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MG John M. Curran, commanding general of the U.S. Army Aviation Center, has announced the selection of CSM Walter K. Beckman as the next command sergeant major for the U.S. Army Aviation Center and the aviation branch. Beckman, currently the command sergeant major of the 4th Brigade, 1st Cavalry Division, at Fort Hood, Texas, will replace CSM Edward P. Iannone Jr., who retired on Oct. 15 after 27 years of service. Beckman is scheduled to assume his new duties beginning Nov. 1. (Continued on page 37.)

The remains of three U.S. soldiers previously unaccounted for from the Vietnam War have been identified and are being returned to their families. They are LTC Donald Eugene Parsons of Sparta, III.; CW3 Charles I. Stanley of Cleveland, Ohio; and SFC Eugene F. Christiansen of Barstow, Calif. Stanley and Christiansen were members of the crew of a UH-1 on an emergency resupply mission, with Parsons and another person as passengers, when the aircraft went down in Quang Tri Province on Feb. 6, 1969. Remains from the crash were recovered in 1993, 1995 and 1996, and three individuals have yet to be identified.

Two aviators assigned to the 4th Squadron, 2nd Armored Cavalry Regiment, at Fort Polk, La., were killed Aug. 20 when their OH-58D Kiowa helicopter crashed during a training event at the Joint Readiness Training Center. Dead are CW2 Milas Turney, 29, of Jacksonville, Fla., and CW2 Phillip Rochlitz, 33, of Anderson, Calif. (See page 30 for more details).

CW5 Daniel J. Logan Jr. has been named the first warrant officer adviser to the chief of staff of the Army (CSA), a position he will hold until June 2003. (See page 30 for more details).

Sikorsky Aircraft has selected Rockwell Collins to provide high-performance Multi-Function Displays (MFDs) for the Army's fleet of UH-60M Black Hawk helicopters. Each of some 1,200 aircraft will be equipped with four of the 6-by-8-inch landscape, active-matrix, liquid-crystal displays. Rockwell Collins anticipates more than \$225 million in sales from the contracts, when fully executed, over the 20-year life of the program.

COL Paul M. Severance (Ret.), a 29-year AAAA member, has been named chairman of the Military Strategy and Logistics Department of the Industrial College of the Armed Forces in Washington, D.C. He is a former professor of military strategy, professor of logistics and course director for the institution's Military Strategy and Warfare Program.

Coalition forces completed Operation Mountain Sweep in Southeastern Afghanistan Aug. 26. The operation was intended to find and destroy remaining all Qaeda elements in the area, search for weapons or usable intelligence, and project combat power into the area to deny the enemy sanctuary there. Mountain Sweep took place over eight days and included five combat air-assault missions. The operation involved seven infantry companies, combat engineers and elements of three aviation battalions. Coalition forces took 10 persons under control during the operation and discovered caches of Taliban weapons and documents. Though fired upon on two occasions, U.S. forces suffered no battle casualties.

The Army has selected L-3 Communications to provide the data link in an upcoming technology demonstration that will link an unmanned aerial vehicle (UAV) with manned airborne platforms. L-3's Tactical Common Data Link (TCDL) technology will be integrated into Army's Hunter UAV and AH-64D Apache and A2C2S-capable UH-60 Black Hawk helicopters. The data link will allow the helicopters to control, the UAV and receive imagery from it, and will also enable the helicopters to standoff and use the UAV as a forward sensor. The Hunter Standoff Killer Team (HSKT) Advanced Technology Demonstration is a \$4.4 million, six-year program consisting of a four-year technology demonstration followed by a two-year user evaluation by Army forces in South Korea. The Army is committing \$2.5 million for the effort and L-3 \$1.1 million. The demonstration will involve at least four Hunters, six to eight Apaches and four Black Hawks. If the demonstration and user evaluations are successful, then the Army plans to transition this new capability to a formal acquisition program to equip its manned and unmanned aircraft.

B. L. Harbert International L.L.C. and Bill Harbert International Construction Inc. have won an \$8 million, firm-fixed-price Department of Defense contract for construction of a new RAH-66 Comanche training facility at Fort Rucker, Ala. The structure would include nearly 64,000 square feet for academic classrooms, simulator operations, administrative support and maintenance spaces. Work is to be completed by Feb. 23, 2004.

Briefings continued on page 37 @

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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. SUB-SCRIPTION DATA: ARMY AVIATION (ISSN 0004-248X) is published monthly, except April and September by AAPI, 755 Main Street, Suite 4D, Monroe, CT 06468-2830. Tel: (203) 268-2450, FAX: (203) 268-5870, E-Mail: aaaa@quad-a.org. Army Aviation Magazine E-Mail: magazine@quad-a.org. Website: http://www.quad-a.org. Subscription rates for non-AAAA members: \$30, one year; \$58, two years; add \$10 per year for foreign addresses other than military APOs. Single copy price: \$3.00. ADVERTISING: Display and classified advertising rates are listed in SRDS Business Publications, Classification 90. POSTMASTER: Periodicals postage paid at Monroe, CT and other offices. Ride along enclosure enclosed. Send address changes to AAPI, 755 Main Street, Monroe, CT 06468-2830.

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Protecting the Force — ASE, AVIONICS, SAFETY 87 LIFE SUPPORT By MG John Curran

Force protection is the business of every leader and it must be under the watchful eye of the commander at all levels. As our military becomes a more lethal and more deployable force, we will continue to operate at a high operational tempo (OPTEMPO). Our systems are becoming more complex and the environment in which we operate is becoming increasingly hazardous. Since this emerging pattern is not likely to change, we as leaders have to come to grips with it and find ways to mitigate the risk and improve our force protection capabilities.

In the realm of aircraft survivability equipment (ASE), safety and life support, we will look at the "Force Protection Equation" as a tool to assist commanders in mitigating risk and apply the required resources to increase force protection. The end result is an environment in which the risk is known and mitigated, soldiers are safer and we will increase the probability of mission accomplishment.

The next step is bolt-on ASE to aid in detection, jamming and decoying of threat air-defense systems. The current choices for replacement ASE are going to cost between \$2 million and \$5 million per airframe for the new AN/ALQ 211 and 212 suites.

The 211 is a suite of radio-frequency countermeasures that detects pulse, pulse Doppler and continuous-wave radar. It also jams pulse and continuous-wave radar threats.

The 212 suite is an infrared missile detector, decoy and jammer system. It uses the Common Missile Warning System (CMWS) to detect incoming infrared missiles. The Advanced Tactical

Infrared Countermeasure system (ATIRCM) uses laser energy to blind the missile. The system will also fire a flare cocktail to further protect the aircraft.

There is a never-ending cycle of developing new weapon systems to defeat the current ASE, then developing new ASE to defeat the new weapon systems. Although the current number of airframes in the Army will decrease over the next few years as older airframes are retired, the cost of upgrading the fleet is staggering. Even the new Comanche, designed to be low

The next variable in the equation is avionics. New avionics systems such as the AN/ ARC 201D will increase the ability of aircrews to share information in

observable (small radar cross section and low infrared sig-

nature) will still need to have some type of bolt-on ASE.

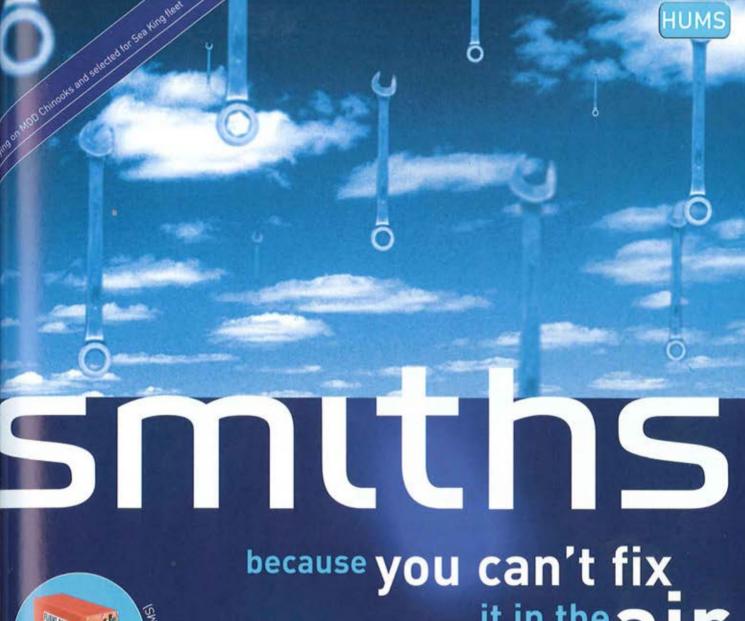
The Force Protection Equation:

ASE + Avionics + Safety + ALSE = FORCE PROTECTION Cost

Force protection for aircrews is a modular system. Each module affords the aircrew with the greatest chance for survival on the modern battlefield. We must protect those that protect us and the formula above gives us a method to do that for Army Aviation. The equation spans from the first concept design of an airframe all the way through to the unit after-action reviews (AARs). As aviation continues to evolve, innovations lead to the creation of new systems.

The first variable in our force-protection equation is

— ASE. Designs for modern aircraft include infrared
(IR) reduction and ballistic tolerance. Exhaust suppressors, flat plate canopies and IR paint are used to reduce
the IR signature of the aircraft. Ballistic tolerance
allows the aircraft to withstand hits from threat systems
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real time and to provide two-way flow of intelligence, mission data and situation updates. The Enhanced Position Location Reporting System (EPLRS) will reduce "fratricide" and increase situational awareness for commanders by tracking friendly positions on the battlefield. The AN/APX 118 is the new transponder for aviation. It has five levels of operation, from the basic aircraft identification and altitude to complete two-way transfer of flight and systems data. The 118 incorporates an airborne collision-avoidance system. It contains several replaceable cards for easy upgrade and maintenance. One of these new cards will be for the military's new digital mode 5 IFF.

Next, we need to add safety to our force-protection equation. Safety allows us to analyze our actions to reduce the possibility of mishap, not only in the general sense but also in our mission planning. Routes and procedures can reduce mishaps caused by pilot error and those caused by enemy interaction. Safety can also mean hardware such as airbags for the cockpits or new flight suits with better fire protection. Crashworthiness is the design part of safety and it protects aircrews if the aircraft stops flying, for whatever reason.

So what happens if the design, engineering, systems and programs all fail, and the aircrew members find themselves on the ground injured, in enemy territory or both? This is when the last variable of our equation comes into play.

Aviation Life Support Equipment (ALSE) is equipment used for survival by the aircrew member. Some of this equipment is as simple as a first-aid kit, signal mirror or flares. The AN/PRC 112 is the new radio for aircrews, and has a built-in Personal Location System (PLS). It will decrease the recovery time and aid in positive identification of a downed aircrew by being coded for each individual. The new aircraft survival kits feature such lightweight equipment as the water-purification kit that removes debris, bacteria and even some viruses.

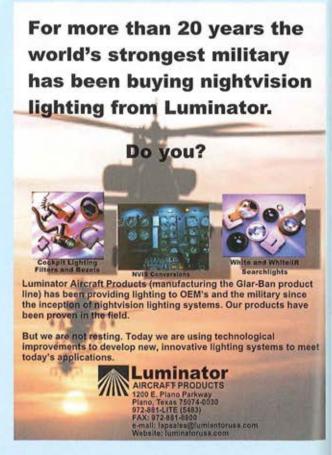
While cost is sometimes a factor, other factors must be considered as well. Such as, how long will it take to field? Is it upgradable? What is its estimated time to obsolescence? Should we upgrade what we have or purchase a new system? The constant research and development in aviation areas brings new and improved products to the market — some more capable than others. When these questions are answered, the real work can begin.

In the Force-Protection Equation, the resultant is greater than the sum of its parts because the variables create a synergy. If you drop any one of the variables out, you diminish the system exponentially. Because the variables are interwoven, they enhance and compliment each other to create a total system. The system becomes a force multiplier, ensures the aircrew's survivability and allows them to fight another day.

44

MG Curran is the commander of the U.S. Army Aviation Center and chief of the aviation branch, Fort Rucker, Ala.





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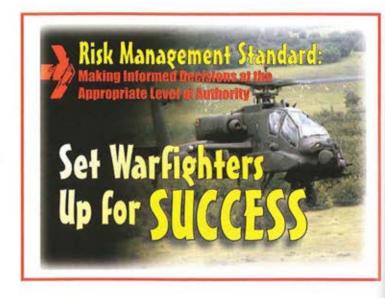


Safety and Risk Management in Training & Battle

By BG James E. Simmons

We started fiscal year 2002 with our commander in chief's challenge to "Be Ready!" echoing loudly and each of us contemplating when the call would come. We didn't have long to wait. In President George W. Bush's announcement of the first military strikes against the terrorists in Afghanistan, he relayed the message he received from a 4th-grade girl with a father in the military. "As much as I don't want my Dad to fight," she wrote to the president, "I'm willing to give him to you."

With the exception of the Korean War, it holds true even today that we lose more soldiers to accidents than to enemy action.



In the days since, we've deeply mourned the loss of each soldier some family gave to fight for our security and to further freedom and democracy. And we've not only mourned the loss of lives on the battlefield, we've suffered losses in training accidents and soldier off-duty activities too.

With the exception of the Korean War, it holds true even today that we lose more soldiers to accidents than to enemy action. We've trained harder, faster and more rigorously to replicate the conditions our units would face in actual combat.

Overall, our units have performed magnificently on the battlefield fighting this war on terrorism, protecting our installations, executing home-station training, conducting training-center rotations, and fielding new equipment and formations. But in some cases, we did experience breakdowns in leaderWhen you need

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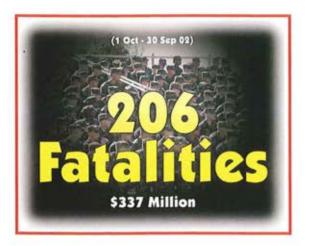
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ship, discipline, training and standards, and the costly consequence has been lives lost and equipment damaged or destroyed.

THE NUMBERS

We are always mindful of the fact that numbers are but a measure of safety performance, and we never lose sight of the fact that each number represents the loss of some little girl's or boy's father or mother, or some family's precious son or daughter.

The Army experienced 26 Class A aviation flight accidents this fiscal year, compared to 10 last year.

Sadly, the numbers are up this year — 206 fatalities

compared to 168 last year, an increase of more than 22 percent. Of those 206 fatalities, 141 died in off-duty ground accidents (113 of those in privately owned vehicle accidents, which are still our number-one killer of soldiers), 48 in on-duty ground accidents, and 17 in aviation accidents.

AVIATION ACCIDENTS

The Army experienced 26 Class A aviation flight accidents this fiscal year, compared to 10 last year — a 160-percent increase and a 136-percent increase over the three-year average. Aviation fatalities are 55 percent above last FY's total of 11, and 38 percent above the three-year average.

In budget terms, aviation accident costs alone accounted for more than \$276 million in losses, a 212-percent increase compared to the same period in FY 01 and a

183-percent increase above the three-year average. In readiness terms, the loss of lives and cost of accidents represent a serious impact on our combat readiness.

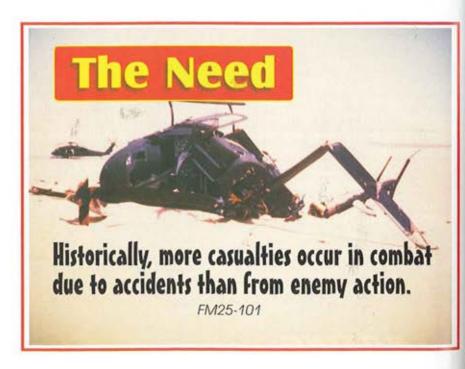
THE ANALYSIS

Not surprisingly, there were no new causes of FY 02 aviation accidents.

An analysis of the Class A aviation flight accidents shows that nine of the 26 accidents involved collision with the ground; six involved brownout or whiteout; and 4 involved a materiel failure. Four accidents also involved a tree or wire strike, and in two accidents crews encountered inadvertent instrument meteorological conditions. Individual failures resulting from overconfidence and crew coordination issues and indiscipline were present in 67 percent of the accidents. Environmental conditions also contributed to 52 percent of the accidents.

The majority of the accidents occurred during night

Class A Aviation Aviation Trends Collision w/ground......9 (36%) Night Material failure4 (16%) Single ship Tree/wire strike4 (16%) IP (total/type)...2669/792 hrs IIMC2 (8%) PC (total/type) .. 1421/771 hrs PI (total/type) ...997/354 hrs Individual failure... .14 (67%) Crew coordination......9 (43%) (ClassA/Fatal) FY02 FY01 Indiscipline8 (38%) AH-64.....9/4....9/0 Overconfidence... .7 (33%) MH/CH-47.....6/8.....0/0 Environment.... .11 (52%) Leader failure. ...8 (38%) OH-58D......5/2....4/0 Training failure4 (19%) MH/UH-60.....4/2.....2/6 Support failure3 (14%)



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and single-ship missions. And it was not always our young aviators who were involved in these accidents; it was our more experienced instructor pilots and pilots in command who often found themselves in situations from which they could not recover.

THE PREVENTION MEASURES

As much as we would all like to have a single silver bullet to stop this unnecessary loss of aviation resources, there isn't one. The real prevention measures lie in continued enforcement of standards and discipline; effective risk management that will allow us to conduct hard training that replicates actual combat conditions; and leadership involvement. I want to particularly focus on two of these issues: discipline and leadership.

Leaders at all levels should ruthlessly enforce discipline in our units. No Kevlar, no seatbelts, out of uniform, speeding, failing to salute a senior officer, flapping canvas — all are signs of indiscipline. If it is happening in your unit, it is everybody's responsibility to make on-the-spot corrections or a new, lower standard will be set when you walk by without correcting it. Increasing demands on our time do not relieve us as leaders of our responsibility to enforce standards and discipline.

If battalion commanders are tactically and technically competent and are present during the planning, preparation and execution of training, we don't lose soldiers to accidents. Leaders at all levels have to get involved in risk management and enforcement of standards and discipline. E-leadership doesn't work in Army aviation!

PROVIDING ASSISTANCE

We sometimes attempt to stop the bleeding in terms of accidental losses by flogging commanders. That's not my intent. As an Army, we do hold commanders responsible and accountable for the safety of the soldiers entrusted to their care. And it is incumbent upon us to provide those commanders with resources and tools to help them.

We are currently doing that by ensuring that we have high-quality risk-management training and education embedded in all of our precommissioning through division commander training courses, as well as in our noncommissioned officer education system from the Primary Leadership Development Course through the Sergeants Major Academy.

The chief of staff of the Army directed development of a Commander's Safety Course — which leverages multimedia and Web-based distance-learning technology — to ensure that commanders have the knowledge and tools to effectively manage their unit safety programs and incorporate risk management into all unit planning and activities. The CSA is requiring that com-

Risk Management continued on page 30 @

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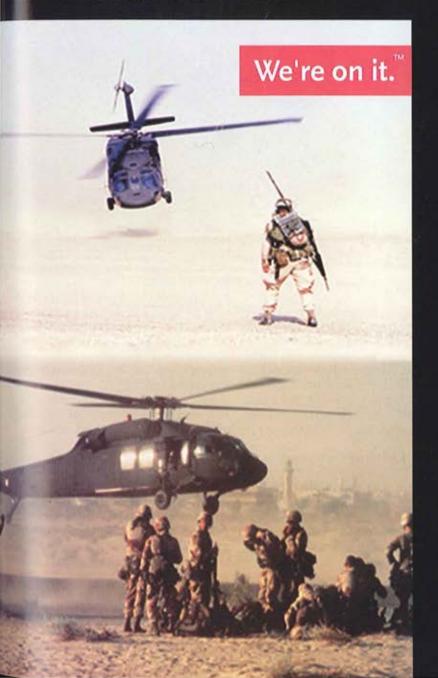
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By Wesley F. McElveen, Rachelle Tucci and Henry Flick

Aircraft survivability equipment (ASE) remains a critical element of Army aviation and an essential enabler to our platforms as we transition to the Objective Force.

Management of ASE has changed somewhat over the past year. Specifically, the ASE project office has moved from the Program Executive Officer for Aviation (PEO Aviation) to PEO Intelligence and Electronic Warfare Systems. This office physically remains at Redstone Arsenal, Ala., and continues to manage infrared (IR) countermeasures, laser warning receivers and ASET IV equipment, existing IR and radio-frequency (RF) countermeasure devices, as well as support RF countermeasure development within the special operations aviation (SOA) forces.

The management of the Suite of Integrated Radio Frequency Countermeasures (SIRFC) has shifted to the U.S. Special Operations Command (SOCOM) as efforts were prioritized across conventional Army aviation and the special operations forces (SOF). In this regard, SOA will complete development, testing, integration and follow-on production of SIRFC for the CV-22, MH-47 and MH-60.

The Army has prioritized the development of the Suite of Integrated Infrared Countermeasures (SIIRCM) as its most important near-term product. Hence, the Redstone project office will continue to lead the development and follow-on production effort of SIIRCM, while supporting SOA efforts on SIRFC as necessary. The following article describes the SIRFC system, its current status in development, and the management team leading the effort. — MG Joseph L. Bergantz, commander of the U.S. Army Aviation Center and chief of the aviation branch.

The Escalating Threat

The Army's Objective Force will be characterized by its agility, responsiveness, versatility, lethality, deployability, sustainability and survivability. Army aviation is making crucial investments in the development and fielding of superior weapons platforms to play a pivotal role in this transforming force. Air warriors and their rotary-wing platforms will exploit the capabilities of such advanced survivability equipment as the AN/ALQ-211 Suite of Integrated Radio Frequency Countermeasures (SIRFC) to maintain Objective Force tactical and strategic dominance.

While the force transforms, the battlespace challenges faced by Army aviators will remain familiar. Aviators are faced with the robust and intensely challenging environment associated with flying "low altitude and nap-of-the-earth." This is an environment that is densely populated with highly mobile, dangerously accurate, and surprisingly affordable surface-to-air missiles (SAMs). Former Soviet Union SAMs alone, for example, are deployed in more than 80 countries, and inventories in some countries contain more than 25 different types of SAMs and radar controlled anti-aircraft artillery (AAA).

Mission-Enabling Technology

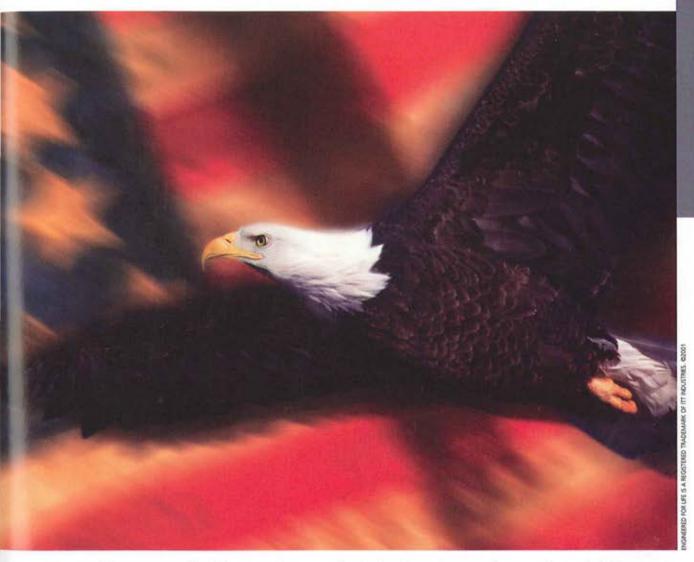
The ALQ-211 SIRFC will help to ensure Army aviation's lethality, survivability and dominance in the transformed force. Clearly, SIRFC is a quintessential mission-enabling technology — providing aviators with the ability to detect, deny, disrupt and defeat deadly air defense threats.

The SIRFC can also increase combat efficiency with selective targeting and precision engagement. Realtime sensor threat data entering the cockpit provides the pilot and crew with a clear situational understanding of existing tactical conditions. Simultaneously, commanders and soldiers on the ground benefit from information fed back through the integrated system.

Additionally, SIRFC provides aviators with both a "picture" of the actual threat environment and a significantly increased level of self-protection. Moreover, the system offers multiple functions for tactical superiority and joint force operational effectiveness. For example, the multi-spectral threat warning and countermeasures not only 'protect individual aviation assets, they also significantly improve the probability of survival and mission success during tactical engagements. A single SIRFC can engage and neutralize both long range and

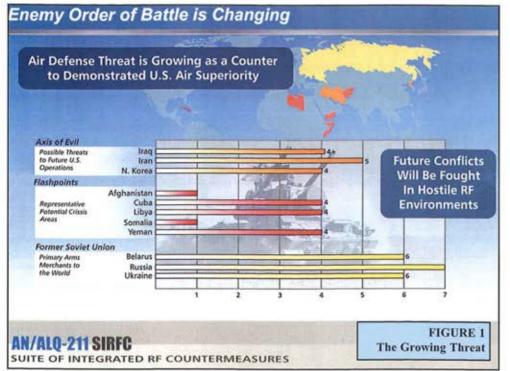
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"This country will define our times, not be defined by them. As long as the United States of America is determined and strong, this will not be an age of terror; this will be an age of liberty, here and across the world." — George W. Bush, September 20, 2001





"pop-up" defensive systems — from SAMs to AAA.

System Mission, Capability and Deployment Status

The Army is now in the later stages of SIRFC developmental efforts, and the Project Manager (PM), Aviation Electronic Systems (AES), is concurrently executing a Low Rate Initial Production (LRIP) decision to address high-priority SOCOM requirements.

The mission of the AN/ALQ-211 SIRFC, however, is to provide improved self-protection against RF-guided AAA, SAMs, and airborne interceptors across the entire spectrum of Army aviation platforms. Indeed, the SIRFC provides situational awareness, sensor fusion,

resource management, target identification, target location, target cueing and pre-emptive and terminal mode electronic countermeasures against fire-control radars and semi-active missiles for both air-to-air and surface-to-air weapons.

This well-defined threat spectrum includes pulse, pulse Doppler and continuous-wave radar systems. SIRFC consists of two basic integrated functions: an advanced radar-warning receiver and an advanced threat radar jammer. The system is comprised of four LRUs (see Figure 2).

Key SIRFC components include the:

- •Receiver-Processor (LRU-1);
- Countermeasures-Transmitter (LRU-2);

- Modulator-Receiver (LRU-3), and
 - Antenna Group (LRU-4).

The Antenna Group itself consists of four quadrant antenna assemblies (receive); four quadrant amplifier converters (receive); one omni-directional antenna (blade); one amplifier converter (blade); one RF transmit switch and four quadrant antennas (transmit).

Program Status

The SIRFC program moved from the System Development and Demonstration (SDD) phase in March 2002. The objective of the SDD phase was to design, fabricate, integrate, test and correct system deficiencies.

Five SDD units were built for qualification, integration and testing on AH-64D Longbow Apache and SOCOM CV-22

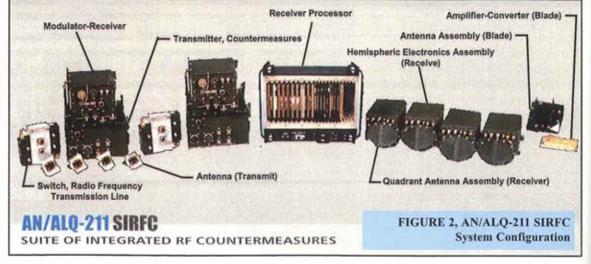
aircraft. The initial unit was installed on an AH-64D and flight tested at China Lake, Calif. The Air Force, through the Navy, is currently integrating SIRFC on CV-22 platforms. First flight for the CV-22 with SIRFC was conducted in May 2000. Integration and testing on other platforms (MH-47E and MH/UH-60, for example) will follow.

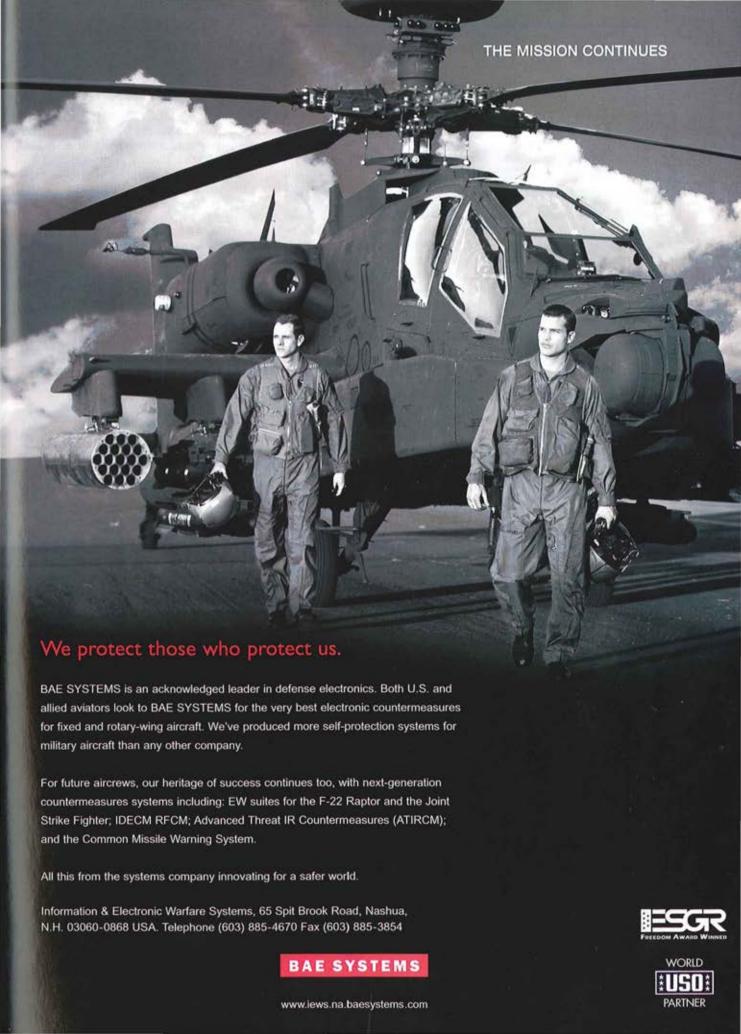
System Modularity

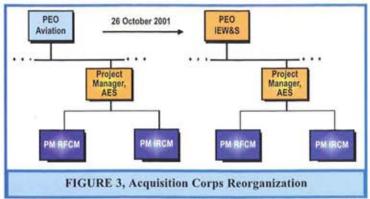
The SIRFC is a modular system easily tailored to unique mission requirements. A full-up configuration provides for:

- Situational awareness.
- · Sensor fusion.
- · Resource management.

SIRFC — A Developed and Tested System







 Target identification, location and cueing.

 Electronic countermeasures against a robust spectrum of radars and missiles.

Five operationally viable configurations are available, beginning with the stand-alone radar-warning receiver and continuing through to a fully integrated electronic warfare suite. Current configurations are traceable to specific warfighter needs and existing budgets constraints.

A number of contracts have been awarded to the SIRFC contractor, ITT Industries' Avionics Division. These contracts are for the production of various configurations to meet specific legacy, interim and Objective Force requirements. For special operations MH-47 and MH-60 aircraft, SIRFC will provide highly accurate radar warning and state-of-the-art countermeasures. On the RAH-66 Comanche, a variant will provide advanced RF threat warning integrated with laser warning. Yet another configuration has been sold to Norway for the NH-90 helicopter — a variant providing sensor fusion, threat warning, situational awareness and electronic support measures.

Management and Leadership Team

The SIRFC program currently is under the supervision of the PM AES at Redstone Arsenal, and collocated with the PEO Aviation. However, the PEO for Intelligence, Electronic Warfare and Sensors (IEW&S) at Fort Monmouth, N.J., provides management oversight and executive leadership.

Before Oct. 26, 2001, executivelevel guidance was provided by the PEO Aviation [Figure 3]. Other systems managed by PM AES include an entire family of ASE specifically designed to detect and counter RF, IR and laser threats in the aviation battlespace. In addition to SIRFC, family membership includes:

 The Laser Detecting Set AVR-2A(V);

 Radar Warning Receiver AN/ APR-39A;

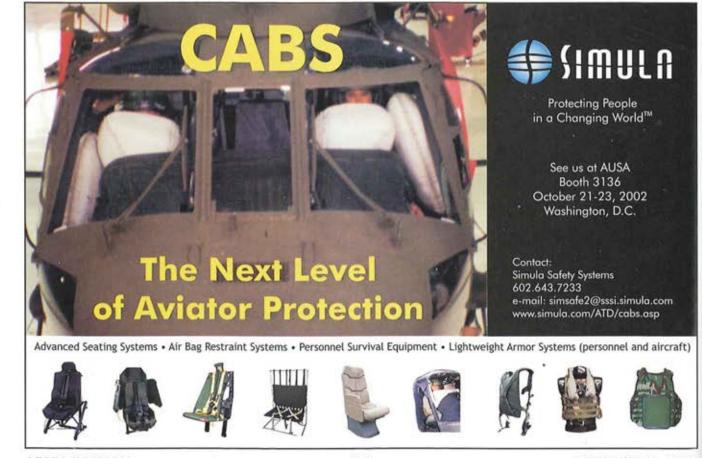
 IR Countermeasures System AN/ ALQ-144A(V)3;

Advanced Threat Infrared Countermeasures/Common Missile Warning System (ATIRCM/CMWS) AN/ALQ-212; and

 Aircraft Survivability Equipment Trainer (ASET) IV.



Wesley F. McElveen is the Project Manager; Aviation Electronic Systems, in the Project Manager's Office, Redstone, Ala. Rachelle Tucci is the manager of communications for ITT Industries' Avionics Division, and Henry Flick is division manager for PM AES Support, CAS Inc.



This Ain't Your Father's INSTRUMENT FLIGHT

By Steven Knight

Nearly 25 years ago the military was dabbling with aided night flight. About that time, the "Nightstalkers" of what was the designated Task Force 160 grabbed the emerging technology and flew off into the night.

This was a trying time for TF 160 as 17 soldiers gave their lives in the first couple years of the unit's existence in the advancement of night-vision goggle (NVG) flight tactics, techniques and procedures (TTPs). Eventually, the redesignated 160th Special Operations Aviation Regiment (SOAR) and the Army used these TTPs on missions in Grenada, the

Persian Gulf and every conflict since.



Some twelve years ago Nightstalkers modified an existing technology in order to fly very extended ranges. Their MH-47 Chinooks were "probed" - fitted with air-to-air refueling probes - and using Air Force training as a guide, the 160th learned to aerial refuel (A/R). This, too, was a trying time for the organization, as several Chinook incidents and accidents took place in the advancement of A/R TTPs. Eventually the number of air refuelable helicopters was increased from the original four MH-47Ds in 1988 to the present, and increasing, number in excess of 50 aircraft, including all of the 160th's MH-47D/E Chinooks and UH-60K/L Black Hawks. The 160th used these proven aircraft and TTPs in Panama, Desert Storm, Liberia and every conflict since.

Elevation Exponential (E2) display. The horizontal dashed line is the helicopter's current altitude. The nose of the aircraft is at the left and the terrain is displayed as the "thick" line out to the "hill" at 7 nautical miles. Beyond that is "blank," due to being out of radar line-of-sight.

Five years ago the Nightstalkers again adopted an existing technology and flew at very low level during Instrument Meteorological Conditions (IMC). The MH-47E and MH-60K have an integral multi-mode radar capable of terrain-following (TF) flight as low as 100 feet above ground level (AGL). By 1998 the 160th SOAR was fully qualified in TF flight, with no lives lost or accidents attributable to the use of the TF radar. The TTPs are now in place. The 160th has routinely used these TTPs in Operation Enduring Freedom and will continue to do so in future conflicts.

As common as NVG flying is for the Army today, air refueling is just as common for the 160th. Both of these mission-enhancers are routine, and they are now joined by TF flight. It's likely that A/R will never be routine for the majority of Army units, because mission, money and training time dictate otherwise. And even though general Army aircraft probably won't be TF-radar equipped, it is very possible that a form of terrain flight while under

instrument meteorological conditions (IMC) will re-enter general Army usage.

The TF radar on the MH-47E and MH-60K is state of the art. When the radar is combined with the glass cockpit of these aircraft the situational awareness output is quite abundant, yet remains orderly, useful and not overwhelming. The radar will TF over any terrain without regard to navigation. When TF is combined with the accuracy of today's Global Positioning System (GPS)*-based navigation, nearly any visual obscuration can be penetrated on an exact course line, which brings the rest of the Army into the IMC terrain flight mode. If aircraft equipped with GPS technology can operate over great distances or time without external navigation aids and be precisely on course, then flight crews can reasonably plan to be at a tactical altitude — even IMC — and not hit the ground.

TF radars are expensive and crews require intensive training to use them effectively. The Army has the capability to deal with both problems, but should it do so? The answer lies in the conduct of a typical long-range mission during which visual obscuration is expected en route. Current Army doctrine in TC 1-204 on route planning applies to visual and TF missions with some minor modifications as the radar "sees" differently than our eyes do.

Additionally, each leg of the route is studied for terrain and manmade obstructions and a tactical IMC (TacIMC**) altitude is established for each leg. Tactical missions are typically flown with a Visual Meteorological Conditions (VMC) departure. When the weather deteriorates to the point where a visual mission would be aborted, the crew switches from "out-thewindow" to "on-the-cues" and continues penetrating the obscuration on instruments, taking commands from the displays and the TF radar. If the radar fails*** while IMC, then the crew continues using TacIMC procedures, climbing to the safe altitude established for each leg during planning. The Army probably should not equip all its helicopters with TF radars, but TacIMC is not only applicable to the rest of the non-TF Army, it's also viable and necessary.

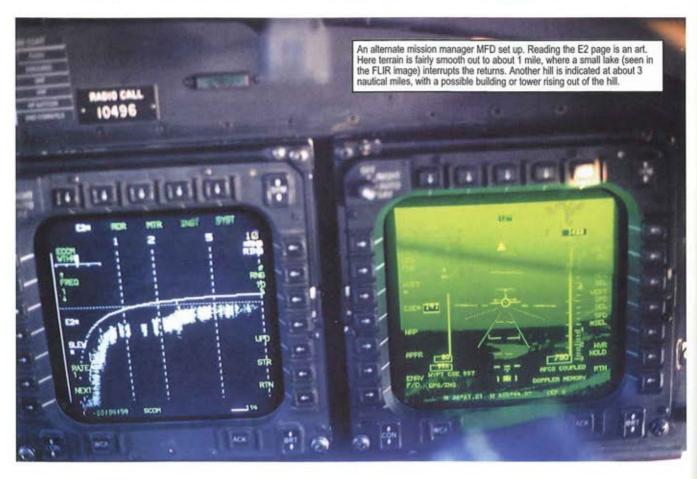
TacIMC flight planning requires meticulous attention to detail. The tactical situation will drive all aspects of the planned mission. The procedures for planning a Tactical Instrument Flight (TacInst) are found in Field Manual 1-240. They include procedures for TacInst departure and turn boxes, en route MEAs and approach boxes. Reasonable care must be given to points of climb and descent, as compared to rates of climb based on ground speed(s).

Furthermore, turns at Air Control Points (ACPs) must be at appropriate positions and speeds. If the crew waits until the aircraft is past the ACP to turn, then more "altitude concern space" must be built into the outside of the turn box to account for this overflight of the ACP and the subsequent turn back onto course. If the turn is planned before the ACP, the aircraft goes from "courseline to courseline," and the "altitude concern space" will be on the "inside" of the turn. Climbs are completed prior to ACPs and descents are started after crossing the ACP.

But TacInst required tactical nondirectional beacons (NDBs) and a tactical air traffic control (ATC) system to control movements on the battlefield a hardware- and manpower-intensive system. GPS technology and central air planning overcome these requirements. We can now plan the flight, submit the plan to the Air Tasking Order (ATO) and Special Instructions (SPINs) for deconfliction, and fly virtually the entire flight IMC without seeing the ground or talking to anybody.

The most significant difference in TacIMC versus TacInst is in the planned width of airways. Due to the inherent inaccuracy of tactical NDBs, TacInst is limited by maximum usable distances between NDBs and proportionally wider "airways" based on the distance between the NDBs under TacIMC; with use of GPS technology the airway remains a constant width from start to end. The width of the airway may vary from as narrow as a couple miles to much wider depending on crew proficiency, navigation system redundancy and acceptable risk.

Wider airways usually yield higher minimum en route altitudes (MEAs), which also yield greater threat radar





FLIR compliments both the radar and the NVGs. Special operations pilots have "three sets of eyes" with which to deal with the dark and adverse weather.



Very "clean" cockpit with all aircraft system warnings, cautions and advisories monitored and displayed through the Integrated Avionics Program on the Multi-Function Displays.

intervisibility. The command must decide if the greater threat is from radar-guided anti-aircraft artillery or the equally lethal earth. Appropriate MEAs and leg width are determined by weighing the relative risks. The command will further weigh mission success against flight risk(s) to determine mission execution during actual IMC.

The concept of TacIMC is one that likely scares the hell out of many Army pilots — probably even more so than TacInst. This is not unexpected. When we first started flying NVGs, there were many that poo-pooed the whole concept. The faint of heart eventually left the military and those with conviction marched on until today NVG fly-

ing is not only accepted, but virtually all Army pilots today fear flying without NVGs — a complete flip-flop of 30 years ago!

Formation flight IMC is still not possible. The technology for helicopter station-keeping is emerging as a result of GPS technology. This technology could allow fairly close IMC "formation" flight. USAF cargo planes have used station-keeping equipment for years, but their definition of formation is not as close as helicopters would need for assault purposes.

Nightstalkers are flying low-level IMC today. They are using both TF and TacIMC in Operation Enduring Freedom. The rest of Army aviation

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likely doesn't have the need, money or training time to equip all its helicopters with TF radars, but TacIMC is viable for all properly equipped aircraft right now. By using premission planning and/or "standardized" established routes with leg MEAs for each, with GPS-based systems as the navigators and the ATO/SPINs as the "deconflictor," TacIMC is viable. Risk is managed by the command through the standardization officers with good training and strict discipline. The mission is accomplished even though the weather would have cancelled the mission just a few years ago. We have truly come a long way!

We now stand at the cusp of a new era, similar to those at which we stood some 20 years ago with NVGs and 10 years ago with A/R. Those with faint hearts will eventually leave the military and those with conviction will march on into the "mission-accomplished" future. As the cloak of darkness has protected us for the last 20 years, the cloak of weather may protect us for the next few.



Steven Knight, a retired Army aviator and former MH-47 SIP with the 160th SOAR, is now a civilian mission instructor with International Development and Resources Inc., contracted to work with the 160th's Special Operations Aviation Training Company.

Footnotes

* For the purposes of this article, GPS technology includes the several various permutations of GPS. These can include "straight" GPS, or "conventional" navigators updated by GPS, or "embedded" GPS and other navigators contained in the same box (i.e., EGI, etc). The relative accuracy and merits of any GPS technology can be argued, but we can all agree that GPS is very accurate and any system that has GPS in the name is practically as accurate as any other.

** TacIMC is a new term coined by the 160th SOAR. The term TacIMC is intentionally different from TacInst. TacInst is truly IFR — a mini National Airspace System. TacIMC is less controlled, as outlined in the text of the article.

*** The MH-47E and MH-60K multi-mode radar (MMR) is a mechanical piece of equipment and as such is prone to failure. The mean time between failure is relatively long and is as reliable as any other piece of equipment on the helicopter, such as the FLIR or mission processors. Further, the radar's ability to TF has limitations.

COTS and AVIONICS INTEGRATION

By Tim Marchant and Duncan Young

The rapidly evolving relationships among aerospace and defense contractors, their subcontractors and their military customers have challenged avionics suppliers to develop new ways to achieve optimum returns on their investments. The emphasis on lean and efficient procurement has helped fuel this evolution, and has also encouraged the exploitation of the rapid advances in commercial electronic technology for use in avionics applications.

For these reasons, original-equipment manufacturers (OEMs) and defense-program managers have largely abandoned customized "black box" approaches in favor of nonproprietary open-architecture systems designs. The commercial off-the-shelf (COTS) approach provides integrators and OEMs with far greater flexibility, enabling them to mix and match both hardware and software from multiple vendors to achieve optimal application solutions.

Suppliers of COTS avionics must be in a position to provide advanced technology solutions to enable their customers to meet rapidly changing mission and threat scenarios. This challenge is made more daunting by the trend toward increased service lifetimes for aircraft (and other weapon) platforms.

As we review traditional and modern design approaches, we see that the COTS approach can enhance functionality over product and platform lifecycles, as well as improving overall cost effectiveness.

THE TRADITIONAL APPROACH TO UPGRADES: THE "BLACK BOX" MODEL

Until about a decade ago, older custom designs were typically supported by replacement and substitution at the component level on an as-needed basis. Two significant trends have made this approach untenable:

• The increased difficulty (and in many cases, impossibility) in providing footprint-compatible component-level upgrades (for example, replacing an outdated microprocessor with a new-generation microprocessor). Continuous improvements in both features and performance (including lower-voltage technology and packaging developments) often necessitate frequent baseline redesigns over the life of a system.

 The availability of, and desire for, new features and capabilities, often driven by changing threat and mission scenarios, that cannot be accommodated by existing baseline designs.

The combination of component obsolescence and the need for capability upgrades is likely to drive substantial system updates every few years. The initial design cost of a system is thus only a small fraction of the total system ownership cost. The cost of subsequent upgrades, as well as the initial cost, must be borne by the black-box user over the product's lifetime.

For certain systems, the same custom design may be applicable across several platforms, which helps to reduce per-unit cost. This may be possible in components common to multiple aircraft types, such as displays or weapon systems, for which performance and capability requirements are consistent and will remain so for the life of the platform.

However, for systems that are closely tied to platform hardware and/or user environment, the custom-designed black box is likely to require distinctive features that differ significantly from platform to platform. A design for a display controller in a tactical fighter is not likely to transfer well to a transport aircraft, in which the environmental requirements, user interfaces and aircraft interface buses will be far different.

Moreover, the possibility of maintaining consistent performance and capability requirements over the platform's life is steadily eroding in the face of extended service lifetimes and continuous changes to mission and threat scenarios.

THE EMERGING COTS PARADIGM

The transformation of defense procurement has led to the emergence of a real alternative to the "black box" model, based on a COTS approach. A number of vendors now provide opensystems hardware, supported by several standardized operating system software environments.

The adoption of hardware and software based on open standards is the basis for the most important distinguishing characteristic of the COTS model for the system integrator. The integrator now has the ability to configure (and reconfigure) a system at the circuit-card level, instead of the LRU level required under the black-box approach. This capability now provides the option for circuit-card-level support, maintenance and upgrades over a system's lifetime.

By pursuing a COTS approach, the system integrator can substantially reduce both nonrecurring engineering costs (during initial design) and the time needed for system integration. The widespread availability of off-the-shelf modules (often from multiple vendors) facilitates immediate system and software integration, without the need to await a hardware redesign and extensive requalification.

"Component obsolescence is a significant problem under the black-box model ..."

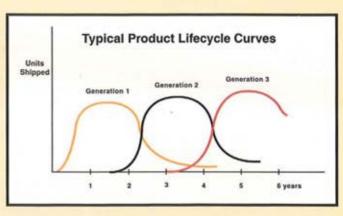
The system integrator is also in a position to select the COTS modules that best address the performance/price needs of the system, without the risk of future upgrades being constrained by the selection. If additional functionality is required (even during the development process), it can be added without requiring a complete system redesign. The COTS alternative also helps reduce the learning curve and training costs through the use of common operating systems and tool kits for developers.

TECHNOLOGY INSERTION USING COTS

Component obsolescence is a significant problem under the black-box model; to support added functions and missions often requires complete system redesign because aging technology platforms cannot be upgraded piecemeal. On the other hand, COTS provides the capability to address component obsolescence at the circuit-card level simply by replacing an obsolete card with a next-generation version. In most cases, this type of technology insertion does not require the design of new modules, because the function that is replaced is often available as a catalog item.

In parallel with the commercial electronics industry, the COTS industry

Figure 1 Lifecycle costs under COTS



typically introduces next-generation product upgrades approximately every 18 months, based on ongoing research and development. Most vendors now support the concept of backwards compatibility based on Form, Fit, Function and Interface (F31) compatibility through multiple generations.

F3I compatibility facilitates the incorporation of system upgrades and performance enhancements by adding or swapping modules at the circuit-card level. As long as both the original design and the upgrade are based on an industry-standard operating system (such as VxWorksO or IntegrityO), new capabilities may be added without requiring complete system reengineering.

THE COTS MODEL AND LIFECYCLE COST

The lifecycle costs of black-box systems are increased by the inability to amortize upgrades over significant volumes, and by the need to redevelop hardware and software at the component or module level to adopt new technology. Unless a black-box avionics system can be used exactly as it was envisioned during the design phase over the entire life of the program, and/or capability upgrades can be introduced across all platforms using the system simultaneously, upgrade costs are likely to be many times the original program costs.

In most cases, however, a black box will need to be redesigned from the ground up after a few years of deployment. This results in high costs for nonrecurring engineering (NRE) of both hardware and software, because of the closed architecture and sole-sourced design. In addition, it is common for these charges to be borne entirely by a single program, even when a platform is shared across several programs, because program needs diverge over time and the need for an upgrade may not be commonly accepted.

Under the COTS model using an open system architecture (OSA) approach, the need for multiple minor upgrades over the platform life is assumed and built into the design process. The initial design is based on appropriate functional partitioning of both hardware and software, using open standards, allowing the design to evolve over time as capabilities are required and technology improves. This approach minimizes disruption and helps control NRE and requalification costs during each upgrade cycle. A typical model for overall platform lifecycle costs (LCC) under the COTS model is shown in Figure 1.

The COTS approach is a significant benefit during system integration as well. The integrator maintains the flexibility to substitute new modules (and new capabilities) without a complete redesign or restart, even as system requirements change throughout development. Of course, these modules are often provided from multiple sources in the open, competitive COTS market, keeping their costs under control.

COTS AND FORCE READINESS

One of the best examples of the usefulness of the COTS model is provided by the Army's M1 tank. During the early 1990s older computers were replaced with VME-based computers that incorporated a set of then-current modules; these modules have been completely upgraded twice. In this way, the Army has been able to increase the M1's capabilities, and meet changes to the threat scenario, far more rapidly and at far lower cost than would have been possible with closed, sole-source system architectures.

It is critical to note here that the ease with which these upgrades were made to the M1 was based on the Army's tight control of internal software interfaces and on functional partitioning of modules based on the assumption of regular upgrades. To realize the cost benefits of COTS-based upgrades, it is by no means adequate to simply replace a black box with a VME-based system.

The use of the COTS-based upgrade paradigm in the M1 also illustrates the cross-platform benefits to the COTS approach. The same module used in the current generation of the M1 has also been selected and used as the mission computer aboard an upgraded version of the Marine Corps' AV-8B Harrier, while subsequent generations of the same module are being incorporated in the mission computer of the most recent F-18E/F.

This cross-functionality significantly reduces upgrade costs within each of the individual programs. It is made possible using the "partitioned" design approach discussed above, without compromising the functionality of any of these platforms.

CONCLUSION

As the COTS market has continued to evolve, the experience of several major weapon platforms has illustrated the advantages of a COTS-based approach to design and upgrades. These include:

- Ability to handle obsolescence at the circuit-card level, rather than requiring LRU- and system-level upgrades.
- Ability to plan for regular upgrades and technology insertion over platform life, even with changes to mission and threat scenarios.
- Reduced cost, resulting from multiple sourcing and use of open architectures, for initial design, system integration, and technology upgrades.
- Ability to amortize technology improvements across multiple platforms without requiring complete redesign.

To fully realize these advantages

requires the adoption of a COTS-based mindset from program initiation, incorporating "partitioned design" approaches and regular planned upgrades.

Although the COTS market is only a decade or so old, the progress so far seems to emphasize its advantages over the black-box model that dominated defense procurement until the 1990s. As program managers, contractors and subcontractors continue to embrace the COTS model, we can expect them to more fully exploit the advantages of this approach, helping to deliver cost-effective mission capabilities across all service branches.

The avionics systems (and other weapon systems) being developed today will leverage the COTS model, to efficiently manage lifecycle support and regular incremental technology insertion throughout program life.



Tim Marchant and Duncan Young are, respectively, the western regional account manager and director of marketing for the Canadian firm Dy 4 Systems Inc.

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Whither Aviation Tactical Automation Part I

By CW3 William R. Clemons

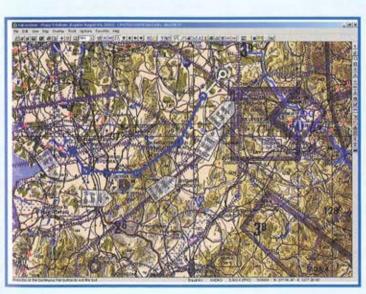


In January 2002 the Program ExecutiveOffice-Aviation (PEO-AVN) paid for myself and several other aviation warrant officers to attend the Mission Planers Users Conference (MPUC) in Ogden, Utah.

The MPUC is an annual gathering of contractors that make hardware and software, government computer experts and the users of mission-planning software. The purpose is to exchange ideas, learn what is available and at the same time explore future possibilities.

PEO-AVN said they paid for our MPUC attendance because they like us. However, I soon realized that they had ulterior motives — they actually wanted to know what we wanted! They are desperate for input from people working in the trenches. They are obviously working hard to get us what we want, but I noticed a disconnect between the people making the decisions, those writing the computer code and the actual warfighters.

Sky-View is a 3D fly-through module that allows the user to fly not just the route, but around the local terrain.



In this article, and a second that will appear next month, I hope to inform my fellow soldiers of aviation mission planning's current status, and to outline for programmers and decision makers the principles tactical automation should follow to be of the most use to those of us in the field.

Current Options

For the last two years, AH-64 Apache line troops in the Korea-based 6th Cavalry Brigade have used the Air Force's FalconView application for mission planning.

FalconView is a sub-component application of the Portable Flight Planning Software (PFPS) and is used for displaying maps, satellite imagery and overlays. Using the route-editor function, route knee cards can be printed for use in the cockpit. All the maps on FalconView can be updated electronically and any airport data is only a click away. The use of FalconView in the 6th Cav. Bde. began slowly with one troop and spread to others as pilots realized what an excellent tool it was. Our primary planning tool, the Aviation Mission Planning System (AMPS), was difficult to use and did not offer such versatile options as printing maps to scale with graphics.

However, only AMPS could load a Data Transfer Cartridge (DTC). A DTC is used to load route waypoints, laser codes and targets into an aircraft to provide range and bearing to Airspace Control Points and to aim sensors. Without a DTC, all required information must be entered manually. Loading all that information would require quite a bit of time when you have almost 100 different pieces of data. Some aircraft, like the OH-58D and AH-64D Longbow, are practically dependent on AMPS to program radios and other equipment.

While not all missions require a hundred waypoints and targets, the DTC can be used as a quasi-database with all the ACPs in an area, and routes can be passed to the crew over radio by listing which ones to fly toward - a great method to use for hasty attack planning. Using FalconView, the aircrew has to enter this data twice, once in FalconView and then in AMPS. To compound the problem, we use the Automated Deep Operations Control System (ADOCS) application for brigadelevel route planning because we could not get threat and airspace deconfliction data on any other system or program.

This process created extra work. When my fellow tactical operations officers (TACOPS) and I heard that a new Windows-based version of AMPS was to be released, we hoped for the best and thought that we could even drop using FalconView. However, the new AMPS software was disappointing.

Using e-mail, we began to contact TACOPS officers throughout the Army and soon established an AMPS working group. Having compiled a mailing list of more than a dozen TACOPS officers, we started to work together and eventually succeeded in having FalconView adopted as the Army aviation planning application. This August, an Aircraft

The use of FalconView in the 6th Cav. Bde. began slowly with one troop and spread to others as pilots realized what an excellent tool it was.

Weapons and Electronics (AWE) module will be released for the AH-64A, allowing a route to be made in FalconView and loaded onto a DTC using the green AMPS box. Currently, only the DTCs for a CH-47 and UH-60 can be loaded with a FalconView route. Comments from Germany say that the lift pilots like their newest tool. The AH-64D and OH-58D will have AWEs by March and April 2003.

PFPS 3.1 is the current version, but 3.2 is entering operational testing and is also due for release this August. The new version includes a GPS module that gives the user a moving map display when plugged into any GPS like a PLGR, Garmin or Magellan. It also has a range-and-bearing tool, but its best new feature is Sky-View.

Sky-View is a 3D fly-through module that allows the user to fly not just the route, but around the local terrain. It does this with either a wire-frame terrain rendition, maps of any scale or with satellite imagery, which gives it an almost life-like rendition. Even better, graphics can be overlaid onto the terrain so that a pilot can see boundaries and phase lines. It is bound to become a good rehearsal tool.

On the Way

The follow on to Sky-View is Powerscene, which does everything that Sky-View accomplishes and more.

Powerscene provides a 3D rendition of the flight route and shows threat domes for enemy air-defense systems.

What remains to be seen is whether the Department of Defense can overcome the problem of creating threat databases that can be viewed by allies at the SECRET-but-releasable level. This is a recurring problem with FalconView in Korea and caused problems during the recent conflict in Kosovo because these systems need to run on shared networks.

Other Powerscene features include labels for special points like schools or airfields, which are shown as flags always facing the viewer — another useful feature in a politically sensitive conflict like Kosovo. Powerscene will be compatible with PFPS 3.1 and 3.2, but will be distributed separately. The AMPS project office is planning to include this program into the Army's planning toolbox someday.

The follow-on system for AMPS and PFPS is the Joint Mission Planning System (JMPS). By appearance, JMPS will be FalconView 3.4. Fielding for the Army will commence about 2006 with full implementation around 2009, and it will be used by all the services for aviation planning.

JMPS will be internally very different from FalconView. JMPS is incorporating a new and logical building-block architecture. The basic JMPS operating system is like a big Lego block that facilitates route building and graphics. A user picks the modules needed for planning and plugs them in. You can then plug in another application, such as a performance-planning chart, so that your fuel burn and weight is calculated and added to your route card.

All kinds of information will eventually be interactive with JMPS, such as threat databases and current weather databases. One of the greatest and transparent features is the use of a Common Route Definition (CRD). CRD's function is to put the route in a format to allow it to be viewed on any system that supports XML, similar to what

is used on the Internet. CRD eliminates the current need to retype route grids from an application like ADOCS to FalconView, then to AMPS, then to a Word document for the critical grid list and having the route available for display on MCS-Lite.

JMPS will run on any system with Windows 2000 and the Defense Information Infrastructure Common Operating Environment (DII COE) system. The DII COE, its biggest drawback, is the lock that restricts the AMPS computer from adding software or other equipment to the computer.

Fixing DII COE

The purpose of DII COE is to make a system secure and capable of interfacing with all DOD computer systems. However, anybody who has worked with AMPS or ULLS-A realizes that is not the case. In a recent 4th Infantry Division exercise, for example, several DII COE-compliant systems could not exchange information such as AFATDS, ASAS, MCS-Lite, TAIS and AMPS.

DII COE's problem is that it does not always assure compatibility, and takes away flexibility. For the computer to be able to load a DTC the software must be flight certified. Flight certification involves extensive testing to ensure bad data is not entered into the aircraft's data bus system, which could lead to a malfunction or even a crash.

However, DII COE causes you lose to flexibility because you cannot load the device drivers for hardware such as a Zip drive or external CD drive. Nor can you load other software. If a way cannot be found to keep the DTC information safe without DII COE, then some computers must be used for only loading DTCs. Others computers, used for planning, should not be DII COE compliant. If possible, the systems need to be dual-booted with two operating systems and two versions, to allow and maintain flexibility.

Soldiers know the need for flexibility. Standardization is required, but only to the point of increasing flexibility. A user must be able to mix and match systems on the fly, because there will be no time to order replacements for the battle at hand.

While at the MPUC, MAJ Smith talked to my fellow TACOPS Officers at length on the type of equipment to procure for the AMPS green-box replacement. Most TACOPS officers agreed on a well-built COTS laptop incorporating the latest in technology, such as IEEE 1394 Firewire, CD-RW and a DVD drive. The DVD is used to load NIMA maps as they begin to issue new sets in that format.

These new computers will have PFPS and AMPS loaded, no doubt locked down by DII COE, but they will have expanded capability. There are also discussions about issuing a spare hard drive for a ruggedized computer that is being issued to the maintainers; it that will have AMPS and PFPS loaded on it for an emergency back-up. This is the type of flexibility that should be built into all automation plans.

COTS Systems

A recent survey at Fort Rucker, Ala., showed that most soldiers believe the Army should acquire ruggedized computers. I thought the same until experience showed me that commercial-off-the-shelf (COTS) systems work in most cases.

Many laptops and other equipment operate fine in the field environment. The 6th Cav. Bde. TOC is a prime example, using more than a dozen IBM laptops, a Dell server in a customized rugged case, and two Hewlett-Packard printers that provide an Information Technology (IT) backbone to support a Wide Area Network reaching down to all of subordinate units.

Though CORS machines occasionally do break, they are generally more reliable than ruggedized Army equipment that is usually proprietary hardware priced at exorbitant levels. The new AMPS equipment reflects this philosophy and will be a Panasonic Toughbook 28.



CW3 William R. Clemons is a tactical operations officer in the Koreabased 6th Cavalry Brigade. Email: clemonsw@usfk.korea.army. mil

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The Safety Center also continues to assist commanders through our Assistance Visits Program, and by providing mobile training teams to teach NCOs and collateral duty safety officers risk-management tactics and techniques (more information on both these programs can be found at http://safety. army.mil/pages/lessonslearned/ncopd/index. html).

THE ROAD AHEAD

Trained and ready crews are our numberone priority. And it is imperative that we continue to train in tough conditions that as nearly as possible replicate combat environments. We can do that and do it safely if we follow the basics of leaders managing risks effectively and enforcing standards and discipline. Whether we're in training or battle, it's the best way to ensure we're able to give back —unharmed — that little 4th-grade girl's father to her, along with the Army's and America's grateful appreciation.

Train hard! Fly safe!



BG James E. Simmons is the director of Army safety and commander of the U.S. Army Safety Center at Fort Rucker, Ala.

WARRANT OFFICER ADVISER

CW5 Daniel J. Logan Jr. has been named the first warrant officer adviser to the chief of staff of the Army (CSA), a position he will hold until June 2003.

The establishment of the warrant officer adviser position is intended to ensure that the Army's senior leader is kept abreast of such issues as professional education, growth and advancement, as well as morale, training, pay and promotion issues affecting the warrant officer corps.

Logan and his successors will also be available to present the warrant officer perspective to Department of the Army boards and committees, as required. Other functions may include meeting with military and civilian organizations to discuss warrant officer issues, and representing army warrant officers at ceremonies, when appropriate.

Fort Polk Aviators Killed in Kiowa Crash

By SGT Mike Kieser

Two aviators assigned to the 4th Squadron, 2nd Armored Cavalry Regiment, at Fort Polk, La., were killed Aug. 20 when their OH-58D Kiowa helicopter crashed during a training event at the Joint Readiness Training Center.

Dead are CW2 Milas Turney. 29, of Jacksonville, Fla., and CW2 Phillip Rochlitz, 33, of

Anderson, Calif.

The helicopter had just left a refueling point when the crash occurred about 3.5 miles east of the north Fort Polk cantonment area, said CPT Darryl Wright, JRTC Media on the Battlefield officer. Both aviators died of their injuries despite the immediate response of combat life savers, air ambulances, observer-controllers and a number of emergency personnel.

Training continued, despite the accident.

Although the 2nd ACR soldiers were able to complete their training, officials said the accident had an impact on everyone.

"Our hearts go out to the families of these soldiers," said BG Jason K. Kamiya, commander of the JRTC and Fort Polk. "Our deepest sympathy goes to these families. We are saddened by this tragic loss and will do everything we can to assist these families during this difficult time."

The cause for the crash is currently under investigation by Army Safety Center teams from Fort Polk and Fort Rucker, Ala.

Turney joined the Army in Nov. 1998 and had served at Fort Polk since Nov. 2000. He is survived by his wife, parents and two stepchildren.

Rochlitz joined the Army in Oct. 1993 and had served at Fort Polk since Sept. 1997. He is survived by his wife and parents.

** SGT Mike Kieser writes for the Fort Polk Guardian newspaper.



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Statement of Ownership, Management, And Circulation (Required by PS Form 3526)

Title of publication: Army Aviation (ISSN 0004-248X). Date of filing: September 2002. Frequency of issue: Monthly, except April and September (10). Annual subscription price: \$30.00. Location of known office of publication: 755 Main Street, Suite 4D, Monroe, CT 06468-2830. Location of headquarters or general business office of the publisher: Same. Publisher: Lynn Coakley, 755 Main Street, Suite 4D, Monroe, CT 06468-2830. Editor in Chief: William R. Harris, Jr. Editor: Stephen Harding. Owner: Lynn Coakley, 168 Long Lots Road, Westport, CT 06880. Known bondholders, mortgagees, and other security holders owning or holding 1% or more of the total amount of bonds, mortgages or other securities: None.

The average no. of copies each issue during the preceding 12 months, and the actual number of copies of the issue published nearest to the filing date (latter appears in parenthesis) were: a. Total No. copies (Net Press Run): 13,931 (13,838) (1); b. Paid Circulation: (1) Sales through dealers, carriers, street vendors, and counter sales: NA (NA).; (2): Paid or Requested Mail Subscriptions NA (NA); c. Total Paid and/or Requested Circulation: 13,125 (13,295); d. Free distribution by mail: Samples, complimentary, and other free copies: 271 (268); e. Free Distribution Outside the Mail (Carrier or Other Means): 410 (150); f. Total Free Distribution (sum of 15D and 15e): 681 (418); g. Total Distribution (sum of 15C and 15f): 13,806 (13,713); h. Copies Not Distributed 125 (125); i. total (Sum of 15g and 15h): 13,931 (13,838); Percent Paid and/or Requested Circulation (15c/15gx100): 94% (96%)

I certify that the statements made by me in this statement and dated September 28, 2002 are correct and complete.

Lynn Coakley, Publisher

FRONTLINE

Aviation Task Force Integration for the Company Commander

By MAJ Rich Gordon

magine you're the commander of an aviation company attached to an attack aviation task force deploying to the National Training Center (NTC) at Fort Irwin, Calif.

You have 120 days to coordinate, plan, train and deploy with the task force (TF) before the first battle begins. Before you meet the TF S3, you should ask yourself two questions: "How am I going to prepare my company for this deployment with the TF away from my parent battalion?" and "Is my company ready to help this TF fight and win?"

This scenario occurs more often in Army aviation than you might think. As units tailor forces for a specific contingency or mission, companies, platoons and sections will leave their parent organizations to join a TF. Task forces can apply the full capability spectrum of Army aviation, but they also create challenges leaders at all levels must overcome. Field Manual (FM) 1-111, "Aviation Brigades," discusses the creation of aviation TFs, but it does not outline specific planning considerations for company commanders who join these task forces.

Based on observations at the NTC, here are some tactics, techniques and procedures (TTPs) for company commanders to consider before their deployments begin. These TTPs are not all encompassing, and they do not apply to just one type of aircraft. But when combined with the troop-leading procedures, unit standard operating procedures (SOPs) and applicable FMs, they may give leaders a good start on effectively joining a task force as they prepare to deploy and conduct operations.

Predeployment Training

You need to maximize the time you have available for home-station training before you deploy. By so doing, your slice and the task force will begin to understand the capabilities and limitations of each other's equipment and operations, and both organizations can develop plans for maximizing combat power. Personal relationships will develop that allow you to understand the task force systems and who can provide you information, guidance and support as the task force conducts operations.

The time available before the deployment will determine the amount of training the task force may conduct. You may have time for actual field problems, but in some cases you will only have time for a desk-side brief to the TF commander. Orders drills, FARP rehearsals, a CPX or classroom discussion will help determine your roles, responsibilities and requirements within the TF. Take advantage of this time, because it pays dividends when the deployment begins. Begin as soon as possible, because when the deployment begins you will be expected to conduct seamless operations.

SOPS

As you join the TF you need to exchange any SOPs that affect mission accomplishment. You will need the TF SOP to understand, at a minimum, your requirements for assembly area operations, force-protection issues, the unit's mission planning sequence and combat reports.

You need to provide the task force with a copy of your SOP for special mission considerations. For example, if your company has a specific method of conducting Wet Hawk operations, then the TF needs to understand this SOP in order to employ your capabilities safely and effectively.

Knowing the SOPs will also minimize planning time, reduce confusion during operations and integrate you more effectively into the organization. Adherence to SOPs also allows the company to parallel plan with minimal guidance from the TF commander. This is especially critical when the TF commander is unfamiliar with your unit.

Command and Control

Key leaders in your company need to maintain personal relationships with key task force leaders. As the commander, you need to understand the TF commander's guidance, receive instruction and comply with intent. Your first sergeant must do the same with the task force command sergeant major. This is important when the command sergeant major begins assigning tasks within the TAA or force protection. These relationships will determine how well the TF will integrate all its slice elements.

Communication will be a vital responsibility during the deployment. Your slice of the task force must be prepared to communicate using every available system. FM, MSE, HF and TA312s are all tools for the TF to use during the fight. Ensure your company brings the needed systems to have redundant communications with the TF commander or TF tactical operations center (TOC).

Your communication systems must mirror the task force's systems. Coordinate with the TF staff for unique communication requirements. For example, if the TF conducts operations using Have Quick II as the Air Battle Net and uses AMPs to disseminate mission data, then your company must be prepared to use these systems. More communication equipment is always better. You will not be fully integrated into the TF if you cannot communicate.

LNOs

Because your company is new to the task force, you will increase your combat capabilities with the proper placement of liaison officers (LNOs). Your LNO to the TF can assist during the MDMP and mission execution to address questions, provide solutions and resolve discrepancies.

The use of the LNO is especially critical when home-station training is limited, because the LNO becomes the TOC's subject matter expert on employing your airframe. The U.S. Army Aviation Center (USAAVNC) LNO Handbook and FMs 1-112, -113 and -114 all provide useful checklists and data for effective LNO operations.

The LNO's experience level, maturity and ability can go a long way in ensuring your unit's success. The LNO is all too often the company's newest officer, and cannot articulate your abilities or requirements. The right person for this demanding job will set the tone for integration into the task force.

Maintenance

Depending on your unit and airframe, the ability to bring parts, tools and test kits will vary during split-based operations. In order to ensure maximum combat power for the fight, the company commander must coordinate support with the task force AVUM or AVIM.

dding additional equipment, parts and special MOS skills to the TF AVUM must be done before the deployment. For example, if you are an OH-58D troop joining an assault task force, additional armament and avionics resources will need to deploy with your troop to assist the AVUM.

Ensure you provide the technical supply section of the TF a push package of basic parts that your aircraft may need for repair. You must bring your own repair manuals and maintenance publications to provide the information needed to the technical supply section and the shops platoon to order parts and assist in repairs.

The TF production control (PC) officer needs to become your ally. While deployed, the task force PC officer will coordinate assets, secure parts and assist in maintenance problems that your company maintenance officer cannot fix.

While deployed, the company must participate in daily TF maintenance meetings. Without visibility on the problem, the task force cannot help with a solution. You cannot expect your company to fix all your problems, so maintain a good relationship with the TF AVUM.

Logistical Support

As you plan for combat operations during the deployment, do not forget logistical issues. Right before the battle is not the time to find out the attack task force did not forecast 7.62mm rounds for the UH-60 door guns.

Fuel requirements vary greatly among aircraft. For example, if you are a CH-47 section, 6,000 gallons of fuel in the task force may not be enough to refuel your aircraft conducting Class IV external loads all day. To the S4 though, this amount is more than enough for a cavalry squadron on a screen line all night long. The TF S4 must understand your requirements and you must accurately report your status. Early identification of requirements will give the TF time to plan, coordinate and secure needed assets.

'Do not forget the task force S1. Provide needed personnel rosters, manning issues and daily status. This will ensure mail comes to your soldiers, pay issues are resolved and personnel issues receive the attention they deserve. This is especially critical if the TF is in effect for a long period of time.

Risk Management

As the task force prepares for deployment, commanders and aviation safety officers must review the tenets of risk management and how those tenets effect operations to a specific airframe.

The TF crew risk-assessment sheets used to place a value on accidental risk may not apply between different aircraft based on crew manning and mission profile. Commanders joining the task force need to outline to the TF commander the hazards they identify when it comes to individual crews or mission tasks they face.

Briefing authority and risk-acceptance levels

should be understood and documented within the task force to prevent mission failure due to tactical and accidental risk. The five-step risk-management process does not change between airframes, but specific considerations in each step do. Use your knowledge to incorporate these differences into TF operations.

afety also needs to be considered among different types of aircraft in relation to tactical assembly area parking plans, FARP requirements and aircraft lighting configurations. For example, as it establishes a base FARP, an attack task force needs to understand the distance a CH-47 will need in the FARP, and an OH-58D squadron should recognize the space required for a UH-60 to park in the assembly area.

Commanders at all levels in the task force can more effectively manage risk through the use of SOPs, rehearsals and clearly understood standards. As you join the TF, ensure you make it a priority to make risk management part of your daily planning process.

Summary

Regardless of airframe, as a company commander joining an aviation task force you should prepare your company and the task force before you begin to conduct operations. Prior home-station training, early integration into the TF and understanding applicable SOPs will help facilitate operations, but time is always the challenge.

Make the most of the time you have before deployment so everyone in your company understands his role in the task force. It will take an additional effort on your part, but to fight and win, the TF needs to be completely integrated. These TTPs will give you a foundation from which to be able to conduct operations safely and effectively. Aviation TFs must closely work together to maximize their ability to contribute to the combined arms fight.



MAJ Rich Gordon is an aviation assault company trainer at the National Training Center, Fort Irwin, Calif.

On Monday, July 22, V Corps' 11th Aviation Regiment welcomed the first AH-64D Apache Longbow helicopters to U.S. Army, Europe. The 6th Squadron, 6th Cavalry Regiment, which recently returned to Illesheim, Germany, after completing Longbow transition training at Fort Hood, Texas, flew from the port at Antwerp, Belgium, to Illesheim with a brief refueling

stop in Mannheim, Germany. The 6/6 Cav. is commanded by LTC Michael J. Barbee.

AH-64D Longbow Apaches start their takeoff from Coleman Army Airfield in Mannheim, en route to Illesheim Army Airfield. The helicopters, part of a squadron formation of 22 Longbows flying together, were on the home stretch to the base for V Corps' 6/6 Cav. The state-of-the-art squadron returned to Illesheim to rejoin its sister squadron, the 2/6 Cav., after the Apaches and the unit's soldiers spent a year being fitted and trained as part of the Army's transformation of aviation assets. (Photo by Bill Roche)



LTC Mike Barbee, commander of 6/6 Cav. (right, pointing), gives a final flight briefing to his squadron's pilots and crew members before the group's flight from Mannheim to Illesheim. (Photo by Bill Roche)







TALON STRIKE 2002: AH-64A GUNNERY IN THE CZECH REPUBLIC

By MAJ John J. Lindsay

The following is the second of two articles on Exercise Talon Strike, which took the 2nd Squadron, 6th Cavalry, to the Czech Republic's Zdar Range Complex in Hradiste Military Training Area for a groundbreaking gunnery exercise.



Deployment

The deployment to the Czech Republic was conducted in several phases, and the unit elected to rail load in order to sustain perishable deployment skills. This was our second squadron rail movement in six months, so our rail-load teams, drivers and leaders at all levels had a solid understanding of what "right" looked like. We were able to recognize and react to problems quickly based on our previous experience.

Key to success throughout this phase was thorough planning, detailed in-progress reviews (IPRs) and a series of published warning orders, operations orders and movement annexes that provided detailed requirements for the troop commanders and staff. Published well in advance of execution, these orders gave leaders an opportunity to provide feedback, and the staff an opportunity to react to changes.

In the end, the squadron safely rail loaded more than 75

vehicles and 40 ISU containers, all of which arrived within a 36-hour period. A robust advanced party completed download. Upon main-body arrival, the unit was able to quickly establish the life-support area and await the arrival of the helicopters.

Table VIII

We knew from the very beginning that this was going to be a challenging exercise. Our excellent range facilities in Germany provided not only a multitude of target array combinations, but all of the support necessary to conduct gunnery, non-standard live-fire exercises and Joint Air Attack Team training. At the Hradiste Military Training Area (MTA), we were 80 miles from Grafenwöhr, Germany, and quickly found that we had taken many things for granted.

The target team from 7th Army Training Command (7th ATC) was comprised of five AWSS personnel, four target operators, two NCO master gunners and an officer in charge (OIC). Their equipment consisted of enough targets to support twice our requirement; ballistic scoring systems (BSS) in order to support rocket and 30mm engagements; a thermal site system to aid in scoring and target identification; a boresite panel and three Humvees.

Target emplacement took longer than expected due to wet and snowy conditions over extremely hilly terrain. Range downtime tasks that normally required two teams over a two-hour period now consumed five teams. The unit augmented the range-support personnel and assisted with such tasks as target emplacement, target preparation, AWSS site survey and firing-position marking. The unit

also provided three additional Humvees to facilitate range support requirements.

Rechargeable batteries that were changed out every 8 to 12 hours supplied power for the targets, and generators provided power for the heater blankets. We discovered that the generators ran out of gas before our seven-hour firing window, but the target team reacted quickly and modified the tanks to accommodate an auxiliary fuel tank. Their mission focus and "can-do" attitude contributed to the eventual success we enjoyed throughout the exercise.

Our biggest challenge during gunnery centered on scoring. We had fuel, ammunition and targets, but no consistent method to provide feedback during the engagements or during the scoring process. The scoring question was answered,



in part, when we rigged the Czech mover with our lifters. In this manner, the crew would receive feedback during the engagement. The sensitivity on each lifter was set to one, so that when a single 30mm round hit the target, it would fall. AWSS was further able to assist in scoring from the tower by installing a BSS system for the 30mm targets. The Hellfire engagements would simply have to be recorded on each aircraft's 8mm recorder and scored accordingly.

In the tower, the squadron S3 functioned much like an air boss on an aircraft carrier. Additionally, we had a weapons systems qualified OIC and safety officer, communications chief, two medics and crash rescue standing by at all times. Troop commanders were given the next day's projected firing order during afternoon down time, based on what we

expected to accomplish by the end of the day.

Crews were given one hard time for the day — when to be in the FARP. Redundancy was built into the schedule so that we had multiple aircraft stacked on the range ready to fire. If a crew missed or was late to their Forward Area Refueling Point (FARP) time, the Tactical Operations Center (TOC) adjusted and reprioritized the schedule. Gross violations of time or firing order resulted in crews being sent to the "Shock Box," a small holding area at the base of the tower. Through strict controls and redundant scheduling throughout the day, we were able to keep lost range time due to aircraft availability to a minimum.

The last remaining challenge we had in the tower was language. Most of us spoke at least some German and usually, when we did not, Germans spoke great English. In the Czech Republic we were almost entirely reliant on interpreters for communication between U.S. and Czech personnel. Critical to our success was having the same dedicated interpreters assigned to the range for the duration of the exercise.

Opportunities

The range was operational from 0900 on Monday through 1500 on Friday, which left a great deal of time on the weekends for opportunity training and partnership events. First and foremost in the minds of our commanders and aircrews was the opportunity to conduct situational training exercises (STX) in a new area. The terrain facilitated not only challenging day and night flight profiles, but also enabled us to conduct high altitude training seven days a week.

While the unit was focused on conducting gunnery, our regiment established contact with the Czech Air Force Hind attack helicopter unit. We invited them to fly to the range to observe the AH-64 in action and receive a brief on the capabilities of our aircraft. In return, we were invited to observe both the Hind and Hip and meet 20 of their pilots. The ground work was laid for the conduct of joint and multinational events in the future.

Our command was thankful for the opportunity to train at a new and exciting place. In order to build bridges for future exercises of this kind, we ensured we established contact with the local community in order to portray a positive image of both the United States and our armed forces. We conducted several visits to a local orphanage in Mostov one of which included an aircraft static display and, perhaps the biggest hit of all, HMMWV rides for the kids!

The squadron took advantage of every opportunity to interact with our Czech hosts. The MTA commander invited us to participate with a Czech unit conducting a small arms range during our density. Spearheaded by our Headquarters Troop, twenty soldiers had the chance to fire a variant of the AK-47 assault rifle on a qualification range. Once again, this was widely regarded as a positive experience from both sides and opened the doors for exchanges of this kind in the future.

In order to accommodate the high level of interest in both the media and among government and military officials on both sides, the regiment designated one of our firing days as a Visitors/VIP Day. Visitors Day was an idea that focused upon providing U.S. and Czech government and military officials, as well as the media, an opportunity to observe and hear about the training we were conducting, while at the same time limiting distracters to the unit during the conduct of the gunnery. The V Corps Public Affairs office took charge of the day's events and coordinated for all logistical

Talon Strike Lessons Learned

- Develop a detailed milestones checklist from now through the AAR.
- Set and maintain suspenses for planning and execution.

Conduct thorough reconnaissance at all levels.



Ensure logisticians have a clear concept of the operation.

- Gather the slice elements early and ensure they are tied into the planning process as much as your own staff.
- Meet often (weekly) at the same time. Hold staff officers accountable for delivering on time.
- Publish warning orders, orders and movement tables, and plan to publish FRAGOs. They are your bread and butter!
- In conjunction with the master gunner, meet with the target support and AWSS personnel. Their planning efforts should parallel and compliment your own.
- Get into the planning weeds when establishing the practical requirements for range support. Failure to replace a propane canister on the boresight panel can delay operations for hours.
- Ensure detailed and thorough medical reconnaissance is conducted. Support requirements must be in place upon arrival of the main body.
- Ensure a process is established for contracting. Meet with the designated contracting officer on a daily basis.
- Ensure a force-protection assessment is completed and all necessary logistical preparation is in place to support operations upon arrival.
- Develop a media plan at all levels. This includes the conduct of a press conference upon arrival and dissemination of the command message to all soldiers.
- Maximize firing time on the range. The planning factor per crew per table is one hour. Instill discipline in the scheduling process by assigning hard times to crews. Reprioritize all day, every day.
- Develop an order-of-merit list for firing crews especially if you've got more crews than range time available.
- Conduct the daily operations/range update separate and apart from the logistics update. Use the executive officer as a go-between to resolve support and operational conflicts. MAJ John Lindsay

and support requirements for the one-day affair. The unit provided tactical and technical expertise, a series of static display and several briefings. Thanks to higher headquarters involvement, we were able to continue training without interruption.

Soldiers were able to benefit from the trip across the border as well. The MTA was located 40 miles from the beautiful city of Karlovy Vary. With its dozens of hot springs and location near the German border, Karlovy Vary has been a popular destination for visitors for hundreds of years. U.S. soldiers were able to experience the sights and tastes of the Czech Republic during a series of MWR trips to this great city over a period of three weeks.

Conclusion

As the last day of training drew near, the collective confidence level of the squadron soared. The aircrews had fired on one of the most difficult and challenging ranges they had ever seen — and succeeded. The staff planned and coordinated a major out-of-country deployment in conjunction with gunnery for the first time in history. The soldiers, with the notion of deployment ever on their mind, moved the squadron and established operations in unfamiliar surroundings quickly, efficiently and to standard. The rail redeployment and aircraft self-redeployment to Germany were accomplished with the same degree of professionalism and precision as the deployment.

In the end, the squadron was able to qualify 24 AH-64 aircrews. We fired more than 18,000 30mm rounds, 5,000 rockets and flew in excess of 700 hours in 25 days. Thanks to the leadership within the regiment and the support throughout USAREUR, the squadron was able to meet its annual gunnery training objectives and make history in the process.

MAJ John Lindsay, the former executive officer of 2nd Squadron, 6th Cavalry followed, is now the unit's S3.

Aviators Visit Czech Republic for Griffin Strike By Cornella Summers

Some 350 soldiers from V Corps' 12th Aviation Brigade, stationed in Giebelstadt, Germany, conducted their first aerial-gunnery qualification exercise at the Hradiste Range Complex in the Czech Republic in late April and early May.

The exercise, dubbed Griffin Strike, was the second aerialgunnery qualification for U.S. soldiers in the Czech Republic, coming close on the heels of the corps' groundbreaking 11th Avn. Bde. exercise Talon Strike last month.

While this was the 12th Avn. Bde.'s first gunnery exercise in the Czech Republic, the unit, like other V Corps units, has in the past trained at various ranges in NATO countries.

Griffin Strike was designed to provide each gunnery crew a prime opportunity to assess and verify its precision and skills in unfamiliar terrain, V Corps officials said. The UH-60 Black Hawk crews conducted live-fire gunnery, including night firing, as coordinated with Czech officials.

"We are excited about this unique training opportunity ... in particular, about the rare chance to get to know and work closely with our Czech counterparts," said COL Jeffrey S. White, the 12th Avn. Bde. commander.

"Training at the Hradiste Range Complex offers all the challenges of a new training environment," White said. "As a result, Griffin Strike will be of tremendous value for our helicopter crews."

White emphasized that Czech authorities were "very supportive" in helping to make the exercise happen.

Primary logistic support and force protection for the exercise was provided by a task force of more than 100 soldiers from V Corps' 3rd Corps Support Command and 18th Military Police Bde. A small task force from the corps' 30th Medical Bde., with two Black Hawk medical evacuation helicopters, provided on-call medical support.

A total of some 80 vehicles, the two MEDEVAC helicopters, 15 additional Black Hawks and one CH-47 Chinook helicopter were involved in the exercise.

Cornelia Summers is a member of the V Corps Public Affairs Office in Heidelberg, Germany.



Ride at a Gallop

by COL Benjamin S. Silver and Frances Aylette Silver, (Waco, Texas: Davis Brothers Publishing Company, 1990), 336 pages, appendixes, bibliography, index.

"Ride at a Gallop" weaves personal memoir and raw sources into a history of the 11th Air Assault Division (Test). The organizational story starts with the Civil War Balloon Corps. The personal story begins in 1942, when COL Silver enlisted. The blended stories cover a crucial development in Army aviation — the creation of the 11th Air Asslt. Div. through its first key battle in Vietnam as the 1st Cavalry Div. This is the big picture behind the book and recent film "We Were Soldiers Once...and Young."

The appeal of this book depends on the individual reader. Early air-assault veterans have told me how easily it read. My experience differed. Both reactions probably reflect the same thing. As the foreword says: "No other work on this subject has recorded so much detail using original documents and quotes therefrom." Those who lived these experiences probably find the book absorbing because it recalls details and gives meaning to pieces that never fit coherently. This detail can bog down an unfamiliar reader.

I see the book's main value as a reference. I have no reason to doubt COL Silver's accuracy. Beyond detail in the chapters, appendixes give more data — military terms and acronyms; a "shopping list" of items the project team sought; lists of who deployed to Vietnam; wiring diagrams; and biographical sketches of key leaders. There are many photos. All are black and white, and some lack good resolution because of size and kind of printing.

In short, this is a book well worth having but not to undertake lightly.

Dr. Jim Williams Aviation Branch Historian



WAATS Gets Apaches

July 19, 2002, marked an historic occasion for Army aviation and the Western Army National Guard Aviation Training Site (WAATS).

That Friday afternoon saw the rollout ceremony of the first AH-64A Apache attack helicopter assigned to the WAATS. The ceremony marked the beginning of the transfer of AH-64A training from the active Army to the Army National Guard, a key element in support of the Army Aviation Transformation Plan. Since the introduction of the AH-64A Apache aircraft into the Army's inventory, all AH-64A training has been conducted at Fort Rucker, Ala. The Army will continue to conduct AH-64D Apache Longbow training at Fort Rucker.

The WAATS is located in the heart of Arizona's Sonoran Desert, approximately 30 miles northwest of Tucson and 95 miles southeast of Phoenix. The facility's location is uniquely suited for attack helicopter operations, in that it

includes a 3,600-square mile tactical training area encompassing high desert and mountainous areas.

The WAATS was dedicated in October of 1986. Since that time it has enjoyed an ever-increasing role in the training of attack and aeroscout aviators. The facility's main mission was to train AH-1 Cobra and OH-58A/C aviators and enlisted maintenance personnel. The transfer of the AH-64A training represents a transformation of modernized aircraft to the Army National Guard and the first major change in the WAATS mission since it opened.

This addition of AH-64A training represents continuing modernization of the WAATS. This modernization is evident in the expansion of the WAATS home station, Silverbell Army Heliport. The heliport is being expanded to accommodate additional aircraft parking. Construction of a new modernized hangar is scheduled to begin in fiscal year 2003. The WAATS is preparing to accept a second Combat Mission Simulator, Aviation Combined Arms Tactical Trainer and the Longbow Crew Trainer.

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.



Marine Corps Maj. Gen. Michael A. Hough, has been nominated for appointment to the grade of lieutenant general and assignment as the deputy commandant for Aviation, Headquarters Marine Corps, Washington, D.C. Hough is currently serving as the assistant deputy commandant for Aviation, Headquarters Marine Corps, Washington, D.C.

Army Chief of Staff GEN Eric K. Shinseki has announced that BG Bernardo C. Negrete, currently the deputy commanding general of U.S. Army Recruiting Command at Fort Knox, Ky., will become deputy commanding general and chief of staff of U.S. Army Accessions Command at Fort Monroe, Va.

President George W. Bush has nominated Army LTG Kevin P. Byrnes for appointment to the rank of general with assignment as commanding general, U.S. Army Training and Doctrine Command, Fort Monroe, Va. Byrnes is currently the director of the Army Staff in Washington, D.C.



ARIVIYAVIATION 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, 755 Main Street, Suite 4D, Monroe, CT 06468-2830, Tel: (203) 268-2450, FAX: (203) 268-5870, E-Mail: magazine@quad-a.org.

Dear Editor:

I read with interest COL Sylvester C. Berdux Jr.'s recent "Legislative Report" item "QRMC Report on Retiree Post-Service Earnings."

I have been battling the military-bashing since I retired in 1996. My post-retirement earnings have not kept pace with those of my military peers, and I have had a few major employers tell me they "do not hire ex-military."

I worked very hard in my military career and went to college at night and on weekends to better myself and complete bachelors and masters degrees on active-duty, and still gave1000-percent dedication to my commanders. I was not surveyed by the QRMC, that I know of, and my salary has always been 45 to 50 percent less than those of my civilian counterparts with no military background, with the same experience and education.

It has been downright disgusting to not have the same upward mobility on the corporate ladder as my non-military peers have. My jobs/positions have made it necessary to work seven days a week and 12 to 14 hours per day, leaving little time for fun, relaxation or vacations in my post-military retirement years.

I pray the TMC can and will be more proactive in reducing the government and military bashing so many of us have had to endure. Thank you, sir.

CW4 Richard Dickson (Ret.), Life Member, AAAA

CSM Beckman cont'd. from page 3

CSM Beckman entered the Army in April 1975 as an infantryman and achieved the rank of sergeant while serving in that MOS and as an antitank missile gunner. He re-enlisted in May 1979, and started a new career in aviation as the honor graduate from the MOS 67N Helicopter Repairer Course at Fort Rucker, Ala.

Since then, Beckman has served in a wide range of aircraft maintenance, leadership and other key assignments, including participation in fielding such new aircraft as the UH-60 Black Hawk and AH-64 Apache, and is a veteran of Operations Desert Shield and Desert Storm.

Beckman is a graduate of the Primary Noncommissioned Course Combat Arms; an honor graduate of the Helicopter Repairer Course; a distinguished honor graduate of the Black Hawk Helicopter Repair Course; and a distinguished graduate of the UH-1 Utility Helicopter Technical Inspector Course. He is also a graduate of the Air Assault School, the

Rappel Masters Course, the U.S. Army Officer Pre-Commission Course, the Primary Leadership Development Course, the Aviation Safety Course, the Noncommissioned Officer Advanced Course, the Sergeant's Major Academy and the Command Sergeants Major Course.

Beckman's military decorations and awards include the Meritorious Service Medal; Joint Service Commendation Medal; Army Commendation Medal (4 awards); Army Achievement Medal; Good Conduct Medal (8 awards); National Defense Service Medal; Noncommissioned Officer Professional Development Ribbon with numeral Army Service Ribbon; Overseas Service Ribbon (with numeral 5); Humanitarian Service Medal; Southwest Asia Service Medal with 3 Bronze Stars; Kuwait Liberation Medal (Saudi Arabia); Kuwait Liberation Medal (Kuwait); Master Aircraft Crewmember Wings; Expert Infantryman's Badge and the Air Assault Badge.

Briefings continued from page 3

On Sept. 4 SGT Felicia Tyson of Company C, 10th Aviation Battalion, 10th Avn. Brigade, at Fort Drum, N.Y., received an Army Achievement Medal from the quartermaster general, MG Juskowiak, for being selected as the "Best of the Best" in the Army for the Supply Support Activity Stock Control NCO. Tyson is a member of AAAA's North Country Chapter.

Kuwait has signed a letter of offer and acceptance with the Pentagon for the purchase of 16 AH-64D Apache Longbow helicopters and related equipment and services worth up to \$900 million. Kuwait is the seventh international AH-64D customer, and the second in the Middle East to purchase the aircraft directly from The Boeing Co.

More than 5,000 soldiers of the U.S. Army's V Corps began deploying by air, rail and ground Sept. 24 for Exercise Victory Strike III at the Drawsko Pomorskie and Wedrzyn Training Areas near Szczecin, Poland. The exercise, which will continue until Oct. 18, is designed to sharpen the deep operations skills of the Army's only forward-deployed corps' attack-aviation assets, including the newly acquired Apache Longbow helicopter. Highlights of this year's exercise will include an airborne operation to practice capturing an enemy airfield, Combat Search and Rescue (CSAR) missions, the use of the corps' Long Range Surveillance Detachment (LRSD), and introduction of the Tactical Airfield Integration System which coordinates combat flights. VS III will also test the corps' ability to rapidly deploy and sustain its command post and support elements in a combat scenario.

The U.S. Special Operations Command (SOCOM) is tooking into its possible use of the A-160 Hummingbird rotary-wing unmanned aerial vehicle (UAV), according to a recent statement by Department of Defense

acquisition chief Pete Aldridge. Under development by Frontier Systems and the Defense Advanced Research Projects Agency (DARPA), Hummingbird had its first forward flight early this year. The goal of the A160 program is to develop a stealthy surveillance rotorcraft capable of carrying a 300-500-pound payload with an endurance of more than 40 hours, an unrefueled range of more than 2,300 miles and a top speed of about 160 mph. The A160 UAV uses a new rotor system that utilizes a patented hingeless, rigid three-blade rotor with low tip speeds and low disk loading for increased endurance.

The U.S. Army's Aviation Applied Technology Test Directorate (AATD) has been reorganized to better support the command's three-fold mission: support for special-operations forces, program executive office activities, and aviation science and technology (S&T) initiatives. Sandy Hoff is now the agency's deputy director; Bruce Tenney has become associate director of technology; Gene Birocco is associate director for operations and business; Ned Chase is now chief of platform technology; and Ray Wall has been named chief of systems integration.

Simula Inc. has received a new contract and a follow-on order for its Cockplt Air Bag Systems (CABS) for U.S. Army Helicopters. The new orders provide continuity of Simula's CABS production line through the end of 2003 for the Army's UH-60 Black Hawk and OH-58 Klowa helicopters, and are valued at \$3.5 million. The new Black Hawk contract also includes \$25 million in additional long-term options, bringing the total of unexercised CABS options for Black Hawk and Klowa helicopters to more than \$30 million. The total value of all delivery orders that can be placed under the five-year Black Hawk contract is \$26.5 million. The Army has also exercised an option to acquire an additional 98 Klowa CABS valued at approximately \$2.0 million.

Preventing Tricare Abuse

Nobody wants to knowingly con-tribute to Tricare fraud or abuse, but many do by failing to report it. There are serious penalties for veterans who have complicity in such activities. If you suspect fraud or abuse you are required to take action.

If something does not seem right about your medical bills there may be a simple explanation. Perhaps an honest mistake has happened, such as the same item was billed twice, or you've been billed for services you never received.

If something does not seem cost-share. right here's what to do:

1. Double-check the billings from your provider of care and the Explanation of Benefits (EOB) you received from your Tricare contractor. Be sure that the only services listed are ones you actually received.

2. If you can't resolve any problems you find by talking to the provider's billing office, notify the program integrity unit of your regional Tricare contractor. Explain what you think the problem is, and forward elsewhere in your community.

copies of the EOB and any other relevant documents.

If you know, or have evidence not rendered/used; of, another individual - whether it be a provider of care or a Tricare eligible person - submitting fraudulent claims to Tricare, notify your con-

Although cost-share under Tricare may vary, it's illegal for a provider to waive those cost shares. You and Tricare are partners in the payment of your medical expenses. Report to your regional Tricare contractor any provider who waives your

The best way to determine if Tricare fraud or abuse has occurred in your name is to review the Explanation of Benefits (EOB) you receive after a claim has been submitted in your name. Specific clues would be services billed for dates indicated on which you did not seek medical care and/or if the amount billed is radically higher than the prevailing charge for similar treatment available

Examples of fraud include:

- Submitting claims for services abuse
- Falsified claims or medical
- Misrepresentation of the dates, frequency, duration, or description of the services rendered;
- · Billing for services at a higher level than provided or necessary;
- Falsifying eligibility; Failure to disclose coverage
- under other health insurance.
- Examples of abuse include: · Pattern of waiving cost share/
- deductible; · Failure to maintain adequate
- medical or financial records; A pattern of claims for services not medically necessary;
- Refusal to furnish or allow access to medical records
- Improper billing practices

Reporting Fraud and Abuse

To investigate any allegation of fraud or abuse Health Net Federal Services (HNFS) must have the following information:

- · Who committed the fraud or
- When the fraud or abuse occurred (time frame).
- Where the fraud or abuse occurred.
- · Detailed description of the fraudulent or abusive activity.
- You can make a report from the Pacific or any other geographic area through any one of the four resources listed below. Provide your name, phone number and address if
- you would like a response: 1. Visit www.healthnetfederalservices.com/bene/bc5 5 1 commitment _to_fight _fraud.asp (Note: This reporting method is anonymous.)
- 2. Call the toll-free Fraud Hotline at (800) 977-6761.
- É-mail Program_Integrity@ Health. Net
- 4. Mail your information to: Health Net Federal Services, Program Integrity, P.O. Box 2348, Rancho Cordova, CA 95741-2348. — Health Net Federal Services, Program Integrity Office.

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Mom, dad, son, daughter, brother, sister, officemate, soldier...me!



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Both Buckners pose with the certificate identifying the younger aviator as his class's distinguished graduate. LT Buckner's wings have their own proud history — his grandfather first donned

them himself in 1952.

Master Army aviator LTC Boyce B. Buckner (Ret.) (left) pins Army aviator wings on his grandson, LT Boyce R. Buckner (right), during the Aug. 21 graduation of Class 02-10 at Fort Rucker Ala.





COL Benny Steagall, Task Force Pegasus brigade commander, promotes CW3 Matthew Carmichael to CW4 in Kandahar, Afghanistan. Carmichael is attached to the 82nd Aviation Brigade as part of Operation Enduring Freedom.



Silver Order of St. Michael Presentation

COL William H. Forrester Jr., commander, 159th Aviation Brigade (far left), and COL "Hawk" Ruth (Ret.) (at right on left) presented COL Barclay (right) with the Silver Order of St. Michael at his brigade change of command awards ceremony. Barclay is now the 4th Infantry Division chief of staff.



U.S. Army War College Distance Education Class of 2002

Shown here are Army aviator members of the U.S. Army War College Distance Education Class of 2002, which graduated July 19 at Carlisle Barracks, Pa. Graduates received War College diplomas and masters degrees in strategic studies.

Front row, left to right:

LTC Robert F. Staake, Michigan Army National Guard/Great Lakes Chapter; COL Eric Peck, Kansas ARNG; COL Bob Bean, U.S. Army Reserve/Southern California Chapter; LTC Lothar Holbert, Pennsylvania ARNG; LTC W. Emery Fountain, Oklahoma ARNG; LTC Steve Hambrecht, USAR; COL Stephen Bogle, Iowa ARNG

Back row left to right: COL Mike Bonner, USAR; COL Gregory Cluff, New Mexico ARNG; COL Ward Arntson, USAR; LTC Larry D. Kay, Missouri ARNG; COL Donald P. McMahon, Missouri ARNG; LTC Mark Smith, USAR. Not pictured: COL William Lake, USA; LTC Michael Connolly, USA

Monmouth Chapter

AAAA's Monmouth Chapter presented the commander and first sergeant of the Massachusetts Army National Guard's Company B, 1st Battalion, 181st Infantry, with a limited edition print on the occasion of the completion of a year tour of duty as the primary force-protection unit for the garrison at Fort Monmouth in the wake of the Sept. 11 terrorist attacks. The unit is scheduled to redeploy home on Sept. 23. Seen here are (from left to right) COL Ted Sendak (Ret.), the chapter's vice president for industry affairs; Chapter President Ron Kurowsky; CPT Chris Gramstorff and 1SG Tom Nanof of Co. B; and CW4 Joe Pisano (Ret.), the chapter's vice resident for programs.



On Aug. 9, 2002 the Monmouth Chapter held its annual Sports Day Golf Tournament and Clambake at Fort Monmouth, N.J., with 165 people in attendance. Three of the five scholarship awardees were present and were honored by those in attendance. The awardees were presented with certificates from the AAAA Scholarship Foundation Inc. and other gifts from the chapter.

A plaque was presented to Warren Dasczinski of the U.S. Army Communications-Electronics Command's Command and Control Directorate, honoring him as the chapter's "Member of the Year."

Hank Zebrowski was also honored for receiving (51 years late!) his South Korean service medal, Combat Infantryman's Badge, Good Conduct Medal, Korean Service Medal with three Campaign Clusters, and United Nations Service Medal.

Bill Pohlmann, the chapter's vice president, scholarships, introduces awardees James Farrante, Kaitlin Severini and Kristin Wall.

Hank Zebrowski listens to the presentation made in his honor.

n his honor.

BAE Systems and Rockwell-Collins offi-

cials donated \$1000 to the chapter's

scholarship fund.



Warren
Dasczinski
receives the
chapter's
"Member of the
Year" Award from
chapter President
Ron Kurowsky.

Rockwell

Collins

Old Tucson Chapter

On Aug. 15 COL John Stanko (Ret.), acting on behalf of AAAA's Old Tucson Chapter, presented the Bronze Order of St. Michael to CW5 Nick Page (*left*). Page, a master Army aviator with more than 9,000 flight hours, has been assigned to the Western Army Aviation Training Site



(WAATS) since 1988 and has provided long and dedicated service as an instructor pilot and standardization officer. Page was also instrumental in establishing many of the WAATS training programs, and still continues to perform both flight-line and classroom instructional duties.



BAE SYSTEMS

AKO Provides Armywide Access

Did you know that as a retiree you have access to "Army Knowledge Online" (AKO) and can use the Internet portal to:

- Access numerous sources of information and services including an Army address book — and Armywide applications that may help you in resolving that burning question you have.
 - Locate others who share your interests, or a buddy with whom you've lost contact.
 - Share information.
- Use Collaborative tools such as chat rooms, community Web sites and channels
 of frequently requested links. AKO also provides e-mail service via a Web interface, POP
 or IMAP. You can also set it to forward to your local e-mail account.

Full AKO accounts, featuring single sign-on, are available to all active and retired members of the active Army, Army National Guard and Army Reserve, as well as to cadets at the U.S. Military Academy, and Department of the Army and non-appropriated fund civilian employees.

To access the portal, log in at https://www.us.army.mil and click the "Tm a new user" button. Follow the instructions to register. AKO is accessible from any Internet connection.

Concurrent Receipt Decision Made?

By the time you read this the Senate and the House should have approved the fiscal year 2003 Defense Authorization Bill and sent it to the White House for signature.

The Military Coalition (TMC), The Retired Officers Association (TROA), and many other military and veterans organizations were very busy in September bolstering the case to ensure the final defense bill includes a provision authorizing concurrent receipt of military retired pay and Department of Veterans Affairs (VA) disability compensation.

In Late September, TMC representatives, TROA and a dozen other associations met with Special Assistant to the President Tim Goeglein to discuss the issue and deliver several letters from TMC and others urging President George W. Bush not to veto the defense bill over concurrent receipt.

TMC applauds NBC News, Tom Brokaw and Fred Francis for their persistence in highlighting the need to correct this long-standing oversight through a four-part series on the concurrent-receipt inequity, "Broken Promises." Francis has featured several disabled military retirees who never knew when they were serving that they would be forced to forfeit their earned retired pay for incurring a service-connected disability inequity.

In the unlikely event that Bush actually vetoes the bill for that reason, we'd expect the senators and representatives to stand by their co-sponsorship and vote to override any such veto.

Even if you've called or e-mailed your legislators on this issue before, TMC urges you to do that again now with the threat of a presidential veto.1. Send a message to your legislators and the White House via TROA's Web site at http://capwiz.com/troa/home/ (use the top two links under "Action Alert").2. Use TROA's toll-free Capitol Hill Hot Line [(877) 762-8762]. When the operator answers, ask to be connected to your legislator's office and tell the staffer you want your legislator to insist on retaining the concurrent receipt provision in the Defense Authorization Bill.

VA to Change Health Care Priority System

Secretary of Veterans Affairs Anthony J. Principi has been under fire from critics, including some members of Congress, for his recent decision to stop soliciting additional veterans to enroll in the VA health-care system. In September, he reinforced that decision and expressed his intent to change the priority system for VA health care.

In the last six years of aggressive VA marketing, the number of veterans enrolled in the VA health care system has grown to six million — about a 50 percent increase. But VA funding hasn't kept pace, and waiting times have skyrocketed, so veterans in many areas now must wait 6 to 12 months or longer for a primary care appointment.

TMC, TROA and other associations and many members of Congress are appalled at the VA memorandum. However, what is more important is the reason behind it being issued — lack of funds to provide the health care mandated by Congress and the root cause of the under funding. It is clear that the cause is the White House in general and the Office of Management and Budget (OMB) in particular. Not only is OMB recommending a veto of the FY03 National Defense Authorization Act if it contains concurrent-receipt legislation, it has issued very conservative budget guidance for 2004, which will have an even greater adverse impact upon veterans' programs and the further reduction of healthcare access.

Meantime, as Rep. Ronnie Shows (D-MS) noted in a press release, the Bush Administration made an emergency loan of \$1.5 billion to Uruguay while there is a crisis in VA healthcare within the United States. We agree. Foreign aid (charity) is nice, but charity begins at home when it comes to military people and veterans' programs.

For FY02, we know that Principl fought with OMB for increased funding for veterans' programs. It was a bruising battle and he won back some of the funds that were to be cut. Can we expect Secretary of Defense Donald Rumsfeld to do the same for military people issues? His track record to date would indicate he won't and in fact would be leading the charge to cut them further.

Keep in mind that you are the final judge as to whether or not military retiree and vet-



erans are being treated fairly. Let your members of Congress know your position on the issues that concern you. If you have a political party affiliation let it know your thoughts as to the direction it is heading.

Class Act Lawsuit Update

At presstime the Washington, D.C., Federal Appeals Court had not released its ruling on the class act lawsuit filed by Medal of Honor recipient USAF Col. George Day, (Ret.). Day is the attorney for the lawsuit filed for the plaintiffs Robert Reinlie and Sam Schism to restore broken health-care promises to World War Il/Korea military retirees.

More than 20,000 military retirees have joined the lawsuit that is seeking to restore free health care for retirees 65 and older and their dependents. It also requests reimbursement of money (maximum of \$10,000) that has been withheld from Social Security pay over the years to finance Medicare Part B, as well as gaining relief from future Medicare deductions.

The lawsuit was first filed in 1996 and has passed through several court hearings. The latest decision was in February 2001 where a three panel decision by the D.C. Federal Court of Appeals ruled in favor of the complainants. The government appealed and requested a hearing before the full 12-member court, which was held before an overflow courtroom on Mar. 6, 2002.

The lawsuit is open to military retirees and widows/widowers, who may file on behalf of a deceased spouse who meet the following criteria:

- · Voluntarily retired with credit for 20 or more years of active duty;
- Entered on active duty before Dec. 7, 1956;
- Be age 65 or older, currently paying for Medicare Insurance Part B or have paid for it in the past.

For more information call toll free (800) 972-6275, go to the Web site www.classactlawsuit.com; e-mail Class Act at lawsuit@classact-lawsuit.com; or write Class Act Group, 32 Beal Parkway S.W., Ft. Walton Beach, FL 32548-5391

VA Agent Orange Claims Retroactive

A federal appeals court in San Francisco has ruled that Vietnam vets who contracted prostate cancer and diabetes related to Agent Orange exposure should receive retroactive disability benefits dated to the time they first filed a claim with the VA.

The ruling of the 9th Circuit Court of Appeals sets a legal precedent that could extend to a wide range of illnesses associated with herbicides. The appeals court decision let stand a lower court ruling that held the VA incorrectly interpreted regulations to deny retroactive payments to vets who filed claims after early 1994.

A 1999 U.S. District Court ruling held that all Vietnam veteran prostate cancer claimants and their survivors are entitled to retroactive benefits to the date of their first filing of their claim for service connection or survivor's benefits (as long as the prostate claim was not final before Sept. 25, 1985).

Also upheld by the appeals court was a provision in a 2000 ruling by U.S. District Judge Thelton Henderson, ordering the VA to provide retroactive payments to the estates of veterans who died before the VA paid the money they were owed. In addition to the prostate cancer, the appeals ruling also affects veterans who filed for adult-onset, or Type 2, diabetes, which was added to the list in 2000. The VA still has the right to further appeal this decision.

DOD Provides Transitional Health-Care Benefits

Family members of active-duty sponsors involuntarily separated from military service under honorable conditions, or family members of reserve component members separated after serving on active duty for more than 30 days in support of contingency operations, are eligible to receive transitional health care benefits for 60 or 120 days under the new Department of Defense (DOD) Worldwide TRICARE Transitional Health Care Demonstration Project if their sponsor was on active duty Jan. 1, 2002, or later.

The new demonstration project provides medical benefits to certain eligible active duty and reserve families when their sponsors depart from military service. Family members of sponsors with fewer than six years of active-duty service are eligible for 60 days of transitional health-care benefits; those with six years or more are eligible for 120 days.

The transitional health-care demonstration benefit is retroactive to Jan. 1, 2002, and remains in effect for two years, to allow DOD time to analyze the program and decide whether to make transitional health care a permanent TRICARE

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benefit for these family members.

Under the demonstration project, family members may use TRICARE Standard, the fee-for-service option with deductibles and cost shares, TRICARE Extra, the network option with deductibles and negotiated fees, or TRICARE Prime, the network option that is least costly for most people.

Sponsors and family members who are enrolled in TRI-CARE Prime will be automatically disenrolled when the sponsor separates from active duty. To continue using the TRICARE Prime benefit during the transitional health-care period, sponsors and family members must contact their TRICARE regional managed care support contractors, or their local TRICARE service centers, and re-enroll in TRI-CARE Prime. There will be no break in TRICARE Prime coverage as long as the sponsor and family members re-enroll in TRICARE Prime.

Dental benefits are available to former active-duty and reserve-component members, but under this demonstration, family members of former active-duty and reserve-component members are not entitled to dental benefits. However, RC members and their family members who are eligible and enrolled in the TRICARE Dental Program (TDP) would be eligible for dental benefits under the TDP, which is separate from this demonstration project.

Coalition Hosts Annual Awards Reception

TMC, a consortium of 33 military and veterans' organizations representing the interests of more than six million members of the uniformed services community, presented its highest awards to two legislators and two congressional staff members at a Sept. 17 Capitol Hill reception.

Sen. Harry Reid (D-NV) and Rep. Mike Bilirakis (R-FL) received TMC's 2002 Award of Merit for their sponsorship of key bills in the Senate and House that would prevent military retirees with service-connected disabilities from having to forfeit part or all of their military retired pay.

TROA Members Approve Name Change

Almost 90 percent of TROA members who cast ballots voted to change the association's name to Military Officers Association of America (MOAA). TROA believes the new name better reflects the total membership composition and what the association does for all of our members.

TROA will begin the transition to the new name on Jan. 1, but will use "formerly TROA" in the logo until Oct. 1, 2003.

Connecticut Chapter On Thursday, Aug. 8, the Connecticut Chapter hosted its 9th Annual Golf Tournament, with this year's proceeds benefiting the AAAA Scholarship Program. Two scholarships were awarded to member's dependents, as noted in the photograph below. It was also the first meeting for the Connecticut Chapter's newly elected president, Mike Blake.



Among those attending the Connecticut Chapter meeting were (left to right) Chapter President Mike Blake; CW4 and Mrs. James Muthig; scholarship recipient Valerie Muthig; AAAA Executive Director Bill Harris; Mr. and Mrs. Fran Bonomo for scholarship recipient Nicholas Bonomo (not present); and chapter Vice President, Scholarships, Paul Hoar.

Chapter officers attending the meeting included (left to right): Bill May, VP, membership; Norma Nardozzi, treasurer; Charles Brady, executive VP; Mike Blake, chapter president; Ron Kwalek, secretary; Maureen Fino, VP, programs; and Paul Hoar, VP,

scholarships.



New Chapter Officers

Air Assault:

CPT Anna M. Haberzettl, Secretary.

Connecticut:

Mr. Michael D. Blake, President; Mr. Charles H. Brady, Sr. V.P.

Edwin A. Link:

Mr. Robert J. Wuestner, Sr. V.P.

Taunus:

LTC Patrick D. Sargent, President; MAJ Scott B. Avery, Sr. VP; CPT Andrew J. Risio, Secretary.

Old Tucson:

LTC Louis H. Jordan, Jr., President.

New AAAA Industry Members

Applied Data Trends Hi-Line Inc.

New AAAA Sustaining Member Goldman, Sachs & Co.

New AAAA Order of St. Michael Recipients COL Waldo F. Carmona (Silver)

Rodney J. Schulz (Silver) MG John M. Curran (Silver) COL Alton C. McKennon, Jr. (Silver) MSG Jonathan C. Cox (Bronze) LTC John C. Buss (Bronze) LTC James M. Marye (Bronze) CW3 Michael E. King (Bronze) CW5 William N. Page (Bronze) CW3 David Pauley (Bronze) LTC James G. Young (Bronze) CW4 William E. Tisdale (Bronze) CW5 Ernie Lee Howell (Bronze) COL Gervis A. Parkerson (Bronze) CW4 Hanson E. Fitte, Ret. (Bronze) LTC Thomas A. Balish (Bronze) LTC Philip A. Mooney, Ret. (Bronze) Ronald A. Trejo (Bronze) Gerald W. Irvine (Bronze) SSG James W. Goodlett (Bronze) Jerry W. Bonham (Bronze) CW4 David L. Hacker (Bronze) MSG Matthew Shoemake (Bronze) CW4 Wendall A. Condon (Bronze) MAJ Robert G. Wegner (Bronze) CW4 John H. Converse (Bronze) MAJ Shawn W. Cowley (Bronze) CPT Scott Hasken (Bronze) MAJ James G. Kanicki (Bronze) MAJ Thomas G. Rowell (Bronze) CPT Rogert G. Henderson (Bronze)

LTC G. Garrick Kelly (Bronze) MAJ Brian K. Serota (Bronze) CW5 Erik A. Schimmer (Bronze) LTC Mark W. Robinson (Bronze)

Aces

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

Ms. Laurie A. Concilio CW5 Kenneth A. Donahue, Ret. LTC Charles F. Fields CPT Pete Ortiz, Jr. MAJ Gerald M. Pearman CPT Dominic M. Scola LTC Stanley O. Smith

New AAAA Life Members

1LT Steven B. Barrier Jr. Mr. Daniel L. MacDonald LTC Christopher F. Smith CW5 Frank E. White, Ret.

AAAA Soldier of the Year

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

SPC Nicholas R. Downey 2002 (Phantom Corps Chapter)

AAAA Soldier of the Month

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

SSG Thomas E. Winter June 2002 (Indiantown Gap Chapter)

AAAA Distinguished Instructor of the Quarter

A Chapter Program to Recognize Distinguished Instructors on a Quarterly Basis

SSG Mark B. Dudley 4th Qtr. FY02 (Colonial Virginia Chapter)

AAAA NCO of the Year

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

SSG Sidney R. Denbina 2002 (Phantom Corps Chapter)

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DIRECTORIES SUSPENDED - EMAILS REQUESTED

Due to increasing security concerns ARMY AVIATION will suspend the publication of home addresses and personal information of our AAAA members, even though they have consented to have them appear in the magazine. This will affect both the "Change of Address" section of the magazine and the usual directories, such as the "Reserve Component Directory" scheduled for the November issue.

Any member who requires additional information to reach another member may contact the AAAA National Office, aaaa@quad-a.org, (203) 268-2450, to obtain more information on how to do so.

We regret any inconvenience this may cause. However, AAAA President LTG Don Parker and I have agreed that this is a necessary and prudent force-protection action.

Secondly, we here at the National Office have received many, many comments over the years on the amount of paper we generate each year for all the meeting notice mailings, symposium registrations, etc. Most recently, AAAA Board Member Bill May contacted me on the subject for use in our local Connecticut Chapter.

In an effort to address this and increasing postage rates, we have begun sending brief e-mail notices to our chapter members that their chapters will soon be holding an event. That one-line message directs them, if they are interested, to click on the URL provided. That opens our Web site for the flyer itself and all the details. We have used it so far for the Central Florida and Aviation Center Chapters, to very good effect.

However, WE NEED YOUR CORRECT E-MAIL ADDRESSES to make it work! Please send a quick e-mail to aaaa@quada.org to confirm your e-mail address with your full name and rank. We promise not to "spam" you. It just means you can get the same notices faster and with less expense. Efficiencies like this can also help avoid or delay future dues increases necessitated by constantly increasing postal rates.

Thanks for all you are doing to help keep this nation safe and free. Please do not hesitate to contact me with any ideas on how we might serve you better.

Bill Harris Executive Director, AAAA Editor in Chief, ARMY AVIATION Magazine

*CFC*CFC*CFC*

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

In 2002, the AAAASFI received a total of over 280 applications and awarded 90 grants and loans totalling \$152,000. These awards are made on the basis of academic merit only and the applications are scrubbed to remove all references to the names and ranks of their AAAA member relative.

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

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

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

Combined Federal Campaign

FUNCTIONAL AWARD NOMINATIONS

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

SUSPENSE NOVEMBER 7

(Awards Period Encompassing November 1 Through October 31):

- Army Aviation Logistics Support Unit of the Year Award
 - Army Aviation Material Readiness Award for Contributions by an Individual Member of Industry
- Army Aviation Material Readiness Award for Contributions by an Industry Team, Group, or Special Unit
 - Army Aviation Material Readiness Award for Contributions by a Small Business Organization
 - Army Aviation Material Readiness Award for Contributions by a Major Contractor

ARMY AVIATION ASSOCIATION OF AMERICA 755 Main Street, Suite 4D, Monroe, CT 06468-2830



Phone: (203) 268-2450; Fax: (203) 268-5870 Email: aaaa@quad-a.org



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Colonial Virginia Chapter

AAAA's Colonial Virginia Chapter recently held its General Membership Meeting and Annual Membership Appreciation Day. The event included a raffle, in which members won a 25-inch TV, a deep-fry cooker, three AAAA memberships, gift certificates from the local community and several other small prizes.



COL Joseph I. Moore is chapter president.



SFC George Deljanovan and SFC Robin Dicarlo work the grill.

COL Moore, Allie Eschenbach, chapter secretary and Mary McCown, treasurer, cut the annual membership cake.



Join the Professionals — Join AAAA

ARMY AVIATION ASSOCIATION OF AMERICA (AAAA)

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

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

Rank/GS Grade	First Name	MI	Last Name	Sex
Mailing Address				
Mailing Address				
City			State	Zip + 4 Code
Active Duty or Civilian .	lob Title and Unit or Firm na	ime E-	Mail ()	
Area Code Office Phon	e Ar	ea Code Residence Pho	ne Area Code	FAX
Consent:	☐ I do not consent to the p	oublication or release of the	he above information t	o third parties.
Signature				Date
Citizenship	Nickname	Sp.	oouseis Name	
Date of Birth (Mo/Yr) _ membapp.i31 08/22/01		Social Security	No	

AAAA ANNUAL DUES

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

☐ AMEX ☐ Diners Club ☐ Mastercard ☐ VISA Card No. Amt S. Exp. Date

Signature: Date:

Check (✓) Your Professional Qualification:

-) Army Active Duty) Army AGR (ARNG)) Army AGR (USAR)) DA/DOD Civilian () Other US Military Service
- (Active)
 () Other US Military Service (Retired)
 () US Defense Industry
-) Army Nat'l Guard) Army Nat'l Guard) Army Reserve) Army Retired) Foreign Military Service) Foreign Defense Industry) US Defense Industry & Military Retired () Consultant () Publishing/Other Assn.
- () Other Are you a former AAAA member? Yes No If yes, what year did you join?

Chapter Affiliation Preferred Print Name of Recruiter

Magnolia Chapter

During its Aug. 2 meeting AAAA's Magnolia Chapter added 34 new members from the Aviation Classification Repair Activity Depot (AVCRAD) in Gulfport, Miss., for a total of 183 members since the chapter's birth a year ago. Go, Magnolia!



(Left to right) COL MacNealy presents Order of St. Michael Bronze awards to CW4 William Tisdale, CW5 Ernie Howell and COL Parkerson. Assisting in the recognition is CW5 Randy Jones (Ret), AAAA national board member.



(Left to right) COL Bradley S. MacNealy, the Mississippi Army National Guard's senior aviation officer, presents "Soldier of the Month" awards to SSG Timothy Lewis (for July), PFC Chris Bone (August) and SSG Crystal Barna (June). AVCRAD commander COL Gervis A. Parkerson also participated in the recognition of these outstanding aviation soldiers



University of North Dakota Chapter

CW5 Neal E. Jacobson was awarded the Order of St. Michael and Legion of Merit Award in celebration of his retirement on Jan. 27. Pictured are (from left to right) LTC Neil R. Hutchison, commander of 1st Battalion, 112th Aviation Regiment; Jacobson; and his wife, Judy M. Jacobson.



COL Joseph I. Moore (left), president of AAAA's Colonial Virginia Chapter, congratulates COL Waldo F. Carmona, outgoing commander of the Aviation Applied Technology Directorate at Fort Eustis, Va., upon Carmona's receiving the Silver Order of St. Michael.

(U.S. Army photo by Ronald Bowman)



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

Barriwell, Cassandr, SGT Benson, Forest A., Mr. Caudle, Kelley D., Ms. Cleveland, Antonio, SPC Crowe, Michelle J., SPC DeVenney, Steven D., CDT DeWitt, Jerry L., CW5 Digerolamo, Anthony J., SSG Donovan, Patrick K., CPT Downing, Eric D., PFC Echelberry, Gregory E., PFC Fessenden, Alan D., LTC Garabay, Xavier A., PFC Hancock, Amy, SPC Harmon, Richard L., CW4 Hawbecker, Joseph L., 1SG Lacy, Michael, SGT Lee, Joshua, SGT McNutt, Christopher, 1LT Mullings, Shernlann, CPL Nolin, Ezra J., PFC Paddon, Jacob, SGT Rohe, David, SSG Santos, Nancy A., Ms. Schaefer, Don B., Mr. Serrano, Tira M., SSG Smaltz, Earle L., Mr. Stevens, Richard B., SGT Terceira, Richard, SSG Tuftie, Bruce J., MAJ Waters, Herbert R., COL Waters, Jimmy, Mr. Whaley, Carrell R., WO1 Wiggers, Toby L., SGT

Nov. 5-7. AAAA Aviation, Electronics and Survivability (AES) Symposium, Sheraton Eatontown Hotel & Conference Center, Eatontown, NJ

Jan. 31, 2003. AAAA Scholarship Executive Committee Meeting, National Guard Readiness Center, Arlington

❤ Feb. 1. AAAA National Awards Selection Meeting, National Guard Readiness Center, Arlington, VA.

Apr. 9-12, AAAA Annual Convention, Fort Worth, TX.



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Army Aviation Hall of Fame

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

Contact the AAAA National Office for details at (203) 268-2450

CW4 Cleveland Valrey Army Aviation Hall of Fame 2001 Induction

CW4 Cleveland Valrey's career in aviation began at age 16 in the Army Air Forces. In 1949, after three years service, he switched to the Army. He entered flight school as a master sergeant with 11 years of service, including combat in Korea with the all-black 2nd Ranger Company. He was wounded, hospitalized in Japan and returned to duty in Korea. For service in the Korean War Valrey received the Bronze Star Medal with Valor device, Army Commendation Medal, Purple Heart, Korean Service Medal with six Battle Stars and Arrowhead, and the Combat Infantry Badge.

After flight school Valrey served in H-21, H-34 and H-37 companies in the United States and Germany. Following fixed-wing training in 1964 he was assigned to special forces and

spent time in the Dominican Republic. He served two distinguished tours in Vietnam, totaling 32 months. During his Vietnam service he was awarded four Distinguished Flying Crosses; two Bronze Star Medals; 50 Air Medals, one with Valor Device; four Army Commendation Medals, one with Valor Device; his second award of the Combat Infantry Badge; and the Vietnam Service Medal with nine Battle Stars. Valrey's final assignment was in the Warrant Officer Branch of the Office of Personnel Operations. For his post-Vietnam service he received three Meritorious Service Medals. By the time of his retirement he had acquired more than 10,500 flight hours — which included over 2,100 combat hours, and 4,200 hours as instructor pilot and instrument examiner.

This truly outstanding master Army aviator and soldier was a role model during more than 30 years of service.



conditions. The only one capable of performing this mission Chinook is a power troops rely on, however fierce the challenge. And that makes all the difference, at any altitude.

