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Paid Advertisement. U.S. Army CH-47 Chinooks flew relief missions in El Savador immediately after the devastating earthquake in January, much as they did in Honduras, pictured here, after Hurricane Mitch. Chinooks are unparalleled at emergency relief because of their reliability and heavy lift capability. *Caption provided by advertiser.*

briefings

As this issue went to press the last of the **AH-64 Apache** helicopters grounded Dec. 14 as a precautionary measure following the discovery of a faulty tail-rotor swashplate assembly were to have been returned to service. All 742 of the Army's A- and D-model Apaches were initially affected by the grounding order, though on Dec. 21 648 of the aircraft were returned to flight operations after an inspection determined they didn't have swashplate assemblies from potentially defective lots. The repair-and-replace action on the last of the 94 potentially defective AH-64s is being completed at Corpus Christi Army Depot, Texas.

Northrop Grumman Corp.'s Integrated Systems Sector has delivered the eighth E-8C Joint STARS production aircraft. The E-8C went to the Air Force's 93rd Air Control Wing at Robbins AFB, Ga. In related news, Grumman's California Microwave Systems unit has rolled out the Army's first full-capability RC-7B Airborne Reconnaissance Low-Multifunction (ARL-M) aircraft. It is the fifth machine in the ARL-M series, and is the first to feature the complete multifunction, multimission performance originally envisioned by the Army.

Five aviators from the Nevada Army National Guard's Det. 1, 717th Medical Company, have been honored for rescuing two crewmen of a crashed Navy SH-60 helicopter. **CPT Daniel Waters, CW3 Craig F. Robinson, SGT Steven D. Milovich, SGT Patrick Moore and SGT Randy L. Barnes** received the Navy and Marine Corps Achievement Medal and the Valley Forge Cross for Heroism. Waters and Robinson also received Air Medals, while Milovich, Moore and Barnes received the Soldier's Medal. All were honored for their actions during the rescue, which occurred nearly two years ago when the Guard aviators lifted the two Navy crewmen from the crash site, near the summit of Nevada's 11,000-foot Mt. Grant.

Pictured left to right are Army Guard commander BG Robert Hayes; crew chief SGT Steven D. Milovich; flight medic SGT Randy Barnes; copilot CPT Daniel Waters; and battalion commander LTC Steve Brown. Not pictured are copilot CW3 Craig F. Robinson and crew chief SGT Patrick Moore, who are attending a military school.

The U.S. Army Aviation Museum at Fort Rucker, Ala., has a new website. Located at **www.armyavnmuseum.org**, the site offers updated information about the museum's history, major exhibits, collection and educational programs. Also available are updated sections on the Army Aviation Museum Foundation and its membership. In addition, the site offers a complete section on Army aviation history. The website supports both the museum and the foundation in their efforts to enhance public awareness of, and interest in, Army aviation and its heritage.

Correction: Due to a typographical error, **MAJ Delbert L. Bristol's** name appeared incorrectly in the heading of his Hall of Fame citation page of the January issue. Please see page 39 of this issue for the corrected citation.

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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, 49 Richmondville Avenue, Westport, CT 06880-2000. Tel: (203) 226-8184, FAX: (203) 222-9863, 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 Westport, CT and other offices. Send address changes to AAPI, 49 Richmondville Ave., Westport, CT 06880-2000.

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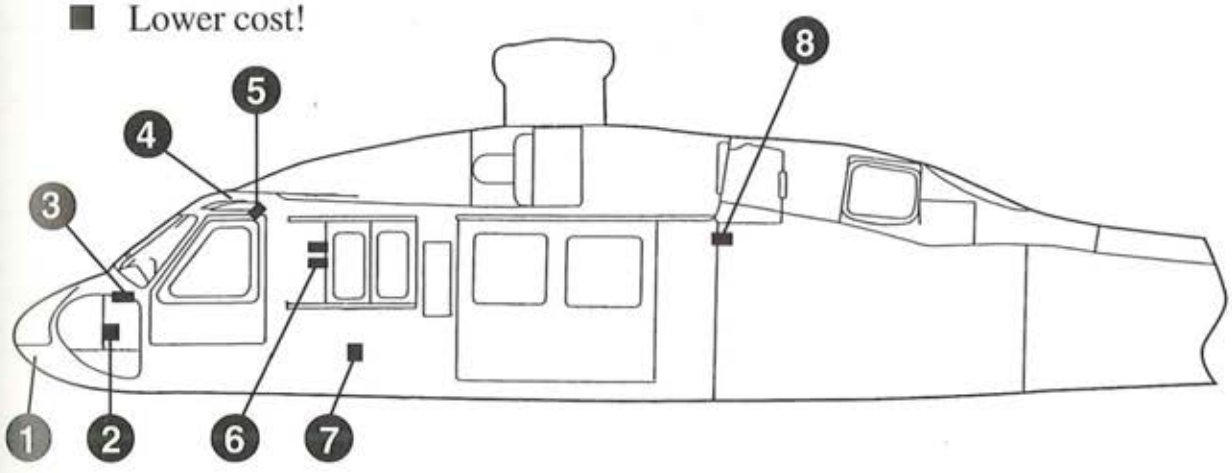

Locations of Mini-Ejectors

1. Chin window defoggers (2 each)
2. Cockpit heater outlets provide heat to cockpit floor – lower (2 each)
3. Cockpit heater outlets – upper (2 each)
4. Overhead viewing window defoggers (2 each)
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6. Gunner's window defoggers (2 each, each side)
7. Cabin heater outlets – forward (2 each)
8. Cabin heater outlets – aft (2 each)

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UAV-Air Maneuver Integrated Operation

By MG Anthony R. Jones

The mission of the Air Maneuver Battle Laboratory (AMBL) is "to examine advanced concepts and technology through warfighting experimentation and technology demonstrations to assess if they enhance the commander's ability to fight and win on the 21st-century battlefield." The AMBL uses a combination of constructive, virtual and live simulations to execute that comprehensive mission.

Since 1993 AMBL has explored advanced concepts of teaming manned and unmanned aerial platform system capabilities on the digitized battlefield in order to capitalize on the unique benefits provided by each system. Our focus has been on capabilities, equipment, employment methods and concepts that provide relevant battlefield information to assist in answering the maneuver Commander's Critical Information Requirements (CCIR). In particular, the focus has been on information provided by a lethal, survivable, flexible team — an air-maneuver team — of helicopters and unmanned aerial vehicles (UAVs) conducting tactical reconnaissance missions.

Manned and Unmanned Experiments

In 1996 AMBL began a series of Manned and Unmanned (MUM) Concept Experimentation Programs (CEPs) to investigate the synergy that occurs when the capabilities of manned and unmanned aerial platforms are combined. MUM I and II CEPs were completed in 1997 and 1998, respectively.

During 1999 and 2000 AMBL conducted the MUM III CEP, which examined the synergistic effect of teaming in order to increase the commander's ability to visualize, shape and dominate the battlespace. Initially, the experiment assessed the information exchange between the UAV and helicopter when the UAV platform and sensor payload were controlled from the manned platform (level 4 control). The information received from the UAV sensor payload was processed through the Comanche's Mission Equipment Package (MEP) Aided Target Detection/Classification system.

MUM III CEP also examined Cognitive Decision Aiding technology from the Rotorcraft Pilot's Associate (RPA) Advanced Technology Demonstration to enhance both hasty and deep-attack missions, and en route reconnaissance and security operations. The integration and use of the RPA Cognitive Decision Aiding System (CDAS) improved the overall mission effectiveness of the team.

During MUM III the potential effectiveness and efficiencies of CDAS tools were successfully demonstrated. The results of MUM III clearly indicate that without integrating a reasonable level of CDAS tools the manned system cannot effectively conduct teaming operations when controlling the UAV platform and sensor payload (level 4 control). Without CDAS tools to assist in providing MANPRINT solutions, the most effective teaming operation is controlling the UAV platform and sensor payload from the ground-control station with sensor data being transmitted directly to the manned system (level 2 control). Using level 2 control, the manned system communicates with the GCS and the GCS directs the UAV platform and sensor payload. Here's what we have learned from MUM I-III:

- Top three roles and missions are reconnaissance, surveillance/targeting and battle damage assessment (BDA), and communications relay.

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- Synergy is maximized when MUM aerial platforms use control level 4 with cognitive decision aids, detailed planning and training.
- When force effectiveness, situational awareness and battlespace coverage increase, mission execution times decrease.
- A UAV with comparable performance is best suited for teaming with other manned air maneuver systems.
- Tactics, techniques and procedures (TTPs) developed and refined in MUM I-III support the Comanche/UAV teaming concept.
- Effective teaming is limited by current tactical UAV capabilities.
- Future UAV platforms require plug-and-play modularity and sensors with advanced technology and greater capability.

The results of MUM III CEP are being integrated into the design of the recently approved MUM IV CEP. MUM IV will continue to investigate CDAS applications to assist in providing the commander a common relevant picture using the C4ISR architecture and operating as a system of systems. This CEP will identify the CDAS requirements necessary to conduct MUM team operations, identify the most appropriate level of command and control, and define the MUM mix at the team, platoon and troop level. We envision that these MUM teams will support the interim and objective force brigade combat team, division and corps across the full spectrum of operations.

The focus of MUM IV will be on the contributions of the mix of Comanche and UAV to tactical ISR (for example, using the Comanche system as a remote ASAS work station), and the use of computer-assisted control technology to provide timely and relevant information. Candidate technologies from Science and Technology Objectives include automated man-computer-machine interfaces; real-time mission replanning; near-term historical cognizance of areas covered by sensors; data monitoring; and employment of aided target recognizer technology in support of commander's intent, CCIR and high-priority targets.

The overall MUM IV objective is to define a capability requirement that will enhance the warfighter's ability to effectively control the actions of unmanned platforms and their sensors with minimum operator input, and capitalize on data fusion and aided target recognition to focus the reconnaissance effort on high-payoff areas. The MUM IV CEP will assist the Horizontal Technology Integration (HTI) of concepts and technologies to control of UAVs and unmanned ground vehicles (UGVs), combined with tactical decision aiding technology for asset and mission management.

Candidate concepts and technologies assist mission planning, create a composite battlefield picture, detect plan violations, recommend plan changes based on threat actions, collect and distribute battlefield information, ensure communications links and manage the battle. Mission scenarios include reconnaissance, surveillance and attack operatio over extended battlespace. The CEP's determination workload issues, and definition of the team and plato mix, will be essential input into follow-on studies of t optimal mix of manned and unmanned platforms above t company and battalion operations. CEP outputs will su port determination of control and decision-aiding technol gy insertion options throughout the platforms of the co bined arms team.

The results of MUM IV will directly affect the followi initiatives being investigated and supported by the Aviati Warfighting Center:

- Provide support to Air Maneuver Concepts-Unmann Aerial Vehicle Team (AMUAVT) Tier II Integrat Concept Team (ICT), DCD, at Fort Rucker, Ala.
- Revise TTPs and identify requirements f aviation/UAV integration for the RAH-66 Comanche a the AH-64D Longbow.
- Conduct experiments with live UAVs at the Aviati Warfighting Center beginning in April.
- Develop and field sol tions to the air maneuver int gration issues identified b Task Force Hawk.
- Identify integration a teaming insights for use in t Hunter Stand-off Killer Tea (HSKT) ACTD.
- Conduct OSD direct AoA and follow-on objecti force optimum mix analys to support Comanche Mil stone III decision. This pr cess will define the requir capability to fully integrate UAV sensor informati imagery into the RAH-66 Comanche.

> Virtual experiments such as MUM I, II and III have provided valuable insights into the effects of teaming UAVs and helicopters.

Task Force Hawk MUM Initiative

Virtual experiments such as MUM I, II and III have pr vided valuable insights into the effects of teaming UA and helicopters. Additionally, the critical operational ne identified during Task Force Hawk operations in Alban and Kosovo indicates this capability is essential to enhan the information available to the force commander by in grating the AH-64 Apache and Hunter UAV.

These insights and critical operational need are current being integrated into Army experiments. The Jo Contingency Force Advanced Warfighting Experime (JCF AWE) was the first live demonstration of manned a unmanned teaming in a tactical scenario. The purpose w to determine if an unmanned aerial vehicle controlled fro the cockpit of an AH-64D Longbow could provi enhanced situational awareness to the helicopter crew a maneuver commanders. During this experiment an A 64D from the 2nd Battalion, 101st Aviation Regiment, w teamed with a Hunter UAV from the Joint Readine Training Center at Fort Polk, La.

The manned and unmanned teaming initiative w employed in the search and attack phase of the JCF AW During this low-intensity conflict phase, the infant brigade task force was to search for and neutralize squa size enemy guerrilla forces in the brigade's area of oper

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tions. The mission of the AH-64D/UAV team was to conduct several area reconnaissance missions on selected named areas of interest (NAIs) as part of the brigade's intelligence-collection plan.

The AH-64D received telemetry data from the UAV at a distance of 58km, which provided UAV altitude, airspeed and location for both the UAV and where the sensor was looking. Useable, solid video transmission to the AH-64D was measured at 30km. The integration of this information will assist the future maneuver commanders in identifying targets and developing fire distribution plans prior to engaging the enemy.

UAV Integration at the Aviation Warfighting Center

Constructive and virtual simulation exercises have created a foundation of understanding on the use and the synergistic effect of manned and unmanned system teaming on air and ground maneuver in support of joint and combined-arms operations. Congress and the Office of the Secretary of Defense have on several occasions indicated that their goal is to have unmanned air and ground systems by the 2010-2015 timeframe.

It is now time to conduct live experimentation on MUM concepts to further define the requirements and TTPs for UAV and air maneuver integration. The Aviation Warfighting Center (AWC) is a great location in which to conduct the live experimentation and integration. The Directorate of Combat Developments has initiated an Integrated Concept Team, AMBL has developed a plan to visit and collect information from Army organizations which now operate UAVs, and the AWC is finalizing a plan to begin flying UAVs. Training of operators and maintainers, as well as air traffic control, approach control and ground control personnel, requires greater definition of mission tasks before the formal training analysis process can begin. Integrating UAVs at AWC will facilitate achieving the following objectives:

- Address Task Force Hawk Issues "hands-on."
- Establish a minimal aviation UAV capability baseline.
- Validate UAV concepts for air maneuver operations.
- Refines manned/unmanned teaming TTPs.
- Explore force structure and mix implications.
- Participate in warfighting exercises and Army experiments.
- Develop and conduct training.
- Define operational requirements for UAV/air maneuver integrated operations.
- Assist in defining material and software requirements for PM UAV.

UAVs will play an increasingly important role in the interim and objective force by enhancing the commander's ability to dominate the battlespace of the future. Clearly, it is time for a full-scale effort to develop and integrate UAVs into air and ground maneuver operations. As a part of that effort, the Air Maneuver Battle Lab continues to play a defining role for future air maneuver operations.

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MG Anthony R. Jones is commanding general of the U.S. Army Aviation Center at Fort Rucker, Ala., and chief of the aviation branch.

A Successful A&P Initiative

by CSM Edward Iannone

In February 1999, an initiative which the Air Force had been working on for the past 10 years was brought to the attention of then-SMA Robert E. Hall by Air Force Chief Master Sgt. Daniel Santos. This initiative was to be a joint venture consisting of all enlisted aviation personnel within the armed forces to streamline the process of obtaining an Airframe and Powerplant (A&P) license. I was contacted by SMA Hall and advised to select a representative for the Army to join the Air Force in the initiative. Ironically, the Noncommissioned Officer Academy commandant, CSM Sanford Tanna, and Assistant Commandant 1SG Jacquelyn Haynes, had already assigned SFC Thomas B. Hamilton III to research the process of obtaining an A&P license. I contacted Hamilton and assigned him as the Army's representative.

The Federal Aviation Administration informed Santos at the beginning of this venture that all mentioned services must participate or the venture would not be sanctioned by the FAA, hence the birth of the "Tiger Team." Since that initial assignment to the Tiger Team, Hamilton has taken part in many meetings, discussions and symposiums that have led to a streamlined process, better assisting soldiers in their bid for A&P qualification.

A charter outlining the duties and responsibilities of each service to ensure the continuation of the Tiger Team — now designated the Joint Service Aviation Maintenance Technician Certification Council — was put forth. It was to be signed by the commanders of the aviation branches of the Army, Navy, Marines and Coast Guard, and in late January it was at the Pentagon awaiting signature by the Air Force. Also by late January the FAA and DANTES had signed an agreement to administer the written tests of the A&P license procedures. The money required to build the server to house the tests had been allocated and was awaiting transfer to the FAA. The FAA not only agreed to let the written A&P test be administered for free at any military education center worldwide (providing individuals met the requirements for the test), but also gave the Tiger Team the right to administer all 65 aviation tests, a bonus that none of the members on the team could have hoped for.

All outdated Military Occupational Specialty codes listed in Federal Aviation Regulation Part 65, figure 22-1, have been updated and approved by the FAA. Consequently, all 67-series and 68K MOS holders are authorized to take both the Airframe and Powerplant written tests upon graduation from the Basic Noncommissioned Officer Course. Lastly, but most importantly, the FAA approved a matrix, cooperatively designed by all the services, that correlates military instruction to FAR Part 147 to streamline the process and give military members the credit they're due for the schools they've attended.

In addition to all that was accomplished for the advancement of enlisted A&P licensure, all of the services discovered that mechanics in all branches are dedicated to ensuring our pilots board the safest, most effective and most mission-capable aircraft in the world.

This initiative is projected to come into full effect near the end of fiscal year 2001. To learn more about this program or to download samples of the matrix and instruction packet, please visit my webpage at **www-rucker.army.mil/csm/csm/csmdefault.htm** and click on the "Current Issues" link.

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CSM Edward Iannone is the aviation branch command sergeant major at Fort Rucker, Ala.

TUAV Development, Now and for the Future

By COL Michael A. Hamilton
and Mr. Michael C. Padden

Figure 1
Shadow 200 air vehicle

Figure 2
Inside view of ground-control station

INTRODUCTION

The Army's chartered proponent for unmanned aerial vehicles is the Project Manager (PM), Tactical Unmanned Aerial Vehicles (TUAV), at Redstone Arsenal, Ala. The PM-TUAV is responsible for the development, systems integration, acquisition and logistics support of all Army unmanned aerial vehicle systems. The PM-TUAV is under the leadership of the Program Executive Officer for Intelligence, Electronic Warfare and Sensors at Fort Monmouth, N.J., and receives requirements direction from the U.S. Army Training and Doctrine Command (TRADOC) System Manager, Unmanned Aerial Vehicles, at the U.S. Army Intelligence Center and School at Fort Huachuca, Ariz.

Over the last 10 years the Army's development of UAVs has undergone several changes in direction. For the last two years a clear consensus has allowed the developmental focus needed. In 1999 the Joint Requirements Oversight Council (JROC) recommended that the Army pursue a path toward obtaining a single system to fulfill all Army UAV requirements. Currently, the basis for the single UAV system, and the Army's first priority, is the Shadow 200 Brigade TUAV. This system configuration is intended to be modified to accommodate future UAV requirements, in order to meet the mission profile and payload needs of the objective force.

Guiding Philosophy

The need for a single system to be used to fulfill all Army UAV requirements is the genesis of the Project's "One System Concept" [see diagram 1], wherein common command-and-control elements are matched in a "plug-and-play" fashion with mission-specific air vehicles, payloads and support equipment.

Associated with this plan is the guiding principle of keeping the air vehicles inexpensive and thus "attritable" — the commander must be able to put the air vehicle at risk as the UAV accomplishes the mission. Integral to this approach is the use of off-the-shelf technology, and the development and use of cost-benefit analysis tools to provide the best capability in airframes and payloads at reasonable cost. The system command-and-control and support elements will be interoperable, interchangeable and commonly supportable to minimize the total ownership cost (TOC). This "system" approach is based on the use of block upgrades and off-the-shelf technology to balance requirements and resources into an effective, affordable and deliverable program.

NEAR TERM

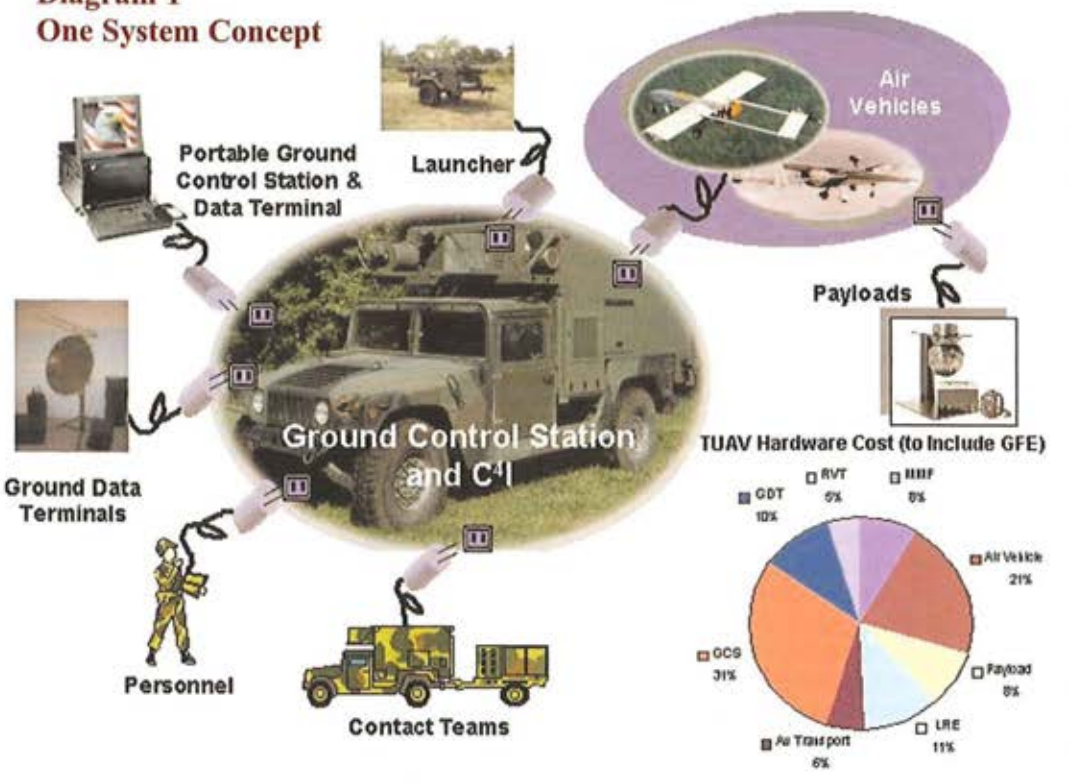
The near-term approach has three main thrusts. First, emphasis is being placed on the development and fielding of the Shadow 200 Brigade TUAV system. Second, as additional near- to mid-term requirements are identified and resourced, the need to incorporate Hunter UAV systems into the One System Concept may be required. And the third thrust is the conduct of a UAV study to determine the

ultimate long-term UAV roadmap and needs, and the establishment of requirement for a small UAV system. Each of these efforts will be discussed in more detail below.

The Shadow 200 Brigade TUAV system is the Army's ground maneuver commander's UAV system. The system provides near-real-time reconnaissance, surveillance and target acquisition (RSTA), and battle-damage assessment (BDA) in support of missions throughout the range of military operations. The capability is adaptable and responsive, helping give the brigade commander dominant situational awareness. The program will use a time-phased, block-upgrade approach to meet the Army's requirement to field a capable ground brigade commander's UAV system as quickly as possible, with the first fielding being in April.

The basic Brigade TUAV platoon is comprised of 22 men; three air vehicles [see figure 1]; two ground-control stations (GCSs) integrated on a Humvee [see figure 2]; antennas; four remote video terminals (RVTs) and antennas; and associated support equipment. Mission planning, tasking and dissemination will occur through the Brigade Tactical Operations Center (TOC) via a collocated GCS. The second GCS is located at the launch and recovery site, where the air vehicles, maintenance equipment, ground-support equipment and supporting personnel are located. The four RVTs will be located where the commander directs to provide video images to such specific units as subordinate maneuver battalions or direct-support artillery.

Diagram 1
One System Concept



The Shadow 200 air vehicle has a wingspan of 13 feet, can carry a payload of 60 pounds and can loiter above a target area 50 kilometers distant for more than four hours. The air vehicle has a ceiling of 15,000 feet and is equipped with a second generation-equivalent electro-optic/infrared (EO/IR) payload. The system is compliant with the joint-service and Army C4I architecture, and with such programs as the Advanced Field Artillery Tactical Data System and the All Source Analysis System.

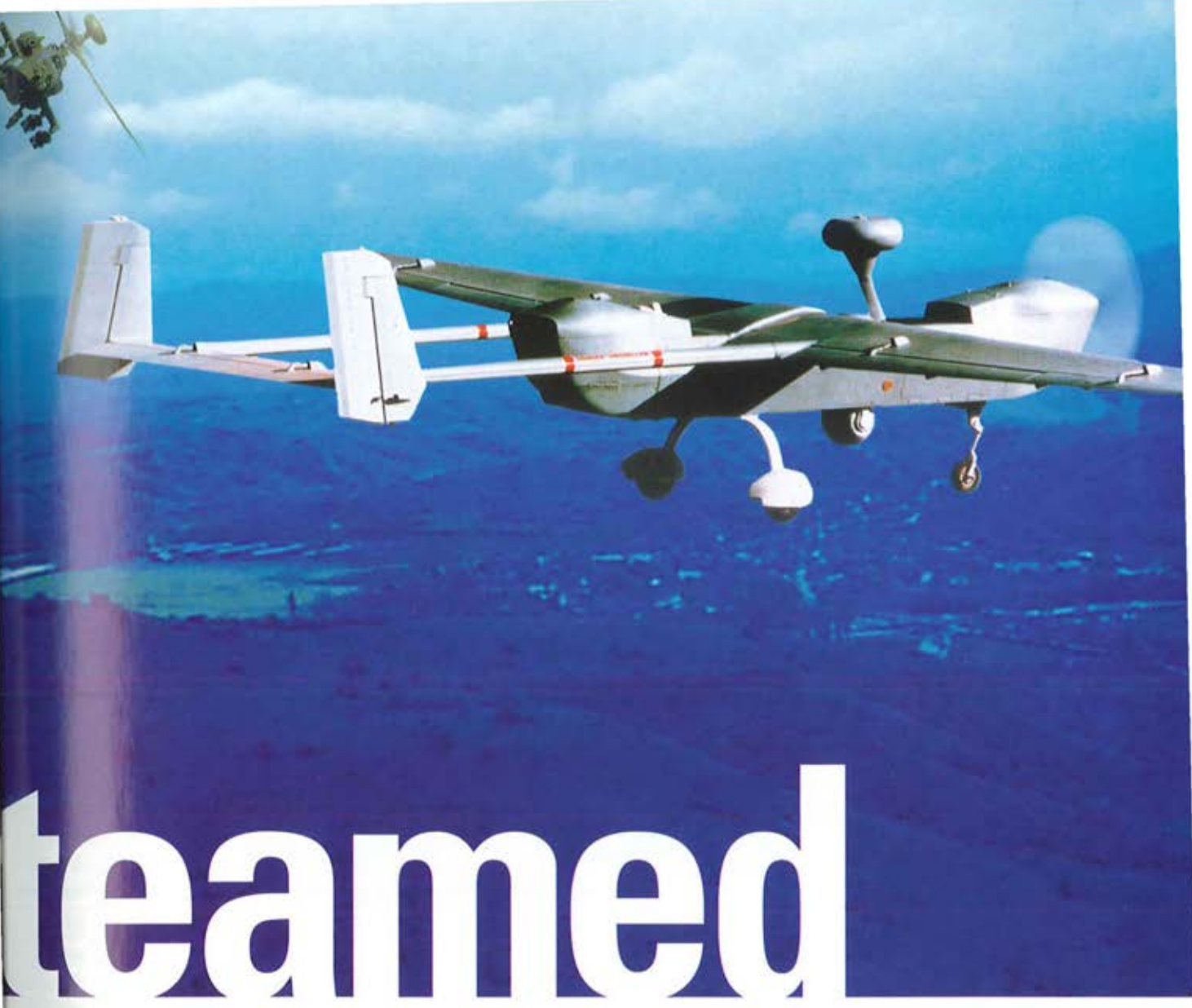
The Brigade TUAV system is produced by the A Corporation in Hunt Valley, Md., at a rate of approximate 12 systems per year starting in fiscal year 2002. In the futu the system will be modified to incorporate additional cap bilities based on future user requirements and the availabi ty of horizontal technology integration opportunities.

A key tenet of the One System Concept is block-upgra development and integration of payloads. It is imperati that payload-developmental efforts are established a maintained to insure that current and future missions can supported. The priorities for payload development and int gration in the near term are (1) electro optic/infrared, synthetic aperture radar/ moving target indicat (SAR/MTI), and (3) a communications relay paylo (CRP). Currently, EO/IR payload requirements are bei met for the Shadow system by using the Plug-in Optron Payload (POP -200). The integration of a SAR/MTI pa load into the system will begin in FY 2003.

The project will continue to support the Hunter UAV [s figure 3] system through at least FY 2005. Alread deployed to combat and peacekeeping operations Kosovo for two years running, the Hunter system provid needed capabilities in endurance, relay capability and pa load weight.

Until FY 2003, the Hunter UAV system will continue be the only operational Army UAV system capable of mee ing demonstration, trai ing and deployment obje tives. Further, the Hunt system is a lynch-pin f developing the Shado system and executing t One System Concep First, the system is bei used for risk-reductio testing for the Brigad TUAV system. Secon based on its extende range capability and lar payload capacity, it being used for numero technical and operation demonstrations, includi the Division Capston Exercise (DCX), heav communications rel payload, and synthet aperture radar/moving ta get indicator payloa Third, in a reduced foo print configuration, t Hunter system is bei used as a surroga Shadow Brigade TUA system for the Interim Brigade Combat Team. The reduce footprint configuration has three air vehicles, downsize antennas and uses air vehicle trailers in lieu of 5-ton truck

By the One System philosophy, Hunter will gradual evolve its subsystems to the One System as natural obs lesce dictates. Further, should it be required by the us Hunter systems could be recapitalized as an interim sol tion to meet the Army's large airframe, extended/multip



teamed

...with Hunter UAV to make aviation history.

First...flight demonstration of an AH-64D Apache Longbow's control of a Hunter UAV and its EO/IR sensor in July 2000. Hunter video was received in an Apache cockpit at a range of 32 km.

First...manned/unmanned teaming in a Warfighter Exercise as part of the Joint Contingency Force AWE at Ft. Polk, Louisiana, in September 2000. Route reconnaissance and target acquisition were demonstrated with video received at a range of 15 km.

First...participation in the Hunter Standoff Killer Team Advanced Concept Technology Demonstration initiated this year to provide the maneuver commander with the necessary tools to effectively fight the battle while on the move.

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pose mission needs.

TRADOC headquarters and the System Manager are currently studying the optimal concept of operation (CONOPS) and requirements for employing unmanned aerial vehicles during the Army's continuing transformation and for the objective force. The study includes assessments of the lessons learned from various advanced warfighting experiments, discussions with proponents and recent deployments to Kosovo. The study will help identify specific air vehicle and payload requirements needed to meet anticipated mission profiles and payload needs.

We anticipate that additional requirements and CONOPS will be established for a small-unit UAV for general platoon use (over the next hill) or for specialty urban needs. The small-unit UAV will likely use only parts of the One System configuration to minimize its footprint and to maximize its deployability and effectiveness. TSM UAV is currently performing an assessment of the utility of the small-unit UAV. The assessment will likely include a follow-on market survey and hardware demonstrations. Upon completion, a formal small-unit UAV requirement is expected to be established and a development program initiated.

Figure 3 Hunter air vehicle

MID TERM

In the mid term, we expect the Shadow 200 Brigade TUAV system will continue to be the foundation of the One System configuration. As objective force UAV capabilities are identified, we expect that new air vehicles will be required to meet the needs of multiple users (for example, aviation and signal applications).

An analysis of alternatives (AOA) will be conducted to identify the requirements for, and availability of, future air vehicles and payloads. The AOA will determine if off-the-shelf hardware will be available, or if new air vehicles and payloads are needed to meet the requisite mission profiles. The mid term payload requirements are expected to include advanced EO/IR, day and night hyper-spectral reconnaissance, and laser range finder/designator payloads. Whatever future requirements may emerge, new hardware and software will be required to operate with the One System architecture.

FAR TERM

In the far term and beyond, the Shadow 200 Brigade TUAV system will continue to be an integral part of the One System configuration. By the far term, we expect the Hunter air vehicle will be replaced with a new air vehicle to provide for extended-range operations, and that small UAVs will be fielded. For the objective force, the need for UAV systems to fulfill nontraditional missions will be established, and if feasible and compliant with applicable treaties, pursued. Although the far-term CONOPS an requirements are yet to be developed, nontraditional appl cations of UAVs for the far-term battlefield may inclu such concepts as logistics UAVs, advanced lethal payloa UAVs and decoy UAVs.

Given the widely dispersed units on the objective forc battlefield, the "logistics UAVs" could be capable of shu tling equipment and supplies between units "just-in-time without putting manned helicopters at risk over unsecure territory. Lethal payload UAVs will provide a search-and destroy capability without putting aircrew and multimillio dollar aircraft at risk. Decoy UAVs could be used in heav ly defended areas as look-a-likes for reconnaissance an attack helicopters and, paired with these aircraft, to diver counter, or engage threats to the aircraft they support.

Far-term payloads are expected to evolve into two distinc groups - those for traditional missions and those for nontra ditional missions. Traditional mission payloads will contin ue to be used primarily for reconnaissance and targetin They will provide improved images, telemetry and commu nication capabilitie for reconnaissance surveillance and targe acquisition. Nontra ditional payloads ma include air to surfac missiles, anti-radia tion missiles, an electronic warfar payloads providin offensive capabilities

CONCLUSION

The successful use o the Hunter UAV sys tem in Kosovo an other operations an the near term use o the Shadow Brigad TUAV have demon strated the usefulness and need for UAV capabilities. T insure the continued success of the Army's UAV initiatives the development and fielding of future UAV capabilitie must be centrally focused. The One System Concept pro vides this focus in a flexible and cost-effective method t fulfill the Army's requirements. A key element of the con cept's success is the concurrent development and matura tion of air vehicles and payloads.

As the Army transforms into the objective force an beyond, the role of TUAVs for traditional and nontradition al missions will become even more significant. The On System, with its mission specific air vehicles and many payloads, will provide a "dominant eye" and an offensiv arm for the future force commander. Working together, th PM-TUAV, PEO IEW&S and the user community coordi nated by the Military Intelligence Center are making Army UAVs a reality.

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HSKT: Army Aviation's Key to the Objective Force

By LTC John S. Wright
and Mr. Kristopher F. Kuck

Hunter Standoff Killer Team (HSKT)

The Hunter Standoff Killer Team (HSKT) is an Advanced Concept Technology Demonstration (ACTD). An ACTD is a means of addressing critical military needs by delivering technologies to the warfighter more quickly. They are designed to provide a residual, usable capability to the field upon completion.

The deficiencies HSKT will address are mobile command and control; aircraft survivability; eyes on the target (acquisition, identification, battle damage assessment); and information management.

The following systems are integral parts of HSKT:

- AH-64D Apache Longbow attack helicopter.
- Army Airborne Command and Control (A2C2S) aircraft.
- F/A-18 Hornet strike fighter.
- Advanced Tactical Forward-Looking Infrared Radar (ATFLIR).
- Joint Standoff Weapon System (JSOW)
- Hunter unmanned aerial vehicle (UAV).
- TOPART sensor package.

The Problem

Maneuver commanders currently suffer from poor situational awareness and communications, and are unable to track assets or access sensor information in real-time. It is very difficult for commanders to stay in the battle and "see the fight." They are thus forced to fight the plan, not the enemy.

In Kosovo, UAVs were deployed in an attempt to provide commanders with better information on the battlefield. These assets belonged to the intelligence community; aviation units had to provide a liaison officer (LNO) with communications at the ground station in order to attempt to exploit the UAV's capabilities. Additionally, the UAVs had to fly high to survive and deconflict with manned aircraft and, as a result, had difficulty discerning real targets from false ones. An assessment team later found the false target rate in Kosovo to be 80 percent and higher. Putting this into perspective for Army aviation, manned aircraft will still have to get up close and personal to correctly detect and identify targets. This is a dangerous proposition in a lethal integrated air defense environment.

These deficiencies are not new. Commanders have voiced them in after-action reports for years. Task Force Hawk's lessons learned from Kosovo included the need for mobile command and control; enhanced survivability and situational awareness; better acquisition and identification of targets; and a requirement to link AH-64 Apaches with UAVs.

The Solution

HSKT's primary objectives are to enhance the commander's situational awareness and the ability to command and control in the joint/coalition environment; enhance aircrew survivability and situational awareness; and greatly increase the lethality of our forces. This will greatly improve the ability of the joint task force/maneuver commander to move around the battlefield and stay in the fight — allowing him to fight the enemy, not the plan.

Three critical enabling technologies are being integrated into the Joint Task Force by this ACTD: cognitive decision aiding, manned/unmanned teaming, and precision targeting.

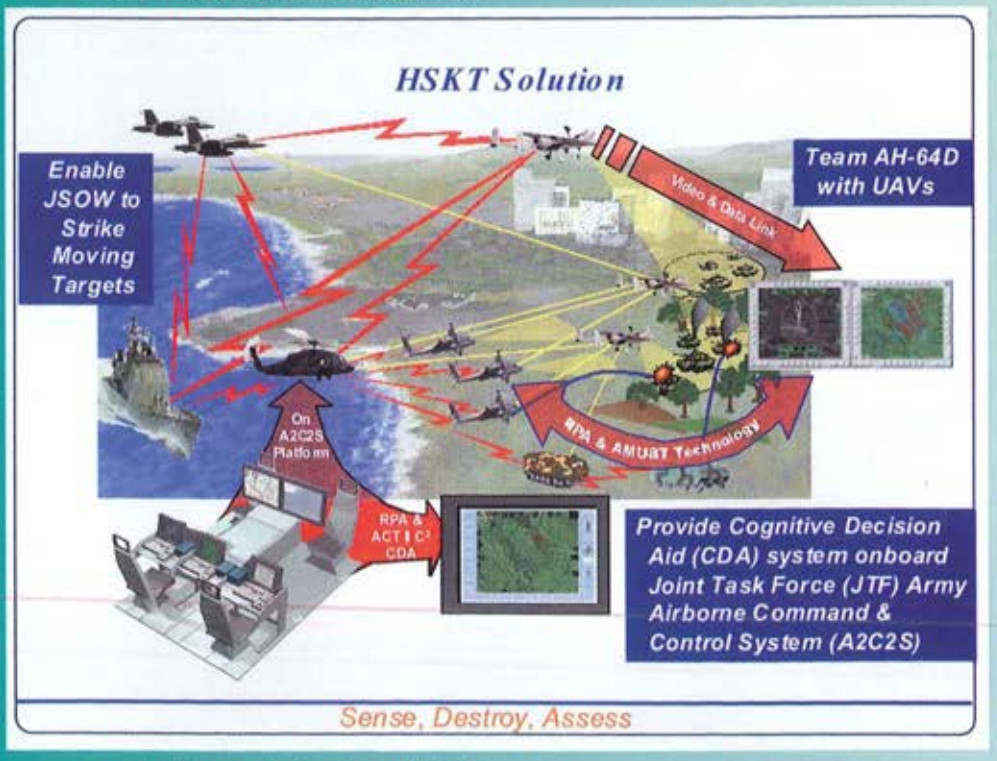
If they'd been available to TF Hawk in Kosovo, these technologies could have made a significant difference in how we utilized our joint/coalition forces.

Manned-Unmanned Teaming

Manned-unmanned (MUM) teaming is one of the critical enabling technologies incorporated into HSKT. This teaming will extend the shooter's eyes on target by using a UAV and its sensors and linking it

to manned aircraft. The pilot of the manned aircraft can use the sensor on the UAV just like he uses the sensor onboard his own aircraft, except the UAV sensor can be 50 to 80 kilometers in front of the aircraft! This capability will provide an unprecedented standoff range from threat weapon and acquisition systems.

Army experiments at the Air Maneuver Battle Laboratory (AMBL) at Fort Rucker, Ala., have established that there are distinct and significant tactical advantages to be gained by teaming MUM aerial platforms to conduct tactical reconnaissance. Teaming manned helicopters with tactical UAVs (TUAVs) provides the maneuver force commander with combined surveillance and reconnaissance at the tactical level. The Aviation and Missile Research, Development and Engineering Center's Aviation Applied Technology Directorate (AATD) at Fort Eustis, Va., and AMBL have been working together to develop the MUM team concept. AATD's Airborne Manned-Unmanned System Technology (AMUST) Program is pursuing solutions to the technical challenges associated with teaming UAVs and helicopters. AMBL has conducted a series of experiments to define and measure teaming benefits and establish MUM team tactics, techniques and procedures (TTPs).



Cognitive Decision Aiding (CDA)

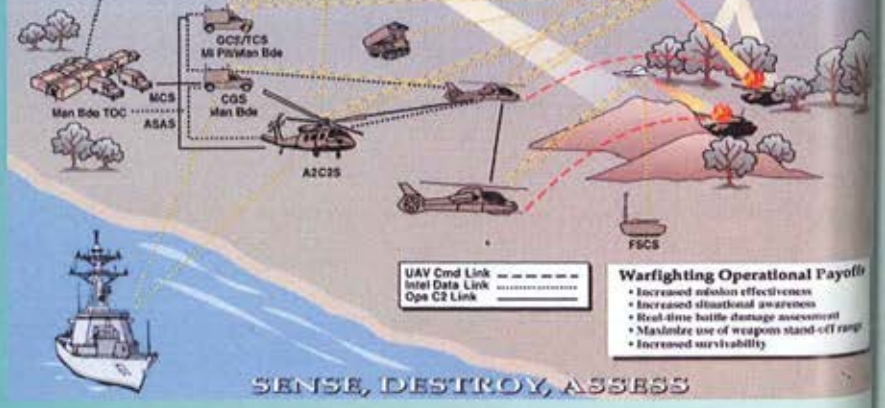
CDA is another critical HSKT enabling technology. The value of this technology was proven last year in the final evaluation/demonstration of the Rotorcraft Pilot's Associate (RPA) Advanced Technology Demonstration (ATD). RPA culminated over 20 years and $175 million of Department of Defense (DOD) investments in tactical CDA.

Working with the AMBL, we ar adapting the RPA technology to cr ate the Mobile Commander' Associate (MCA). MCA will allo the JTF commander to do in the a and on the move everything he ca do from the ground-based tactic operations center, albeit more effi ciently. MCA acts as his on-boar staff. The system tracks all entitie monitors team status, alerts the com mander to changing situations, an develops an optimum course o action through management an fusion of intelligence data.

We are also adapting the RPA tech nology to create the Warfighter Associate (WA), an associate syste for attack and reconnaissance heli copters. WA will allow the AH-64 to use a UAV as "wingman" (se teaming, below), increase situatio awareness within current cockp workload, and produce a more letha more survivable, more responsiv manned platform.

The implementation of this assoc ate capability will minimize th impact on the target system's curre architecture and provide the associat capability through a page link. A capabilities will be accessed throug this associate page link and an add tional linkage to the UAV sens through the target systems display.

Specifically, the HSKT approach i implementation is to make the assoc ate system software based with r preprocessed data requirements. Th



associate system will use a download from the ground-based command post planner. It will automatically update the situational overlays based on message and sensor traffic (JSTARS, Link-16, JVMF, etc.) and will have the capability to make and execute plans for multiple systems including fixed-wing and VTOL UAVs, wingmen and other systems. The technical approach will be compatible with AH-64D (Lot 7 and up), RAH-66 and A2C2S architectures.

Precision Targeting

HSKT will integrate the Navy TOPART sensor suite (a GPS/LADAR sensor that produces highly precise, relative-GPS target coordinates) onto the Hunter UAV, to enhance the unmanned part of the Hunter Standoff Killer Team.

HSKT will team AH-64D Longbows, MCA and the Hunter UAV with two Navy F/A-18 strike fighters. The F/A-18s will be modified with the Advanced Tactical Forward-Looking Infrared Radar (ATFLIR), a high-fidelity targeting sensor onboard the aircraft, and the ability to receive the relative-GPS targeting data produced by the TOPART sensor and download it into a GPS-guided munition. These upgrades will allow maneuver commanders access to another sensor platform and provide the means to engage and retask at extended ranges with the Joint Standoff Weapon (JSOW).

Upgrades to the F/A-18 will provide high precision targeting data from the UAV to increase the accuracy of precision engagement using the Navy TOPART sensor on the UAV.

Possible Scenario

The JTF commander receives an update from JSTARS aboard the MCA. Moving Target Indicator (MTI) information provided by JSTARS indicates possible enemy activity. He then tasks an AH-64D to identify target(s) — the pilot reroutes the UAV and identifies the target using its sensor package, and sends the information real-time to the JTF commander.

The commander can view video directly from the UAV or choose to view it on a situational overlay with other important data. MCA fuses this information with other data being received from other intelligence sources. MCA alerts the commander to the changing situation and recommends a new course of action.

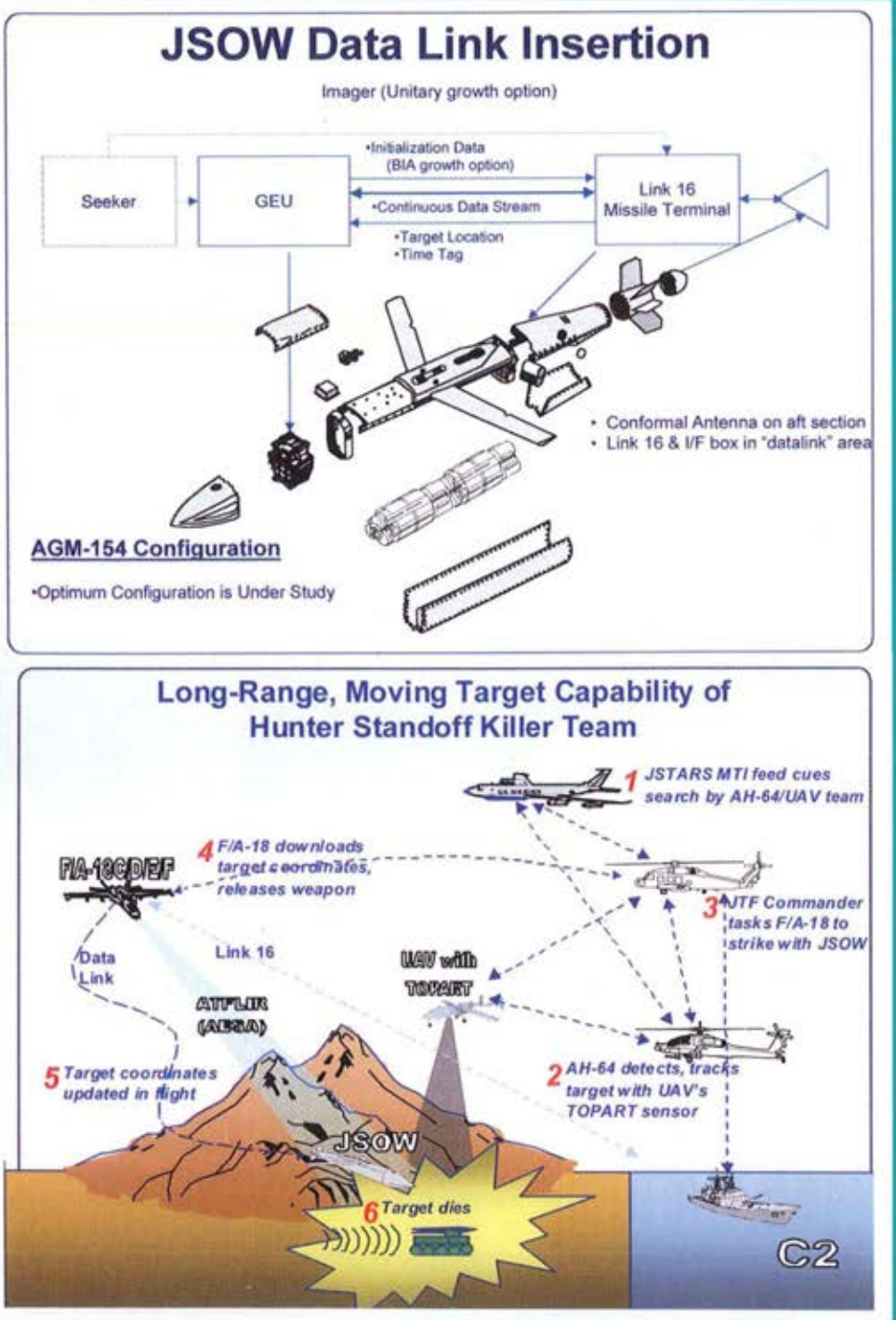
Summary

Teaming the unmanned system with the manned platforms will greatly increase target identification range, increase standoff range and increase survivability. Associate technology and digital connectivity among the team will improve timelines, reduce staffing and increase lethality. Precision targeting will also increase lethality and timelines.

The HSKT program is a six-year effort, which includes three years of integration, one year of testing and two years of a leave-behind capability for U.S. Forces, Korea, (USFK) and U.S. Special Operations Command (SOCOM). The specific plans include:

Fiscal Year 2001 Plans

- Integrate associate technologies into the JTF Army mobile command vehicle to develop MCA capability and the Longbow Apache helicopter to develop WA capability.



• Integrate manned and unmanned teaming algorithms and software into the MCA and WA systems. Develop Link-16 data terminal for the JSOW to provide enroute-targeting updates for weapons delivery.

• Conduct preliminary design of sensor package for integration into unmanned aerial vehicle.

• Connectivity to JSTARS.

FY02 Plans

• Continue software builds and simulation tests for MCA and WA. Conduct hardware-in-the-loop integration tests.

• Install remote target sensor (TOPART) into unmanned aerial vehicle.

• Integrate fully functional Link-16 data link, antenna and guidance software into the F/A-18 JSOW system. Integrate F/A-18 ATFLIR.

FY03 Plans

• Complete software builds and simulation tests for MCA and WA. Complete hardware-in-the-loop integration tests of the MCA A2C2S and the WA Longbow Apache systems.

• Integrate preproduction JSOW data terminal, antenna and guidance, and test system with the F/A-18 and the Longbow Apache.

• Initiate HSKT connectivity testing and preliminary user evaluation in relevant warfighter tactical environment.

FY04 Plans

• Conduct integration test and user evaluation befo system moves to USFK.

FY05-06 Plans

• Leave behind capability for USFK.

Residuals

These are the operational assets HSKT leaves behin for the warfighter:

• MCA. Two kits for the command-and-control vehicl

• WA. Eight Longbow Apache kits.

• Four UAV kits with reconnaissance and precision-ta geting capabilities.

• Two F/A-18 kits with precision targeting and weapo delivery capabilities.

• 220 Upgraded JSOWs.

• Simulation capabilities at AMBL for further develop ment of TTPs and experimentation.

This ACTD, while sponsored by CINC Korea and CIN SOCOM, is applicable to potential conflicts that involve joi and/or coalition forces anywhere in the world.

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The ALBANIAN Challenge

by 1SG David E. Jeffers

I had the distinct honor of serving as the Army Airspace Command and Control (A2C2) noncommissioned officer in charge (NCOIC) for Task Force Hawk in Albania. I consider it an honor because I was able to experience the Army at its finest. I personally participated in and witnessed innovation and perseverance at a level never required until Task Force Hawk.

The fact that there were no aircraft accidents at Tirana Airport in Albania is indicative of the hard work and magnificent professionalism of all airspace users. Many lessons were learned and new airspace doctrine will hopefully be developed as a result of the challenges Task Force Hawk faced at Tirana. A new and fresh look at combat airspace operations in a joint environment is warranted based on the lessons learned in Albania.

Predeployment Coordination

The key lesson learned in Albania is the need for better predeployment coordination among all airspace users. Airspace coordination was not conducted prior to the TF Hawk deployment. Many problems could have been solved had the task force conducted comprehensive predeployment exercises. I have identified three critical areas that should have been coordinated prior to deployment.

Airspace Authority

The airspace-control authority was established in the Airspace Control Order (ACO) and delegated to the Combined Air Operations Center (CAOC). Key to the success of TF Hawk was the Battlefield Coordination Detachment (BCD). TF Hawk airspace users and the CAOC should have had at least one face-to-face meeting prior to deployment. This would have established operational relationships and established any delegated airspace authority. This meeting should have happened at the CAOC headquarters in Vicenza, Italy. Having the meeting at CAOC would have given the leaders of the BCD and the TF Hawk A2C2 element the opportunity to meet all key leaders. The TF Hawk fire-support coordinator and intelligence chief should also have been at this meeting.

Another agency that was brought into the airspace hierarchy late in the game was the Air Operations Control Center (AOCC). The AOCC eventually became the designated authority for Albanian airspace below the coordinating altitude, and was responsible for all helicopter operations within Albania. The great challenge for the AOCC was coming on the scene after Operation Shining Hope and TF Hawk had been operational for at least a month. The lesson here is that all possible control agencies need to be identified at the earliest possible time.

If the mission requires that a new agency be established and control authority transferred, this must be done systematically and must be as seamless as possible. The greatest challenge for all involved in the Albanian operation was trying to determine who was in charge of what, and how to contact them. This leads me to one next problem area: communications.

Communications

When we landed in Tirana our greatest challenge — next to dealing with the mud — was establishing communications. Communications were required not only with the CAOC and the BCD in Vicenza, but also the Air Force's Radar Approach Control (RAPCON) and the humanitarian-relief agencies located across the Tirana runway.

We faced many challenges trying to establish secure voice and electronic communications with all the airspace users. This operation clearly showed that we must establish better joint communication deployment procedures.

This must begin with compatible systems. Deployments in support of missions like Operation Allied Force are in our future and we need to cover the basics. Communications cannot be short-changed.

Deconfliction of Multiple Operations

Knowing that we would be operating with multiple airspace users, deconfliction procedures should have been in place prior to arrival. Here are a few of the issues that arose:

- Special Use Airspace. Special use airspace was overlooked in the planning process and it should have been planned for. TF Hawk had to develop a helicopter training area (HTA), a maintenance test flight area (MTA) and a weapons test fire area (WTFA). Each of these areas required special coordination with different agencies. The HTA required approval with the AOCC and the Tirana RAPCON because it lay within both jurisdictions. The MTA was coordinated with Tirana ATC because it conflicted with the Class D and E airspace. The WTFA was coordinated with the Albanian government because it conflicted with local fishing areas and required a maritime NOTAM that was issued by the CAOC.
- Restricted Operation Zones (ROZs) were built for the Army Tactical Missile System (ATACMS) for preplanned and immediate fire missions. There were 12 ATACMS positions with inactive ROZs that could be activated in the ACO through the normal planning process or for an immediate fire mission. These ROZs were depicted on the RAPCON's and Air-borne Warning and Control System (AWAC) radar video mapper to allow real-time deconfliction.
- Day and Night Operations — Time Deconfliction. To provide the safest environment in which to conduct combat, combat support, combat service support and humanitarian relief operations (HUMROs) in the same airspace, the A2C2 most often utilized deconflication by time. We began by separating the humanitarian (TF Shining Hope aircraft) from the combat operations aircraft (TF Hawk). To deconflict HUMRO and attack operations, HUMRO helicopters flew their missions primarily during the day and TF Hawk aircraft flew theirs primarily at night.

THE KEY LESSON LEARNED IN ALBANIA IS THE NEED FOR BETTER PREDEPLOYMENT COORDINATION AMONG ALL AIRSPACE USERS.

Challenge cont'd. on page 23

Aviation Night-Vision Imaging System: "I Want Some of Those OMNIs"

By CW5 Joseph C. Roberts

As Army aviation modernizes, ongoing changes in personnel, force structure and equipment will have a profound effect on the way we communicate, train and fight. The modernization process must include an information and education process of equipment nomenclature, its operation and employment.

However, systems are typically fielded or upgraded under the program of continuous technology refreshment (CTR) without follow-on training and education. An example of this is the AN-AVS 6-series Aviation Night Vision Imaging System (ANVIS). ANVIS has undergone component upgrades since 1993, yet many users have no clear idea which specific ANVIS they are using, do not understand the performance capabilities of their specific ANVIS and do not know the correct nomenclature for ANVIS.

For example, a very experienced aviator, having used an upgraded ANVIS, recently commented that he preferred the "yellow OMNIs." Because of the variations in ANVIS configuration, the Office of the Deputy Chief of Staff for Operations (ODCSOPS DAMO FDV) requested the Project Manager, Night Vision, Reconnaissance, Surveillance, Targeting, and Acquisition (PM NV/RSTA) survey the field to determine all currently fielded configurations of ANVIS. This is why many of you have been completing the ANVIS survey over the past few months. To help clarify variations and differences associated with ANVIS, the following will provide a historical perspective of ANVIS procurement, define OMNI, explain the performance differences and enhancements of the various versions of ANVIS, and offer a look at future developments in aviation night vision goggle procurement.

Development of the aviation night-vision goggle (NVG) began in the late 1970s in response to the limited performance and inadequate human interface issues — such as excessive weight, ability to see flight instrumentation, and the inability to immediately correct NVG battery failures — of the AN-PVS 5 NVG. The AN-PVS 5 NVG was not designed for aviation use. Even after its frame was modified for aviation use, its operation required mission-restricting limitations. Moreover, many unit commanders limited tactical training and situational-training exercises to environmental conditions that matched the AN-PVS 5's requirements. Those environmental conditions limited mission capability.

By 1982 the AN-AVS 6 ANVIS was nearing the end of its development. The original ANVIS incorporated a 40 degree field of view; an MX10160 image-intensifier tube with a resolution of 36 line pairs per mm (lp/mm, which equates to 20/40 visual acuity in high light conditions, 20/120 in low light conditions) and a signal-to-noise ratio of 15:1, 15mm eye relief (clearance); flip up/down capability; a dual battery power pack that used two lithium batteries (a primary and backup controlled by a switch); and a single adjustment pivot and adjustment shelf.

Although ANVIS procurement began in 1982, extensive test and evaluation resulted in the first units receiving both versions of ANVIS, the AN-AVS 6(V)1 and AN-AVS 6(V)2 in 1986. The (V)1 indicated standard ANVIS mount and the (V)2 was so designated because of an offset mou on its pivot and adjustment shelf to b compatible with the sighting system the AH-1 Cobra. Only units with AH 1 Cobras use the (V)2 version ANVIS. The fielding continued un Army Acquisition Objective (AAO) 17,753 ANVIS was met. To suppo the procurement process, ANVIS we procured under contracts that covere specific periods. These contract per ods were identified as "OMNIBUS contract periods because more tha one vendor was used to support pr curements. Obviously, the first contra period was identified as OMNIBUS or as many refer to it, OMNI I. In add tion to the contract period, there a options to the contract that may exte beyond the normal contract perio Under the OMNI I contract that beg in 1985, approximately 6,300 (V)1 a 1,100 (V)2 ANVIS were procured.

The OMNI II contract period beg in 1990. During this contract peri approximately 8,100 additional (V and 2,700 (V)2 ANVIS were procure During the pre-OMNI I, OMNI I a OMNI II contract periods, no signif cant technological improvements the ANVIS were incorporated. B 1993 the AAO was nearing compl tion. Under the OMNI III contract per od, approximately 1,100 ANVIS we procured to complete the AAO.

However, by this time issues co cerning ANVIS compatibili with chemical masks and avi tor spectacles had been identified a corrective action taken. The eyepie focus lens was changed to a larger o that, when used in conjunction with improved dual interpupillary adju able pivot and adjustment shelf, p

vided an extended (25mm) eye relief (clearance) so that the ANVIS could be adjusted farther from the eyes, maintain the 40-degree field of view, and allow for the use of spectacles or possibly chemical masks. Additionally, improvements in the manufacturing processes allowed industry to develop image-intensifier tubes of improved performance. More significant, the visual acuity of the new image-intensifier tubes were 20/105 in low light conditions as opposed to the 20/120 of the intensifier tubes procured under OMNI II.

Because these ANVIS met the form, fit and function requirements of ANVIS, they did not require significant testing or evaluations. One other improvement during the OMNI III procurement was the switch to a mold-injected, one-piece anti-wobble monocular housing that removed the electromagnetic interference (EMI) shielding that was required for pre-OMNI I image-intensifier tubes. Image-intensifier tubes procured during OMNI I and later had the EMI shielding incorporated on the tube.

Although the AAO had been achieved at the completion of the OMNI III procurement and fielding, continued industry development and improvement of image-intensifier tubes was sustained primarily because of the infantry branch's desire to upgrade and procure ground NVGs, as well as the desires of the other services to upgrade their night-vision goggles. In 1996 PM NV/RSTA procured 749 ANVIS with new, modernized image-intensification tubes under the OMNI IV contract. Although small, this procurement had the profound effect of creating demand for ANVIS upgrade by demonstrating advances in image-intensifier tube technology. Known typically as OMNI IVs, these new ANVIS incorporated all the advances of the ANVIS procured under OMNI III, but the unique characteristic is the unparalleled performance of the image-intensifier tubes.

The ANVIS procured under OMNI IV have one other significant change. Instead of the ANVIS mount being a part of a visor assembly, it was removed from its visor to be mounted directly on the dual visor assembly of the SPH-4B flight helmet. Because of all these dramatic improvements, as well as the change in ANVIS mounting, the ANVIS was given a new nomenclature, AN-AVS 6(V)1a.

Today, more and more units are asking for the AN-AVS 6(V)1a night-vision goggle. Because of the demand for ANVIS with improved performance, coupled with the obsolescence of currently fielded systems, our aviation branch chief, Maj. Gen. Anthony Jones, requested a refielding of ANVIS that incorporates state-of-the-art technology. In response to this request, ODCSOPS (DAMO FDV) authorized the PM NV/RSTA to acquire state-of-the-art ANVIS with sufficient procurement funds to begin fielding in the second quarter of fiscal year 2001. The newest ANVIS, dubbed the AN-AVS 6(V)3, will provide unparalleled performance in terms of improved resolution and signal-to-noise ratio.

***Night Vision** cont'd. on page 24* ☞

The USAAL Distance-Learning Initiative

By Christine B. Mack

In a joint effort with the Iowa Army National Guard (ARNG), the U. Army Aviation Logistics School at Fort Eustis, Va., developed a di tance-learning (DL) transition course to support certification requiremer for UH-60 Black Hawk helicopter maintenance personnel. For the past se eral years the ARNG has seen an increasing number of Black Hawks add to its inventory as Army aviation missions have shifted from the Arn Reserve to the Army Guard. Aviation units are facing the task of trying maintain performance standards and unit readiness, while confronting reduction in training resources.

Applying the current available technology, the DL course was develope with emphasis on video teletraining (VTT) via the teletraining netwo (TNET) system. The TNET system is the U.S. Army Training and Doctri Command's standard for delivering two-way VTT instruction. Studies ha shown that DL provides a cost-effective means to deliver training to the so dier when and where it's needed, without impacting training effectivenes The course covers UH-60 maintenance technical procedures that inclu replacing system and subsystem assemblies and components; performing lin ited maintenance operational checks, scheduled inspections and troubleshoo ing; using and maintaining ground-support equipment required for maint nance and ground handling; and using applicable publications. The USAAL conducted the first pilot course iteration in fiscal year 1997 with units in Iow and Kansas; 15 fully qualified UH-60 mechanics were graduated. A secon test course iteration was conducted by the Eastern Army Aviation Trainin Site (EAATS) in FY 99. After a third test course iteration is conducted, val dation will be completed.

"Studies have shown that DL provides a cost-effective means to deliver training to the soldier when and where it's needed."

Effective learning in a teletraining enviro ment requires training materials that a specifically configured for this mediu Instructional materials are designed to incorpo rate features that foster interaction among th instructor and the students at the remote site while maintaining training effectiveness. Th resident UH-60 transition course materials we reconfigured to present technical instruction v VTT. Instructor guides emphasize the use visual aids and oral feedback during instructio to help the instructor assess the level of stude attentiveness, comprehension and retention of information. The stude guides facilitate student involvement through the use of student read-ahea packages and stress note taking.

The ARNG units participating in the course provide trained maintenan personnel to serve as assistant instructors and technical inspectors. The use flyable aircraft from their inventories as training devices; they provid adequate training areas that support the use of a two-way video; and the ensure that the student meets the course prerequisites and adheres to th training schedules. The National Guard Bureau is responsible for identify ing potential Guard training sites for future courses and assisting selecte units in meeting VTT equipment, facilities and personnel requirements.

Unit readiness, changing technology, massive information, downsizing and a reduction of resources are driving current training needs. Th soldiers we train today are competent, highly skilled technicians, an require training that is up to date, realistic and accessible. The success this course will essentially lead to the development of a virtual classroo environment for our active and reserve component students, which wi provide modernized, real-time instruction and answer the challenges training our total army in the 21st century.

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Christine B. Mack is an instructional systems specialist with the U.S. Arm Aviation Logistics School at Fort Eustis, Va.

Challenge cont'd. from pg 19

• Day and night Operations — Space Deconfliction. Although time deconfliction was the most advantageous, if the need arose and two users required the same airspace at the same time, users were deconflicted by space or altitude. When the need for concurrent operations arose, a grid matrix covering airspace used by TF Hawk was used to deconflict the operations, with TF Hawk having priority. HUMRO and TF Hawk aircraft were not permitted to operate within the same grid boxes during combat operations. This kept operational security high and ensured safe helicopter operations.

Too Many Players, Too Little Space

I am still amazed at the sheer numbers of aircraft we crammed into little Tirana Airport. What was once a quiet airport serving the capital of a small country became host to the U.S. Air Force strategic airlift efforts, United Nations humanitarian-relief operations and Army combat operations.

At the start of operations the USAF had C-17 and C-130 cargo planes shuttling in and out continuously. On the same ramp area HUMRO aircraft were being filled with supplies and conducting relief operations. Simultaneously, supplies, equipment and personnel in support of Shining Hope and TF Hawk were being off-loaded.

The civilian operations at the Tirana Airport went on without a hitch thanks to the fine efforts and cooperation between the USAF RAPCON and tower controllers, Albanian air traffic controllers and TF Hawk airspace users. I witnessed many busy and hectic operations around that airport, and the unblemished safety record during the whole operation brings great credit upon the professionalism of all involved. To have the four diverse missions operating on a much larger airbase would have been a challenge.

And that was just the "Air Force side" of Tirana - there was also the TF Hawk side. We were a fighting force ready to undertake combat operations. We were ready to launch 24 attack helicopters and to fire the Army Tactical Missile System (ATACMS) around the clock. We also had UH-60 and CH-47 helicopters flying combat-support missions. TF Hawk could itself have completely inhabited Tirana Airport.

Keeping situational awareness was a daily challenge. If only one aircraft had departed without someone knowing, the deconfliction nut roll would have been on. I am proud to say that the agencies operating out of Tirana were able to work closely and cooperatively to allow each service to meet its own mission. In all but a few cases, every effort was made to allow the fullest freedom of movement for all airspace users. Great pains were taken to ensure situational awareness was current and complete.

I hope we will never be faced with another Tirana situation. But if we are, we must realize that the only way to accomplish all of our missions is through close cooperation. No matter what the personalities or priorities, cooperation must stay at the forefront. Many conflicts were avoided due to the cohesion that was present in Tirana. That cohesion was built with the one-on-one meetings that took place at the "worker-bee" level. They were the very same one-on-one meetings that should have taken place initially between the joint airspace users of Operation Allied Force.

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1SG David E. Jeffers was the NCOIC of Task Force Hawk's A2C2, in Albania.

***Night-Vision** cont'd. from pg 21*

The AN-AVS 6(V)3 will feature new image-intensifier tubes that are truly state of the art. In addition to image-intensifier tube improvements, the AN-AVS 6(V)3 includes additional improvements. The older course thread translating objective lenses have been replaced. This improvement will allow the user to achieve a much finer focus throughout the focal range. Also, the ANVIS carrying case will have an improved zipper and the insert will be modified so that HUD clamps will not cut into it as easily.

The future of aviation NVGs looks promising. Because of the increased field-of-view requirement contained in the Air Warrior Operational Requirements Document, development of an increased field of view aviation NVG has begun. Dubbed the Advanced Night Vision Goggle (ANVG), it will provide a semipanoramic field of view while maintaining all the performance enhancements of the AN-AVS 6(V)3. Heads-up display symbology will be embedded into the ANVG so that an add-on display will not be necessary. Assuming the program remains on schedule, fielding of this promising technology should begin by FY05.

In summary, many of you have worked diligently to complete the ANVIS survey that was requested in late May of this year. Survey data will provide the PM NV/RSTA with information concerning what configurations of ANVIS are fielded and allow the PM to standardize these configurations. The use of term "OMNI" only indicates contract period and is not necessar synonymous with performance. The fore, the use of the actual nomenclatu of ANVIS - such as AN-AVS 6(V AN-AVS 6(V)2, AN-AVS 6(V)1a, AN-AVS 6(V)3 - clearly defines t specific configuration of ANVIS a indicates its performance capabiliti As Army aviation continues its tra formation into the 21st century, mo ernization of our night-vision capabil will again allow us to "own the nigh across the full spectrum of operatio in any environment, worldwide.

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CW5 Joseph C. Roberts is chief of t Night Vision Devices Branch, Aviati Training Brigade, at Fort Rucker, Al

Shinseki expands AC/RC division teaming

by Kristin Patterson
*reprinted with the permission of **National Guard** Magazine.*

WASHINGTON (Army News Service, Sept. 19, 2000) -- Under a new concept called "corps packaging," all of the National Guard's eight combat divisions and 15 enhanced separate brigades will be matched with active-component divisions at the corps level.

Army Chief of Staff Gen. Eric K. Shinseki announced this expansion of teaming between active and Guard divisions Sept. 14 in a speech to 3,000 Guard officers at the National Guard Association annual conference in Atlantic City, N.J.

Shinseki also announced that 122 Blackhawks and 68 Apache helicopters would be "cascaded" or transferred from active-component units to the National Guard under an accelerated timetable. (They were originally scheduled to go to the Guard in fiscal year 2002, he said.)

Shinseki said the recent teaming of the 1st Cavalry Division with the Texas Guard's 49th Armored Division to train for Bosnia went so well that he is going to "expand that experiment."

"Those alignments are going to bring us to a level of readiness we've always talked about getting to," he said. "And this is our commitment to get there. We will all be expected to respond to missions and operational requirements that span the entire spectrum of operation."

The 49th Armored Division headquarters is now finishing up the last few weeks of its mission commanding peacekeeping troops in Bosnia. Virginia's 29th Infantry Division and Pennsylvania's 28th Infantry Division will command subsequent rotations there.

More information regarding divisional missioning in the war plans would be available within the next few months, Shinseki told the Guard officers. Guard officials said they have pushed for division inclusion in the war plans because it would identify specific missions toward which to train.

Division teaming began two years ago as a pilot program, pairing the 49th with the 1st Cavalry Division headquartered at Fort Hood, Texas, and California's 40th Mechanized Division with the Army's 4th Mechanized Division, also headquartered at Fort Hood. This original division teaming was announced at the 1998 National Guard Association conference by former Army Chief of Staff Gen. Dennis J. Reimer.

One division would have the lead in certain areas, and the divisions would share resources. When one division deployed, the other would mobilize to provide replacement operations, Reimer said during his conference speech two years ago.

The Army's 1st Cavalry Division required additional personnel in order to mobilize to Bosnia in 1998. Had the Army already begun a pilot program matching active-duty divisions to Guard divisions, additional personnel could have come from the Guard, Reimer said.

The latest announcement also expands last year's alignment of six Army Guard enhanced brigades to the reactivated 24th Infantry Division at Fort Riley, Kan., and the 7th Infantry Division at Fort Carson, Colo., as their primary combat forces.

Shinseki's plan takes the program all the way with all the divisions and enhanced brigades.

Under I Corps at Fort Lewis, Wash., California's 40th Armored Division is teamed with the Army's 2nd Infantry Division in Korea, while the corps also includes three of the Guard's enhanced brigades-the 116th Armored Cavalry Brigade in Idaho, the 29th Infantry Brigade in Hawaii, and Washington's 81st Infantry Brigade.

Under III Corps at Fort Hood, Texas, the 7th Infantry Division's headquarters at Fort Carson, Colo., would align with the Guard's 39th Infantry Brigade in Arkansas, the 41st Infantry Brigade in Oregon, the 45th Infantry Brigade in Oklahoma and the 155th Armored Brigade in Mississippi.

The 49th Armored Division remains paired with the 1st Cavalry Division at Fort Hood; Minnesota's 34th Infantry Division with the 4th Infantry Division at Fort Hood; and Indiana's 38th Infantry Division with Fort Carson, Colo.

Kansas' 35th Infantry Division would fall under V Corps in Heidelberg, Germany along with Louisiana's 256th Infantry Brigade (Mechanized) and Tennessee's 278th Armored Cavalry Regiment.

The XVIII Airborne Corps at Fort Bragg, N.C., includes these relationships: the 29th division with the 10th Mountain Division at Fort Drum, N.Y.; the 28th division with the 3rd Infantry Division at Fort Stewart, Ga.; and New York's 42nd Infantry Division with the 101st Airborne Division at Fort Campbell, Ky.

The 24th Infantry Division at Fort Riley, Kan., which falls under the XVIII Airborne Corps would be aligned with New York's 27th Infantry Brigade, North Carolina's 30th Infantry Brigade, Georgia's 48th Infantry Brigade, Florida's 53rd Infantry Brigade, Indiana's 76th Infantry Brigade and South Carolina's 218th Infantry Brigade. "Having a training alignment is one thing, but you have to ask to what end?" Shinseki asked.

It was the first of a series of rhetorical questions asking how the Guard might configure into missioning. He said the Guard is capable of augmenting, rotating, backfilling and reinforcing the active force. "The difference between a mission area and mission is this next step for us to go to the CINCs to explain what we understand are the requirements to get them to accept that there is a requirement for us to do the tough part," he said, adding that they then could earmark specific units for the requirements.

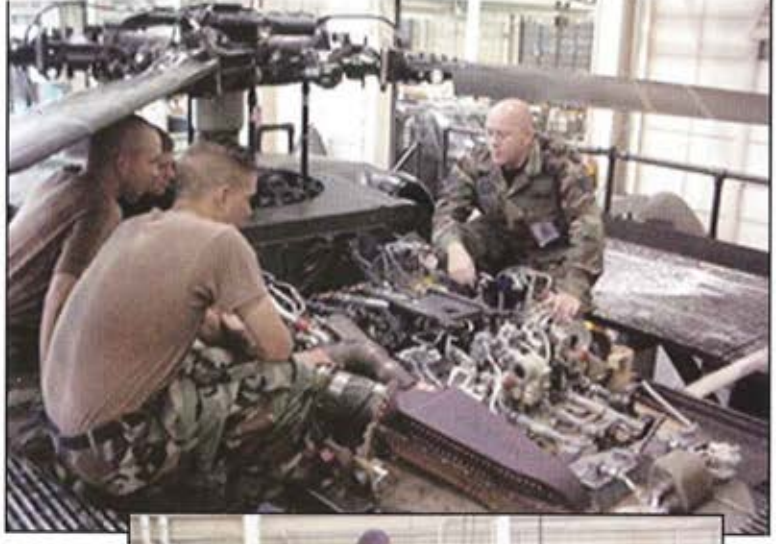
Shinseki alluded to a timeline for disclosing further details on missioning, saying more would come in the next year. Army National Guard Director Maj. Gen. Roger Schultz said Shinseki's announcement was welcomed by the Guard community.

"Having our combat divisions and our enhanced brigades assigned to the Army's four corps gives us the credibility we have been striving to achieve for the past 10 years, since so many of our citizen-soldiers took part in Desert Shield and Desert Storm," Schultz said.

(Editor's note: Kristin Patterson is news editor for National Guard Magazine.)

Joint Black Hawk Training

by Master Sgt. Gary McKeeby, USAF



In late 1992 the U.S. Army Aviation Logistics School (USAALS), Fort Eustis, Va., was the focal point for proposed consolidation of all U.S. military H-60 Black Hawk helicopter training. All four services met during four separate phases to discuss joint-service training issues.

Phase I was a search to identify commonality in training among the services. Every branch of service that utilized the H-60 was studied to determine if consolidation of training with the Army and joint instructor utilization (purple-suited training) were feasible. Some branches did not participate due to unique aircraft service and equipment. At the end of the grueling Phase I, the Air Force was found to be the best candidate for the H-60 ITRO program. The primary focus of Phase II was to determine the best place to conduct this consolidated training. With an existing course at Fort Eustis, USAALS was clearly the choice for the location of consolidated training. Although the Air Force had trained students on the H-1 and H-53 helicopters, their course did not contain training on the H-60 helicopter.

With the first two phases completed, Phase III, the important cost phase, was implemented. The start-up investment was minimal because the H-60 Black Hawk Helicopter Repairer Course was already in place and running. The greatest expense would be collocation of the entire Air Force helicopter training course to Fort Eustis. The course would split into basically two courses — the consolidated joint service ITRO H-60 Course and the Collocated H-1/H-53 Course. The collocated course would move to Fort Eustis to maintain continuity with its sister course. During Phase III, it was determined that the payback of this interservice training investment would be realized over a 20-year span. Phase IV, implementation, was accomplished in 1994 with the creation of the 362nd Training Squadron's Detachment 1 at Fort Eustis. The initial force consisted of three permanent party and 20 Air Force students.

Today, USAALS and Det.1, 362nd Trng. Sqdn., work together seamlessly. Seventy-five Army and seven Air Force instructors train more than 960 Army and 70 Air Force H-60 Black Hawk maintenance professionals each year. The students benefit by learning about each other's branch of service, while being trained to maintain a multi-million-dollar aircraft. The benefits are not confined to Fort Eustis. There are two other USAALS and Air Force ITRO courses: the 68H10 Pneudraulics Course at Sheppard Air Force Base, Texas, and the Non-Destructive Inspection (30-level) Course at Pensacola, Fla.

With the increasing frequency of joint-service military operations, classmates are likely to meet once again on the active flight line ready to perform quality maintenance together. The ITRO program is a true success story — "purple-suited" training at its finest.

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Master Sgt. Gary McKeeby is assigned to Det. 1, 362nd Training Squadron, and is the primary liaison for Air Force helicopter joint-service training at Fort Eustis, Va.

BUILDING BOSNIAN ARMY AVIATION

By Ben A. Van Etten

Joint Ranger Mission

The fall of the Berlin Wall and the brea up of the former Soviet Union resulted many former communist Eastern Europe countries declaring independence. Yugoslavia, for example, Slovenia, Croat and Bosnia-Herzegovina all declared ind pendence. The creation of these indepe dent nations was not, of course, a peacef process. The devastating civil war that rag between April 1992 and October 1995 pr duced more than 200,000 casualties. T Dayton Peace Agreement in the fall of 19 ended the fighting in Bosnia. From Dayt came the NATO-based International Secur Force (IFOR/SFOR) and the military stab lization program. Several nations donated military equipment to t Bosnian Federation in order to help that fledgling state achieve milita parity with its better-equipped rivals. Among the equipment were 15 fo mer U.S. Army UH-1H helicopters and a support packag

Military Professional Resources, Inc. (MPRI) was contracted by the Army of t Federation of Bosnia and Herzegovina to teach pilots, maintainers and logisticians ho to operate their helicopter fleet under NATO/U.S. standards. The program, which MPI began in February 1999, was not as simple as it might sound.

The facilities for the flight and maintenance training were housed in a bombed-out j engine factory. The hanger needed a new roof and sides (not to mention heat and lights). T classrooms were stripped bare (no furniture, light fixtures, and even the sinks had been ripp from the wall). Additionally, the Kosovo air campaign was under way at that time and Bosn airspace was closed to all traffic, except NATO. This was not a problem since ground clas es could begin for both pilots and maintenance. The bottom line was that this project start out as a "bare bones" operation.

From the beginning, all of the American team members were very impressed with the ca iber of the students. The Bosnians were very happy that the United States was involved wi the "train-and-equip" program and were eager to learn whatever we presented to them They're intelligent, very receptive to our instruction and definitely motivated. The first cla of five instructor-pilot candidates and 20 maintenance personnel all spoke English. The su ceeding pilot classes speak English, but only about half of the maintenance personnel spea even basic English. They too were all highly intelligent and motivated students, but since th instruction is in English and the technical manuals are all in English, interpreters we required for all phases.

One of the first requirements was to help the Federation Air Force set up an organization (similar to a U.S. Army aviation brigade). The Aviation Maintenance Squadron included unit maintenance (AVUM) and intermediate maintenance (AVIM), and a Supply Support Activity (SSA). The Flight Squadron is comprised of three units - the UH-1 section, the Mi-8 section and Flight Operations. The "Airfield Command" includes all of the staff and support operations.

From the commanding general on down, the Federation Air Force was happy and receptive to our guidance — but there were some obstacles. Most of the senior officers and noncommissioned officers had grown up under the former Yugoslav National Army (JNA) and the communist system. It's hard to undo 40 years of bureaucracy and doctrine. One of our greatest demands is teaching them to make decisions at the lowest level. It's a tough challenge given the top-down decision-making process of the former JNA.

Another major training distractor was dealing with the three UH-1 Safety of Flight (SOF) messages during the past 12 months. For example, an SOF message left us with just six flyable engines out of 19. In order to maintain a 2,000-hour flight hour program, we've been required to make 40 engine changes during a nine-month period. A super training opportunity, but a major distracter from other training. Our engine shop (built from scratch) has successfully repaired five of the SOF engines.


Maintenance in Rebuilt Hangar


Hueys and Hips Together

The availability of UH-1 repair parts has also been a problem. Because the Army has stopped procuring new UH-1 parts, a successful maintenance program has to include "networking" with other UH-1 users, and the controlled exchange of parts. This has created two "hangar queens," but this, too, is a learning experience. With the help of the State Department and the U.S. Army Aviation and Missile Command the Bosnians are acquiring "demilitarized" UH-1s as an additional parts source and to help put the "hangar queens" back in the air.

In spite of the many training distractions — such as the SOFs and more snow last winter than at any time in the last 100 years — the program is on schedule. We will meet the 2,000-hour flight hour program. We have graduated five instructor pilots, 12 other pilots (PICs and CPs), and 57 from the basic maintenance course. Also, three maintenance test pilots have completed both the flight and ground portion of the Aviation Maintenance Manager's Course, and 12 students are in the basic UH-1 pilot's course. All of the students are participating in some phase of advanced flight or maintenance training. In May an air-movement operation was successfully completed using both UH-1s and Mi-8 aircraft. This was the first joint operation, which included a ranger battalion from the Federation Reaction Force.

Future aviation training will include air-ambulance operations utilizing UH-1s. This capability will be invaluable to both the military and to the civilian population in general. Joint operations and tactical, collective training (to NATO standards) are all planned as crew proficiency increases.

In the short time we've been here there has been a noted improvement in morale and esprit de corps in the Federation Air Force. The war brought havoc and destruction to this country that one has to see to believe. In spite of all of this, you can't help but notice the pride of accomplishment and confidence in the future exhibited by our students. All of the resources and training have been provided by donations from other nations.

It will take many years for Bosnia to rebuild the industry and infrastructure required to sustain itself. A prosperous future for Bosnia and peace in the Balkans will require donor-country aid for many more years. The progress of the aviation program is an example of money and effort well spent, and suggests that similar programs will reap the same results.

Ben A. Van Etten is a retired Army aviator now employed by MPRI, Inc.

45 years ago i
"Army Aviatio
Magazine"

The Army Air Corps is Back

Reprinted with permission of AIR FORCE Magazine, September 1955.

Few taxpayers are aware of the needless expense caused by duplication of Air Force functions through formation of another air force by the United States Army. In fact, this Army air force comprises a fourth air force, complementing those now existing of the Navy, the Marines, and the United States Air Force, itself. The wastefulness of this action is shown in the plans of each commander of a field army to use 939 Army aircraft. These are in addition to the Air Force aircraft available to him from normal theater support. The latter alone could adequately supply all his needs. The assignment to individual commanders of airplanes is a throwback to the penny packet method of distributing aircraft learned to be so fallacious in the early North African campaign of World War II. This requirement of almost a thousand Army planes in each field army (of which there are now eight) to perform functions which the Air Force can now do most economically, without increased cost to the taxpayer in additional planes, merits careful consideration. It is a subject which should receive close scrutiny by the public, the Bureau of the Budget, and Congress.

The natural desire of an Army commander to control his own aviation, while commendable from the individual commander's limited viewpoint, must be evaluated in the light of what will give the greatest good to the nation. It has been reiterated many times in recent months that the most pressing problem facing the nation is the maintenance of adequate defense forces for security within our national economy. This cannot be done if the Army continues to obtain and to use airplanes based on concepts of warfare learned in World War II and Korea. In truth, some Army concepts of operation even hark back to the Civil War when the mule-drawn vehicle was the best transportation known. The Army is unfortunately degrading the use of airpower in these obsolete fashions, for it treats the plane as a faster kind of truck or horse to be used over the same route and distances established by trucking methods. Similarly concept of tactical operations still confine its activities to a combat zone geographically defined based on former ground limitations. However, one lesson learned through hard experience by other users of airpower is now being relearned by the Army. That is - the requirement for centralized control of airpower that it does possess to obtain maximum usefulness. Attempts are being made to do this in the Army Transportation Corps over the objections of other branches and corps of the Army desirous of continuing individual control. This fourth air force, in addition to airplanes, is wastefully duplicating pilot and mechanic training schools as well as supply and maintenance facilities. In fact, with plans for completed world-wide air mobility of the Army, the Army is building up an air force with which it hopes to become entirely independent of any support of the present Air Force.

One example of the wasteful use of aircraft planned is the assignment, within the 939 planes of the field army, of sixty helicopters to be used for the sole purpose of medical supply and evacuation. In addition to this, 467 helicopters may be secondarily used for this purpose. Actually, an air force troop carrier assault squadron of sixteen helicopters could evacuate from 1,000 to 5,000 casualties per day, which should be adequate for the most pessimistic of commanders. For if this commander intended to use as many as 527 helicopters for casualties, his war would soon be over in favor of the enemy.

However, this wasteful duplication is not the most serious problem presented by the fourth air force. The real problem which will exist in the large number of Army planes programmed for a combat area, will be that of tactical control. A single, centralized tactical control system must be set up to identify all planes, locate targets for friendly aircraft, and permit flexibility of assignment of aircraft in a theater of operations. This centralized control system is now possessed by the Air Force. A duplicating system set up by the "Army Air Corps" or none at all, to control Army plans would soon make the air over the battle area a snarled-up mess and lead to disaster. Proper air cover must be given throughout a controlled system, for any reconnaissance, supply, troop carrier or evacuation missions. One single agency must control all types of air operations in combat, whether fought on the patterns of pre-atomic days or the new concept of flexible mobility and dispersion.

It is to be noted that the Army appears justified in its demands for more air transportation and air support, when considered with the requirements presented unilaterally by the Army. However, when an analysis is made of the actual airlift needed to fight a new type of war with a hard-hitting compact army devoid of many weighty, obsolete, logistical organizations, it is seen that the requirements are preposterous. They are based on the airlift needed to move World War II type armies from mudhole to mudhole.

In the past, budgetary limitations have necessitated the expenditure of most Air Force funds, and justifiably so, to build up the Strategic Air Command as a ready retaliatory striking force to prevent war. Now, with the need to develop armies that are truly air mobile, it is logical that the Air Force should be the proper custodian of the job in order to do it best and most economically. We should not be influenced by the precedent set in the recent past, of the Army attempting to enter the air business due to default of the Air Force because of its limited budgets. Millions can be saved by taking from the Army all aircraft other than a few small planes needed by commanders for liaison, and even this latter allocation is probably not necessary. It is not unlikely that billions could be saved, if the Army coordinated its tactics with proper use of airpower and cut out obsolete methods of operation based on surface-bound views. The claim that scientific advances have now made one airplane capable of doing the work that thousands did during World War II also can be applied to the functions of the infantry. As an example, one ground soldier controlling a number of rocket field pieces can do the work of an entire field artillery regiment.

The resolution of this problem will require a little knocking of heads together by the Commander in Chief and the Secretary of Defense. It will require telling the Army to stick to its own business. It will require that the Army cooperate and not compete with the Air Force in developing techniques of using air and ground power to the best advantage of the nation. It will require that this fourth air force concept be abandoned by the Army.

There is a best way to do a job. The nation's economy demands that it have that best method through proper unification of the services and the prevention of duplication or quadruplication. National survival and not service survival is at stake.

Colonel Moneysaver

ARMY AVIATION mailbox

Share your opinion on matters of interest to the Army aviation community. The publisher reserves the right to edit letters for style, accuracy or space limitations. All letters must be signed and authors identified. The publisher will withhold the author's name upon request. The opinions expressed are those of the authors, and do not reflect the opinion of ARMY AVIATION Magazine. Send letters to AAAA MAILBOX, 49 Richmondville Avenue, Westport, CT 06880-2000, Tel: (203) 226-8184, FAX: (203) 222-9863, E-Mail: magazine@quad-a.org.

Dear Editor;

I read with great interest the August/September 2000 "Briefings" article that talked about four CH-47C Chinooks from the 179th Aviation Company at Fort Carson, Colo.

The actual mission, called Operation Northern Leap, was conducted in early 1979 to demonstrate the self-deployment capability of Chinooks fitted with four bladder-type internal fuel tanks. The CH-47C has, of course, been superceded by the much more advanced CH-47D, and the 179th redesignated as Co. A, 2nd Battalion, 158th Aviation Regiment. The unit served in Operation Desert Storm, then inactivated in 1996.

In addition, the Army Reserve CH-47 units mentioned in the same Briefings column are Co. A and Detachment 1, respectively, of the 7th Bn., 158th Avn. Regt.

SSG Andrew P. Manuel
Co. D, 2nd Bn., 160th SOAR
Fort Campbell, Ky.

people on the move

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

FY00 Colonel Army Competitive Category Promotion Board Results

PROM SEQ#	NAME	BR							
86	ADKINS DONALD MCCO	AV	424	MCCONVILLE JAMES C●	AV	161	WILSON MARILEE●	AV/48
327	BARRETO DANIEL●	AV/48	39	MILLER RICHARD●	AV	199	YOUNG THOMAS●	AV
169	BECNEL WADE●	AV	422	MOENTMANN JAMES +	AV			
93	BRADLEY DARRYL	AV	375	MOODY MICHAEL●	AV	304	CROSBY WILLIAM●	AC
230	BRESLIN CHARLES●	AV	442	NORRIS KEITH●	AV	183	GAVORA WILLIAM●	AC
337	BRODEUR MARC●	AV	428	PALUMBO RAYMOND●	AV	308	GROTKE MARK	AC
370	BROOKS RICHARD●	AV	364	PERRIN MARK●	AV	292	HEINE KURT+	AC
61	BROWN WILFRED	AV	286	PLOURD PATRICK●	AV	195	NOONAN KEVIN●	AC
58	CHANDLER JIMMY J.●	AV	381	POTTS CURTIS●	AV	190	PALLOTTA RALPH●	AC
197	CYPHER-ERICKSON DOROTHY●	AV/48	325	POWELL MICHAEL●	AV			
276	FERRELL DONALD	AV	275	PRUITT DAVID●	AV	139	ANTLEY BILLY●	45
395	GARVEY DANIEL●	AV	385	RHYNEDANCE GEORGE●	AV/46			
# 450	GASS GREGORY+	AV	407	SALES MILLARD●	AV	170	MEYER DAN●	48/AV
427	GOLDEN WALTER ●	AV	299	SEMMENS STEVEN●	AV			
418	GULOTTA GASPER●	AV	226	SHAFFER DAVID●	AV	223	DAVIS RICHARD	53
185	HARDY KIRT●	AV	234	SHERMAN PATRICK●	AV			
191	HILDRETH BRADFORD●	AV	387	STORY KURT STEVEN●	AV	# Below the Zone		
295	HOFF MICHAEL	AV	17	TALLEY RICHARD●	AV/46			
79	ITHIER JAN●	AV/48	6	THEISING FRANK	AV	+ AAAA Life Member		
320	JUDGE JOSEPH III	AV/48	411	THOMAS KELLY●	AV	● AAAA Member		
168	KNIGHTON CHRISTINE●	AV	362	THORNAL MASON●	AV			

Briefings *continued from page 3*

The National Aeronautics Association has issued a call for nominations for its Frank G. Brewer Trophy, which is awarded annually to an individual, group of individuals or organization for significant contributions of enduring value to aerospace education in the United States. The trophy will be presented during the National Congress on Aviation and Space Education, to be held from March 14 to 17 in Minneapolis, Minn. For information, visit the NAA's website at **www.naa-usa.org/website/**.

Lockheed Martin's Sanders division has successfully "sled-tested" its Advanced Threat Infrared Countermeasures/Common Missile Warning System (ATIRCM/ CMWS), and is nearing completion of the contractor flight-testing phase. During the sled tests, conducted at Holloman Air Force Base, N.M., in late August, missiles were strapped to and launched on a rail system simulating live missile firings. An ATIRCM/CMWS, installed on a UH-60 helicopter, then successfully identified, tracked and jammed the missile threats during 13 tests at distances up to 4 kilometers.

The **Egyptian government** has signed an agreement with the Department of Defense to upgrade 35 of Egypt's AH-64A Apache helicopters to AH-64D configuration. Once a Foreign Military Sales agreement is concluded, the Army will contract directly with the Boeing Co. for the Egyptian aircraft and associated equipment. The total value of the program - including aircraft, ordnance, spares, training and support - is estimated at approximately $400 million.

The Army has awarded **GM GDLS Defense Group** the contract to supply the Interim Armored Vehicle. The $4 billion, six-year contract will provide the Interim Brigade Combat Team with two vehicle variants that are deployable anywhere in the world in combat-ready configurations. Two variants will be produced — the Infantry Carrier Vehicle and the Mobile Gun System. The ICV will have eight configurations besides the basic infantry carrier model — mortar carrier, reconnaissance vehicle, antitank guided-missile vehicle, fire-support vehicle, engineer support vehicle, command-and-control vehicle, medical-evacuation vehicle and the NBC reconnaissance vehicle.

DuPont has introduced a line of aircraft wipes specially engineered to resist snagging on metal parts and corners, and which won't leave rag marks in prepaint applications. More information on the Sontara AC wipes is available on the web at **www.sontara.com**.

The 2001 **Vietnam Helicopter Pilots Association** calendar is now available. It boasts 27 photos of helicopters operating in South East Asia, along with unit logos and an updated by-date roster of each pilot killed in action. The calendars cost $17 each, which includes shipping/handling. Call Turner Publishing Company toll-free at (800) 788-3350 or write to PO Box 3101, Paducah, KY 42002.

Logicon Inc. has received an eight-year, $114 million U.S. Army, Europe, task order to provide continued support of battle simulation centers for the 7th Army Training Command's Directorate of Simulations-Forward. The task order covers training services in technical and exercise planning support. The work will be conducted in nine locations in Germany and one in Italy beginning in December.

Tips from TOPS

By Col. Jerry Crews, USA-Ret., Deputy Director, TOPS

Under a Microscope

Can you pass the crucial chemistry test?

Many professionals who screen applicants will tell you that only about 30 percent of a candidate's total qualifications are based on the technical aspects of the job. The other 70 percent is chemistry. Chemistry can make or break you during an interview, but it's something you have almost absolute control over - and, far too often, take for granted.

Chemistry is defined as "the science of the composition, structure, properties, and reactions of matter." When you first meet someone, there is usually a whole range of subtle, as well as overt, subliminal reactions. Because of the value they carry during your career transition, I want to elevate these subtle reactions to a more conscious level. This is not a discussion about beauty; if you had to be beautiful to find a job, most of us would never work again. Usually, it's not what you're born with that matters but how you package it.

Physical chemistry: My wife and I were traveling recently when she asked if I knew a couple standing in the distance. I thought they looked familiar but couldn't figure out what was missing. When we saw them up close, it was not what was missing but what they had gained that surprised me. Use the same discipline after leaving the service that you did on active duty to maintain a healthy personal appearance. You can't change the way you're constructed, but if excess weight is a problem for you, exercise and diet can help.

Chemical chemistry: Many employers have told me they won't hire someone who smokes because people who smoke lose work time taking smoke breaks, have clothes that smell smoky, have bad breath, and are sick more often than those who don't smoke. With some discipline (and help from patches, gum, and/or counseling), you can quit this expensive and unhealthy habit. Another aspect of chemical chemistry, while not as unhealthy, can be almost as irritating as smoke: excessive perfumes or deodorants. The only thing worse than a woman who smells like she poured an entire bottle of perfume on herself is a guy who smells like he has been marinated in the bottle.

Personal chemistry: This is not about how to dress but about more personal aspects of appearance. At a recent job fair, one employer had a large bowl of unshelled peanuts available. Others offered candy, licorice, or chewing gum, and people were stopping and grabbing handfuls. Someone who had grabbed the peanuts came over to talk with me, and I was not impressed with his peanut breath or the peanuts stuck between his teeth: an employer would not be impressed either. Before an interview, brush your teeth and gargle. If it's an interview over a meal, avoid foods that will leave you with bad breath or that get caught in your teeth. If you want to chew some gum or use a breath mint prior to a meeting, do so in the privacy of your office or car - but don't show up looking like a cow chewing your cud.

Hair can be a sensitive subject for some. If you are going bald, going gracefully is often preferable to a poorly fitting toupee or other attempts to conceal your scalp. If you feel you must color your hair, get it done professionally. If you wear jewelry, don't overdo it. A few simple and conservative pieces are fine.

Chemistry plays an important role in your career transition, but many of us never give it a second thought. The bottom line of the career transition process (as well as life in general) is to be whoever you are and hope you are what an employer wants.

arrivals/departures

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RETIRED

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AAAA NEWS

Arizona Chapter

BG J.D. Thurman *(left)*, commanding general of the National Training Center (NTC), Fort Irwin, Calif., is congratulated by COL Laurence Thomas Jr., commander of Defense Contract Management-Phoenix, and acting president of AAAA's Arizona Chapter, following Thurman's presentation on operations at the NTC. Apache Longbows are heading to the NTC in April for the two-month Digital Capstone Exercise (DCX).

Colonial Virginia Chapter

On Friday Dec. 22, 2000, the Colonial Virginia Chapter of AAAA presented two $500 Scholarships. At left, LTC Robert S. Saunders, the chapter's vice president for programs and publicity, presents one of the scholarships to Ms. Allison E. Arthur. At right, Saunders presents the second scholarship to Mr. Alexander Duncan III. Others present included Colonial Virginia Chapter members Ms. Allie Eschenbach (secretary), CW3 Lance Nation (VP, warrant officer affairs) and the recipients' family and friends.

In Memoriam

We note with sadness the passing of two legendary Army aviators, **MG James F. Hamlet** and **MG William J. Maddox Jr.**, each of whom died on Jan. 5. Both were longtime AAAA members, and both had been inducted into the association's Hall of Fame in recognition of their many contributions to Army aviation.

MG James F. Hamlet (Ret.) was born Dec. 13, 1921, in Alliance, Ohio. After attending public schools and Tuskegee Institute, he entered the Army in 1944 and was ultimately commissioned as an infantry officer. He saw extensive World War II combat service in Italy, and after the war served in a variety of increasingly important command and staff positions. Hamlet ultimately became a rated Army aviator, and joined AAAA in 1958.

He returned to combat during the Vietnam War, serving successively as operations officer of the 11th Aviation Group, commander of the 227th Avn. Battalion and executive officer of the 11th Avn. Grp., all between May 1966 and July 1967. He then attended senior leadership schools in the United States, and returned to Vietnam in 1970. During this second tour in Southeast Asia he served successively as commander of the 11th Avn. Group., assistant commander of the 101st Airborne Division and commander of 3rd Brigade, 1st Cavalry Div.

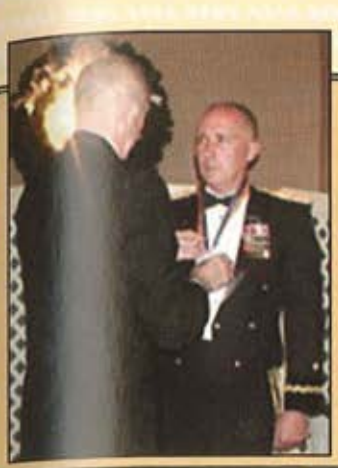
Following his Vietnam service Hamlet went on to command the 4th Inf. Div. at Fort Carson, Colo., and later became the Army's deputy inspector general. His active and influential 37-year Army career ended with his 1981 retirement from active duty. Following retirement, Hamlet remained active in a variety of causes, and in 1983 he was inducted into the AAAA Hall of Fame.

He is survived by his wife, Paulette, and his son, James.

MG William J. Maddox Jr. (Ret.) was born on May 22, 1921, and entered the Army during the latter part of World War II. Commissioned as an armor officer, he became an Army aviator in 1945.

In the years following the end of World War II Maddox served as a liaison pilot and staff officer in the Philippines, Japan and Korea. He went on to attend a variety of leadership and professional-development schools, as well as serving in positions of increasing responsibility in Germany-based armored units, and joined AAAA in 1957. In 1965 he assumed command of the 13th Combat Avn. Bn. in Vietnam, serving in that and other positions for the remainder of his first tour in Southeast Asia. After a stint as chief of staff for the Europe-based 3rd Armd. Div., Maddox returned to Vietnam in 1969 to command the 3rd Bde., 25th Inf. Div. He subsequently took command of the 164th Cmbt. Avn. Grp., a position he held for the remainder of his second Vietnam tour.

Following his Vietnam service Maddox successively served as a special assistant to the director of Army aviation, the director of Army aviation and, from September 1973 to June 1976, as commander of the U.S. Army Aviation Center. He was inducted into the AAAA Hall of Fame in 1976, and following his retirement from active duty that year he filled a number of important aviation positions in the United States and abroad, including director of the Royal Jordanian Air Academy, director of safety for Petroleum Helicopters Inc. and managing director of Bell Helicopter (Asia) Ltd.



Iron Mike Chapter

MG John R. Vines, commander of the 82nd Airborne Division at Fort Bragg, N.C., was the guest speaker at the 18th Aviation Brigade Holiday Formal. Left, during the event, MG Carl McNair (Ret.), the president of AAAA, presented Vines with the Order of Saint Michael honoring his years of association with Army aviation. McNair also commented on the successes of the 18th Avn. Bde. and took the time to highlight the importance of supporting professional organizations such as AAAA. Right, COL William M. Jacobs assisted McNair with the presentation.

Central Florida Chapter

AAAA Central Florida Chapter President Sam Richards *(second from left)* and Vice President, Programs, Jan Drabczuk *(third from left)* present donated toys to USMC Sgt. Hunter *(left)* and Cpt. Meade *(far right)*, for the Marine Corps' Toys for Tots program. The toys were purchased with funds generated by the chapter's December 2000 social, a monthly event normally used to finance the Central Florida Chapter's scholarship fund.

AAAA Scholarships Available

Application Deadline
May 1, 2001

Scholarships "dedicated" to Enlisted, Warrant Officer, Company Grade Officer and Department of the Army Civilian members.

Funds also available for spouses, siblings & children of AAAA members.

AAAA SCHOLARSHIP FOUNDATION
ACHIEVE WITH HONOR

Contact
AAAA Scholarship Foundation, Inc., 49 Richmondville Ave., Westport, CT 06880-2000
Telephone: 203-226-8184 E-Mail: aaaa@quad-a.org for complete details.

LEGISLATIVE REPORT

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

Key Bills Reintroduced in House

The following is a short list of bills of interest to the uniformed services and veterans community that were introduced during the House's first two days in session.

H.R. 65 (Rep. Mike Bilirakis, R-FL) authorizes reduced offset of retired pay for veterans disability compensation, with an offset percentage inversely proportional to the retiree's Department of Veterans Affairs (VA) disability percentage.

H.R. 303 New and Improved

Bilirakis's new H.R. 303 (which would authorize uniformed services retirees to receive both military retired pay and VA disability compensation concurrently) is an improved version of last year's bill, since it includes two retiree categories of retirees not covered previously.

First, it would include so-called "chapter 61" (disability) retirees with 20 or more years of service who were awarded at least some disability rating from their parent service (independent from any VA rating).

Second, it would cover "Temporary Early Retirement Authority" (TERA) retirees who were induced to retire (many under threat of involuntary separation if they failed to retire) with 15 to 19 years of service during the post-Cold War force reduction.

Previous House concurrent receipt bills had excluded chapter 61 retirees, on the rationale that military disability retirees should not receive "double disability benefits" from the VA, too. But experience with the new special compensation for severely disabled retirees prompted reexamination of that exclusion.

The main argument for allowing concurrent receipt of retired pay and veterans disability compensation is that the two are paid for different purposes. Retired pay is earned compensation that recognizes all of the extraordinary demands and sacrifices inherent in a service career, whereas disability compensation is for pain, suffering and lost future earnings due to a service-connected disability.

Because the two compensate service members for different things, one should not offset the other. Congress fixed a similar inequity in 1999, when it repealed the retired pay offset for certain military retirees employed as federal civilians. The same principle applies to the disability compensation offset.

Bilirakis' H.R. 303 would allow chapter 61 retirees to keep the amount of gross retired pay they would have received if they had been retired for length of service, without any military disability. Any additional retired pay amount due to the military disability award would still be subject to a dollar-for-dollar offset by any disability compensation received from the VA.

H.R. 179 Update

Both Rep. Shows and Rep. Norwood have reintroduced H.R. 179, the "Keep Our Promise to America's Military Retirees" Act. This legislation would authorize all retired beneficiaries and their family members the option of enrolling in the Federal Employees Health Benefits Program (FEHBP). For retirees who entered service before June 7, 1956, (the date of the first statutory reference to "space-available" retiree care), FEHBP coverage would be provided with no premium.

This is substantially the same as last year's H.R. 3573, modified only to acknowledge the recent enactment of TRICARE For Life (TFL). But cosponsors from the 106th Congress don't carry over to bills introduced in the 107th Congress, so all cosponsor lists have to restart from scratch.

TFL Impact on Medigap Policies

Current law bars sale of duplicate commercial Medigap coverage to Medicare eligibles, and some have asked whether this law would affect TFL eligibles when this new program is implemented next Oct. 1. TMC has written the Health Care Financing Administration (which oversees Medicare) to ask for a formal determination whether this law would bar sale of Medigap policies to TFL-eligibles.

On one hand, we understand some beneficiaries may be nervous about dropping their Medigap policies immediately upon the Oct. 1 implementation of TFL. On the other, we worry about "scare" advertising that may prompt beneficiaries to keep or purchase expensive duplicate coverage they are very unlikely to need if TFL is implemented as expected. Either way, the answer to the question will be important, and we'll pass it on as soon as it's received. You can view the TMC letter at **www.troa.org/Legislative/ HealthCare/TMCltr.asp**.

Principi to Head VA

Anthony J. Principi, who co-chaired the Congressional Commission on Military Servicemembers and Veterans Transition Assistance, has been nominated to be the next secretary of veterans affairs. Principi's commission, which reported its findings in 1999, called for dramatic increases in educational and job-training benefits for servicemen and servicewomen leaving active duty. Congress accepted, in part, the commission's recommendation to increase educational benefits under the Montgomery GI Bill. AUSA supported this initiative, which increased the educational benefit to $650 per month.

Principi, a Naval Academy graduate, commanded a patrol boat in the Mekong Delta during the Vietnam War. He also served briefly as staff director of the Senate Armed Services Committee and as deputy administrator of the VA in President George H. W. Bush's administration. The Senate must confirm his nomination.

House Committees Get New Leadership

With most House committee chairmen having completed their six-year term limits, House leaders selected a new slate of chairmen. Some key new faces from the standpoint of military and veterans groups:

Armed Services Committee: Rep. Bob Stump (R-AZ); Veterans Affairs Committee: Rep. Christopher Smith (R-NJ); Budget Committee: Rep. Jim Nussle (R-IA). TMC has had excellent relations with Stump and his staff during his tenure on the Veterans Affairs Committee, and we look forward to working with him in this new capacity.

Smith also has had a long history of support for military and veterans programs, and we're pleased to note that Nussle cosponsored H.R. 303 (concurrent receipt of retired pay and VA compensation) in the 106th Congress.

North Carolina Retirees Win Suit

On Dec. 21 the North Carolina Supreme Court ruled that the state attorney general had no standing to appeal an earlier decision finalizing settlement of a suit by North Carolina retirees to win refund of illegally collected state income taxes on military and federal civilian retired pay during the years 1989-1997. Barring any further unforeseen delays, N.C. retirees should get their refunds in April.

TRICARE Senior Pharmacy Program (TSRx)

The fiscal year 2001 National Defense Authorization Act (NDAA) established the TRICARE Senior Pharmacy Program (TSRx) for all Medicare-eligible uniformed service beneficiaries. This DOD "triple option" pharmacy benefit will extend benefits to approximately 1.4 million Medicare-eligible military beneficiaries.

Key Provisions:

- TSRx becomes effective on April 1, 2001
- All uniformed services beneficiaries 65 and older are eligible to use the TSRx benefit. (Note: Beneficiaries who attain age 65 on or after April 1, 2001, will have to be enrolled in Medicare Part B to be eligible for TSRx.)
- Continued (no cost) access to military pharmacies for drugs routinely stocked.
- Access to the National Mail Order Pharmacy Program (NMOP) where

beneficiary can get up to a 90-day supply of most non-narcotic drugs (or a 30-day supply of a narcotic prescription). (Note the prescriber must write the prescription for a quantity equivalent to a 90-day supply based on the prescribed daily dose.) The formulary, which uses generic drugs when available, is very broad, but does have some limitations.

- Use of the TRICARE retail pharmacy network, (most national drugstores) which have open formularies and where a beneficiary can get a 30-day supply of medication. (A non-network pharmacy can be used after the standard TRICARE annual deductible of $150 has been met.)
- There is no annual deductible or enrollment fee, except for the use of non-network pharmacies, as described above. In January TRICARE contractors began mailing a packet of information explaining TSRx to all uniformed services beneficiaries whose DEERS database information is accurate. Make sure that you and any eligible family members are registered with the Defense Enrollment Eligibility Reporting System (DEERS), and that your information is current.

If you and eligible family members have valid military ID cards and your residence hasn't changed since issue of those cards, your DEERS data should be current. The best way to change/verify your information is by visiting the nearest military personnel office. You may also e-mail changes to addrinfo@osd.pentagon.mil, or mail them to Mail changes to DEERS Support Office, Attn: COA, 400 Gigling Road, Seaside, CA 93955-6771. Visit the DEERS website at www.tricare.osd.mil/DEERSAddress or, as a last option, (call wait time may be very long) the DEERS Support Office toll-free numbers:

(800) 538-9552
(800) 334-4162 (California only)
(800) 527-5602 (Alaska and Hawaii)

DEERS Support Office hours of operation are 6 a.m. - 3:30 p.m., Pacific Time, Monday through Friday.

Agent Orange and Diabetes

Vietnam veterans with adult-onset (Type-II) diabetes are eligible for disability compensation from the VA based on their presumed exposure to Agent Orange or other herbicides.

This decision follows the latest in a series of reports by the Institute of Medicine (IOM) examining the impact of herbicide exposure on veterans' health. Based on this new information, IOM researchers found "limited/suggestive" evidence of an association between the chemicals used in herbicides during the Vietnam War and Type-II diabetes.

VA officials advised that it will take several months to write the rules before Vietnam veterans with diabetes can begin applying for disability compensation. They can, however, enroll in VA's healthcare system immediately and begin receiving the care they need. Contact the nearest VA Regional Office [by calling toll-free (800) 827-1000] or the nearest VA medical center for additional information on this subject. Information can be found as well by visiting the VA web site at www.va.gov.

TRICARE Improvements for Active Duty and Family

Active-duty members and their families should expect major new benefits soon in DOD's TRICARE managed healthcare plan. Changes coming within the next year include:

- Family members of active duty members in remote locations will become eligible for the TRICARE Prime Remote program Oct. 1, 2001, and
- DOD will have a five-year period to phase in chiropractic care for active-duty members.

TRICARE managers also are expected to increase access to school physicals, and to eliminate the need for some nonavailability statements and referrals for specialty care. Some of these issues may not occur before a new TRICARE contract is awarded, perhaps in 2003 or 2004. For more detailed information on these subjects contact your nearest TRICARE Service Center or visit the TRICARE website at www.tricare.osd.mil.

TMC's Legislative Scorecard for 2000

The following is a summary of the major legislative initiatives that were supported by TMC and enacted during the second session of the 106th Congress. Collectively, they represent significant enhancements in the quality of life for servicemembers and their families, and should have a positive effect on the services' recruiting, retention and readiness programs.

Health Care

- Authorized TFL for Medicare-eligible uniformed services beneficiaries (regular and Reserve retirees, their family members and survivors), effective Oct. 1, 2001.
- Authorized DOD retail and mail-order prescription coverage for all Medicare-eligibles, effective April 1, 2001, with NO enrollment fee or deductible.
- Authorized DOD Military Medicare-eligible Retiree Health Care Trust Fund (makes TFL a mandatory, must-pay entitlement program), effective Oct. 1, 2002.
- Reduced TRICARE Standard retiree catastrophic cap from $7,500 to $3,000 per year (applicable to all retirees regardless if under 65 or if Medicare-eligible and participating in TFL).
- Eliminated TRICARE Prime copays for active duty family members.
- Expanded TRICARE Prime Remote, with PRIME-level benefits for active duty families assigned where Prime is not available.
- Authorized long-term care coverage for active/Reserve/retired military/federal civilians (estimated implementation date Oct. 1, 2002).

Retirement and Survivor Programs

- Expanded special compensation for severely disabled retirees to include Chapter 61 (military disability) retirees.
- Provided full-inflation COLAs for all retirees/annuitants.
- Increased maximum annual Reserve retirement points from 75 to 90.
- Required universal state acceptance of military-prepared wills.
- Required automatic immediate Reserve Component Survivor Benefit Plan coverage for Reservists attaining 20 years of service, unless declined by member and spouse.
- Provided improvements in educational benefits for widows and children of service-connected deceased veterans, including a 21 percent increase in the educational stipend and, for the first time, COLA adjustments.
- Extended Dependency and Indemnity Compensation (DIC) to survivors of National Guard and Reserve members who suffer a stroke or heart attack during inactive duty training.

Active and Reserve Forces

- Provided 3.7 percent Jan. 1, 2000, pay raise, plus targeted July 1, 2000, raises for E-5, E-6, E-7.
- Authorized active/Reserve Thrift Savings Plan enrollment (NLT Oct. 1, 2001).
- Reduced median out-of-pocket housing expense to 14.5 percent in 2001, and to zero by 2005.
- Increased SGLI coverage to $250,000
- Provided 21 percent increase in Montgomery GI Bill (MGIB) benefits.
- Repealed 1 percent cap on annual subsistence allowance increases, effective Jan. 1, 2002.
- Improved funeral honors duty benefits for Guard/Reserve; authorized choice of drill pay or $50; approved incapacitation pay for injury/illness sustained on such duty; and clarified reemployment rights.
- Authorized Post-Vietnam-Era Veterans Educational Assistance Program (VEAP) conversion to MGIB.
- Approved disability compensation for Guard/Reserve who suffer heart attack/stroke during inactive duty training (IDT).
- Authorized children of National Guard and Reserve members to seek presidential appointment to a service academy.

Other Gains

- Restored requirement for VA to assist veterans in preparing claims' applications for benefits.
- Repealed Social Security earnings test for beneficiaries age 65 to 69.

AAAA NEWS

NEW MEMBERS

AIR ASSAULT CHAPTER
FORT CAMPBELL, KY
SGT Todd M. Andrew
MAJ Stephen T. Burns
SSG Brian R. Coriuch
SSG Juan S. Cornett
CPT Patrick K. Donovan
CPT Patton J. Gade
1LT Scott A. Kutscher
1LT Stephen M. Miller
1LT Joe B. Sharrock
PFC Jaclyn N. Smith
1SG John F. Szoke III
PFC Dustin L. Wickliff

ALOHA CHAPTER
HONOLULU, HI
CW4 William N. Soeth

ARIZONA CHAPTER
MESA, AZ
CDT Michael C. Shaw

AVIATION CENTER CHAPTER
FORT RUCKER, AL
2LT Kevin M. Burns
WO1 Eric W. Collier
WO1 Kassel R. Coon
WO1 Patrick E. Devine
2LT Jason L. Hathaway
2LT Marcus B. Howard
2LT Thomas M. Jones
2LT Raul E. Jurado
2LT Joshua A. Karkalik
2LT Bruce A. Kraemer
2LT Christopher J. Landry
2LT Joshua M. Luckey
2LT Kevin P. Maddox
1LT Christopher E. McNutt
WO1 James A. Neal
2LT Stephanie K. Parks
2LT Erik K. Rautenberg
2LT Scott A. Schmidt
Mr. Charles M. Seitz
2LT Ben K. Selzer
WO1 Billy J. Sbults
WO1 Carl F. Snyder
WO1 Kristina M. Stradley
2LT Jonathan M. Thoennes
Ms. Pamela S. Wing
2LT Paul M. Wuensch

BIG RED ONE CHAPTER
ANSBACH, GERMANY
CPT Karl L. Steinek

BLACK KNIGHTS CHAPTER
WEST POINT, NY
CDT Boyce R. Buckner
CDT Richard E. Hull, III

CENTRAL FLORIDA CHAPTER
ORLANDO, FL
Mr. Stanley R. Gause

COLONIAL VIRGINIA CHAPTER
FORT EUSTIS, VA
SSG Charles C. Dees
SFC Wayne B. Fink
Mr. Kent J. Fuqua
SGM Quinten High
Ms. Sharon R. Hilliard
Mr. Keith J. Hoff
SFC Roosevelt Johnson
SSG Gary B. Martin
Ms. Sonja E. McLaughlin
MSG Darius L. Ratcliff
SSG Michael G. Staniszewski
SSG James C. Thomas
SFC Selwyn T. Thompson
SFC William J. Tyes

CONNECTICUT CHAPTER
STRATFORD, CT
Mr. John R. Cutler
Mr. Peter J. MacDonald

DELAWARE VALLEY CHAPTER
PHILADELPHIA, PA
LTC Billy N. Wagner, Jr. Ret.

EDWIN A LINK MEMORIAL CHAP
BINGHAMTON NY AREA
Mrs. Andrea F. Hatzinger

GREATER CHICAGO AREA CHAP.
CHICAGO, IL
Mr. Fred J. Ferber

IRON MIKE CHAPTER
FORT BRAGG, NC
SSG Matthew P. Burke
CW3 Adam F. Gore
CW4 John P. Mandulak
LTG Dan K. McNeill
CPT Natasha M. S'Chevalier
CSM Kenneth L. Tweedy

JACK H. DIBRELL/ALAMO/
FORT SAM HOUSTON, TX
LTC Lowell J. Berry
Mr. Michael A. Portele

MICHIGAN GREAT LAKES CHAP.
GRAND LEDGE, MICHIGAN
Mr. David Bina

MINUTEMAN CHAPTER
WESTOVER AFB, MA
Mr. H. Bruce Peterson

MONMOUTH CHAPTER
FORT MONMOUTH, NJ
CW4 Raymond P. Ferrante

MORNING CALM CHAPTER
SEOUL, KOREA
MAJ Joseph M. Adams
SSG Shirley J. Adams
SGT Douglas Age
PV2 Dae Hyun Ahn
SGT William G. Akers
SPC Phil Albarado
SPC Erik S. Alexander
SFC Claude W. Allen
PVT Dustin Allinger
SPC Jose Alvarez
SGT Scott W. Anderson
PV2 Shane D. Anderson
SPC Ana M. Arcevargas
SPC Jean M. Attulien
SGT Derek D. Atwaters
PV2 John P. Ayers
PV2 Chul Gyoon Back
SGT Jeffrey B. Bailey
SPC Lephas A. Bailey
SGT David Baillakgeon
SPC Kenneth E. Banes
PFC Jamel L. Barnett
SSG Shanno Barnett
SGT Cassandr Barnwell
SPC Roland Barron
PFC Nathan L. Bass
SGT William Bauzo
SSG James T. Bear
PFC Tamikan Beasly
SSG Yvonne M. Becker
SGT Darrell L. Bell
SPC Ariel Benitez
SPC John T. Bernard
SGT Jeffrey R. Bierman
SPC Yongmi Yu Black
SFC Mi Boerner
SSG Corey T. Bookert
SFC Sandra Boothi
SGT Bryan S. Boots
SPC Ivan Bowen II
SGT Kenneth D. Boyce
SPC William Brammerer
PV2 Archie Brawner
SPC Jonathan Brecheisen
SPC Kendraon D. Brown
PV2 Kevin Brown
SGT Phillip R. Brown
SGT George J. Bruce
SGT Frank Butler
PFC Jee S. Byun
SGT Gerome S. Cabe
SSG Elizabeth Cajen
SGT Clifford D. Camphor
SGT William B. Cantrell
SGT Albert Carbajal
SFC Otero Carmelo
SGT Doswell D. Carter
SPC Joseph Carver
SGT Stephen B. Cavin
SGT Demetrius Chantz
SPC Eric Chen
PFC Charles Chin
SPC Daniel J. Choi
CPL Jung H. Choi
CPL Youn Suk Choi
SSG David P. Christian
PFC Todd E. Christenson
SPC Young O. Chung
SPC Arturo L. Claveria
PFC Nicholas Clawson
SGT Dexter B. Clemons
SPC Antonio Cleveland
SPC Joseph Allen Coghill
SPC Carlos Concepcion
SGT Burt D. Courtney
SPC Charles S. Cruz
SGT Michael A. Curry
SPC Joel H. Daley
SSG Michael W. Darden
SSG Paul G. Deason
PV2 Sherri Debevoise
SGT William Dell
SSG Nicholas Delnero
SPC Shaun M. Delorey
SSG Ramon Delosreyes
SGT Ricardo J. DePalm
SPC Erin Depew
SGT Weny L. Domingo
SSG Keith Douglas
SSG Christo Downey
SPC Thomas R. Doyle
SPC Kain Dretzka
SSG Howard K. Drew
SGT Hans P. Drupiewski
SSG Terrance Dunbar
SSG Joson T. Dunlap
PV2 Jonathan Dunn
SGT Richard L. Eadie
SGT Kevin L. Eaton
SPC Paul F. Ecklund
SPC Yvette Edmonds
SSG Freddie Ellis
PFC Jessica Emel
PFC Carlos V. Espada
PFC Lucas C. Eujen
PV2 Crystal Evans
SSG Kevin D. Evans
SGT Lance L. Evans
PFC Ronald C. Fallon
SPC Grant J. Farmer
SPC Walter Fennell
SPC Jeffery J. Fesler
SFC Patrick F. Fields
SFC Ronnie Joseph Figliola
MAJ Russell E. Fisher
SSG Kris Fitzsimmons
SPC Mark T. Flater
SPC Heather M. Flavell
SPC Spencer K. Floyd
SGT Eduardo Fonsela
SGT Todd A. Forward
SSG William Virgil Foster
SSG Paul C. Fournier
SSG John P. Fox
SGT Eric A. Franco
SPC Jackie W. Frentress
SPC Daniel A. Fritts
SGT Thomas J. Gambale
PV2 Desaree R. Gamez
SGT Jason Garcia
SSG Todd Garner
SPC Jason M. Garrison
SPC Willie Gause
SGT Timothy Gawarecki
SSG Edward Gay
PFC James R. Gessler
SGT Mark D. Ghere
SGT Shawn Gibbsons
SPC Randolp Gibson
SPC Alejandro Giron
SGT William Glass
PFC Robert Gomez
SGT Antonio Gonzalez
SPC Jose Gonzalaz
PFC Sophia C. Gonzales
PV2 Yaveth A. Gonzalez
SPC Kathryn A. Grady
SPC Andria J. Grafflin
SGT Charles T. Gray
SGT Charles T. Gray
PV2 Chadford D. Green
CPL Tae Kyoo Ha
PFC Clyde Hack
SFC Deorriel Hackett
PV2 Everette Hall
SSG Kaseem Hallam
SPC Micheal D. Hamilton
SPC Thomas Hanavan
SGT Donnie R. Hance
SPC Amy Hancock
SPC Kenneth Hankinson
PFC Amos W. Harris
PFC Jason B. Harrison
CPL Jerome R. Harris
SGT Darrell Hawkins
SFC Judson Hayden
SSG Phillip J. Haynes
SGT Zachary Heard
SSG Brian A. Heitman
PVT Johan Henao
SPC Anthony L. Henthorn
PVT Ceasar Herrera
SPC Kristi L. Hickey
SPC Christopher A. Hills
SGT Gaylon A. Holder, Jr.
PFC Jae Hoon Hong
SPC Jong B. Hong
SPC Arthur A. Horcastitas
PFC Steven K. Horn
SGT Rodney Paul Horner
SPC Betty L. Horton
SPC Daniel J. Houck
SGT Jaimie D. Howard
PFC Joseph Howard
SGT Sharon Yvonne Hughes
PFC Jong Hoon Hyun
SSG Jerry F. Irick
SFC Daniel Orlando Islas
SGT Yvette Jackson
SPC Sharon L. James
PFC Seung M. Jang
CPT Loren B. Jerlow
PFC Y. Jo
SPC Jason E. Johnson
SPC Samuel Johnson
SPC Thomas D. Johnson
SSG John Andre Jones
PFC Hyung Suk Jooh
SPC Christopher L. Jordan
CPT Katie J. Judge
PFC S. Jun
PFC Jae Yoon Jung
PFC S. Jung
PV2 Ji Hoon Kang
SPC Young Kang
SPC Carol L. Kay
PFC Steven C. Kelley
SPC Lisa M. Kennedy
SGT Chong Kim
PV2 Hyun Kyoo Kim
SSG Hyun Suk Kim
PFC Jae W. Kim
PFC Jin Woo Kim
PV2 Moon Sung Kim
PV2 Yong Kim
SFC Carl Edward King
PFC Eric L. King
SSG Mary King?Espina
SPC Cassandra D. Kirkpatrick
SPC Theodo Klepin
SGT Samuel Knight
PFC Amy Kocurek
SGT John A. Kolodgy
SGT Charles Krewson
SGT Michael Lacy
PV2 Truong Lam
SGT Andrew J. Lau
SSG Orrett D. Lawrence
SPC David Lay
SPC Hyun Lee
SGT Ji K. Lee
PFC Joo Hyung Lee
PV2 Joon Kab Lee
PV2 Joong Min Lee
PFC Jung Min Lee
CPL Kyung Woo Lee
SGT Sang W. Lee
PV2 Se Hoon Lee
SSG Matthew T. Levenson
SPC Joseph E. Lewis
PFC Marcelino Licudine
SPC Jeremia Linderman
SPC Hector F. Lockamy
SSG Saundra E. Lucas
SGT Samuel A. Lynon
SPC Jerononte Lyons
SPC Brandon K. Maitre
SGT Gregory L. Marrisette
SGT George Martinez
SSG Matthew J. Martin
SPC Sandra K. Martin
SSG James E. Matthews
SPC David Mayo
SFC Anthony J. McCort
CPL Jacob D. McDonald
SSG Robert B. McGraw
SPC Lloyd McGrew
SGT Tammy McManus
PV2 Robert W. McSwain
SSG Virak A. Metcalf
SSG Anthony R. Mielke
SPC James G. Miller
SGT Robert E. Mills
SGT Vickie L. Mixon
SSG John H. Monro
SPC Rosa Montalvo
PV2 Jonathan B. Morris
CPL Sherrilann Mullings
SGT Edward L. Muna
SGT Carolyn L. Mungroo
SPC Alissa N. Munoz
SGT Robert J. Murphy
PFC Tiffany A. Muskopf
PV2 Kyung Jin Nam
SPC David Nihipali
SSG Daryl A. Noble
PFC Leonard Nodal
PFC Ezra J. Nolin
SGT Laura L. Norvell
SSG Hans M. Nunemaker
SGT Dwayne L. Oneal
PV2 Bryan Orcutt
PVT David F. Ortis
PFC Francisco Ortiz
SPC Nilda Ortiz
SGT Gary Osburn
SGT Eifwa P. Owens
SSG Adrion Page
SPC Cecil J. Park
PV2 Hun Woo Park
PV2 Jong Hyun Park
PV2 Joon Young Park
PFC Jung Suk Park

SSG Sung K. Park
SSG Deborah Parsley
SPC Andre P. Patterson
SFC Thomas C. Patterson
SGT Epifanio J. Payams
SFC Myra E. Peltier
SGT William Peterson
PV2 Adam Pflum
SFC Wilbert R. Pierce
SPC Gregor Pitlman
SGT Grover M. Pope
PV2 Jose A. Quezada
SPC Joseph H. Ra
SGT Kevin J. Radke
SFC Elvin A. Ramoslopez
SPC Christina N. Ratcliff
SSG Bobby D. Rhue
SSG Bradley Riggs
SPC Robert A. Riggs
PV2 Manuel A. Rivas
SGT Nestor Rodriguez
SPC Anthony Roman
SSG Erik R. Romero
SFC Monica D. Roncancio
SPC Jaun A. Rosario
SGT Aaron W. Rosenland
SFC Lorena Ruiz
PV2 Marc Runge
SSG Deborah A. Russell
MSG Kenneth E. Russell
SGT Kenneth Russell
SPC Michele D. Russell
SPC Michael S. Sather
SPC Kevin Sayles
MSG Dennis K. Schall
SPC Soo J. Schmidt
SSG Tira M. Serrano
SGT Timothy A. Sharp
SFC Brian Sheafer
SGT Eul Shin
PV2 Donnie P. Sigur
SFC Terry L. Silvers
SSG Robert Simpson
SFC Jason R. Smith
SGT Michael D. Smith
PV2 Patricia A. Smith
SPC Terrance D. Smith
SGT Philip Snell
PFC J. So
SPC Pamela A. Solomon
PV2 Jung Ho Song
SPC Jason R. Sorenson
MAJ Allen D. Soukup
SGT Gregory A. Sparkman
SSG Timothy A. Sparks
SPC Kyle A. Spruell
SGT Donatian A. Stephen
SGT Richard B. Stevens
SGT Angela Stimpert
SGT Joseph Stone
SGT Troy Strader
SSG Anthony Strid
SSG Deanna L. Swords
SPC Alia Taylor
SPC Michael L. Taylor
SSG Richard Terceira
SSG Reginald F. Thomas
SSG Robert A. Thompson
SPC Lattessha Thornton
SGT Brian M. Tirado
SPC Jason Tomford
SPC Michica M. Trillo
PV2 Daniel O. Trofman
SPC Autumn Tucker
SSG Michael L. Tucker
SPC Christo Turner
SPC Latonya S. Ulloa
SSG Jose A.S. Velazquez
SPC Amy B. Veley
SSG Richard T. Vendl
PV2 Kweisi Vines
SPC Gary Volcy
PFC Demestre D. Walker
SGT Edwin Wall
SGT Jaimie E. Walt
SSG Douglas E. Walters
SPC Scott S. Warr
SSG Sandra Washington
SSG Carl L. Webb
SPC Richard Weesner
SPC Robert F. Westerman
PFC Barbara K. White
SSG Dora White
SGT Wayne White
SGT Kenneth R. Williams
SSG Neil T. Williams
SPC Scott Williams
SPC Tony Williams
SGT John L. Wilson
SGT Michael Windsor
PFC Scott A. Wisecarrer
PFC Tae Joon Won
SGT Daniel A. Yohnke
PV2 T. Yoon
LTG Daniel R. Zanini

NARRAGANSETT BAY CHAPTER
N. KINGSTOWN, RI
SGT Christopher D. Ashley
SPC Gudrun Aubee
SFC Elaine L. Burmeister
MSG Linda M. Casson
SGT Jodie M. Dove
SGT Eric J. Furguson
CPT Brian P. Hennessey
SPC Donald S. Hughes
SGT Eric C. Jacques
SPC Kathleen T. Leander
PFC Rebecca L. Moore
CW4 Steven F. Moy
PV2 Paula Muriel
SSG Neal J. Spelman
SSG Rocco R. Spirito, Jr.
SSG Stanley R. Warnock

NORTH COUNTRY CHAPTER
FORT DRUM, NY
SGT Norman W. Tapper

NORTH TEXAS CHAPTER
DALLAS/FORT WORTH
Mr. Randy Jones

NORTHERN LIGHTS CHAPTER
FORT WAINWRIGHT/FAIRBANKS AK
SSG Bradford J. Quigley

OREGON TRAIL CHAPTER
SALEM, OREGON
CW2 David A. Long
SPC Sarah M. Rejian
1LT Kenneth S. Shinn

PIKES PEAK CHAPTER
FORT CARSON, CO
Mr. Timothy Kelley
CPT Michael Salvitti

RISING SUN CHAPTER
CAMP ZAMA, JAPAN
SPC Scott J. Dolezal
SGT Timothy A. Hunt
SGT Jeff R. Loyd
SGT Bryon L. Mack
SGT Dwight D. Phaneuf
SSG David Rohe

SAVANNAH CHAPTER
FT STEWART/HUNTER AAF, GA
CW2 Rick L. Brand

SOUTHERN CALIFORNIA CHAPTER
LOS ANGELES, CA
CW2 Richard T. Roe, Ret.

TAUNUS CHAPTER
WIESBADEN, GERMANY
1SG Joseph L. Hawbecker

TENNESSEE VALLEY CHAPTER
HUNTSVILLE, AL
Ms. Mineto S. Anfield
Ms. Melanie L. Barksdale
Ms. Melissa J. Black
Ms. Emma Louise Cooper
SGM Robert F. Furia
Mr. James A. Hawkins
Ms. Pauline M. Lehman
Ms. Melissa J. Pilotte
Mr. Charles Reading
Ms. Geri Reddy
LTC Robert L. Wilkie, Sr Ret.

VIRGINIA MILITARY INSTITUTE
LEXINGTON, VA
CDT Jenny K. Carman
CDT Pamela J. Nulia
CDT Regina M. Perich
CDT Todd M. Wynn

WASHINGTON-POTOMAC CHAPTER
WASHINGTON, DC
CW4 Steven L. Adee
CW4 Jay Bellamy
Mr. Mark Forror
Mr. John R. Guardiano
Mr. Paul McPherson
Mr. Anastasia Orfanoudis
Mr. John Persinos

WINGS OF VICTORY CHAPTER
GIEBELSTADT, GERMANY
MAJ William J. Davisson
SP4 James P. Goodwin III
CPT Jon D. Kerr
CW3 Brian S. Patton
MAJ Guy M. Zero

WRIGHT BROTHERS CHAPTER
COLUMBUS, OHIO
CPT Howard R. Linscott

MEMBERS WITHOUT CHAPTER AFFILIATION
MSG Bob Haskell
SGT Glen G. Larson
CDT John N. Nestor

New Chapter Officers

Lindbergh Chapter
Mr. Calvert L. Worth, VP for Retired Affairs; Mr. Daniel J. Rubert, VP Publicity; Mr. James C. Reynolds, VP Industry Affairs.

North Country Chapter
MAJ Justin Kidd, VP Awards.

Morning Calm Chapter
CPT Tony Taylor, Secretary

Western New York Chapter
CPT Daniel U. Golinski, Secretary.

AAAA NCO of the Quarter

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

SSG Rocco R. Spirito, Jr.
1st Qtr. 2000
(Narragansett Bay Chapter)

SSG Stanley R. Warnock
2nd Qtr. 2000
(Narragansett Bay Chapter)

SGT Eric C. Jacques
3rd Qtr. 2000
(Narragansett Bay Chapter)

SGT Jodie M. Dove
4th Qtr. 2000
(Narragansett Bay Chapter)

AAAA NCO of the Year

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

MSG Linda M. Cassen
Year 2000
(Narragansett Bay Chapter)

New AAAA Life Members

Mr. Steve Allen Lewis
CW3 Kent T. Sapp
LTC Donald L. Wellen, Ret.
MAJ Donald R. West

AAAA Soldier of the Month

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

SGT Eric J. Furguson
March 2000
(Narragansett Bay Chapter)

CW4 Steven F. Moy
April 2000
(Narragansett Bay Chapter)

1SG Robert F. Fortin
May 2000
(Narragansett Bay Chapter)

SGT Christopher D. Ashley
June 2000
(Narragansett Bay Chapter)

SPC Gudrun Aubee
July 2000
(Narragansett Bay Chapter)

PFC Rebecca L. Moore
August 2000
(Narragansett Bay Chapter)

SSG Neal J. Spelman
September 2000
(Narragansett Bay Chapter)

SGT Glen G. Larson
October 2000
(Narragansett Bay Chapter)

SPC Donald S. Hughes
November 2000
(Narragansett Bay Chapter)

SPC Kathleen T. Leander
December 2000
(Narragansett Bay Chapter)

SPC Sarah M. Rejian
December 2000
(Oregon Trail Chapter)

PV2 Paula Muriel
January 2001
(Narragansett Bay Chapter)

SFC Elaine L. Burmeister
Febuary 2001
(Narragansett Bay Chapter)

New AAAA Order of St. Michael Recipients

CH(COL) Francisco Somera, Jr. (Bronze)
MAJ Lyle M. Peterson , Ret. (Bronze)
CW4 Thelbert B. Lee (Bronze)
CW4 Michael J. Trotter (Bronze)
CW3 Michael A. Strieber (Bronze)
CW4 Larry J. Willette (Bronze)
CW5 Terrence F. El (Bronze)
LTC Robert W. Kenneally (Bronze)
MAJ Randal E. Dorf (Bronze)
LTC(R) John E. Marksteiner (Bronze)

New AAAA Industry Members

Innovative Soluations Sup.
NAASCO Northeast Corporation
Seitz Scientific Industry
Vaisala
WESCAM

Aces

The following members have been recognized as Aces for their signing up five new members each.
CDT Britton L. Armstrong
MAJ Mathew J. Brady
MAJ Albert Carreon, Jr.
CDT Monica Y. Choi
SGM Kenneth G. Rich

In Memoriam

MG James F. Hamlet, Ret.
CW4 Conrad R. Howard
MG William J. Maddox, Jr., Ret.

AAAA NEWS

2000 Membership Winners

The winners of the 2000 "Chapter Membership Enrollment Competition" are:

MASTER CHAPTER CATEGORY
Morning Calm Chapter, Seoul, Korea
CY00 Net Member Gain of 607 members
COL Stephen D. Mundt, Chapter President
Mr. John H. Bae, VP Membership

SENIOR CHAPTER CATEGORY
Armadillo Chapter, Conroe, TX
CY00 Net member Gain of 10 members
LTC Robert A. Roh, Ret., Chapter President

AAAA CHAPTER CATEGORY
Wings of Victory Chapter, Giebelstadt, Germany
CY99 Net Member Gain of 21 members
COL Jeffrey S. White, Chapter President
CPT Jon D. Kerr, VP Membership

AAAA "TOP GUN" INDIVIDUAL MEMBERSHIP RECRUITMENT
Mr. John H. Bae, Morning Calm Chater
enrolled 709 new members
Mr. William J. Cannon, Aviation Center Chapter
enrolled 577 new members
SGT Lisa Marie Duncan, Michigan Great Lakes Chapter
enrolled 30 new members
LTC Michael F. McClellan, Ret., Tennessee Valley Chapter
enrolled 29 new members
CPT Russell J. Elizondo, Air Assault Chapter
enrolled 26 new members

Indiantown Gap Chapter

CSM Chuck Reisinger of the Eastern Army National Guard Aviation Training Site at Fort Indiantown Gap, Pa., presents the AAAA Certificate for Outstanding Achievement to SFC Deborah Williams, an aviation operations sergeant at the EAATS. Williams, Fort Indiantown Gap's soldier of the month for September, was subsequently selected as the EAATS soldier of the year for Training Year 2000.

Lost Members

Help us find our Lost Members. We'll give you an additional month on your AAAA membership free for each member you help us locate. Simply write, call or E-mail us with the Lost Member's current address. AAAA, 49 Richmondville Avenue, Westport, CT 06880-2000. Tele: (203) 226-8184; FAX:(203) 222-9863; E-Mail: aaaa@quad-a.org.

Ambrosini, Anthony E., CAPT
Baker, Phillip T., 2LT
Brooke, J. Lynton, COL
Cochie, Kevin S., CPT
Cruz, Felix M., SGT
Davis, Royal A., 1LT
Devillier, Chad J., CW2
Dykman, Peter, CPT
Entrekin, Michael E., 2LT
Erickson, Heather E., SPC
Fellmer, Mark J., 2LT
Gammill, Ari R., WO1
Goan, Robert L., Mr.
Hanan, Frank R., SSG
Hanson, Ryan M., SPC
Holmes, Sharon, LTC(P)
Ivey, James R., CPT
Jenkins, Bobby J., SFC
Jones, Christopher, 1LT
Keairns, Lowell, Mr.
Kruszona, Raymond R., WO1
Mackey, John A., CPT
Madden, Matthew E., WO1
McCarthy, Michael B., CDT
McCoy, Michael G., MAJ
McKinnon, Jody L., CAPT
Meskill, Jeffrey J., 1LT
Murphy, Charles, CPT, Ret.
Norris, William L., Mr.
Owens, Donald K., LTC
Presley, Peter J., 1LT
Randall, Martin A., WO1
Rassi, Jason W., WO1
Simmons, Barry B., 2LT
Stone, Christopher, CPT
Trilone, Charles W., WO1
Vandrey, Inga C., 2LT
Welch, Jason R., 2LT
Welch, Ryan K., 1LT

- **Apr. 4-7, 2001** AAAA Annual Convention, Charlotte, NC.
- **Jul. 20** AAAA Scholarship Executive Committee Meeting, National Guard Readiness Center, Arlington, VA
- **Jul. 20-21** AAAA Scholarship Selection Committee Meeting, National Guard Readiness Center, Arlington, VA
- **May 11-15, 2002** AAAA Annual Convention, Nashville, TN.

Army Aviation Hall of Fame

The Army Aviation Hall of Fame sponsored by the Army Aviation Association of America, Inc., recognizes those individuals who have made an outstanding contribution to Army aviation. The actual Hall of Fame is located in the Army Aviation Museum, Fort Rucker, Ala., where the portraits of the inductees and the citations recording their achievements are retained for posterity. Each month Army Aviation Magazine will highlight a member of the Hall of Fame. The next triennial induction will occur in the spring of 2001. Contact the AAAA National Office for details at (203) 226-8184

MAJ Delbert L. Bristol
Army Aviation Hall of Fame 1976 Induction

MAJ (later COL) Delbert L. Bristol served as an Army liaison pilot in the early test that established organic air observation in 1942. After serving briefly on the faculty of the Department of Air Training, Bristol left the continental U.S. with the first group of pilots and aircraft mechanics deployed overseas in October, 1942.

After his arrival in England, and during late 1942 while in North Africa, he was the driving force in the organization of a combat zone school that trained additional pilots and aircraft mechanics to meet the artillery's combat aviation needs until replacements from Fort Sill became available in sufficient numbers.

While serving as the artillery air officer for II Corps during the Tunisian and Sicilian campaigns, Bristol directed and coordinated the employment of the air observation posts [pilot and field artillery observer teams in radio-equipped Piper L-4 Cubs] that later was acclaimed as one of the great innovations of World War II. Calling on his experience as First Army artillery air officer in Northern Europe in 1944-45, he contributed in great measure to the success of the Air OPs in combat.

In 1948-1949, while a major on the Army General Staff in Washington, D.C., his negotiations in the Army Staff and with the Air Force, sometimes against heavy odds, assured the foundation of the Army's organic aviation following the unification of the services.

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