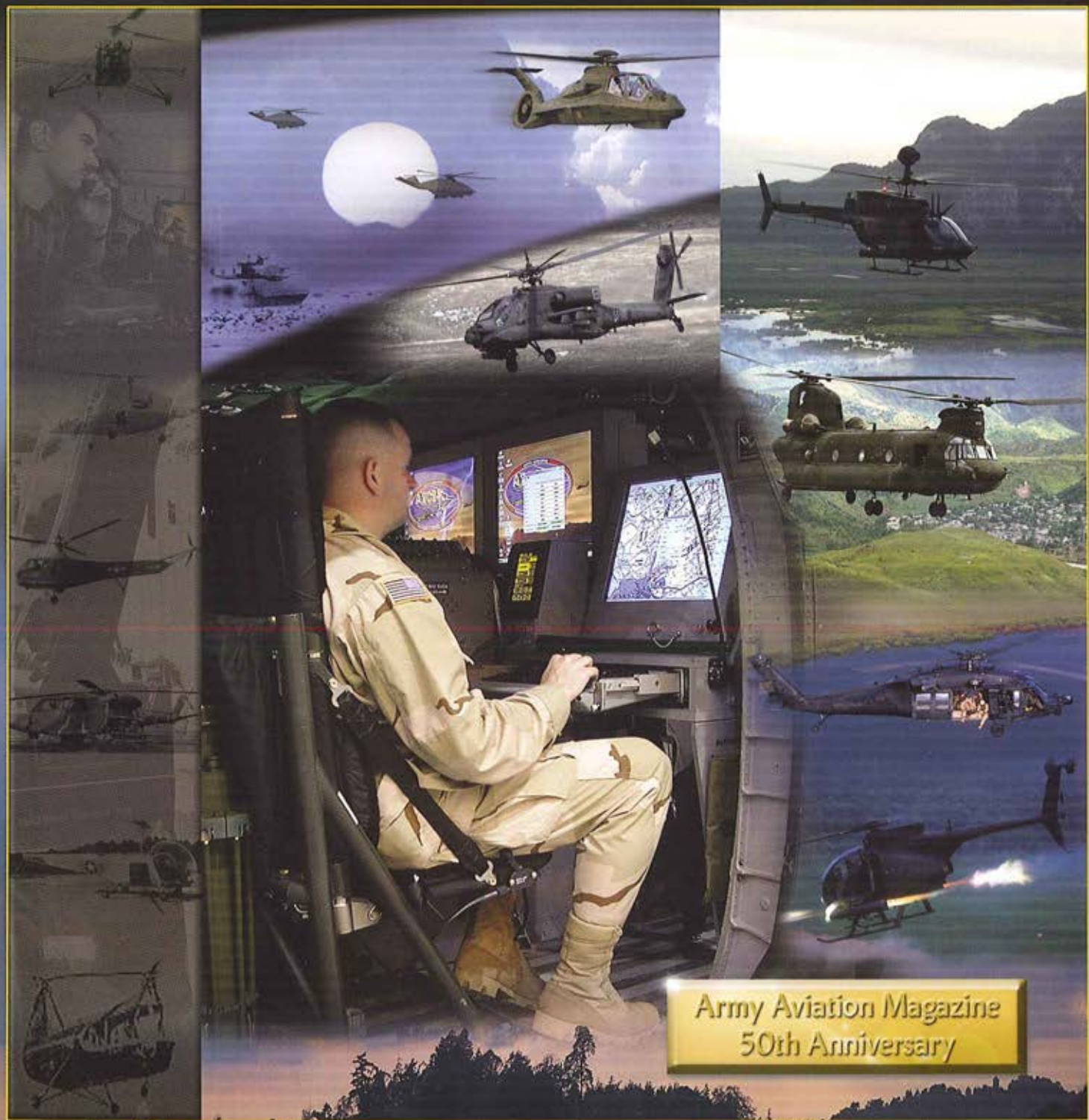


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Inside

# ARMY AVIATION

OFFICIAL PUBLICATION OF THE ARMY AVIATION ASSOCIATION OF AMERICA • DECEMBER 31, 2003 • \$3.00



Army Aviation Magazine  
50th Anniversary

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## on the cover

**Paid Advertisement.** The Army Airborne Command and Control System (A2C2S), a flying command post designed by Raytheon, has seen active duty in Operation Iraqi Freedom. The Army outfitted a number of Black Hawk helicopters with the A2C2S mission equipment package which transformed the helicopters into airborne command and control posts flying at 120 nautical miles per hour and enabling commanders to travel wherever needed without interrupting command and control. *Caption provided by advertiser.*



BG James Pillsbury has taken over as commander of the U.S. Army Aviation and Missile Command and Redstone Arsenal, Ala. He succeeds MG Larry Dodgen, who is moving on to become commander of the Space and Missile Defense Command in Arlington, Va. Dodgen became AMCOM commander in September 2001.

Pillsbury — a senior Army aviator — has been deputy chief of staff for U.S. Army, Europe, and Seventh Army since August 2002. He has a bachelor's degree in history from Trinity University and a master's in international relations from Troy State. Military schools he has attended include the Infantry Officer Basic Course, the Transportation Officer Advanced Course, the Command and General Staff College and the Army War College. He has served at Fort Lewis, Wash.; Fort Rucker, Ala.; Fort Eustis, Va.; Fort Campbell, Ky.; Fort Leavenworth, Kan.; Washington, D.C.; Fort Drum, N.Y.; and New Cumberland, Pa.; as well as in Korea and Germany.



The U.S. Army Aviation and Missile Command at Redstone Arsenal, Ala., has awarded Northrop Grumman Corp. a \$10.5 million modification to a cost-plus-fixed-fee contract for contractor logistical support, which will include depot maintenance/supply support, labor and materials. The work will be performed in Sierra Vista, Ariz., and San Diego, Calif., and is expected to be completed by Sept. 26, 2004.

Hupp Aerospace/Defense has won a two-year, long-term Defense Department contract to provide maintenance kits for the Army's AH-64 Apache attack helicopter fleet. The contract, awarded by the Defense Supply Center Richmond, is valued at more than \$7 million and includes three one-year options. The firm currently produces the 500-Hour Phase Inspection Kit for the Army's UH-60 Black Hawks.

The RQ-5 Hunter unmanned aerial vehicle built by Northrop Grumman Corp. reached its 3,000 combat flight-hour milestone last month in the skies over Iraq. As of Nov. 2, Army Hunters had flown nearly 600 combat sorties totaling more than 3,100 hours since deployment to Iraq in January 2003. The Army has extended Hunter's operational deployment through the first quarter of next year, while continuing its flight-test program in the United States to demonstrate the system's ability to meet new mission requirements.

In a widely praised show of support for reserve-component employees who have been called up for service, the Sears retail chain has announced it will continue to pay the difference between the employees' salaries and their military pay. In addition, Sears will maintain the employees' full range of benefits, including medical insurance and bonus programs, for all called-up employees for up to two years.

The Army has selected CAE USA to provide desktop trainers (DTTs) and a reconfigurable part-task trainer (PTT) for the MH-47G Chinook and MH-60K Black Hawk helicopters operated by the 160th Special Operations Aviation Regiment (SOAR). The initial delivery order, valued at approximately \$5 million, calls for CAE to design reconfigurable MH-47/MH-60 PTTs and DTTs. The firm is currently in negotiations with the Army for the production of an MH-47G combat mission simulator (CMS) and an MH-60K CMS. If CAE secures this additional work, the total contract value is expected to be approximately \$85 million.

Marjorie Bong Drucker, a nationally known writer and magazine publisher, and the widow of World War II fighter ace Maj. Richard Bong, died Sept. 27 in Superior, Wis., after a six-year battle with cancer. She was 79.

## ATTENTION AAAA MEMBERS!!!



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ARMY AVIATION is the official journal of the Army Aviation Association of America (AAAA). The views expressed in this publication are those of the individual authors, not the Department of Defense or its elements. The content does not necessarily reflect the official U.S. Army position nor the position of the AAAA or the staff of Army Aviation Publications, Inc., (AAPI). Title Reg® in U.S. Patent office. Registration Number 1,533,053. SUBSCRIPTION DATA: ARMY AVIATION (ISSN 0004-248X) is published monthly, except April and September by AAPI, 755 Main Street, Suite 4D, Monroe, CT 06468-2830. Tel: (203) 268-2450, FAX: (203) 268-5870, E-Mail: [aaaa@quad-a.org](mailto:aaaa@quad-a.org). Army Aviation Magazine E-Mail: [magazine@quad-a.org](mailto: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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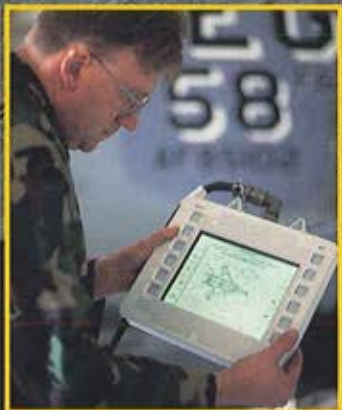
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## Notes from the New Aviation Branch Chief

BG E.J. Sinclair



### To the Soldiers and Leaders of the Aviation Branch:

I am very humble, proud and privileged to be your new Aviation Branch Chief. Last Wednesday as I looked out on Howze Parade Field, I was reminded of why I love being a Soldier and an Army Aviator. The Silver Wings Band and the soldiers standing in formation representing the Aviation warriors serving throughout the world and so proudly representing our branch was truly awe inspiring. So, I wanted to take this opportunity in Army Aviation Magazine to share a few thoughts with you.

First, our branch owes a heartfelt thank you to MG(P) Mark Curran for his truly outstanding job as our 9th Aviation Branch Chief and Commanding General of the U.S. Army Aviation Center and Fort Rucker. His tremendous leadership and vision over the past 28 months has ensured Aviation is on course with Army transformation objects and that we are meeting the warfighting needs of our field and combatant commanders. He'll do great things for our Army as the Director of the Futures Center with TRADOC at Fort Monroe, Va.

Recently, I participated on the Army Chief of Staff's Task Force — Aviation study group led by MG J.D. Thurman and then the follow-on brief to GEN Schoomaker. The Chief of Staff asked the Aviation community to provide him with a holistic review of Army Aviation and to recommend how we could maximize Army Aviation as an integral part of the combined arms team in joint battlespace. The CSA provided excellent guidance on his vision and expectations for Army Aviation in the coming years. As a result of the Task Force study and recommendations, Army Aviation will undergo several changes in the near future. We must embrace these changes and work together to shape Army Aviation of tomorrow. I am honored to be part of these important changes — changes that will be the foundation for our branch well into this century.

But, we must remember that we are an Army at war supporting our nation and her allies with the global war on terrorism. The past few years clearly demonstrated that the world is a dynamic, uncertain and dangerous place. The unsettling occurrences in Iraq, Afghanistan, the Balkans and on the Korean Peninsula reaffirm the need for a prepared and ready Aviation force. I see my primary mission is to ensure every Aviation Soldier is equipped and trained to accomplish their wartime mission. All the weapons in the world and the best technologies are useless without the intellect, dedication and remarkable sense of duty of our soldiers. Our top priority here at Fort Rucker is to provide the best trained aviation warfighters — soldiers, NCOs, warrant and commissioned officers, and unit leaders — to our field units. This means we are actively listening to you, your leaders and subject matter experts, and taking the experiences and lessons learned from ongoing operations to incorporate and modify our courses of instruction at our aviation training centers. We are working quickly to refine and improve the training of our soldiers.

We have a great Branch and Army Aviation is well respected throughout the Armed Forces. Thank you for what you do each and every day for Aviation Branch, our Army and our Nation. I pledge to you my best efforts as the 10th Aviation Branch Chief and am honored to be part of the Army Aviation Team.

ABOVE THE BEST!!!

Sincerely,

E.J. Sinclair  
Brigadier General  
Commanding General



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# Farewell Message

from MG(P) John M. Curran

*Our heritage with the Army and as a branch runs deep and, today our value as a member of the combined-arms team on the battlefield is immeasurable.*

A few short months after I took the reins of our branch, terrorists attacked the United States. Sept. 11, 2001, in many ways defined the direction and speed of Army aviation transformation. Since that day we have fought, flown and lost distinguished friends and soldiers in Afghanistan and Iraq. Our will to rid the free world of terrorism has never wavered and our soldiers' will to win our nation's wars has been the difference. Our soldiers continue to make our coun-

try and other locations safer places in which to work and live.

Over the course of the last few years we have initiated strategies that have prepared our branch to meet the demands of future military requirements. We have had success in balancing readiness, modernization and our soldiers' well being.

The message from the field was clear: "Give us aviators that are trained in their go-to-war aircraft." The plan to answer that demand was an accelerated Flight School (FS)

XXI. The pilots we are now placing in units are trained and ready for the demands of unit mission training. Aviation leaders are receiving pilots trained in basic combat skills — pilots who quickly master the combat skills required of their units.

A host of Army professionals have set the stage for unit successes by creating a Master Gunner's Course, a Tactical Operations (TACOPS) Course and a Non-Rated Crewmember Instructor Course. In addition, Army professionals have established



BG E.J. Sinclair assumed command of the U.S. Army Aviation Center and Fort Rucker, Ala., from MG John M. Curran and became the 10th Aviation Branch chief on Dec. 10, 2003.



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a Master Gunner and TACOPS career track, and have opened and staffed the Seneff Aviation Warfighting Simulation Center. The AWSC has trained individuals and units deploying to Operation Joint Endeavor since its beginning.

*Army aviation's role of providing the indispensable vertical dimension to the modern battlefield has come to be universally recognized.*

In conjunction with preparing our aircrews to fight and win, we are modernizing our fleet of aircraft through the accelerated retirement of legacy (OH-58C, AH-1 and UH-1) aircraft. Achieving the future force is only possible through the continued procurement of TH-67s for the training fleet. We are also modernizing our AH-64, CH-47 and UH-60 fleets and must remain on schedule with RAH-66 procurement.

A complete review of how we maintain and sustain our warfighting aircraft will determine our success in improving operational readiness and reducing operations and support costs. Automated logistics, digital maintenance data collection, automated parts

marking and other logistics initiatives will redefine how we manage our aviation assets in the future force. Much remains to be done and many critical decisions must be made that will define what we will look like and how we will fight.

Warfare is a continuous test of will between two thinking and adaptive adversaries. Army aviation has assisted U.S. ground forces to remain dominant over the land fight in the past and will continue to do so in the future.

Leader-development training has received increased emphasis over the past few years. We have incorporated lessons learned in operations Enduring Freedom and Iraqi Freedom into every facet of leader and soldier training. We have experienced combat veterans teaching and facilitating training at all levels. This is preparing our leaders to pave the way for Army aviation.

Changes in our organizational design, doctrine and materiel advances will require new approaches to safety. Aviation safety is a function of competent, confident and experi-

enced crews. We are experiencing positive trends as we continue to fight and secure our homeland at an increased operational tempo. Safety is not "business as usual," it is integrated into everything we do as soldiers. Our safety programs and command emphasis will continue to be a force multiplier.

As I depart Fort Rucker for the moat at Fort Monroe, I am comforted to know that my replacement is tremendously qualified to lead our Branch. BG E.J. Sinclair is a true warrior. Few soldiers have his tactical and technical credentials. He has led soldiers in combat, at our combat training centers, and in heavy, light and cavalry organizations. Give him the same professional support you have given all the branch chiefs.

It has been my distinct privilege to have served as your branch chief over the past two-and-a-half years. There are several organizations and individuals I want to acknowledge for making significant contributions to our mission during my tenure.

■ First, the entire organization of AAAA — your magazine, conventions, leadership and active participation in the consortium of professional military organizations helped to make our branch a recognized leader in aviation.

■ Second, the soldiers, civilians, contractors and tenant organizations at Fort Rucker, the U.S. Army Aviation and Missile Command, and the Program Executive Office-Aviation — you have set professional standards Armywide for the future of our branch.

■ And last, thank you to the soldiers working 24/7 to keep our nation free from terrorism. The sacrifices of you and your families are recognized by a grateful nation. You are conducting a very difficult task with bravery, honor and dignity.

"Above the Best."



MG(P) John M. Curran was the commanding general of the U.S. Army Aviation Center and Fort Rucker, Ala., and the ninth chief of the Aviation Branch from Aug. 9, 2001, to Dec. 10, 2003. He is now director of the Futures Center, U.S. Army Training and Doctrine Command, at Fort Monroe, Va.

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U.S. ARMY AVIATION CENTER AND FORT RUCKER  
OFFICE OF THE COMMANDING GENERAL**

December 1, 2003

Dear Army Aviation Magazine,

On behalf of the Soldiers and civilians of the Aviation branch, we congratulate you on 50 years of outstanding coverage and service to the Army Aviation Association of America (AAAA) and the United States Army.

Since your humble beginnings with the first issue in March 1953, Army Aviation magazine has provided the members of AAAA and generations of aviators, crewchiefs, air traffic controllers, flight surgeons and medics, maintainers, tacticians and others in the aviation profession with a wealth of quality information on the latest changes in our doctrine, equipment, technologies, and future endeavors.

Please convey our admiration and thanks to your staff and the many other people who have contributed to Army Aviation magazine during the last 50 years. They have made Army Aviation magazine the great publication we are proud to call our de facto professional branch journal.

Thank you and best wishes for the future.

Sincerely,

John M. Curran  
Major General, US Army  
Commanding





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U.S. Army Aviation Community,  
past and present...

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# 50 ARMY AVIATION TH ANNIVERSARY

By William R. Harris

**F**ifty years of age for a publication is a long time. Although I can't claim any scientific research, I'll bet there aren't 100 magazines in the United States that can make the same statement. Titles like TIME, SCIENTIFIC AMERICAN, FIELD and STREAM come to mind but other once famous names in 1953 like LIFE, LOOK, and COLLIERS have all come and gone. Granted we aren't quite in the same class, but there is a reason why we are still around. I believe that it is because we fill a need for a magazine that is written by you, published for you, and read by you, the U.S. Army Aviation Soldier, DAC and industry partner.

It all started in our Founders', Art and Doty Kesten's, New York apartment in March of 1953. In the December 1992, 40th Anniversary issue, Art explains.



MARCH 1, 1953

This is the first issue of a monthly newsletter that will be mailed to Army Aviators of all Components who reside in or who are stationed in the First Army area.

The contents of each newsletter will be derived from military and civilian sources with whom the average Army Aviator would ordinarily not come in contact.

This newsletter is published at the outset with private funds by a group of interested Army Aviators in view of the fact that a government economy directive precludes the publication of this information through official channels. It is hoped that all Army Aviators will become contributors as well as subscribers.

A check for one dollar (\$1.00) is earnestly solicited to defray the costs of publishing and the stamped return envelopes. Please make your check payable to Capt. Arthur M. Kesten and mail to "Army Aviation Section; Hq, First Army, Governors Island, NY; ATTN: Army Aviation Newsletter.

## The beginnings

As a Reservist flying weekends from Governor's Island in N.Y. Harbor in '53, we edited a monthly Mimeograph newsletter primarily for those Army Reservists (ARNG and USAR) who were in First Army, and a relatively few active Army Aviators.

We did so at gov't expense (Uncle Sam's mimeo machine, paper, and postage, but our sweat).

The "Why?" of the effort is outlined on the cover of our very first mimeograph issue dated March, 1953 that's reproduced here.

We were subsequently thrown off post five months later when the First Army G-1 told us the newsletter and its use of the First Army patch were unauthorized. Our immediate response? In today's vernacular, we 'privatized' our operation, asking our readers to become subscribers at \$2 per year. A little over a year later, some 2,600+ had sent in their two dollars.

## The staff

Initially a true "Mom and Pop" operation run as a hobby from a 14th story, two-bedroom apartment in downtown New York City (as shown in Joe Gayhart's cartoon below) the magazine staff in Connecticut went to two full-timers in July, '55; went to four persons

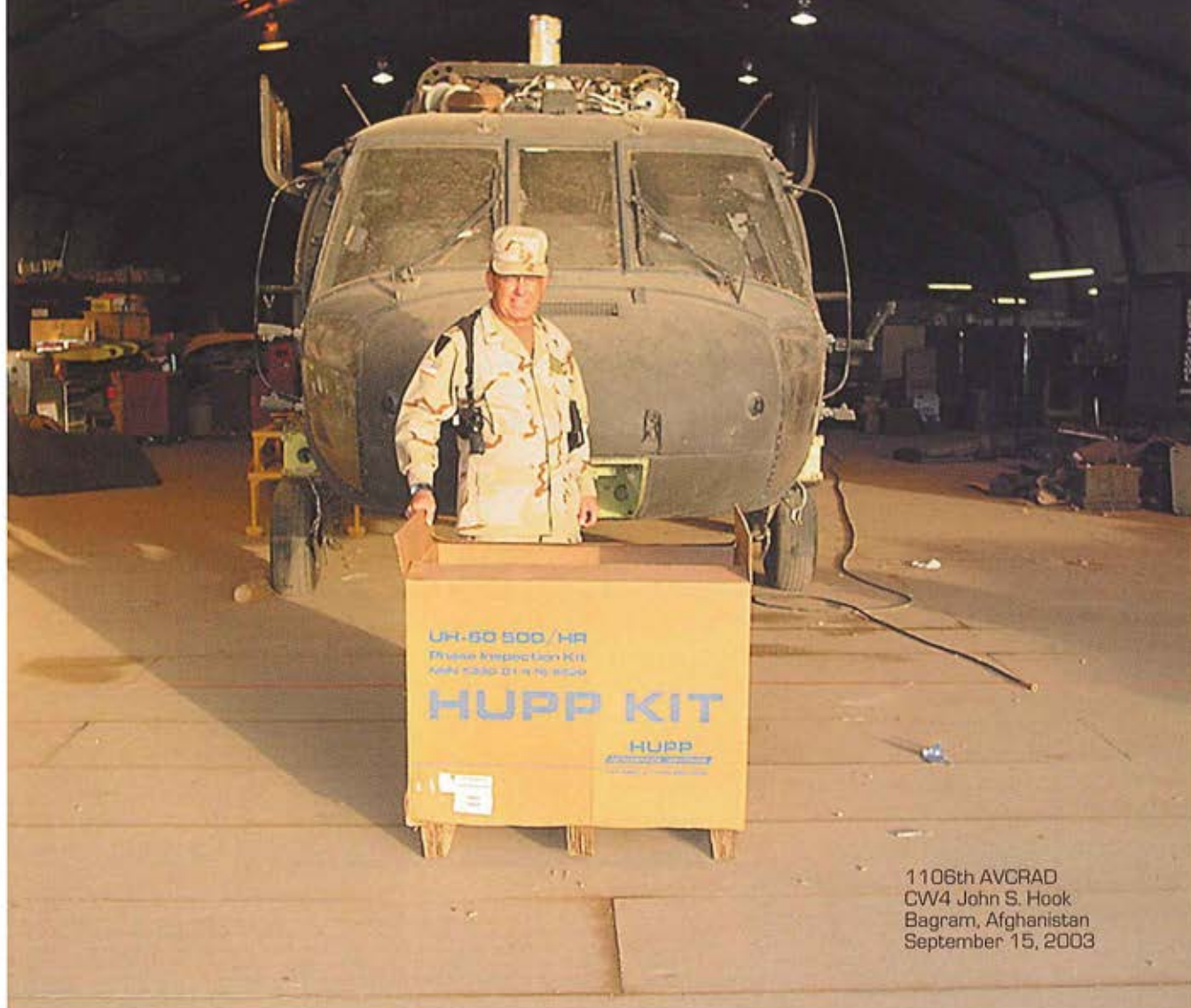
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in '70 as more AAAA administrative tasks were handled by the staff (and here began our electric heaters, down-in-the-basement, lots of residual smoke operation); and then went to eight very cramped bodies in '83.

Peel away the four-color veneer and you'll find that "Mom" was the real dynamo in this enterprise . . . How does one work side-by-side with one's wife day after day for 36 years, and still remain civil, yet alone married? We agreed early on that anything that pertained to "numbers", be it checks, deposits, accounting, IRS, bills, etc. would be her responsibility. And anything that applied to "letters" - editorials, page production, ghost-writing, advertising, AAAA communications, etc. - would be my job. It was this very simple and clear cut division of workplace duties that kept us amicable marriage and business partners.

In 1987, Art and Doty sold the publishing company to their daughter Lynn, who brought her expertise as the former Executive Director of the American Helicopter Society, (AHS), to bear. Lynn actually drove the biggest change in the history of the magazine when she brought us from digest size to full size magazine in 1998.

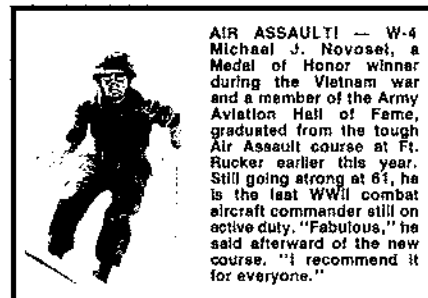
**F**rom the early literally "mom and pop" years, through Lynn's 16 years, to my ownership since August of this year, I see a fascinating story of the evolution of this powerful Combat Arms branch in these pages. As I looked through 50 years of back issues in preparation for this issue, I have been completely impressed with the professionalism, passion, and dedication of our soldier-authors to get it right, get it down on paper, and get it out to the field through the vehicle we provide, ARMY AVIATION Magazine.

As I leafed through the past issues I also found a number of interesting items, a few of which we'll share here.

- How about CW4 Mike Novosel (*top right*), Medal of Honor recipient, graduating from Air Assault School at the age of 61 in 1984.
- Ad for rotary wing UAV in 1958 (*second from top*).
- CWO Don Joyce qualifying with numerous shipboard landings on the icebreaker USS Glacier in 1958 (*below right*).
- Phone number for AAAA that starts with "Clearwater 9- 4752" and no area code.
- Officers' Wives Teas (*below*).
- GEN Ham Howze's late 50's 1958 article mentioning the utility of Army Aviation to increase mobility on the Nuclear Battlefield post detonations.



Mrs. Bogardus S. Cairns, wife of the Commanding General of Fort Rucker, acts as hostess at a recent coffee in the Officers Club for the volunteer workers in the Thrift Shop. The coffee was sponsored by the Women's Club at Fort Rucker. Waiting to be served are, left to right, Mrs. Rollo Allen, Mrs. James Laycock, Mrs. Otis Wolten, Mrs. Thomas Lang, Mrs. Adrian Cunningham, and Mrs. Joseph Wood. (U.S. Army Photo)



**AIR ASSAULT! — W-4 Michael J. Novosel, a Medal of Honor winner during the Vietnam war and a member of the Army Aviation Hall of Fame, graduated from the tough Air Assault course at Ft. Rucker earlier this year. Still going strong at 61, he is the last WWII combat aircraft commander still on active duty. "Fabulous," he said afterward of the new course. "I recommend it for everyone."**

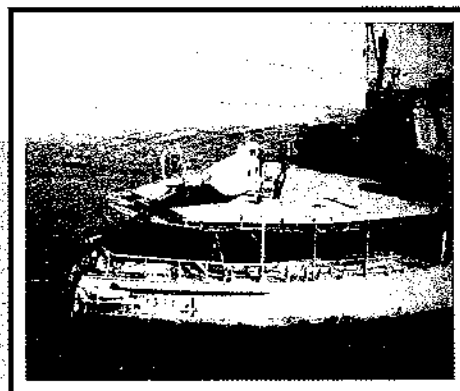


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Becoming "Shipboard-Qualified" by dint of six landings on the USS Glacier this summer, six USA TREGG AA's prepared themselves through cross-training for emergency work in the Thule Area. Lts. John A. Johnston, James R. Blackmore, and Elvin H. Underwood; and CWO's John H. Chreitzber, Gordon E. DeGeest, and Donald R. Joyce were the AA's who completed the 36 landings and pilot changeovers without incident. Landings on the nation's largest Icebreaker were made in shallow approaches with the aid of a signalman. Brakes were locked during touchdowns to prevent forward rolling. (USAF photo.)



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A3008-1003





■ CPT Robert M. Leich (*above left*) and then LT Robert R. Williams (*above right*) at Fort Sill, OK the birthplace of modern organic Army Aviation in June of 1942.

■ Tilt rotor/tilt wing (*top right*) from 45 years ago!

■ Flying Jeep (*second down on right*).


■ Senator LBJ getting helicopter ride in 1958 (*bottom right*).

■ President Eisenhower (*below*) using Army Aircraft and aviators for White House transport prior to Marines assuming the mission.

# ARMY AVIATION

AUGUST 18 ★ 1958

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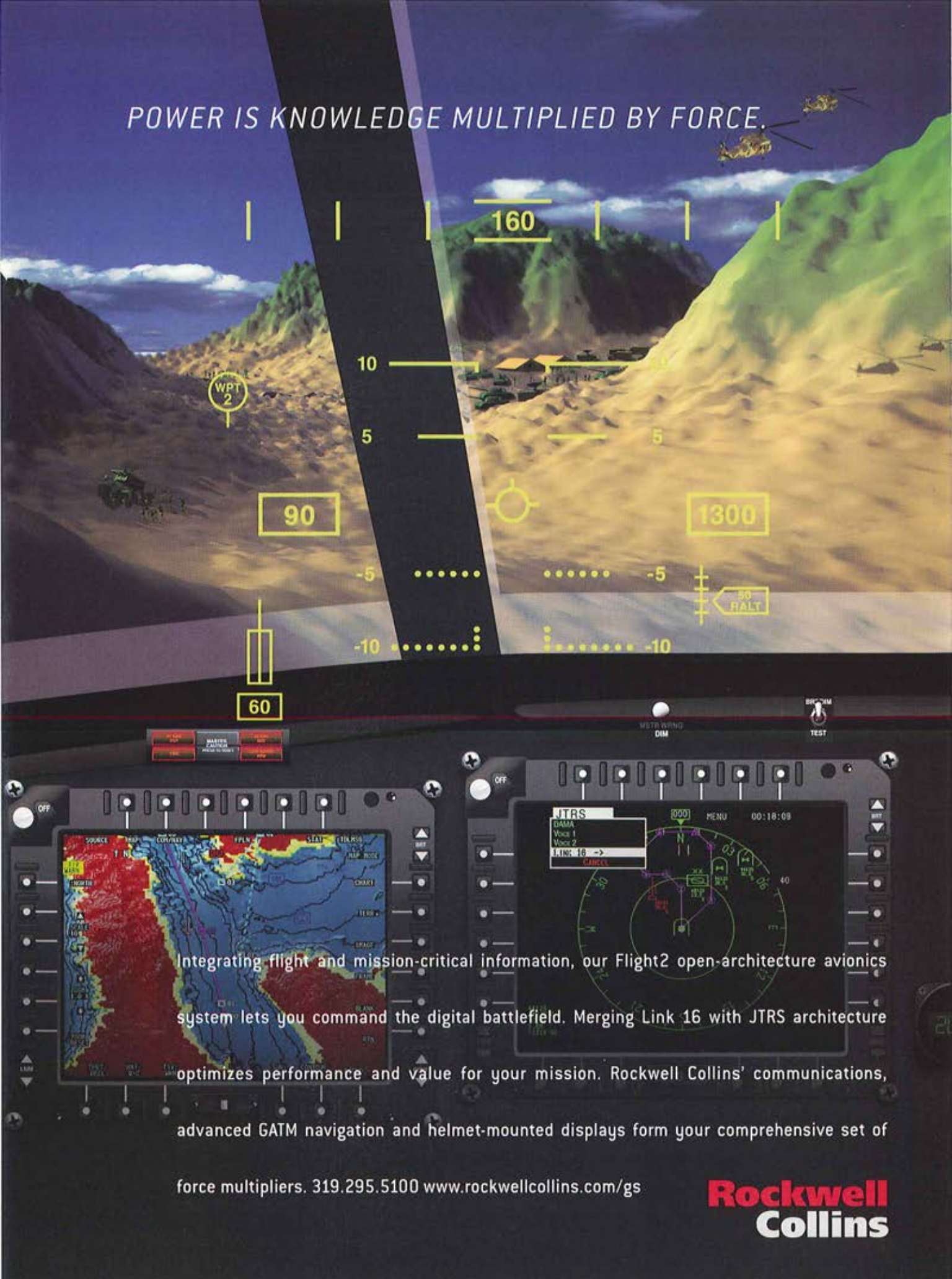
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■ COL(P) Don Parker hits 2,000 Mohawk hours! (top left)

■ First mention of LHX/Comanche 1980, 23 years ago... IOC (Initial Operational Capability) was projected to be early 1990's ...ouch! (upper right)

■ A definitive history of Army Aviation published in the December 1992 issue marking the decade-by-decade events since the first class of aviators graduated from Fort Sill, OK in June, 1942 by the men who were there, LTG Bob Williams, GEN Ham Howze, LTG Harry Kinnard, GEN Shoemaker, and Joe Cribbins. (below right)

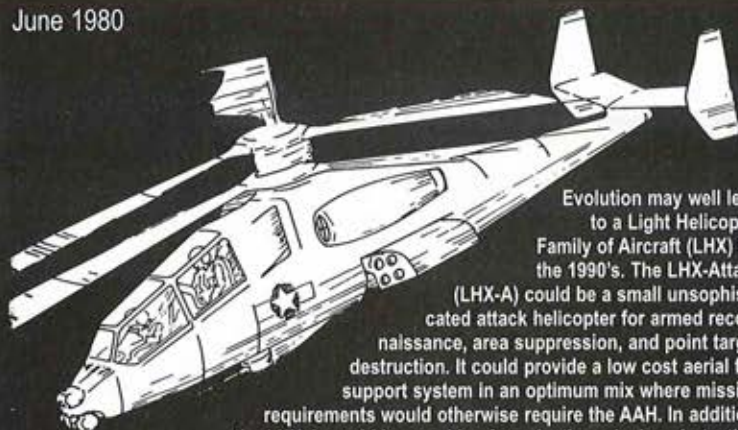
■ MG Cairns (below left) receiving his second star from his young son upon landing from a self piloted TDY trip in 1958.

**E**vents like Urgent Fury in Grenada, Just Cause in Panama, Gothic Serpent, and the coming of age of our Special Operations community with the 160th Special Operations Aviation Regiment, (Airborne) were all a part of the story. In fact, one of my first assign-

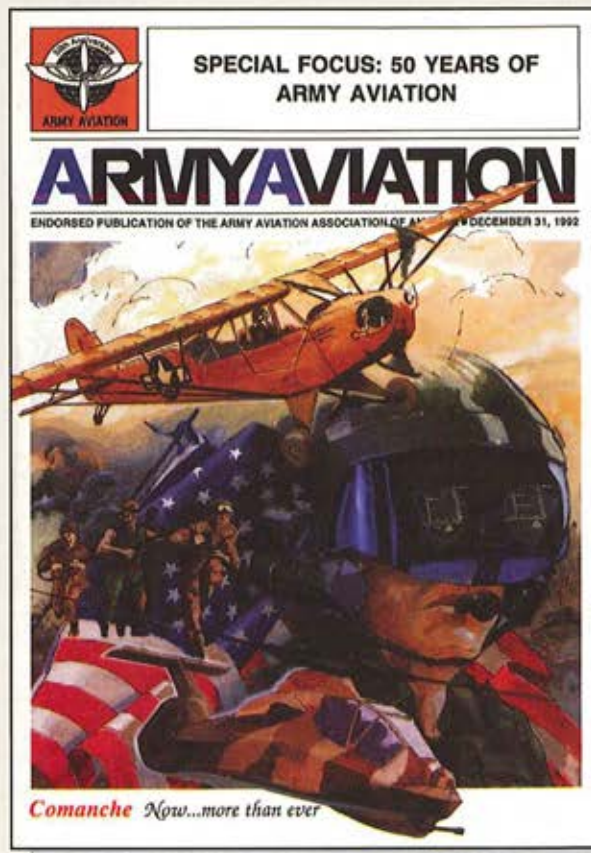


**SURPRISED** — Playing a one-star sheriff, Scott Cairns, six-year-old son of Maj. Gen. Bogardus S. Cairns, presents a second star to his Dad upon the General's arrival at Ozark Army Airfield. The Cairns family had received D/A notification of the promotion while the General was in flight to Fort Rucker, and young Scott was deputized to make the surprise presentation at the airport. (USA photo)

June 1980



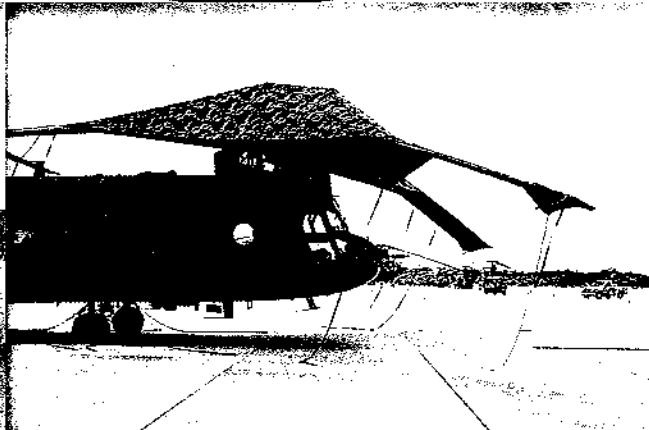
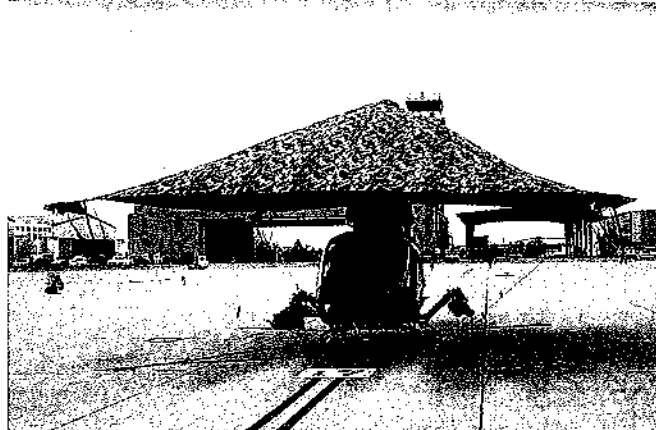
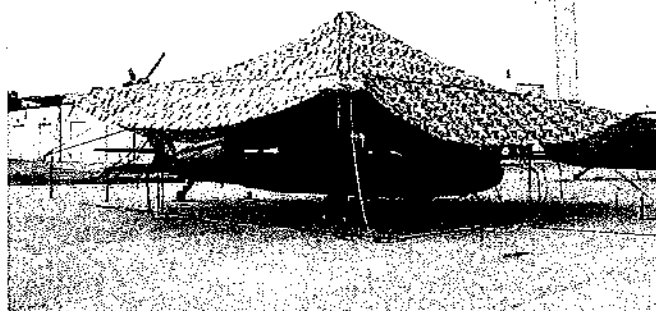
Evolution may well lead to a Light Helicopter Family of Aircraft (LHX) for the 1990's. The LHX-Attack (LHX-A) could be a small unsophisticated attack helicopter for armed reconnaissance, area suppression, and point target destruction. It could provide a low cost aerial fire support system in an optimum mix where mission requirements would otherwise require the AAH. In addition, the LHX-A would be capable of conducting missions in tactical requirements for the more lightly armed/equipped scout helicopter.



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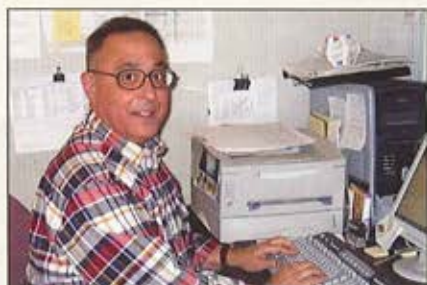
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## Army Aviation Magazine & AAAA Staff



**Mike Safarewitz,**  
Assistant to the  
AAAA Executive  
Director

**Steve Harding,**  
Editor.



*[Not pictured, but not  
forgetten, Jim Bullinger,  
Contributing Editor.]*



**Barbara Ross,**  
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Manager, AAAA  
National/Functional  
Awards Program  
Manager.

**Bob Lachowski,**  
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**Mary Ellen Kother,**  
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Program Manager



**Joan Zinsky,**  
Membership  
Services



**Debbie Coley (left),** Mailing Operations, **Diane Grinstead (center),** AAAA Membership Services, **Mary Ann Stirling (right),** Office Manager, Director of Scholarship Programs and AAAA Membership Services.

**I**n the following pages, you will see that I have selected one or two articles per decade that capture the flavor of each period for me. We easily could have made this issue 200 pages and still not adequately covered this half-century of events in Army Aviation. Appearing in these pages over the years have been some of the true giants of our past like the aforementioned GEN Ham Howze. There have been great articles by non-aviator leaders like GEN Butch Saint in the late 80's on Joint and Combined operations. And many, many fine articles were contributed by former Branch Chief, LTG Don Parker, who really consolidated the branch and put it on the map, as well as numerous Secretaries of Defense and Army, and many Army

Chiefs of Staff. What is equally impressive to me though are the articles by lower ranking individuals who get to specific issues like Leadership as you will see from CPT Doug Gabram on Page 46 published in 1992 when Doug was the HHC commander for 1-101. Doug is now the 1-101 Battalion Commander in Iraq putting his words to good use as you will see in his new article co-authored with an Infantry Battalion Commander on integrating combat operations on Page 48 which brings us neatly up to the present. We are also republishing two articles by the famed MG Phip Senneff in this issue, one as a colonel from the 50's contemplating the future and fantastic platforms like a "flying Jeep", and the other in the throes of combat in 1968 in



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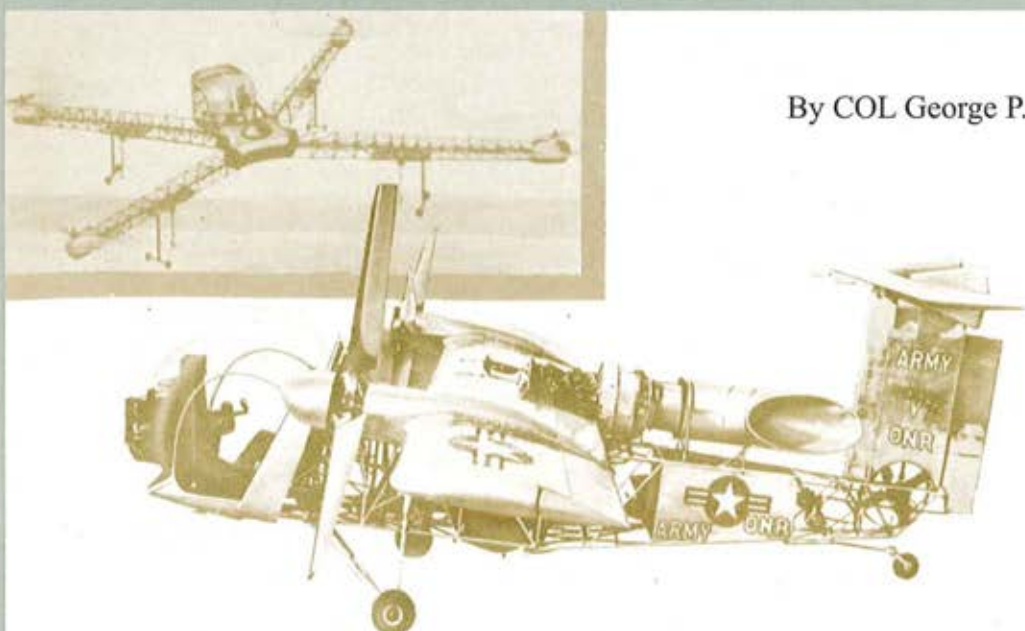
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*[Editor's Note: The following articles from past issues of Army Aviation are presented here exactly as they originally ran.]*

# FUTURE AIRCRAFT

By COL George P. Seneff



**A**lthough the aircraft the Army has are good, they do not have the characteristics that will be needed in the future. It is difficult for them really to become an integral part of the ground Army in the field. In the fixed-wing aircraft, landing and take-off runs are too long; and maintenance of both types is difficult for forward operations.

In its development of future aircraft the Army is attempting to insure four things:

First, true ease of maintenance under battlefield conditions.

Second, a true short take-off and landing capability for fixed-wing aircraft. In effect, this means that we should not in the future consider any airplane which will require more than 600 feet to take off or land over a 50-foot obstacle (i.e., a ground run of about 250 feet).

Third, the capability in fixed-wing airplanes of landing or taking off on rough, unprepared, even plowed fields.

Fourth, for all aircraft, a high degree of all-weather capability. This means that the aircraft must be able to operate under any conditions of visibility under which ground vehicles can be effectively operated. Attaining this capability involves development of better instruments and better navigational and air traffic control systems.

To give the Army the aircraft it will need, the Army aviation research and develop-



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ment program is concentrating in three areas —

A short-range program to give the Army conventional aircraft which will be able to do the job better than those now available.

A longer-range program to replace these conventional aircraft with more unconventional types which will better perform the basic functions.

A new approach in completely unconventional aerial vehicles designed as true replacements for ground vehicles.

### **FIXED WING DEVELOPMENTS**

In the first or short-range program, we are seeking improved aircraft in both the fixed and rotary wing field. By 1960 or shortly thereafter, we hope to replace all of the aircraft that we now have and add some new ones to the family.

For a long time to come, a large portion of the aircraft in Army aviation are bound to be small observation airplanes like the L-19. We hope to select a replacement for the L-19 within the next two or three years. This replacement will have a better payload, a better cruising speed, and a better unprepared short field landing and takeoff capability.

to find a light inexpensive substitute for our present reconnaissance helicopters. While existing types are very good machines, they are expensive and difficult to maintain under field conditions. Accordingly, we are seeking a simple two-place machine which will weigh about one-half and cost about one-half to one-third, compared with present reconnaissance helicopters. What we are really seeking is a "Model T" approach — a machine that could be maintained in the front lines and which we will be able to afford to buy on a much larger scale than at present.

Next, in the helicopter family is the H-40. Built by Bell Aircraft, it has already made its first flight. This — the first U.S. helicopter designed to use a gas turbine engine — will have greatly increased performance capabilities over the Army's present utility helicopters and will be more compact and rugged for forward area use.

The H-40 will be a very agile machine — a real "aerial hot-rod". In addition to operating as a utility cargo, command and medical evacuation helicopter, it will be very adaptable to use in Sky Cav units, both as a fire support helicopter mounting machine guns and rockets, and as a troop carrier for

**For a long time to come, a large portion of the aircraft in Army aviation are bound to be small observation airplanes like the L-19.**

In addition to this light observation capability, however, the Army has a strong need for a higher performance observation aircraft for shallow penetration flights over enemy-held areas to obtain information and to acquire targets for our own ground-to-ground missiles. One of its primary functions will be to carry electronics surveillance equipment, such as infra-red and radar, that the Army will use for gathering intelligence information and target acquisition data.

Accordingly, the Army now has under development, in conjunction with the Marine Corps, the "Mohawk," a higher performance observation airplane. Powered by twin turbo-prop engines, it will have a maximum speed of about 275 knots, a loitering speed of less than 100 knots, and a short take-off and landing capability. This last will enable it to live with the Army in the field.

The largest fixed-wing airplane which the Army is purchasing for test is the de Havilland "Caribou" — the first airplane in which the Army has been permitted to exceed the 5,000 pound weight limitation. Weighing about 13,000 pounds empty, it will have a payload of 3 tons, a cruise speed of about 150 knots, and will have very good short field landing and take-off capabilities. The Army is to get five for service test early in 1959.

### **ROTARY WING PROGRESS**

In the field of helicopters the Army's first effort is

battlefield transport. The Army will start getting these in 1958.

The next helicopter under development is the three-ton payload class and will be developed as the largest internal load cargo-carrying helicopter. Again the goal here is increased performance and much easier maintenance.

One chief use of this type helicopter, besides its normal cargo carrying function, will be to provide mobility for missile units to enable them to move freely and easily on the battlefield.

Last in the helicopter family is the "flying crane." Essentially, this is a flying framework to give the Army heavy lift capability which it requires. This helicopter should be able to take payloads of up to 12 tons for distances of 25 to 50 miles. Besides being used for movement of critical supplies, it can serve such purposes as lifting small armored vehicles over barriers, putting bridging into place and moving other heavy materiel about the battlefield.

**A**ircraft of this type are being studied by the helicopter industry at the present time. This machine rounds out the family now under development to replace or supplement existing aircraft.

In the longer range program, more unconventional approaches are being followed. Recent advances in the state of the art have made it apparent that the Army may, in the future, be able to perform with fixed-wing aircraft many of the tasks for which



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heretofore it has had to use helicopters. Because the helicopter cannot, for technical reasons, attain the same speed and range as fixed-wing aircraft, it is very much in the Army's interest to replace as many helicopters with airplanes as possible with the additional hope that the cost and complexity of the unconventional fixed-wing aircraft will at least not exceed those of the helicopter.

Very likely, within the next several years, it will be possible to achieve vertical take-off and landing with airplanes that will also be capable of relatively high speed forward flight. Such aircraft, however, will not completely replace the helicopter. The helicopter has an agility in operations close to the ground and in confined areas which will be very difficult to supplant for many years to come.

**B**ecause it is largely an unexplored field and because development of prototype aircraft is expensive, the Army is employing a "flying test bed" approach.

A test bed is a small research aircraft which can be built cheaply, almost on the baling wire principle, to investigate possibilities which might be applied to large aircraft. Following are the principal areas cur-

**As the future brings more radical concepts into view, Army aviation research will, we hope, stay with or ahead of them.**

rently under study by this method:

**Boundary Layer Control.** This is a means of controlling the air flow next to an air foil to obtain greatly increased lift. This in turn, has the effect of lowering the stalling speed of the aircraft and thereby lowering its take-off or landing speed.

**Deflected or Vectored Slipstream.** The deflected or vectored slipstream principle makes use of a very heavily flapped wing which has the effect of deflecting the air flow downward to give very short or even vertical take-off and landing possibilities.

**Rotatable Ducted Fans.** Ducting a fan or propeller gives it about 25 to 30 percent more efficiency than that obtained from an unducted propeller. In this test bed the ducts are rotated to a vertical configuration for take-off and landing and to a horizontal position for fast forward flight.

**Tilt Wing.** In this design the whole wing with the propellers mounted thereon is rotated vertically for take-off and landing and into a horizontal plane for forward flight.

**Multi Wing.** This is an old concept being reinvestigated because it is a means of "bathing" far more wing surface in the propeller slipstream, thus increasing lift and making possible a short wing span in Army aircraft.

**Rotating Rotors.** In this configuration rotors are placed in a horizontal plane for take-off and landing

and in vertical plane for forward flight.

**Unloaded Rotor.** In this, the conventional rotor is used to give the aircraft vertical flight. For fast forward flights the rotor is unloaded; that is to say, it is flattened out and allowed to windmill or idle. Lift is taken over by conventional wing surfaces, and thrust by forward driving propellers.

**Deflected Jet.** Under this principle, currently being investigated by the Air Force, the jet blast of a jet engine is deflected downwards for take-off and landing, then turned into the horizontal plane for high speed forward flights. This latter principle is not of overriding interest to the Army because jet engines at the present time are not efficient at low altitude. It will, nonetheless, bear watching.

The majority of these test beds should fly within the next 5 months. By working with them under many conditions, the Army hopes to determine which approach or approaches are best suited to the Army's operating conditions, and thus offer us the greatest chances of success in the future. The principles thus developed will eventually be applied to the replacements for the fixed-wing aircraft being developed under the short term program.

The third and newest field of endeavor in Army aviation is that of "direct lift devices."

The Army's initial approach to this area has been made with the deLackner Aerocycle and the Hiller Flying Platform. The Flying Platform in particular, in recent months, has shown much promise, and the Army is moving quickly to exploit it. However, it cannot carry all the equipment which the soldier needs on today's battlefield, much less that of the future.

Accordingly, the next step in this area is, probably, the aerial jeep. Ultimately the goal is to provide a vehicle which can stay in the air for several hours, move at speeds of up to 50 miles an hour and would be a jeep that could move over the ground instead of on it. It would be able to take advantage of the ground for protection yet be freed from the ground's limitations.

**T**his machine would be able to sneak up to a ridge line to permit a look over the top, or to fire a burst into a barn or haystack to see if anything was there. It should be able to scout down ravines and fly over woods if necessary, but should spend most of its life within a few feet of the ground. The possibilities of this vehicle — for reconnaissance, messenger work, patrolling — are limited only by the imagination of the user.

If this machine proves successful, the next step will be to enlarge the family — to build larger machines with increased firepower. Another possible adaption may be an aerial truck.

This, then, is the Army's program in aviation research and development — encompassing the conventional, the unconventional, and radical — as a major contribution towards keeping the U.S. Army the most mobile in the world. As the future brings more radical concepts into view, Army aviation research will, we hope, stay with or ahead of them.

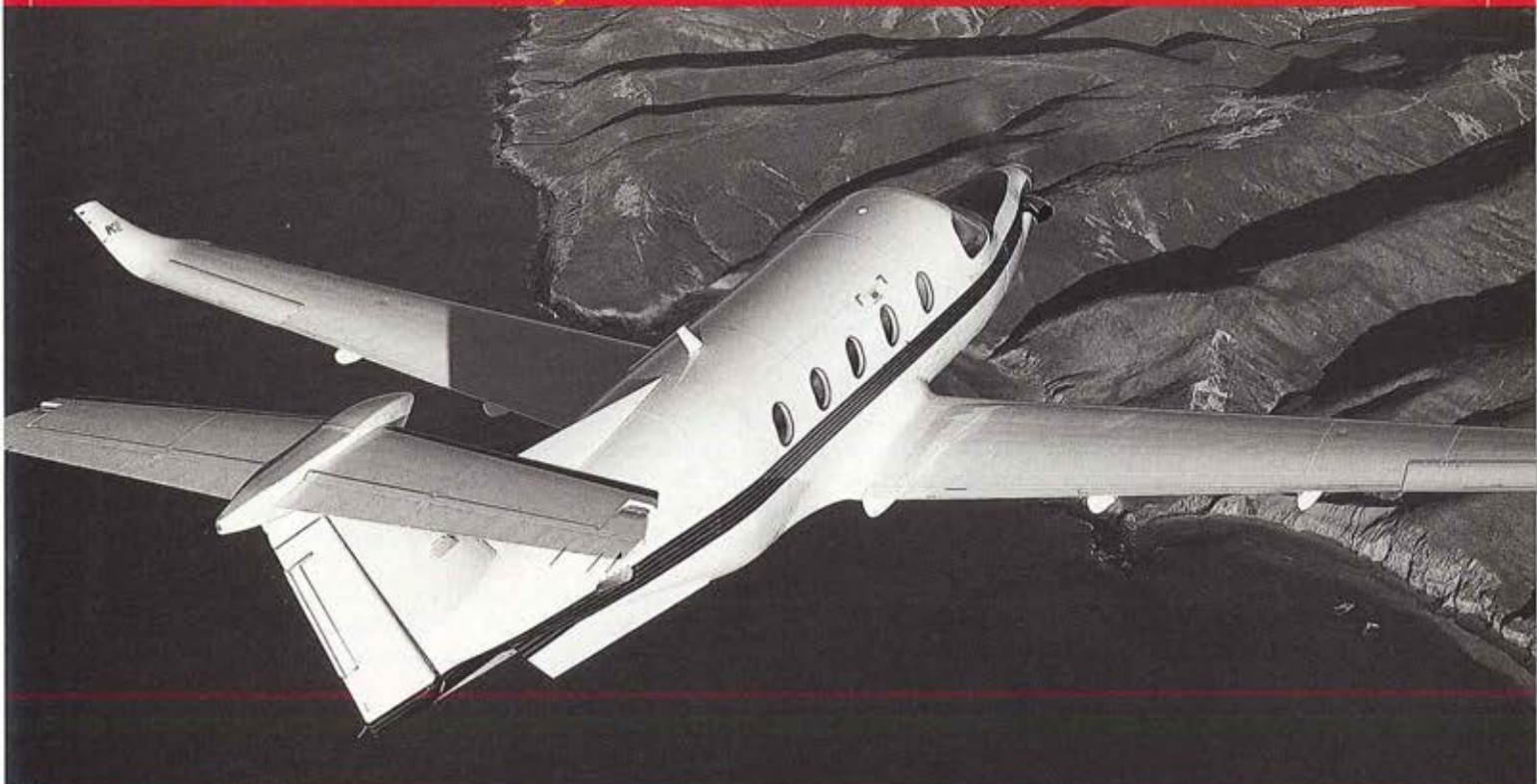


*This article was first published in the January 1958 issue of Army Aviation Magazine.*



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Former 1st Aviation Brigade Commander,  
MG G.P. Seneff, Jr., Comments on the ...

# TRENDS IN ARMY AVIATION COMBAT OPERATIONS



GENTLEMEN, it is a great pleasure to be here. It was somewhat unexpected, but I am delighted that I was able to make this go-round of the AAAA Convention as I missed one recently.

I don't have to review for you in detail the tremendous build-up in aviation assets that we have seen in Vietnam over the past five years, but to run by it very quickly: In January of 1962, we had 3 aviation companies over there; in April of '65 we had 13; and in December of '65 less than a year later, we had 36. In December of '66, a year later, we had slowed down a bit, going to 40 companies and I'll touch on that later.

I'm not permitted to tell you precisely how many companies are there at the present time, but it's well in excess of the 40 that I've just cited and the number is still growing by month.

Shown in another way in Chart 1 are the numbers of aircraft and people that we've had in the 1st Aviation Brigade from the time that it was formed up until the very recent past. We show in Chart 3 the number of hours per aircraft which will be of some interest to you and I'll come back to that later.

Note that there has been a significant increase in the average number of hours flown. I would point out that this average is for the total number of aircraft in the Brigade. This includes the maintenance ships, the C-in-C ships that might not fly quite as much, the gun ships which don't fly as much as the slicks do these days, and so on.

## THE QUESTION OF CONTROL

Now with the build-up of course, came the very great question as to how to control these aviation assets. The first headquarters that was put over them was the battalion. In the summer of '65 the 12th Aviation Group Headquarters was formed because the numbers of battalions were getting too great to control directly from USARV. The

17th Aviation Group, the second group, and the Aviation Brigade Headquarters were formed between January and March of 1966 in response to the need for a headquarters to oversee the assets of these continuously expanding numbers of companies and battalions. Brigade Headquarters was provisionally activated in March of 1966 and formally activated in May.

*What was the job of the Brigade Headquarters?* Well, this impinges pretty heavily upon philosophy of Army aviation, how you make the aviation units fully responsive to the needs of the ground commander, to what degree do you centralize the exercise and so on. You've all heard our arguments on this, counter-arguments, Air Force arguments, and so on over many years.

It was recognized basically that the aviation elements had to stay at the lowest possible level from an operational point of view in order to get the job done, i.e., to be fully responsive to the ground commander that he was supporting. On the other side of it because of the rapidity of the build-up and the many problems connected with it, it was felt that a certain amount of centralized command was desirable to handle the myriad of details that the operational commander is not concerned with or doesn't want to get concerned with. So we've had this split in command functions that have become a way of life in Vietnam.

## THE HEADACHES OF COMMAND

The operational ground commander, the division commander, the brigade commander, and so on

**CHART 1**  
**GROWTH RATE — 1st AVIATION BRIGADE**

Date	Acrft	Co. Units	Strength
Mar 66	983	36	10,900
Jan 67	1,020	36+	—
Aug 67	1,400+	40+	16,000+





CW5 George W. Foley, Ret.  
and Ms. Margaret D. White

# Army Aviation at War ...

A Full Spectrum Force Meeting the  
Challenges of Today and Tomorrow



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## Tuesday, 23 March 2004

- 0730-1800 AAAA Air Assault Chapter Golf Tournament  
1300-1700 AAAA Registration Center Open

## Wednesday, 24 March 2004

- 0800-1900 AAAA Registration Center Open  
1000-1230 AAAA Scholarship Foundation Board Meeting  
1400-1630 AAAA National Executive Board Meeting  
1800-2000 Early Bird Reception & Opening of Exhibits

## Thursday, 25 March 2004

- 0700-1600 AAAA Registration Center Open  
0745-0845 Eye-Opener Coffee  
0745-0845 Speakers Breakfast  
0800-1700 Press Room Open (Sponsored by GE Aircraft Engines)  
0830-1100 Professional Opening Session  
0830-0900 AAAA President's Welcome  
MG Andy Andreson, Ret., AAAA President  
0900-0930 Aviation Branch Opening Remarks  
BG E. J. Sinclair, Aviation Branch Chief, Commanding General, U.S. Army Aviation Center & Fort Rucker  
0930-1000 Host Command  
MG David H. Petracus, CG 101<sup>st</sup> Airborne Division, Air Assault  
1000-1100 Keynote Address & Presentation of Individual Awards  
\*GEN Peter J. Schoomaker, Chief of Staff, U.S. Army  
0930-1500 Spouse Tour - Country Music Hall of Fame & Studio "B" and Lunch.  
1100-1130 Professional Session Breakouts  
1100-1130 Session I Breakout  
• Warrant Officer Update: \*CW5 Stephen T. Knowles II  
• Enlisted Update: \*CSM Walter Beckman  
1100-1600 PERSCOM Career Guidance  
1100-1600 Exhibits Open (Continuous Briefings in Hall)  
OIF Commanders, Apache Attack, Unmanned Aerial Vehicle - UCAR, Utility Helicopters, Aerial Common Sensor, AVCATT-A, Aviation Systems, Scout/Attack, RAH-66, Cargo Helicopters, AATD, Air Warrior, FCS, ATEC  
1230-1430 AAAA Annual Meeting & Luncheon  
President's Annual Report, National Elections, AAAA's Presentation of Membership Awards.  
1730-1900 Hall of Fame Ticket Pickup  
1800-2100 Hall of Fame Reception & Dinner  
2100-0100 AAAA Chapter Receptions

## Friday, 26 March 2004

- 0800-1600 AAAA Registration Center Open  
0800-0900 Eye-Opener Coffee  
0800-1600 Press Room Open (Sponsored by GE Aircraft Engines)  
0800-0900 Speakers Breakfast

## Friday, 26 March 2004 (Cont'd)

- 0830-1100 Professional Session:  
0830-0900 • LTG Richard A. Cody, G3  
0900-0930 • LTG Anthony R. Jones, DCG, TRADOC  
0930-1000 • MG(P) John M. Curran, Director, TRADOC Futures Center  
1000-1030 • MG Joseph L. Bergantz, PEO Aviation  
1030-1100 • BG James H. Pillsbury, CG AMCOM  
0930-1600 Spouse Tour - Historic Falcon Manor and Lunch  
1100-1600 PERSCOM Career Guidance  
1100-1600 Exhibits Open (Continuous Briefings in Hall)  
OIF Commanders, Apache Attack, Unmanned Aerial Vehicle - UCAR, Utility Helicopters, Aerial Common Sensor, AVCATT-A, Aviation Systems, Scout/Attack, RAH-66, Cargo Helicopters, AATD, Air Warrior, FCS, ATEC  
1200-1330 Luncheon:  
Guest Speaker: GEN Paul J. Kern, CG, Army Materiel Command  
1500-1600 AAAA NEB & Chapter Presidents Session  
1630-1800 Cub Club Reception  
2100-0100 AAAA Chapter Receptions

## Saturday, 27 March 2004

- 0730-1500 AAAA Registration Center Open  
0730-0900 Eye-Opener Coffee  
0745-0900 First Light Breakfast  
Speaker: LTG Joseph L. Yakovac, Jr., Military Deputy, OASA, (AL&T)  
0800-1500 Press Room Open (Sponsored by GE Aircraft Engines)  
0900-1000 Panel #1 Preparing for the Future: Lessons Learned Become Techniques, Tactics, and Procedures.  
Chairman: BG E. J. Sinclair, CG, USAAVNC  
1000-1100 Panel #2: Aviation Task Force: Where Are We Now And Where Are We Going?  
Chairman: MG James D. Thurman, Aviation Task Force Chairman  
1100-1500 PERSCOM Career Guidance  
1100-1500 Exhibits Open (Continuous Briefings in Hall)  
OIF Commanders, Apache Attack, Unmanned Aerial Vehicle - UCAR, Utility Helicopters, Aerial Common Sensor, AVCATT-A, Aviation Systems, Scout/Attack, RAH-66, Cargo Helicopters, AATD, Air Warrior, FCS, ATEC  
1200-1330 Luncheon  
Guest Speaker: GEN Kevin P. Byrnes, CG, TRADOC  
1745-1900 AAAA Banquet Ticket Pickup  
1800-1845 AAAA Banquet Reception  
1900-2200 AAAA Awards Banquet  
Guest Speaker: \*GEN Bryan D. Brown, Commander SOCOM, Presentation of Unit Awards

\* Speaker Confirmed



# 2004 AAAA ANNUAL CONVENTION GENERAL INFORMATION

All forms available on the web [www.quad-a.org](http://www.quad-a.org)

**DOD APPROVAL:** The Department of Defense, "finds that the business portions of this event meet the minimum regulatory standards for official attendance by DoD employees. This finding does not constitute a blanket approval or endorsement for attendance. Individual DoD Component commands or organizations are responsible for approving or disapproving official attendance of its DoD employees based on mission requirements and DoD regulations. The propriety of attendance by DoD employees in their personal capacities at incidental social portions of this event shall be determined by the individual DoD employee's Ethics Counselor based on standards of conduct and community relations requirements."

**REGISTRATION & FEES:** A Registration Form must be completed by each individual (excepting spouses) who wishes to attend the professional sessions or social functions. Badges for admission to the Professional Sessions for the spouses of attendees are complimentary. AAAA members, non-members, guests, and their spouses who only wish to attend the exhibits or social functions need not pay the Professional Session or Membership fees. **Admission to the Exhibit Hall is complimentary and will be by Badge. Photo ID is required.** Function fee refunds will be made if notification is received at the AAAA National Office by phone or mail on or before **Friday, March 12, 2004.** Individuals may pick up their badges and function tickets at the AAAA Registration Center in the Convention Center. See "SCHEDULE OF EVENTS" for hours of operation.

**HOUSING:** The Gaylord Opryland Hotel and Convention Center is handling all housing reservations for the AAAA Convention. The cut off date is **February 28, 2004.** You may make a reservation through the AAAA website, by telephone, facsimile, or mail.

To make your reservations by Internet, visit the AAAA website at [www.quad-a.org](http://www.quad-a.org) and click on the Gaylord Opryland Resort & Convention Center Hotel Reservation link. To make your reservations by telephone, call the Gaylord Opryland Resort & Convention Center at 615-883-2211. To make your reservations by Fax, complete one form for each room needed and fax to the Gaylord Opryland Resort & Convention Center at 615-871-5728 before Saturday, February 28, 2004. To make your reservations by Mail, complete one form for each room needed and mail to Gaylord Opryland Reservations and Ticketing, 2800 Opryland Drive, Nashville, TN 37211 before Saturday, February 28, 2004.

Government/Military/DAC room rates apply only to Active Army and DAC personnel and to those Reserve Component and Retired persons who are NOT in the current employ of defense contractors on a full time, part time, or consulting basis while attending the AAAA Convention. The AAAA will review all reservations made prior to the cut off date to determine rate eligibility. If you have made a reservation at the Government/Military rate and it is determined that you are ineligible, the rate will be changed to the Industry/Civilian rate if rooms are still available. Please do not make reservations at the Government/Military Rate unless you are eligible.

**DRESS CODE:** The AAAA suggests the following attire:

- **Setup and Early Bird Reception - Casual Attire**
- **Thursday, Friday:** Daytime - Class B/Coat & Tie  
Hall of Fame Dinner - Coat & Tie  
Chapter Receptions - Casual Attire
- **Saturday:** Daytime - Class B/Coat & Tie  
Banquet - Dress Mess/Dress Blues/Black Tie

**NOTE:** AAAA suggests that Army personnel Professional Session speakers and other official participants wear Class A uniforms.

**RENT-A-CAR SAVINGS:** Call Hertz, AAAA's official Rental Car Company for outstanding discounts. Call **Hertz Toll Free at (800) 654-2240** or **Gaylord Travel TOLL FREE at (800) 677-9526.** Please cite **Hertz Meeting Number CV#022Q1636** when making reservations.

**TRAVEL RESERVATIONS:** Gaylord Travel has been selected as AAAA's official travel agency. Gaylord Travel offers:

- 5% off all fares on American and US Airways.
- 10% off if booked and ticketed at least 30 days prior on American.
- 10% off if booked and ticketed at least 60 days prior on US Airways.
- Zone fares do not require a Saturday night with a 2 day minimum stay.
- \$9.00 round-trip airport/hotel transfers (\$9.00 savings) when you purchase your airline ticket from Gaylord Travel.
- \$200,000 flight insurance at no cost.
- Will record frequent flyer miles.

Call Gaylord Travel at **(800) 677-9526** from 8:30 AM to 5:00 PM (Monday-Friday) Central Time or Fax to **(615) 871-5794.** Please make every effort to use Gaylord Travel to make your travel arrangements for the AAAA Convention. If this is not possible, arrangements have also been made with American Airlines, US Airways to serve as the official air carriers for the AAAA Annual Convention. Please cite the American Airlines Group File Number **A5334AS**, US Airways Group File Number **GF13132959.**

**AAAA AIR ASSAULT CHAPTER GOLF TOURNAMENT:** The AAAA Air Assault Chapter is sponsoring a Golf Tournament on Tuesday, March 23; morning and afternoon flights are scheduled. See attached Golfing form. Corporate Sponsors for holes and prizes are also being sought. For information, contact CPT Shawn Hatch at (931) 920-5365; E-Mail: [aaaagolf2004@yahoo.com](mailto:aaaagolf2004@yahoo.com)

**SPOUSE PROGRAMS:** The AAAA invites spouses to participate in planned activities on Thursday and Friday, March 25 and 26. See the Spouse Tour Registration Form.

**Thursday - Country Music Hall of Fame & Studio "B" and**

**Lunch:** Buses will depart from Opryland at 9:30 A.M. to the Country Music Hall of Fame & Studio "B". Luncheon buffet will be served at the Wildhorse Saloon. Tour will return to Opryland at 3:00 P.M.

**Friday - Historic Falcon Manor and Lunch:** Buses will depart from Opryland at 9:30 A.M. to the Falcon Manor, "the finest mansion in the region". An elegant lunch will be served in the Victorian Carriage House. Tour will return at 4:00 P.M.

**AWARD PRESENTATIONS:** The AAAA's National Individual Awards will be presented after the keynote address Thursday morning by GEN Peter J. Schoomaker, CSA. The National Unit Awards will be presented at the Annual Banquet on Saturday, March 27. The "Top Chapter" and Membership Awards will be presented at the AAAA Annual Meeting & Luncheon on Thursday, March 25.

**ARMY AVIATION HALL OF FAME DINNER:** The AAAA invites all to attend the Army Aviation Hall of Fame Dinner on Thursday, 25 March at Gaylord Opryland Resort and Convention Center, during which candidates selected by the AAAA membership will be inducted into the Army Aviation Hall of Fame. Admission will be by ticket. See Schedule of Events and Registration form for details.

**PROFESSIONAL SESSIONS:** The Professional Sessions taking place on **Thursday, March 25** through **Saturday, March 27** at the Gaylord Opryland Convention Center, will be of special interest to all AAAA members, and is being arranged by **BG E. J. Sinclair**, Aviation Branch Chief, who serves as the Program Chairman. Admission to the Professional Sessions under the theme of **"Army Aviation at War...A Full Spectrum Force Meeting the Challenges of Today and Tomorrow"** will be by Badge.

**AAAA CHAPTER RECEPTIONS:** The AAAA Chapter Receptions are a most important and unique part of every AAAA Convention and will be held on Thursday and Friday evenings at the Gaylord Opryland Resort and Convention Center.



# EVENT REGISTRATION FORM

## AAAA ANNUAL CONVENTION

**March 24 – 27, 2004 • Gaylord Opryland Resort and Convention Center • Nashville, Tennessee**

The Advance Registration Deadline is **SATURDAY, FEBRUARY 28, 2004**. Registration forms received after February 28 will be held for Onsite Registration. Advance Registrations will not be processed unless accompanied by full payment of fees. I understand that I may receive a full refund of my registration and function fees if requested by phone call or written notification to AAAA made on or before **FRIDAY, MARCH 12, 2004**. Government fees apply only to Active Army and DAC personnel and to those Reserve Component and retired AAAA members who are **NOT** in the current employ of defense contractors or suppliers on a full-time, part-time, or consulting basis while attending the AAAA Convention. I understand that if I select the Government category and am not eligible, I will be charged for the difference in fees.

RANK/GS GRADE NAME (FIRST, MI, LAST)

HOME MAILING ADDRESS OR NAME OF COMPANY, FIRM OR UNIT

STREET ADDRESS OR P. O. BOX NUMBER

ARE YOU ☐ YES  
A.U.S.  
CITIZEN? ☐ NO

CITY

STATE

ZIP (IF U.S.) (OR COUNTRY)

OFFICE TELEPHONE NUMBER

FAX TELEPHONE NUMBER

SOCIAL SECURITY NUMBER

JOB TITLE AND AFFILIATION

IS YOUR UNIT OR FIRM EXHIBITING?  
☐ YES ☐ NO

E-MAIL

### Badge Info

NAME & RANK TO APPEAR ON BADGE

UNIT OR FIRM NAME TO APPEAR ON BADGE

CITY & STATE, (& COUNTRY IF NOT U.S.)

SPOUSE'S NAME (IF ATTENDING)

\* IF YOU'RE NOT AN AAAA MEMBER  
JOIN AAAA NOW & PAY THE MEMBER RATE!

	DAY OF EVENT	GOVT. AAAA MEMBER OR SPOUSE	INDUSTRY AAAA MEMBER OR SPOUSE	GOVT NON MEMBER OR SPOUSE	INDUSTRY NON MEMBER OR SPOUSE	ITEM TOTAL	OFFICE USE
① BADGE FOR PROFESSIONAL SESSIONS	Thu-Sat	<input type="checkbox"/> \$ 20 ①	<input type="checkbox"/> \$ 60 ①	<input type="checkbox"/> \$ 50 ①	<input type="checkbox"/> \$ 90 ①	\$ _____	_____
AAAA LUNCHEON & ANNUAL MEETING	Thu	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	\$ _____	4 _____
HALL OF FAME INDUCTION DINNER	Thu	<input type="checkbox"/> \$ 35	<input type="checkbox"/> \$ 55	<input type="checkbox"/> \$ 55	<input type="checkbox"/> \$ 65	\$ _____	5 _____
PROFESSIONAL LUNCHEON Speaker: GEN Paul J. Kern, CG, AMCOM	Fri	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	\$ _____	7 _____
PROFESSIONAL LUNCHEON Speaker: GEN Kevin P. Byrnes, CG, TRADOC	Sat	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	<input type="checkbox"/> \$ 28	\$ _____	10 _____
② AWARDS BANQUET Guest Speaker: GEN Bryan D. Brown, Cdr. SOCOM Presentation of AAAA National Unit Awards	Sat	<input type="checkbox"/> \$ 35	<input type="checkbox"/> \$ 75	<input type="checkbox"/> \$ 75	<input type="checkbox"/> \$ 85	\$ _____	11 _____

SEATING REQUEST \_\_\_\_\_

AAAA ANNUAL DUES (IF JOINING NOW)

\*\$15 rate for Full-Time Students, Enlisted, WO1s, GS-8  
DACs & Below, Wage Board 12 DACs & Below

☐ \$ 26\*

☐ \$ 26\*

\$ \_\_\_\_\_

METHOD OF  
PAYMENT

Mastercard

VISA

American Express

Diners Club

Personal Check

Business Check

(Make checks payable to "AAAA")

TOTAL \$ \_\_\_\_\_

CREDIT CARD NUMBER \_\_\_\_\_

EXPIRATION DATE \_\_\_\_\_

CARDHOLDER NAME AND SIGNATURE \_\_\_\_\_

① Spouse Badge for Professional Sessions is complimentary; ② Reserved Seating; Formal/Black Tie; Military Blues/Mess Jacket. Seating requests cannot be guaranteed.

**Return this form to the AAAA National Office by February 28, 2004**



# HOUSING FORM

AAAA Annual Convention, Nashville, TN — March 24-27, 2004

Here are 4 easy ways to make your reservations:  
(Please choose only one)

**By Internet at [www.quad-a.org](http://www.quad-a.org)**

Visit the AAAA website at [www.quad-a.org](http://www.quad-a.org) and click on the Gaylord Opryland Resort & Convention Center Hotel Reservation link. Complete the form as directed.

**By Telephone**

Simply call the Gaylord Opryland Resort & Convention Center at (615) 883-2211 to make your reservations by phone.

**By Facsimile**

The Gaylord Opryland Resort & Convention Center Reservations facsimile number is (615) 871-5728. Simply complete this Housing Form and fax it in!

**By Mail**

You can mail this Housing Form directly to the Gaylord Opryland Resort & Convention Center at: Gaylord Opryland Reservations and Ticketing, 2800 Opryland Drive, Nashville, TN 37211.

**Register on-line at [www.quad-a.org](http://www.quad-a.org)**  
**Reservation cut off date: February 28, 2004**

**NOTE:** Reservations must be guaranteed by deposit equal to one night's stay. Please obtain specific reservation/cancellation policies from the hotel. Rates are subject to local taxes.

Make any changes and cancellations **DIRECTLY** with the Gaylord Opryland Resort & Convention Center (615) 883-2211. Contact the Hotel for Reservation Confirmations.

**\*\*Please note that if you work for a Defense Contractor on a full-time, part-time, or consulting basis while attending the AAAA Convention, you are NOT eligible for the Military/DAC rate even if you are Retired Military.\*\***

RANK/GS GRADE NAME (FIRST, MI, LAST) \_\_\_\_\_

HOME MAILING ADDRESS OR NAME OF COMPANY, FIRM OR UNIT \_\_\_\_\_

STREET ADDRESS OR P. O. BOX NUMBER \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP (OR COUNTRY) \_\_\_\_\_

OFFICE TELEPHONE NUMBER \_\_\_\_\_ FAX TELEPHONE NUMBER \_\_\_\_\_

E-MAIL \_\_\_\_\_

ARRIVAL DATE \_\_\_\_\_ ARRIVAL TIME \_\_\_\_\_ NO. NIGHTS \_\_\_\_\_ DEPARTURE DATE \_\_\_\_\_

☐ **INDUSTRY/CIVILIAN: Return this page directly to the hotel!** N-AAAA

☐ \$184 Traditional Single or Double + Tax ☐ \$204 Garden Terrace Single or Double + Tax  
Gaylord Opryland Reservations and Ticketing ☐ Above double \$15 each additional person  
2800 Opryland Drive, Nashville, TN 37211; Tel: (615) 883-2211; FAX: (615) 871-5728

☐ **MILITARY/DAC: Return this page directly to the hotel!** N-AAGVT

☐ \$82 Traditional Single or Double + Tax ☐ \$102 Garden Terrace Single or Double + Tax  
Gaylord Opryland Reservations and Ticketing ☐ Above double \$15 each additional person  
2800 Opryland Drive, Nashville, TN 37211; Tel: (615) 883-2211; FAX: (615) 871-5728

Please Check One Box: ☐ Single Occupancy ☐ Double Occupancy ☐ Other: \_\_\_\_\_ ☐ Require more than one room: \_\_\_\_\_  
Print or Type the Names of All Persons Sharing Your Room Excluding Yourself:

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

Please Check One Box: ☐ King Bed ☐ Two Double Beds ☐ Handicapped Accessible

**NOTE:** Bedding Preference cannot be guaranteed. Confirm your preference at check-in.

Please Guarantee My Reservation with the Following Credit Card:

☐ MasterCard ☐ VISA ☐ American Express ☐ Diner's Club ☐ Other (Specify): \_\_\_\_\_

Credit Card Number \_\_\_\_\_ Expiration Date \_\_\_\_\_

Signature of Cardholder \_\_\_\_\_

☐ Please Guarantee My Reservation with the enclosed check equal to one night's stay.

**RETURN THIS FORM DIRECTLY TO: GAYLORD OPRYLAND RESERVATIONS**



# AAAA SPOUSE TOURS REGISTRATION FORM

Return this form with a check in US Dollars payable to: **Gaylord Attractions**, 2802 Opryland Drive, Nashville, TN 37214, or call direct with a Credit Card to: (615) 871-6779

**Mention Code: N-AAAA to receive the special pricing below!**

The Tour Registration Deadline is **SATURDAY, February 28, 2004**. After this date there is no guarantee for availability. A confirmation will be mailed to you and should be considered your receipt. Buses will leave from a departure point printed on your **confirmation**. All prices are inclusive of tax and gratuities. There will be **NO REFUNDS** or **TICKET EXCHANGES** after a ticket has been purchased. Tickets may be picked up at either of the Gaylord Opryland Hotel Guest Services Desks located in the Cascades or Magnolia Lobbies. Gaylord Opryland is not responsible for any tickets not picked up. Gaylord Destination Sales reserves the right to cancel an event due to lack of minimum attendance. All tours must have not less than twenty (20) participants. In the event of tour cancellation, your money will be refunded in full **AFTER** the Convention. **Do not return this form to the AAAA.**

## Country Music Hall of Fame & Studio "B" with Lunch

Spanning an entire city block and soaring 107 feet above a lush urban park, the new \$37 million, Country Music Hall of Fame promises to delight everyone who visits. The Country Music Hall of Fame and Museum Tour tells the story of one of America's most popular musical art forms. Through the display of stage costumes, musical instruments, artworks, correspondence, film and photography, the evolving history of country music vividly unfolds in this new facility. Next visit the famous Studio B - Nashville's oldest surviving recording studio. RCA Studio B is one of the world's most historic recording studios. Opened in November 1957, it served for 20 years as one of the creative nerve centers of the Nashville Sound. More than 35,000 songs were brought to life by the Studio B magic, including dozens of country best-sellers like Jim Reeves's "He'll Have to Go" and Dolly Parton's "Jolene."

And last but certainly not least, head to the Wildhorse Saloon. The interior of the Wildhorse Saloon is show stopping, with over 60,000 square feet of space, three levels and a 3,300 square foot dance floor. Oil paintings of wild horses galloping through the building and a herd of five paper mache horses stampeding across our ceiling. The Wildhorse Saloon is no ordinary place. Whimsical horses and cows are "saddled-up" to the bar enhancing the fun.

As soon as you step inside the front door, the mouth-watering smells from the kitchens greet you. The chef is known around Nashville for his award-winning food and signature recipes. They use only the freshest ingredients to make your dining experience special. The soups and sides are the perfect match for our award-winning barbecue, juicy steaks, fresh seafood, and smoked chicken. Don't forget dessert!

## Historic Falcon Manor Tour with Lunch

In 1896, entrepreneur Clay Faulkner told his wife Mary he'd build her "the finest mansion in the region" if she would move next to their woolen mill, 2-1/2 miles from downtown McMinnville. Mary agreed, and Faulkner supervised construction as enthusiastically as he promoted the mill's "Gorilla Pants" (so strong even a gorilla couldn't tear them apart) and mineral water at the Faulkner Springs Hotel, the "ideal health and pleasure resort" he would eventually open on the lake across the road.

Faulkner's solid-brick, 10,000-square-foot mansion had all the "modern conveniences" when it was built -- electric lights, indoor plumbing, central heat, and more. Today, the National-Trust-award-winning property is filled with museum quality Victorian antiques, and some say it's presided over by a friendly ghost -- perhaps the proud builder himself.

The visit begins with an elegant luncheon, served in the exquisite Victorian Carriage House dining room. Then "The Victorian Gentleman," dressed in period costume, takes the stage for a fun-filled monologue spiced with amusing anecdotes about the Faulkners and the subsequent history of the house, including its days as a beloved country hospital. Group members are then invited to tour the mansion, enjoying its sweeping staircase, exquisite woodwork, rich colors and museum quality antiques at their own pace. The tour ends in the 1200-square-foot Victorian Gift Shop next door to the mansion, which specializes in 1800s-style merchandise the Faulkners might have purchased in their day.

EVENT NAME	DATE & TIME OF EVENT	COST PER PERSON	QUANTITY	TOTAL COST
Country Music Hall of Fame & Studio "B" with Lunch (Including transportation)	Thursday March 25, 2004 9:30 a.m. - 3:00 p.m.	\$70.50		\$
Historic Falcon Manor Tour with Lunch (Including transportation)	Friday, March 26, 2004 9:30 a.m. - 4:00 p.m.	\$55.00		\$
TOTAL ENCLOSED				\$

NAME (FIRST, MI, LAST) \_\_\_\_\_

HOME MAILING ADDRESS OR NAME OF COMPANY, FIRM OR UNIT \_\_\_\_\_

STREET ADDRESS OR P. O. BOX NUMBER \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP (IF U.S.) (OR COUNTRY) \_\_\_\_\_

OFFICE TELEPHONE NUMBER \_\_\_\_\_

FAX NUMBER \_\_\_\_\_

If you have special needs/disabilities, please describe below so that we may plan appropriately:



**AAAA CONVENTION AIR ASSAULT CHAPTER**  
**"CAPTAIN'S CHOICE" GOLF TOURNAMENT**  
**TUESDAY, 23 March 2004, 0730 and 1330**  
**SPRINGHOUSE GOLF CLUB, NASHVILLE, TN**

The AAAA Air Assault Chapter has arranged a Captain's Choice Golf Tournament for the morning and afternoon of Tuesday, March 23rd, 2004 in conjunction with the AAAA Annual Convention, 24-27 March 2004, in Nashville, Tennessee.

Arrangements have been made with the Opryland's Springhouse Golf Club, which is a stop on the Senior PGA Tour, for a Captain's Choice Tournament. Two flights are scheduled, at 0730 and 1330. Each flight can support a maximum of 144 golfers. The cost for this year's tournament is \$75.00 per player, which includes green fees, carts, guest amenities, shoe care, and prizes (1st, 2nd, 3rd, longest putt/drive, etc.). Space availability will be on a first-come, first-filled basis. Please note that Springhouse Golf Club is a spike-less facility. Springhouse will replace guests' metal spikes with non-metal versions at no charge. If you have metal spiked shoes, please arrive at least 30 minutes prior to tee-time to allow the staff sufficient time to change your spikes.

The Springhouse Golf Club at Opryland is a Scottish Links style course designed by former U.S. Open and two-time PGA Champion Larry Nelson. The layout was sculpted amid limestone bluffs and native wetlands. There are five teeing areas on each hole allowing a course as long as 7,007 yards or as short as 5,126 yards of outstanding golf.

Your earliest possible response is greatly encouraged to ensure tournament success. The first 288 paid responses will be accepted. Please include your established handicap or, if none is established, include your normal score for 18 holes.

Your reply to the following is requested no later than **1 February 2004**. Payment is due with the application and is fully refundable until 1 February 2004. Please return this application with your check, payable to the Air Assault Chapter, AAAA, and return to: AAAA Air Assault Chapter, PO Box 356, Fort Campbell, KY 42223. Those interested in sponsoring a hole at the tournament, or for general sponsorship information, contact CPT Hatch at (931) 920-5365, [aaaagolf2004@yahoo.com](mailto:aaaagolf2004@yahoo.com)

-----  
**(Detach and return to address below)**  
-----

I would like to play in the 2004 AAAA Air Assault Chapter Golf Tournament.

I prefer: \_\_\_\_\_ Morning; \_\_\_\_\_ Afternoon; \_\_\_\_\_ No preference.

My handicap is \_\_\_\_\_; No handicap, but my general score is \_\_\_\_\_.

\_\_\_\_\_ Yes, I would like information about sponsoring a hole during the Golf Tournament.

\_\_\_\_\_ Yes, my local AAAA Chapter would be interested in information about sponsoring a hole and providing a Chapter Team to compete against other Chapters for a "Chapter Golf Championship".

If you have already formed a team please list the other members: \_\_\_\_\_

AAAA Chapter Name: \_\_\_\_\_

Your Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State & Zip: \_\_\_\_\_

Telephone (including Area Code): \_\_\_\_\_ FAX: \_\_\_\_\_

Email: \_\_\_\_\_

**Copy this page by February 1, 2004 and return Directly to:**

Make checks payable to:  
**Air Assault Chapter, AAAA**

AAAA Air Assault Chapter  
PO Box 356  
Fort Campbell, KY 42223  
(931) 920-5365, [aaaagolf2004@yahoo.com](mailto:aaaagolf2004@yahoo.com)





## ARMY AVIATION ASSOCIATION OF AMERICA (AAAA)

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

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

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

Rank/GS Grade	First Name	MI	Last Name	Sex
Mailing Address				
Mailing Address				
City		State	Zip + 4 Code	
Active Duty or Civilian Job Title and Unit or Firm name				
( )		( ) E-Mail		
Area Code	Office Phone	Area Code	Residence Phone	Area Code FAX
Consent: <input type="checkbox"/> I do <input type="checkbox"/> I do not consent to the publication or release of the above information to third parties.				
Signature			Date	
Citizenship		Nickname	Spouse's Name	
Date of Birth (Mo/Yr)		Social Security No.		
membapp.131 02/14/02				

## AAAA ANNUAL DUES

Applications other than those listed below:  
 ( ) 1 yr, \$26; ( ) 2 yrs, \$47; ( ) 3 yrs, \$70  
 Full-Time Students; Enlisted; WO1s; GS-8 DACs & Below;  
 Wage Board 12 DACs & Below:  
 ( ) 1 yr, \$15; ( ) 2 yrs, \$27; ( ) 3 yrs, \$39  
 Add \$5 per year if you have a foreign, non-APO address.  
 Add \$15 if your check is drawn on a foreign bank.  
☐ Check enclosed payable to "AAAA" or charge to  
☐ AMEX ☐ Diners Club ☐ Mastercard ☐ VISA  
 Card No. \_\_\_\_\_  
 Amt \$ \_\_\_\_\_ Exp. Date \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_

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

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

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



**Sabreliner Corporation  
congratulates AAAA on the occasion  
of celebrating fifty years of service  
to Aviation Soldiers.**

**Sabreliner is proud  
to be part of this great nation,  
the United States of America,  
and continues its commitment  
to our Soldiers in the field.**

**SABRELINER  
CORPORATION**

**314-863-6880  
www.sabreliner.com**

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COMPLETE PROFESSIONAL

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**Combat Operations** continued from page 34

have full operational control of all the assets of the Aviation Brigade. The only aircraft I really owned were the ones I had in Brigade Headquarters. All the other aspects of command were my headaches, and the headaches of my brigade commander or my group commanders and my battalion commanders.

If you want to look at it another way, we had all the worry, sweat and headaches of the business, and the operational commander had all the fun, and that is truer than it might sometimes sound.

We played a fairly strong administrative role in trying to take care of our people, in keeping our people sorted out, and in making adjustments as new companies came in to make sure that one company wouldn't turn into a pumpkin overnight because all of its people had gone home at the end of their year. We processed, of course, fantastic numbers of awards and decorations, primarily because of the Air Medal, and we had the normal administrative worries that any commander in any organization has got.

### IN-COUNTRY TRAINING

We had a heavy training role to make sure that our people were trained properly after they got in the country, and I'm not throwing any slants on the Aviation Center here for they're sending us magnificently trained people, but obviously there are a few things that they can't give them even there, and we do have to keep training up in the field.

It's not an easy thing to do because the people are flying more in trying to get the job done than anyone has ever believed possible, and there is not much time left for them to train as such.

We had strong standardization programs going, not in terms of flying standardization — we had that too — but in terms of standardization of doctrine, techniques, tactics, methods of operation, and so on. Understandably enough, the elements in different parts of the country in many ways were doing things in different ways. If you took a company from the Delta and plugged them in the highlands, you would find that their SOPs were quite different. Well this we couldn't live with and retain the degree of flexibility that we needed, so we started early in the game with the help of part of the "old team" from the 11th Air Assault that General Kinnard very kindly let me steal from the 1st Cav Div to bring down to my Brigade Headquarters and then start work on this sort of thing. He gave us some good people, and it hurt him to do it but it certainly helped us.

### THE SHIFTING OF FORCES

We exercised a fairly strong planning role in large operations that required the shifting of significant assets from one end of the country to the other. For example in Operation Junction City, we got one battalion with five companies from I Force V and put them in support of Junction City and two companies from the Delta for a 4 or 5 day period to help kick that operation off. This will grow more

in the future.

We haven't been able to shift assets around very much because we were somewhat limited in what we could take away from people and still enable them to do their job, but I think that I can very safely say that in the future operations it will not be uncommon to see 20 Assault Helicopter Companies with 220 to 240 Hueys and six, eight, or ten Chinook Companies put behind a single division for a single day in order to throw them in quickly, and to gain better surprise than they've sometimes been able to obtain in the past.

### THE BROAD DISPOSITION

Logistically, we were somewhat out of the pattern, except for the brush fires, and the brush fires kept us very well occupied. Again, without being unkind to our friends in AMC who do a tremendous job in supporting us, there were many things that dropped through the cracks, and these seemed to keep us fairly well occupied from time to time. As you know, we're spread out from one end of the country to

the other. Chart 2 shows the general layout in Vietnam, the countryside itself, place names, and the location of the major ground elements in the country. As you know, every Infantry Division has an Aviation Battalion of its own, and the 1st Cav, of course, had a very fine aviation setup of its own. These were under complete command and operational control of the elements to which they belong, but the rest of the combat aviation units in the country belong to the 1st Brigade, and they were disposed in country as is shown on the chart. The 17th Aviation Group is the one in the north and it's under the operational control of 1 Force V (1st Field Force Vietnam). The 12th Aviation Group, located just north of Saigon in Long Binh, is under the operational control of 2 Force V. The 17th and 12th Groups actually were pretty close to being equal



in overall size, 12th Group being a little bit bigger and the 13th Battalion in the Delta, the good old Delta Battalion under the opcom of the senior advisor of the 4th Corps.

### PATTERN OF SUPPORT ...

The general pattern that we followed in this was to put one aviation battalion headquarters behind each infantry division. Now when I say, behind, they weren't attached to them and actually they weren't under their opcom, but for all intents and purposes they belonged to the infantry division concerned. For example, we've got the 11th Aviation Bn with the 1st Infantry Division — it was the original guinea pig outfit actually that we used to work up the tactics and techniques in support of a standard infantry division by separate airmobile outfits. The 214th Aviation Bn is now co-located with the 9th Division, and so on.

Now these battalion headquarters pretty well stayed with the division, i.e., the 11th had permanent liaison with the 1st Infantry Division and they live in each other's hip pocket. The assets, the company-sized assets, that are needed for specific operations are shifted back and forth as required and put under that battalion headquarters for opcom during



a specific operation. For example, the 11th battalion on occasion has been up to as many or had as many as 10 to 12 assault helicopter companies under their command.

### **REPETITIVE "TEAM-UPS"**

So the battalion headquarters, in particular, is fully responsive to the units that it's supporting. Beyond that, insofar as possible, and by and large it was possible across the board, we tried to co-locate a company with each brigade so that again you got a close association between the aviation company commander and the infantry brigade commander, and that company worked for that brigade more often than not.

As an example of the way this worked out, the companies of the 11th Battalion which lived with the 1st Division spent 60 percent of their time last year in direct support of elements of the 1st Infantry Division. They spent the other 40 percent working for other people around the countryside. Now this percentage will probably increase as the aviation assets there increase, and as we have a better capability of giving people more support all the time. So this, generally speaking, is the way we have worked.

Now to differentiate between our operations and those of the aviation battalions that belonged to the infantry divisions, generally speaking, the latter were used internally by the divisions. The airmobile company, for example, while it wasn't split up, very often spent a lot of its time on ash and trash, hauling pigs and rice, and so on and so forth, handling internal jobs within the division.

In big operations they were used once in awhile as an assault chopper company, but they were not used in this role nearly to the extent that my people were. My people were the experts in combat assault operations, and again, about 60 percent of their time was spent in flying CAs as opposed to the other types of support missions that we flew.

The battalion headquarters of an infantry division and my battalion headquarters with the infantry division frequently rotated off on the air mission command job. For example, in a day in which you had a large number of lifts going within a division, the 1st Aviation Battalion and the 1st Division again would take one; my people would take the next; and they'd just switch back and forth. Same frequencies, call signs different, but using the same bird throughout the day, and we developed in this a pretty flexible way of going at it.

Statistics are always a bore, but I'd like to give you a few anyway for FY 67. Hours flown: I thought we were going to break a million hours, but we didn't quite do it — 933,189. Troops transported: 3,940,299 of almost four million. Evacuation of wounded: 2,170 and that's in Brigade birds, not medevac birds for they did not belong to me. VC killed by helicopter: 9,413. I don't want to belabor this point, but that's higher than the body count of any division in Vietnam. Structures destroyed and sampans destroyed: almost 6,000 of each.

### **THE VULNERABILITY RATE**

The vulnerability rate actually has improved over the past year or so. Now I'll have to treat this one with a grain of salt because I'm not really sure whether the vulnerability rate has improved, or whether we finally have gotten people to admit that an accident is an accident, instead of trying to label it as a combat loss, so any real charting of this

is a bit difficult at this point in time, but those statistics are very, very good from the vulnerability point of view.

One aircraft hit per 756 combat sorties; one shot down for 9,692 combat sorties; and one "total aircraft" loss for slightly over 25,000 combat sorties. I would maintain again as I have at times in the past that I think that kind of a batting average is a lot better than you get on the Freeways around Los Angeles, and personally I feel a lot safer in a chopper in Vietnam than I do on one of those roads.

The killed rate and wounded rate are similarly very good. Now this is very meaningful to us, because what it's doing for us aviation-wise in Vietnam, as we said before, is providing a tremendous training ground for young aviators. It's not so dangerous or so grinding into the ground as was World War II that we're losing tremendous numbers of good people. On the other side of it there's just enough danger in the air to tend to make people try to do the job properly most of the time.

I mentioned earlier that we had a slight lapse in the feed-in of aviation assets during the year calendar '66 which, of course, was the time of the tremendous buildup in ground forces. The American ground forces in Vietnam more than doubled during that calendar year, but we got a very small increase in aviation assets to go along with it. This is completely understandable for the production rate of pilots, birds, and everything else lagged considerably in keeping up with the game.

### **160 FLYING HOURS A MONTH!**

Now what does this translate into? In December of '66 we suddenly found that our people were flying in aircraft much more than we ever had before and in reality we began to find out how much they could fly. My first indication of this was in the 52nd battalion where in that month we had ten people fly in excess of 150 hours, and most of them were up around the 160-170 level, which was somewhat unprecedented even over there and made us start to worry a good deal.

We did institute some controls, the primary control being that we have now said that no one can fly more than 140 hours in a 30-day period, i.e., 30 consecutive days, without getting stood down for 3 days. After he gets his 3 days stand down he starts flying again.

Now what this has done for us in terms of averages within the brigade are pretty well reflected in Chart 3. Now I wanted to show you the worst picture on this obviously so I confined this to slicks — the Deltas and the "H" models that we've got over there because they are flying considerably more than other aircraft or other people. The average hours per aircraft in the brigade — slicks only — is 91.2. The highest, the 174th Aviation Company, the Dolphins who are with Task Force Oregon, and who work most closely with the 1st Brigade of the 101st Division, put 145.5 hours average on their slicks in August of this year, which is almost unbelievable. The average time per pilot was 90 hours, and again, the highest was the 174th with an average amongst the slick drivers of 107 hours. Now this includes the company operations personnel, company commanders, exec operations officer, etc., so it's not a precise reflection of what was happening to the individual, i.e., the day-in and day-out cockpit pilot, and they in that company in that month were right on the 140 hour mark across the board.

This is not something exceptional in Vietnam now —



### CHART 3

#### 1ST AVIATION BRIGADE UH-1D & H FLIGHT STATISTICS AUGUST, 1967

Average per aircraft .....	91.2 hrs
Highest (174th AHC) .....	145.5 hrs
Average per pilot .....	90.0 hrs
Highest (174th AHC) .....	107.0 hrs

it's a way of life. What we're learning really, I think, is how much people can fly in a chopper. Flight surgeons and commanders keep a close eye on them; they are holding up well; they do seem to be able to stand it. In fact, most of them prefer this to not being able to fly, and it's reached a point where people begin to squawk if they only get 100 hours in a month because they have to spend too much time sitting around a bar or something. They'd rather fly to keep themselves occupied.

Now, I said I'd say something of the fact that we thought we were pretty good, and I didn't. The members of the 1st Aviation Brigade, and this is not because they belong to this brigade above any other or anything of this sort, but it's because they're superb young people — really tremendous people. The young warrants that we're getting are better motivated than any bunch of people I've ever seen in my life. They're bright-eyed, bushy-tailed, eager and never anything less than 200 percent willing.

#### A MEASURE OF PROGRESS

They perform incredible feats day-in and day-out. Some of them get recognized for it; you could never recognize all of them for what they're doing on a daily basis for they're doing a tremendous job. You simply don't get squawks from ground commanders on the support they're getting from these companies in Vietnam at the present time.

I was probably getting through brigade headquarters ten to twenty letters a month of appreciation from battalion commanders and company commanders on the outstanding job that some outfit or some man had done for them. Over a drink at night I heard two infantry brigade commanders arguing with each other about whether the Robin Hoods or the Vultures were the better helicopter company, and when you get infantry brigade commanders arguing about what they're getting out of an outfit that doesn't belong to them, you have made a certain amount of progress.

#### THE FUTURE ...

So, these gents are proud of themselves for they're doing a terrific job and it is thanks to most of the people in this room and a lot of others who are at this convention that they're able to do this job, because you're the people who have motivated them, built them up, trained them, equipped them, and everything else that goes along with it.

What does the future hold? I think we'll continue to see some growth out there. I can't go into it in detail unfortunately, but I can assure you that the general methods of operation will stay the same, and the performance will stay the same.

*This article was first published in the January 1968 issue of Army Aviation Magazine.*



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# You Should Know the Answers

By BG Carl H. McNair, Jr., ODCSOPS, DA



**W**as I caught short recently when my 11-year-old daughter read the January issue of Army Aviation Magazine before I saw it!

With a gleam in her eye, she had opened it at the dinner table and said, "Dad, what is the only known Air Force Base that has more Army aircraft assigned to it than it has Air Force Aircraft?"

I looked at her quizzically and said, "What kind of a question is that?"

By that time she had the attention of everyone at the table and said, "After all, since you are the 'Army Aviation Officer', you should know the answer."

I tried a couple of futile replies to include some transferred Air Force bases — Campbell AAF, Hunter AAF, and the like — but all drew negatives.

I finally had to give up, and she told me "Whiteman AFB, MO.!" Per the recent article in Army Aviation. I'm a little wiser now — and a lot better informed on that particular question.

In retrospect, therefore, I thought I might share a potpourri of data with you, good for dinner table conversation, or even "Happy Hours Talk" about your favorite subject - Army Aviation. Let's start with aircraft ...

**Q.** How many aircraft does the Army actually have?

**A.** According to the January "Gold Book" maintained by Joe Cribbins and his Aviation Logistics Office in ODC-SLOG, there are 8,728 Army aircraft in our fleet. Of these 91.5% are rotary wing aircraft and 8.5% are fixed wing.

For those of you who may have wondered why there are not more fixed wing and twin engine transitions, your answer lies simply in the fact that the bulk of the aircraft are rotary wing. There has been a dramatic shift since the early '50's when our force was 90% fixed wing (L-19 O-1's, L-20 U-6's, L-23 U-8's) and 10% rotary wing ... and here's one for the nostalgic aviation buffs who might ask:

**Q.** "Where have all the Beavers gone - and the Otters, too?"

**A.** Have faith - there are a few still flying painted Army OD. In fact, we have two U-6A Beavers still in the active force and three U-1A Otters. I entered the Army in 1951, concurrent with the introduction of these aircraft and they might outlast me yet.

**Q.** What aircraft does the Army have the most of?"

**A.** Surely, you would say the Huey and you would be right! With almost 4,000 still in the total force ... and here's one that will tease many friends of Army Aviation:

**Q.** "Do we have more AH-1 Cobras in our inventory, or OH-58 Kiowas?"

**A.** The OH-58 with slightly over 2,000 is our next largest, followed by the AH-1G/S Cobra with nearly a thousand.

**Q.** "Which of our fixed wing aircraft is the most numerous?"

**A.** In the fixed wing arena, the Mohawk leads our force with the U-21/C-12 fleet closely behind. There's a wide range of other support aircraft, such as U-3's, U-9's, and C-45's, still substituting to meet support aircraft requirements.



## US ARMY GENERAL OFFICERS WHO ARE ARMY AVIATORS

### GENERALS

George S. Blanchard Robert M. Shoemaker  
John J. Hennessey John W. Vessey, Jr.

### LIEUTENANT GENERALS

Sidney B. Berry Eugene P. Forrester  
James M. Lee

### MAJOR GENERALS

Morris J. Brady Joseph T. Palastra, Jr.  
John W. Brandenburg Edward A. Partain  
Jerry R. Curry George S. Patton  
James F. Hamlet George W. Putnam, Jr.  
Benjamin L. Harrison Ronald V. Rattan  
Jack V. Mackmull James C. Smith  
John W. McEnery Story C. Stevens  
James H. Merryman James C. Smith  
Howard F. Stone

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Weldon F. Honeycutt James E. Thompson\*  
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William J. Kennedy John F. Wall\*  
Richard D. Kenyon\* Jack A. Walker  
\* Colonel (P) John W. Woodmansee, Jr.

You'll see them turn up at Army airfields across the country and say, "Gee, I didn't know we had any (blank) in the Army."

But we do and will have these substitute resources as long as they can perform a useful mission and until suitable replacements are available.

Now, with respect to personnel ...

In spite of our current shortfall in total aviator strength, relatively speaking, Army Aviators still represent a sizeable portion - almost 20% of the officer corps - with assets nearing 14,000.

At the beginning of FY79, there were 8,188 commissioned aviators on active duty and 5,406 aviation warrant officers.

Of these, two-thirds were in aviation assignments, cockpit or staff positions, while the balance were serving in school or other career development positions. During these days of aviation shortages and increased requirements, we will see a need for a larger percentage to be employed in aviation-related assignments.

## AVIATION NOT A HINDRANCE

Certainly worthy of note is the fact that 56 active duty general officers today are Army Aviators (see separate listing). In fact, four of the Army's ten four star generals are aviators:

GEN George S. Blanchard, who serves as CINC USAREUR; GEN John H. Hennessey, the CINC REDCOM; GEN John W. Vessey, CG EUSA and CINC

UNC; and GEN Robert M. Shoemaker, the CG US Army Forces Command. And, also in our senior aviation ranks, 460 of our aviation warrants are CW4's.

Concerning aviation units, structure, and force location, the question sometimes arises as to where the bulk of our aviation resources lie. Without a doubt, our focus is on Europe and our NATO commitments and our priorities are certainly there, so we attempt to provide the most modern systems to the forward deployed forces.

But because of training requirements, logistical considerations, and other factors, the vast majority of the aviation units are split between FORSCOM and the Reserve Components with approximately one-third to each (with a slight edge to the Reserve Components - and they are indeed a key element of the total force).

I could go on and enumerate the number of aviation companies, by type, battalions and groups, but let it suffice to say that aviation continues as a most viable and visible force in today's Army. Notwithstanding where your unit or aircraft is or your mission, you are indeed an important part of the Army's overall plan.

Aviation is a vital element and is so recognized. We in aviation must ensure that our contribution is enhanced, not diminished. Unquestionably, aviation, by its very nature, is a costly resource, and its return on the battlefield must warrant the investment.

## A LOOK AT THE BUDGET

In the FY80 budget just submitted to the Congress, aircraft procurement, modification, spares, and support equipment totaled \$946.4 million, or 13.2 of a total procurement request of \$7.1 billion. In addition, a significant amount of aviation effort is included in the total \$2.9 billion Army R.D.T. budget request.

This all points up to the continuing importance of providing a maximum return on the defense dollar invested. Army Aviation is designed to do just that on today's battlefield.

Looking to future systems and leading the list of aviation R&D items for FY80 with a budget request for \$176 million is the advanced attack helicopter. I recently joined with MG Jim Merryman, Commander, US Army Aviation Center; MG Thomas Lynch, Commander, US Army Armor Center; and BG Ed Browne, AAH Program Manager, for an AH-64A program review at Hughes Helicopter facility in Culver City, California, on 30 January.

During that visit, each of us was afforded a brief opportunity to fly in the AH-64A. What an experience! The agility, power, and maneuverability of the AH-64 are what we have long sought in an aerial weapons platform - one designed from the ground up to live and fight in the Army's environment. It's a super machine, and one which we need to counter the threat of the '80's.



*This article was first published in the February/March 1979 issue of Army Aviation Magazine.*



# "It's been an extraordinary year."

By LTG John Galvin

No matter which way you look at it, this has been an extraordinary year for Army Aviation. The branch has been created; the aviation school has been given pronency for all training and doctrine; the BLACK HAWK is here and the APACHE is on the way; the Aviation Brigade is coming on as a part of DIVISION 86 — all of this and much else makes 1983 a year to remember.

## MUCH MORE TO BE DONE

The Aviation Employment Conference showed us that there is much left to be done. Roles and missions are shifting as we bring on new organizations and new equipment. In this period of flux, Army Aviation is looking at the possibilities inherent in the role of support and the role of maneuver on the battlefield. The gun may be coming back to challenge the missile as aviation weaponry for a wide variety of missions.

The new branch will grow to maturity in the era of the AirLand Battle, where the potential for development of aviation is broader and more varied than ever before. The question is: How to fight? There are great untapped resources and capabilities available for exploitation within our new branch.

Perhaps the most important tactical concept of all is the idea of the ground envelope. The lift, scout, and attack birds, no matter how they are configured or no matter what the mission may be, will operate in close coordination with all other Army combat arms to bring three dimensions to the battlefield — with maneuver and firepower that has never been seen in the levels that this new mix can bring.

A combat aviation management system, such as is used today in the 101st Airborne Division (Air Assault), is probably going to provide the example for command and control interfaces at all

levels in the air-ground combination on the battlefield.

What the force packages will look like remains to be seen, and that is a very important matter: We need homogeneous organizations in which scout, lift, and attack birds are segregated into their own particular units — and then are mixed on the battlefield in packages as dictated by the tactical situation. We cannot put every kind of weapon on every helicopter — we must carefully build the proper mix. The air-to-air capability will definitely be a requirement of the immediate future.

## FOUR CHALLENGES

What does all of this mean to the army aviator of today?

What are his responsibilities as we transition into the aviation branch, with its new doctrine, with its combined arms training, with the questions of roles and missions, of maneuver versus support — with the question of how to fight?

What is the responsibility of the individual officer, non-commissioned officer, and soldier within aviation branch as it grows to maturity under the aegis of AirLand Battle?

I see four challenges.

The first challenge is to become a team partner, fighting alongside the rest of the Army, training up the doctrine and the equipment, winning the AirLand Battle through an integrated mix of combat power — in the right place at the right time on the battlefield.

I know that you have already heard many times that you must become a part of the team. Maybe there's a certain aspect of "penance" in the advice that you get that tells you — over and over again — not to put on your white scarf and fly away into the "Wild Blue Yonder."

You should be objective and recognize the fears and biases behind the endless repetition of the idea that you are some-



how going to be lost — and with the comment, "Wild Blue Yonder," I mean no disparagement to the United States Air Force. History shows us that there was a requirement for a strategic Air Force, as well as for tactical flying. It was necessary for the Army Air Corps to become an Air Force in order to be able to operate in the strategic realm as a partner to the other Armed Forces; but you know that you are tactical — you will be operating in the ground envelope as a part of the Army.

You must overcome the worries and anxieties of some of the United States Army by showing — over and over again — your absolute dedication to the ground fight. As an aviator your first source of pride must be the recognition that you are, above all, a soldier.

The second challenge is the danger of parochialism which might inhibit the development of training and doctrine along lines that can be most productive to the Army ground battle. As the experience of the other branches — which you now have in abundance — begins to disappear over the years, you must replace this at Fort Rucker, and in the field, with a deep professional knowledge and understanding of what goes on in the Infantry, Armor, Artillery, and other elements of the ground fighting machine.

The third major challenge is the problem of people in the aviation branch. As we look at the personnel aspects of the drastic changes which must come about in the creation of a new branch, we should recognize that careers are on the line — careers of officers, non-commissioned officers, and young soldiers. The immediate answer to the problem of career development is, of course, to get on with the organization of Division 86, but that is only the first step. As the kaleidoscope of personnel actions revolves around the birth

of the branch we must do everything possible to recognize the people aspects of the organizational and doctrinal changes that are sure to come about.

Everyone of you must ensure, from top to bottom of the organization, that the following words are true: Aviation Branch takes care of its own.

The fourth and last of the challenges has to do with tradition. Never forget that the fighting will of the Aviation Officer and Soldier will always be more important than anything else. It is based on many things, of course; on love of country, on pride in unit, on a personal sense of responsibility. Perhaps even more than these, it is based on a deep feeling of cohesion among those who wear the aviation insignia.

## AS IT SHOULD BE

In the future, you will see devotion, dedication, and indeed love for the branch. The wings and propeller will come to mean more and more to you as time goes by, enveloping great chunks of your life and experience. And this is as it should be. That insignia means you have become an equal member of the fighting team, an expert, a professional in every sense of the word, an Army Aviator in a way that has new meaning to all of us.

Army Aviation is embarked on a profoundly significant endeavor, reaching into hitherto untouched possibilities in combined arms warfare. The potential is unlimited, but the future is unknown. It all depends on you.

I can only wish you the best of luck — and Godspeed.



*This article was first published in the December 1983 issue of Army Aviation Magazine.*

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# FORGET THEM NOT!



By MG Robert F. Molinelli

**R**arely do I have the opportunity to discuss and reflect upon the impact of logistical support. Logistical support is every bit as important as standoff kill ranges, war games, and sound tactics.

We must have the ability to support the combined arms team while moving, shooting, and communicating. This sounds simple but, in reality, it's an enormously complicated and important mission.

## "Nothing worked right."

As an LTC, I recall my initial frustration while commanding the 2d Squadron, 17th Cavalry of the 101st Airborne in Vietnam. When I moved the squadron to conduct extensive operations south of Khe Sanh, we established a forward area rearm and refuel point west of Dong Ha. Nothing worked right or for very long the first day.

Maj. Gen. Jim Smith, then the ADC(S) for the 101st, descended upon my pitiful operation, gave us some valuable lessons, and with assistance from DISCOM we had an acceptable operation going on the second day.

*I know that moving fuel and ammunition is not a grand and glorious duty, but it's super important.*

I vowed then and there to refine that ability to establish a FARP and, furthermore, to teach and work my maintenance units in that environment. Any combat commander who is worth his salt today had better know and appreciate his logistical support. The

fuel and ammunition does not arrive by magic, and without ammo for our sophisticated aircraft, we have nothing.

I know that moving fuel and ammunition is not a grand and glorious duty, but it's super important. If anyone thinks it's simple, just strap on a 5,000 gal. tanker full of JP-4 and take it from point A to B in all kinds of weather. If you prefer, work in an ammo bunker or out in the noon sun loading trucks. These soldiers are often out of our sight but they are our lifeline! We simply cannot function without their full support and mission accomplishment.

## "Working the problem"

Have you ever taken the time to speak with a unit maintenance officer, his commander, and the battalion aviation maintenance officer?

If you have, maybe you walked away with the same impression I did - they all had different views of the maintenance program and the status of aircraft. It kind of ran the cycle from "best" to "Oh, my God!"

Personally, having been a maintenance officer in two units, I believe this is acceptable since everyone, in reality, is working the problem. The attack varied, but then again, so did the vested interests. The maintenance officer, in my book, is the honest broker; he tells you the true story. Sometimes, we're prone to shoot the messenger if we do not like the news, and this is dumb.



We must listen to this critical player and support his program. If he tells us that maintenance teams are needed to repair aircraft and that station training and PT will have to slip this week, his request must receive serious consideration. When he points out that blades are arriving in boxes full of water, or the computer is rejecting requisitions, or equipment is out of order, we must help solve the problem.

The only time the staff or commander will hear about a problem is when the maintenance officer has explored all avenues for possible solutions and still has a problem. He's every bit as proud and professional as the most flamboyant cav pilot - and by the way, some of the cav pilots I know aren't very good at fixing cars, much less aircraft. On the other hand, a good maintenance officer can save you countless hours of intensive questioning on priorities, training, support, and flying hours.

After my initial experience with a FARP and MG Smith, we endeavored to learn how to move quickly and do our maintenance. Much to my S-3 and S-4's consternation, I'd move the squadron 40 to 60 miles with two hours notice. For the most part the aircraft and "D" Troop moved at night with the maintenance and support closing by 1000 hours the following mornings. At first we didn't do it well, but practice we did and we improved quickly.

## Practice pays off

The payoff came with LAMSON 719 in January 1971. USARV sent four additional air cavalry troops bringing our strength to seven air cavalry troops, one Delta troop, a Ranger Company, and the HAC BAV company. We moved the Squadron to Quang Tri overnight and were completely functional by 1000 hours the next morning. Subsequently, after securing Khe Sanh, we moved four troops with their supporting maintenance to Khe Sanh.

It all worked and worked well. By the first of March, I found it necessary to move and consolidate our maintenance at Quang Tri, but only because we were being shelled regularly at Khe Sanh, and not because our maintenance couldn't support us. At any rate, that was a long time ago but the whole thing worked because we worked together.

## Looking ahead

New tool sets, maintenance cranes, test equipment, improved computer capability, and dedicated logistical personnel should improve the program in the future. Maintaining aircraft, having the correct repair parts, understanding Test Measurement and Diagnostic Equipment (TMDE) procedures, and moving supplies forward to support the fighting man are integral to the combined arms team concept.

We too frequently assume away the logistical problems. I've learned my lesson and fully appreciate the value of logistical support. Having learned it, I salute the soldier hauling ammo, pumping fuel, maintaining equipment, posting supply records, and getting the right supplies to the correct place on time.



*This article was first published in the January 1984 issue of Army Aviation Magazine.*



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# Third Army View of DESERT SHIELD/STORM

By MG Robert S. Frix and MAJ Ronald A. Carter

President George Bush ordered American military forces to Saudi Arabia on 7 August 1990. By 11 August, 13 Army helicopters had arrived in country. By the time the ground war began on 24 February 1991, XVIII Airborne Corps had 920 aircraft in Saudi Arabia, VII Corps had deployed 808, and Echelon Above Corps (EAC) and Army Special Forces had 160 for a Theater total of 1,888 Army aircraft. During the period of August 1990 through March 1991, 2,010 Army aircraft flew 182,960 hours as part of the Army team. Ten aviation brigades directly participated in combat operations and other aviation forces provided essential combat support and combat service support to the theater.

On 16 January 1991, AH-64 Apache helicopters from the Aviation Brigade, 101st Airborne Division (Air Assault) conducted a deep operation to destroy Iraqi radar sites to help clear the way for the massive air operation to begin in the early moments of 17 January 1991. The missiles fired by the Apaches were the first shots fired in the Gulf War.

Aviation made significant contributions throughout the entire Gulf operation. Aviation units exercised their ability to deploy to the Theater as elements of rapid deployment task forces. Aviation assets allowed the ground commander to extend his area of influence, observe his area of operation, and project his firepower to a degree never before realized. By providing an additional maneuver dimension to the ground commander, aviation forces extended the corps and division commanders' ability to project combat power deep into Iraqi territory and, through armed reconnaissance, gathered real-time intelligence to facilitate operational and tactical planning. At the operational level, aviation combat and combat support forces quickly shaped the battlefield by cutting off the withdrawal of the Iraqi Republican Guard forces, facilitating their defeat.

At the tactical level, the aviation brigade and attack battalion were fully integrated into division commanders' schemes of maneuver as essential components of the combined arms force. Tactical maneuver was redefined as attack battalions integrated their combat power into the division attack. The partnership of the AH-64 Apache, M1A1 Abrams tank, and M2 Bradley was an awesome fighting force. Armor, infantry, and combat aviation melded together as a maneuver fighting force that will underpin the architectural framework for AirLand Battle Operations.

Combat service support aviation forces were essential to sustain the tempo of the ground battle. Establishment of initial forward operating bases over 100 KM into Iraq and initial aerial resupply of fuel and ammunition allowed corps commanders to extend combat power forward to flank the Iraqi army and set the conditions for success. Medium lift helicopters moved tons of equipment, supplies, and combat soldiers forward to support the ground campaign. The cargo and utility fleet were workhorses and proved the value of this essential combat multiplier. Over 980 utility and cargo helicopters supported combat operations in Southwest Asia.

Peacetime training is directly responsible for much of the success enjoyed by Army aviation. The effectiveness of standardized attack battalion training, night training programs, and extensive use of simulators has been validated by aircrew performance in combat. The Army's development programs have produced outstanding, technically and tactically competent leaders at every level in all branches.

Technology has provided aviation with a generation of aircraft capable of operating reliably in extreme conditions. The Gulf War tested and validated the



current family of aerial platforms, extremely lethal high technology weapons systems, and some theretofore still developmental and/or unfielded systems.

### VITAL INGREDIENT

The most vital ingredient for success was the absolutely superb men and women that served. The dedicated, smart, and courageous aviation soldiers made it happen, no matter how tough or complicated the situation.

The overall blend of quality soldiers, tactics, training programs, leadership, and equipment was a formula for Army Aviation success. However, recognition and improvement of areas of weakness is extremely important to future battlefield success. Failure to do so may prove costly in lives and equipment. The remainder of this article will summarize a few key issues which are symbolic of the many impacting on the aviation community. This is by no means meant to be a comprehensive discussion on lessons learned from the Gulf War.

The Aviation Brigade at both division and corps established themselves to be key players during Operations DESERT SHIELD and DESERT STORM. They were only limited in their ability to plan and execute missions by thinly-manned Brigade Headquarters. The capability of the Aviation Brigade to fight deep, close, and rear operation battle 24 hours a day was limited by minimum personnel manning. The current series MTOE needs to be more robust. This need would have been more obvious had the ground battle continued for a longer sustained period.

The current policy of resourcing pilots at the rate of one pilot per seat does not meet the requirements of full combat operations. Limited pilot availability equates to a limitation of combat capability and flexibility for the ground commander. Aircraft availability is effectively reduced to eight flying hours per day (up to 50% less under more

strenuous conditions such as night vision systems flying). As a result of the pilot constraint, aircraft were generally limited to flying, at best, 32 hours out of the 100 hour ground war without having to take excessive risks caused by aviator fatigue. Commanders employed their aviation assets judiciously with troops available often carrying greater weight than the enemy portion of METT-T.

The topographic characteristics of Southwest Asia made navigation difficult, if not impossible in some areas, for both air and ground systems. On-board navigational equipment and navigation techniques, even LORAN, proved marginal on Army aircraft in the desert environment. The Global Positioning System (GPS) navigation system was the solution. The GPS, installed in the aircraft or hand-held, enabled crews to fix their locations with pinpoint accuracy. Aviation units applied this navigation capability to target acquisition, target engagement, and enroute navigation. The result was a positive synergistic effect on virtually all battlefield operating systems.

### COMMAND AND CONTROL

Command and control of aviation assets during DESERT STORM operations was difficult due to the complexity of missions, low flying altitudes, and great distances between tactical assembly areas and objectives. The corps communications network was stretched to the extent that units without satellite communications capability were less effective in the decision making process. Command and control would have been greatly enhanced by employment of Airborne Command, Control, and Communication aircraft (ABCCC). The ABCCC must be equipped with long range communication systems and with pilotage systems which allow them to move with the shooters they control (e.g. night vision systems). We also

*Third Army View continued on page 54*

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# The Ten COMMANDMENTS of Leadership

By CPT Douglas M. Gabram

What does a Lieutenant need to know to be an effective leader?

I recently had the privilege of briefing the senior class at West Point on what a company commander expects in a new lieutenant.

I reflected back on my days as a platoon leader and all the lessons I had learned the hard way. Furthermore, with over 35 months of company command time, I have had the great opportunity to work with and train eight Lieutenants of various backgrounds. This time also included some intense professional development from some superb field grade officers.

The term commandments came from one of my old battalion commanders. You could use rules, laws, policies, or even guidelines, but commandments always stays with me. This is nothing brilliant, just one company commander's advice to some junior officers.

## COMMANDMENT #1

**Technical and Tactical Proficiency** — know your job, strive for excellence, strive to be the best aviator in your unit. Understand maintenance; mission accomplishment depends on mission ready equipment. Know your logbooks by heart. Learning maintenance should be one of your top priorities. Read, study, and seek the knowledgeable people in the unit and ask questions. Remember, knowledge is power and usually is the difference between one or two block. Henry Knox said, "To act with confidence, you must first master your own profession."

## COMMANDMENT #2

**Loyalty and Support** — If your commander fails, the company fails, and you will probably fail. The majority of company commanders are com-

petent officers, otherwise they would not have been trusted with such an important responsibility. If for some reason things are not working out with your company commander, put your head down and try and make it work. Be a team player; it will be best for the company. I cannot emphasize how important it is to be a team player. Not me or I, but us and we. The quick definition for loyalty and support — don't complain, don't talk behind your commander's back, don't be part of the problem, be part of the solution. Advise your commander, don't challenge him.

## COMMANDMENT #3

**Pay Attention to Detail** — Practice this and it will enable you to do the job right the first time. There are many shortcuts out there — don't take them. Shortcuts usually get people hurt. Start a leader's notebook, get organized from the start. Write things down and prioritize them. Proper attention to detail will save lives in combat and is part of the success formula for an effective maintenance program.

## COMMANDMENT #4

**Prepare Your Soldier for Combat, Both Mentally and Physically** — This revolves around the dynamic word "training". I don't want to get into detail about good and bad training. There are certainly enough Army manuals written on this subject. I will offer this, take training seriously. It should be realistic and performance oriented. Take the time to personally check the training in your unit and make a realistic assessment. There is a lot of truth to the phrase "soldiers only do well what the leaders check".

I believe 70% of being successful in combat is the proper mental frame of



mind. Keep your soldiers focused, motivated, and informed. The unit who wins is the unit who thinks they can. Combat can become a very quick reality. Neither myself or my gun platoon leader ever thought we'd be flying Apaches into Iraq at 0200 in the morning looking for bad guys. With the proper attitude and training, we were able to accomplish the mission. Some of you will see combat sooner than you think. Ensure you are mentally and physically prepared. You owe this to your soldiers.

#### **COMMANDMENT #5**

**Take Care of Your Soldiers and They Will Take Care of You** — When I arrived at Ft. Hood, TX as a new lieutenant, I asked my platoon sergeant for his words of wisdom, and he stated, "Take care of your soldiers and they will take care of you. It is a very basic concept, but a proven winner. The leaders who do this well are the leaders we will follow."

Listen to your NCOs and Warrants; they have all the experience. Exercise leadership through them, not around them. Don't try and be somebody you are not. The soldiers will know your limitations. Be fair. My definition of fairness is consistency. The right decision is usually the hard decision. Above all, have a sense of humor. I know this is easier said than done.

#### **COMMANDMENT #6**

**Admit Mistakes, Evaluate, and Learn From Them** — Nobody is successful or gets to the top of anything in life without making some mistakes along the way. The key is to learn from them and improve yourself. You are the new guy and you will make mistakes. Don't make unnecessary excuses. The phrase "no excuse, sir" is sometimes still appropriate. Try not to make the same mistakes twice. In the end, this usually separates the good officers from the average ones.

#### **COMMANDMENT #7**

**Be Professional at All Times** — Twenty-fours a day, your soldiers are looking at you for the proper example. You never get a second chance to make a first impression. Develop some situational awareness and think before you talk. Professionalism revolves around many attributes: appearance, attitude,

integrity, loyalty, self-discipline, and moral courage, just to name a few. Strive to be the best in whatever you do and never ever quit.

#### **COMMANDMENT #8**

**Put Your Soldiers in Positions to Succeed** — Know your soldiers, study them, know their strengths and weaknesses. Only then can you effectively lead them. Never put them in a position you would not put yourself in. Your soldiers are your most precious asset. It is your job to ensure their success.

#### **COMMANDMENT #9**

**Keep Your Commander Informed** — Never assume he knows your plan or intent, or your whereabouts. Communicate clearly to your boss, and understand his intent on the important issues. Remember, many people talk a lot — few people actually communicate. Try the CAV principle: Coordinate, Anticipate, and Verify.

#### **COMMANDMENT #10**

**Lead By Example in all Situations Possible** — It is number

ten on the list, but probably the most important. Establish from the start you will do what your soldiers do, and lead them through it. The better the example, the better the leadership. When in charge, take charge. It is sad, but you will see many officers who can not or will not take charge.

The Army is going through many new changes and becoming extremely competitive at every level. Our younger leaders must get an edge on success early. Each commandment has an important role in developing the all-around leader. As the Nike commercial says, get out there and "just do it!"



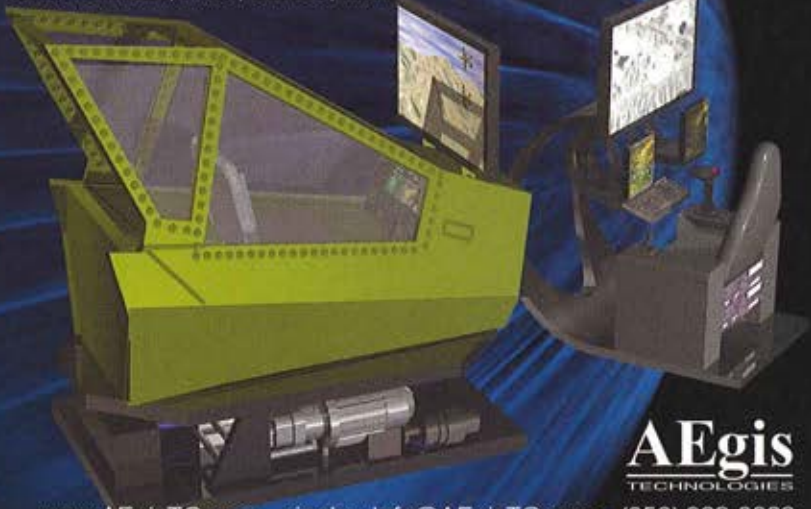
*CPT Gabram was the commander, Headquarters and Headquarters Company, 1st Battalion, 101st Aviation Regiment, Fort Campbell, Ky. at the time this article was written.*

*This article was first published in the October 1993 issue of Army Aviation Magazine.*

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Commanders and S3s from "Expect No Mercy" and "The Rock" make final coordination at an intermediate staging area before launching on a raid. From left to right: MAJ Andy Rohling, CPT Arie Richards, LTC Dom Caraccilo, LTC Doug Gabram, MAJ Mike Slocum and CPT J.T. Naylor.

# The Banding of Brothers:

## The Integration of Attack Aviation With Infantry in Iraq

By LTC Doug Gabram  
and LTC Dominic Caraccilo

"Rock 6, this is No Mercy 6 with a flight of five Longbows established at ROZ KIM."

"No Mercy 6, Rock 6, roger. Lead elements of ground assault force are currently seven clicks out from the objective area, moving at 40 miles per hour. Begin movement from KIM to checkpoint 1-6."

"No Mercy 6, this is No Mercy 3, timing looks good. Lead vehicles are entering the objective area. You'll easily spot the western edge of the objective area by locating the mosque with the green-and-white checkered dome."

"Roger, No Mercy 3, green-and-white dome in sight; we're six clicks out, inbound at 100 knots."

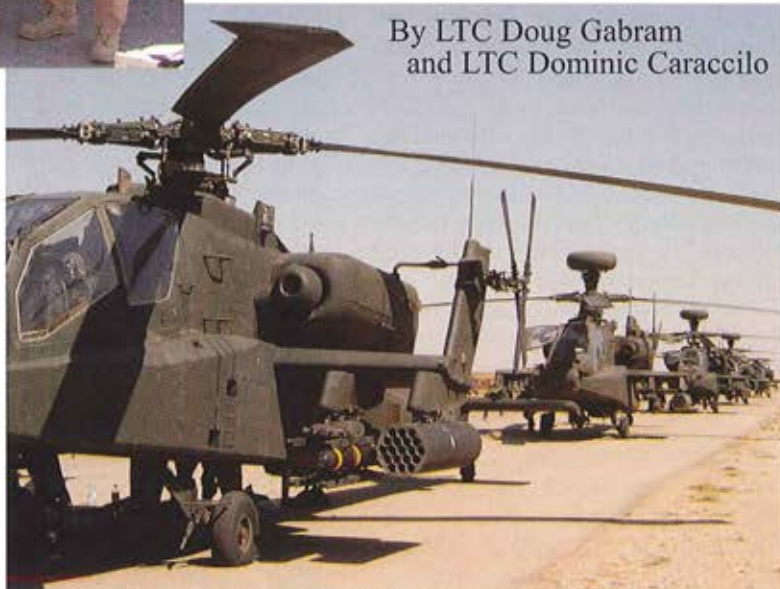
"No Mercy 6, this is No Mercy 3, Rock has breached the compound. You're clear in direct to your ABFs."

"No Mercy 6, Rock 6, HVTs in custody. Numerous weapons and illegal documents discovered. Ground elements have secured the area and are continuing their search. Your timing was perfect. Rock 6 out."

The preceding was an FM radio secure conversation of an actual raid mission against a high-value target (HVT) site in the vicinity of Kirkuk, Iraq, where the 1st Battalion, 101st Aviation Regiment ("Expect No Mercy") and the 2nd Bn., 503rd Infantry Regt. ("The Rock") operate as a combined arms team.

The 1-101 Avn. has been under the operational control (OPCON) of the 173rd Inf. Brigade at Kirkuk Air Base, Iraq, for more than five months. Within the brigade, the No Mercy task force (14 AH-64D Apache Longbows) has worked hand in hand with the 2-503 Inf. on a daily basis, conducting preplanned deliberate raids, air assaults, reconnaissance and security, and quick reaction force (QRF) missions in and around Kirkuk.

The relationship developed by this particular air assault



Apache Longbow aircraft from 1st Battalion, 101st Aviation Regiment, line up at an intermediate staging area for an intelligence update from other government agencies before executing a raid with "The Rock."

attack aviation battalion and airborne infantry task force is a testament to the "tailorability" of the Army. Before the war, if anyone would have envisioned a Longbow unit from Fort Campbell, Ky., working day to day in northern Iraq with an airborne infantry unit from Vicenza, Italy, the comment "have another beer" may have been appropriate. However, this rendezvous with destiny (as they say in the 101st Abn. Div.) has proved to be a valuable combined-arms relationship, both personally and professionally vindicated by the results achieved on the battlefield.

### SUSTAINED AIR-GROUND OPERATIONS

The purpose of this article is to present a pre-mission planning roadmap leading to some of the more noteworthy missions, and the tactics, techniques and procedures (TTPs) used during the execution of combat and stability and support operations (SASO) in northern Iraq. While the Army has been training air-ground tactics for years, it has not since Operation Desert Storm experienced a sustained operation in which air platforms and ground elements habitually operate on a day-to-day basis.



Much has been written both in doctrine and TTP white papers about the integration of ground elements with attack aviation. For nearly two decades the combat training centers (CTCs) have been the battleground for validating those procedures. One conclusion, however, is apparent - we must sustain and/or increase participation in all of the CTCs between attack aviation and ground forces. Furthermore, we must find a way to train together at various military operations in urbanized terrain (MOUT) sites, like those at the CTCs, Fort Campbell and Fort Hood, Texas.

However, other than at the CTCs and during periodic short-duration forays these tactics have been sampled but in no way validated. The war on terrorism in Afghanistan and Iraq has provided that proving ground. We have learned once again that when the bullets start flying, ground commanders want their Apaches - therefore, they cannot be an afterthought in training.

### **THE PROCESS IN A TIME SENSITIVE ENVIRONMENT**

What does it take to produce effective air-to-ground coordination?

The answer is one word - communication. Many units talk a lot, but few units truly communicate. Those that communicate successfully accomplish the mission when the battlefield is confusing, the enemy situation is ambiguous, and the rules of engagement and the construct for which they are implemented are a moving target.

The daily brigade targeting meetings and subsequent battalion targeting processes set the stage for our deliberate operations, establishing the task and purpose for both aviation and infantry. However, most of the successes enjoyed by the brigade developed when an informant brought timely information that required swift action if we were to seize

**We have learned once again that when the bullets start flying, ground commanders want their Apaches — therefore, they cannot be an afterthought in training.**

the initiative and capitalize on the moment. In a time-sensitive environment time itself becomes the most valued resource during mission planning, and usually the most limited. Realizing this, we established a very effective TTP to facilitate effective coordination/communication to quickly initiate a raid. On average, the need to execute movement in support of a human intelligence (HUMINT) tip within 20 minutes of notification became the norm.

Also key to the success of the Longbow's reaction time and command-and-control effectiveness was the construction of a "master" Air Mission Planning System (AMPs) load. This included standard priority locations inside Kirkuk, and various routes, NAIs and TCPs in the 173rd Inf. Bde.'s battlespace.

To enhance the communication flow the team embedded

a senior aviation liaison officer (LNO) who deployed with The Rock during execution. This attachment paid huge dividends, as most of the final coordination for actions on the objective took place on the hood of a Humvee after a leaders' recon. While aircraft were waiting at readiness condition (REDCON) 1, ready to take off, No Mercy 3, co-located with Rock 6 and Rock 3, communicated the ground scheme of maneuver to "paint a picture" for the aircraft's pilot while he rolled toward the objective. This not only allowed the aircrews to receive and fully understand last-minute changes to the plan, it also synchronized the timing of air and ground forces so that they simultaneously arrived at the objective area at the appropriate time.

Because No Mercy 3 (or his liaison representative) was collocated with the ground element he was able to provide instantaneous intelligence reports and instructions to the aircrews so they could position themselves to best support The Rock, all the while focused on their part of the mission. By placing a senior aviator on the ground with the infantry, No Mercy aircrews were nested assets able to adapt to the changing needs of the maneuver commander.

### **INJECTING INTO THE DELIBERATE PLANNING PROCESS**

When time was in greater abundance, No Mercy and The Rock staffs were completely integrated and on the same sheet of tactical music, adhering to documents like the 101st Abn. Div.'s Gold Book as a template from



which to organize its fight. Again, the ability to communicate both doctrinally and professionally was the underlying reason for success.

Understanding the ground tactical plan is essential for all aviators, and was a requirement that was constantly stressed. As conditions allowed, No Mercy directed that the aircrews assigned to a mission attend The Rock's OPORD to gain additional insight to the ground unit's scheme of maneuver. The situational awareness gained from their attendance was immeasurable and added greatly to understanding of the plan.

An added benefit is that the ground tactical plan can be refined by the interaction of the aviators with the ground



forces. The attendance at the OPORD and preliminary rehearsals allows aircrews to ask questions and offer suggestions that refine the ground tactical plan better early on, instead of waiting until the combined-arms rehearsal.

Combined-arms rehearsals were always executed when time was available. Essential items that were always covered included actions on contact, universal control measures, communications plan, friendly vehicle markings, rules of engagement/release authority, use of close air support, and medical-evacuation (MEDEVAC) procedures. There were obviously more, nonetheless any discussion and interaction between aviators and ground forces pertaining to all facets of the mission were key for success.

## THE BATTLEFIELD FRAMEWORK

The Rock operated from company safe houses inside the city and conducted daily patrols, which developed a rapport with the community resulting in interpersonal relationships, negotiating techniques, and consistent ability to develop human intelligence (HUMINT) on possible anti-coalition targets trying to adversely affect a safe and secure environment. The Longbows routinely flew specified reconnaissance and security missions, which provided a necessary show of force and presence in and around the city.

By fully understanding how the ground forces were operating in the city No Mercy was able to adjust its tactics over urban areas, generally maintaining approximately 300 to 800 feet above ground level (AGL), always utilizing the wing-man concept with one "low bird" and one "high bird" at an altitude where it could best cover the other aircraft. This tactic was obviously easier during the day, for at night the larger the separation between aircraft the harder to maintain coverage using either night-vision goggles (NVGs) or forward-looking infrared (FLIR).

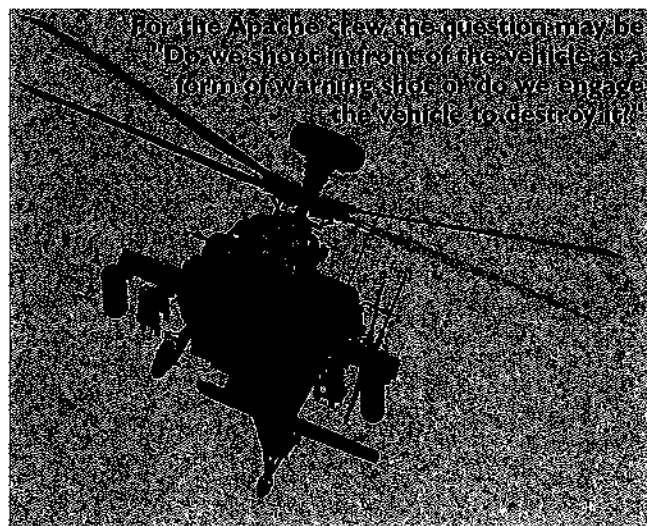
Over the city the sensor of choice was usually the eyeball, since aircraft teams were constantly moving above 60 knots to maximize station time and stay above single-engine airspeed. After acquisition of a threat, the crew would reposition to an area from which to best provide support and get the Target Acquisition Designation System (TADS) on the target. The appropriate altitude, airspeed and standoff were constantly evaluated depending on the situation at hand. Furthermore, the Apache's 8mm tape-recording system provided near-real-time feedback and intelligence - both critical for combat and SASO missions.

One of the most difficult challenges we had to face daily was the fine line between "winning the hearts and minds" of the Iraqi people versus aggressive offensive operations to find, detain or destroy HVTs performing anti-coalition activities. Varying ethnic backgrounds in the brigade's 9,200-square-mile battlespace and our responsibility to cover it forced us to constantly overlap combat and SASO operations.

Adaptive and synchronized decision-making by junior leaders and aircrews was vital to successfully operating in this ever-changing environment, as aircrews were only a flip of a switch away from providing lethal fires in support of the infantry on the ground. Because of the complex battlefield framework, the rules of engagement (ROE) were always discussed and thoroughly understood by both the ground forces and aircrews. The ROE (or more appropriately, our tactics for how we supported the ROE) in this

situation changed as we went from combat operations to SASO and back to combat.

This challenge can be very difficult for young soldiers as they ask the question: "Should we knock on the door, or do we kick the door down?" For the Apache crew the question may be "Do we shoot in front of the vehicle as a form of warning shot or do we engage the vehicle to destroy it?" The easy answer was to simply employ the Apache's weapons systems and take the target out. The more difficult, and usually correct answer, for gaining intelligence and "winning the hearts and minds" of the Iraqis was to not destroy - but detain or capture. The TTP of choice for the employment of lethal fires with the purpose of capturing suspected terrorists/looters was for the Apaches to fire warning shots in front of a fleeing vehicle, ultimately stopping the vehicle and vectoring the infantry in to secure the target.



The Apache's 30mm cannon was the weapon of choice for this purpose. Even though it is defined as an area weapon system, it is extremely accurate.

We constantly assessed every situation in terms of METT-TC. Sounds simple, but it constantly placed a heavy burden on junior pilots and infantryman to make quick decisions that could have significant political ramifications. In the end, our soldiers were disciplined and understood the ROE to effectively act within the commander's intent to make the right decisions.

## COMBINED ARMS CONCLUSION

The Expect No Mercy battalion and The Rock have mastered the art of combined-arms operations.

Although these two units had never worked with one another before the spring of 2003, the professionalism, tactical and technical competence, and appreciation for each other has formed a bond that all other air-ground task forces should strive to emulate. The TTPs and lessons learned during our five months of combat together have truly made us a "Band of Brothers" - and that band will leave its mark on every soldier and aviator in our two battalions for years to come.



*LTC Doug Gabram and LTC Dominic Caraccilo are, respectively, the commanders of the 1st Battalion, 101st Aviation Regiment, and 2nd Bn., 503rd Infantry Regt.*



# Time to Train

## How We Fight:

### Validation of the Joint Training Concept

By LTG Thomas F. Metz and LTC Christopher A. Joslin

*"The lesson of this war [Afghanistan] is that effectiveness in combat will depend heavily on jointness, ... and achieving jointness in wartime requires building that jointness in peacetime."*

— Secretary of Defense Donald Rumsfeld, Jan. 31, 2002

Afghanistan's lessons of combining special-operations forces, fixed-wing attack aircraft, near-real-time intelligence from national assets, regular Army divisions and indigenous fighters were recently applied in Iraq this past March and April.

In some cases, perhaps the techniques were more traditional, but in general the emerging doctrine - coupled with evolving tactics, techniques and procedures (TTP) - led military leaders to pursue ways in which to best inculcate these new forms of joint military operations across America's armed services.

Each of the services already has well established mechanisms for training its forces: the Army has its Combat Training Centers, the Navy has Top Gun, the Air Force uses Red Flag, and the Marine Corps has its Air Weapons Training Squadron 1.

However, all of these institutions emphasize service-specific capabilities, where achieving "jointness" is more deconfliction of joint operations rather than integration of multi-echelon, joint forces across distances comparable to realistic deployments.

We fight jointly, as joint task forces, so we obviously need to train the same way in peacetime.

Our nation needs a joint national training capability (JNTC) to ensure our forces are trained and ready to operate as a joint team in single-nation, unilateral and coalition JTF operations.

It is also clear that this JNTC concept deserves a name that represents what it truly could be, a Joint Air-Ground Center of Excellence, or JAGCE.

In June 2003 the Army's III Corps demonstrated a way to make the JAGCE a reality.

#### Creating the Foundation

The current theater of operations in the U.S. Central Command's area of responsibility (AOR) spans distances comparable to the entire Southwestern portion of the United States and is generally within the 700 mile strike-distance of aircraft carriers.

The nature of CENTCOM's on-going operations includes forces from all services with coalition joint task force (CJTF) headquarters located hundreds of miles from the actual operations and in other partner countries.

The tempo and agility of these CJTF operations is unprecedented, involving national-level intelligence gathering assets; special-operations forces; thousands of aircraft (including attack fixed wing, helicopters and unmanned aerial vehicles, or UAVs); long-range artillery rockets, missiles and cruise missiles; and conventional ground forces.



**21st Century Joint Military Operations**

550 Miles  
400 Miles  
650 Miles  
675 Miles

Two Wars, So Far  
Both Joint Theater Operations  
Do We Expect Any Other Kind?

Fort Hood fielded the Army's Battle Command Systems

This established a Joint Conflict and Tactical Simulation (JCATS)-based, CJTF-level simulation populated with an entire CJTF and scripted enemy force in the BCTC, tied to brigade and battalion ABCSS.

The Bridging Event was a limited test of the exercise system with the command-and-control assets at Fort Hood and two configured AH-64D Longbow attack aircraft deployed and flying in Arizona. These aircraft fired





on an instrumented target vehicle and all events (both firing and tracking) were captured on the command-and-control systems at Fort Hood.

The JAGCE test linked echelon-above-corps assets to find the enemy. It employed Longbow aircraft to fix targets and a combination of attack aircraft and rocket artillery fires (hundreds of miles apart) to finish the target. Then virtual UAVs were used to assess the battle damage, all real-time in the constructive simulation.

## Results and Recommendations

The JAGCE demonstrated it can meet the requirements for a JNTC. It verified the technical feasibility to conduct operations from a designated set of locations, or as a mobile capability deployable to various locations. We must make it a reality to attain a peacetime training process for preparing forces for how they fight. To get

there, we must do the following:

1. Establish and resource a JNTC program.

The U.S. Joint Forces Command (USJFCOM) should be the nexus for establishing the JNTC capability. This would take the multi-service and joint service TTPs already developed and published by the Air Land Sea Application (ALSA) Center, combined with professional observer-controllers taken from each of the services' existing training programs and USJFCOM, to form the core of a JNTC training program.

The opposing forces (OPFOR) could also come from each of the services' existing programs and could be resourced as required to meet the JNTC schedule from their home stations.

2. Set the training venues.

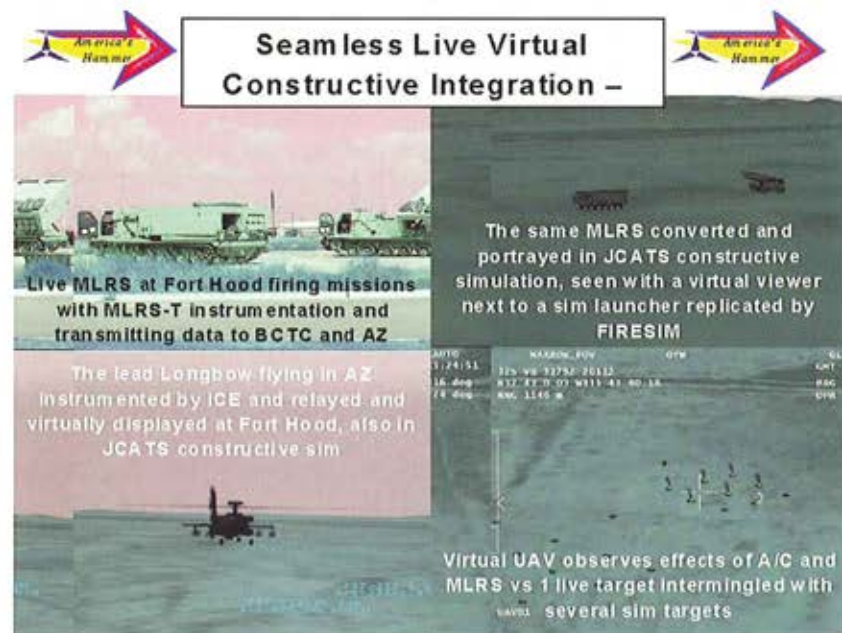
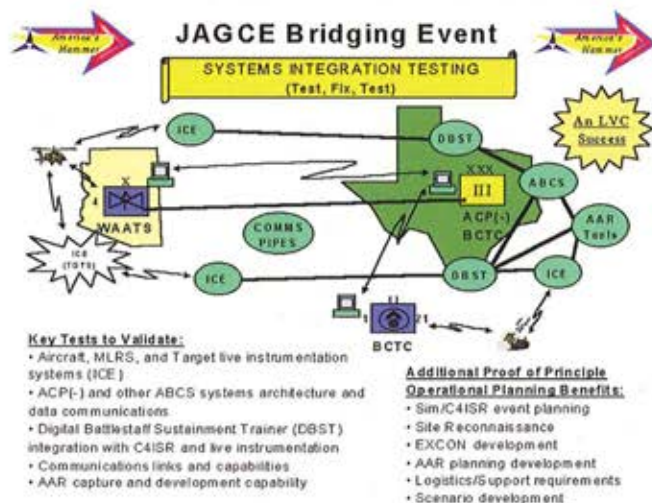
The Bridging Event highlighted operating differences among the services that have direct impact on each service's ability to effectively execute realistic training, particularly in the environmental-assessment process.

The training areas must accommodate off-road land maneuver operations that include tracked vehicles and rotary-wing aircraft. They must also have the logistical architecture to support significant force deployments. This includes all classes of supply, bulk fuel, ammunition-storage and transfer operations, railhead down load and up load capabilities, line-haul ramps, and ground- and air-certified ranges.

The communication trunking system for tracking instrumentation and exercise control must exist or have requirements identified and locations surveyed.

3. Develop realistic training scenarios with specific training objectives tied to JTTP.

The purpose is to train all participants of a CJTF at all levels that replicate anticipated mission requirements in complex live-fire situations that require the service participants to exercise and work through the seams that traditionally exist between the services in current training workups. These include cross-boundary fires; integrated close-air-support operations; deconfliction of indirect and direct fires; integrated airspace command and control that exercises flexible airspace control orders able to rapidly change to meet changing tactical situations; integrated intelligence and air-defense systems incorporating Aegis, Patriot, space and other national assets; application of joint firepower; joint suppression of enemy air defenses (SEAD); joint theater missile defense; "fratricide" reduction and prevention; integration of special-operations forces; and integrated battle command and control systems.







## Training Audience



### U.S. Army Participants

- CJFLCC HQ (-)
- ECC
- ACE
- ARFOR HQ (-)
- DIV UAV
- Force Artillery HQ (-)
- MLRS Battalion
- Division Aviation Bde (-)
- Division Attack BN
- GS Avn Company
- Medium Lift Platoon
- Avn Spt Package
- Signal Company (+)
- Corps ADA Bde (-)
- Air Traffic Services Det

### Potential Participants

- JFACC
- CAOC & BCD
- Air Force/Navy/USMC fixed wing attack
- Lethal and non-lethal SEAD
- JAACP
- AWACS
- JSTARS
- UAV
- CSAR
- OPFOR
- ASET IV System
- Mounted OPFOR Unit
- Dismounted INF Co
- OPFOR counter-air

Sourced... Legend... (Contract Add-On)

These scenarios should also include a transition from hostilities to peace/stability operations.

#### 4. Schedule the training.

Like each service schedules its major training events,

### Third Army View continued from pg. 45

lack the ability to get real time information directly to the shooters. The "quick fix" for C2 of aircraft was retransmission of command radio nets.

VII Corps deployed its one authorized CH-47D medium lift helicopter company (16 aircraft). That lift support was not sufficient to support a heavy corps in Southwest Asia. DESERT STORM proved the necessity of being able to rapidly transport priority cargo over long distances. The CH-47D helicopter proved to be a critical support asset. It would be very difficult for a heavy corps to be able to sustain high OPTEMPO AirLand Battle operations without an increase in medium lift helicopters or without more fixed wing intratheater airlift assets to offset the demands placed on CH-47D units organic to the corps.

Operation DESERT STORM clearly demonstrated the need for theater level aviation refueling equipment and operations. The distances flown in theater rear areas by MEDEVAC, support aircraft, and units deploying forward required additional refueling points beyond those established by corps. Major shortages were identified in Forward Area Refueling Equipment (FARE) and personnel. AirLand Battle dictates rapid movement of forces on a non-linear battlefield. The concept is valid, but severely strained tactical aviation unit and corps FARE assets. Current MTOE changes have deleted FARE equipment and personnel from COSCOM and SUPCOM quartermaster units. Equipment was eventually received from CONUS but qualified personnel remained a critical shortage throughout the operation. Dedicated aviation refueling systems and operators should be incorporated into COSCOM and SUPCOM QM units to support future theater combat operations.

### FIXED WING

Fixed wing Army aviation assets also contributed to the success for the ground campaign. Aerial exploitation units

USJFCOM would schedule CJTF training events tied to deployment readiness during a worldwide training conference, resourced by each service for all participants. Evaluate, assess, and retrain.

For the Bridging Event we used, see the Training Audience at left.

### Conclusion

As warfare in the 21st century looks to remain as tailored joint forces deployed to distant and wide-ranging areas of operations, the opportunity is upon us to create a joint training capability that combines the best of what the services already execute into a JAGCE that replicates how we fight now and how we will fight in the future.

USJFCOM can make this a reality with forces, facilities and technology that the Bridging Event helped to demonstrate. As we reorganize and regenerate forces returning from Iraq and Afghanistan, now is the perfect opportunity to continue the Joint National Training Capability program.



LTG Thomas F. Metz is the commanding general of the Army's III Corps. LTC Christopher A. Joslin is the executive officer for the 4th Brigade (Aviation), 1st Cavalry Division. Both are stationed at Fort Hood, Texas.

provided commanders with valuable intelligence, and operational support aircraft provided critical courier and passenger service between major headquarters. Since these aircraft are required to fly above the established coordination altitude, their missions must be incorporated into the theater Air Tasking Order (ATO). Timely distribution of the ATO to all using units is essential for mission and airspace coordination. The Army currently has very limited access to the distribution system now in use by the USAF for the ATO. The problem is exacerbated when fixed wing units are located great distances from the corps headquarters where the ATO distribution terminal is located. A critical need exists for an ATO distribution system available to all units required to fly their missions off the theater ATO. There is a need to develop and field such a system to enhance operations and minimize safety hazards.

In conclusion, Army Aviation was an integral component of DESERT SHIELD and DESERT STORM. AirLand Battle doctrine underpinned all aspects of combat operations during the conflict and provided a bridge of transition for future AirLand Battle Operations. Armor, Infantry, and Combat Aviation worked together as an awesome combined arms team and demonstrated the effectiveness of operational maneuver. There are still some problems to be resolved and challenges to be met. With their resolution and a continued emphasis on integration of quality people, realistic demanding training, and advanced technology, it is clear that aviation will become and remain a full-fledged partner in the Combat Arms.



At the time this article was written MG Frix was Deputy Commanding General, 3rd U.S. Army, Fort McPherson, Ga. MAJ Ronald A. Carter was ARCENT aviation officer.

This article was first published in the May 1992 issue of Army Aviation Magazine.





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

The Army chief of staff has announced Senate confirmation of the following general officer nominations:

**MG John M. Curran** for promotion to the grade of lieutenant general and assignment as director of the Futures Center, U.S. Army Training and Doctrine Command, Fort Monroe, Va. He is currently the commanding general of the U.S. Army Aviation Center and Fort Rucker, Ala.

**MG Larry J. Dodgen** for promotion to the grade of lieutenant general and assignment as commanding general of the U.S. Army Space and Missile Defense Command in Arlington, Va. He is the commanding general of the U.S. Army Aviation and Missile Command at Redstone Arsenal, Ala.



## ARMY AVIATION mailbox

Share your opinion on matters of interest to the Army aviation community. The publisher reserves the right to edit letters for style, accuracy or space limitations. All letters must be signed and authors identified. The publisher will withhold the author's name upon request. The opinions expressed are those of the authors, and do not reflect the opinion of ARMY AVIATION Magazine. Send letters to AAAA MAILBOX, 755 Main Street, Suite 4D, Monroe, CT 06468-2830, Tel: (203) 268-2450, FAX: (203) 268-5870, E-Mail: [magazine@quad-a.org](mailto:magazine@quad-a.org).

Dear Mr. Harris:

Today I received the 45-year AAAA lapel pin you sent. Thank you.

My recollection is that the very early monthly AAAA newsletters were little more than mimeographed copies of the happenings, assignments and going-ons with Army liaison pilots. I have watched with interest and respect as Art and Dottie Kesten grew not only the magazine, but also the association into a professional and efficient organization. I commend them for their original idea and success, and you and the current staff for the expansion and continuation of their successful concept.

Although today I received your 45-year lapel pin, I have been a rated liaison pilot and, subsequently, an Army aviator since the fall of 1942 - about 61 years.

Again, thanks for the pin. I wish you many more years of continued success in the publication of Army Aviation magazine and the promotion of the Army Aviation Association of America.

Sincerely,  
Earl Montgomery  
Longview, Texas

## QUALITY BEARINGS AT CCAD By David A. Packard

Corpus Christi Army Depot's bearing shop became the first depot shop to be ISO 9001:2000 registered by passing a certification audit conducted Oct. 7 through 9 by Smither's Quality Assessments, a third-party registrar.

The certification means that the CCAD bearing shop complies with ISO 9001, an international standard on quality management systems. The standard requires a business or organization to define the processes used to meet requirements within the standard and requirements from customers. The standard also requires continuous improvement of processes and customer satisfaction.

The certification effort was led by bearing shop supervisor Manuel Torres, work leader Julian Martinez and management analyst Theresa Zapalac. This certification took a team effort - not only in the bearing shop, where the employees consistently produce a quality product and meet AWPS goals, but also in the areas supporting the bearing shop.

The support areas participated in management-review meetings that addressed internal audit results, bearing shop performance data, issues with an aging bearing facility and equipment, and satisfaction surveys by production

controllers who receive the product from the bearing shop. Other support areas involved included the internal audit program; training and calibration; the laboratory that provides the process standard and analysis of the cleaning solutions; engineering services that provides support in procuring equipment and ensuring both the facility and equipment are maintained; the NDI line that inspects the bearings; and the publication and records-control group.

The certification effort started with the bearing shop identifying its quality policy, measurable quality objectives and the processes used to meet customer requirements. The next step was identification of inputs and outputs for each process, along with effectiveness monitors and measures for improving the processes. The registrar will return to CCAD every six months to perform surveillance audits in the bearing shop and the support areas to ensure their processes are maintained and are improving.

CCAD has been pursuing certification for several years. Although this is a small shop, it means a big step toward depot certification. Depot managers are now applying the lessons learned from



the bearing shop's certification toward total-depot certification. A goal of achieving depot certification this summer has been set.

Much of what ISO 9001 does for us we take for granted or don't notice, because we have been doing the right things all along. Getting CCAD certified will involve every CCAD employee. A big part is simply having everyone know what their jobs are and having the knowledge, tools and resources to accomplish them. It will take some hard work to achieve depot-wide certification, but it will definitely show the aviation world CCAD's degree of competitiveness.

David A. Packard is a quality engineer at Corpus Christi Army Depot, Texas.



## AAAA PRESIDENT'S MESSAGE

November was a tough month for our soldiers. It was an especially tough month for the 101st Airborne Division (Air Assault). Our thoughts and prayers go out to the Screaming Eagles and their families. The sacrifices are doubly hard at this holiday time of year for all our deployed troops and their families. However, we must not lose sight of all the great work our soldiers have done to improve the life of the Iraqi people, the freedom they have brought them, and the increased security this will provide to our citizens back home.

During these trying times, AAAA has done its best to be there for you. We were able to support the families of our fallen by underwriting the air travel for some of these soldiers' families to the Nov. 21, 2003, prayer vigil and ceremonies at Fort Campbell, Ky. We also were able to supply the flowers for the funerals of the seventeen killed in the two-aircraft crash in Iraq. Small contribution indeed, but I wanted you to know that we were there when the 101st rear detachment commander reached out for help.

Proactively, we also sponsored the 20th annual Aircraft Survivability Equipment Symposium. A number of years ago we added avionics to the mix. This year for the first time we included the area of Air Traffic Services which has so often not received the priority it deserves. It was a rousing success with over 260 attendees and terrific briefings on the lessons learned from soldiers who had just returned from Operation Iraqi Freedom. This type of AAAA-sponsored event gets right down in the weeds on issues that can have a profound impact on our Army's combat effectiveness and safety of our troops. Warrants and NCO's briefing their peers on what works and what doesn't, along with the PMs and activity commanders is what this is all about.

On behalf of the entire AAAA National Executive Board I wish you a happy holiday season and safe and prosperous New Year. Keep our troops in your prayers and let us know what we can do to serve you better.

Andy Andreson  
Major General, Retired  
President, AAAA



## AAAA AVIATION SURVIVABILITY, AIR TRAFFIC SERVICES AND MISSION EQUIPMENT SYMPOSIUM

The 2003 AAAA Aviation Survivability, Air Traffic Services and Mission Equipment Symposium was held Nov. 4-6 2003 at the Gaylord Opryland Resort and Conference Center in Nashville, Tenn.

This 20-year-old event was an outstanding success with over 260 attendees and included ATS for the first time. The theme of this year's event was "Aviation Enablers: ATS, ASE, AME — People, Training, & Hardware: One Team, One Fight." It was truly focused on the soldier and real-world lessons learned from Operation Enduring Freedom and Operation Iraqi Freedom. The morning general sessions focused on strategic issues while the afternoon breakouts really got into the nuts and bolts of the issues at the soldier level.

One of the highlights of the event was the Wednesday evening banquet which featured the presentation of the Aircraft Survivability Equipment Award sponsored by BAE Systems, and Avionics Award sponsored by Cubic Defense Systems. The 2003 winners were CW4 Brendan D. Kelly, 101st Aviation Brigade our ASE Award recipient (left), and SGT James E. Davis, 1-52 Aviation Regiment (right) our Avionics Award recipient. Mr. Kelly's wife, Carol, (only slightly out of control) is seen at far right. CW4 Mike Durant (Ret.), was the banquet speaker and gave an outstanding patriotic presentation.

Special thanks to Mr. Gary Nenninger, PM Aviation Systems, our professional program chairman and his team from Huntsville, and COL Don Adkins, Commander, Air Traffic Services Command for their support. AAAA National certificates of appreciation were presented to MSG John Savage, Larry Dunavant, Viki Mathews, Brian Sabourin, and Mike Tesi who really made the event happen. Thanks again for all your help.





## NEW MEMBERS

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LTC Donald N. Galli  
Ms. Schren Head  
CW5 James W. Hill II  
MAJ Frederick P. Wellman  
MAJ Kristopher J. Jerger

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Mr. Marvin W. Nichols  
Mr. Scott P. Pierce  
Mr. Kirk A. Shippers  
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**COLUMBUS, OHIO**  
Mr. Dale L. Newton

### MEMBERS WITHOUT CHAPTER AFFILIATION

MAJ John D. Adams, Ret.  
CW3 Jolly J. Harper  
MAJ Jon M. Harrison  
LTC Andrew T. Liebknecht  
LTC Mark F. McMullen  
CW3 Michael P. Montgomery  
WO1 Wallace F. Poteete  
1SG John F. Ranft  
COL Thomas M. Ryan, Ret.

## New Chapter Officers

### Corpus Christi:

Mr. Jorge L. Aguilar, VP Activities

### Flying Tigers:

MAJ Jeffrey D. Stephens, Treasurer.

### Iron Eagle:

COL Dyfird A. Harris, Pres.; MAJ Tommy R. Higgins, Sec.; MAJ Steven A. Rodriguez, Treas.; CW5 Gregory S. Schneider, VP Member Enrollment; CPT Stephanie L. Savell, VP Chapter Awards.

### Jack Dibrell/Alamo:

Mr. Kevin M. Wesloh, Secretary.

### Ragin Cajun:

LTC Christopher P. Gehler, Pres.; CPT Richard E. Stanfield II, Treas.

## New AAAA Life Members

COL Carl J. Kreisel  
SGT Jeffrey K. Lynch

Mr. Norman Q. Thomas

CPT Brian P. Zarchin

## AAAA Soldier of the Month

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

### SGT Christopher O. Brown

December 2003  
(Oregon Trail Chapter)

## New AAAA Order of St. Michael Recipients

COL Ellis W. Golson (Silver)  
COL Michael R. Bozeman (Silver)  
COL Albert Rubino (Silver)  
Gerald G. Smith (Bronze)  
CW3 Richard H. Tanner (Bronze)  
CW4 John L. Eskridge (Bronze)  
CW3 Anthony P. Born (Bronze)  
CW4 William C. Fell (Bronze)  
Walter M. Garner (Bronze)  
Edward H. Miller, Jr. (Bronze)  
MAJ Thomas M. Fugate (Bronze)  
CW3 Michael P. Boyle (Bronze)

CW3 Daniel C. Heth (Bronze)  
CW3 Frank L. Miller, Jr. (Bronze)  
CW3 Michael Rosenberg (Bronze)  
SFC Timothy McChesney (Bronze)  
CW3 Michael D. Fox (Bronze)  
1SG David L. Perkins (Bronze)  
MAJ Brady H. Rose (Bronze)  
MAJ Christian J. Walters (Bronze)  
CW4 Mary L. Colburn (Bronze)  
MSG James T. Gallagher (Bronze)  
CW4 D. Gregg Johnson (Bronze)  
LTC Mark P. Gaul (Bronze)  
CW4 Brian D. Callahan (Bronze)  
LTC Larry W. Fleniken (Bronze)  
SFC Kelly Fisher (Bronze)  
CW4 Gary Cox (Bronze)  
SCM Gary Gustner (Bronze)  
LTC Richard Duerr, Ret. (Bronze)  
BG Thomas P. Luczynski (Bronze)  
CW4 Daniel J. Davies (Bronze)  
1SG Thomas E. Roulhac (Bronze)  
LTC Daniel G. Wolfe (Bronze)  
MAJ Joseph A. Capobianco (Bronze)  
MAJ Edwin S. Borman (Bronze)  
SFC Eric J. Duskie (Bronze)  
1SG Clarence P. Reynolds (Bronze)  
MAJ Scott T. Williams (Bronze)

CW5 Ramiro Guerrero (Bronze)  
CPT David Almquist (Bronze)  
SGM Jose G. Delgado (Bronze)  
CW3 Rod A. Brown (Bronze)  
MAJ Troy S. Kok (Bronze)  
CW3 John P. Meier (Bronze)  
SFC William T. Hamilton (Bronze)  
MSG Stanley D. Singell (Bronze)  
SFC Phillip J. Marson (Bronze)  
SFC James M. Chancellor (Bronze)  
SFC Tony W. Dawson (Bronze)  
SFC Mark A. Rockwell (Bronze)  
SFC Richard G. Vama (Bronze)  
CW3 Ted Schmeltz (Bronze)  
MAJ Ihor Petrenko (Bronze)  
CW3 Bobby L. Richardson (Bronze)  
CW3 Anthony C. Nistico (Bronze)  
CW4 Joseph P. Elliott (Bronze)  
CW3 Jonathan D. Smith (Bronze)  
CW3 Richard Knowlton (Bronze)  
CW2 Michael L. Butler (Bronze)  
SGT Charlene Villagomez (Bronze)  
Charles H. Allen (Bronze)  
COL Mark C. Dugger (Bronze)

## In Memoriam

COL David A. Richards



# JOSEPH P. CRIBBINS PRODUCT SUPPORT SYMPOSIUM

## 30th Annual Product Support Symposium

Von Braun Center — Huntsville, AL 35801

### **"DEPLOYMENT/SUSTAINING AND THE PATH AHEAD"**

**11 to 13 February 2004**

#### *Objective & Scope*

The Army Aviation Association of America (AAAA) and the United States Army Aviation and Missile Command (AMCOM) will co-sponsor the 30th Annual Joseph P. Cribbins Product Support Symposium for interested members of industry and the aviation logistics and acquisition communities on 11 to 13 February 2004. The theme of this year's symposium is "Deployment/Sustaining and the Path Ahead".

The purpose of the Product Support Symposium is to stimulate dialogue among industry executives, senior government officials and military leaders concerning the contribution Army Aviation will make, in the areas of materiel acquisition and logistics, in achieving the Army's Transformation vision.

The symposium will consist of individual and panel presentations with follow-on question and answer sessions on the following topics: Operational Overview, Industry Perspective, Aviation Requirements, Deployment/ Sustaining and the Path Ahead.

The Product Support Symposium will provide a unique opportunity for senior leaders from industry, the military, and the government to interact and share their thoughts on the future of aviation logistics. The key objective of this year's symposium will be to build on last year's transformation discussion on how industry and the government can work together to overcome Army Aviation's Deployment/Sustaining and Path Ahead issues.

For further information regarding the symposium, please contact Connie Armstrong or Janice Sanders of AEPSCO, Inc. at (256)464-9191 or via e-mail at [Armstrong\\_connie@aepco.com](mailto:Armstrong_connie@aepco.com) or [Sanders\\_janice@aepco.com](mailto:Sanders_janice@aepco.com), respectively.

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#### AGENDA

##### **Monday, 09 February 2004**

0700 - 1630	Worldwide Aviation Logistics Conference (WALC) — Sparkman Center	1015 - 1040	Industry Keynote Speaker
		1040 - 1105	PEO, Aviation Update
0700 - 0830	PSS Registration at the WALC — Sparkman Center	<b>Lunch:</b>	
		1130 - 1300	Luncheon Speaker

##### **Tuesday, 10 February 2004**

0800 - 1630	Worldwide Aviation Logistics Conference (WALC) — Sparkman Center	<b>Afternoon Session:</b>	
		1300 - 1430	Deployment/Sustaining Panel
		1430 - 1500	<b>Break</b>
		1500 - 1630	The Path Ahead Panel

##### **Wednesday, 11 February 2004**

0800 - 1630	Worldwide Aviation Logistics Conference (WALC) — Sparkman Center	<b>Evening Session:</b>	Coat & Tie ~ Von Braun Center
0700 - 0830	PSS Registration at the WALC — Sparkman Center	1830 - 1930	Reception
1400 - 1900	PSS Registration ~ Huntsville Hilton	1930 - 2045	Dinner
1630 - 1930	Early Bird Reception Hosted by Tennessee Valley Chapter (TVC) AAAA Huntsville Hilton	2045 - 2200	Awards Presentation & Guest Speaker

##### **Thursday, 12 February 2004**

###### **Morning Session:**

0630 - 0730	Continental Breakfast — Von Braun Center
0700	Registration Opens
0815 - 0835	Opening Remarks, COL (R) Robert Birmingham — TVC President
0835 - 0905	Government Key Note Speaker
0905 - 0930	AMCOM Update
0930 - 0955	Operational Perspective
0955 - 1015	<b>Break</b>

<b>Friday, 13 February 2004 — Bob Jones Auditorium</b>	
0800 - 0810	Welcome
0810 - 1200	General Officer Review Board (GORB)
1200	Closing Remarks

\*All sessions except Evening Session dress will be:

Military — Duty Uniform
Civilian — Appropriate Civilian Attire
Speakers —
Military — Class A
Civilian — Coat & Tie
Evening Session dress will be:
Military — Class A
Civilian — Coat & Tie





**AAAA Joseph P. Cribbins  
30<sup>th</sup> Annual Product Support Symposium  
Registration Form**



Von Braun Center \*\* Huntsville, AL\*\* 11 - 13 February 2004

**SPONSORED BY THE TENNESSEE VALLEY CHAPTER OF THE ARMY AVIATION ASSOCIATION**

**REGISTRATION DEADLINE: 23 January 2004**

RANK/TITLE: \_\_\_\_\_

NAME: (as you would like it to appear on your badge) \_\_\_\_\_

UNIT/COMPANY (for badge): \_\_\_\_\_

COMPANY ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

TEL: \_\_\_\_\_ FAX: \_\_\_\_\_ EMAIL: \_\_\_\_\_

*Retired military and others working for a Defense Contractor on a Full-Time, Part-Time or Consulting basis, are not **NOT** eligible for Govt/Mil registration fee.*

	11-12 Feb 04 Registration	Briefings on CD	12 Feb 04 Luncheon	12 Feb 04 Banquet	1 YEAR MEMBERSHIP	TOTAL PAID
<b>AAAA Member</b>						
Industry Fees	___ \$335	Included	Included	Included	NA	\$ ___ .00
Govt/Mil Fees	___ \$45	Included	___ \$20	___ \$30	NA	\$ ___ .00
Spouse Fees (name for badge)			___ \$20	___ \$30		\$ ___ .00
Late Registration Fee (Payments postmarked after 23 Jan 04/Same Day Registration)					Additional \$50	\$ ___ .00

<b>Non AAAA Member</b>						
Industry Fees	___ \$360	Included	Included	Included	___ \$26	\$ ___ .00
Govt/Mil Fees	___ \$50	Included	___ \$20	___ \$30	___ \$26	\$ ___ .00
Spouse Fees (name for badge)			___ \$20	___ \$30		\$ ___ .00
Late Registration Fee (Payments postmarked after 23 Jan 04/Same Day Registration)					Additional \$50	\$ ___ .00

**All payments are due and must be postmarked by 23 January 2004**    **GRAND TOTAL**    \$ \_\_\_ .00

Early Bird Reception at the Hilton on Feb 11th

**Method of Payment:**

☐ Cash    ☐ Personal Check    ☐ Business Check    ☐ Credit Card

**Make Checks payable to: AAAA Product Support Symposium**

☐ Visa    ☐ Discover    ☐ Mastercard    ☐ American Express

Name on Credit Card: \_\_\_\_\_ Credit Card #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Please fax receipt to fax number given above    ☐ (check here)

Please return completed registration form & appropriate fees to:

**AEPCO, Inc. /Attn: Connie Armstrong**

Meadow Green Centre, 9238 Madison Blvd., Building 2, Suite 110, Madison, AL 35758

TEL: (256)464-9191 FAX: (256)464-9291 EMAIL: armstrong\_connie@aepco.com

**Hotel Reservations**

**TO MAKE YOUR RESERVATION, CONTACT THE HUNTSVILLE HILTON DIRECTLY AT (256) 533-1400**

**Please refer to the "AAAA Product Support Symposium" to receive the reduced rate.**

Reservations received after 23 January 04 will be on a space available basis only.

*If cancellation is necessary, refunds of registration fees less a \$50.00 administrative fee will be provided only upon receipt of written notice of cancellation when postmarked by 23 Jan 04 - No refund after 23 Jan 04*



## FY 2004 DEFENSE AUTHORIZATION ACT

The Senate passed the fiscal year 2004 Defense Authorization Act by a vote of 95-3. The sole dissenters were Sens. Byrd (D-WV), Akaka (D-HI) and Jeffords (I-VT). President George W. Bush signed it on Nov. 24. Major personnel items of interest to AAAA members include:

■ **Concurrent Receipt of Retired Pay and Department of Veterans Affairs (VA) Disability Compensation.**

On Jan. 1, 2004, all military retirees with at least 20 years of service and VA disability ratings of 50 percent or higher will see their military retired pay offsets phased out over a 10-year period. Combat Related Special Compensation (CRSC) will be expanded to include all combat- or operations-related disabilities, from 10- to 100-percent ratings, also effective Jan. 1. Currently, only those with qualifying disabilities rated 60 percent or higher or who have a disability associated with a Purple Heart are eligible. In both cases, Guard and Reserve retirees with 20 qualifying years of service (including those with less than 7,200 retirement points) will be eligible.

■ **Military Pay Raise Comparability Process.**

This is a permanent law change tying future military pay raises directly to private-sector pay growth, as measured by the Bureau of Labor Statistics' Employment Cost Index (ECI). Current law specifies that raises for active-duty, Guard and Reserve members after 2006 would otherwise be capped one-half of one percentage point below the average American's pay raise every year.

■ **Military Pay and Allowances.**

An average pay raise of 4.15 percent.

■ **Imminent Danger Pay (IDP) and Family Separation Allowance (FSA).**

An increase in the worldwide use of IDP from \$150 to \$225 per month and FSA from \$100 to \$250 for 15 months beginning Oct. 1, 2003.

■ **Enhanced TRICARE Coverage for the National Guard and Reserve.**

Cost-share access to TRICARE for nonmobilized, uninsured/unemployed members of the Guard and Reserve and expanded TRICARE coverage before and after a mobilization. Also, immediate dental and medical screening for Selected Reservists (primarily drilling members of the Guard and Reserve) alerted for activation.

■ **TRICARE Standard Information Outreach.**

The Department of Defense (DOD) is directed to develop and implement a plan for information outreach to assist beneficiaries in obtaining access to TRICARE services.

■ **Survivor Benefit Plan (SBP) Program.**

Equitable SBP coverage for the survivors of active-duty personnel who die, regardless of the circumstances of the death. SBP annuities for survivors of Reservists who die in the line of duty while performing inactive duty.

Survivors of service members killed on active duty will have the option to elect "child-only" Survivor Benefit Plan (SBP) coverage. This will help many surviving spouses who now see their SBP coverage reduced by the amount of any VA survivor benefit. In addition, the new law tasks DOD and the General Accounting Office (GAO) to conduct a study of military death benefits, including a comparison with private-sector

death benefits.

■ **Reserve Mobilization Reports.**

The president must provide a report to Congress within six months on the numbers, duration and skills of activated Reservists since 2002; the secretary of defense must report within a year on the effects of the call-ups on reserve recruitment and retention, and assess what changes may be needed in active- and reserve-component roles, missions, force structure and capabilities.

■ **Reserve Health Care.**

The bill directs a report on health-care needs of the reserve component, including whether benefits need to be expanded beyond the limited new measures in this legislation.

■ **Military Manpower.**

An increase of 2,400 in active Army end strength and an increase of 1,779 full-time active duty National Guard or Reserve personnel.

■ **Federal Long-Term Care Insurance Program.**

Gray-area Reservists (who have completed 20 years of service but have not attained age 60 and retired-pay eligibility) will be eligible to enroll in the program.

■ **Health Protection and Surveillance.**

The secretary of defense must establish a quality-control program to ensure compliance with pre- and post-deployment medical evaluations for service members.

■ **Commissaries.**

Unlimited commissary access for National Guard and Reserve service members.

The new law restricts the Pentagon's authority to contract out certain commissary functions and requires congressional notification of planned changes affecting more than 10 commissary employees.

■ **Housing Allowance.**

Service members will see an average housing allowance increase of about 6.5 percent in January. That will reduce median out-of-pocket housing expenses for each grade to 3.5 percent of housing costs in 2004, with a target of further reducing average out-of-pocket expenses to zero in 2005.

## REIMBURSEMENT FOR HOUSEHOLD GOODS.

A new provision authorizes the Pentagon to enter contracts with moving companies that require the companies to reimburse military families the full cost of replacing any items lost or damaged during the move.

## TAX BILL SIGNED INTO LAW

On Veterans Day President Bush signed into law the Military Family Tax Relief Act of 2003. This brought to a close six years of TMC and MOAA efforts to ensure that military members

are afforded capital-gains tax equity with other Americans. Along the way, TMC, MOAA and other veteran service organizations also won support for:

■ Increasing the death gratuity for survivors of members killed on active duty from \$6,000 to \$12,000, and making the full amount tax-free. This increase is effective retroactive to Sept. 11, 2001.

■ Restoring an "above the line" tax deduction for drilling Guard/Reserve members who incur travel and lodging expenses when drilling 100 or more miles from home.

■ Restoring capital gains tax equity for military homeowners by exempting up to 10 years away from home, on military orders, from counting against the requirement to have lived in a primary residence for at least two of the five years preceding sale of the home. This provision is retroactive to 1997. In addition, the bill makes Homeowner Assistance Program (HAP) payments tax-free (HAP partially compensates military and federal civilian homeowners for losses due to depressed housing markets in base closure areas).

This is a big win for thousands of active duty, National Guard and Reserve members and military survivors who will benefit from the measure.

## VETERANS BENEFITS ACT OF 2003

Both House and Senate passed H.R. 2297, the Veterans Benefits Act of 2003, and the president signed it. Among its many provisions, H.R. 2297:

■ Restores dependency and indemnity compensation (DIC) and certain other benefits for surviving spouses who remarry after age 57 (TMC and MOAA strongly supported the House plan for restoration at 55, but the Senate measure prevailed). Qualifying spouses who remarried at age 57 or older before enactment of the bill will have one year to apply for reinstatement of these benefits.

■ Increases monthly educational benefits for spouses and dependent children of members who died of service-connected causes from \$695 to \$788 for full-time study, from \$522 to \$592 for three-quarter time study, and from \$347 to \$394 for half-time study.

■ Extends VA's specially adapted housing grant to severely disabled service members before separation from active-duty service.

■ Expands benefits eligibility to children with spina bifida who were born to certain Vietnam-era veterans who served in Korea near the demilitarized zone.

■ Eliminates the 30-day requirement for former prisoners of war to qualify for presumptions of service-connection for certain disabilities.

■ Expands the Montgomery GI Bill program to cover self-employment training programs and entrepreneurship courses at approved institutions.



## LEGISLATIVE REPORT

Col. Sylvester C. Berdix, Jr. (Ret.),

AAAA Representative to The Military Coalition (TMC)





Ending his tenure on a high note, Comanche Program Director **Chuck Allen** was awarded the Bronze Order of St. Michael on Nov. 21, 2003, his last day on the job.

In the photo, Mike Blake (left), president of AAAA's Connecticut Chapter, presents Allen with the OSM as they stand near RAH-66 Aircraft #4 on the production line at the Comanche Major and Final Assembly facility in Bridgeport, Conn. Blake, the former Comanche program deputy director, has been named director.

Allen took over leadership of the Comanche Program Office in July 2000. He oversaw the successful 2002 program restructure that resulted in a new \$6.7 Engineering, Manufacturing and Development contract with the Army. In 2003 the Boeing Sikorsky team began major assembly of the first EMD aircraft.

Allen has taken a new position within The Boeing Company as vice president and program manager of the firm's Orbital Space Program in Huntsville, Ala.



COL Mason W. Thornal (left), commander of the 18th Aviation Brigade, presents the Silver Order of St. Michael to CW5 John P. Mandulak (right) at his retirement on Nov. 14. Mandulak spent a total of 38 years in the Army. He completed two tours in Vietnam, one as an infantry officer, and the second as an aviation company commander. He flew more than 400 combat hours and earned the Distinguished Flying Cross for his actions during his second tour. Mandulak is qualified in 12 different airframes and has 4,000 total flight hours. His last assignment was as the 18th Avn. Bde. tactical operations officer.



MAJ Michael Moore, flight surgeon for the 18th Aviation Brigade, was awarded the Order of St. Michael in an Oct. 15 ceremony. Seen here are (from left to right) LTC Curt S. Cooper, deputy brigade commander; Moore; and brigade commander COL Mason W. Thornal.

## Tennessee Valley Chapter

The Tennessee Valley AAAA Chapter and Redstone AHS International Chapter cohosted the Aviation Annual Golf Tournament on Sept. 10 at the Redstone Arsenal, Ala., Golf Course.



AAAA Tennessee Valley Chapter President **COL Bob Birmingham (Ret.)** (left) and AHS Redstone Chapter President **Paul Bogosian** (right).

The winning team from PEO Aviation.





## North Star Chapter

On Dec. 6 AAAA's North Star Chapter conducted an Order of St. Michael induction ceremony during the Fifth Annual 34th Aviation Brigade (Minnesota Army National Guard) Ball. The ball was organized by the 2nd Battalion, 147th General Support Avn. Regiment, sponsored by the 34th Avn. Brigade, and attended by nearly 400 guests.

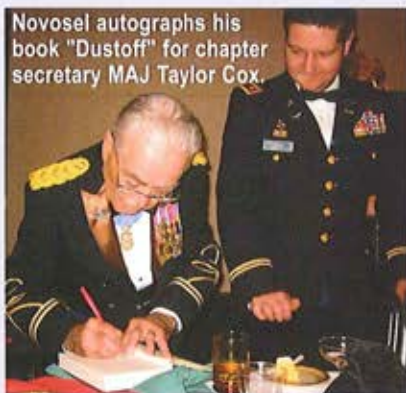
Notable attendees included MG Larry Shellito (adjutant general of Minnesota and commander of the 34th Infantry Division), BG Mark Ness (Minnesota Air National Guard commander), BG Jon Trost (ADC, 34th ID) and CW4 Michael J. Novosel (Ret.) as the keynote speaker.

The induction ceremony was conducted by LTC Michael Huddleston (the chapter's vice president for awards and commander of the 2-147) and LTC Chris White (S-3, 34th Avn. Bde. and acting brigade commander).

Novosel inducted the following four soldiers into the Order of St. Michael: SFC Kelly Fisher, CW4 Gary Cox, CSM Gary Gustner, and LTC Richard Duerr (Ret.), and presented each with the Bronze medal.

Also during the ball, CW4 Chuck Barr (Ret.) and his wife, Susan, were presented with the certificate of the AAAA LTC John H. Stein Memorial Scholarship and accepted on behalf of their daughter Kimberly.

COL Mark C. Dugger (chapter president and commander of the 34th Avn. Bde.) was unable to attend the ceremony because of a deployment.



Novosel autographs his book "Dustoff" for chapter secretary MAJ Taylor Cox.



Novosel inducts SFC Kelly Fisher into the Order of St. Michael.



MG Larry Shellito (seated), the adjutant general of Minnesota and commander of the 34th Inf. Div.; (second from left) Novosel; medal recipients (3rd from left to right) Fisher, CW4 Gary Cox, CSM Gary Gustner, LTC Richard Duerr (Ret.); and presenting the certificates, LTC Michael Huddleston, chapter VP for awards.



CW5 Chuck Barr (Ret.) and his wife Susan accept the AAAA LTC John H. Stein Memorial Scholarship on behalf of their daughter Kimberly.

## 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](mailto:aaaa@quad-a.org).

Ahmad, Syed I., Mr.  
Barker, Jim T., MAJ  
Bray, Stephen P., Mr.  
Cordie, Michael D., SFC  
Delarosa, Salvador, SPC  
Desautch, Mark L., 2LT  
Gaiser, David M., SPC

Gibbs, Charles M., CPT  
Graham, Andrew R., CPT  
Gray, Christopher, SSG  
Hunter, Oliver H., COL  
Hurt, Donald H., 2LT  
Kordonoway, Michael, SSG  
Larabee, Salinda A., SMSgt

Leahy, Patrick T., WO1  
Maimrose, Christopher, WO1  
Pitts, Alex L., WO1  
Ramdass, Monshi R., 1SG  
Reading, Charles J., Mr., Ret.  
Robbins, Andrew J., 2LT  
Roberts, John B., CW2

Romeo, Drew, Mr.  
Rose, Michael E., SFC, Ret.  
Rushing, Christine, SPC  
Schoebel, Merle S., Ms.  
Smith, Andrew B., 2LT  
Smith, Justin M., WO1  
Smith, Matthew J., SPC

Teasley, Charles, Mr.  
Vanderberk, Danny, CPT  
Whitaker, Robert G., 2LT



- ☞ Jan. 5-7, 2004. AUSA/AAAA Aviation Symposium, Crystal Gateway Marriott, Arlington, VA.
- ☞ Jan. 27-29. AFCEA TechNet Orlando 2004, Orlando, FL.
- ☞ Jan. 23. AAAA Scholarship Executive Committee Meeting, National Guard Readiness Center, Arlington, VA.
- ☞ Jan. 24. AAAA National Awards Selection Meeting, National Guard Readiness Center, Arlington, VA.
- ☞ Feb. 11-13 Joseph P. Cribbins Product Support Symposium, Huntsville, AL.





# Army Aviation Hall of Fame

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

## **Arthur and Dorothy Kesten Army Aviation Hall of Fame 1975 Induction (Inducted to represent the 1950-1959 period)**

Arthur and Dorothy Kesten were among the few people who, in the early 1950s, foresaw the continuing need for a professional-technical association that would enhance the general knowledge, public image and personal well being of those in Army aviation.

Pooling their talents as editor and business manager, this husband-and-wife team founded a magazine in 1953 for Kesten's fellow Reservists and active-Army contemporaries in First Army. Fulfilling a need, their magazine grew rapidly in acceptance at a point when Army aviation was relatively unknown to the general public, and almost totally ignored by other news media.

As founder of the Army Aviation Association of America (AAAA) in early 1957, and later as its first executive vice president, Arthur Kesten drafted the initial by-laws, secured the necessary Department of the Army approvals, and then recruited the members of AAAA's initial National Board as well as its first 140 regional and chapter officers, enlisting their participation in the new organization.

Through their personal contacts with hundreds of members and through their direct communications, the Kestens aided in the rapid transition of a 4,000 subscriber magazine into a viable, multi-program national association. Originating Army flight-pay insurance, the Kestens also developed many of AAAA's initial national and chapter programs, and accepted prime responsibility for the direction and administration of AAAA's first successful national conventions.

Their constant enthusiasm and dedication and selfless contributions to Army aviation not only gave Army aviators and crewmembers a source of information, but also a forum from which they could be heard. No two persons have devoted more time, effort and innovative thought to Army aviation as an entity, or to its members as individuals.





# EXTENDING COMBAT CAPABILITIES.



Robertson Aviation is proud to have provided United States Army Aviation helicopters with extended range fuel systems that have added to their combat capabilities in Iraqi Freedom, Enduring Freedom, Desert Storm, Bosnia, and Panama,

- **Combo Pak Internal Auxiliary Fuel System (Combo Pak IAFS)** for the AH-64 Apache helicopter that consists of a crashworthy self-sealing internal auxiliary fuel system integrated with an ammunition storage magazine. The Combo Pak IAFS provides 100 gallons (nominal) of fuel and 300 rounds of ammunition (including rounds in the chute). The Combo Pak IAFS is completely interchangeable with the standard ammunition storage magazine and can be quickly installed or removed using the Apache Magazine and Auxiliary Tank Transfer System (AMATTS).

- **Extended Range Fuel System II (ERFS II)** for the CH-47 and MH-47 Chinook that consists of up to three 800 gallon crashworthy self-sealing tanks to provide up to 2,400 gallons of additional fuel for extended range or for offloading to other combat weapons systems in the forward area.

- **Internal Auxiliary Fuel Tank Systems (IAFTS)** for the UH-60 and MH-60 Black Hawks; including a two-tank internal crashworthy self-sealing system that increases range/endurance approximately 100%, and a single tank internal crashworthy self-sealing system that increases range/endurance approximately 50%. With aircraft modifications installed the two systems are completely interchangeable

To be fielded in 2003 the Crashworthy External Fuel System (CEFS) for the UH-60 Black Hawk consists of two crashworthy self-sealing single-point pressure refuelable external tanks that mount on ESSS equipped UH-60 Black Hawk helicopters.

Robertson Aviation will continue to search for ways to improve the combat capabilities of Army Aviation – we are proud to have the opportunity to be part of your team.

For more information visit our website at [www.robertsonaviation.com](http://www.robertsonaviation.com), call (480) 337-7050, fax (480) 968-3019, or write 1024 E. Vista Del Cerro, Tempe, AZ 85281

**ROBERTSON**  
AVIATION

Crashworthy Extended Range Fuel Systems