ARMY AVIATION

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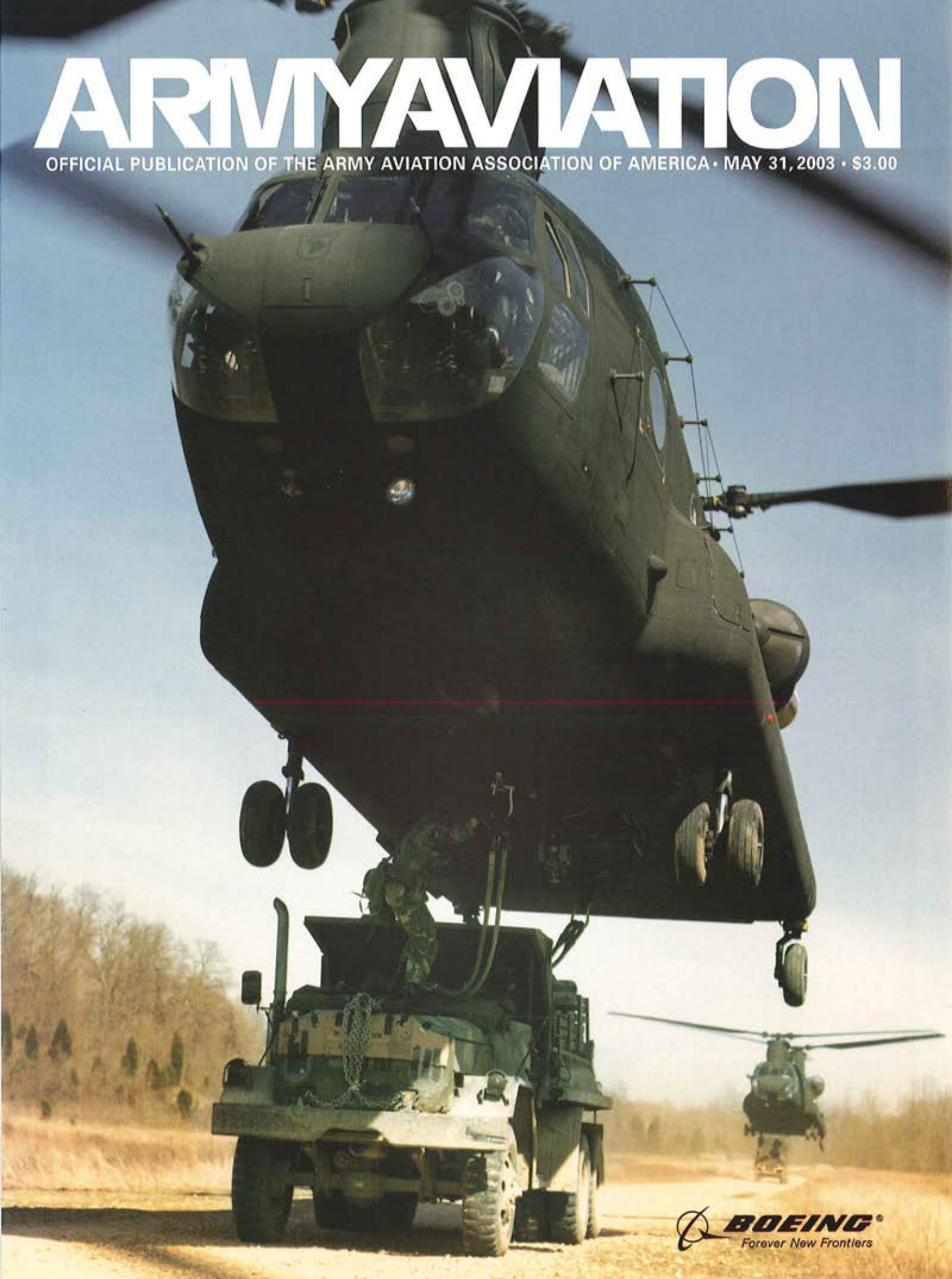

AIRCRAFT	DURATION OF FLIGHT	PILOT TIME	PILOT EXPERIENCE

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briefings

Two Army aviators were among the soldiers freed from Iraqi captivity in the closing days of the ground war portion of Operation Iraqi Freedom. **CW2 David Williams** and **CW2 Ronald Young**, both of the 1st Cavalry Division's 1st Battalion, 227th Aviation Regiment, were captured following the March 23 downing of their AH-64D Apache. Video images of the captured aviators were seen worldwide, as were images of their return to American control following their rescue by coalition forces. Both aviators underwent medical evaluation at Landstuhl Regional Medical Center in Germany before being returned to the United States.

The **Department of Defense** announced today the names of six soldiers killed when their UH-60 Black Hawk helicopter crashed in central Iraq on Mar. 3. The soldiers were CPT James F. Adamouski, 29, of Springfield, Va.; SPC Mathew G. Boule, 22, of Dracut, Mass.; CWO Erik A. Halvorsen, 40, of Bennington, Vt.; CWO Scott Jamar, 32, of Granbury, Texas; SGT Michael F. Pedersen, 26, of Flint, Mich.; and CWO Eric A. Smith, 41, of California. All were assigned to the 2nd Bn., 3rd Avn. Regt., at Hunter Army Airfield, Ga. The incident remains under investigation.

Shanghai Sikorsky Aircraft Company (SSAC), an equity joint venture between Sikorsky Aircraft Corp. and Shanghai Little Eagle Science and Technology Co., has Chinese government authorization to commence operations. Negotiations are already underway for 2003 deliveries of three separate light-aircraft models, with production capability expected to accommodate 24 aircraft per year. A letter of intent was signed at the first SSAC board of directors meeting for the sale of a Shen 4T, a single-engine turbine helicopter scheduled for delivery later this year. The LOI represents the first customer for this model helicopter in China and the first sale for the joint-venture company.

Sikorsky Aircraft has selected **CMC Electronics** to provide its CMA-2082M Flight Management System and CMA-2088 Emergency Control Panel for use in the UH-60M Black Hawk. CMC anticipates that it will supply the systems for some 1,200 current-model Black Hawks scheduled for upgrade to UH-60M standard, and the total value of the deal could exceed $110 million over the course of the upgrade program. CMC's CMA-2082A Avionics Management System and CMA-2088 are standard equipment in the Army's UH-60Q and HH-60L aircraft.

In a related development, **Sikorsky** has awarded **Penny & Giles Aerospace Ltd.** — a division of Curtiss-Wright Corp. — an $18 million contract to provide a software configurable air-data computer for use in 1,200 upgraded Black Hawks. The air-data computer uses sensors and microelectronics technology to compute the host aircraft's airspeed, altitude and rate of climb, as well as outside air temperature and other critical information for the primary flight displays and mission computer.

And in other **Sikorsky** news, the firm has opened an Eastern Region office in Newport News, Va., to better support its military customers in the Tidewater area.

The Aviation Applied Technology Directorate of U.S. Army Aviation and Missile Command has awarded **Goodrich Corporation** an $8.5 million contract to supply its Integrated Mechanical Diagnostics-Health and Usage Management System (IMD-HUMS) for Army UH-60L helicopters. Goodrich's Fuel and Utility Systems division will provide IMD-HUMS systems and support for 22 UH-60L helicopters at the 101st Airborne Division in addition to eight systems already ordered. This collaborative project follows a previous demonstration of the Goodrich IMD-HUMS technology on the UH-60A. The systems to be provided include an onboard system and a maintenance management ground station.

HALL OF FAME NOMINATIONS ARE OPEN
See page 42 for details, or visit the AAAA webpage at www.quad-a.org

***Briefings** continued on page 39*

contents

vol. 52 no. 5 MAY 31, 2003

FEATURES:

SPECIAL FOCUS: Hardware Update

AAAA CONVENTION PHOTO WRAP-UP

DEPARTMENTS:

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

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Congratulations

20th Anniversary of the Army Aviation Branch

SECRETARY OF THE ARMY
WASHINGTON

MAR 26 '03

To the Soldiers of our Aviation Branch:

On behalf of the Army, congratulations on this 20th Anniversary of the Aviation Branch.

It is amazing what Army Aviation has accomplished in just two decades since Secretary of the Army John O. Marsh, Jr., and Chief of Staff of the Army General John A. Wickham, Jr., signed General Order Number Six establishing the Aviation Branch.

Seizing on the momentum of the lessons learned from the creation of air mobility warfare during the Vietnam War, the volunteers who stepped forward for the new branch have helped to build the most revered Army Aviation force in the world.

Today, we have the finest education system to train our people and grow leaders in Aviation, as well as others from our allies. The doctrine and the tactics established by Aviation are models for others to emulate.

Our research, development and acquisition programs for Army Aviation have put on us on the leading edge for new technologies and capabilities in aviation. Our special operations aviation capabilities are second to none. We have the preeminent, most reliable, combat tested and lethal aircraft to ensure success in whatever mission the Army is asked to accomplish.

But more importantly, we are proud of the service and professionalism of the men and women who make up the ranks and support of our second youngest branch. If not for you, your sacrifices, your dedication and commitment to freedom, we would not be the great Army and Nation we are.

To all who serve in the Active, Reserve, and Guard components, best wishes on your 20th anniversary as a Branch of the Army.

God Bless, be safe, and enjoy this special day.

Respectfully,

Thomas E. White

UNITED STATES ARMY
THE CHIEF OF STAFF

April 12, 2003

20th Anniversary of Army Aviation Branch

On April 12, 1983, Army Aviation became a separate branch with the signing of General Order Number Six by Secretary of the Army John O. Marsh, Jr., and Chief of Staff of the Army General John A. Wickham, Jr.

For 20 years Soldiers have come to rely on the lethality, mobility, and flexibility that you bring to the battlefield. The Army Vision requires a "strategically responsive" force that is dominant across the full spectrum of operations - the very definition of Army Aviation today. The branch motto "Above the Best" indicates Army Aviation's integral relationship with the world's greatest ground combat forces.

Army Aviation is an essential member of the warfighting team. Never before has your branch been so important to the success of The Army. You ensure the warfighters on the ground have what they need to execute their mission and achieve overwhelming victory. From firepower to mobility, from re-supply to re-arm, from rescue to scout duties - Army Aviation is the eyes, ears, and fists of the battlefield commander.

The men and women who have gone before you, those who have so proudly worn the wings of an aviator or crew chief, demand that you set and uphold a standard of excellence that is second to none. The soldiers on the ground expect the same thing.

Congratulation to all our Army Aviators on this, your 20th Anniversary. Your determination is as strong as I have seen in all my years of service – you accept any mission, no matter how difficult; you take any objective, no matter how tough the fight; and we are all immensely proud of you. May God bless you all, our magnificent Army, and this great Nation.

Sincerely,

Eric K. Shinseki
General, United States Army

DEPARTMENT OF THE ARMY
OFFICE OF THE SERGEANT MAJOR
203 ARMY PENTAGON
WASHINGTON, DC 20310-0203

REPLY TO ATTENTION OF

To the Soldiers of Army Aviation:

Here's wishing you the best on this 20th anniversary of your great branch.

America and your Army are very proud of what each of you do to ensure our Aviation forces are ready when we are asked to answer the Nation's call.

From turning wrenches and troubleshooting aircraft systems, to pumping fuel and loading ammo, to crewing birds, to coordinating flight ops and providing air traffic control – you are the team and the life's blood that keep our aircrews flying.

Aviation is a vital part of all our operations around the world – 24/7. You provide our Army with the mobility and lethality to achieve victory across a three dimensional battlefield. Never forget – so many rely on you.

You, the soldiers and non-commissioned officers, in Army Aviation set high standards for yourselves, you train hard to master your crafts, and then excel.

Your daily challenge is living up to and exceeding your branch motto. And you do it so well... you are "*Above the Best.*"

Now drop and give me 20. Happy Anniversary!

Sincerely

Jack L. Tilley
12th Sergeant Major of the Army

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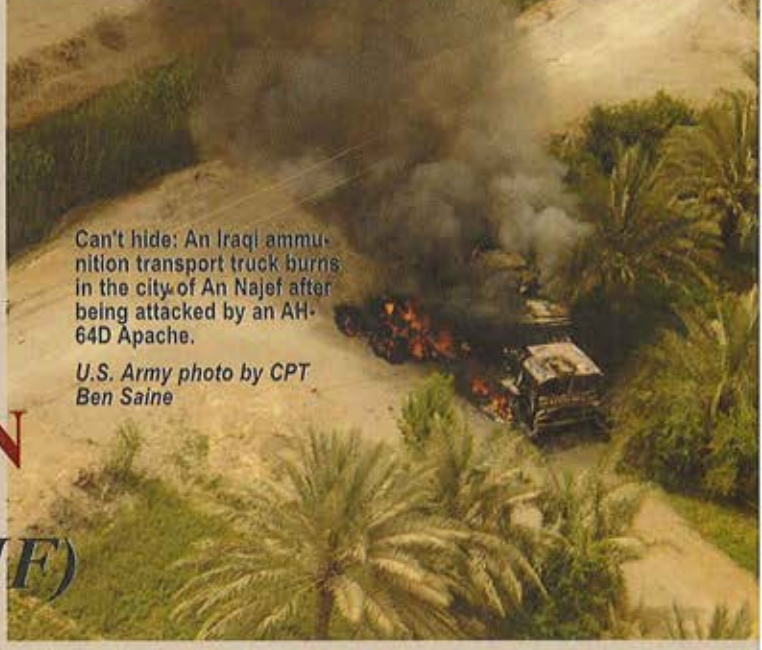
ANOTHER SUCCESSFUL CONVENTION, HARDWARE UPDATES, IN PRAISE OF ARMY AVIATION *During Operation Iraqi Freedom (OIF)*



Can't hide: An Iraqi ammunition transport truck burns in the city of An Najef after being attacked by an AH-64D Apache.

U.S. Army photo by CPT Ben Saine

By MG John M. Curran

Last month's annual AAAA convention in Fort Worth, Texas, was a resounding success.

On behalf of the Aviation Branch, our compliments and gratitude goes to LTG Ellis D. Parker (Ret.), our association president, Executive Director Bill Harris, and the entire Army Aviation Association of America team for the long hours, hard work and the attention to detail that went into executing a great convention. I would also like to thank all of the industry partners and military organizations that participated with exhibits, presentations and various support. We couldn't have had a better convention to mark and highlight the twentieth anniversary of the Aviation Branch. Great job and thanks to all.

I also extend a special thanks to the participation by Army Vice Chief of Staff GEN Jack Keane; GEN Kevin P. Byrnes, commanding general of U.S. Army Training and Doctrine Command; GEN Paul J. Kern, commanding general of U.S. Army Materiel Command; LTGs John S. Caldwell and Richard A. Cody; and all of the active-duty and retired general officers. We appreciate each of them sharing their unique perspectives, knowledge and insights with us during this year's gathering.

We would like to express a hearty thank you and a warm farewell to LTG Parker, who after two great years as our president passes the AAAA leadership to MG Ronald K. Andreson (Ret.). MG Andreson has outstanding qualifications, most recently serving as AAAA's senior vice president, and will no doubt do a great job leading us over the next several years. Congratulations to MG Andreson.

Wrecking Crew: Members of Company C, 1st Battalion, 101st Aviation Regiment, 101st Abn. Div. stand in front of one of the unit's AH-64D Longbow Apaches. *(Left to right)* CW2 Sherman Hartley, CPT Kevin Meyers, BG E.J. Sinclair, CW2 Jennifer Wellington, CW4 Tim Jenkins and MAJ Bill Gayler.

U.S. Army photo by CPT Ben Saine

HARDWARE UPDATES

Now to this month's special focus on hardware updates. I invite your attention to the following articles in this issue: the Aviation Combat Developments Hardware update by COL Ellis W. Golson and MAJ Barry Higgs; the PM-Longbow update by COL Ralph G. Pallotta; the OH-58D Kiowa Warrior update by LTC Jeffrey A. Crabb; the Comanche update by LTC L. Neil Thurgood; an Aviation Applied Technology Directorate update by COL William M. Gavora; the Cargo Helicopter update by COL William T. Crosby and Ray Sellers; and the UH-60M Black Hawk update by LTC Keith Robinson and Harry S. Hamilton. You should find each article insightful with information on the latest developments.

ARMY AVIATION IN OPERATION IRAQI FREEDOM

Just over two months ago a coalition force under the command of the U.S.

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Central Command initiated Operation Iraqi Freedom to end the regime of the dictator Saddam Hussein. Due in large part to the embedding of nearly 600 members of media, the American people — along with millions of others around the earth — watched, listened and read updates made possible by near-instantaneous coverage.

For the first time in history an entire world was able to witness a war unfolding in real time. What is equally astonishing is that the public was kept well informed and knowledgeable about the military operations, the methods of employment, the types of weapons used and the dangers confronting the troops, thanks to the number of military analysts who helped to explain every aspect of the conflict.

It would be safe to say that the world was able to witness first-hand the professionalism of our well trained and equipped armed forces. We can be very proud of how our soldiers, sailors, marines and airmen conducted themselves — facing the challenges of the terrain, the weather, the enemy and the unknown. Our forces conducted a very difficult task with bravery, honor and dignity, while maintaining their humanity and concern for the Iraqi people.

As an American and a soldier with many friends and colleagues engaged in the war, I too followed the news with great interest, watching and tracking how our forces were doing. As chief of the Army's Aviation Branch, I was especially focused on how our aviation soldiers and units were fairing in the conflict. I wanted to know if the training we provide — to our leaders, staff officers, NCOs, pilots, crew chiefs, maintainers, airspace controllers and other soldiers - was adequate or was what they needed. I also had similar interest regarding the aircraft and their weapons, navigations, communications and other systems. Did our troops have the right equipment, tools and field gear to accomplish their missions?

As the ground war progressed and reports began to come in, we started to learn just how well our aviation units were doing. I was very pleased to learn that our pilots and aircraft were doing a great job and meeting the expectations of the ground commanders. Our folks were doing what they were trained to do and we were achieving success.

No longer a threat: An Iraqi T-72 tank destroyed by a 101st Airborne Division Apache sits on the road outside of Iskandiriyah Airfield, south of Baghdad. *U.S. Army photo by CPT Ben Saine*

REVIEW OF AVIATION'S PERFORMANCE

Let's review some of the doctrine and facts concerning employment of attack aircraft to better understand what is expected from Army aviation. Attack aircraft are incredibly versatile. While their primary mission is the destruction of enemy armor or mechanized forces, they also conduct reconnaissance and security operations. *[See insert on the missions of attack aircraft]*

Attack helicopter battalions allow ground commanders to dominate the battlefield, combining mobility, speed, range, versatility and lethality in flight environments not suitable to fixed-wing aircraft.

A night deep attack is the most difficult and high-risk mission attack helicopter battalions perform.

AH-64A Apaches fired the first shots in the 1991 Gulf War, destroying Iraqi radar sites to open the air phase. They were also devastatingly effective when used against Iraqi armor out in the desert.

The superb performance of the Apache in Afghanistan was well documented. Vernon Loeb's April 28, 2002, Washington Post article "Built for the Cold War, Flown in a Hot One in Operation Anaconda, Apache Helicopter Shrugs Off Balkans Debacle and Al Qaeda Bullets," detailed the performance of the aircrews and aircraft. "[T]he gunships helped [U.S. forces] regain the initiative by destroying positions and laying down counterfire at much closer ranges than any fixed-wing aircraft could fly," Loeb wrote.

He also quoted a senior Army official, who said: "They got in tight enough to shoot and they took a few hits, but of the three Apaches that were battle-damaged in Anaconda, they've all been repaired and they never left country."

We have great confidence that once operations in Iraq have been fully analyzed and the lessons learned are assimilated, the Apache's reputation as a lethal and rugged weapon will only be enhanced.

Commander's options for the employment of attack aircraft:

- **Reinforce ground forces by fire and close combat attack.**
- **Attack massed armored or light forces.**
- **Attack in depth to extend the influence of the force.**
- **Perform search-and-attack missions.**
- **Dominate avenues of approach.**
- **Mass to defeat enemy penetrations.**
- **Attack to protect the flanks of a moving or halted friendly main body.**
- **Provide security for movement and passage of lines by ground forces.**
- **Conduct reconnaissance.**

REPORTS FROM THE FIELD

During OIF, I received several e-mails forwarded to me from BG Edward J. Sinclair, assistant division commander with the 101st Airborne Division in Iraq. In one e-mail, which was sent on the 20th anniversary of the Aviation Branch (April 12), he recounted the division's participation in an attack with members of the 101st Aviation Brigade against elements of the Medina and Hammurabi divisions of the Iraqi Republican Guard.

From his comments, you can read

MG Curran continued on page 31

"My strategy to avoid ATM fees? Get a USAA no-fee checking account."

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A2752-0303

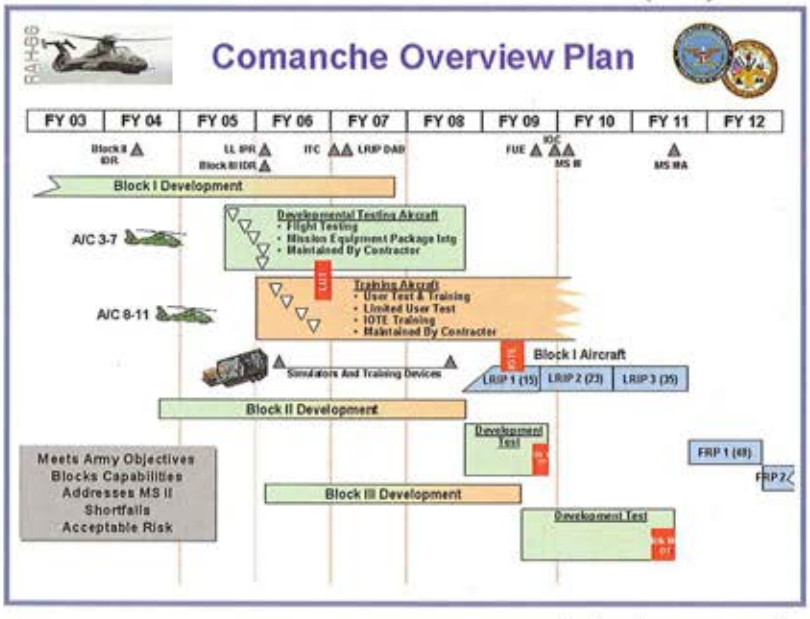
COMANCHE UPDATE

LTC L. Neil Thurgood

In the 100th year of manned flight, production activities on the RAH-66 Comanche — the world's most advanced multi-role combat helicopter — are in full swing.

The Army, industry and government officials attended the opening ceremony of the new Comanche aft-fuselage production facility at Boeing Helicopters in Philadelphia on March 31, 2003, marking a historic day for Army aviation. Unveiling a plaque to mark the occasion, Kelly Colvin, representing Congressman Weldon (R-PA), said: "This new facility, designed to deliver a complete capability in production, will shortly provide the Army with the world's most advanced reconnaissance and attack helicopter."

"This critical start will enable the CPO and Project Managers Office (PMO) to continue to meet or surpass all milestones in this important program," added Chuck Allen, the Comanche Program Office (CPO) lead.



This event marks the start of the Engineering and Manufacturing Development (EMD) production cycle, managed by the Army's PMO in Huntsville, Ala., and the Boeing Sikorsky CPO in Bridgeport, Conn. The production start of the RAH-66 Comanche begins the transition for Army aviation from the Legacy Force to the Objective Force.

In all, the Army has ordered 650 Comanches for its 21st century combat aviation capability supporting the Future Combat System (FCS). Every facet of the Comanche, incorporating evolutionary and revolutionary technology, brings increased capability to the warfighter.

Construction of the new RAH-66 Comanche aft-fuselage production facility was completed on schedule and within budget. The aft-fuselage assembly area employs the latest advances in building composite technology, as well as featuring innovative energy-efficiency measures. The open plan design allows for flexibility and ease of movement of the aircraft, without traditional columns and heavy overhead-lift requirements.

Commenting on the state-of-the-art facility, Pat Shanahan, Boeing's vice president in Philadelphia, said: "We are fully aware of the importance to the Army of completing this key program to schedule and budget. Our investment in this new facility, which is the most advanced aerospace production facility in the world, reflects our total commitment to ensuring that the program continues to meet or beat all of its milestones."

NEW TACTICAL SOLUTION FOR EXTENDED RANGE.

The Crashworthy External Fuel System (CEFS) offers a new tactical solution for extended range for the Black Hawk helicopter.

Existing 230 gallon external ferry tanks are modified to incorporate a self-sealing crashworthy bladder, a gravity and single-point pressure refueling capability, a cavity drain and a customer provided fuel quantity probe. Any AFMS equipped UH-60 helicopter can be easily modified to add the suction fuel transfer system to move the fuel from up to four 200 gallon CEFS tanks into the main fuel tanks.

FEATURES

- Crashworthy to same standards as primary fuel system
- 200 gallon fuel capacity per CEFS tank
- Single-point pressure refuelable
- Dropped full of water from 65 feet
- On-aircraft full scale crash test
- Gunfire tested (50 cal., 14.5mm, 23mm HEI)
- Minimal aircraft modifications to AFMP, airframe and ESSS
- Fuel quantity indication system
- Installation and removal by two men in about 10 minutes per CEFS tank using a portable lifting system

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Crashworthy Extended Range Fuel Systems

Uninterrupted delivery of these milestones for the Comanche to our Army aviators demonstrates our ongoing commitment to equip the U.S. Army with the finest multi-role helicopter in the world. The Comanche helicopters will play a key role in global defense.

Upon completion, each aft-fuselage assembly is delivered to the Sikorsky Aircraft facility in Bridgeport. There it is mated with the Sikorsky-provided forward fuselage and other components, concluding with final assembly, inspection and testing. This is the first step toward completing production utilizing a low-risk blocking strategy. This production start leads to the first flight of aircraft three in June 2005. User Initial Operational Test (IOTE) is expected to take place in March 2008, with first operational deliveries in 2009.

CAPABILITIES

The RAH-66 Comanche is a twin-engine, five bladed, multi-role attack and reconnaissance helicopter designed as a highly stable aerial sensor and weapons-delivery platform. With a tandem-seated crew consisting of the pilot (in the front cockpit) and the co-pilot (aft), the Comanche is self-deployable, highly survivable and delivers a lethal array of battlefield armaments and interoperability effects.

The Comanche is powered by two LHTEC gas-turbine engines, each rated at 1,237 shaft horsepower, which allows for a cruise airspeed of 170 knots per hour and a flight endurance of more than three hours.

Comanche is the Army's most advanced attack and reconnaissance helicopter. The aircraft features fully integrated avionics and weapons, plus state-of-the-art real-time access to digitized battlefield information. The RAH-66 incorporates a series of enhancements that make it more effective in combat, more survivable and more maintainable in the field. Its ability to communicate digitally with other aircraft and ground forces, and to share that information instantly across the FCS environment, gives the RAH-66 a significant capability over current combat helicopters. This will enable it to dominate the 21st-century battlefield.

The RAH-66 Flight Control System (FCS) provides the warfighter with several unique and exciting capabilities. In the cockpit there are unique sidearm controllers that allow the pilot to fly "single handed." The three-axis (pitch-roll-yaw) and limited vertical axis control eliminates the need for the traditional center stick and pedals, leaving more room for the pilot in the cockpit. The system provides visual and aural cues to the pilot for both operational and structural flight envelopes.

Comanche is self-deployable, highly survivable ...

The high-bandwidth, full-authority stabilization of the Core Advanced Flight Control System (AFCS) provides high agility and a low workload for operations. In degraded visual environments the selectable modes allow transition from the rate command/attitude hold response-type system to an attitude command/position hold response-type system for hover hold, and an attitude command/velocity hold response-type system in forward flight. The system also provides both barometric and radar altitude-hold modes.

It is a quick-reacting, airborne weapon system that can fight anywhere to destroy, disrupt or delay enemy forces. The Comanche's advanced systems are designed to fight and survive during the day, at night and in adverse weather throughout the world.

The aircraft's signatures have been balanced to provide complimentary capability against radar, infrared, acoustic and optical threat systems. It is equipped with an Electro-optical Target Acquisition Designation Sight (EOTADS), laser range finder/designator (LRF/D) and a Night Vision Pilotage Sensor (NVPS) that allow the two-man crew to navigate and operate in darkness and in adverse weather conditions at extended standoff ranges. Combined with state-of-the-art sensors for long-range acquisition and early discreet targeting, the aircrew will engage without being seen and shoot first with a high probability of target destruction in each engagement, air or ground threat. Comanche will significantly enhance situational awareness of both friendly and enemy air and ground assets by using the jointly developed improved data modem and the communication suite.

EMD PRODUCTION MODEL

Comanche contains more than 80 new materials and does not resemble any of today's production helicopters. New materials and resulting designs are only made possible with new processes. The Comanche is constructed around a central box-beam with separate laminate modules that are made of robust materials, which together form an incredibly strong and rigid airframe structure. This type of construction greatly reduces flex in the airframe and the vibration environment for both the crew and hardware.

Comanche development and production has been executed with aircraft maintenance in mind, utilizing all advances in the field to aid the

AVIATION
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workload for the maintainer. The Comanche eliminates "black boxes" in favor of circuit cards that can be replaced in minutes. These circuit cards have the ability to reconfigure in flight to ensure all necessary systems are kept operating if one should fail. Comanche also has a fault-detection system that is generations ahead of anything currently in the fleet, as well as an additional feature called fault isolation that pinpoints the problem area. This aircraft determines what is wrong with it and has the maintenance records, procedures, part numbers and tools required for repair resident in the aircraft. These and similar advances will reduce lifecycle costs and make the system more useful, more dependable and less costly per flight hour.

SUMMARY

Army aviation will ensure that our Objective Force has unmatched agility, mobility and lethality. Army aviation is the Objective Force multiplier, and Comanche is a cornerstone for the Objective Force. Comanche brings the state-of-art aviation technologies required to achieve Objective Force capabilities. The current and future relevance of Army aviation on the modern network-centric battlefield depends on critical interoperability enablers across the fleet.

Our most important effort will be to keep the Comanche on schedule and complete EMD deliveries — en route to fielding. We look to begin the final integration and testing in the summer of 2003. The Comanche PMO has presented to the Army leadership, including the chief of staff of the Army, our plans to continue to improve upon the Comanche. This plan, utilizing a risk-reduction blocking strategy, is supported in the fiscal year 2005-2009 POM.

The Comanche helicopter is the most sustainable and maintainable combat helicopter ever developed, and represents a revolutionary achievement in aircraft design that will drastically improve aviation maintenance operations and will fundamentally change Army aviation. Comanche is designed to stay in the fight longer and be "turned around" quicker than any other helicopter currently in the Army inventory.

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AATD AND ARMY AVIATION

By COL William Gavora

The Aviation Applied Technology Directorate (AATD) located at Fort Eustis, Va., is a semi-autonomous command and directorate within the Aviation and Missile Research, Development and Engineering Center (AMRDEC) in Huntsville, Ala. On May 1, 2003, operational control of AATD transitioned from the U.S. Army Aviation and Missile Command (AMCOM) to its newly established Research, Development and Engineering Command (RDECOM). Our mission, however, remains unchanged — to transition technology to soldiers that enhances and sustains Army aviation.

STRATEGICALLY, WE ACCOMPLISH OUR MISSION IN THREE WAYS.

The first is through the normal science and technology route — by developing, demonstrating and applying critical technologies that enhance the capability, readiness, safety and affordability of our aviation systems. In essence, we are planting technology "seeds" (using primarily 6.3 research and development funds) that conform to the aviation branch's strategy, harvesting what grows and then providing matured technology to the materiel developer for incorporation into his aviation platforms.

Second, we provide quality and timely engineering services and rapid prototyping support to Army program executive offices (PEOs), the U.S. Special Operations Command and other customers.

And third, we now provide direct support to units that are involved in worldwide contingency operations via the expedited fabrication, application and support of innovative materiel solutions.

The Army is currently in the process of transforming itself into a more deployable, agile, lethal and sustainable force. AATD is doing its part by making substantive contributions to the Legacy, Current and Interim forces by supporting aviation project managers (PMs) and operational units through unique rapid prototyping and Advanced Concept Technology Demonstrations (ACTDs) such as Hunter Standoff Killer Team (HSKT). AATD is one of four Army organizations with authority, delegated by the AMCOM commanding general, to certify the airworthiness of aircraft. Additionally,

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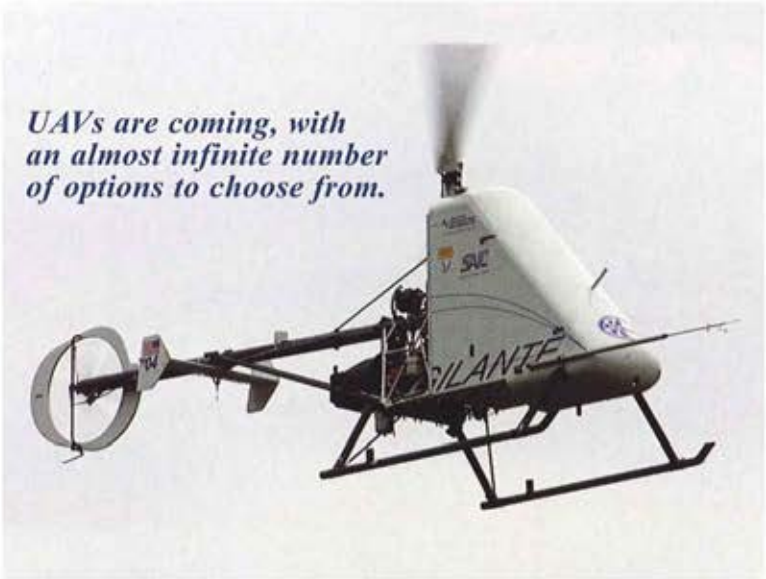
AATD supports the Objective Force through the development and application of propulsion, airframe and ground-support technologies; systems integration and testing; and through the development of and experimentation with tactical unmanned aerial vehicle (UAV) systems and technologies, including manned-unmanned teaming.

Over the past year AATD has had numerous successes in support of our PM and operational customers, and we look forward to contributing substantively over the next year as well.

Our most significant accomplishment was teaming with PEO Command, Control and Communi-



cations-Tactical (C3T) and the Aviation and Missile Research, Development and Engineering Center (AMRDEC) Prototype Integration Facility (PIF) and Aviation Engineering Directorate (AED) to integrate, test, fabricate and install the satellite-based Blue Force Tracking (BFT) situational awareness system now installed on more than 200 Apache, Black Hawk and Chinook helicopters. This system was highlighted by the Army chief of staff in his congressional testimony and a recent MSNBC report from the Iraqi theater of operations.

Other significant Apache accomplishments include the development of deployability kits featuring an organic hoist for installation and removal of the Longbow Fire Control Radar, and integrating VOR, ILS and GPS equipment into the aircraft to make the Apache fleet IFR-capable. We are currently working with the PM on battle damage assessment and repair of main rotor blades, and will perform the validation/verification analysis of the Internal Auxiliary Tank, Integrated Electronic Tech Manuals and Micro-Climatic Cooling System.

With respect to the UH-60 Black Hawk, AATD assisted the PM A2C2S in upgrading system hardware and added BFT to its two demonstration systems now deployed to the Middle East. We will also upgrade three production systems later this year, and integrate NBC detection sensors into the aircraft. We are currently testing a Laser Obstacle Detection System (LODS) and Virtual Cockpit with Retinal Scanning Display on behalf of the Army's Night Vision Laboratory and PM Aircrew Integrated Systems (ACIS), respectively, and a joint communications net in support of the Navy, and will begin work to arm the aircraft with 20mm guns in the next few months.

The highlight of the year, however, was the installation of satellite communication (SATCOM) equipment on Black Hawk and Chinook helicopters at two locations in Afghanistan. This mission required six AATD personnel, including five volunteer Department of the Army civilians, to travel 600 miles across enemy territory in order to complete the mission.

Our most significant contribution to the OH-58D Kiowa Warrior program has been the completion of a Commercial O&S Savings Initiative (COSSI) on behalf of the aircraft's product manager, which reduces aircraft weight by more than 300 pounds. One of the key items of the weight-reduction program is the replacement of the ALQ-144 infrared (IR) jammer with an AATD-designed lightweight system.

AATD also developed the Hellfire debris deflectors for the Kiowa Warrior and Apache; assisted the 4th Infantry Division and PM Aviation Mission Equipment (AME) with integration of the Enhanced Position Locator System (EPLRS) on its Kiowa Warriors and Longbow Apaches; and integrated the Grenadier-Brat situational awareness system on 82nd Airborne Div. Kiowa Warriors within 48 hours after receipt of the mission.

AATD hasn't played as much of a role in support of the CH-47 Chinook program over the past year as we have on other aircraft, but we hope to provide more support in the future. We did, however, design and test a new MH-47D gun mount for the special operations forces.

Likewise, while a good deal of the technology that will be used in the Comanche was previously developed at AATD, we haven't contributed much to that program either over the past year. We are, however, working with the PM Comanche on a technology called Silverized Kevlar to reduce weight in the upper pylon area and will likely develop deployability kits similar to the Apache design. I hope to become involved with the development and testing of the Tactical Control Data Link (TCDL) that will allow for Comanche control over UAVs.

The Army's current Aviation Modernization Plan specifies that science and technology (S&T) — AATD's traditional core mission — supports Army aviation by providing the knowledge needed to upgrade existing systems or develop new ones to meet mission requirements. We have been working side by side with the Black Hawk PM to develop a 3,000shp engine common to both the Black Hawk and Apache that improves performance by increasing power-to-weight ratios, improves reliability through increased operational life and reduces ownership costs by

AATD continued on page 38

KIOWA WARRIOR UPDATE

By LTC Jeff Crabb

From the mid-1960s until today, the OH-58 helicopter has provided Army aviation with a reliable, flexible and adaptable aircraft to meet the service's changing operational demands.

The OH-58D Kiowa Warrior originated from the Army's Helicopter Improvement Program (AHIP). The first OH-58D AHIP flew in October 1983 and began unit deliveries in September 1985. The armed version began fielding in the early 1990s. The AHIP reconnaissance configuration was equipped with a distinctive Mast Mounted Sight (MMS), advanced optics, improved electronics, integrated avionics and weapon systems to become the OH-58D Kiowa Warrior. Kiowa Warrior production continued until October 1999. With deliveries to the 1st Battalion, 25th Aviation, at Schofield Barracks, Hawaii, fielding was completed in December 1999.

The OH-58 helicopter has provided Army aviation with a reliable, flexible and adaptable aircraft to meet the service's changing operational demands.

The OH-58D is equipped with a variety of weapon systems, including Hellfire, Air-to-Air Stinger (ATAS), 2.75-inch rockets and a .50-cal. machine gun. All of these systems have helped the OH-58D provide unit commanders with a potent, dynamic capability to conduct successful and decisive flight operations around the globe. The Kiowa Warrior has performed admirably during Operation Iraqi Freedom.

With the fielding process complete the aircraft has entered into the sustainment phase of its life cycle. Entering this phase has not left the OH-58D in a static and nonresponsive state. The Army's transition to the anticipated digitized battlefield of the 21st century requires that the OH-58D incorporate both safety and operational-compatibility modifications. The ongoing modification efforts include a Safety Enhancement Program, a Digitization Program and a Weight-Reduction Program.

Safety Enhancement Program

The Safety Enhancement Program (SEP) modifications include the installation of a Rolls Royce C30R3 engine with a Full Authority Digital Electronic Control (FADEC); Improved Master Control System Processor Units (IMCPUs); an Improved Data Modem (IDM); an improved Single Channel Ground/ Air Radio System (SINCGARS-SIP); Engine Barrier Filters (EBF); Crashworthy Seats; and a Cockpit Air Bag System (CABS). Additionally, the Control Display System (CDS) is being upgraded to meet requirements for digital communications.

SEP production is now into its sixth year. As of April 2003, 177 aircraft have been delivered. The most recent SEP aircraft were fielded to the U.S. Army Aviation Center at Fort Rucker, Ala., and the 1st Squadron, 17th Cavalry, at Fort Bragg, N.C. The SEP production effort, as currently funded through fiscal year 2007, will only modify 304 of the 354 authorized aircraft.

Digitization Program

The Digitization Program includes expanded digitization capabilities for the Improved Master Controller Processor Unit (IMCPU) with CDS4 Phase IIB Software; new 304 Improved Data Modem (IDM); Common Transponder with Mode S; and a PCMCIA Card-based Data Transfer System. The planned hardware and software changes will improve system reliability and maintainability, and provide an enhanced message-completion rate for digital messages and situational awareness

over the Tactical Internet (TI). The IMCPUs and IDMs have increased processing capabilities and data throughput.

This next generation of software (CDS4) allows the Kiowa Warrior to communicate digitally with an expanded set of Joint Variable Message Format (JVMF) messages over the tactical intranet (TI). The Scout/Helicopter Program Office in cooperation with the Aviation Mission Equipment (AME) Program Office is evaluating the Enhanced Position Location Reporting System (EPLRS) as the primary interface to the TI. Blue Force Tracking (BFT) enhancements are also being evaluated to increase battlefield situational awareness.

Weight Reduction Program

The Weight Reduction Program began in 1999 when the Scout-Attack Helicopter Product Management Office applied for and received

$6 million under the Pentagon's Commercial Operations and Support (O&S) Cost Savings Initiative (COSSI) Program to reduce Kiowa Warrior O&S costs and weight.

The PMO is teamed with the Aviation Applied Technology Directorate at Fort Eustis, Va., and with the EFW Corporation in Fort Worth, Texas, to develop lighter, more reliable aircraft systems. Weight-reduction solutions being examined include lightweight multi-functional color displays; lightweight Hellfire launchers; ALKAN mounting rack; IR exhaust diffuser; GAU-19 machine gun; and a single weapon systems stores box.

Other initiatives in-progress to reduce aircraft weight include removing installation hardware and wiring harness for obsolete systems. The goal is to reduce aircraft operational gross weight by 300 to 400 pounds in order to improve operational and autorotational characteristics, as well as to increase system reliability and lower support costs.

Other Initiatives

The newly developed Engine Barrier Filter (EBF) kit continues to be incorporated into the OH-58D fleet. The initial installations were accomplished by the Project OLR facility in Killeen, Texas, and began with the 1st Sqdn., 10th Cav., at nearby Fort Hood, Texas. Since December 2001, 142 Kiowa Warriors have received the new EBF kits.

Extensive testing and field experience are proving that the EBF's performance is far superior to the Inlet Particle Separator (IPS) filtration system. Engine losses attributed to dirt and dust ingestion have all but ceased following kit installation. Increased air flow and cleaner plenums associated with the EBF are providing other benefits to operational units. EBF-equipped Kiowa Warriors are also reporting a noticeable increase in available engine power. Installation of the FADEC R3 engine measurably reduces rotor droop, improves engine reliability, increases high-altitude/hot-day power, and significantly extends engine Time Between Overhaul (TBO).

To tackle MMS obsolescence, the PM has commenced two concurrent maintainability/reliability programs on its most critical components. Both comprise form-fit-function, two-way, interchangeable, drop-in replacements. The first is a Laser Range Finder/Designator (LRF/D) upgrade that will keep the laser in specification about 50 percent longer. The second program is a high-resolution Focal Plane Array (FPA) for the Thermal Imaging Sensor Upgrade (TISU). The new TISU will increase the overall mean time between failure rate about five-fold and increases recognition ranges by 40 percent. These upgrades were introduced via "modernization through spares" and will be fielded through attrition.

Accomplishments

The Kiowa Warrior program has had many accomplishments during the past year. First and foremost, Kiowa Warrior continues with the highest operational tempo (OPTEMPO) and consistently maintains the highest operational readiness rates (more than 91 percent Mission Capable for February 2003) of all Army aircraft. This is a testament to the hard work and dedication of Kiowa Warrior aircrews and maintainers around the world, as well as to the logisticians within U.S. Army Aviation and Missile Command (AMCOM) and the Scout-Attack Product Office.

The Future

As Army aviation transitions from "Legacy Force" Kiowa Warrior to the future "Objective Force" Comanche, the service-life timelines must remain flexible. The Scout/Attack Product Office continues to assess technical and programmatic challenges for providing the fleet with a safe, state-of-the-art aircraft. The initiatives outlined above, as well as others, will enable the Kiowa Warriors to respond more effectively to any future global development.

Kiowa Warrior's capability to quickly deploy and provide reliable, versatile, and lethal support is currently making a difference in Army operations in Iraq and around the world.

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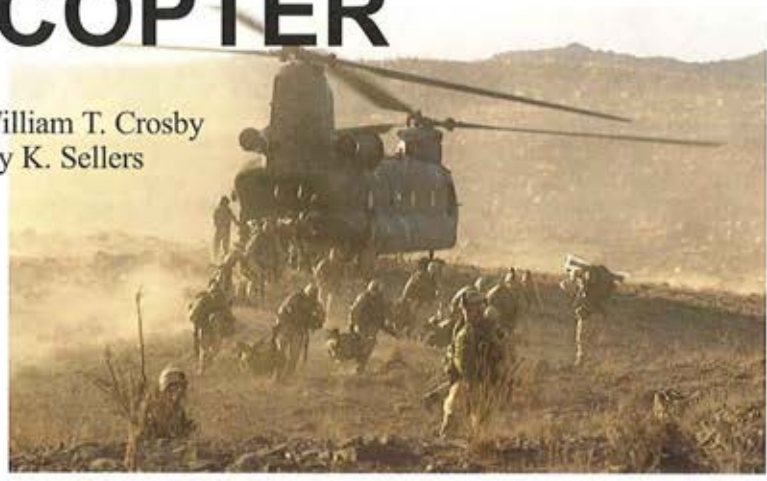
LTC Jeff Crabb is the product manager, Scout/Attack Helicopters, in the Program Executive Office-Aviation at Redstone Arsenal, Ala.

CARGO HELICOPTER UPDATE

By COL William T. Crosby
and Mr. Ray K. Sellers



The CH-47 Chinook Cargo Helicopter Program Office (PMO) had another exciting and eventful year in 2002 and is enjoying much success in the early months of 2003.

The CH-47D Chinook continued to prove its value as the Army's heavy-lift workhorse in Afghanistan and Iraq, and the next-generation Chinook, the CH-47F Improved Cargo Helicopter, is poised to continue the tradition as it enters low-rate production. Other system improvements and initiatives also saw amazing progress, and the Cargo PMO will continue to enhance and sustain the Chinook's exceptional performance in the future.

THE CH-47F MOVES FORWARD

As 2002 came to a close, the CH-47F program moved out of Engineering and Manufacturing Development (EMD) and into Low Rate Initial Production (LRIP). The first aircraft has been inducted into the production line and the CH-47F induction center is operating ahead of schedule. The new line will produce the CH-47F and will also support MH-47G production. Special-operations aircraft have now been integrated into the production program and Team Chinook has accepted the challenge of supporting the remanufacture of both aircraft.

The two CH-47F EMD aircraft have completed a rigorous flight-test program and are now undertaking additional flights to collect reliability data. At the close of 2002, the two CH-47F EMD aircraft had accumulated well over 200 flight hours and the program intends to fly an additional 400 hours in 2003 as the CH-47F prepares for its Initial Operational Test in the spring of 2004. Even as the CH-47F enters production, new capabilities are being developed to ensure this aircraft remains the world leader in heavy lift. The following illustrates the Cargo Helicopter road map and the current block-upgrade approach for the CH-47F.

The CH-47F will carry the Army well into the 21st century. It will increase system reliability, decrease O&S costs, provide a digital communications and navigation suite, improve survivability, enhance transportability and extend the type's service life for another 20 years. As the CH-47F program moves forward, Team Chinook says farewell to a true leader and trusted friend. LTC Newman Shufflebarger, the CH-47F product manager, leaves for War College this summer after three years of selfless service to the CH-47F program. His Cargo Helicopter family wishes him all the best!

THE CH-47D SOLDIERS ON

Although the CH-47F is the future of heavy lift, the CH-47D will be around for a long time and is being supported through several ongoing modification programs.

In the field, the newest CH-47 enhancements continue to perform exceptionally. The CH-47D engine-upgrade program is moving forward with more than 180 aircraft modified to the new T55-GA-714A configuration. This program remedies many of the deficiencies plaguing T55-L-712 engines. The L-712 engines are aging, power margins have been deteriorating, and with the weight growth of the CH-47D the engines can no longer meet the aircraft's lift requirements — to lift and transport a 15,000 lb. external load for 50 nautical miles at 4,000 ft. at 95°F with a 30-minute fuel reserve. The engines' ability to perform at higher altitudes dramatically increased the aircraft's value to the warfighter in Afghanistan, where the high terrain made the CH-47 the assault helicopter of choice. The engine-upgrade program runs through fiscal year 2007, and includes all CH-47 and MH-47 aircraft in the Army's fleet.

The Cargo Helicopter PMO continued development of the Low Maintenance Rotor Hub (LMRH). The LMRH will provide major cost and readiness benefits for the CH-47 Chinook. The current CH-47D rotor head contains 400 parts in the hub system assembly, including critical bearings that require lubrication. These bearings contain drain points that allow lubricants to escape, requiring inspection and repair and replacement of seals and other parts.

The rotor-head assemblies are the number two and three O&S cost drivers for the Army's CH-47 fleet. The new design replaces lubricated "wet" bearings with elastomeric "dry" bearings that require no additional lubrication. This upgrade eliminates at least 10 days of unscheduled maintenance per aircraft each year, which translates into a more than 2.7 percent readiness-rate

Cargo Helicopter Update continued on page 25

UPDATE Apache

By COL Ralph Pallotta

Apache operations in Afghanistan and during Operation Iraqi Freedom have shown that the Apache and Longbow Apache are fighters, protectors, winners and survivors. As in all earlier conflicts, there are lessons to be learned and sometimes reinforced. Be that as it may, the first real conflict for the new Longbow Apache proved the outstanding results of operational tests and evaluations performed during development. This Apache attack helicopter is lethal and survivable!

There have been several recent articles that presume to chronicle a mission during which the Longbow Apache failed to live up to its reputation. You may have read about this mission in particular, where the newly fielded Longbows flew into a tactical situation and sustained damage from enemy fire. The damage forced the aircraft back to home station and rendered the majority of them non-mission ready.

The author of the article was correct in principle, but what was not said is that on that one mission the pilots engaged the enemy, sustained critical battlefield damage, protected every crew member, received the appropriate amount of battle damage repair and got back into the fight. As LTG Cody cited, you can't take one vignette of a battle and condemn the whole system.

So, even though a select few in the media would concentrate on one operation and cite it as a drawback, the Longbow Apache proved that even when it did get into harm's way, it returned, damaged yet intact, to be repaired and manned to fight another day.

True professionals don't draw hasty conclusions from any one event. They collect the facts, then examine the whole before passing judgment. What we do know is that when enemy armor was able to mass, it was devastated. The fact that heavy armor units were forced to disperse and hide, becoming virtually ineffective, is a testament to the effectiveness of joint operations that included the Longbow Apache. The Longbow Apache executed every planned mission. Commanders and soldiers have praised and accepted the Apache as the preferred platform for close combat support.

Every system has its place, and the Apache has truly shown that it can operate with the maneuver units. This capability allows ground commanders to bring decisive and immediate firepower in the third dimension to shape the battle and control the tactical situation in real time.

As in any conflict, there were lessons to be learned and immediate course corrections were made. There is no issue with Apaches supporting the ground forces and protecting the crews — it performed as advertised. This is no accident. We designed and built into the Longbow Apache elements such as redundancy, self-sealing fuel systems, crew armor and run-dry components, allowing for combat damage and providing a measure of survivability that has been evident throughout the Afghan and Iraqi campaigns. This ruggedness has earned the aircraft the reputation of being as "durable as concrete."

We are compiling extensive data and information that will be used in after-action reports and lessons learned. This will provide a more comprehensive picture of what was accomplished by the Apache units. At this time details are not public, but I can tell you that the ground and air commanders all acknowledge the contribution of the Apache to the successful accomplishment of the ground missions.

In response to operational requirements, the PM Apache has provided the warfighters with immediate improved capabilities and safety. There are five major systems: Upgraded Engines; Internal Auxiliary Fuel System (IAFS); Air Transportability Kits; Instrument Flight Rules/Instrument Meteorological Conditions (IFR/IMC) Capability; and Rocket Pod Boresight Adapter Kits.

Units deploying to Iraq received the upgraded engines and IAFS. The IAFS system fits in the ammo bay and provides the crew with an additional 100 gallons of fuel and a basic 300 rounds of 30mm ammunition. The tanks provide for longer ranges and extended times on station. Their self-sealing capability proved invaluable when the aircraft received small arms and anti-aircraft fire.

During the war in Iraq, the PM office was notified on a Saturday evening that at least six Longbow Apaches were to be delivered to Iraq as immediate operational floats. By Monday morning all the necessary personnel, equipment, aircraft (the six Longbow Apaches and a C-5) and air-transportability kits were in place to perform the loading operations. The Longbows were loaded and flown to Iraq, off-loaded and made ready for combat.

In response to a U.S. Army, Europe, (USAREUR) requirement for Apaches to have the capability to self deploy in IFR/IMC conditions, the PM has qualified a system for both AH-64A and AH-64D aircraft. We have received funds for the 2nd Squadron, 6th Cavalry, (2/6 Cav) to install the kits at Fort Hood, Texas, before the start of the unit's Unit Fielding Training Plan. When aircrew members graduate and return to home station, the pilots and aircraft will be IFR/IMC equipped.

The boresight kits have also been an unqualified success. Delivery has been made to deployed units. These kits reduce the boresight task from hours to minutes and accuracy has improved immeasurably.

The Longbow Apaches currently deployed in Iraq are the Block I (Lots 1-6, 284 aircraft) version. They contain the best of the mid-90s technology and they are far superior to the A-model. But we have not rested on that fact. In consonance with the research and development community and pre-planned product improvement (P3I) requirements of the Longbow Apache requirements document, we have developed and invested in modernization efforts that are being applied to the Block II aircraft (Lots 7-10, 217 aircraft).

These latter aircraft are designed to be a key maneuver element of the Digitized Corps. They bring the capability for situational awareness and full command and control with the introduction of Enhanced Position Location and Reporting System (EPLRS) and the use of the Joint Variable Message Format (JVMF) messages. This also

puts us in the Tactical Internet, the AFAPD to JSTARS, TACFIRE to the fire support net and all team nets. Suffice it to say this will make the Block II Longbow Apache a viable part of the Interim Force on the two dimensional battlefield.

Our next step is to enter into the Objective Force as a three-dimensional, enabling system. The path ahead is to integrate technologies and modernization into a Block III configuration. This would entail the remanufacture of the 284 Block I Longbow Apaches. The goal is to provide the Objective Force with a system that would be capable of global information grid, multi-band/multi-mode, rapid reconfiguration and open architecture.

With the open system architecture, we could interface the Joint Tactical Radio System (JTRS) to take full advantage of the tactical data link, EPLRS and satellite communications (SATCOM). We could also advance situational awareness with unmanned aerial vehicle (UAV) connectivity, cognitive decision aiding and sensor fusion. With the insertion of these new technologies, along with upgrading the aircraft's transmission, installing the more powerful 701D engine, and installing the presently-in-development all-composite main rotor blade, we can also regain most of the A-model performance.

We will continue to learn our lessons and will continue to apply fixes as necessary. Our recapitalization effort — borne out of efforts such as Task Force Hawk, the D-model remanufacture, our reliability and safety thrust, and our analysis of selected depot-level repairables — is approved at the highest levels of the Army, and has actually commenced for some items on the A-model and on the remanufacture line. Recapitalization, along with a block modernization plan, will ensure that the Apache can continue to support the ground commander by fighting alongside the maneuver units while enabling the formation of the Objective Force.

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COL Ralph Pallotta is the project manager for the Apache attack helicopter (AAH), at Redstone Arsenal, Ala.

Cargo Helicopter Update *continued from page 23*

increase. The design also reduces the parts count from 400 to 195, and will provide increased fatigue lives and all components can be replaced in the field. Fielding is scheduled to begin in FY 2005.

Other key CH-47D modifications include:

- Engine Air Particle Separator (EAPS). The EAPS provides protection against erosion in sand and dust environments. Without EAPS, aircraft operating in sandy regions experience a one-half to two-thirds reduction in engine life. The EAPS provides effective protection against foreign object damage (FOD) and has an internal FOD screen. Additional enhancements include improved locking mechanisms and seals. The EAPS has made a huge difference in recent operating environments and will be fielded on all CH-47D/F aircraft.
- Extended Range Fuel System (ERFS) II. The ERFS II system provides CH-47s with up to 2,400 gallons of auxiliary fuel for worldwide self-deployment or tactical forward-area refueling. When combined with the CH-47's primary fuel load, the ERFS II permits an extended range of approximately 1,058 nautical miles (with a 10 percent fuel reserve). The crashworthy tanks are self-sealing and able to withstand penetration by ammunition up to 14.5mm.
- Air Warrior. Air Warrior is an aircrew system providing flight clothing, helmet, defensive weapon and basic survivability equipment. Additional subsystems expand the versatility and operational capabilities with special mission garments (NBC and Artic), NBC mask, microclimatic cooling, ballistic protection and over-water survival equipment. All Air Warrior equipment is integrated into a pilot and crew chief ensemble and to the host aircraft.
- ALE-47 Countermeasure Dispenser System. The AN/ALE-47 is an upgrade to the M-130 Flare Dispenser System. Munitions are dispensed manually, or automatically by the AN/ALQ-156 Missile Warning System. The AN/ALE-47 provides commonality with the MH-47E and growth capability for integration of ATIRCM components.
- Digital Source Collector (DSC). DSC technology includes flight and cockpit voice recording; engine and vibration monitoring; rotor track/balance; and maintenance diagnostics.
- M-240 Aviation Machine Gun. The M-240 is an improved 7.62mm machine gun for aviation applications. It offers a significant increase in reliability over the M-60D, a self-protection armament subsystem and commonality of parts within the M-240 family.
- Common Transponder (AN/APX-118). Replaces the APX-100 with the APX-118 Mode "S" Level 3 transponder capability. It provides state-of-the-art digital integration of communications security (COMSEC) and Mode S transponder capabilities for Identification Friend or Foe (IFF) and Traffic Alert and Collision Avoidance System (TCAS). Uses existing IFF antennas and COMSEC equipment.
- Doppler/GPS Navigation System (DGNS). The DGNS is an upgraded version of the current AN/ASN-128B, featuring a Selective Availability Anti-Spoofing Module (SAASM)-compliant receiver. The system supports Instrument Flight Rules (IFR) operation and improved anti-jamming capabilities. It includes an interface with the Aviation Mission Planning System (AMPS) to provide a non-corruptible database capability.

STILL THE GREATEST

The CH-47 Chinook continues to fulfill the broad spectrum of heavy-lift operations. Use in Afghanistan and Iraq have once again proven the importance of this true battlefield enabler. The newest version of the Chinook is in production and the Cargo Helicopter PMO will ensure that the name "Chinook" remains synonymous with heavy-lift excellence.

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COL William T. Crosby is the project manager, Cargo Helicopters Project Management Office, at Redstone Arsenal, Ala. Ray K. Sellers is chief of the PMO's Technical Management Division.

UH-60M BLACK HAWK UPDATE

By LTC Keith W. Robinson and Harry S. Hamilton

"The BLACK HAWK legacy of success in Peace and War for 26 Years will serve as a springboard to support the Army's Future Combat System well into the future."

The UH-60 Black Hawk, now in its 26th year of production, continues to be the workhorse of Army aviation. With 1,562 aircraft, the Black Hawk fleet is not only the Army's largest aircraft fleet, it is also the most versatile. It routinely performs missions ranging from medical evacuation and search and rescue, to command and control to air assault, as well as internal and external lift. Designed with survivability, ballistic protection, crashworthiness and superior reliability features, the Black Hawk fleet has a lower mishap rate than the entire Army rotary-wing fleet average.

Making its debut in 1978, the Black Hawk was designed with a 20-year service life. Today, 30 percent of the fleet is more than 20 years old and the fleet average age is more than 14 years. About two-thirds of the Black Hawk fleet is comprised of older UH-60A models built between 1978 and 1988, with an average age exceeding 18 years. UH-60L models, in production since 1988, still average more than eight years in service.

Because the Black Hawk is essentially analog, it is unable to interface with the Army's future combat systems. To counter the older UH-60A's declining readiness rates and increasing operations and support costs, and to meet Objective Force interoperability requirements, the Utility Helicopter Project Manager's Office has established programs to extend the life of the UH-60, while providing it with the additional capabilities needed on the future battlefield.

To gain immediate reliability improvements and slow fleet-aging rates, the PM established a UH-60A recapitalization/rebuild program at Corpus Christi Army Depot, Texas, to rebuild 193 UH-60A aircraft to a "like-new" condition. New depot maintenance work requirements standards will be applied to 88 depot-level reparables, benefiting both the UH-60A and the entire Black Hawk fleet. Once fielded, these 193 aircraft will be the last UH-60As inducted into the UH-60M recapitalization/upgrade program.

Focus on the Future

The UH-60M recapitalization/upgrade program was developed to maintain the Black Hawk's relevance on the future battlefield. This is the Army's top priority utility helicopter program, and is designed to recapitalize and upgrade the UH-60A/L fleet to meet the Army's future requirements. This method of transforming the Black Hawk fleet was selected over modernization (the acquisition of new equipment to replace old) due to the sheer size of the current Utility Helicopter fleet. Recapitalization is a more economic method to increase the capability of the Black Hawk and to restore each aircraft to a "like-new" condition.

The UH-60M entered into the System Development and Demonstration phase of the life cycle in April 2001. The design phase will be concluded with the System Critical Design Review next month. Engineering trade studies have been conducted to finalize the design of the aircraft to ensure it will provide aircrews and commanders with capabilities that will further enhance mission performance and soldier safety.

The recapitalization/upgrade of the Black Hawk, incorporating a digitized cockpit in addition to many other enhancements, will allow for improved aircraft systems and combat situational awareness, improve lift and range, improve maneuverability and safety, and extend the aircraft's service life. Sikorsky Aircraft Corp., the original manufacturer of the Black Hawk, is the prime contractor and system integrator for the UH-60M.

The UH-60M program will rebuild and upgrade 1,217 UH-60A and UH-60L Model Aircraft into UH-60M and HH-60M MEDEVAC aircraft to provide:

- **Extended Service Life**
- **Reduced Operations and Support Costs***
- **Increased Reliability & Maintainability***
- **Improved Crashworthiness**
- **Increased Lift and Range***
- **Operations On, and Integrated with, the Digitized Battlefield**
- **Long Range Precision Navigation**
- **Enhanced Survivability through Increased Situational Awareness**
- **Reduced Crew Workload**

*** Over UH-60A Models**

The most significant changes to the Black Hawk are found in the UH-60M cockpit. Four Rockwell-Collins multifunction displays (MFD) are placed in a smaller-footprint dashboard — six inches narrower than on the current Black Hawk — that provides additional visibility outside the cockpit, thereby enhancing safety. The MFDs will display primary flight controls and tactical and navigational information, and will have integrated Stormscope functionality.

A Harris digital map that will be displayed on the MFDs is software-based, supports multiple NIMA map formats, and will be integrated with the flight plan and tactical-situation picture. Among the many features the map will display are height-above-terrain and threat intervisibility, which will allow for graphical flight-plan editing.

Dual Honeywell Embedded Global Position System/Inertial Navigation Systems (EGIs) will allow for precision navigation at all ranges. Navigation can be accomplished by pure inertial, GPS only, or a blend of GPS and inertial. While similar units are currently flying on other Army aircraft, the UH-60M EGIs include some significant product improvements. In addition to the existing 1553 interface, the UH-60M EGI has an additional ARINC 429 interface to allow for a more direct link between the EGI and the aircraft's flight-control computer. Also, the addition of a SAASM-compliant, GEM V GPS receiver will provide more robustness in the preservation of the GPS signal, as well as better satellite visibility and tracking capability.

The Canadian Marconi Flight Management System sports an improved, larger, alphanumeric key panel to make it more pilot-friendly. It will also have an improved processor and added Ethernet interface, allowing for improved fault management/system status reporting and flight/search and rescue planning.

An improved data modem, running JVMF v7.0 software, will provide the interface to the tactical internet, while a Smiths Aerospace 16 port Ethernet hub will enable high speed-high volume data exchange among aircraft systems.

Major improvements to flight controls are also being incorporated in the UH-60M. The introduction of a Dual Digital Flight Control system with improved flight-control

laws will allow for the addition of a fully coupled flight director for "hands-off" flight. The fully coupled flight director will provide the flight crew the ability to fully couple glideslope, vertical and horizontal speed hold, and lateral steering modes (VOR, heading select, TACAN, etc.) with the autopilot, to include hover hold and "go around." The capability to automatically enter a hover hold at a predetermined height above the ground, or to initiate a preplanned "go around" profile, will greatly assist flight crews in recovering the aircraft if outside visual references are lost during an approach to landing.

Airframe improvements include a new cabin built around high speed machined parts. This improvement in the manufacturing process means fewer parts, resulting in reduced cracking and fewer corrosion paths.

The safety of the UH-60M is being enhanced with the addition of newly designed seats with greater crash survivability for crew and passengers from Simula and Martin-Baker. Seats will also be more comfortable, reducing crew and passenger fatigue on longer-duration missions. The new crashworthy external fuel tanks will also be used on the UH-60M, significantly reducing the chance of post-crash fires caused by ruptured external tanks. Finally, a new Flight Data Recorder/Cockpit Voice Recorder will allow for recording 13 hours of flight data and the last 30 minutes of voice within the cabin.

Significant improvements are also being made in the propulsion section. The UH-60A and UH-60L engines will be recapitalized and upgraded to General Electric T700-GE-701D models by incorporating improved components into the engine "hot section." As a result, engine power is increased by four percent to 2,000 shaft horsepower, leading to an improved lift capability. All UH-60Ms will be outfitted with the improved-durability gearbox transmission outfitted with rotor-brake provisions. This will provide an additional safety factor by allowing crews to quickly start or stop the rotor system during operations on land or at sea.

Another major improvement will be the introduction of a composite blade with 16 percent more chord. Sikorsky developed these blades through a dual-application program with the Army. Equipped with dihedral tips, the blades are designed to provide about 500 more pounds of lift than the current blades, and will provide greater flight maneuverability and 15 to 20 knot higher speeds in certain environmental conditions.

The UH-60M's first flight is scheduled for September, with low rate production starting in 2005. The design baseline described above will be fielded to the first field units in 2007. With the ever-increasing pace of technology, however, a Pre-Planned Product Improvement (P3I) program is already being conceptualized to insure that the UH-60M continues to evolve. Among the improvements are a health-and-usage monitoring system that will improve data collection on the aircraft, a fly-by-wire capability that will save approximately 200 pounds and further improve the aircraft's handling qualities, the Joint Tactical Radio System, and more modern aircraft survivability equipment.

Full-Spectrum Dominance

The UH-60M has been designated the utility helicopter in support of the Future Combat System. As such, capabilities are being designed into the aircraft to insure that it remains responsive, deployable, agile, sus-

***UH-60M Update** continued on page 39*

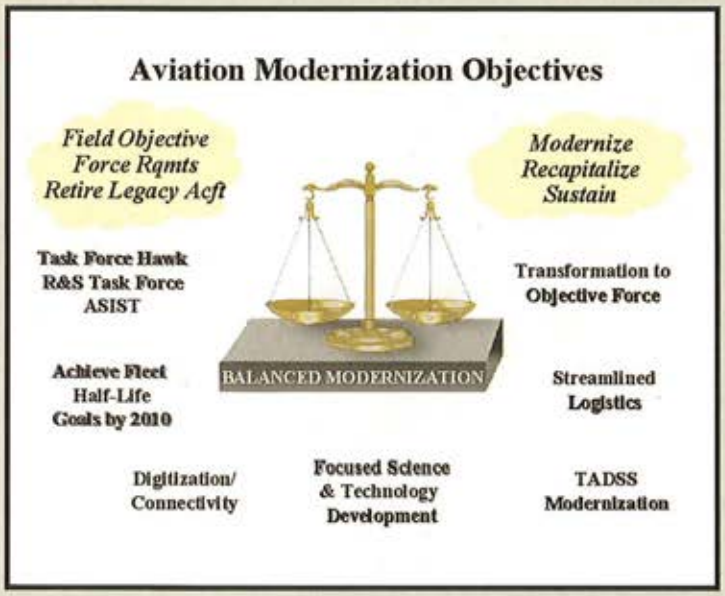
AVIATION COMBAT DEVELOPMENTS
HARDWARE UPDATE

By COL Ellis W. Golson and MAJ Barry Higgs

The Army's decision to transform itself is a direct result of the changing strategic environment of the 21st century — reinforced by the events that shook the nation on Sept. 11, 2001. The changing military environment necessitates an aviation force capable of conducting the full range of military operations. This requires a balanced modernization strategy across Doctrine, Organizations, Training, Materiel, Leader and Education, Personnel and Facilities (DOTMLPF) systems. Hardware modernization, the focus of this article, requires the Army to selectively invest in today's force to maintain warfighting readiness as it transforms to an objective-force capability.

Near-term Modernization (Fiscal Years 2002-2008)

Significant aviation force structure changes are ongoing. This structure, to be implemented in the near-term, will serve as a bridge to "objective force" aviation. It will provide the foundation for hardware modernization, allowing accelerated divestiture of approximately 1,000 legacy AH-1 and UH-1 aircraft and cascading of modern aircraft to the reserve component.



Modernization funding shortfalls in the 1990s have created a renewed urgency to address aviation's operational issues. The Army continues to program efforts to correct lessons learned in Bosnia, Albania, Kuwait, Kosovo (Task Force Hawk) and Afghanistan. The Aviation Safety Investment Strategy Team (ASIST) is working to identify measurable accident-prevention goals and identify Armywide investments needed to achieve them.

While the focus of the Aviation Transformation Task Force is force structure, it has also identified readiness as an issue and worked to identify fixes that can be implemented in the near-term. Finally, as the Army refines its digitization requirements, ongoing subsystem- and software-development efforts will insure aircraft are fielded with compatible, interoperable and supportable communications equipment.

Each of the above efforts has helped shape aviation modernization in the near term. A state-of-the-art target acquisition and pilotage system will be retrofitted on all AH-64A/D aircraft. OH-58D, UH-60 and CH-47 crews will be equipped with the latest night-vision goggles that improve resolution and reduce halo effect. The Air Warrior system will begin fielding in FY 2004 to improve aviator effectiveness in nuclear, biological and chemical hazard environments. The Aviation Combined Arms Tactical Trainer-Aviation Reconfigurable Manned Simulator (AVCATT-A) will begin fielding in FY 04. AVCATT-A will support institutional, organizational and sustainment training in a collective

and combined arms virtual environment. The Army has designated AH-64, UH-60 and CH-47 recapitalization as high priority and fully funded these efforts.

AH-64D Longbow Block II deliveries started in 2003 and will continue until the procurement objective of 501 is reached in 2007. Block III upgrades to the Longbow fleet begin in FY 07. The Block III will make the Longbow compatible with the Objective Force; provide Level 4 unmanned aerial vehicle (UAV) control, IFR/IMC capability, targeting improvements, and operating and support (O&S) improvements. Fielding of the modernized target acquisition designation sight and pilot night vision system (TADS/PNVS) will begin in 2004. Readiness and sustainment fixes, component recapitalization and Air Warrior integration will also begin in the near-term.

Hardware modernization requires the Army to selectively invest in today's force ...

The UH-60M and HH-60M (medical evacuation variant) are currently in the system-development and demonstration phase. First Unit Equipped (FUE) for the UH-60M is scheduled for FY 2007. The UH-60 modernization program will insert digital technologies, address safety and O&S cost drivers, integrate Air Warrior and extend aircraft life. Another significant modification is the Army Airborne Command and Control System (A2C2S), which will begin production in FY 2003. This mission kit will convert selected UH-60s into aerial tactical operations centers, supporting command and control (C2) on the move, as well as the commander's situational awareness and common view of the battlefield.

The CH-47 modernization program will provide commanders a more-reliable, less-costly-to-operate aircraft compatible with Army digital connectivity requirements. Key modifications integrate an upgraded T55-GA-714A engine, digital avionics, Air Warrior, enhanced air transportability, an extended-range fuel system, reliability and maintainability improvements, and complete recapitalization of 133 components. The current program goal converts 300 CH-47Ds to the CH-47F configuration. FUE is scheduled for FY 2008.

Other major near-term hardware modernization initiatives include the OH-58D Safety Enhancement Program (SEP), aviation digitization, and the RAH-66 Comanche Engineering and Manufacturing Development (EMD). The OH-58D SEP, currently underway, adds crashworthy seats, an upgraded engine and limited digitization upgrades to the Kiowa Warrior. Aviation digitization efforts are centered on synchronizing upgrades with the Army digitization timetable. Comanche EMD will support an FUE in 2008.

Mid-Term Modernization (FYs 2009-2018).

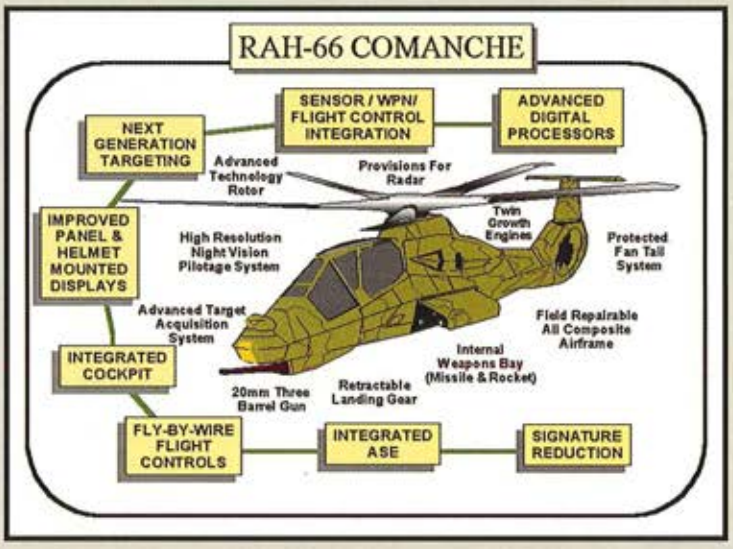
The mid-term is focused on fielding the UH-60M, HH-60M, CH-47F, completing Block III Longbow Apache fielding in 2012 and the Army's first Objective Force platform — the RAH-66 Comanche. Further development of essential enabling technologies in electronics, man-machine integration, air platforms, propulsion systems and weapon-system enhancements will provide aviation with key capabilities for insertion into current systems or incorporation into next-generation and future systems.

A decision on replacement of the UH-60 and CH-47 will also be required in this timeframe. Should a new-start aircraft be required, research and development must begin in the mid-term.

The next generation of Hellfire missile is also expected to be in full-rate production in the mid-term. It is expected to provide increased range, lethality and resistance to countermeasures compared to the current laser or RF (radio frequency) Hellfire.

The trend toward increased utilization and teaming with unmanned platforms is expected to continue through the mid-term and lead to integration of unmanned aerial vehicles into the aviation force structure.

The RAH-66 Comanche remains aviation's highest-priority modernization program. It represents the Army's next generation armed reconnaissance and attack aircraft. Comanche supports the Objective Force "system-of-systems" commander as a highly survivable, reliable, sustainable and lethal networked platform extending the operational reach of the maneuver force. The aircraft is a twin-engine, single-rotor, two-pilot, all-composite aircraft designed with advanced sensors and integrated communications. Comanche production continues into the far term to meet Army Objective Force requirements.



Far-Term Modernization (2018-2035).

The enduring aviation missions of attack, reconnaissance, vertical lift and support to command, control, communications and intelligence (C4I) are expected to remain relevant into the far term. The characteristics and capabilities required to execute these missions will be based on assessments within the context of the future operational environment and technology constraints. In the far-term:

- The last of the Army's AH-64Ds should be replaced by RAH-66.

Aviation Combat Developments *continued on page 37*

MG Curran continued from page 10

how effective our pilots and aircraft performed.

Sinclair wrote: "Just wanted to share a great day in the 101st with you all. We took over the bottom 1/4 of Baghdad with 2nd and 3rd brigades. 2-17 Cav., with their Kiowa Warriors, are key to the fight in the city streets, while the AH-64 battalions provide standoff engagements and secure the outer ring. Our 1st Bde. is still securing An Najef, Al Hilah and Karbala. We had a company of Longbows that ran into some bad guys SE [southeast] of Baghdad, still hiding out. They were remnants of the Hammurabi Division.

"The AH-64D company was able to kill nine T-72s [tanks], six ZPU-23 [air defense guns], seven S-60 air-defense guns, 12 D-30 artillery pieces, an Iraqi UH-1 [helicopter], a COLT airplane that was on the ground, and numerous fuel and cargo trucks. There was similar success across the division with engagements. Today alone our BDA [battle damage assessment] for 101 Atk. Bde. totals were more than a brigade-size element of the Republican Guard. And while some aircraft did take enemy fire — including a few hits — all of our aircraft returned to our Tactical Assembly Area. It was truly an exciting day for all of us, and obviously we were all pretty excited tonight."

Aviation units of the 101st were responsible for the destruction of approximately two Iraqi divisions' worth of equipment, greatly eliminating the threat to coalition forces and to Iraqi citizens. These attrition efforts against Saddam's forces significantly contributed to the momentum of the ground campaign to move on Baghdad and complete the liberation of Iraq.

BG Sinclair also wrote in a later e-mail how well other units and aircraft were doing.

"Sir, I know a lot is being written about the role of the infantry at An Najef, Karbala, Al Hilah and now in Baghdad. And deservedly so — they have done a fabulous job. But a lot of the visibility of what 101st Atk. and 159th Avn. brigades have done is not being highlighted enough, so I just wanted to make sure you were aware of their contributions.

"101st Atk. Bde. has flown over 5,000 hours and 159th has flown over 8,000 hours since we crossed the berm on 19 March. Besides the attack missions, both brigades executed the two longest air assaults/moves in history — one of over 380 kms and one of over 500 kms. They also conducted brigade air assaults with the 1st Bde. into An Najef, 2nd Bde. into Karbala and 3rd Bde. into the outskirts of Al Hilah. Additionally, as we moved into Baghdad, they moved both 2nd and 3rd brigades (a total of over 3,000 soldiers in one day) into their respective sectors in Baghdad. Just this week they air assaulted the 2nd BCT [brigade combat team] from Baghdad into the airfield at Mosul — truly a monumental task covering over 500 kms.

"Their role in resupply has been crucial. With 1,000-km LOCs [lines of communication] ... from Kuwait to Mosul, we have been at times totally reliant on the 159th for resupply," wrote Sinclair. "Especially critical was their role in the emergency resupply missions of MLRS and 155mm artillery ammunition, 24 hours a day, as 3rd ID outran their ground trains and became black on ammo. The Chinooks and Black Hawks have truly been the lifeline for our resupply efforts over such great distances. ... There have been some severe challenges with the dust and the shamals, but overall the FMC [full mission capable] rates have remained very good, especially when you consider the number of hours flown and the mission profiles."

MORE STORIES OF COURAGE AND ACCOMPLISHMENT

Journalist Steve Liewer of Stars and Stripes European edition was embedded with the 2nd Squadron, 6th Cavalry, in Iraq and wrote extensively on missions flown by 2-6 and 6-6 Cavalry and the 11th Aviation Brigade. You'll find many factual accounts of the bravery on our aviation soldiers, to include the riveting story of 29-year-old 1LT Jason King (with 6-6 Cav) and how he was shot in the throat while flying on a mission March 23.

You can read more of King's story in "Pilots recall night battle behind enemy lines," posted on April 17. Another compelling story is "6th Squadron, 6th Cavalry, back in battle for Baghdad," written on April 4. I encourage you to read all of Steve's stories posted on the S&S website at www.estripes.com.

PREPARING FOR THE NATION'S NEXT CALL

Now that operations in Iraq have shifted gears and the lessons learned and after-action reviews are being conducted, we will see how well Army aviation executed its assigned missions.

Currently and in the months to come, a host of agencies will work closely with U.S. Central Command, including such Army activities as the Center for Army Lessons Learned, TRADOC, AMCOM, PEO Aviation and the Army Safety Center, to capture the facts, tactics, techniques and procedures used by our forces. We in the aviation community will study our performance — in difficult, demanding and fluid conditions — scrutinize and evaluate both the good and the bad, and work to make the changes and modifications to our aviation forces to be ready to contribute to future coalition, joint and combined operations.

Our Army must fight and win wars across a full spectrum of operations. Army aviation — comprised of attack, recon, lift, maintenance, flight ops and air traffic services — will continue to provide our soldiers on the ground with an indispensable capability, now and well into the future.

To all of the soldiers who participated in Operation Iraqi Freedom, know that we share in your pride of a job well done. America is proud of what you have sacrificed and accomplished in liberating the Iraqi people and ending the brutal regime that threatened the peace and freedom of the world.

Continue to think safety and risk management, be safe and watch out for others. Above the Best!

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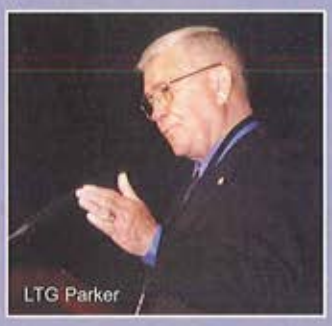
MG John M. Curran is the commander of the U.S. Army Aviation Center and chief of the aviation branch.

2003 AAAA Annual Convention Highlights

ARMY AVIATION ASSOCIATION

2003 AAAA Annual Convention

Although some were surprised that due to the world situation the 2003 AAAA Annual Convention took place at all, those who had been with us through the tornado in 2000 in Fort Worth knew nothing stops Army aviation! The event far exceeded expectations with over 4,000 attending. Three days of professional programming organized by Presentations Chairman, MG Mark Curran, aviation branch chief, and a record number of exhibits kept the attendees very busy indeed.



AAAA President, **LTG Ellis D. Parker, (Ret.)** opened the program Thursday morning April 10, 2003, with the introduction of **MG Curran**, who kicked off the professional sessions focusing on the convention theme, "Army Aviation — 20 Years of History, Transforming for the Future." Then, **BG William C. Feyk**, DCG, III Corps & Fort Hood, delivered the Host Command Welcome.

[Please note that ALL the presentations are available on the Army Knowledge Online (AKO) site under the "Collaborate" tab. Then click on "Communities," then "TRADOC," then "Aviation," then "Aviation Center Conferences," then, "AAAA 03".]

Following the opening session, various breakout sessions took place. Among the briefers were **CSM Walter Beckman**, Aviation Branch CSM; **COL Benny G. Steagall**, J5 JTF6/Joint Task Force Six; **CW5 Stephen T. Knowles**, Aviation Branch Warrant Officer, **MG Dr. Dieter Budde**, Division Commander, Airmobile Operations, Germany; **LTC Arthur T. Ball**, Contingency Ops Bosnia, Task Force 1-25 Aviation; **LTC Scott A. Jacobson**, Special Operations Aviation.

Army program managers briefed during all open exhibit hours. Left, **COL William G. Lake** (*left*), PM Utility Helicopters, presents the view from his area of responsibility.

Friday's program continued with **LTG Cody**, (*right*) Army G-3, who gave an outstanding look at ongoing operations. **MG Joseph L. Bergantz** (*below left*), PEO Aviation and **MG Larry J. Dodgen** (*below right*), CG AMCOM followed with Acquisition and Logistics and Sustainment issues.

In a surprise presentation first thing Friday, **COL George Gluski** (*right*), Chief, Aviation and Safety NGB, received 42 Air Medals from Army G-3 LTG Cody. He had earned the medals in Vietnam but they had not been authorized by the Army until a few weeks ago. A friend had discovered the error and unknown to COL Gluski had pushed it through the system. Mrs. Gluski (*center*) joined George for the presentation.

Friday's Luncheon featured **BG Howard Yellen** (*right*), DCG U.S. Army Special Operations Command, Fort Bragg. After his presentation he was presented with a signed copy of "Dust Off" written by Medal of Honor recipient and Hall of Fame member **CW4 Mike Novosel** (*left*).

Friday concluded with a gathering of Cub Club members .... those individuals who were Army aviators dating back to the L-4 Grasshoppers (Cubs) used in WWII.

Saturday Morning kicked off with the traditional First Light Breakfast. **LTG John Caldwell Jr.**, (*right*), Military Deputy, OASA (AL&T), was this year's speaker.

Later, **LTG Caldwell** (*center*) lead an Industry panel that included (*from left to right*) **Mr. Patrick M. Shanahan**, VP/GM, Boeing Rotorcraft Systems; **Mr. Dean Borgman**, President, Sikorsky Aircraft, UTC; **LTG Caldwell**; **GEN Terrance Dake**, USMC (R), Sr. VP, U. S. Government & International Military Programs, Bell Helicopter Textron; **Mr. John M. Ward,** VP Business Development, Lockheed Martin Missile and Fire Control; **Mr. Mike Donovan**, VP Combat Vision Center, Lockheed Martin Missile and Fire Control.

COL Benny G. Steagall (*standing center*) chaired Saturday afternoon's Operation Anaconda Panel. He was joined by (*seated at tables from far left to right*) **CW3 Tyron Freeman,** 2-82 Avn Battalion Safety Officer; **CW2 Emanuel Pierre** and **CW3 Stuart Contant**, both of 3rd Battalion, 101st Avn. Reg., 101st Airborne Div.; **LTC Paul Bricker**, CDR, 2-82 Avn; **MAJ Mathew Brady**, Commander 1042 Medevac; **CPT Natalee Birdsell**, Commander, B/2-82 Avn); and **CSM Francisco Torres, Jr.,** CSM, 2-82 Avn.

The Army aviation branch was established on April 12, 1983. Twenty years later to the day, convention attendees celebrated the anniversary on the exhibit hall floor. Shown cutting the cake are current branch chief, **MG Curran** (*left center*), **LTG Parker** (*center*) and the first branch chief, **MG Carl McNair** (*right center*).

Transforming the Combined Arms Team Panel was chaired by **MG Curran** (*far left*). He was joined by **MG Michael D. Maples** (*second from left*), Military Intelligence — ISR; **BG John M. Custer, III**, Transformation Objective Force; **COL Paul Melody,** CAT-D (Combined Arms Training Directorate, Ft. Benning; and **COL Joseph Hughes (Ret.),** Unit of Action, Armor School, Ft. Knox, Ky.

Saturday's luncheon featured guest speaker **GEN Kevin P. Byrnes** (*right*), CG, TRADOC.

GEN Byrnes

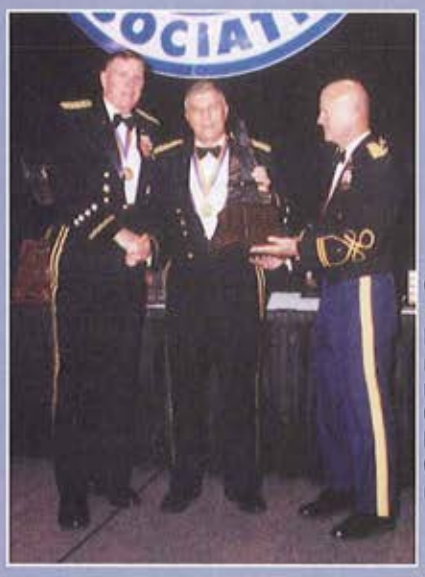
This Year's convention concluded Saturday night with the AAAA Awards Banquet featuring an address by **GEN Jack Keane**, U.S. Army Vice Chief of Staff who presented the AAAA National Unit and Individual Awards. Due to deployments around the world, a number of awards were accepted by awardee spouses and other representatives of the winners.

The CY2002 Outstanding Aviation Unit (USAR) of the Year was presented to 6th Battalion, 52nd Aviation Regiment. Accepting the award are **LTC Steve J. Campfield**, unit commander (*center*) and **WO1 Erik Theismeyer** (*right*).

The top National Guard Unit of the Year was the 1042nd Medical Company, Salem, Ore. Accepting the award are **MAJ Mathew J. Brady**, (*second from left),* and **1SG David Walsh** (*second from right*), Sr. NCO for the unit. **MG Fred Rees**, (*right*) Acting Chief, NGB, helped co-present the award.

CW3 Stuart Contant (*center*) and **CW2 Emanuel Pierre** (*right*) wounded Anaconda veterans, accepted the Outstanding Army Aviation Unit of the Year (Active Army) Award for the 3rd Battalion, 101st Aviation Regiment, Fort Campbell, Ky. on behalf of the deployed commander, **LTC James M. Richardson**.

The Comanche Program Management Office received this year's Robert M. Leich award. Pictured are **COL Robert Birmingham** (*center*), PM along with **Mr. Frank Walsh** (*right*), Deputy PM.



Mr. John L. Shipley (*right*), AMCOM Director, Special Program (Aviation), accepts the Joseph P. Cribbins DAC of the Year award from **MG Curran** (*left*) and **GEN Keane** (*center*).

CW4 Ryan B. Newman, 6th Battalion, 101st Aviation Regiment was the James H. McClellan Aviation Safety Award winner. Again due to deployment, he could not be present at the convention. Here, **GEN Cody** (*center*) accepts the award on his behalf from VCSA **GEN Keane** and **CW5 Stephen T. Knowles II** (*right*), warrant officer for the aviation branch.

SGT James H. Hanshaw (*center*), Co. B, 2nd Battalion, 82nd Aviation Regiment, Fort Bragg, N.C., was the 2002 Army Aviation Soldier of the Year. He accepts his award from **GEN Keane** and Branch **CSM Walter Beckman**.

SSG Edward L. Newell was the winner of the 2003 Army Aviation NCO of the Year Award. Due to his deployment, **Mrs. Newell** (*center*) accepts her husband's award from **GEN Keane** (*left*) and **CSM Beckman** (*right*).

CW4 James E. Hardy, Company A, 3rd Battalion, 101st Aviation Regiment, was the Aviator of the Year. His wife, **Brenda** (*center*) accepts her husband's award due to his deployment.

As the 2003 Convention drew to a close, **LTG Parker** concluded his term as President and passed the gavel to new AAAA President **MG Andy Andreson (Ret.)** who is joined in his new term by Senior VP BG Tom Konitzer and Secretary/Treasurer MG Jim Snider.

See you next year in Nashville, TN
24-27 March 2004

Aviation Combat Developments cont'd from page 30

- UH-60 and CH-47 aircraft should be replaced, as requirements are expected to exceed the limits of additional recapitalization.
- A seamless aviation-logistics management system is required to be in place, reducing ownership cost by incorporating such automation technologies as embedded diagnostics/prognostics, anticipatory logistics and total asset visibility.
- Simulation will encompass an ever-increasing role in aviation training.
- The integration of communications, sensor and weapon technologies will improve situational awareness, survivability and lethality during full-spectrum operations.
- Increased application of unmanned technologies.

Conclusion

While much progress has been made in the last few years, significant challenges lie ahead. New and emerging aviation requirements include meeting Global Air Traffic Management (GATM) requirements for airspace utilization, developing an executable aircraft survivability equipment strategy, meeting evolving digitization requirements and transforming to an interim (and later, objective) aviation force structure.

Successful modernization will involve more than just hardware — it's the integration of equipment, doctrine, training, organizations and soldiers. Aviation's investment strategy must provide a balanced, risk-minimizing approach. The payoff will be an aviation force that remains the best in the world.

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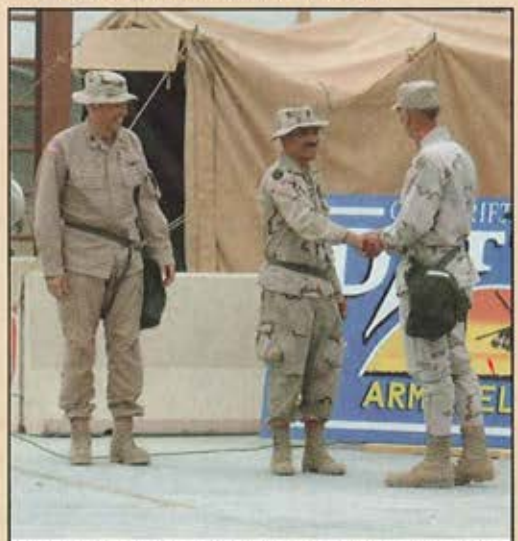
COL Ellis W. Golson is director of the Directorate of Combat Developments at the U.S. Army Aviation Center, Fort Rucker, Ala. MAJ Barry Higgs is chief of the Combat Aircraft Branch, within the Material and Logistics System Division of DCD.

New Army Airfield Opens in Kuwait

By CW5 Donald Ridings
Photos by Laurence Hoffman

Erickson and Stratman roll back the sign cover as MAJ James Kester of the 377th TSC announces the opening of Patton Army Airfield.

One of the Army's newest airfields recently opened for business at Camp Arifjan, Kuwait, thanks in part to the efforts of the soldiers of the Aviation Maintenance Section of the 331st Theater Support Command's Materiel Management Center Equipment Readiness Division. The unit, a combined active component-reserve component organization, has been in Kuwait since the end of Operation Desert Storm. The 377th TSC has been actively working aviation maintenance issues in the Southwest Asia theater since October 2000.



CFLCC commander MG Henry Stratman presents a commander's coin to SSG Willy Ortiz, who did the artwork for the Patton AAF sign. COL Erickson is to the left.

The 1109th AVCRAD's command group stands in formation before the airfield dedication speech. They are (from left to right, in back) LTC Thomas Sousa, MAJ Jeffrey Burns, MAJ Vincent Vaanoorbeeck and MAJ Robert Burnside. In front of the staff are LTC William Shea (executive officer) and COL Ernest Erickson (commander).

Construction of Patton Army Airfield — named in honor of famed World War II commander GEN George S. Patton Jr. — was originally scheduled for completion in 2005, but that date was advanced to Feb. 21 of this year owing to pressing operational needs. The airfield — which supports the more than 750 Army aircraft deployed as part of operations Iraqi Freedom and Enduring Freedom — was dedicated on May 12. MG Henry Stratman, commanding general of the Combined Forces Land Component Command, was the guest speaker.

The airfield is currently operated by the Connecticut-based 1109th Aviation Classification Repair Activity Depot, assisted by elements of the Mississippi-based 1108th AVCRAD.

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CW5 Donald Ridings is assigned to the 331st TSC. Laurence Hoffman works for the Army Materiel Command.

AATD continued from page 20

reducing specific fuel consumption. This is my top S&T priority, and I am currently seeking funding to complete the developmental effort that leverages previous component technology developments.

For example, the Rotorcraft Drive Sytem-21 program will leverage developed gear technology and manufacturing techniques to demonstrate major advancements in rotorcraft drive-system technology. Work is ongoing with Boeing and Sikorsky to validate advanced methodologies, design tooling and modeling in order to produce a lightweight, high-performance system with reduced production and operating and support costs. The Comanche Program has already committed to inserting this technology into Block III production and we hope to incorporate it into the Unmanned Combat Armed Rotorcraft (UCAR) as well. Additionally, this technology is also applicable to all our helicopter platforms, the A-160 UAV and the Future Combat Systems.

AATD is currently working with industry partners and the Navy to develop advanced third-party technologies for integration into current Health & Usage Monitoring Systems (HUMS). This is a joint program with the Navy that builds on HUMS technology by improving fault detection, providing enhanced engine diagnostics and enabling quicker maintenance response. This is accomplished by linking the HUMS directly to the Integrated Electronic Technical Manuals and transmitting data to a ground station during flight.

The Survivable, Reliable Airframe Program (SARAP) leverages advancements in technologies from other structure programs (RW Structures Tech Demo and U.S. Air Force Composite Affordability Initiative). AATD has teamed with Boeing and Sikorsky to develop new composites that will reduce aircraft weight, provide better ballistic tolerance, improve crashworthiness, increase affordability and reduce development time through virtual prototyping, new processes and better/lower cost materials. With completion in fiscal year 2006, the technologies will be applicable to all airframes but are slated for transition to Comanche Lot IV in FY 2008.

UAVs are coming, with an almost infinite number of options to choose from. UAVs must be able to operate across the spectrum of military operations. Ultimately, however, we want UAVs to keep our soldiers out of harm's way and to create harm for our adversaries. AATD is one of the Army's leading UAV proponents and experimenters. UAVs have traditionally been used in the reconnaissance, surveillance and target-acquisition roles. UAV weaponization is an area that is new to us, but one that we need to carefully consider if we are to effectively utilize UAVs to their full capability. The challenge is to carefully examine the wide variety of options and then select those that are most useful. Those options that lend themselves to modular application or multi-mission capabilities are good examples.

One very important aspect of UAVs is the ability to team with manned aircraft. Unfortunately, there is a general misperception that UAVs can do what manned aircraft can do. While UAV technology is advancing at a rapid rate, UAVs do not possess the curiosity, intuition and judgment of an aircrew. Proper teaming will enhance the survivability and lethality of both manned and unmanned systems, and the synergy created between the two will deliver greater results than if they act independently.

One of our most important programs at AATD is the Airborne Manned-Unmanned System Technology Demonstration (AMUST-D). The objective of the program is to demonstrate the teaming of manned helicopters and UAVs through the incorporation of Cognitive Decision Aiding (CDA) technology to help aircrews manage an ever-increasing workload. It is our intent to integrate this technology into a Longbow Apache and an A2C2S as part of the HSKT Advanced Concept Technology Demonstration, which is designed to increase an operational commander's capability by teaming a Hunter UAV with Longbow Apaches, US Navy F-18s and the A2C2S. One of the key aspects of the program is integrating CDA technology and precision targeting sensors into the Apaches and UAVs. This is a six-year program to be highlighted by a two-year Military Utility Assessment with U.S. forces in Korea.

UCAR is another of our top S&T priorities. We are currently working on the Defense Advanced Research Projects Agency PM's team that is considering a number of technologies (Small Heavy Fuel Engine, CDA, Autonomous Collaborative Flight, etc.) now being developed at AATD. The objective of the program is to develop and demonstrate a vertical takeoff and landing (VTOL) UAV that provides a mobile strike capability. Some view UCAR as a future battlefield teammate of Comanche. Integrating weapons and sensor packages and developing technology that allows UCAR to operate autonomously are the most important and difficult things to do.

The A-160 Hummingbird is another DARPA-managed program that will eventually transition to the Army. It is a Class IV (Extended Range Multi-Purpose) UAV that is envisioned to operate as a long-range, long-endurance C4ISR, logistics and communications relay asset.

Finally, the Low Cost Precision Kill Program (LCPK) will demonstrate a low-cost and accurate guidance package added to the Hydra-70 2.75-inch rocket as a solution to the Army's Advanced Precision Kill Weapon System (APKWS) requirement. Essentially, this is a seeker-equipped rocket we intend to shoot from the Vigilante UAV later this year.

In summary, AATD has more than 50 years experience in developing innovative solutions and, again, science and technology will play an important role in shaping the future of Army aviation.

We will be right in the middle of it. Our focus will be on propulsion, airframe and ground-support equipment technologies; systems integration; and UAVs, including manned-unmanned teaming. And we will also continue to support our customers' immediate needs through unique rapid prototyping.

At AATD, we continue to strive to be recognized as experts in the field of rotorcraft and tactical UAV systems and technology, and to be known for the quality of our work and the excellence of our people.

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COL William Gavora is commander of the Aviation Applied Technology Directorate at Fort Eustis, Va.

Briefings *continued from page 3*

CAE has been awarded a $4.7 million contract to provide the U.S. Army Aviation Warfighting Simulation Center at Fort Rucker, Ala., with its first UH-60L Black Hawk Battlestaff Training Simulator (BaTS) to support crew and collective training. The UH-60L BaTS, which is based on CAE's Reconfigurable Flight Trainer technology, will be a motion-cued, fixed-base training device that simulates the UH-60L. The training device will include high-fidelity pilot and co-pilot flight stations and a rear cargo area capable of supporting a five-member battlestaff. The state-of-the-art CAE Medallion-S™ visual system will provide high-fidelity visual imagery in a four-channel configuration. In addition, the UH-60L BaTS will be used by the Army to support research, development, and acquisition initiatives as well as advanced concept requirements activities related to simulation development efforts.

On April 1 the Army raised the time-in-service requirement for promotion to captain from 38 months back to 40 months. With the increase, the Army begins an incremental return to the 42-month requirement that existed prior to October. Officials said the higher requirement provides more time for junior officers to prepare for the responsibilities associated with the rank of captain. In October, the Army started promoting officers to captain after only 38 months of service as one facet of a campaign to alleviate a shortage of captains.

Sen. Fred Thompson has been tapped to serve as chairman of the fundraising campaign for the Wings of Liberty Military Museum at Fort Campbell, Ky. Currently in the planning stages, the 78,000 sq. ft. facility will include a 200-seat IMAX-style theater, art gallery, cafe, book store/gift shop and artifact storage area. A site has been secured near the post's existing Don F. Pratt Museum, and fundraising continues. For additional information, visit www.fortcampbell.com/museum.html.

General Dynamics Armament and Technical Products division has awarded BAE Systems' Information and Electronic Warfare Systems unit a $26.7 million contract to develop and demonstrate the guidance section of the Army's Advanced Precision Kill Weapon System (APKWS) Block I program. The BAE Systems guidance section is intended to provide pinpoint accuracy for the unguided Hydra-70 rockets employed by Army attack helicopters, making the rockets "smart" enough to home in on and destroy enemy targets while minimizing collateral damage.

The U.S. Army Communications-Electronics Command (CECOM) has awarded Northrop Grumman Corp. and seven additional contractors an eight-year indefinite delivery/indefinite quantity contract for the CECOM Rapid Response (CR2) program. The program seeks to provide the Department of Defense (DOD) and other federal agencies with a rapid method to develop, upgrade, maintain and support a broad range of new and existing platforms and systems, including aircraft, wheeled vehicles, watercraft, spacecraft, electronic systems and support structures.

DOD's Joint Tactical Radio System (JTRS) Joint Program Office has awarded Rockwell Collins a JTRS Software Communications Architecture (SCA) maintenance contract. The firm was a member of the Boeing team for the initial development of the JTRS Cluster 1, as well as a member of the Modular Software Radio Consortium that developed the JTRS SCA.

UH-60M *continued from page 28*

tainable, survivable and, above all, versatile.

The UH-60M will be deployable in the Air Force's C-17 and C-5 transports, a process that will be simplified with the addition of a folding stabilator on the aircraft. The improvements in interoperability and survivability, combined with an already robust survivable/crashworthy basic design, will improve both aircraft performance and the pilot's tactical situational awareness. Additional system hardening and redundancy will also enhance survivability.

The Black Hawk's versatility is based on the concept of using a common platform with the capability to perform multiple missions and rapidly respond to changing mission requirements. Future medical evacuation (medevac) and special operations variants will be based on the UH-60M platform. The HH-60M medevac variant will incorporate the HH-60L state-of-the-art medical interior with on-board oxygen-generating capability, medical suction, cabin environmental controls, medical supply cabinets and external hoist. In addition to the features found in the cockpit, the HH-60M will also include a forward looking infrared (FLIR) system, Tactical Air Navigation (TACAN) and Personnel Locator System (PLS) capability. The special operations variant, the MH-60M, will be among the first aircraft fielded with the UH-60M baseline capabilities.

Providing the commander with full situational awareness at all times, the Army Airborne Command and Control System, or A2C2S, is hosted on the UH-60 Black Hawk. This system consists of five interchangeable, reconfigurable workstations displaying the common tactical picture. A2C2S is linked via a communications suite that provides line-of-sight and non-line-of-sight connectivity throughout the battlespace. Black Hawks equipped with A2C2S provide the objective force commander a tactical operations center capability anywhere on the battlefield or while traversing the battlespace at more than 150 miles per hour.

This airborne command-and-control platform capability is also used to coordinate the efforts of state, federal and nongovernmental agencies in times of national emergency. Black Hawks play an increasingly large role in homeland defense, providing a multipurpose platform that allows flexible response to crisis situations. Among its many roles, Black Hawk provides fire-suppression, search-and-rescue, and medical-evacuation support to assist homeland-defense efforts.

The Black Hawk has demonstrated its capabilities time and again in conflicts in Grenada, Panama, Kuwait, Somalia, Bosnia, Afghanistan and Iraq, as well as here in the United States in its many homeland-security applications. The UH-60M program, with its improvements in lift, range and interoperability, will continue to improve in its critical contributions to worldwide Army peacetime and wartime operations.

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LTC Keith W. Robinson is the product manager, UH-60 Modernization, in the Utility Helicopters Project Office at Redstone Arsenal, Ala. Harry S. Hamilton works for CAS, Inc., in support of the Utility Helicopters Project Office, also at Redstone Arsenal.

AVIATION WARRANT OFFICER RECRUITING

By CW4 Robert L. Huffman

One of our challenging life-cycle issues here at Aviation Proponency is accessing and recruiting warrant officer aviators. The recent release of the Army Training and Leader Development Panel (ATLDP) study —which recommends goals for recruiting warrant officers — and the number of questions we receive on this topic validates the timeliness and importance of this issue.

Aviation Proponency is charged with warrant officer acquisition per AR 600-3; it's the first of our eight life-cycle functions. Fortunately, the Army has a team of warrant officer recruiters at Fort Knox, Ky., that deals with day-to-day recruiting issues. These recruiters maintain an excellent website at **www.usarec.army.mil/hq/warrant/.**

However, we are our own best recruiters. If you know a soldier or a young civilian who wants to become a warrant officer, the following information may prove beneficial.

The basic non-waiverable prerequisites for a warrant officer aviator applicant from active duty are:

- U.S. citizenship;
- A General Technical (GT) score of 110 or higher;
- A high school diploma or General Education Diploma (GED);
- A secret security clearance (interim secret is acceptable to apply);
- Successful completion of the standard three-event Army Physical Fitness Test (APFT) and meeting the height/weight standards IAW AR 600-9; and
- Pass the Class 1-A/W flight physical for aviators IAW AR 40-501, which has been approved by the commander of the U.S. Army Aeromedical Center.

The process for civilian applicants differs slightly. In addition to the non-waiverable prerequisites, candidates must:

- Be at least 18, but not have reached their 29th birthdays by the time the selection board convenes;
- Score 90 or higher on the Alternate Flight Aptitude Selection Test (AFAST); and
- Have a letter of recommendation from a senior Army aviator (CW3 to CW5 or major or higher — active-duty applicants only).

And though not required, we prefer that applicants also have:

- Two years of college credit from an accredited institution; and
- A Federal Aviation Administration private pilot's certificate, or higher.

The application process is not as difficult as it once was. Using the recruiting Web site as a reference, applicants can download sample applications and access real-time information regarding the process. Many local education and learning centers offer preparatory examinations and study guides for the AFAST. Software programs such as Form Flow and access to the Army Knowledge Online system significantly decreases the time required putting the application together.

As easy as we've tried to make the process, there are still challenges. Recruiting warrant officers is not a directed command responsibility and units usually do not receive retention credit for soldiers selected for the warrant officer program. However, retention credit is authorized and units are unaware of this. Command emphasis has proven exceptional, though, with regards to the "green-to-gold" program once the program became well known and widely understood.

Highly motivated potential aviation applicants in ROTC programs are not aware of the warrant officer aviator option. These prospects believe that if they are not branched aviation, there is no chance at all to fly. Greater awareness of the Warrant Officer Candidate Program should be made available for "uncommitted" ROTC students.

Although Aviation Proponency and U.S. Army Recruiting Command have made significant progress in recruiting highly qualified applicants, we need assistance in recruiting more of our finest Americans into these warrant officer aviator positions. USAREC is getting the word out to civilians, the sister services and our own active-duty soldiers, but we can help ourselves by encouraging any motivated person to apply. A "grass roots" recruiting program involves communication and getting the word out.

It is my hope that the members of AAAA will help with the recruiting process. Help us keep the corps and the Army strong.

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CW4 Robert L. Huffman works in the Aviation Proponency at the U.S. Army Aviation Center, Fort Rucker, Ala.

LEGISLATIVE REPORT

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

TMC Reps and MOAA President Meet with TRICARE Leaders

The Military Coalition (TMC) representatives, MOAA President VADM Norbert Ryan Jr. and other veteran service organization representatives recently met with Assistant Secretary of Defense for Health Affairs Dr. William Winkenwerder and the surgeons general of the services.

Department of Defense (DOD) representatives proposed delaying implementation of a mandate to eliminate the requirement for TRICARE Standard users to obtain non-availability statements (NAS) for maternity care. Citing time constraints and a desire to ensure the viability of residency training programs in obstetrics, DOD suggested pushing the start date of this provision from December 2003 (as mandated in the fiscal year 2002 Defense bill) to summer of 2004.

If Congress agrees, beneficiaries living within the 40-mile service area of a military treatment facility (MTF) that provides obstetrical care would likely be required to receive such care at the MTF.

DOD officials also discussed increasing TRICARE Standard maternity copayments from the current flat fee of $25 per episode of care to a copay that is more in line with the cost share required for medical and surgical services.

Ryan expressed both TMC and MOAA's opposition to both of these proposals. While TMC and MOAA applaud the progress made by DOD in making MTFs more "patient centered" and recognize the contribution of residency training programs to the medical readiness mission, more needs to be done to improve beneficiary access. The MTFs must accelerate efforts to make health services more attractive to beneficiaries so that they will seek care there.

Delaying implementation of the NAS-elimination provision and increasing out-of-pocket costs sends the wrong message to those who use the TRICARE system. Programmatic delays and changes will be viewed by service members, active and retired, as a reduction in benefits that could adversely affect family morale and retention of service members.

War Spending Bill Brings Special Pay Increases

In a Saturday session last month, the House and Senate approved a $79 billion Supplemental Appropriations bill to provide funding for the war in Iraq. President George W. Bush signed the bill into law the following week. Of the $79 billion appropriated, more than $62 billion will go directly to the Iraq war effort, cover the increased costs of fuel, munitions, and added compensation for personnel. Other big-ticket items on the bill include close to $8 billion for foreign assistance and almost $4 billion for additional homeland-defense expenses.

TMC is heartened to see that increases in special pays survived the House and Senate conference negotiations. For this fiscal year (Oct. 1, 2002 through Sep. 30, 2003), imminent-danger pay will be increased from $150 to $225 per month, and the family separation allowance will be increased from $100 to $250 per month. Hill sources indicated that the increased pays are likely to be extended in some fashion. TMC and MOAA are certainly glad that legislators took the opportunity to further compensate those putting their lives on the line.

TMC would particularly like to thank Sen. Richard Durbin (D-IL), who championed this initiative, and we urge Congress to continue to show support for all members of the uniformed services community.

Itemized Billing Streamlines TRICARE Outpatient Care Payments

The DOD military health system converted to "itemized billing" a few months ago to streamline the process for billing uniformed services beneficiaries, third-party payers and persons not eligible for TRICARE for outpatient care received at military treatment facilities.

According to TRICARE officials, the new billing approach does not change access to care for TRICARE beneficiaries. However, it changes the way DOD will bill care received at an MTF to the beneficiary's other health insurance (OHI) company for those who have other health insurance and receive outpatient care at the MTF. Individual beneficiaries will not be billed — this billing is between the MTF and the OHI.

Previously, outpatient bills were calculated using an all-inclusive or "single rate" per visit. The single rate covered not only the provider's fees but also fees for laboratory, radiology and pharmacy services received during an outpatient visit. Under itemized billing, each outpatient service or treatment provided is clearly annotated on the claim form (billing statement for non-DOD patients,) along with all associated charges.

In addition to the itemization of charges for services received during an outpatient visit, MTFs are now also able to bill third-party payers for prescriptions filled from orders received from physicians within the MTF.

Overall, the transition to itemized billing is a win-win situation, officials said. Beneficiaries who have other health insurance and receive care at a MTF can now receive an explanation of benefits and a bill that clearly identify the health care services received and their associated cost. DOD benefits from the collections received, which can be put toward resources to support medical services and other patient-related initiatives at MTFs.

Third-party payers also receive a benefit, in that claims submitted by DOD are now similar to claims submitted by civilian providers, which creates assurance for payers third- party payments made to DOD mirror established industry practices. While DOD's initial efforts have focused exclusively on outpatient care, plans are underway to convert billing practices for inpatient care to itemized billing later this year.

Beneficiaries with questions or concerns about an itemized bill or explanation of benefits should contact their regional managed care support contract claims processors or TRICARE service center representatives. A list of local and regional toll-free telephone numbers is available on the TRICARE Web site at **www.tricare.osd.mil/regionalinfo/**. For more info visit **www.tricare.osd.mil/ NewsReleases/2003/news0306.htm.**

Senators Sponsor Reserve Health Care Bill

On April 10, Sen. Mike DeWine (R-OH) introduced S. 852, the National Guard and Reserve Comprehensive Health Benefits Act of 2003, a bill designed to provide wrap-around health coverage options to Guard and Reserve service men and women and their families. Joining DeWine as original cosponsors were Sens. Tom Daschle (D-SD), Patrick Leahy (D-VT) and Gordon Smith (R-OR). Sen. Tim Johnson (D-SD) has since been added as a cosponsor.

S. 852 would permit National Guard and Reserve service members and their families to join the TRICARE program on a cost-share basis (Reservists have been allowed to participate in the TRICARE dental program on a cost-share basis for a number of years). A Reserve member who took TRICARE coverage under the legislation could expect to pay an annual cost-share of $420 for personal coverage and $1,450 for family coverage. Alternatively, service members who preferred to retain their civilian plan coverage would be free to remain in it, and during periods of mobilization those premiums would be partially subsidized.

TMC and MOAA strongly support S. 852 as a major legislative priority for the Guard and Reserve. The bill is posted on the MOAA Web site, along with a suggested letter of support: http://capwiz.com/moaa/issues/bills/.

DFAS Change Creates Confusion, Problems

A change in the Defense Finance and Accounting Service (DFAS) address for written correspondence from Cleveland, Ohio, to London, Kentucky, has created some confusion among members of the military retiree community.

The confusion, officials said, stems from the fact that many retirees and Survivor Benefit Plan (SBP) annuitants think DFAS operations have actually moved from Cleveland to the Kentucky town. This is not the case, but it has led to problems for employees in both locations. The change created a new way of doing business that hasn't been fully explained. Here's how it works and what customers can do to ease the problems.

The London location is simply a "mail drop" facility where retiree and survivor correspondence to DFAS is opened, sorted and filmed. The Kentucky staff runs documents through a scanning/imaging machine so these important papers can be electronically transmitted to DFAS-Cleveland. Since the documents arriving in London come in all sizes, shapes and conditions, some are difficult to handle.

To use the imaging process to advantage, it's important to provide consistent documents to the London KY mail handlers. These suggestions are not based on DFAS guidelines, but are recommendations based on years of experience by various organizations and agencies involved in the transmittal of documents.

Types of documents that retirees and beneficiaries may need to transmit include marriage and death certificates, divorce decrees (and letters accompanying those documents), and even changes of address requests. To have the greatest chance of your documents being handled most efficiently by DFAS:

- Ensure documents are standard size (8.5 by 11 inches); make enlargements or reductions when necessary before mailing them;
- Ensure documents are not brittle, fragile, torn or permanently creased because

the imaging process uses ungentle, mechanical handling;

■ Ensure any notary or certification seal will be legible after the document completes the scanning/imaging process. If the seal is impressed or embossed, carefully rub a pencil lightly over the raised surfaces. This will lightly darken the impression so that the DFAS technician who processes the electronic copy of document will be able to easily discern it was properly notarized or certified;

■ Be sure to provide a copy of the reverse of documents when data pertinent to the correspondence is on the back of the page;

■ Don't mail and also FAX correspondence to DFAS unless so instructed by DFAS;

■ Place the member's last name and Social Security number in the upper right hand corner on the front of each page mailed.

While following these recommendations may not create an absolutely perfect solution, it will go far to make sure the person submitting the document becomes another satisfied DFAS customer.

Tax Bill Clears Senate

A long-sought bill to provide tax relief to military homeowners, survivors and drilling Reservists moved one step closer to enactment last week when the full Senate passed it by a 97-0 margin. H.R. 1307 has been close to passage for some time, but was temporarily stalled in the House by the addition of several special-interest provisions (which were later removed).

The two versions of the bill are very similar, but have a few key differences. The Senate version would exempt up to 10 years away from home on military orders from the requirement to have occupied the home for two of the last five years; the House version would exempt only five. Likewise, the House version sets a maximum $1,500 deduction for training expenses for drilling Reservists, whereas the Senate sets no ceiling.

These differences, along with other minor variations between the two bills, must be worked out by negotiators from the House Ways and Means and Senate Finance Committees. This can be done either informally, in which case one or both houses will pass a subsequent version of the bill, or through an official conference committee. TMC sent a letter (AAAA was a signatory) to the chairmen of the two committees, asking them to support the more robust Senate provisions.

TMC and MOAA are urging the two chambers to quickly resolve their differences and produce a final military tax bill for the president to sign. Tax relief for deserving service members is long overdue, and passage would signal Congress' support for our deployed troops.

CHAMPVA Changes for Surviving Spouses

Surviving spouses who lost access to the Civilian Health and Medical Program of the Department of Veterans Affairs by remarrying before Feb. 4, 2003, now can be reinstated into the program if they remarried after becoming age 55 and if they apply for reinstatement by Feb. 4, 2004.

Similarly, a surviving spouse who remarried after becoming age 55 and lost access to TRICARE benefits may now be eligible for CHAMPVA coverage. To be eligible for CHAMPVA, the individual must be a family member of a veteran who has a permanent and total service-connected disability, or who died of a service-connected condition, or who was totally disabled from a service-connected condition at the time of death. In general, CHAMPVA covers most health care services and supplies that are medically and psychologically necessary.

For more information or an application contact VA's Health Administration Center at (800) 733-8387. For general information on CHAMPVA, visit the VA's CHAMPVA web site at **www.va.gov/hac/champva.html.**

Three AFRCs in Germany to Close

Three Armed Forces Recreation Center hotels in Germany — two at Lake Chiemsee and one in Garmisch — will close a year earlier than planned, Army officials announced.

Remaining AFRC-Europe facilities in Garmisch will stay open while the new 330-room hotel on Sheridan Kaserne is under construction and proceeding on schedule to open in October 2004, when the Army originally planned to end all operations in Chiemsee and the hotel operations in Garmisch. The AFRCs are open to all Department of Defense ID-card holders, active duty, reserve component, retirees and their families. For more information, refer to the original news release at **http://www.dtic.mil/ armylink/news/Apr2003/ a20030401afrceclosures.html**

ARMY AVIATION HALL OF FAME NOMINATIONS
(SUSPENSE DATE FOR NOMINATIONS: JULY 1, 2003)

USAGE

The official nomination form to be used for the submission of all nominations for the Army Aviation Hall of Fame may be obtained from one's AAAA Chapter Secretary or by writing to: AAAA, 755 Main Street, Suite 4D, Monroe, CT 06468-2830. Telephone: (203) 268-2450. FAX: (203) 268-5870, or downloading from the AAAA Web site (**www.quad-a.org**)

CRITERIA

An AAAA-sponsored Army Aviation Hall of Fame honors those persons who have made a) an outstanding contribution to Army Aviation over an extended period, b) a doctrinal or technical contribution, c) an innovation with an identifiable impact on Army Aviation, d) efforts that were an inspiration to others, or e) any combination of the foregoing, and records the excellence of their achievements for posterity. All persons are eligible for induction, except active duty Generals and Colonels. Membership in AAAA is not a requirement for individuals nominated for the Army Aviation Hall of Fame. Any individual, military or civilian, may nominate an individual for Army Aviation Hall of Fame consideration.

DOCUMENTATION

The Army Aviation Hall of Fame Board of Trustees will consider only the following in making its selections:

[1] A 100-word summary of the accomplishments of the individual nominee.

[2] Up to three additional pages of data or 1,500 words (whichever is greater) amplifying the accomplishments of the individual nominee.

[3] The nomination must include a photograph of the nominee in any size, preferably in color.

SUBMISSION

Any person may submit this Nomination Form directly to the Army Aviation Hall of Fame Board of Trustees for consideration. Nominations should be postmarked not later than July 1, 2003, and mailed or express-mailed to AAAA, ATTN: Chairman, Hall of Fame Board of Trustees; 755 Main Street, Suite 4D, Monroe, CT 06468-2830. The receipt of each nomination will be acknowledged by the AAAA. However, nominations material — to include photographs — cannot be returned.

SELECTION

The Board of Trustees, which is composed of members of the Hall of Fame, is responsible for selecting a specific number of candidates from all nominees received for placement on the Army Aviation Hall of Fame Ballot.

BALLOTING

The selected candidates, their qualifications and their photos will be published in a ballot to be mailed to all AAAA members in good standing. These members will be asked to elect a specified number of Inductees from those candidates appearing in the ballot. Balloting is conducted triennially.

INDUCTION

The next induction will take place at the AAAA Annual Convention in April, 2004. The elected Inductees will be inducted in the Army Aviation Hall of Fame in ceremonies held during an Army Aviation Hall of Fame Induction Dinner. The actual Hall of Fame is located at the U.S. Army Aviation Museum in Fort Rucker, Alabama, where the portraits of the Inductees and descriptive narratives are displayed.

NEW MEMBERS

AIR ASSAULT CHAPTER
FORT CAMPBELL, KY
CPT Ronald C. Black
CW4 George W. Cook
SFC Michael D. Cordle
1LT Matthew F. Graessle
LTC Scott A. Jacobsen
LTC Richard A. Juergens
CW2 Emanuel Pierre

ALOHA CHAPTER
HONOLULU, HI
CPT David M. Bresser
SFC Shane A. Jacobson
CW3 James A. Lindsay
CPT John A. McAfee
1SG Bruce A. Robertson

AMERICA'S FIRST COAST CHAP.
JACKSONVILLE, FL
Mr. Frank Kalas

ARIZONA CHAPTER
MESA, AZ
COL Rene I. Beauchamp, Ret.
Mr. Roland C. Kjellsen
Mr. Robert W. Peterson
BG Charles M. Scott, Jr. Ret

AVIATION CENTER CHAPTER
FORT RUCKER, AL
Mr. Darrell D. Allman
CW3 Gary E. Anderson, Sr. Ret
WO1 Daniel T. Archer
CW4 Dennis W. Avenell
2LT Paul M. Baillie
WO1 Nathan D. Barber
WO1 Douglas M. Berg
2LT Charles J. Beyer
CW3 Marcus O. Bielau
WO1 Ervin D. Bier
WO1 Matthew J. Bizon
WO1 Stephen E. Brack
2LT Joseph W. Bradshaw
2LT Daniel M. Brady
WO1 Geoffrey A. Brannon
WO1 Dannon G. Brecht
2LT Craig D. Brewer
2LT Ronald S. Brown
SSG James W. Butler
Ms. Jo Ann Bynum
2LT Justin W. Canterbury
CW3 Robert E. Cox, Ret.
CW3 Edward T. Crean Sr.
WO1 Matthew P. Creighton
2LT Joshua deFreitas
2LT Jacqueline L. Dinehart
CW2 Steve A. Donahue
CPT David A. Dosier
Mr. Andrew Downes
2LT R. Scott Dunlap
2LT Michael F. Dyer
WO1 Jeffery A. Eads
2LT Jonathan P. Ewing
2LT Lucas M. Fischer
WO1 Charles E. Frey
1LT John B. Givhan, Ret.
2LT Michael H. Gourgues
WO1 Felicia M. Hagen
2LT William F. Hanna
WO1 Corey W. Harris
MAJ Troy V. Harrison
WO1 Steven M. Hasse
CW3 Freddy R. Hayes
2LT Ryan C. Hedberg
WO1 Jeffery J. Hoffman
Mr. Michael L. Hoppmann
2LT Angela E. Hubbard
2LT James E. Hubert
CPT David B. Hulme
2LT Debra L. Hunter
COL Sam Hurt, Ret.
2LT Kristopher J. Johnson
Ms. Amy Jones
2LT Keith C. Katzenberger
CW3 William H. Keith
Mr. Alan R. Keller
2LT William J. Kidd
WO1 Anthony T. Kruckeberg
CW4 Keith L. Langewisch
2LT Christopher J. Loftus
WO1 Frank J. Madeira
2LT Joseph C. Marshall
WO1 Brian C. McDonough
WO1 Paul I. McNeill
2LT David K. Melville
CPT Alexander L. Menkes
WO1 Richard Montoya
2LT Jeffrey M. Morreale
SSG Kenneth J. Nazario
2LT Daniel R. Nelson
WO1 Michael S. Nelson
2LT Matthew R. Nowlin
2LT Charity S. O'Dell
CW3 Brett F. Ogburn
2LT Justin P. Oliver
1LT John F. Raby
1LT Richard J. Rafael
2LT Derrick B. Rainwater
Mr. John G. Ramiccio
CPT Luis O. Remigio
CPT Andrew S. Rendon
SSG Frank G. Reyes
CW3 Patrick V. Rourke
WO1 Jason S. Ruger
WO1 Alberto D. Santillian
WO1 Zachary H. Sharper
2LT Tanner J. Spry
2LT Dana M. Stultz
2LT Joshua C. Trapp
SPC Fabian Troutman
LTC Thomas W. Tubbs, Ret.
WO1 Juan Vazquez-Rosa
Mr. Robert W. Veatch
CW4 John A. Wade
WO1 Kathryn F. Walker
WO1 Aaron W. Walsh
LTC Norman B. Watson, Ret.
WO1 Thomas N. White
Mr. Frank A. Wynne
SSG Christopher A. Yarborough

BIG RED ONE CHAPTER
ANSBACH, GERMANY
SPC Terry M. Horner

CEDAR RAPIDS CHAPTER
CEDAR RAPIDS, IOWA
Mr. Gerald W. Egeberg
Mr. James C. Perkins
LTC Russell E. Perry
Mr. Earl L. Rice

CENTRAL FLORIDA CHAPTER
ORLANDO, FL
Mr. John A. Barnocky
MAJ Llewellyn S. Buck, Ret.
LTC Harvey C. Detwiler, Ret.
Mr. Andrew M. Ghiglieri
Ms. Helen Kean Kirkpatrick
MAJ David R. Lawson, Ret.
SGT Matthew J. Leve
Mr. William C. Martin

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CW4 Mark S. Alderson, Ret.
SSG James F. Ashmore
Mr. Austin S. Barnard
SFC Randell W. Crawley
SSG Michael C. Egly, Ret.
SSG Clark K. Herring
LTC Raymond F. Holleran, Ret.
SSG Leonard J. Laraway
MAJ Joe A. Leming, Ret.
CW4 Kelly E. McDougall
SGM Michael G. Postell, Sr.
Mr. Matthew P. Shivers
Mr. James E. Stellmacher
SSG Jesse Valdemar
SFC Edmond Vallarde
MAJ Guy A. Wills, Ret.

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STRATFORD, CT
Mr. David A. Backer
Mr. Richard J. Cleary
Mr. Peter A. Laoretti
Ms. Laura P. Mazzadra
Mr. Thomas E. O'Connor
Mr. John M. Roth
Mr. Jerry Shapiro
Mr. Brian L. Shifflett
CW2 Rex W. Spencer
Mr. Bruce Staebler

CORPUS CHRISTI CHAPTER
CORPUS CHRISTI, TX
Mr. Sean M. Connors
SGT Michael W. Martin
SGT Leslie A. Williams

DELAWARE VALLEY CHAPTER
PHILADELPHIA, PA
Ms. April Koss
SGT Edward J. Phillips
Mr. Gregory L. Yerkes

EDWIN A LINK MEMORIAL CHAP
BINGHAMTON NY AREA
Mr. Walter W. Roney II
Ms. Angie Smith

FLYING TIGERS CHAPTER
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Mr. Kenneth L. Berry
CPT Roger F. Deon, Jr.
Mr. Hung V. Le
1SG Stephen N. Lynch, Jr.
1SG Donnald L. Porter, Ret.

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FORT LEAVENWORTH, KS
LTC Andrew B. Nocks
LTC Wayde L. Sumerix, Ret.
LTC Robert D. Williams

GREATER ATLANTA CHAPTER
ATLANTA, GA
MAJ Steven A. Ballew
COL Charles S. Black, Ret.
LTC John F. Comer, Ret.
Mr. Robert H. Fletcher
LTC Jack D. Ragsdale, Jr, Ret

GREATER CHICAGO AREA CHAP.
CHICAGO, IL
SGT Thomas W. Thompson II

IRON MIKE CHAPTER
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CDT Sean R. Cochran
1SG Wade Pasquarella
CSM Francisco Torres, Jr.

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COL Michael M. Davis, Ret.
SPC Dennis A. Donahue
Mr. Kevin R. Gwinn
Mr. Kevin M. Wesloh

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CPT James B. Barkley
SSG Peggy G. Barta
MAJ James H. Boozell
Mr. James T. Breznay
CPT Jakie R. Davis
CSM George E. Dorr
MSG Gilford W. Douglas
CW4 D. P. Eisele
CW2 Gilbert G. Elkins Jr.
Mr. James R. Fidler
CPT David P. Gelhaus
MAJ Paul T. Horry, Jr.
CW2 Glenn E. Kitchens
2LT Steve R. Lopez
CSM Richard L. McCullough
CPT John W. McElveen
2LT Danny B. Mckinney
CW4 John A. Miller
CW2 Gene A. Norris, Jr.
SGT Dennis C. Poston
CW3 Peter Prim
CW4 Eric S. Puette
SFC David P. Rouffy
CW2 David Sexton
CPT Bradley C. Shealy
CH(LTC) Karl F. Suhr, Jr.
CW3(P) Barry V. Thomason
SGT Samuel H. Wilds

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ST. LOUIS, MO
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NEW YORK/LONG ISLAND
AREA, NY
Mr. Wayne Comstock

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JACKSON, MS
LTC Randolph C. Bourgeois,Ret

MINUTEMAN CHAPTER
WESTOVER AFB, MA
SFC August P. Kozlak

MONMOUTH CHAPTER
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Mr. George Massabni
CW2 Matthew Merryman, Ret.
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SPC Jason Allen
SPC Daniel Bothway
PFC Jeremiah Deegan
SPC David Hendrickson
Mr. Jung Ik Lee
SSG Carlos J. Negron
SPC Tyler Nowitzki
SPC Brandon L. Perdue
SPC Terry Rogers
PFC Hope Rondeau
MAJ Stephen T. Smith
SPC Micheal Spadoni
SGT Lee Speights
SGT Anselmo M. Templado
PFC Guy Weaver
SPC Nicholas Webber

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FORT DRUM, NY
MAJ Todd A. Messitt

NORTH STAR CHAPTER
ST. PAUL, MN
CPT John C. Fabie

NORTH TEXAS CHAPTER
DALLAS/FORT WORTH
Mr. A. R. Almodovar
Mr. Leon M. Begin
COL James R. Cox, Ret.
Ms. Debbie Gearhart
Mr. Richard L. Gross
Mr. Jim Hiller
LTC Kenneth Stonebraker Rt
Mr. Mark Yana

NORTHERN LIGHTS CHAPTER
FORT WAINWRIGHT/
FAIRBANKS AK
SFC Sean P. Collins
1SG Keith M. Stafford

OLD TUCSON CHAPTER
MARANA, AZ
COL James H. Kelsey, Ret.

OREGON TRAIL CHAPTER
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Mr. John C. Helm

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CW3 Kenneth N. Golya
CW4 Jeffrey A. Harford, Ret.
CW4 Richard C. Olson, Ret.
Mr. John J. Scherer
SFC(P) Samuel Sepulveda
1SG Wayne D. Sharp

PIKES PEAK CHAPTER
FORT CARSON, CO
MAJ Lawrence R. Welch, Ret.
MAJ Neal A. West

RAGIN' CAJUN CHAPTER
FORT POLK, LA
CPT Adib R. Khoury
CW2 Scott E. Moore

RHINE VALLEY CHAPTER
HEIDELBERG, GERMANY
Mr. David C. Lock

SAVANNAH CHAPTER
FT STEWART/HUNTER AAF, GA
LTC Kenneth E. Heller, Jr.

SHOWME CHAPTER
JEFFERSON CITY, MO
MAJ William J. Thomas
MAJ Gordon E. Vandivort
SFC William J. Vogel Jr.

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CHAPTER
LOS ANGELES, CA
Mr. Glad Baldwin
LTC Walter M. Burch, Ret.
Mr. Dan DaPra
Mr. Liem Dean
Mr. Dave Godber
Ms. Heather Godber
Mr. Jim Godber
Mr. Justin Godber
Mr. Eric Gunther
2LT Robert D. Price
Mr. John R. Reimers
Ms. Cyndy Tracy
MAJ William D. Tresky

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HUNTSVILLE, AL
Mr. Kevin L. Alexandre
Ms. Ashley E. Balch
COL Gary L. Bliss
Mr. Matthew C.F. Boenker
Mr. Robert Boswell
Mr. Mark S. Bradley
Mr. Robert Carmack
Ms. Holly Carr
MAJ Russell L. Dunford
Mr. Steve L. Edwards
Ms. Gayle Falling
CW2 Robert V. Felkner, Ret.
Mr. Duane J. Gotvald
Mr. Jess F. Granone
Mr. Eric L. Haugtvedt
Mr. Phillip W. Hodges
Mr. Chris C. Holden
Ms. Marsha A. Jeffers
Mr. David L. Jones
CW4 James C. Justice, Ret.
Mr. William F. Keith
LTCOL Ton Koetsier
Mr. Thomas J. LaPointe
Mr. Eric Martin
Ms. Patricia T. Martin
Ms. Penny K. McManus
Ms. Donna B. Meadows
LTC John D. Miller, Ret.
Mr. Ricke S. Olguin
LTC Derek J. Paquette
Mr. James D. Parker
Ms. Meredith A. Payne
Ms. Sandra Ratley
Ms. Nona M. Riley
Ms. Julie L. Smith
Ms. Deborah A. Spieler
Mr. Michael G. Tesi

NEW MEMBERS cont'd.

TENNESSEE VALLEY cont'd.
Ms. Debra J. Thomsen
Mr. William H. Wadlington
Mr. David R. Walsh
1SG Kenneth J. Wells, Ret.
Mr. Victor W. Welner
Mr. Charles Winters

UNIV OF NORTH DAKOTA CHAP. GRAND FORKS, ND
Mr. Gerald Cardon

WASHINGTON-POTOMAC CHAPTER WASHINGTON, DC
Mr. Jeff Affuso
LTC Gregory A. Beacham
COL John C. Bendyk
Ms. Trang H. Bui
Mr. Robert F. Curtis
MAJ Robert P. Fabrizzio, II
Mr. James Gallon Jr.
Mr. Anthony Girata
Ms. Lynda L. Graceffo
Mr. Gil Guarino
Mr. Thomas E. Hanlon
Mr. John Hillen
MAJ Anthony G. Hoffman
MAJ Allen Jarvis
COL Mose E. Lewis, III, Ret.
Mr. Mike Long
Ms. Janis Miller
Mr. Michael L. Paterson
CW5 Earl G. Peay, Ret.
Mr. Drew Romeo
MAJ Anthony J. Satterfield
COL Lee Thompson, Ret.
CDR Guy Ullman, USN, Ret.
Mr. Edward Van Buren

WINGED WARRIORS CHAPTER SOTO CANO AB, HONDURAS
SPC William F. Guse

MEMBERS WITHOUT CHAPTER AFFILIATION
BG Mohammad Al-Neamy
MAJ Falah Al-Qahtani
Mr. Jim Altom
SGT Peter Ambrozik
COL William E. Bacon, Ret.
Ms. Janet Baker
MAJ David E. Baskett, Ret.
Mr. William J. Best
LTC Edmund Bookman, Jr, Ret
CW4 Clint F. Boswell
Mr. Pat S. Bussard
MAJ Donald L. Campbell, Ret.
CW2 Clayton S. Carnes
Mr. Jay Carter
CW3 Todd A. Clark
ATPR Mark Coulson
Mr. Michael D. Delia
LTC James E. Dodrill, Ret.
Mr. Joseph Fernandez
Ms. Alexandra Filutowski
CW4 Michael R. Friend
LTC Brett Greenland
LtCol John F. Hales
SGM Norma J. Helsham
CW4 Douglas C. Hettler
Mr. Brian Hodges
Mr. Mark T. Hogland
Mr. Don Keimig
CW4 Andrew S. Pillado
LTCOL Joe Rears
CW4 Jeffrey A. Reichard
CW3 Patrick J. Riordan
Mr. Robert Rodriguez
SFC Michael E. Rose, Ret.
CPT David W. Sandoval
Mr. Johnny M. Sands
CPT Michael D. Sennett
Mr. Steve C. Smith
LTC Robert L. Stinnett
Mr. James M. Storie
Mr. Richard M. Turner
CDT Daniel R. Wagner
Ms. Beverly Wilks
Mr. Robert J. Witt
Ms. Jentry Workman
LTC Theodore P. Wyman

Oregon Trail Chapter

CW4 Larry Yaden was inducted into the Order of St. Michael at an April meeting of AAAA's Oregon Trail Chapter. Chapter President LTC David A. Greenwood and members honored Yaden for his distinguished 35-year career in Army aviation, during which he logged more than 13,000 flight hours as an instructor pilot, maintenance test pilot and mission pilot. Yaden's service included tours in Vietnam and Korea, and he commanded the Oregon Army National Guard's counterdrug RAID Detachment for the past 10 years.

It is with great sadness that we note the April 6 death of **COL Harry J. McGinnis (Ret.)**, longtime president of AAAA's Delaware Valley Chapter and a member of the Order of St. Michael.

A native of Lakewood, Ohio, he served as an infantry officer in Vietnam before entering flight training. He went on to fly CH-47 Chinooks and fixed-wing aircraft, and was a CH-47 instructor pilot before becoming an aviation logistics officer. His last duty station before retiring from active duty was with the Office of the Deputy Chief of Staff for Logistics at the Pentagon. After retirement, McGinnis went on to a highly successful 15-year career with Boeing, during which he served as the company's program manager for the MH-47E special-operations variant of the Chinook.

McGinnis is survived by his wife of 22 years, Debra F. Eggleston McGinnis; by two daughters and three sons; by a granddaughter; and by two brothers and an uncle.

Burial will be at Arlington National Cemetery.

Tennessee Valley Chapter

On April 3 AAAA's Tennessee Valley Chapter held its "AAAA Convention Warm-Up Social" at the Fire House Club, Redstone Arsenal, Ala.

In addition to the traditional raffle and "good time had by all present," the chapter raised more than $3,825 throughout the evening. The chapter and the AAAA National Headquarters teamed up to purchase $11,000 worth of 100-unit phone cards, generously discounted by the Army and Air Force Exchange Service, to give to the soldiers of the aviation units currently deployed in support of Operation Iraqi Freedom. The following companies made significant and generous contributions: AEPCO, Inc.; Veridian; Lear; CSC; Colsa; DRC; Camber; Avion; Mevatec; Cobra; Westar and Tec-Masters. Lawrence Thomas, Tom Harrison and George Chinea also made important contributions.

LTC Cory Mahanna, chapter member at large, will deliver the calling cards to our young service men and woman as part of his deployment to Kuwait representing the Program Executive Office - Aviation.

AAAA industry and board members pose for a group picture following the night's festivities.

On April 1 the Tennessee Valley Chapter executive board voted to select the winner of the chapter Logo Contest. Following a three-month contest, the board selected Ms. Elyse M. Vergez's entry out of 23 submitted entries. Vergez, a freshman at Liberty Middle School in Alabama, received a $200 check for her winning design, which the chapter will adopt for its Web homepage and t-shirt logo. Congratulations!

COL Bob Birmingham, president of the Tennessee Valley Chapter, presented Vergez with a $200 check for her winning entry.

AAAA Membership Awards Presentation

Thursday, April 10, 2003, the first full day of the 2003 AAAA Annual Convention featured the **AAAA Annual Membership Meeting and Luncheon**, which was highlighted by the presentation of the top five AAAA membership recruiter (Top Guns) awards. At right, **Mr. John Bae** (*left*), Morning Calm Chapter, accepted the 1st place award for enrolling 785 new AAAA members from **LTG Parker** (*center*) and then AAAA National Senior VP and membership Chairman, **MG Andy Andreson (Ret.)** (*right*).

Mr. William J. Cannon (*far left*), Aviation Center Chapter, accepted the runner-up Top Gun award for enrolling 602 new members.

MAJ William W. Merrell, Magnolia Chapter, was third with 52 new members. In his absence, **COL Bradley S. MacNealy** (*left*), accepted the award.

The chapter Net Gain awards were also presented at the luncheon. Master Chapter Category award winner was **Tennessee Valley Chapter** with a net member gain of 159 members. **COL Robert P. Birmingham** (*center left*), chapter president, accepts award from LTG Parker (*right*). **LTC James D. Pepper (Ret.)**, (*far left*), chapter VP membership.

CW3 Richard H. Tanner, (*upper left*) Aviation Center Chapter, was fourth with 38 new AAAA members, and fifth was **LTC Michael F. McClellan (Ret.)** (*below left*), Tennessee Valley Chapter, who enrolled 32 new members.

The Senior Chapter winner with a net gain of 63 members was the **Magnolia Chapter**. Accepting the award is **LTC John B. Hawkins (Ret.)** (*left*), chapter treasurer.

The AAAA Top Chapter for 2002 was the **Tennessee Valley Chapter** headed by COL Bob Birmingham (*left*), president.

The AAAA Chapter category was won by **Iron Eagle Chapter** with a net gain of 36 members. LTG Parker and MG Andreson accept the award on behalf of COL David L. Lawrence, chapter president.

AAAA NEWS

AAAA President's Corner

By MG Andy Andreson (Ret.)

As your new AAAA president I would like to share with you some of the initiatives we are pursuing on your behalf.

First, the result of the recent chapter survey revealed that the number one concern is that the AAAA national organization represents the membership to national decision makers. Through The Military Coalition (TMC) and our representative, COL Sy Berdux (Ret.) we have been weighing in on the numerous quality of life issues that you see reflected every month in the magazine in Sy's column. However, we can do more. I am meeting with the president of the AUSA, GEN Gordon Sullivan (Ret.) in the next few weeks to see how we might be able to leverage off some of that fine organization's efforts. In addition, we are also exploring Aviation specific issues that the AAAA would be best at pushing forward like the Reserve Component Aviation Career Incentive Pay equalization with the Active Component that has been so well initiated by our Mississippi-based Magnolia Chapter over the last year.

Due to ongoing deployments, we have made available dues renewal waivers for those of you who are deployed. I assure you that you will not be dropped from membership and will be renewed if you request it. If we can identify you as a member of a deployed unit even without your request, we will renew you. You will receive a free one-year extension of your current AAAA membership.

Also, our Huntsville, Ala.-based Tennessee Valley Chapter held a couple of fundraisers to underwrite the cost of international phone cards for our deployed aviation soldiers. The chapter kicked in $4,000 of its own money, raised another $3,500 from local industry, and we at the National AAAA donated another $5,000 to the cause. As you will read on page 44, LTC Cory Mahanna, a TV Chapter officer, is in theater and will distribute the cards personally. Should make him a pretty popular guy. Thanks to Mr. Gary Nenninger, who coordinated our national participation.

Bottom line is that we are listening, we are acting to become more effective at the national level. We are also taking care of the members involved in the close fight with dues waivers and projects like the phone cards to make life a little easier for all of you who are making us so proud to have worn the uniform.

I look forward to working with our new Senior VP, BG Tom Konitzer (Ret.), and our new Secretary/Treasurer, MG Jim Snider (Ret.) to make a real impact on the lives of you our members through making your voices heard where they count. We won't let you down.

Above the Best!
Andy

Lost & Found

One pair of reading glasses were found at the 2003 AAAA Annual Convention in Fort Worth, Texas. If they belong to you please contact the AAAA National Office at (203) 268-2450

CW4 Chris Miller, U.S. Army Training and Doctrine Command's assistant systems manager for Comanche, receives the Bronze Order of St. Michael from CPT Dave Hulme, commander of the Early Operational Capabilities Unit, RAH-66 Comanche, during Miller's PCS awards ceremony.

Lost Members

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

Anderson, James H., WO1
Carey, Fin P., 2LT
Clements, Brian, LCOL
Doiron, Charles, WO1
Freeman, Richard, Mr.
Grober, Jesse B., 2LT
Holton, Craig A., MAJ
Kellems, Casey J., 2LT
Kohlhaas, Samuel, WO1
Lively, James R., WO1
Mann, Lucas, 2LT
Martin, Thomas R., Mr.
McKinney, Charlie S., 2LT
McLaughlin, Shawn J., WO1
Paul, David, SFC
Pirchasin, Estee S., CPT
Roderick, Timothy I., CW4
Sanford Hayden, Virginia B., 1LT
Scott, Timothy, Mr.
Spencer, Richard C., CPT
Steyn, Adrian W., WO1
Tann, Kevin, 2LT

Calendar

- **Jul. 2-6.** VHPA Annual Reunion, Orlando, FL. For more information, contact Don Joyce (407) 870-5367.
- **Jul. 18.** AAAA Scholarship Executive Committee Meeting, National Guard Readiness Center, Arlington, VA.
- **Jul. 19.** AAAA Scholarship Selection Committee Meeting, National Guard Readiness Center, Arlington, VA.
- **Sep. 15-18.** The C4IEWS Path to Military Tranformation & Homeland Security Enabled by Military & Civilian Warfighters Symposium, Sponsorsed by: U.S. Army CECOM and the Fort Monmouth Chapter of AAAA — AFCEA - AOC - AUSA. Visit website for more details: http://www.aaaamonmouthchapter.org

Army Aviation Hall of Fame

Nominations Are Open

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. Nominations are currently open for the ballot that will be distributed to all AAAA members in the fall of 2003. Nominations should be postmarked no later than July 1, 2003. Contact the AAAA National Office for details at (203) 268-2450

CSM Willy Wilson, Ret.
Army Aviation Hall of Fame 2001 Induction

CSM Willy Wilson (Ret.) began his career in Army aviation as an aircraft mechanic. On his first combat tour in Vietnam he served as mechanic and door gunner in both Army and Navy helicopter gunships. On his second he was a technical inspector, and also served as flight engineer on a CH-54 that tested new off-loading procedures for seagoing vessels. The crew off-loaded 700 tons of cargo from the Australian aircraft carrier HMAS Sydney in four hours and 30 minutes.

In the mid-1960s Wilson was a crew chief on a CH-34 with the NASA Gemini Program, and helped determine the feasibility and procedures for land versus sea recovery of returning spacecraft. In August 1979 he was NCO in charge of Operation Northern Leap, which established a new operational concept for the self-deployment of Army CH-47 Chinook helicopters in a multi-helicopter flight from Fort Carson, Colo., to Heidelberg, Germany.

Wilson's last active-duty assignment was as director of enlisted maintenance training, a position previously held by either a colonel or lieutenant colonel. He was not only successful as a department director, but also established an Aero Scout Observer Course, restructured the Air Traffic Control Course, and established and served as commandant of the Army Aviation Branch NCO Academy. His peers as directors in the Aviation School were senior commissioned officers with whom he competed successfully for resources.

Since retiring, Wilson continues to serve Army aviation as vice president, operations, for a defense contractor involved in overhauling Army helicopters.

During his active service, Wilson was awarded the Legion of Merit, Distinguished Flying Crosses from the Army and Navy, two Bronze Stars, 25 Air Medals, Meritorious Service Medal, Purple Heart and others.

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