progressed steadily, we've covered a number of the biggest highlights in the two bills ranging from the 3.1 percent pay raise and Army manpower increases, to the failed initiatives in the House to improve Reserve TRICARE coverage and slow down the base closure process. However, the House and Senate bills each propose dozens more initiatives of interest to various segments of the military community. TMC representatives and committee chairs have summarized virtually all of the personnel and benefit sections, including non-legislative report language, to highlight where the House and Senate bills are the same and where they differ.

Here are several selected highlights not mentioned in previous updates:

- House and Senate provisions restrict further civilianizing of medical billets unless DOD can certify doing so won't reduce care access, quality or raise costs.
- House and Senate provisions effectively continue combat pays for wounded troops during hospitalization.
- House and Senate provisions make permanent the temporary death benefits upgrades passed earlier this year in the Emergency Supplemental Appropriations Act.
- House and Senate provisions require enhanced casualty assistance for wounded service members, their families, and survivors of members killed on active duty.
- Senate Committee language directs DOD to take steps to implement premium conversion and flexible spending accounts to exempt active duty and Selected Reserve members from paying income taxes on health and dental premiums and out-of-pocket health and dependent care costs.
- The Senate would protect nursing home resident TRICARE beneficiaries from certain pharmacy charges.
- The Senate would require a TRICARE standard coordinator in each region charged with recruiting providers and helping beneficiaries find providers.
- The House proposes a moratorium on commissary privatization studies.
- The House bill would re-designate the Dept. of the Navy as the Department of Navy and Marine Corps.
- The House would require the services to notify Individual Ready Reserve (IRR) members of the end date of their military service obligation, and prohibit involuntary activation of IRR members after that obligation expires.
- The House calls for a General Accounting Office review of allegations of unfair treatment of reservists in the disability evaluation process.
- The House directs a review of TRICARE reimbursement policies for beneficiaries with other health insurance.

POLL SHOWS HIGH CONFIDENCE IN MILITARY

Results of a nationwide Gallup poll in late May put the military at the top of all public institutions in which the public has confidence. The similarity to results of previous polls is a welcome sign that the war in Iraq appears to have had little effect on Americans' faith in those in uniform.

Forty-two percent of those surveyed indicate they have "a great deal" of confidence in the military, and 32 percent said they had "quite a lot." 15 percent reported "some confidence," 7 percent "very little," and 1 percent "none."

Combining the "great deal" and "quite a lot" categories to simplify reporting, here is a list of the top 15 institutions rated in order of public confidence:

Military	74%
Police	63%
Church & organized religion	53%
Banks	49%
Presidency	44%
Medical system	42%
U.S. Supreme Court	41%
Public schools	37%
TV news	28%
Newspapers	28%
Criminal Justice System	26%
Organized Labor	24%
Congress	22%
Big Business	22%
Health Maintenance Org. (HMOs)	17%

From the AAAA President's Cockpit

It has been a busy two months as your new president. I attended the American Helicopter Society annual meeting in Grapevine, Texas, visited a future convention site, and made numerous office calls in Washington, D.C.

In June, Executive Director Bill Harris and I met in Atlanta to view potential facilities for the 2007 Convention, which will mark the Association's 50th Anniversary since its founding in 1957. Rest assured it will be a grand celebration in a first class city, in a new and very efficiently designed wing of the Georgia World Congress Center that more than meets the challenges we experienced the last time we held the convention there in 1995. In addition, planning is also well under way for the 2006 Convention next April 9 to 12 in Nashville at the Gaylord Opryland Resort.

Konitzer visits with LTC Dennis Walburn and wife Brenda.

After Atlanta, we flew to Washington, D.C., for a meeting with retired GEN Jack Keane, the new Chair of the AAAA Senior Executive Associates Program. We also commenced two days of office calls with several key leaders: GEN Dick Cody, the VCSA; SMA Kenneth Preston, Sergeant Major of the Army; MG Walter Pudlowski, the acting director of the Army National Guard; and with Mr. Rhett Flater, the executive director of the American Helicopter Society. We had some great discussions about the future direction of AAAA and Soldier support.

PHOTOS BY WILLIAM HARRIS/AAPI

Office call with SMA Kenneth O. Preston.

However, without a doubt, the most significant event was spending time with our wounded OIF and OEF Soldiers at the Army's Walter Reed Medical Center. I cannot tell you how proud I am of these great Americans. Most were without limbs, but none was without spirit, courage and determination.

When Bill and I walked into LTC Dennis Walburn's room, with his wife Brenda at his side, the first thing he said was, "I'm a Life Member of AAAA, although I haven't flown since '95." Dennis, a member of the Florida Army National Guard, was with a Stryker Brigade and lost his leg to an improvised explosive device detonation. We visited many more Soldiers and all were an inspiration. Our prayers and support go out to them, their fallen comrades, and all the families.

In the June issue I spoke of the AAAA strategic focus with the specific purpose of "To Support the U.S. Army Aviation Soldier." Everything we do will be measured against this standard.

Goal number one is that AAAA will be the "Advocate for Aviation Soldier issues." We'll accomplish this by educating key decision makers and facilitating communication. We are already working this hard.

Goal number two is to provide the resources, financial and other, to our AAAA chapters, military organizations and individuals working to support Army Aviation Soldiers. The National Executive Board relies upon you as members and your local chapters as the best source to identify Aviation Soldier needs. The system is working, as evidenced by the numerous recent chapter requests for support for OIF and OEF "Welcome Home" activities, and the Tennessee Valley Chapter's request to co-underwrite sweatsuits for wounded Soldiers needing clothing as they transition through military medical facilities in Germany. But we can do more!

AAAA has the resources and is committed to support the Army Aviation Soldier. We need to hear from you how we can best do that.

Tom Konitzer
AAAA President
president@quad-a.org

FALLEN HEROES

AAAA is saddened to announce the loss of the following Soldiers with Aviation units serving in support of the global war on terrorism.

CW4 Lourey

CW2 Scott

CPT Gonzalez

Operation Iraqi Freedom

Two Task Force Liberty OH-58D Kiowa Warrior helicopters were struck by small arms fire at about 10:50 p.m. on May 26 while conducting operations near Baqouba, 35 miles northeast of Baghdad. One of the aircraft crashed after being shot-down, the other helicopter landed safely at a nearby base after sustaining damage. The two pilots of the downed aircraft died May 27 from their injuries.

The Soldiers were:

CW4 Matthew Scott Lourey, 40, of East Bethel, Minn.
CW2 Joshua Michael Scott, 28, of Sun Prairie, Wis.

Both were assigned to the 1st Sqdn., 17th Cavalry Regt., 82nd Airborne Div., Fort Bragg, N.C.

Homeland Defense

The body of **CPT Jason Luz Gonzalez**, 28, a Fort Hood AH-64 Apache pilot was discovered in his Harker Heights, Texas home June 3 with multiple gunshot wounds. Gonzalez, a father of two and an OIF veteran, was the commander of Headquarters and Headquarters Troop, 1st Sqdn., 6th Cavalry Regt., 4th Inf. Div. The Harker Heights police have charged four men, including two teenagers, with capital murder June 20 in the death of Gonzalez. The suspects are being held at Bell County Jail on bail of $1 million each. Gonzalez was scheduled to go back to Iraq at the end of the year.

(Information from Dept. of Defense news releases and media sources.)

Advertisers Index

Upcoming Events

AUGUST 2005
- **Aug 15-17** AFCEA 27th Annual Conference & Exposition, Fort Bragg, NC

SEPTEMBER 2005
- **Sep 12-14** AFA Air & Space Conference, Washington, DC
- **Sep 17-19** NGAUS 127th General Conference, Honolulu, HI

OCTOBER 2005
- **Oct. 3-5** AUSA Annual Meeting, Washington Convention Center, DC
- **Oct. 3** AAAA Scholarship BOG Meeting, Washington Convention Ctr., DC
- **Oct. 3** AAAA Nat. Executive Board Meeting, Washington Convention Ctr., DC
- **Oct. 17-20** AFCEA Infotech 2005 Conference & Exhibition, Dayton, OH

JANUARY 2006
- **Jan. 27** AAAA Scholarship Executive Committee Meeting, NGRC, Arlington, VA
- **Jan. 28** AAAA National Awards Committee Meeting, NGRC, Arlington, VA

FEBRUARY 2006
- **Feb. 15-17** AUSA Winter Symposium & Exhibition, Fort Lauderdale Convention Center, FL
- **Feb. 26-28** HAI HELI-EXPO 2006, Dallas, TX

APRIL 2006
- **April 9-12** AAAA Annual Convention, Gaylord Opryland Convention & Resort Center, Nashville, TN

JULY 2006
- **July 21** AAAA Scholarship Ex. Committee Meeting, NGRC, Arlington, VA
- **July 22** AAAA Scholarship Selection Committee Meeting, NGRC, Arlington, VA

Army Aviation Hall of Fame

The Army Aviation Hall of Fame sponsored by the Army Aviation Association of America, 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 2007. Contact the AAAA National Office for details at (203) 268-2450

MAJ Charles L. Kelly
Army Aviation Hall of Fame 1975 Induction

MAJ Charles L. Kelly, Army Medical Service Corps, was DUSTOFF and DUSTOFF was "Combat Kelly." The two became synonymous during the Vietnam War in 1964 when the most effective of all emergency evacuation systems emerged to full maturity in the mountains and rice paddies of this Southeast Asian country.

As commander of the 57th Medical Detachment (Helicopter Ambulance), Kelly assumed the call sign "DUSTOFF." His skill, aplomb, dedication and daring soon made both famous throughout the Mekong Delta region. The lonely silence of many a distant outpost was broken by his radio draw, "This is DUSTOFF. Just checking in to see if everything is okay." And when there were wounded on the ground, in came Kelly with his crew... "hell bent for leather!"

On one such mission on July 1, 1964, Kelly approached an area hot with enemy activity to pick up wounded, only to find the enemy waiting with a withering barrage of fire. Although Kelly was advised repeatedly to withdraw, he calmly ignored the warning and replied to the ground element's advisor, "When I have your wounded." Moments later he was killed by a single bullet. Kelly was dead, but the air evacuation was only beginning.

His "DUSTOFF" became the call sign for all aeromedical evacuation missions in Vietnam, and his "When I have your wounded" became the personal and collective credo of the many gallant medevac pilots who followed him.

An exceptionally capable instructor in medical subjects as a captain, Kelly demonstrated a high degree of positive leadership early in his career, an asset that became fully evident in later combat in Vietnam.

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