

AAAA
Annual
Convention
Report
page 17

1989 AAAA ANNUAL CONVENTION PHOTO WRAP UP

ARMY AVIATION

ENDORSED PUBLICATION OF THE ARMY AVIATION ASSOCIATION OF AMERICA • MAY 31, 1989



LHX MCGONNELL DOUGLAS
SUPERTEAM
BELL HELICOPTER TEXTRON

WE PUT THE FIGHT INTO LHX.

PUBLISHER

Lynn Coakley

**ASSOCIATE PUBLISHER
& ADVERTISING DIRECTOR**

Terrence M. Coakley

EDITOR

William R. Harris, Jr.

PRODUCTION MANAGER

Joanne M. Comcheck

ADVERTISING REPRESENTATIVE

Deirdre Frost

EDITORIAL/PRODUCTION ASSISTANTS

Debbie Meisinger, Joan Zinsky

CIRCULATION MANAGER

Jill Thomas

CIRCULATION ASSISTANTSMary Ann Stirling, Debbie Coley,
Nancy Jo Childs

Army Aviation Magazine is a professional journal endorsed by the Army Aviation Association of America (AAAA). Title reg. ® in U.S. Patent Office. Registration Number 1,533,053.

ADVERTISING

Display and classified advertising rates are listed in SRDS Business Publications, Classification 90. For advertising information, call (203) 226-8184.

SUBSCRIPTION DATA

ARMY AVIATION (ISSN 0004-248X) is published monthly, except April and September by Army Aviation Publications, 49 Richmondville Avenue, Westport, CT 06880-2000. Phone: (203) 226-8184. Subscription rates for non-AAAA members: \$25, one year; \$48, two years; add \$10.00 per year for foreign addresses other than military APO's. Single copy price: \$3.00.

ADDRESS CHANGES

The receipt of change of addresses is verified by the publication of the residence or business change in the "Arrivals & Departures" or PCS columns of the magazine. Senior AAAA members (O-5's and above) are asked to provide their new duty assignment for publication in the magazine's "Aviation Command Changes" column.

POSTAL

Second class postage paid at Westport, CT.

POSTMASTER

Send address changes to Army Aviation Publications, Inc., 49 Richmondville Ave., Westport, CT 06880-2000

FORTHCOMING ISSUES

June 1989 — Special Report: UH-60

BLACK HAWK

July 1989 — Special Focus: SOF Aircraft, NVG Feature, Directory: Aviation Officer.

FRONT COVER

Paid advertisement:
LHX SuperTEAM
McDonnell Douglas/Bell Helicopter Textron

ARMY AVIATION

VOLUME 38

NUMBER 5

GUEST EDITORIAL

Training and Readiness: Challenges for Army Aviation
by GEN Carl E. Vuono.....4

AVIATION BRANCH UPDATE

AINET: A Revolution for Combined Arms through Technology
by MG Ellis D. Parker.....8

AAAA NEWS

AAAA — 1989 Annual Convention Photo Report.....17
AAAA — Hall of Fame Inducts Seven New Members.....59
AAAA — AAAA President's Annual Report.....68

FIELD REPORTS

Efficient Use of Training Resources
by COL Michael H. Abbott.....30
Yellowstone Dustoff
by CPT Kenneth Quaglio and CPT Timothy J. Moore.....32
APACHE Thunder—Advanced JAAT Test
by CPT Mark Ferrell and CPT Scott Reynolds.....33
GPS Navigation of the Future
by Walter W. Perron.....39
Total Operational Flying Duty Credit Audits
by MAJ Morris S. (Sandy) Smith.....40
Fuertes Caminos '88: A Success Story in Honduras
by MAJ William R. Steele and MAJ John A. Farris.....41
APACHE Training Brigade
by COL Robert D. Hurley.....44
Want to Get Ahead?
by BG Robert S. Frix.....46
Corpus Christi: Update
by COL William J. Blair.....47

OTHER DEPARTMENTS

Career Track.....53 AAAA Overview.....68
New Members.....55 "Arrivals & Departures".....51
Briefings.....49 AAAA Calendar.....76
Awards & Honors.....49 Mailbox.....45

NEWS

U.S. Precision Helicopter Team Update.....43

EDITORIAL MATERIAL

The views expressed in the magazine are those of the individual author and may not necessarily be those of the Department of the Army or the staff of this publication. Manuscripts, drawings, photos, and other material cannot be returned unless accompanied by a stamped envelope bearing the submitter's return address.



The darkest night will be your finest hour.

11:00 PM. It's time to move out. Ground troops advance. Attack helicopters come in low. While a dozen miles north, special operations units strike deep behind enemy lines.

Each force has a critical advantage.

Night vision. From Litton.

For any kind of mission.

For special operations units—the new M-915A goggle. This is an improved version of the current U.S. military AN/PV55B, (Litton Model M-969). It utilizes Litton Gen 2 plus high performance image intensifiers. This version like all Litton goggles can use standard AA batteries.

For ground forces—the new M-972 one-tube goggle. This super lightweight, head-mounted goggle allows excellent peripheral vision. It can utilize either Gen 2 plus or Gen 3 image intensifiers without requiring system modification. The M-972 is manufactured to AN/PVS7A U.S. military specification for a rugged military environment. It is compatible with NBC mask and eyeglasses and can be hand-held or adapted for 3 or 4 times magnification.

For aviators—the Litton ANVIS goggle. It attaches directly to the flight helmet for dramatic improvements in comfort and visibility. Available with Gen 2, Gen 2 plus or Gen 3 tubes.

Litton also offers the M-912A goggle. A more durable face mask and higher performance lenses are just some of the improvements over the standard AN/PVS5A.

Litton's night vision capability doesn't end here. Litton will train your people to do first line maintenance. Tools and equipment can be supplied for your depot level maintenance facility to keep your goggles in top operating condition.

Once we give you the advantage, we want you to keep it.

Now that you're seeing things in a new light.

Litton Electron Devices Division,
1215 South 52nd Street, Tempe, AZ 85281 USA.

Litton

Electron Devices



Training and Readiness: Challenges for Army Aviation

by General Carl E. Vuono

Throughout its history, Army Aviation has played a key role in demonstrating a warfighting capability that has earned the respect of our potential adversaries. For more than thirty years, visionary leaders have shaped Army Aviation, and have driven the evolution of our Army — its doctrine, organization, materiel, training and development of leaders. Army Aviation leaders have always sought superior battlefield mobility, to be at the right place at the right time, with the right amount of combat power. Their vision has increased combat aviation capability through tactical and technical innovation.

Trained and Ready Strategic Force

My vision is to have a trained and ready Army, today and tomorrow, capable of carrying out its strategic role anywhere, anytime. I envision our Army as a strategic force because it is vital to America's security and is essential to our national military strategy in both peace and war. The Army accomplishes roles that *only the Army* can perform. Only the Army can defend U.S. vital interests in sustained land combat wherever those interests are threatened. Only the Army has the elements of combat power and support able to conduct contingency operations or support friendly nations' land forces around the globe. Only the Army has the active and reserve forces necessary to support our civil authorities in many types of disasters and crises. Most important, to our nation and our allies, only the Army can provide that most visible and credible symbol of national resolve — the soldier forward deployed on freedom's frontier. In all of these strategic force roles, Army Aviation is an integral and indispensable element of our combat power.

As a strategic force, the Army must be

prepared for an instantaneous transition from peace to war. Our Army is trained and ready to make that transition should we ever be called upon to do so. Staying a trained and ready Army in the future demands a carefully crafted mix of readiness, modernization, and force structure in a way that minimizes risks for America. It also demands that we provide demanding and challenging training of soldiers, units and leaders to maintain the capabilities we need to meet our strategic roles.

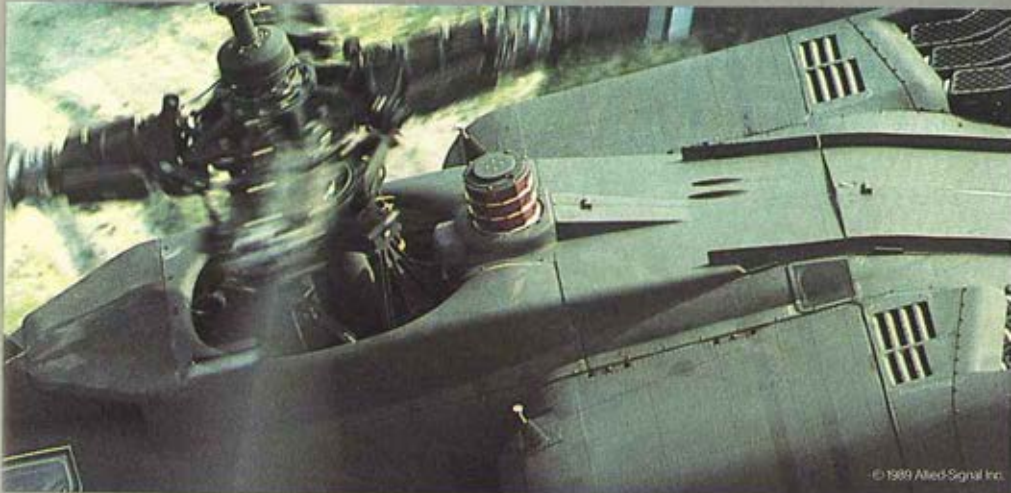
Foremost Priority

The foremost priority for our trained and ready Army is to continue recruiting and retaining quality men and women for our ranks. Quality soldiers enhance our capabilities, and give discipline to the force. Increased capabilities and discipline give us the flexibility necessary to respond successfully to the wide variety of crises, conflict situations, and peacekeeping requirements that continually develop. Quality in our force fosters dynamic and exciting training. Quality at all levels encourages improved performance on difficult tasks, a factor which contributed significantly to Army Aviation's excellent record of safety in 1988, the safest year in the history of Army Aviation. This record is a result of aviator expertise, safety awareness, and command involvement throughout the force, and is a tribute to high standards in training throughout Army Aviation.

A second priority for keeping our Army trained and ready is to maximize combat capability with a warfighting doctrine which synchronizes all elements of the combined arms team. Today, units in our Army continually seek to achieve full combat power by translating AirLand Battle doctrinal tenets into effective tactics, techniques, and procedures. Army Aviation is on the leading edge

(Challenges — continued on page 6)

GEN Vuono is Chief of Staff, U.S. Army.



© 1989 Allied-Signal Inc.

WHAT STARTS THE APACHE ON THE WARPATH IS NOW READY TO LIGHT UP THE LHX. AS THE MOST EXPERIENCED MANUFACTURER OF SMALL GAS TURBINE APUS, GARRETT AUXILIARY POWER DIVISION IS READY TO HELP THE LHX ACHIEVE ITS FULL POTENTIAL.

OUR COMMITMENT TO ARMY AVIATION IS BEING PROVEN ON THE AH-64 APACHE. AND OUR COMMITMENT TO ADVANCED TECHNOLOGY IS ALREADY BEING DEMONSTRATED ON 50HP AND 110HP DEMONSTRATOR ENGINES IN THE ARMY'S MULTIPURPOSE SMALL POWER UNIT PROGRAM (MPSPU).

TECHNOLOGY THAT DELIVERS 35% BETTER FUEL CONSUMPTION, INCREASED POWER DENSITY, AS WELL AS ENHANCED RELIABILITY AND MAINTAINABILITY. TECHNOLOGY THAT IS CREATING THE OPTIMUM APU FOR THE OPTIMUM LHX.

GARRETT AUXILIARY POWER DIVISION, BOX 5227, PHOENIX AZ 85001.

(602) 220-3139. WHERE THE ULTIMATE EFFICIENCY IS RELIABILITY.

Allied-Signal Aerospace Company



Challenges (continued from page 4)

of this challenge with the newer systems such as the APACHE. As our doctrine and technology mature, Army Aviation continues to shape its future — not as a stand alone capability for the overall force — but as a full fledged member of the combined arms team.

Appropriate Mix

A trained and ready Army must also maintain an appropriate mix of forces with adequate combat and support units to defeat the wide variety of threats facing our nation across the full spectrum of conflict. We have in our Army today the right combination of U.S. based and forward deployed forces; a proper ratio of combat, combat support and combat service support in heavy, light, and special operations forces; and National Guard and Army Reserve units, supported by a skilled civilian work force, capable of assisting in major mobilization obligations world-wide. A significant part of each component in that mix is Army Aviation whose soldiers and units, around the world, perform superbly under difficult conditions. Our military strategy demands that we maintain this mix of forces in our structure to provide the necessary diversity of capabilities in quality, composition, and size to meet our combat requirements and our strategic force responsibilities.

Another priority for staying trained and ready is to continue modernizing our combat capability by developing and fielding the most capable organizations and warfighting systems. We have slowed the pace of equipment modernization, but we will continue to push the development of key technologies and fielding of systems that make the greatest contribution to our warfighting readiness, even if that means fielding in smaller numbers.

Our efforts are guided by an equipment modernization strategy with functional area modernization plans, including a comprehensive, forward-thinking approach to managing the technology base for the greatest long-term return on our resource investments. These plans are patterned after the Army Aviation Modernization Plan which addresses both near-term and long-term modernization.

In the near-term, we will continue acquisition of our current best systems — APACHE, BLACK HAWK, and CH-47D — to provide our highest priority units with needed capabilities now. We will also protect our investment by making product improvements on these airframes to keep them safe and effective on the battlefield. In the long-term we will continue to apply useful life criteria based on aircraft age and warfighting requirements for our various categories to retire systems that are no longer effective or capable of surviving on the battlefield. Finally, we will continue to shape our future combat capability with research and development on new systems, such as the LHX, which will greatly add to our combat power. Our modernization plans uphold the discipline in our drive to shape the future, and are a thread of continuity that ensures we keep a long-term perspective while improving our near-term capability.

Combined Arms Team Approach

Another priority for staying trained and ready as an Army is to continue to emphasize training of soldiers, units, and leaders. Perhaps the most significant achievement of 1988, the Year of Training, was a renewed commitment to the combined arms team approach in training. I see evidence of this everywhere — in our forward deployed and CONUS based units, and in our service schools. I especially note this trend at combat training centers where the imperative to synchronize combat power is reinforced to leaders repeatedly. Indeed, leaders have learned in training at the combat training centers that single capability solutions have tragic consequences; there is no place on any battlefield, in peace or in war, for an operation that does not make full use of every asset available to the commander. We must continue to challenge our soldiers, units and leaders with tough, realistic combined arms training to high standards.

High training standards save lives, in peace and war. Routinely training to high standards reduces risk and increases the likelihood of meeting expectations in battle. Army Aviation standards are often measured in inches and-seconds, as in maintenance, or in nap-of-the-earth night flight with vision goggles. Precision in training standards is a challenge to our soldiers, but is a concern to our potential adversaries

(Challenges — continued on page 31)



MSIP FOR APACHE. BECAUSE SOMEONE'S TRYING TO STEAL BACK THE NIGHT.

Apache owns the night. But opposing forces, aware of the superior performance of the AH-64A Apache, are actively developing weapons to counter its combat effectiveness.

To meet these emerging threats, the U.S. Army has begun a Multi-Stage Improvement Program (MSIP) for Apache. This program features affordable and proven state-of-the-art technology to ensure Apache's warfighting superiority well into the next century.

Under this program, Apache will be equipped with improved targeting and fire control systems including the Airborne Adverse Weather Weapon System. This system, coupled with new fire-and-forget missiles, will provide greatly enhanced performance against hostile tanks —

even in the worst weather. We're adding advanced electronic architecture with distributed processing; air-to-air missiles; faster, more secure communications; electromagnetic hardening; and new defenses against laser and radar threats. The program will also provide growth capability for future LHX mission equipment.

When fielded, MSIP Apache will more effectively stop enemy tanks, more thoroughly disrupt air defenses and defeat opposing aircraft, and more decisively strike deep behind enemy lines — anytime, anywhere.

With the MSIP Apache, nobody's going to steal back the night!

APACHE

Apache owns the night.

MCDONNELL DOUGLAS



AIRNET: A Revolution for Combined Arms through Technology

Over the past few years, I have had the privilege of witnessing many exciting changes within Army Aviation. During my tenure, our branch has integrated the maintenance and avionics support personnel into the Aviation Branch from the Transportation and Signal Corps. We have initiated the Aviation Officer Basic and Advanced Courses, and the Noncommissioned Officers Academy at Fort Rucker. We have rewritten all the Warrant Officer Training Courses. We have consolidated Army Air Traffic Control at the home of Army Aviation. We began a multiyear improvement program to the Army Aviation fleet by fielding the AH-64 APACHE, the CH-47D CHINOOK and the OH-58D among others. We have greatly improved our branch and our Army in many ways, but few things have excited me as much as the potential revolution offered to the Army and Aviation by a program known as Air Networking (AIRNET).

SIMNET Application

AIRNET is the aviation application of the Defense Advanced Research Projects Agency (DARPA) Advanced Research on Interactive Simulator Networking (SIMNET) program. SIMNET is a high-risk research project designed to develop the technology required to provide the Department of Defense a man-in-the-loop tactical fighting simulator system that supports realistic force-on-force combat training. Its goals are to develop low-cost, manned fighting simulators, to link these simulators in local area networks, to replicate the command and control structure of the unit simulated, and to link multiple local area net-

works over long distances. The difficult problems are to keep the price low enough to permit the Army to buy sufficient numbers to effectively train our forces and to keep the devices very user friendly so our soldiers do not have to become computer technicians to use them. As a spinoff of the technology developed for training, SIMNET also has the potential to explore new or improved weapons systems by building them in a simulator before we spend money building expensive prototypes.

The Beginning

SIMNET began in the early 1980s as an innovative method to collectively train company and battalion sized mechanized forces to fight on the AirLand Battlefield. DARPA demonstrated the first prototype M-1 Abrams Tank simulator in early 1985. Since then, DARPA has linked M-1 tanks and M-2/3 Bradley fighting vehicles to form platoons, company teams, and battalion task forces. DARPA's next step is to add Aviation and Air Defense Artillery units into the SIMNET battlefield.

Aviation has pursued the need for a collective training simulator for scout and attack helicopter team training since the late 1970s. Unfortunately, simulation technology had not yet matured enough to allow us to build and operate such a system economically. The Army asked DARPA to explore aviation's collective training needs after recognizing SIMNET's great potential. DARPA responded with a comprehensive program to build three levels of prototypes. These prototypes will economically determine exactly to what extent a simulator must replicate the actual aircraft when complemented by our current family of training devices.

(AIRNET — continued on page 14)

MG Parker is Chief, Aviation Branch, Commanding General, U.S. Army Aviation Center and Ft. Rucker, AL and Commandant, U.S. Army Aviation Logistics School.



**IF YOU WANT TO KNOW WHERE
GAS TURBINE TECHNOLOGY IS HEADED,
ASK THE ARMY.**

Their Chinook transport helicopter has given the military a lift for millions of operating hours. It's powered by the classic Textron Lycoming T55 gas turbine now in an advanced engine configuration destined for a new special operations military helicopter.

TEXTRON Lycoming

Textron Lycoming is a subsidiary of Textron Inc.



F16



H-76



SHADOW



CH-47D



AH-64



MH-47E



SH-60



ATF



AH-1



B-1B



Model 360



CH-53E



UH-60



ACAP



B-52H

ON-TARGET TECHNOLOGY.

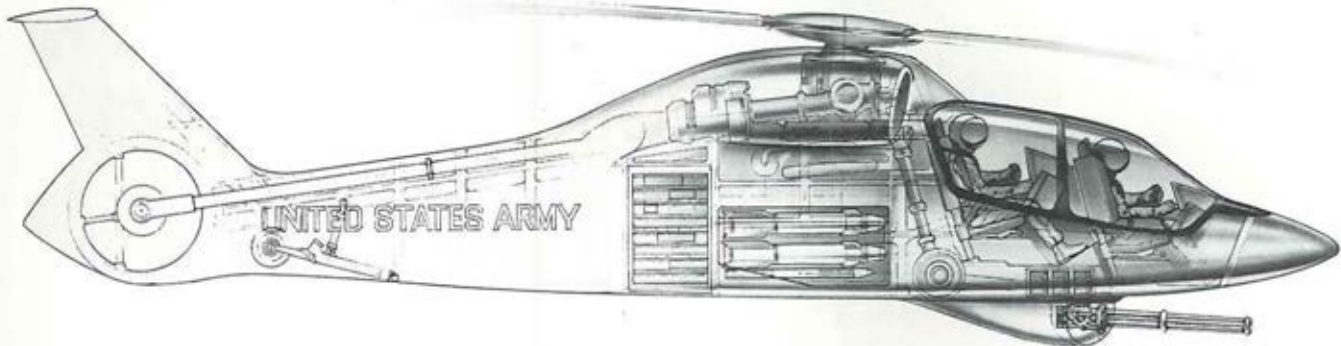
In all these aircraft, members of the First Team for LHX applied highly advanced technology to specific customer requirements.

We believe in meeting requirements, not setting them.

Now the First Team for LHX—the Boeing Sikorsky team—is doing the same for the Army. We're targeting unequalled skills,

technologies and systems management experience on the LHX program. So the Army will get what it asks for: a combat-effective, affordable and supportable fighting machine—on time and within budget.

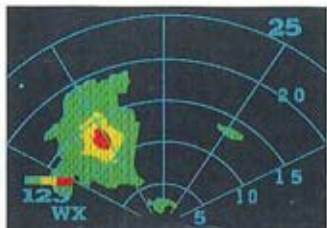
The First Team. The best team for LHX.



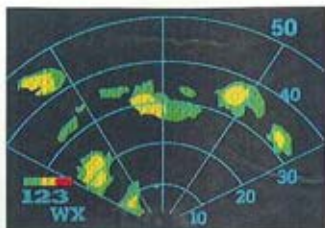
BOEING SIKORSKY
THE FIRST TEAM FOR LHX

Boeing Helicopters • Sikorsky Aircraft • Boeing Electronics •
Boeing Military Airplanes • Collins Avionics • GE Armament •
Hamilton Standard • Harris • Kaiser Electronics •
Link Flight Simulation • Martin Marietta • TRW • Westinghouse

FIND THE THUNDERSTORM



Weather radar indicates level 5 rainfall between 10:30 and 11:30, suggests that the path is clear straight ahead. But wait!



Radar shows level 2 and 3 cells across the screen, 120° forward of the aircraft and 10 to 50nm away. What's the best route?



Stormscope Series II system shows electrical discharge activity 25nm straight ahead. On this test flight, we deviated left (into the level 5 activity) and flew smoothly through heavy rain.



Stormscope system shows a small area of thunderstorm activity at approximately 9:00. We proceeded on course and encountered level 2 and 3 rainfall, but no thunderstorm activity.

These flight tests demonstrate why you shouldn't rely solely on radar for airborne thunderstorm avoidance. True, radar provides pilots with valuable weather information. But only Stormscope systems detect and map thunderstorms to provide the information required by pilots to avoid them. And, unlike radar, Stormscope systems are passive, therefore not detectable.

There's a lot more you should know about Stormscope systems. For our informational video (only \$25.00), call 1-800-328-1684, ext. 666 (in Minn: 1-800-792-1072, ext. 666). For complete information, contact 3M at 614-885-3310. (In Canada call 519-451-2500, ext. 2537. In Europe call U.K. 01-676-9369.)

StormscopeTM
Series II Weather Mapping Systems

GSA Contract # GS00K89AGS0647 (through 9/30/89)

Displays shown above are reconstructions of simultaneous instrument readings during actual airborne thunderstorm research.

3M



A NEW IDEA TAKES FLIGHT

*INTRODUCING THE SCHWEIZER
TH-330 TURBINE, A TOTALLY
NEW CONCEPT IN ROTARY
WING TRAINING.*

Designed specifically to meet the requirements of the U.S. Army SCAT (Single Contractor Aviation Training) program, the TH-330 offers a unique three-seat configuration, advanced integrated avionics, and outstanding high/hot performance.

In the 20-year tradition of the TH-55 Osage, the TH-330 is designed to be the helicopter trainer for the future. Safety, reliability, performance, and cost effectiveness are integral to the TH-330 concept.

The TH-330 and Schweizer — committed to the future of U.S. Army Aviation.

Schweizer
Schweizer Aircraft Corp.
Elmira, NY 14902 U.S.A.
Phone: 607-739-3821
Fax: 607-796-2488
Telex: 932459

“SIMNET/AIRNET-D can also be used to save millions of dollars by pretesting the operational test to ensure that the test is correctly written.”

AIRNET **(continued from page 8)**

DARPA unveiled the first-level SIMNET/AIRNET prototypes at Fort Rucker in August 1988. Since then, four second-level SIMNET/AIRNET Generic Helicopter Prototypes (GHP) have been delivered. The GHP requires a 2-man crew and can be re-configured as a generic scout or attack helicopter. The scout helicopter configuration seats the crew side by side, and has a Forward Looking Infrared (FLIR) or Day Television (DTV) sight and Air-to-Air Stinger missiles. The attack helicopter configuration seats the crew in tandem, and has the FLIR/DTV sights with higher magnification, ATA Stingers, a cannon, and HELLFIRE missiles. Aviation Center crews have successfully engaged stationary targets and conducted air-to-air combat during early system tests. The final research prototypes will be delivered in FY90 and have the specific characteristics of the OH-58D and AH-64A.

These prototypes will provide the opportunity for aviation to experiment with this new collective and combined arms training capability. Aviation's primary goal is to provide a low-cost training system for field commanders to train war-fighting skills. We are also exploring the potential of enhancing our current institutional training programs by adding realism through the simulator's collective tactical environment.

Developmental Issues

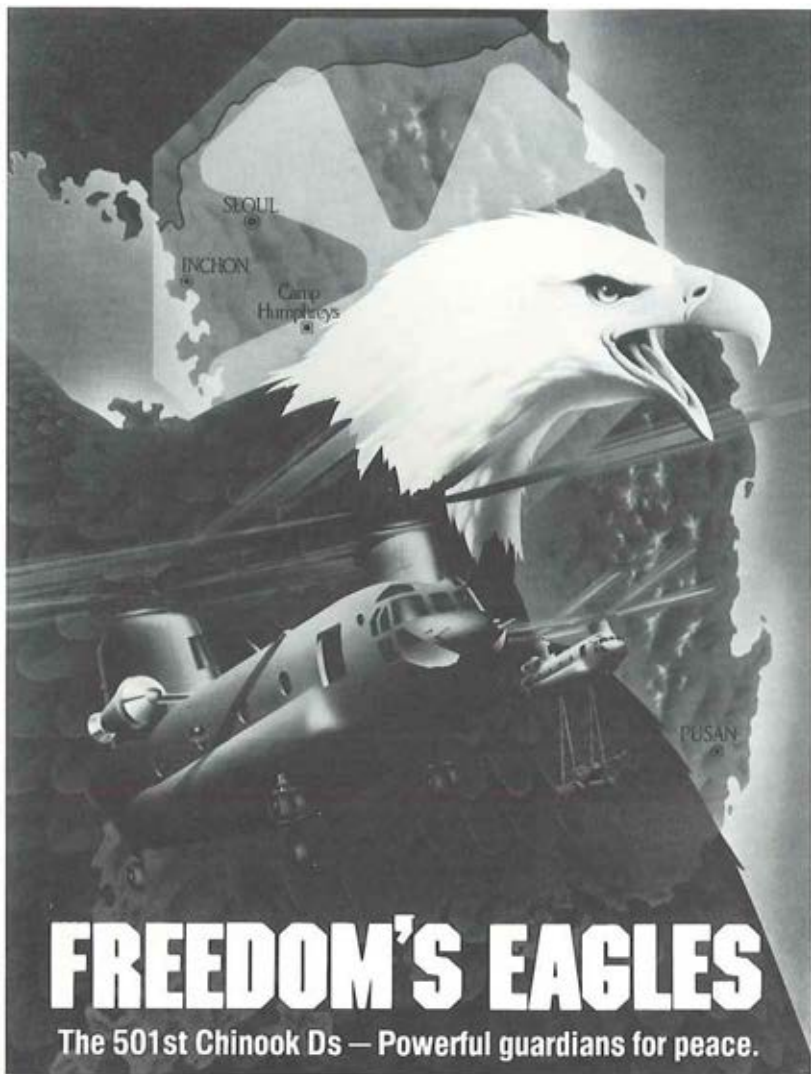
The DARPA SIMNET/AIRNET prototypes will also be used jointly by the Army and DARPA to explore developmental issues. Once the SIMNET/AIRNET devices are accepted as valid models of current systems, DARPA will begin

modifying them to emulate new or desired systems or improvements to current systems. This will greatly enhance aviation's ability to better define weapons system requirements, explore force development issues, and develop tactical employment procedures before a new system prototype is built. With this technique, the new system can be tested early in its life cycle to ensure that it meets the desired need. SIMNET/AIRNET-D can also be used to save millions of dollars by pretesting the operational test to ensure that the test is correctly written.

AVCATT

An aviator in a tactical unit can expect to train on the follow-on training system called the Aviation Combined Arms Tactical Trainer (AVCATT) beginning in 1995. The AVCATT will have cockpits to replicate the aircraft in the attack helicopter company and air cavalry troop to include the command and control echelons for both friendly and enemy forces needed to support/oppose the company/troop in battle. The AVCATT will be capable of standing alone for independent aviation training or integrating into the armor/infantry system called Close Combat Tactical Trainer (CCTT) for combined arms training. All other branches and the Air Force will be included in the Combined Arms Tactical Trainer (CATT) training system "umbrella."

The SIMNET/AIRNET research initiative is exciting and promises great rewards for aviation and the Army. In today's austere budget environment we all must look for new and innovative ways to perform our jobs better at a lower cost. I applaud DARPA for its vision in building such a super training and developmental tool so quickly and economically. Aviation will reap its benefits for many years to come. ■■■■



FREEDOM'S EAGLES

The 501st Chinook Ds — Powerful guardians for peace.

FREEDOM'S EAGLES supply the all-weather muscle to deliver the goods over a tough Korean landscape. The mighty, new Chinook 47Ds, strengthen the 501st capabilities and technology for a swift, sure, day-or-night response to the threat of aggression. This is the thirteenth consecutive on-time delivery of the modernized CH-47D to the U.S. Army.



17TH AVN BRIGADE



501ST AVN REGIMENT



A CO., 2-501ST AVN



B CO., 2-501ST AVN

BOEING



THE COLLINS ARN-149. IT CAN SAVE YOU A BUNDLE.

If you want to save acquisition, installation, operating and support costs, choose the new Collins ARN-149(V) Low Frequency Automatic Direction Finder.

Collins ADF provides 100-3000 kHz frequency



coverage plus 500 kHz and 2182 kHz preset maritime emergency frequencies. With 4,000 hour MTBF, integral 1553B capability, and 25% to 80% savings in space, power and weight, the ARN-149 is ideal for both new and inventory military aircraft.

For installation savings, the ARN-149 can use existing aircraft wiring. It features a combined sense and loop antenna, and there is no need for the critical impedance

matching required by older ADF designs.

For information, write Collins Government Avionics Division, Rockwell International, Cedar Rapids, Iowa 52498; or phone (319) 395-2208.



**Rockwell
International**

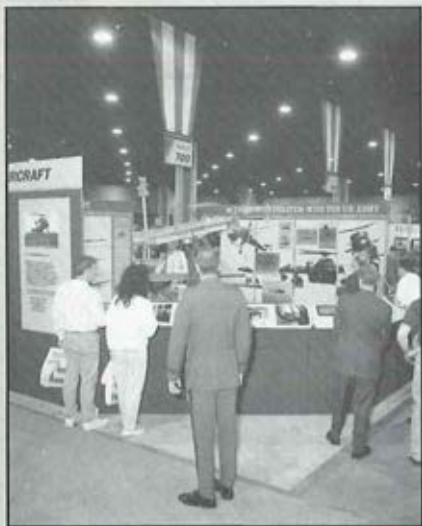
...where science gets down to business

Aerospace / Electronics / Automotive
General Industries / A-B Industrial Automation

COLLINS AVIONICS



ATLANTA - '89



1989 AAAA CONVENTION HIGHLIGHTS



AAAA President MG Story C. Stevens, Ret., opened the 1989 AAAA Annual Convention, April 6-9, in Atlanta, GA (top left). The professional program was chaired by Presentation Chairman MG Ellis D. Parker (above left), Aviation Branch Chief, CG USAAVNC, Ft. Rucker, AL and Commandant USAALS. The professional program opened with the presentation of the colors by the 101st Airborne Division, Air Assault, Honor Guard (top center). The keynote speaker was the Honorable William L. Dickinson, Republican, Second District, AL, U.S. House of Representatives (top right). Thursday speakers included BG Clyde A. Hennes (above right), COL Turner E. Grimsley (right) and CSM Hartwell B. Wilson (far right).



1989 AAAA CONVENTION HIGHLIGHTS



The 1989 Hall of Fame ceremonies took place during the Hall of Fame Luncheon, April 6, 1989 at the AAAA Annual Convention in Atlanta. See the full coverage of the event beginning on page 59 of this issue.



SGM James J. Lloyd, Aviation Proponency Sergeant Major, Directorate of Aviation Proponency, USAAVNC (above left) delivers his remarks during the NCO Professional Program Friday, April 7. The AH-64 APACHE briefing (above right) was one of ten Aircraft Seminars presented by the various PM shops on Saturday. Saturday morning was AVSCOM's Professional Program and included (right): MG Richard E. Stephenson, CG AVSCOM; (l to r below) MG Ronald K. Andreson, PM-LHX; BG William H. Forster, Dir. of Requirements Integ., Deep Opns, ODCSOPS; BG David L. Funk, PEO Avn, and COL Richard J. Lunsford, Jr., PM Training Devices.



1989 AAAA CONVENTION HIGHLIGHTS

THE SHOW OF SHOWS

180,000 SQUARE FEET!!
Displays from over 140 aerospace organizations. Aircraft on display included the AHIP, APACHE, BLACK HAWK, CHINOOK, COBRA, IROQUOIS, JUH-60A LIGHT HAWK, JUH-1H, JOH-58C, AS 350B (ASTAR), TH-330, and PATHFINDER-206.





Counterclockwise from top right: 1) SFC Mary D. Thompson delivers the Invocation for the 1989 AAAA Awards Luncheon. 2) The AAAA Individual Awards await presentation during the Awards Luncheon. 3) GEN Maxwell R. Thurman, CG TRADOC, delivers his address. 4) Aviator of the Year, CW4 Myron F. Babcock, accepts the award from GEN Thurman as Mrs. Babcock looks on. 5) Standing in for Sergeant Major of the Army Julius W. Gates, CSM Samuel G. Smith (left), CSM Second Army, presents the Aviation Soldier of the Year Award to SSG John E. Rhodes as Mrs. Rhodes and President Stevens share the moment.





Top left: Joseph P. Cribbins, Chief, Aviation Logistics Office, ODCSLOG (2nd from left) poses with co-winners of the DAC of the Year Award John A. McLaughlin (left) and John L. Shipley (2nd from right), and AAAA President Stevens. Below left, MG Ellis D. Parker, Branch Chief, presents the James H. McClellan Aviation Safety Award to CW3 Henry M. Yerger who is accompanied by his wife. Below: The Chapter Presidents' Session provided valuable feedback to senior AAAA leadership.



The AAAA President's Reception on Friday evening is one of the best-attended events — mixing, mingling and consuming fantastic hors d'oeuvres are a hard combination to beat.



1989 AAAA CONVENTION HIGHLIGHTS



1989 AAAA CONVENTION HIGHLIGHTS



The 1989 Membership Luncheon opens (above), and the U.S. Precision Helicopter Team (above left) is introduced. Left: MG John L. Klingenhagen, Ret., President, AAAA Scholarship Foundation, presents a AAAA Life Membership pin to GEN William C. Westmoreland, Chairman, Honorary Board of Governors, AAAA Scholarship Foundation. Below left LTG John J. Tolson reports Army Aviation Museum construction is on schedule. Below (left to right) AAAA President Stevens poses with the three "Top Guns" (co-winner top recruiters) CPT Keith S. Norris, Ms. Susan E. Barnes, CW2 Dwight A. McDonald, and AAAA Senior Vice President and Vice President for Membership BG James M. Hesson.



1989 AAAA CONVENTION HIGHLIGHTS



Top left: Lindbergh wins the Top Chapter Award; Chapter President, MG Donald R. Williamson receives the Banner from President Stevens. Top right, Cedar Rapids Chapter President, R.P. Marovich (center), accepts a plaque from BG Jim Hesson, Ret., AAAA Senior VP for his chapter having achieved the largest membership gain in the AAAA Chapter category. Right: "Top Gun" CW2 McDonald accepts a similar award in the Senior Chapter category on behalf of the Thunderhorse Chapter.



Left: Senior Vice President and Vice President for Membership Brigadier General James M. Hesson (right) presents the plaque for largest membership gain in the Master Chapter category to BG Rodney D. Wolfe, President of the Army Aviation Center Chapter. The Army Aviation Center Chapter racked up an astounding net gain of 423 members in 1988. AAAA President Story C. Stevens looks on from the left.

Right: MG Ronald K. Andreson, PM LHX, was the guest speaker for the Saturday morning "First Light Breakfast." Below left, the Air Assault Chapter poses during the Chapter Photo Sessions Saturday afternoon in the exhibit hall. Below right, GEN Carl E. Vuono, Chief of Staff of the Army and Awards Banquet Speaker, is welcomed at the ASE booth by MAJ Joseph A. Durso of the ASE PMO during the Awards Banquet Reception Saturday evening.



Above left: GEN Carl E. Vuono, Chief of Staff, U.S. Army, and new Commanding General, FORCES COMMAND, GEN Colin L. Powell, continue their inspection of the exhibit hall during the Awards Banquet Reception. Above right: General and Mrs. Powell are announced at the Saturday night Awards Banquet. Right: The 101st Airborne Division, Air Assault, Honor Guard, Fort Campbell, KY, led by SSG Chris Schultz, presents the colors at the Awards Banquet in Revolutionary era uniforms. The stirring presentation was accompanied by a solo fife and drum.





Counterclockwise: 1) LTG Donald S. Pihl (l), Military Deputy, Office of the Asst. Sec. Army (RD&A) and GEN Vuono (r) flank members of Task Force 118, the Robert M. Leich Award winning unit. 2) MG Donald Burdick (r), Director, ARNG, NGB, presents the Outstanding Aviation Unit of the Year Award (ARNG) to the 1st Bn, 130th Avn Regt., 449th Avn Group, NCARNG. Accepting are LTC Duncan M. Stevens (l) and CSM Clarence L. Hodges. 3) The Outstanding Unit of the Year Award (USAR) is presented by MG William F. Ward, Chief, Army Reserve (r), to the 185th Transportation Co. (AVIM). Accepting are MAJ David C. Roberts (l) and 1SG Richard C. Beatty. 4) The 9th Cav Bde (Air Attack) 9th ID was the Army Aviation Unit of the Year. GEN Vuono (l) poses with the commander, COL Joseph D. Carothers and Mrs. Carothers (r) and senior NCO, CSM Markfast S.E. Bess. 5) GEN Vuono delivers Banquet Address.





Top left: GEN Vuono accepts the AAAA President's Award from AAAA President Stevens "for his singular success in improving safety in Army operations" and for his role in charting the future course of Army Aviation in signing the U.S. Army Aviation Modernization Plan in May 1988. **Top right:** Executive Vice President Art Kesten, retiring after 32 years of service to AAAA and his wife Dotty, accept the plaque commemorating their efforts from AAAA President Stevens. **Right:** New AAAA President BG James M. Hesson, Ret., accepts the gavel and a handshake from outgoing President Stevens at the conclusion of the Awards Banquet.



Above: Members of the AAAA National Staff at the Sunday morning Aviation Brunch. **Above right:** Chow line starts to form for the Brunch. **Right:** The "Get-Away" Champagne puts the finishing touch on the best convention yet.



**Yes,
We Admit
It...
We're Only
Interested
In Your
Body.**

**Military and Commercial
Repairs**

Specializing In

Honeycomb Bonded
Structure Repairs

Honeycomb Component
Replacements

Sheet Metal And
Structural Repairs

Consolidation And
Consignment Of Inventory

Immediate Delivery
Worldwide

FAA Repair Station 265-8

Two-week turnaround
repair time on AH-1,
UH-1, OH-58.

Please contact us for
capabilities on all
other models.

Now offering two-year
warranties on all
overhaul parts.

New Manufacturer of
Bonded Structures

 **HELICOMB
INTERNATIONAL**

6956 East Thirteenth Street
Tulsa, Oklahoma 74112
(918) 835-3999
Telex 796168 HELICOMB TUL
FAX # (918) 834-4451

Test & Evaluation:

Efficient Use of Training Resources

by Colonel Michael H. Abbott



combat are the ones that deserve the most emphasis. Evaluations administered during tactical missions promote the efficient use of your unit's assets and allow us to evaluate more crewmembers in a given amount of time.

FT. RUCKER, AL — As stated in AR 95-3, the aviation standardization program is designed "to ensure a high degree of efficiency in accomplishing the combat mission of the aviation force." This is achieved by command supervision, employment of standard aviator tasks, use of standard publications, and maintenance of a disciplined pilot force by administration of frequent tests and flight evaluations.

The Directorate of Evaluation and Standardization (DES) sets the tone for quality assurance throughout the aviation community. With this responsibility comes the implied task of constantly trying to do the most effective and efficient evaluations possible and produce a product that will help the commander accomplish his wartime mission.

Flight Standardization Division

The Flight Standardization Division (FSD) carries the bulk of the DES mission. The division consists of three branches: Aeroscout/Attack, Utility, and Fixed Wing/Cargo. They represent DES in conducting the USAAVNC and Department of the Army Flight Standardization Program. A significant portion of our resources go to supporting the FSD effort. Improved efficiency in this area is intended to pay dividends in several ways.

COL Abbott is Director, Directorate of Evaluation and Standardization, USAVNC, Fort Rucker, AL.

As part of our efforts to be more efficient, we are exploring new ways to approach our evaluation trip planning. Our schedule for these trips is often driven by external forces. Alignment with MACOM evaluation teams or major commitments by field units impact on our ability to combine our evaluation visits on a regional basis. Our intent here is to look at our scheduling options to maximize the effectiveness of our resources. Additionally, we are looking at how to do more with less, that is, reduce the number of personnel making trips but, through more efficient use of our assets, maintain the high standards that are expected of us.

Some of the initiatives we are exploring will manifest themselves in the way we approach evaluations. Every attempt will be made to integrate into unit tactical scenarios on both actual missions and those scenarios developed solely for training. We will perform individual/crew evaluations in as close to a mission setting as possible — within the limits of time and resources. If we must "train as we fight," we must evaluate as we fight.

The moratorium on touch-down emergency procedures helped shift our flight training emphasis to combat training. We have not, however, been as quick to shift the emphasis of our evaluations. Those tasks that determine success or failure in

Operations/Resource Management Division

The Operations/Resource Management Division (ORMD) is responsible for all administrative functions within DES. ORMD consists of three branches: Operations, Literature Review, and Technical Support. Additionally, our budget section is included in this division.

Within ORMD, significant effort is being made in the area of making operator's manuals and checklists more efficient. As the user representative to these manuals, we are making every effort to make them "user friendly" and maximize use of training time in our day-to-day missions. Again, in keeping with the concept of "train as you would fight because you will fight as you train," the manuals must be a reflection of that philosophy.

The operator's manual confirms the essential information the operator needs to employ that system, specifically in a combat environment without sacrificing safety. We have removed those portions which contain maintenance and training and placed them in the proper publications.

The aviator is therefore not expected to duplicate the duties of the crew-chief or the maintenance officer. It is time to look for ways to trim unnecessary procedures that do not yield benefits. We cannot afford to it on the ground for long periods

of time and waste fuel on unnecessary and inefficient runup procedures. The UH-1 HUEY operator's manual and checklist led the way for us; other aircraft publications are now in the process of being revised. We can and must be more efficient with our valuable resources.

Evaluation Division

The Evaluation Division, consisting of an Internal and External Branch, develops policies and procedures for evaluating and improving training effectiveness and efficiency in consonance with the current TRADOC School Model. Also, they identify training-development and combat-development problems and recommend solutions to those problems. In this effort, they analyze and interpret statistical data with the intent of improving the efficiency of existing training design, content, and media methods.

Ongoing initiatives in this division are, with our other divisions, designed to improve training efficiency. The Internal Evaluation Branch is responsible for evaluating the USAAVNC training product (material and personnel). This includes conducting training effectiveness analysis, selected studies, and interviews. They also administer surveys, questionnaires and exams, and collect data through classroom evaluations, student critiques, and test item analysis.

External Evaluation Branch is the most visible arm of Evaluation Division. They evaluate the USAAVNC training product and assist field units as necessary to provide follow-up to training received

here at USAAVNC. This action includes planning, organizing, and conducting the Aviation Standardization and Training Seminars (ASTS), USAAVNC's Branch Training Team (BTT), and instructor pilot/standardization instructor pilot (IP/SP) seminars.

DES is committed to efficient use of valuable training assets. As we lead the way in aviation standardization, we hope also to set an example of getting the most from our resources. All Army aviation personnel have a responsibility to develop new ways to work efficiently and be smart in our training efforts. IIII

Challenges - cont. from p. 6

Our duty is to train soldiers and units as a combined arms team on the most difficult tasks under realistic conditions, to high standards. The standards for tomorrow's Army will be set by the soldiers, units, and leaders we train today. The more demanding the training in peace, the more soldiers will survive battles in the next war.

The final priority for staying trained and ready as an Army is to remain committed to developing the most outstanding leaders the world has ever known in a fighting force. Our Army needs leaders who are tactically and technically competent, stress fundamentals, set the example, and enforce standards. Equally important, we want leaders — sergeant through general — who care for soldiers and their families.

Leaders in our Army must treat soldiers and their families with the dignity and respect they deserve, which will inspire soldiers to follow leaders, and

to do as they do. The day-to-day leadership of non-commissioned officers provides an appropriate balance between concern for soldier welfare, and enforcements in training and discipline. In recognition of their success in fulfilling this role, Secretary Marsh and I have designated 1989 as the Year of the Non-Commissioned Officer.

Our Army is committed to providing the education, experience, and opportunities for its leaders to develop an ability for melding soldiers with doctrine and equipment to influence the course of the battle. We have such leaders today, but we must not rest on our laurels. Our challenge is to maintain this edge by continuing to develop outstanding young men and women to lead the Army, and Army Aviation, into the 21st century.

Today's trained and ready Army is a tribute to the dedication and selfless service of Army Aviation leaders, past and present, who promoted innovation in a modernizing Army. Army Aviation has pursued technological change with an eye to its practical application. When others saw helicopters as vulnerable, Army Aviation leaders saw them as a capability to surmount traditional obstacles on the battlefield. Army Aviation has always sought to increase tactical mobility in ways that greatly increase agility in our combat capability. We face challenges in maintaining a trained and ready Army. We always have and we always will. What will sustain us is the spirit of excellence found in Army Aviation which challenges all to stay "Above the Best."

Operations:

Yellowstone Dustoff

by CPT Kenneth Quaglio and CPT Timothy J. Moore

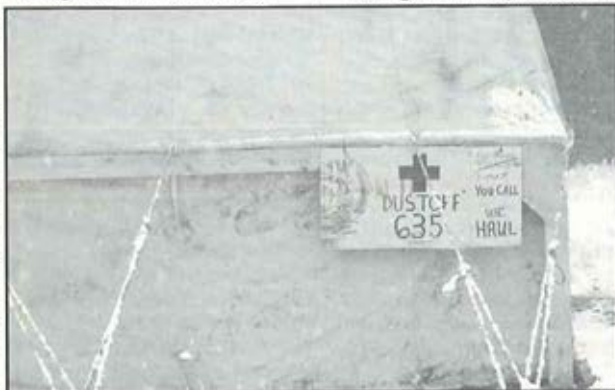
FT. BENNING, GA — During the summer of 1988 the Department of Defense provided direct support to fight the forest fires that ravaged Montana and Wyoming. Part of that effort included four UH-60 BLACK HAWK helicopters from the 498th Medical Company (Air Ambulance) stationed at Fort Benning, GA. As part of the 34th Medical Bn (the Army's largest medical battalion), the 498th Medical Company is the largest active duty MEDEVAC unit in CONUS.

On 31 August we received a warning order from FORSCOM to prepare two UH-60's and crews for C-5A deployment to Bozeman, MT. Two fully equipped UH-60's with crews of four arrived in Bozeman where they were reassembled. They flew to West Yellowstone Airport, where they teamed up with a task force from Fort Lewis, WA. One crew remained at Yellowstone and the second was sent to Crandall, WY. Both crews provided continuous aeromedical evacuation coverage to both fire fighting efforts.

On 9 September FORSCOM tasked the 498th Medical Company with two additional UH-60 MEDEVACs and crews. The aircraft were folded and loaded, and the crews packed and ready 8 hours after the request. They deployed on C-5A on 13

CPT Quaglio is Operations Officer and CPT Moore is Supply Officer, 498th Medical Company (Air Ambulance), Ft. Benning, GA.

September to Malmstrom Air Force Base, MT. They teamed up with another task force from Fort Lewis and moved to a field site 10 miles west of Lincoln, MT. The Crandall fire was one of the worst in the area and it was decided that one MEDEVAC should remain as close as possible to the firefighters. The second aircraft remained at the West Yellowstone Base Camp to allow for contingencies. When the fires near Lincoln, MT had reached their peak, both aircraft were brought forward to the site.



The MEDEVAC flew 10 missions in Wyoming and four in Montana. The greatest problems met by the crews were the extremely poor visibility due to the smoke, high winds, and mountainous terrain. Missions were often flown at altitudes greater than 9,500 MSL with 60 knot winds. Night flying was not pos-

sible due to visibility limitations. The patients transported suffered from respiratory problems, heart attacks, and minor injuries.

Each evacuation required careful premission planning and coordination between civilian and military agencies. On several occasions the aircraft at Crandall had to quickly move because of the uncontrollable fire.

Crews from Fort Benning rotated out every 10-14 days to insure crew endurance was not a problem. The Wyoming crews flew a total of 39.3 hours and the Montana crews 15.8. The Montana crew self-deployed on the 21 September flying 26.7 hours and arriving home on the 22nd. The Wyoming crew self-deployed on 30 September and flew 26.6 hours arriving home on 2 October.

During a 30 day period in

August through September the MEDEVAC coverage plan consisted of 4 UH-60 MEDEVACs with hoists and crews along a 210 mile stretch of the Continental Divide in two states. All this was accomplished with 24 hours of planning and over a distance of 1600 miles. The tremendous (DUSTOFF — cont. on p. 48)



Operations:

APACHE Thunder — Advanced JAAT Test

by CPT Mark Ferrell and CPT Scott Reynolds



FT. HOOD, TX — By now everyone in the world of attack aviation has heard of Advanced Joint Air Attack Team (AJAAT) operations but few have had the chance to learn the techniques involved. AJAAT is JAAT with advanced helicopters, such as the AH-64, that can provide laser designation along with target-killing capability. The AH-64 employed in a high threat, low altitude AJAAT engagement significantly increases A-10 standoff ranges eliminating the most difficult task for the A-10..., target acquisition. This article is in response to the need for a "user's guide" until the results of the AJAAT test can be incorporated into our operational pamphlets and doctrine. We also hope to give enough background to answer the, "How did you guys come up with that?" questions which are sure to be asked.

So get ready for a bit of hangar flying and welcome to AJAAT, where a laser spot is worth a thousand words!

Background

It is a little known historical fact that the first mission flown by the Army's initial AH-64 APACHE Squadron, the 7-17 Cavalry, 6th Cavalry Brigade, was a JAAT. It was March 1986, the APACHES of the "Heavy Cav" still had their

CPT Ferrell is Assistant Brigade, S-3, 6th Cavalry Brigade, Fort Hood, TX. CPT Reynolds is the A-10 Project Manager, A-10 Tactics and Test Division, 57 Fighter Weapons Wing, Nellis AFB, NV.

"new car smell" on that early morning flight as they joined up with the A-10s of the 917th Tactical Fighter Group, Louisiana Air National Guard. As it often seems to happen with those things which expand to something big, this first operational APACHE mission started with a phone call.

The Louisiana Warthog pilots needed some bombing practice. Since the 7-17 Cavalry owned the required airspace they decided to call up through the good-old-boy network (unit to unit) to see if they could work something out. During this phone conversation between operation officers the words, Laser and PAVE PENNY just happen to come up.

It was agreed that the A-10s price of admission to bomb the Ft. Hood impact area would be their willingness to bring along their PAVE PENNY laser tracking pods to see if they would work with the APACHE's laser. Both sides were a bit curious but nothing more. They did not know that after this first mission JAAT would never be the same. But after the A-10s hit the first target on the first pass using PAVE PENNY laser tracking, everyone knew that something was happening way down Texas way! Thus the Squadron Commander told the Brigade Commander who told the Corps Commander who just happened to mention it to his Air Force counterpart (and everyone knows that three-star

generals tend to make things happen.) The AUTOVON lines between Ft. Hood and Nellis AFB began to run hot. It wasn't long until the S-3 of the 7-17 Cavalry found himself talking to the Air Force project officer for JAAT with Advanced Helicopters. The Advanced JAAT Test was on, and it all began because the boys from Louisiana needed to drop a few bombs.

The Test

For the test the 7-17 Cavalry (now redesignated 3-6 Cavalry) was paired up with the 422d Test and Evaluation Squadron (TES), A-10 Branch, of the 57 Fighter Weapons Wing at Nellis AFB, NV. The 422d TES is a unique unit, its mission is to test and develop tactics and doctrine for the Tactical Air Command (TAC). These high-time A-10 pilots with extensive operational experience are true subject-matter experts. They write doctrine only after they have tested it themselves from the cockpit. For the Army's part the 3-6 Cavalry displayed all of the characteristics one would expect of a unit chosen to be first with APACHES. Of the 45 assigned APACHE aviators over 28 were senior or master aviators. All were experienced attack and scout aviators, many of whom had taken part in earlier JAAT tests. The 3-6 Cavalry commander, LTC Kenneth R. McGinty, had been the troop commander. (APACHE — cont. on p.34)

mander during the Tactical Aircraft Survivability Validation Test (TASVAL). The tactics and techniques from this 1979 joint test were the major source for what came to be known as JAAT.

The AJAAT test was conducted in three phases. Phase I took the 3-6 Cavalry to the vast instrumented and threat radar ranges of Nellis AFB to assess both high and low threat daylight AJAAT. During phase II, the 422d TES traveled to Ft. Hood to refine the developments of phase I. Phase II also evaluated night AJAAT in a low threat arena. As anyone who has spent time in Texas can tell you, the month of December is "monsoon season" at Ft. Hood. Thus phase II of the AJAAT test was afforded European like weather of low ceilings and limited visibility.

The third and final phase found both units deployed to Ft. Sill, Oklahoma. At Ft. Sill the terminology worked out during phases I and II was tested against a target array unknown to either the 3-6 Cavalry or the 422d TES. In addition, the full effect of artillery on AJAAT was provided by the 155mm guns of B Battery, 3-18 Field Artillery Battalion of Ft. Sill.

Finally to verify the test, OH-58D crews of the Field Artillery School were trained for AJAAT. Their success in quickly applying AJAAT procedures solidified the work of the 3-6 Cavalry and 422d TES. Over 300 AJAAT missions were flown during the three phases. The results of each mission were reviewed and sometimes

hotly debated during post-mission debriefs. Many old and valued JAAT techniques were found to be outdated or unneeded when conducting AJAAT operations. Giving up these old habits did not come easy since many members of the test (Army and Air Force) had taken part in the original JAAT testing and doctrine writing. Once it was understood that we had indeed arrived at something which was "advanced", nothing was held from questioning. Due to the dedication of the members of the 3-6 Cavalry and the 422d TES the previous boundaries of JAAT operations were transcended.

Lessons Learned

While the basic doctrine for JAAT is sound, a high degree of refinement was apparent when AH-64s were used. With AJAAT, greater efficiency through total integration and distribution of fires is now a reality. The AH-64's sophistication, coupled with the A-10's PAVE PENNY laser tracker produces more firepower on the battlefield.

With the AH-64's improved optics and on board laser designator the AJAAT can now detect, identify, and destroy enemy armor at ranges in excess of 7 kilometers. The AJAAT can better respond to the spontaneous battlefield. By using the laser, the target hand-off between the teams was improved dramatically. Communications between the teams was reduced and thus, so was the confusion factor of missed or misunderstood radio calls. With the A-10's PAVE PENNY tracking the AH-64's

laser, the possibility of multiple attacks was realized and the problem of the A-10 not sighting the target area was eliminated. The A-10's IR MAVERICK was locked on to targets well beyond the pilot's visual range. The cue to the target's location, given by the designating AH-64's laser to the A-10's PAVE PENNY tracker, produced greater stand-off for the A-10. AJAAT experience indicates that the A-10 can acquire the AH-64's laser spot in excess of 20 kilometers from the target area. During engagements with the A-10's 30mm cannon, it was found that "Blind Shots" were possible. This means that the A-10 pilot need not be in visual contact with his target, all he has to do is verify the correct target area and shoot at the cue which appears on the pilot's Head Up Display (HUD). This "blind" shot is most effective against targets in tree lines where visual contact by the A-10 pilot is not possible. AJAAT greatly improved the survivability, effectiveness and efficiency of all members of the team.

AH-64 Tactics

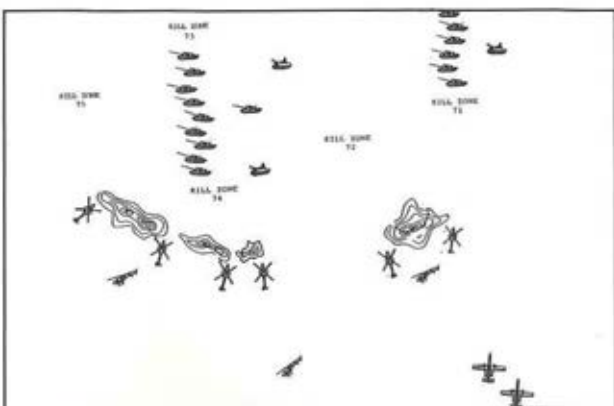
Early on during the fielding of the AH-64 the members of the 3-6 Cavalry realized that they were not only working with a new aircraft, but with new tactics as well. The traditional "scout-gun" mix of odd numbers and unlike aircraft tasked and organized into light and heavy teams did not work with the technologically advanced AH-64. By adopting the lead-wingman concept of even numbers and same type aircraft, the true power of AH-64

was realized. Up to three, two aircraft AH-64 sections could be formed per Troop. Because of this, a larger engagement area could be covered by the AH-64s offering greater target opportunity and maneuver space for all members of the AJAAT team. The scouts, using the same two-ship organization, could now deploy two sections ahead of the AH-64s in order to establish early contact with both friendly and enemy elements. The scouts could then "fix" the battlefield early on, bringing in the AH-64s and A-10s when the moment was right. By using two-ship sections within the Troop framework, better dispersion, greater flexibility and overall mutual support was realized. It was these tactics and organizations that the 3-6 Cavalry used during the test. (Figure 1)

AH-10 Tactics

Because of the AH-64's laser designation, the effective use of four-ship A-10 tactics was now possible. Both sections of two A-10s were brought in on the target, or on different targets. The timing between sections was controlled by the A-10 lead. When maximum firepower was needed, the sections were brought in at the same time by using a second AH-64 to designate for one of the sections. When conducting this type of four-ship attack each A-10 section was given its own laser code. A single AH-64 worked a four-ship section by putting all A-10s on a single code during a sequential attack.

A concern early in the test was that the designating AH-64 would become a non-killer.



This proved to not be the case. The AH-64 that designated for the A-10s was actually fighting with three weapon systems. As the AH-64 lased for the A-10's attack it was also launching remote HELLFIRE missiles that are coded up on his wingman's laser code. He covered the A-10 coming off the target with his own weapons. Thus the designator was still a killer, but now with three different systems.

The Scout

The Scout is the man that puts the AJAAT together. He clears the AH-64s into the battle positions which best cover the kill zones. He fires the artillery which drives the enemy into the kill zones, breaks off antennas, put holes in his radars, and buttons him up. The scout conducts the initial target brief to the A-10s if an Air Force Forward Air Controller (FAC) is not available and turns the A-10s over to the designating AH-64. While doing all of this, the scout also maintains contact with higher headquarters and briefs the next Troop's scouts that will enter

the battle. The scouts give the AJAAT situational awareness.

Artillery

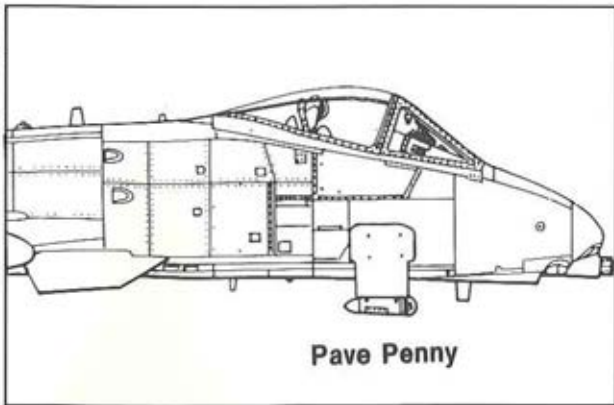
Pre-planning artillery in serials on, to the flanks, and to the rear of the kill zones works best for AJAAT. The Squadron Fire Support Officer (FSO) is the key planner between the aviation and artillery forces. The scouts are the executors of the FSO's plan. When able, the scouts would pick-up the firing unit's Forward Observer (FO) for quicker artillery integration. During a spontaneous AJAAT, flying the FO would be the best way of quickly working in the artillery.

PAVE PENNY

During every mission, once the A-10 achieved intervisibility with the target area, PAVE PENNY lock-on was quickly established. The best attack angles off the AH-64's laser-to-target line were within 60 degrees either side of the line. PAVE PENNY lock-ons beyond 60 degrees were seen but determined to be undependable. One tactic the A-10s (APACHE — cont. on p.36)

APACHE - cont. from p. 35

began to use was to make a "recce" bump at the Initial Point (IP) to detect the laser spot. By picking up the spot briefly at the IP the A-10 lead was able to remask and adjust his flight path for the best terrain masking enroute to the target area. Many PAVE PENNY lock-ons from the IP were beyond 20 kilometers. (Figure 2).



Pave Penny

INFRARED (IR) MAVERICK

For survivability and effectiveness, the IR MAVERICK missile is the A-10's best weapon. So often when thinking about A-10s, one cannot help but focus on the 30mm cannon and its ability to rip open tanks like a can opener. While this is true, it must be noted that when engaging a tank an A-10 may have to close to within 2000 FEET to ensure a kill! That is little more than 600 meters to those of us who think metric when measuring distance. Conversely the IR MAVERICK gives the A-10 a tremendous stand-off capability. The shortcoming of the IR

MAVERICK has been the need of the A-10 pilot to acquire the target visually before he could lock-on and launch the missile. During AJAAT the designating AH-64 has the capability of using 126 power optics for target identification. The IR MAVERICK has only a 6 power optic. By using the PAVE PENNY cue displayed on his HUD, the A-10 pilot quickly aligned his IR MAVERICK seeker boresight over it to achieve lock-on and launch the missile. When using AJAAT techniques most IR MAVERICK launches were beyond the A-10 pilot's visual

range. (Figure 3).

Communications

Upon the A-10s arrival at the IP, the lead scout (or the scout tasked by the commander to work the A-10s) conducted the standard JAAT brief to the A-10 lead. The initial JAAT brief from the scout to the A-10 was a situational awareness brief and is passed on the Troop common UHF. UHF was found to have the best range of all the radios within the AJAAT team with the added benefit of HAVE QUICK anti-jam capability. The FM radios were used to communicate with the ground commander and the artillery. Each section within the Troop had its own VHF frequency for leadwingman communication. The scout was in the best position to see the "big picture" without actually having to see the targets which the designating AH-64 will bring the A-10s on. The scout must be ready to conduct a complete, nine-line, FAC-to-Fighter brief if a FAC is not on the scene. Once the initial brief was complete, the scout handed the A-10s to the designating AH-64 who gave

AGM-65 (MAVERICK)

DESCRIPTION: TV GUIDED, ROCKET-PROPELLED AIR-TO-GROUND MISSILE FOR USE AGAINST FIELD FORTIFICATION, SAM SITES AND ARMORED VEHICLES.

GUIDANCE: HOMING, PROPORTIONAL NAVIGATIONS, TV-GUIDED

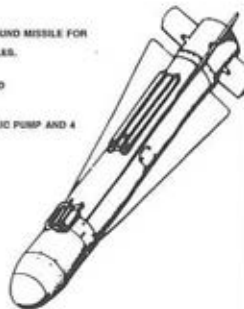
CONTROL: 4 CONTROL SURFACES ON TAIL SECTION, HYDRAULIC PUMP AND 4 HYDRAULIC SERVOPOSITIONERS.

WARHEAD: SHAPED CHARGE

PROPULSION: SOLID PROPELLANT, DUAL THRUST

CERTIFIED: AT, A15, F4, F16

MGT/ENG RESPONSIBILITY: AFL000A3LC



the A-10s the Specific Target Brief. Up to this point everything had gone the same as any standard JAAT. With the hand-off to the designating AH-64 it becomes Advanced JAAT.

The Specific Target Brief was conducted by the AH-64 that will designate for the A-10s. This AH-64 can be the aviation commander or whichever AH-64 the commander has chosen to work with the A-10s. *Everyone* within the AJAAT team must be able to conduct this brief and designate for the A-10s. The notion that the aviation commander has to do this to control the AJAAT is false. He may be out of position at the time, but knowing the situation he can

2. "NORTHERN MOST TANK" The A-10s are being brought in on the northern most tanks first. This helps to paint a picture for the A-10 pilots.

3. "773 FEET" Elevation of 773 feet is also by way of the AH-64's fire control computer. This information will affect the A-10's attack profile and is necessary input for the A-10's computed sight system.

4. "1688" This will be the laser code that the AJAAT will use. The AH-64 selects the code in order to insure deconfliction with codes being used for HELLFIRE delivery. The A-10 pilot enters this code into the PAVE PENNY by way of cockpit switch settings. 1688 (typical training code) is the

keep the A-10s from flying into impacting artillery 2 kilometers to the south. This is an optional call.

7. "CALL DEPARTING BAGGETT" Bagget is the name of the IP. The call for departing the IP will allow the AH-64 to ready himself to designate the target. The AH-64 could have told the A-10 to, "depart Bagget in ___ minutes," or "depart Bagget at my command."

Laser Coordination

Specific procedures from J-LASER were used during the coordination calls for AJAAT. During any comm-jam, HAVE QUICK UHF anti-jam methods were used. These calls gave AJAAT its sense of timing.

Specific Target Brief

1. Target Location-----"PK 224569"
2. Target Description-----"NORTHERN MOST TANK"
3. Elevation-----"773 FEET"
4. Laser Code-----"1688"
5. Laser to Target Line-----"190 DEGREES"
6. Restrictions-----"DO NOT OVERFLY SPOT"
7. Remarks-----"CALL DEPARTING BAGGETT"

task the AH-64 which is in the best position to use the A-10s. The Specific Target Brief from the AH-64 to the A-10 lead was the detailed description of the target that the A-10 will attack.

Description

1. "PK 224569" While the AH-64's sighting and fire control systems are capable of eight digit UTM's, the A-10 pilots found six digits worked best for their needs.

laser code that the PAVE PENNY will "look" for.

5. "190 DEGREES" The laser line, 190 degrees, is needed so that the A-10 pilot can ensure that he is within 60 degrees either side of it for PAVE PENNY lock-on. Also, by drawing a back azimuth from the target using the laser line, the A-10 pilot can picture where the AH-64 is.

6. "DO NOT OVERFLY SPOT" This restriction is to

They were crisp, concise, and to the point. Each word has its own precise meaning and thus must be followed to the letter. Many will note that the old standby THUNDER and LIGHTING calls are gone. These were eliminated once it was realized that, after much debate, they were nothing more than timing calls that over the years had taken on a life of their own. THUNDER and (APACHE — cont. on p.38)

APACHE - cont. from p. 37

LIGHTING have come to mean different things to different people/units. The coordination calls were given by the A-10s over UHF.

Coordination Calls

"IP & WEAPON." This is a situational awareness call that informs all in the AJAAT team that an A-10 has departed the IP and is inbound to the target. Naming the type weapon to be used is a means of deconfliction. When employing the MAVERICK, normal launch ranges put the A-10 overhead or slightly ahead of the AH-64. Gun, rockets, or high drag general purpose (HDGP) bomb employment will require the A-10 to cross in front of the AH-64 in order to position itself for target engagement. By knowing what weapon the A-10 will use, the AH-64 can continue firing (MAVERICK), or hold its fire (Gun, rockets, bombs). The AH-64 should hold its fire when the A-10 has crossed in front of it within 1 NM of the AH-64's gun-target line. An example call would be, "HOG-1, BAGGET, MAVERICK."

"30 SECONDS." With the extended range of the IR MAVERICK, it is difficult to predict A-10 ordnance impact. Therefore, the A-10s use 30 seconds to mean that the A-10s are 30 seconds away from the AH-64's area of influence. An area of influence is defined as the A-10s entering an area of deconfliction with the AH-64s because of munition flight paths. 30 seconds gives the AH-64 time to complete its present engagement, acquire a new target for the

A-10, and prepare to lase the target. Simply stated, "30 Seconds" means that the A-10 will need a laser spot from the AH-64 in 30 seconds!

"LASER ON." The A-10 calls "laser on" at the start of its roll-out. "Laser on" is echoed by the AH-64 so that the A-10 is assured that the laser call was heard.

"SPOT." The A-10 has a PAVE PENNY lockon.

"TERMINATE." The A-10 has launched ordnance or has visual contact with the target and no longer needs the laser. Careful planning must be done when A-10s are attacking the line or wedge formations to ensure that the lead A-10 does not terminate the laser prior to

the wingman's lockon. When in trail, each A-10 will make separate "laser on" and "terminate" calls.

"SHIFT." Once the lead A-10 engages the target, a "shift" call can be made by him or the wingman to shift the laser to the next target. The laser must remain on during the shift to maintain a PAVE PENNY lockon. If the laser is turned off, the PAVE PENNY will revert to a search mode. Depending on the search mode, it could take 10 to 20 seconds to reacquire the laser energy, leading to unacceptable exposure times and aborted attacks. When the AH-64 has the next target acquired he calls, "SET."

(APACHE - cont. on p.48)

Example Communications

- | | |
|------------|--|
| [1] A-10 | "SCOUT 1, HOG 1, BAGGET" |
| [2] OH-58 | "HOG 1, SCOUT 1, BRIEF FOLLOWS" |
| [3] A-10 | "HOG 1, READY" |
| [4] OH-58 | "PK 2256, BAGGET, 10 TANKS MOVING WEST, ZSU, SA-9 EAST OF TANKS, FRIENDLY GROUND TO THE NORTH, FRIENDLY HELO'S TO THE NORTHEAST, FRIENDLY ARTILLERY IMPACTING 2 KM'S SOUTH, CONTACT APACHE 1 THIS FREQUENCY" |
| [5] A-10 | "HOG 1 COPIES ALL" |
| [6] A-10 | "APACHE 1, HOG 1, BAGGET" |
| [7] AH-64 | "HOG 1, APACHE 1, BRIEF FOLLOWS" |
| [8] A-10 | "HOG 1, READY" |
| [9] AH-64 | "PK 224569, NORTHERN MOST TANK, 773 FEET, 1688, 190 DEGREES, DO NOT OVERFLY SPOT, CALL DEPARTING BAGGET" |
| [10] A-10 | "HOG 1 COPIES ALL" |
| [11] A-10 | "HOG 1, BAGGET, MAVERICK" |
| [12] AH-64 | "APACHE 1, ROGER" |
| [13] A-10 | "HOG 1, 30 SECONDS" |
| [14] A-10 | "HOG 1, LASER ON" |
| [15] AH-64 | "APACHE 1, LASER ON" |
| [16] A-10 | "HOG 1, SPOT" |
| [17] A-10 | "HOG 1, LOCK-LAUNCH" |
| [18] A-10 | "HOG 2, SHIFT, GUN" |
| [19] AH-64 | "APACHE 1, SHIFT..., SET" |
| [20] A-10 | "HOG 2, SPOT, TERMINATE" |

Avionics:

GPS Navigation of the Future

by Walter W. Perron



ALEXANDRIA, VA — The U.S. Army Aeronautical Services Office, Cameron Station, Alexandria, VA, is the Army focal point for Global Positioning Service, (GPS) instrument procedures. GPS is a space-based navigation system that has the capability of providing highly accurate three-dimensional position, velocity and time to an infinite number of airborne and ground-equipped users anywhere on or near the earth.

Three Segments

The system consists of three segments: space, control and user.

The space segment will transmit satellite position coordinates and timing information.

The control segment tracks the satellites and uploads correct position and precision clock information.

The user segment processes the position and time data from four satellites to compute precise position and velocity.

The U.S. Army is planning to use one channel sets to pinpoint artillery pieces and provide precise targeting information for close air support. The aircraft fleet will be equipped with either the five channel high dynamic/fast acquisition set or the two channel medium dynamic set. The advantage of the multi-

Mr. Perron is an Aeronautical Information Specialist, U.S. Army Aeronautical Services Office, Cameron Station, Alexandria, VA.

channel receivers is that they simultaneously receive more than one visible satellite and obtain quicker fixes. The single channel receivers collect the data from the satellites in serial fashion.

“The use of a passive system will also be a valuable asset in the tactical realm.”

Advantages

GPS will not be affected by adverse weather conditions. It has the capability of being accurate to within 15 meters. The benefits derived from satellite information processing will enhance aerial navigation (enroute, terminal, approach and depar-

ture), weapons delivery, ground navigation and surveying.

The use of a passive system will also be a valuable asset in the tactical realm. No longer will we require a ground-based NAVAID for flights in adverse weather, thus reducing the risk of compromising the airfield or heliport location. With time, position and velocity information available multiship rendezvous are enhanced.

The Assistant Secretary of Defense (ASD) has tasked DOD to explore the use of GPS to emulate the National Airspace System (NAS) as it exists today, with the intention of decommissioning DOD ground-based VOR, DME, TACAN, Omega and Loran-C. The ASD tasked the USAF to develop a test plan for the integration of GPS in the NAS. A working group consisting of the three services, FAA and the GPS Joint Program Office (JPO) was formed. Our task was to develop the test plan and matrices to evaluate GPS performance and accuracy.

Two Phases

Presently we are coordinating with the laser tracking facility and airfield commander at Laguna AAF, GPS test site so that the test procedures can be developed and implemented. The test plan will be implemented in two phases.

Phase one will consist of gathering statistical data to support the use of GPS to emulate existing enroute and terminal procedures.

Phase two will be to develop GPS unique procedures using the data gathered during phase one, flying then in controlled conditions and then at selected sites in the NAS.

IIII

Personnel:

Total Operational Flying Duty Credit Audits

by Major Morris S. (Sandy) Smith



ALEXANDRIA, VA — Total Operational Flying Duty Credit (TOFDC) should be extremely important to you because it determines whether or not you have "made your gate" and receive continuous Aviation Career Incentive Pay (ACIP). If you don't remain apprised of your TOFDC and it is not accurately reflected on your Officer Record Brief (ORB), the Officer Master File (OMF) at the Total Army Personnel Command will not be correct. Consequently, your commander or assignment officer could, unknowingly, make decisions which might cause you to miss a gate and lose your flight pay.

Who is impacted

All aviators should be interested in the accuracy of their TOFDC. Warrant officers should be interested because they desire accuracy of their records and because they must also meet their gates. However, with the exception of only a few assignments and schools, their TOFDC is continuous throughout their careers.

On the other hand, commissioned officers should be the most concerned about accuracy since they move in and out of operational flying assignments throughout their careers and have the greatest potential for missing a gate. Therefore, my MAJ Smith is Chief, Aviation Plans and Programs Section, OPMD, Total Army Personnel Command, Alexandria, VA.

discussion will be primarily oriented toward them.

For years we've audited your records, at your request, to determine your TOFDC and then ensure the OMF reflected that amount. In August 1988 we initiated audits to be conducted in conjunction with your 12 and 18 year gates. The purpose of these

“. . . your commander or assignment officer could, unknowingly, make decisions which might cause you to miss a gate and lose your flight pay.”

Audits are the same, however, we also want to ensure you receive continuous ACIP if you are entitled to it. Here's how it works.

The Audit

Approximately one to two months before you reach your 12 or 18 year gate, we perform the audit by comparing the OMF with your Career Management Information File (CMIF) maintained in your assignment branch. We inform you of our findings by letter and include the TOFDC figure shown in the OMF, our determination of your credit, and a by-year breakdown from your Aviation Service Entry Data (ASED) to the present. We accomplish this action prior to your gate so we can discuss and work out any discrepancies with you before we notify the U.S. Army

Finance and Accounting Center of your gate status.

In the event you inform us of a discrepancy we will tell you what information we need to change our audit figure. Normally, DA Forms 759 and 759-1 are all that are necessary to give you additional TOFDC.

What can you do to ensure you don't miss you 12 or 18 year gate after we audit your records? First, be proactive. Read AR600-105, Aviation Service or Rated Army Officer to better understand when TOFDC is credited. Second, take the time to determine your TOFDC, remain apprised of it, and ensure

your ORB is accurate.

Third, keep your DA Forms 759/759-1 and any copies of documentation which show your MTOE or TDA positions were changed from nonoperational flying to operational flying while you were assigned there. Fourth, ensure your OERs show the correct duty position title, specialty or MOS, and all additional skill identifiers (ASIs) for your MTOE or TDA positions.

Finally, if the TOFDC on your ORB is incorrect, have your Military Personnel Office call Mrs. Bell at AUTOVON 221-8156 or commercial (202) 325-8156. They can also write her at Commander, U.S. Total Army Personnel Command, ATTN: TAPC-OPD-D, 200 Stovall Street, Alexandria, VA 22332-0413. She'll be glad to help. IIIII

Reserve Components:

Fuertes Caminos '88: A Success Story in Honduras

by Major William R. Steele and Major John A. Farris

FT. MEADE, MD — First U.S. Army Aviation assets recently completed the most successful aviation support operation of its kind in Honduras, Central America. Between December 1987 and June 1988, Army National Guard, Army Reserve and Active Army assets joined forces to become Task Force 111 during Operation Fuertes Caminos or "Strong Roads" 88. The objective of Task Force 111 was to continue construction on a farm-to-market road through the mountainous terrain of the Yoro Province in the northern and central part of Honduras. A base camp, Powder Horn, was constructed adjacent to the work site to support the road-building effort. In addition to the construction of over 11 kilometers of new road, repair operations restored much of the 5.5 kilometers of road completed during the previous year (Blazing Trails '87).

Aviation Mission

The aviation mission included movement of construction materials, equipment and personnel in and around the construction site, emergency medical evacuation, support of medical civil action programs, civil affairs, fire-fighting, and new media transportation. Additional taskings included the movement of cargo

MAJs Steele and Farris are Aviation Staff Officers, Centralized Aviation Readiness Training (CART) Team, First U.S. Army Headquarters, Fort Meade, MD.

and personnel between the base camp and Palmerola Air Base along with search and rescue and command and control mission.

Task Force 111 Aviation assets included seven UH-1H and two UH-1V aircraft. Six aircraft were based forward at Camp Powder Horn to provide medical and engineer support. The remaining three, were located at Palmerola Air Base, approximately 60 miles to the south, which was the primary location for aircraft maintenance.

The personnel TDA consisted of 12 duration and 40 rotational personnel. Rotation crews turned over every 17 days while duration crews remained for the entire exercise period to provide continuity.

The Environment

The environment consisted of dense altitudes averaging 7500 feet, limited visibility, changing dusty and muddy conditions, limited refueling locations, field operating conditions, and temperatures exceeding 110 degrees. With limited emergency landing areas, a lack of an instrument en route structure, 60-foot trees surrounding most landing zones, strict host-country security requirements, construction and excavation restrictions, and the lack of any suitable flight-following communications system, the aviation challenge was clearly established.

Due to the type of soil and steepness of terrain, access to the construction sites, especially after a period of rain, was restricted and dangerous. This normally would have caused delays in construction material delivery and logistical support.

Aviation support in the form of movement of passengers, sling-loading fuel, concrete pipe, cement, masonry sand, small pieces of equipment, and air-delivered water for compaction negated most of the weather and terrain factors. This allowed the construction effort to proceed without the loss of critical manpower and construction equipment time.

Extended Slings

Extended length air-delivery slings were required as the host nation would not allow clearing of trees beyond the limits of the road height excavation and fill. Trees in the area were mostly pine with an average of 60 feet.

Extended external slings (80-100 feet) were not previously authorized for the UH-1 aircraft. Special coordination was effected with U.S. Army Aviation Systems Command, (AVSCOM), the Aviation Logistics Center, and First U.S. Army to establish procedures for "long-line" external loading operations for the UH-1 aircraft.

Extended, external loading of aircraft and air delivery of water to the road surface significantly increased construction efficiency. Fuertes Caminos 88 was the first time extended length slings were authorized for use by UH-1 utility helicopters. This type of operation was a prime contributor to the successful construction mission.

(Caminos — cont. on p. 42)

The management of the Aviation Safety and Accident Prevention programs by the aviation element, was extremely successful. The safety program encompassed not only meetings, posters, education, and constant awareness, but also an effective air traffic control program, Observation Hazard Report (OHR) program, and maintenance program.

All aspects of aviation were covered. The initial step on the program was to perform a detailed aviation safety survey of the heliport area. This step-by-step survey recorded and prioritized each hazard identified. The Aviation Element Commander's philosophy was that "Nothing, absolutely nothing, we are doing here is worth risking life or limb of any individual. If we cannot do it safely, we will not do it", was applied. Solutions were formulated and timely followup activities performed to ensure corrective actions were taken.

Air Traffic Control

Air Traffic Control (ATC) was provided by B Co, 1/58th Aviation Regt (ATC), XVIII Airborne Corps, Fort Bragg, NC. The ATC personnel provided positive control for what turned out to be a high-density traffic heliport. ATC personnel operated a tactical tower located on the airfield with UHF VHF/FM capabilities. A V1 (and later a V2) Nondirectional Radio Beacon (NDB) was installed at Camp Powder Horn to aid in navigation for aircraft operating in the exercise area.

The aviation maintenance support operation, located at

Palmerola Air Base, was singularly the most important aspect of the successful aviation support mission. Challenges included nine aircraft flying in excess of 110 hours per week, and an aircraft phase inspection per week, the extremely detrimental impact the environment had on aircraft subsystems, scarce availability of repair parts and limited maintenance personnel.

In spite of these significant factors, the aviation support element maintained an aircraft availability rate that exceeded Department of Army standards.

system allowed Powder Horn Flight Operations or TF-111 Aviation Maintenance (located at Palmerola) to communicate with all aircraft within the TF-111 operational area. It also allowed ground-to-ground communication between operations and maintenance.

The Army Aviation operation conducted in support of Fuertes Caminos '88 was very successful. Of the 3500 flying hours allocated, a total of 3,398 hours were flown. The airfield constructed at Camp Powder Horn logged in excess of 22,000 separate aircraft

"...If we cannot do it safely, we will not do it."

UHF/VHF Link System

A flight-following, radio relay, aviation communications system was essential to a safe aviation support operation. To fulfill this requirement, a UHF/VHF Link System (repeater) was loaned to TF-111 by the Department of the Interior, Division of Information Systems, Interagency Fire Center, Boise, ID. The system, simply explained, received VHF signals from and transmits VHF signals to an aircraft. The system signal is then transmitted to a receiving site where it is converted to a telephonic signal. The receiving sites are connected by wire to flight operations. The system is powered by twelve-volt (truck type) batteries (one per repeater site) which are kept charged by solar panels.

When fully operational, the

operations. Mission execution included the movement of 12,895 passengers, 4,980,987 pounds of cargo and 83 emergency medical evaluation missions. The Aviation Element fulfilled all mission requirements, without a Class A, B, or C mishap, while exceeding DA aircraft readiness standards.

Fuertes Caminos 88 provided each participant an extremely challenging environment along with a unique training opportunity. Each soldier departed the exercise with a deep sense of pride having played a part in this success story. The combining of assets of the Army National Guard, Army Reserve and Regular Army organizations within First U.S. Army not only met the challenge but set the standard for future exercises of this type.!!!!

U.S. Precision Helicopter Team Chosen

The **National Precision Helicopter Championship Meet** was conducted at Ft. Rucker, AL, March 19-24. The weather failed to cooperate with three days of drizzle, low ceilings, and fog.

The four event **National Meet** ended with the Timed Arrival and Rescue, Precision Hover, and Helicopter Slalom being completed. Fourteen of the 22 competing crews were dispatched on the Navigation Exercise, but heavy rain and fog caused cancellation.

LTC Bob Harry was the organizer; **George Putnam, Alec Rankin, and Jon Iseminger**, the current World Champion, composed the Jury; **Jean Tinsley** was the Chief Judge assisted by **John Williams** as Senior Judge, and **BG (Ret.) Jim Hesson, Pat Warren, Milt Brown**, and a very well trained group of military personnel headed by **MSG Jim Sutton**. For the first time, two crews from the U.S. Navy and U.S. Marine Corps competed.

CW4 John Loftice and **CW2 Kenneth Wright** from USAREUR scored highest and became the National Champions. The runners-up were **CW2 George Egbert** and **CW2 Paul Hendricks** of the AZARNG and in third place were **CW3 Ed Jones** and **CW3 Neil Whigham** of the TXARNG.

Silver trophies furnished by the Helicopter Club of America (HCA) were presented to each of the winning pilots and co-pilots by **BG Rodney D. Wolfe**, the Assistant Commandant at Ft. Rucker, and **HCA President Putnam**. For the first time, a "Sportsmanship Award" was announced and was won by the ARNG contingent.

Finally, eight crews were chosen to train and compete for the honor of being among the five crews to represent the United States in the International Competitions. In addition to the three



crews named as winners in the National Championships, the following complete the team: **CW3 John Iseminger**, pilot, with **CW3 Rudolph Hobbs**, co-pilot; **CW3 Howard Fancher**, pilot, with **SGT Lonnie Rash**, co-pilot/navigator; **CW3 James Church**, pilot, with **SGT Scott Harbarger**, co-pilot/navigator. **CW3 David White**, pilot, with **LT Jay Collins**, co-pilot; **CW4 Maris Stipnieks**, pilot, with **LT Brian Dickens**, co-pilot.

Once again, it will be an All-Army Team with representation from the ARNG, Europe, Hawaii, and several CONUS installations. Maintenance personnel to support the team will be provided by the ARNG.

The Team, dressed in new uniforms provided by the HCA (neckties compliments of the AHS), was introduced at the Membership Luncheon at AAAA's Annual Convention in Atlanta, and assisted their own cause at the Luncheon by seeking \$10 donations in exchange for an authorized Team Cap. The international competition (World Helicopter Championships) will be held in the vicinity of Chantilly, France, 6-10 September. Chantilly is about 45 kilometers north of Paris.

Additional Flyoffs are scheduled for May 18-20, June 28-30, and August 8-10. The final Flyoff will be held in Belgium, September 1-2. Each Flyoff is considered as a National Event for purposes of training and qualifying judges. Call **LTC Bob Harry** (205-255-5509) for copies of the international rules or additional information.

Training:

APACHE Training Brigade

by Colonel Robert D. Hurley



FORT HOOD, TX — The APACHE Training Brigade (ATB) is fulfilling its mission to receive, equip, train, evaluate, and deploy all APACHE Battalions in the Army. Twelve Battalions have already been trained, certified combat-ready, and deployed to their new duty station. The total number of battalions to be formed has been increased to 47 with the addition of 15 National Guard units and four Army Reserve units. As a result, the ATB will continue to field APACHE Battalions through the year 1996.

In October 1988, the "Flying Tigers" of the 4th Battalion, 229th Aviation, commanded by LTC Gerald D. Saltness became the tenth unit to complete the APACHE Training Brigade's Unit Training Program (UTP). They did extremely well while in training and met or exceeded all standards while undergoing an externally evaluated ARTEP.

The unit has completed its deployment to Illenheim, FRG. I am sure they will uphold the proud tradition of the "Flying Tigers," whose name and logo they bear. The original Flying Tigers of World War II fame joined the 4-229th for a formal graduation dinner and dance at Fort Hood. Mr. Tex Hill, Squadron Leader, 2d Squadron, American Volunteer Group, was the featured speaker.

During much of 4-229th Aviation's training they were accom-

panied by cadre personnel from 1st Battalion, 151st Aviation of the South Carolina Army National Guard. The 1-151st will return to the ATB in June 1990 to complete their training. Upon completion of their ARTEP they will be the second AH-64 National Guard unit fielded.

The 1st Battalion, 101st Aviation, commanded by LTC Thomas W. Garrett, completed their ARTEP on 6 December 1988 and returned to Fort Campbell. Their's was a very successful UTP during which the soldiers, noncommissioned officers, and officers displayed the high esprit de corps and "can



do" attitude that is the hallmark of the Army's only Air Assault Division.

The 2nd Battalion, 101st Aviation, commanded by LTC Pascoe was redesignated as the 2d Battalion, 229th Aviation on 16 November 1988. The battalion completed the ARTEP on 18 March 1989 and deployed to Fort Rucker, AL on 8 April 1989. Training with 2-229th were cadre per-

sonnel from 1st Battalion, 111th Aviation of the Florida Army National Guard. The cadre has returned to Florida to train the rest of their unit. 1-111th will return to Fort Hood in July 1990 to complete their Unit Training Program.

The 3rd Battalion, 1st Aviation, commanded by LTC Swank is currently completing the company phase of training and will enter the battalion training phase on 30 April 1989. Upon completing the program in June 1989 this activating unit will deploy to Ansbach, FRG.

The 3d Battalion, 227th Aviation, commanded by LTC Tony Jones, has finished the equipment draw and the majority of the individual training required. They will enter the 90-day UTP on 1 May 1989 and will complete the UTP and deployment to Hanau, FRG, on 16 September 1989 as the newest member of the Spearhead Division, 3d Armored Division.

In May 1989, LTC Johnny Sheppard and the soldiers of the 1st Battalion, 24th Aviation, 24th ID (Mx) will arrive at Fort Hood for their six and one-half month training period.

For those of you who have not seen what a very few good men and women — soldiers and civilians — can do in a very short period of time, COME ON DOWN!
IIII

COL Hurley is Commander, APACHE Training Brigade, Fort Hood, TX.

MAILBOX

26 September 1988

To the Editor:

Many years ago, while in combat with a fighter squadron on Iwo Jima, my dearest friend in WWII stated a truism which has remained with me throughout my life. In discussing our futures when WWII ended and what it would take to succeed in the world community, he said, "Sam, it's not what people think of you that counts, it's whether or not you are remembered!"

I was recently "remembered" and honored at a most impressive and emotional ceremony in Hawaii where, under the U.S. Army Regimental System, my former Command Sergeant Major Carrol R. Laudenklos and I activated the 25th Aviation Regiment. CSM Laudenklos and I, as Battalion Commander, trained the 25th Aviation Battalion, prepared it for deployment, and took the Battalion to combat at Cu Chi, RVN in March 1966. Now we are to serve as the Honorary Regimental Commander and Honorary Command Sergeant Major of the 25th Aviation Regiment to help carry on the traditions and history of the Regiment and to help improve combat readiness by passing on our experiences and lessons learned from the past.

The ceremony took place at Schofield Barracks, Hawaii on September 9, 1988. The units that became the 1st Battalion of the Regiment are rich in tradition and honors: 25th Aviation Battalion (Attack), AAAA unit of the year, 1968; 17th Assault Helicopter Company, AAAA unit of the year, 1987; 56th Aviation Company (AVIM), best damn maintenance company in Army Aviation.

Sometime later this year, CSM Laudenklos and I will travel up to Fort Drum, N.Y. to induct the aviation elements of the 10th Mountain Division (Light) into the 25th Aviation Regiment as its 2nd Battalion. And next year, when we return to Hawaii, the aviation units of the 53rd Aviation Battalion (Provisional) will become another battalion of the 25th Aviation Regiment.

What I found in Hawaii was most amazing. Under the guidance and strong dynamic leadership of Colonel Ted Duck, the Aviation Brigade Commander, and Lt. Col Ed Littlejohn, Commander, 25th Aviation Battalion (Attack),

they have developed aviation units that are throwbacks to those who went into combat in the days of early Vietnam. In spite of their lack of *modern* equipment and a continuing shortage of manpower (to fill the seats of ready-to-fly aircraft), their units are ready to fight. Every piece of equipment in the 25th Infantry Division (Light) is airmobile and the aviation units accompany all of the infantry fighting units wherever they go to train for combat - Australia, the Philippines, Japan, Korea, Thailand — you name it in the Pacific - they go!

The Division relies heavily on their aviation assets for maneuverability, staying power, medical evacuation, resupply, rappelling and doesn't mind in the least to provide the funds to give their aviators flying hours. You know what else blew my mind? There are a number of W-4's down in the line units, providing the stability and guidance for the newbies in their organizations! Two have been selected for the Master Warrant program already. Their attitude was typical of that throughout every aviation unit — positive, can-do, professional. What a refreshing change from the images I have gleaned by living near a pure training base, Ft. Rucker. Not that Ft. Rucker is not a professional base — just that TOE units with their combat missions in mind exude a different sense of confidence and a *joie de vie* to be envied by the training community!

I left Hawaii not only with a sense of pride for my Regiment but with a contented feeling that our National Defense is in good hands with the youth of America. One last thought. I would be remiss not to address the enlisted side of the equation. Under the direction of CSM Glenn C. Cordiero and the First Sergeants of each aviation unit there in Hawaii (some of whom don't even have the rank as yet), you'll find the most dedicated, exacting, professional young people maintaining the aircraft and allied equipment and manning staff positions that I have ever seen in over 30 years of active service with the aviation community.

You can tell by now how proud I am of having been selected as the Honorary Regimental Commander of the 25th Aviation Regiment for the next three years and how much Army Aviation has meant to me throughout my life!

Colonel Samuel P. Kalagian, Ret.
Enterprise, AL

Personnel:

Want to Get Ahead?

by Brigadier General Robert S. Frix



FORT CAMPBELL, KY — The following is advice for improving one's potential for selection for promotion, further schooling (both military and civilian) and professional development.

Loyalty: For officers, noncommissioned officers, and soldiers, loyalty is sacred and never to be violated or sacrificed. Loyalty goes three ways. Down to your subordinates, laterally to your peers and contemporaries, and up to your boss and unit. Many forget loyalty to subordinates and peers, to their own detriment. Most senior officers watch and judge how someone treats subordinates and peers.

Integrity: *Credibility* is another practical word. If people don't trust your word or signature, you have a big problem. One should cherish their professional reputation, credibility and integrity. Perceptions have the same impact as reality.

Dignity: Part of why people join the Army is to improve themselves and their self-esteem. To "step-on" someone and their dignity is to demonstrate a lack of concern for the individual and the result is the loss of their respect and support. In some cases, "stepped on" people will become your unknown enemies and will wreck your plans and reputation. Treat all firmly and fairly. The Golden Rule works.

BG Frix is Assistant Division Commander, 101st Airborne Division (Air Assault), Fort Campbell, KY.

"Treat all as you would be treated." To talk ill of others in their absence undercuts your own image.

Career Management: You are your best career manager. Seek jobs with responsibility and challenge. Go see the person that controls the job you want. Present yourself in the best possible manner and ask for an opportunity. This means a lot.



You may not get exactly what you want due to availability or requirements, but it won't hurt to try. More than not, it pays off. Keep your current boss informed and seek his advice.

Current Job: Every job is important, especially to your boss. Do your best, be positive and support your unit and boss. First, it's only right; second, they will appreciate it and take care of you.

Records: Make sure they are in order. Personally check them and follow up on corrections made. Three key elements have significant importance in the board selections process. These are: the official photograph, the officer record brief (ORB), and the official microfiche which includes officer evaluation reports (OERs), awards, and other performance data.

The official photograph provides board members with a first impression of you. Your chances of selection are reduced if the photograph is missing, outdated, shows you as being overweight, in a poorly fitted uniform, in need of a haircut, or generally is of poor quality. Ensure that your photograph represents you as a professional. AR 640-30 now provides for the first officer photograph to be taken at the Officer Basic Course. A new photograph is required every three years. It is also appropriate whenever the old photograph no longer represents your present appearance.

The ORB is your resume. Keep this document as current and as accurate as possible. Pay particular attention to section ID assignment history. Avoid cryptic entries, abbreviations of job descriptions, and repetitive listings that may give the impression of homesteading.

The annual audit, normally done during the birth month, is the primary means of updating the ORB. The servicing MILPO has responsibility; however, the officer must work closely with them to ensure supporting documentation is provided. Follow the action through until completion. Duty titles should match those indicated on the (AHEAD — cont. on p. 48)

Maintenance:

Corpus Christi: Update

by Colonel William J. Blair



CORPUS CHRISTI, TX — Corpus Christi Army Depot is prepared to move into the 21st century. Our extensive modernization plan will keep us competitive with private industry and a leader in aviation maintenance.

Providing Army and cross-service helicopter overhaul support is the prime mission at CCAD. To maintain our ability to meet this mission, modernization of our facilities, equipment, technology and quality of work life is essential. The consolidation of CCAD's modernization requirements into a Depot Integrated Modernization Plan has improved our long-range planning and aids in communicating our needs to HQDESCOM, HQAMC, and Dept. of the Army.

READY 2000-PACER

CCAD is currently involved in a significant modernization program, "READY 2000-PACER." The DESCOM Revitalization of the Army Depots by the year 2000 (READY 2000) is highlighted by its prototype depot, CCAD, with our Plan for the Aeronautical Center of Excellence for Rotary Wing Aircraft (PACER). READY 2000 is an integrated approach to depot modernization that includes four phases (Phase 0 — Strategic Planning, Phase I — Structured Analysis, Phase II — Design and Phase III — Implementation). In

COL Blair is Commander, Corpus Christi Army Depot, Corpus Christi, TX.

addition to the four phased approach, HQDESCOM has initiated a single funding line in the budget for depot modernization beginning in FY89.

The READY 2000 methodology will provide the roadmap for CCAD to move into the Computer Integrated Manufacturing/Overhaul arena and meet our mission requirements in the year 2000 with drastically reduced costs and improved product quality. CCAD is currently in Phase I with everything on schedule.

New Workload

Various models of the AH-64 APACHE, UH-1 HUEY, AH-1 COBRA, OH-58 KIOWA, UH-60 BLACKHAWK and CH-47 CHINOOK engines and components are all currently overhauled and maintained here at CCAD. New workload for the depot includes the UH-60 BLACKHAWK, the AH-64 APACHE and the CH-47D CHINOOK and OH-58D KIOWA. We expect workload to increase in line with the fielding of the new weapon systems. The BLACKHAWK and APACHE are both larger in size than the systems currently being overhauled. The manufacturing shops must be able to accommodate not only the increased workload but larger airframes, engines, transmissions, rotor heads and many other components. Additionally, the existing helicopter systems being overhauled/repared (UH-1,

OH-58 and AH-1) at CCAD have service life extension profiles which go to the year 2010.

The necessary Military Construction, Facility Engineering projects and equipment are identified in our modernization plan for the timely organic support of the Army's current and new helicopter weapon systems.

Increased shop space is not the only requirement for the support of these sophisticated new weapon systems. State-of-the-art equipment is required to work on the new materials and to test the technologically advanced systems in these aircraft. Implementation of this state-of-the-art equipment will also improve the Department of Defense industrial technology base for helicopter overhaul.

Quality of Life

The CCAD philosophy includes providing a clean, safe, energy-efficient and healthy work environment for all employees. The morale and dedication of our employees is the key to our quality products. To ensure the retention of these qualities in our work force, many projects in the modernization plan provide not only for modernization of our facilities, equipment and technology but an improvement in our quality of work life.

Systematic overall depot modernization will ensure the integration of our business systems with the manufacturing systems. This integration is an important aspect of CCAD's effectiveness. CCAD will remain the Army's center for technical excellence in aviation maintenance through the integrated approach to modernization provided by READY 2000 and a coordinated effort by our dedicated employees. ■■■■

AHEAD - cont. from p. 46

OER. Ensure that each job within the same unit is listed only once on the ORB. There should be an entry for each distinct job held, not an entry for every OER received.

Frequent review is the recommended means of maintaining accurate official records. Do not wait until you are eligible for promotion to update the ORB. Your PERSCOM assignment officer or professional development officer is also available to assist you in reviewing your ORB.

It is a good idea to stop by PERSCOM in Alexandria, VA and visit personally with your career branch whenever possible. Face-to-face contact means something. You just may influence your next assignment and you can address your needs as required.

The official microfiche must also be current and complete. It should include all OERs, orders for awards, and other performance data. Ensure all data pertains to you. To obtain a copy, write to: Commander, PERSCOM, ATTN: DAPC-MSR, 200 Stovall Street, Alexandria, Virginia 22332-0400. Be a team member, take care of your soldiers and your peers and they will take care of you.

AIR ASSAULT! IIIII

DUSTOFF - cont. from p. 32

loss of forest and the effort to save it resulted in surprisingly few injuries.

Other Deployments

The 498th Medical Company actively trains to perform mis-

sions across the country and around the world.

Just one week before the forest fire support the 498th Medical Company deployed two aircraft and crews to the Joint Readiness Training Center, where they integrated and trained with Alaska's 6th Infantry Division's (Light). While supporting the forest fire operation, the unit HQ deployed six aircraft and the remainder of the company on a four day battalion exercise in September. In October, a week of reverse cycle training increased night operations capability by 28%. In November two aircraft and six aviators conducted joint training with the 57th Medical Detachment (RG) at Norfolk, VA, and completed two days of deck landing qualifications.

This demanding pace was maintained while providing daily support to the Fort Benning installation, the 197th Infantry Brigade (M) (S), the Ranger Regiment, as well as the local civilian community through the MAST program. We continually support the Mountain Ranger Camp in Dahlonga, GA, and the Florida Ranger Camp at Eglin Air Force Base, FL.

The soldiers of the 498th Medical Company work hard to insure they are ready to respond anytime and anywhere. They carry the Army Medical Department colors proudly wherever they are asked to go.

DUSTOFF! IIIII

APACHE - cont. from p. 38

"LOCK-LAUNCH." MAVERICK lock and launch advisory call indicating that there is standoff ordnance inbound.

Summary

It has now been over a year since the AJAAT test was completed. The Fighter Weapons School has taken an aggressive approach in getting the word out to the operational units in TAC. At Ft. Hood the 6th Cavalry Brigade and the APACHE Training Brigade now train to conduct AJAAT. All new AH-64 units are taking the AJAAT techniques back to their home stations upon completing their unit fielding at Ft. Hood. The 3-6 Cavalry has worked AJAAT with the 23d Tactical Fighter Wing out of England AFB, Louisiana and the 175 Tactical Fighter Group of the Maryland Air National Guard. These two top-notch units did much to shape its final form. The folks at the Air Land Forces Application Agency (ALFA) have assisted in the review of the test results and will soon publish the updated operational pamphlets.

We now truly have expanded the utility of the JAAT idea from the standard old front line, poor survivability, defensive battle into the more progressive high payoff scenarios. New aircraft entering into service adapt quickly to AJAAT. The idea of future growth was central to the AJAAT test. The OH-58D is custom made for the designator role and has proven the AJAAT techniques time and time again. Any aircraft with a designating laser, or laser tracker is a candidate for AJAAT.

But the true payoff is that "Advanced" JAAT now provides the ground commander with a true synergistic, lethal, and efficient tank killing team!

IIIII

BRIEFINGS



MG Ellis D. Parker, CG, Ft. Rucker, AL, proudly holds up the plaque aviators under his command earned. The award, the Army Training and Doctrine Command (TRADOC) Commander's Award for Accident Prevention, was for Rucker's safety efforts during FY88. During that year, Army Aviation Center aviators flew about 243,458 hours with only one Class C accident.

Eugene Buckley, president, Sikorsky Aircraft, has recently announced the following senior management appointments: **Kenneth C. Mard**, senior vice president, programs; **Ray D. Leoni**, senior vice president, engineering, development and assembly operations; **Arthur J. O'Leary**, vice president, product line management/H-60 Army and Air Force programs; **William A. Minter**, vice president, government compliance; **Dr. Kenneth**

M. Rosen, vice president, research and engineering; and **Larry Bingaman**, director of communications.

Travis Engen, president and chief executive officer of ITT Defense, has promoted two senior executives to positions of broader responsibility. **George H. Ashmore**, president of ITT Electro-Optical Products Division, moves to ITT Aerospace Optical Division in Ft. Wayne, IN, as president. **Richard B. Lewis II**, vice president and technical director of ITT Defense, replaces Ashmore as president of ITT Electro-Optical Products Division in Roanoke, Virginia.

Boeing Helicopters' president **Don Chesnut** has recently announced the appointments of **Edward J. Renouard** as executive vice president, and **John F. Hayden** as vice president, business acquisition.

Thomson-CSF and prime contractor **Hamilton Standard**, a division of **United Technologies Corporation**, have been awarded a contract to supply VH-100 Head Up Displays (HUD) for the U.S. Army's Bell OH-58C/D helicopters.

AWARDS AND HONORS

The following information is provided by the U.S. Army Aviation Center at Ft. Rucker, AL:

Initial Entry Rotary Wing Aviator Course Class 88-12 (12/16/88): 2LT Jesse J. Kirchmeier, Distinguished Graduate; 2LTs James E. Oxeer, Scott C. Brandon, James B. Jenkins, Bruce C. Balzano, Honor Graduates.

Initial Entry Rotary Wing Aviator Course Class 88-12 (12/16/88): WO Edward C. Trittel, Jr., Distinguished Graduate; WO Michael S. Harder, Honor Graduate & Leadership Award; WOs Matthew E. Porter, James G. Loggins, Paul E. Bassett, Honor Graduates.

Initial Entry Rotary Wing Aviator Course Class 88-13 (01/19/89): 2LT Timothy J. Thurston, Distinguished Graduate; 2LTs Thomas J. Trossen, Charles B. Dirks, Sheri K. Hanley, Scott J. Putzler, Honor Graduates.

Aviation Senior Warrant Officer Training Course Class 89-1 (01/24/89): CW2 John C. Dundorf, Jr., Distinguished Graduate; CW2s John P. Utecht, Larry J. Wildeboer, Kevin R. Palush, Honor Graduates; CW4 Thomas J. Adams, Honor Graduate & Class Leader.

Initial Entry Rotary Wing Aviator Course Class 88-14 (02/02/89): 2LT Bradley K. Grambo, Dist. Graduate; 2LTs Eric A. Grothe, Jorge L. Vazquez, Jr., Honor Graduates; 1LT James E. Hyatt, II, Honor Graduate & Class Leader.

Initial Entry Rotary Wing Aviator Course Class 88-15 (UH-1) (02/15/89): 2LT Lance J. Muscutt, Distinguished Graduate; 2LT Paul B. DeGironimo, Honor Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-15 (UH-1) (02/15/89): WO Ronald G. Corley, Distinguished Graduate; WO Michael L. Holloway, Honor Grad. & Leadership Award; WO Arthur L. Johanson, Honor Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-15 (OH-58) (02/15/89): 2LT Ronald L. Dodge, Jr., Dist. Grad.

Initial Rotary Wing Aviator Course Class 88-15 (OH-58) (02/15/89): WO Theodore A. Howard, Distinguished Graduate; WO Phillip A. Hill, Honor Graduate.

(Awards and Honors — cont. on next page)

AWARDS AND HONORS

Aviation Officer Advanced Course Class 88-5 (02/22/89):

CPTs Allen E. Glass, II, Dale A. Goldsberry, Jane K. O'Connor, Exceeded Course Standards, Master Tactician Award & Communicative Arts Award; CPTs Joseph W. Blackburn, Craig S. Danielson, John T. Mudlo, Christopher Trouve, Jeffrey A. Upchurch, Daniel G. Wolfe, Exceeded Course Standards & Master Tactician Award; CPTs Gary L. Davis, Mark K. Souza, Exceeded Course Standards & Master Logistician Award; CPTs Paul A. Mooneyham, Glenn A. Rizzi, Exceeded Course Standards & Communicative Arts Award; CPTs John S. Hodges, William P. Shea, Master Tactician Award, Master Logistician Award & Communicative Arts Award; CPT Paul Carriere, 1LT Vincent M. Tobin, Master Tactician Award & Master Logistician Award; CPT James H. Crosby, Master Tactician Award & Communicative Arts Award; CPTS George D. Knapp, Jimmy L. Meacham, Jeffrey N. Peterson, Richard A. Reichardt, Roy D. Steed and 1LT Jeffery T. Toves, Master Tactician Award; CPT Michael E. Weaver, Master Logistician Award & Communicative Arts Award; CPTs Peter E.D. Clymer, James D. Cockrill, Richard A. Evans, Mark E. Grant, Mark F. Rakow, Scott W. Sovereign, Robert S. Stolz, Master Logistician Award; CPTs Karl S. Elebash, III, James J. Lauer, Michael T. Lytle, James S. Rice, John D. Williams, Communicative Arts Award; CPTs John C. Burns, Hadley Foster, Jr., William J. Gillen, Jr., David A. Palmer, Andrew H. Schlosser, Exceeded Course Standards; CPT William B. Bourne, Jr., Class Leader.

Initial Entry Rotary Wing Aviator Course Class 88-16 (UH-1) (03/01/89): WO Shawn H. Wilson, Distinguished Graduate; WO Scott A. Mace, Honor Graduate and Leadership Award; WO Stuart A. Olmer, Honor Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-16 (UH-58) (03/01/89): 2LT Eugene T. Kaiser, Distinguished Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-16 (UH-58) (03/01/89): WO Jeffrey S. Jeter, Distinguished Graduate; WO Mark E. Kaufman, Honor Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-15 (03/01/89): WO Robert M. Vetscher, Distinguished Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-17 (UH-1) (03/15/89): 1LT Daniel J. Eder, Dist. Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-17 (UH-1) (03/15/89): WO Vincent C. Gibson, Dist. Graduate;

WOs David A. Crawford, Michael L. Spanier, Brenda M. Hellerman, Honor Graduates.

Initial Entry Rotary Wing Aviator Course Class 88-17 (UH-58) (03/15/89): WO Todd A. Larson, Distinguished Graduate; WO Barry A. Cranfill, Honor Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-16 (UH-60) (03/15/89): 2LT Dawn M. Troutman, Distinguished Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-16 (UH-60) (03/15/89): WO Richard S. Robinet, Dist. Graduate; WO Delmar C. Kidd, Honor Graduate.

Initial Entry Rotary Wing Aviator Course Class 88-15 (03/15/89): WO Luke Arant, Distinguished Graduate; WO Clinton G. Logwood, II, Honor Graduate, WO Kevin G. Scotti, Leadership Award.

Master Warrant Officer Training Course Class 89-1 (03/21/89): MWO Grant L. South, Distinguished Graduate; MWOs Raymond Kangas, James R. Dammon, Bradley R. Bennett, Robert V. Rector, Honor Graduates.

Air Traffic Control Basic Noncommissioned Officer Course Class 89-2 (12/02/88): SGT David W. Brasfield, Distinguished Graduate.

Aeroscout Basic Noncommissioned Officer Course Class 89-1 (12/02/88): SGT Louis A. Pepesca, Distinguished Graduate.

Aeroscout Basic Noncommissioned Officer Course Class 89-2 (02/03/89): SSG Gayle E. Calahan, Distinguished Graduate.

Air Traffic Control Basic Noncommissioned Officer Course Class 89-3 (02/03/89): SSG Raymond Ramos, Distinguished Graduate.

Air Traffic Control Basic Noncommissioned Officer Course Class 89-4 (03/03/89): SGT Carey C. James, Distinguished Graduate.

Avionic Equipment Maintenance Supervisor Advanced Noncommissioned Officer Course Class 89-2 (03/10/89): SSG William H. Albert, Dist. Graduate.

Air Traffic Control Systems, Subsystems, and Equipment Supervisor Advanced Noncommissioned Officer Course Class 89-1 (03/10/89): SSG Raymond Lopez, Distinguished Graduate.

Aviation Flight Operations Advanced Noncommissioned Officer Course Class 89-2 (03/10/89): SFC Kurtis T. Mabe, Distinguished Graduate.



ARRIVAL &

DEPARTURES

Colonels

CHIEN, KENNETH
3013 MERCHANT COURT
GREAT FALLS, VA 22066

FERRA, ALBERT J.
HQ 4TH BRIGADE
3RD INFANTRY DIVISION
APO NEW YORK 09182

GASKINS, PHILIP W.
QUARTERS 21-2
FT. MCNAIR
WASHINGTON, DC 20024

HERVEY, ALBERT E. JR.
P.O. BOX 46198
WASHINGTON DC 20050

OTIS, JOHN A.
82 BIFICH HILL
FT. RICHARDSON, AK 99505

Lt. Colonels

BELL, WILLIAM L.
101 HORNE ROAD
LINDEN, NC 28356

BROWN, FRED E.
978 PIKE COURT
ST. LOUIS, MO 63138

BURKE, CHARLES M.
8218 MAPLE RIDGE AVENUE
SPRINGFIELD, VA 22153

COLE, CHRIS L.
P.O. BOX 29221
PRESIDIO SF, CA 94129

COOK, DAVID J.
415 N. ROSCOE BOULEVARD
PTE VEDRA BCH, FL 32082

DIXON, WILLIAM B.
HHC 17TH AVIATION BDE.
APO SAN FRANCISCO 96301

FAULHABER, GEORGE B.
1033 JEFFERSON, NE
ALBUQUERQUE, NM 87110

HENDRICKSON, JOHN F.
P.O. BOX 353
LOS ALAMITOS, CA 90720

MCGINTY, KENNETH R.
7306 MALLORY CIRCLE
ALEXANDRIA, VA 22310

PATTERSON, ALBERT L.
4TH BATTALION
501ST AVIATION REGIMENT
APO SAN FRANCISCO 96208

STEPHENS, WAYNE H.
165 SPRING HOLLOW LANE
WESTERVILLE, OH 43081

SWANK, DAVID W.
4701 GLASS MOUNTAIN DR
KILLEEN, TX 76542

Majors

BEAUVAIS, GREGORY
HHC, 7 AIC, BOX 3471
APO NEW YORK 09114

BRENDEL, MARLIN D.
1751 LAVER LANE
LAND O'LAKES, FL 34639

CLAWSON, WILLIAM R.
15208 WINTERWIND DRIVE
TAMPA, FL 33624

FOSTER, THOMAS M.
304 BEAUREGARD HEIGHTS
HAMPTON, VA 23669

GARRITY, BETH H.
4217 35TH STREET
ARLINGTON, VA 22206

GEORGE, RODNEY M.
HHC, E COMPANY
160TH SPECIAL TROOPS
APO SAN FRANCISCO 96301

KINNEY, RAYMOND F.
115 CEDAR CIRCLE
FAYETTEVILLE, GA 30214

MOZT, LEONARD P.
8310 SOUTHERN OAKS CT
LORTON, VA 22079

NAPOLI, JOHN C., JR.
1106 BOWEN AVENUE
COPPERAS COVE, TX 76522

REMLY, STEVEN L.
709 BROUGHAM ROAD
FAYETTEVILLE, NC 28301

TAYLOR, DOUGLAS H.
1305 B NORTH MAIN STREET
ENTERPRISE, AL 36330

TUCKER, WILLIAM A.
1681 BAYSDEN COURT
FAYETTEVILLE, NC 28303

Captains

ALANIZ, DAVID H.
127 CANDLERBROOK DRIVE
ENTERPRISE, AL 36330

BARRON, JOHN E.
206 LAKESHORE ROAD
ENTERPRISE, AL 36330

BATTEN, RICHARD E.
4018 UNION BRANCH ROAD
PETERSBURG, VA 23805

BETANCOURT, JOSE A.
2A FOURNETT COURT
FORT BENNING, GA 31905

BLACHURA, MICHAEL J.
571 E. EL PASO, NO. 201
FRESNO, CA 93710

BROWN, DAVID R.
500 MI BDE (CAMP ZAMA)
P.O. BOX 110
APO SAN FRANCISCO 96343

BUCKNER, EUGENE R.
113 VINTAGE LANE
ENTERPRISE, AL 36330

BURNS, JOHN
1307C STONLEIGH COURT
LEAVENWORTH, KS 66048

CREA, THOMAS M.
105 DEEPWOOD COURT
CLARKSVILLE, TN 37042

CUMMINS, MICHAEL D.
239 SEMINOLE DRIVE
ENTERPRISE, AL 36330

DANAHEY, TIMOTHY J.
4719 RIVER VALLEY WAY
BOWIE, MD 20715

DARDEN, STEPHEN A.
40 202 LANE
FORT RUCKER, AL 36362

FAILOR, JAMES L.
3904 FORGE DRIVE
DALE CITY, VA 22193

FITZGERALD, MAUREEN E.
4 RICE MILL DRIVE
SAVANNAH, GA 31419

GLANG, FRANK O.
1060 RIDGEWAY DRIVE
ENTERPRISE, AL 36330

GLASS, E. ALLEN
5998 BLUE TEAL COURT
FAYETTEVILLE, NC 28306

GNADEK, JOHN J.
5450 ALBATROSS AVENUE
EWA BEACH, HI 96706

GORDON, MARGARET
132 BRIARWOOD PLACE
YORKTOWN, VA 23692

GROSCLOCK, WARREN P.
75 N. HARRIS DRIVE
FORT RUCKER, AL 36362

HALE, BRETT M.
HSC MI BN (LI)
APO MIAMI 34042

HAM, JOHNNIE A.
USNTPS 98, NATC, NAS
PATUXENT RIVER, MD 20670

HOLLEY, ROSS E.
2116 MADERA DRIVE
SIERRA VISTA, AZ 85635

IVERSON, DENNIS J.
HHC 1ST IDP JB-3 AIR/
APO NEW YORK 09137

JOHNSON, THEODORE C.
201 BONN ROAD
FORT ORID, CA 93941

JOHNSON, THOMAS W.
205A MARSHALL ROAD
CARLISLE, PA 17013

KEOGH, MICHAEL H.
A CO 2-2 AVIATION REGT.
APO SAN FRANCISCO 96524

LAMANNA, ANTHONY S.
P.O. BOX 751
NEWINGTON, VA 22122

LAUER, JAMES J.
2D BN, 501ST AVIATION
APO SAN FRANCISCO 96271

LORD, EMORY S.
37 KIRBY STREET
FORT RUCKER, AL 36362

LOUGE, MICHAEL
451 B HALAWA VIEW LOOP
HONOLULU, HI 96818

MAPLES, DAVID L.
P.O. BOX 3368
FORT SILL, OK 73503

MILLS, FREDDIE J.
1601A CHAFFEE COURT
(NAS)
PATUXENT RIVER, MD 20670

MIZE, JAMES D.
P.O. BOX 463
APO NEW YORK 09185

MOORE, MICHAEL B.
HHT 5/77TH CAVALRY
APO SAN FRANCISCO 96251

NELSON, ROCKNEY T.
C CO, 1ST BN (ATK)
2ND AVIATION REGT.
APO SAN FRANCISCO 96524

NIELSEN, RICHARD H.
733-058 WILLOW LAKE CIR.
VIRGINIA BEACH, VA 23452

NOBLE, DOUGLAS E.
30 BOYCE LANE
FORT RUCKER, AL 36362

PARKER, THOMAS W.
B CO, 6/155 AVIATION REGT
BOX 91
APO NEW YORK 09185

PETERSON, BRADLEY G.
HHC, USAISEC-EUR
BOX 224
APO NEW YORK 09056

POLSON, JOHN D.
2610 PHYLIS DRIVE
COPPERAS COVE, TX 76522

PRESGRAVES, DONALD C.
HHT, 47 CAVALRY
APO NEW YORK 09076

REINWALD, ALLISON R.
18 SIMPSON DRIVE
DALEVILLE, AL 36322

SCHISSER, JAMES S.
D CO, 5-158TH AVIATION
BOX 962
APO NEW YORK 09039

SCHUSTER, JOHN N.
207 TAYLOR
ENTERPRISE, AL 36330

SHEA, WILLIAM P.
46 FISHER ROAD
MIDDLETOWN, CT 06457

SHEETS, GEO S.
F CO, 1-13 AVN, RCX 8448
FORT RUCKER, AL 36362

SHURTZ, WILLIAM F.
HHC, 12TH AVIATION BDE.
APO NEW YORK 09457

SMITH, GEORGE R.
16 MONTIETH LANE
FORT RUCKER, AL 36362

SOOS, JOHN A.
612 B CHELSEA PLACE
NEWPORT NEWS, VA 23603

STEIN, MICHAEL J.
109 HARRARD CREEK DRIVE
ENTERPRISE, AL 36330

STOKES, DAVID L.
103 CREEK COURT
ENTERPRISE, AL 36330

SULLIVAN, DAVID W.
4713 NORTHGALES CIRCLE
FAYETTEVILLE, NC 28304

TANEY, THOMAS P.
120 BRIAN COURT
DALEVILLE, AL 36322

TERRLE, LOUISE V.
P.O. BOX 4369
FORT EUSTIS, VA 23604

WALKER, HAL G.
516 TRADEWINDS DRIVE
FAYETTEVILLE, NC 28304

WATSON, RANDALL E.
P.O. BOX 4007
FORT EUSTIS, VA 23604

WILENSKY, JESSE S.
P.O. BOX 533
FOXBORO, MA 02035

WONG, TEZEON Y.
325 NORTH STREET
MIDDLETOWN, NY 10940

YONTS, JAMES R.
203 ORICLE DRIVE
ENTERPRISE, AL 36330

1st Lieutenants

BORGERDING, CHRISTOPHER
125 SLURF WAY, NO. 433
MONTEREY, CA 93940

BUTLER, RUSSELL P.
TAUNUS CHAPTER VP MEMB
A CO, 5/158 AVIATION REGT
APO NEW YORK 09039

DE AMARAL, ZANE E.
B CO, 4TH BATTALION
1597 AVN REGT.
APO NEW YORK 09359

GRIMSLEY, HEATHER J.
504 ANGUS, APT. A
KILLEEN, TX 76542

MEGGS, ANGELA D.
PO. BOX 33953
FORT LEWIS, WA 98433

MOQUIN, MARC
106 HUCKLEBERRY DRIVE
SAVANNAH, GA 31419

O'NEIL, TIMOTHY J.
507 BRIARWOOD, APT. 16A
ENTERPRISE, AL 36330

PERKINS, JEFFERY A.
100-B LAWTON MSU 30-B
FORT HUACHUCA, AZ 85613

PHILLIPS, G. DEXTER
RR 1, BOX 134
DALEVILLE, AL 36322

REYES, HUGO E.
804 LIVINGSTON
DALEVILLE, AL 36322

SHOOR, BRIAN R.
120 B ASPEN
SPRING LAKE, NC 28390

2nd Lieutenants

ALVERSON, JEFFREY L.
1775 ARDEL
POCATELLO, ID 83201

BEAUDOIN, CHRISTOPHER D
TROOP, 1-1 CAV. BOX 254
APO NEW YORK 09326

BLATZ, MICHAEL J.
2501 BACON RANCH ROAD
NO. 826
KILLEEN, TX 76542

BROWN, RANDALL K.
207 GLENWOOD, APT. 1
ENTERPRISE, AL 36330

CHEW, EILEEN K.
117 CANDLEBROOK DRIVE
ENTERPRISE, AL 36330

CROSBY, JULIE A.
1113 WALES DRIVE
KILLEEN, TX 76542

EBNER, GREGORY R.
201 E. EMERALD DRIVE
ENTERPRISE, AL 36330

GORDON, JERI L.
122 BRIAN COURT
DALEVILLE, AL 36322

GORSKI, BRUCE J.
1001 TWIN CREEK DRIVE
APT. 1504
KILLEEN, TX 76543

HURST, SCOTT T.
430 SOUTH FRANKLIN ST.
APT. 4
WILKES-BARRE, PA 18702

JONES, RONALD D.
E TROOP 5717TH CAVALRY
APO SAN FRANCISCO 96224

LITTLE, MANFRED L.
202 COLONY DRIVE
ENTERPRISE, AL 36330

MYERS, RALPH R.
185 HARRY DRIVE
FORT RUCKER, AL 36362

NASCIMENTO, LEONEL
108 B ANTHONY CIRCLE
ENTERPRISE, AL 36330

OLSON, BRIAN C.
111 S. TYLER STREET
SPARTA, WI 54669

OSBORNE, SCOTT M.
106 E.N. DEERWOOD DRIVE
MARION, IN 46953

PARRISH, MARK A.
4800 CEDARHILL CIR., NO. B
KILLEEN, TX 76543

SEXTON, JOHN M.
P TRP, 42N, BOX 10335
APO NEW YORK 09082

SHUE, GRADY V.
PO. BOX 596
ALBEMARLE, NC 28002

SILVERNAAL, DAVID I.
814 RIVERBEND CT, APT. 103
NEWPORT NEWS, VA 23602

SMITH, MARK D.
2819 WIMBLETON RIDGE
WOODBURY, MN 55125

SPITZNAS, JAMES R.
6905 BANBURY ROAD
BALTIMORE, MD 21239

THOMPSON, JOHN W.
N TROOP, 2 CAS, 2 ACR
PO. BOX 19108
APO NEW YORK 09092

TILLAR, DOMALDSON P.
200 NATCHEZ
ENTERPRISE, AL 36330

ZIEMER, DOUGLAS K.
A CO, 3-3 AVIATION REGT.
APO NEW YORK 09182

CW4's

ANDRINGA, FRANKLYN
4197TH AVIATION REGIMENT
BOX 12
APO NEW YORK 09359

BERTOLASIO, WILLIAM
2806 WHITE BIRCH COURT
WOODBURGE, VA 22192

BLANTON, THOMAS P.
5111 CANYON CREEK DRIVE
TEMPLE, TX 76502

BUCKRUCKER, KEVIN A.
880 CHOLLA DRIVE
BARSTOW, CA 92312

CLARK, CHRISTOPHER
2058 FOXBURY LANE
CLARKSVILLE, TN 37043

HANSEN, RANDALL S.
HQ CO, 1ST BATTALION
501ST AVIATION REGIMENT
APO SAN FRANCISCO 96301

HORWATH, JOHN C.
6913 BROCKWOOD STREET
FAYETTEVILLE, NC 28314

KRAAY, ANTHONY G.
202 BROOKSHIRE DRIVE
ENTERPRISE, AL 36330

NOVOSEL, MICH. J., JR.
HHC, 12TH AVIATION BDE.
APO NEW YORK 09457

PHILLIPS, ROBERT D.
306-B SUDUT STREET
SCHOFIELD BKS, IN 94786

PROCTOR, STEVEN V.
1709 ANTELOPE TRAIL
HARKER HEIGHTS, TX 76543

CW3's

BENSON, BRUCE D.
AVUM TROOP, 4/2 ACH
BOX 10298
APO NEW YORK 09092

BOLDING, RANDY L.
3 SAN FERNANDO BLVD.
SAVANNAH, GA 31419

CANNON, WILLIAM L.
RT. 3, BOX 46A
DALEVILLE, AL 36322

HAFKEMEYER, MICHAEL G.
HHC, 7TH BN 159TH AVN REG
BOX 113
APO NEW YORK 09061

KALE, DAROLD L.
S TROOP, 4/11TH ACR
APO NEW YORK 09146

KRAFT, DAVID A.
OLD TUCSON CHAP SECY
8181 N. BROCKSHIRE CT.
LONGVIEW, AZ 85741

MALO, WILLIAM E.
PO. BOX 4132
FORT EUSTIS, VA 23604

MOODY, RONALD K.
D TROOP, 4/7 CAVALRY
APO NEW YORK 09076

OSTERLUND, RICHARD B.
102 WOODLAND DR., RTE 2
ENTERPRISE, AL 36330

RUSSELL, CORNELL
142 WEST END LANE
ROME, NY 13440

CW2's

ARMSTRONG, BRETT J.
ROUTE 2, BOX 39
CLARKSDALE, MS 38614

BRUMFIELD, RICKEY P.
H.H. 7TH DIV. (WAKUUA)
FORT ORD, CA 93941

CLAY, DAVID DEE
A CO, 5/158TH AVN. REGT.
BOX 867
APO NEW YORK 09039

DESROCHES, PIERRE
2605 REEVE CIRCLE
NO. 1816
COLORADO SPRGS, CO 80906

HOLYCROSS, MARK B.
ERAU 8808
PISCOTAIT VALLEY, AZ 86301

MATHY, BRIAN P.
207TH AVIATION COMPANY
APO NEW YORK 09102

REENTS, MARK J.
H/11 2/2 ACR
PO. BOX 1922
APO NEW YORK 09139

UNDERHILL, RONALD L.
4510 DAY COURT
FAYETTEVILLE, NC 28314

WO1's

APPLE, MICHAEL K.
520 ALBURNDALE LANE
FAYETTEVILLE, NC 28314

BENDER, KEVIN L.
PO. BOX 1727
OAKHURST, CA 93644

BERNSTEIN, MARK K.
5890 BANCLOERD, APT. 3004
EL PASO, TX 78512

BRANNAN, MARTIN E.
B CO, TASK FORCE WARRIOR
BOX 161
APO NEW YORK 09185

BYRNE, BRIAN M.
3706-A COLLIER STREET
WAHIAWA, HI 96786

DOWD, CRAIG W.
3334 ZION DS
EL PASO, TX 79904

DOWLING, JOHN M.
5912-Z FISHER AVENUE
FORT HOOD, TX 76544

LOFGAN, GREG P.
3515 E. ALDER
SEATTLE, WA 98102

GUIDO, DAVID E.
175 GREENBRIAR COURT
SAVANNAH, GA 31419

HARRIS, JOHN M.
943 KIEFF DRIVE
WATERTRON, NY 13601

HENDRICKSMYER, VINCENT
204 SOUTH DRIVE
APT. B
COPPERAS COVE, TX 76522

HURLEY, KEITH M.
HHC, 1ST AD, 4TH BRIGADE
APO NEW YORK 09250

JOHNSON, JAMES H.
G CO, 3RD AVIATION REGT.
APO NEW YORK 09182

KNIGGE, MICHAEL K.
15 KIRBY STREET
FORT RUCKER, AL 36362

KUHR, PAUL E.
1109 S. CLARA STREET
APPLETON, WI 54915

LANGWISCH, KEITH L.
14 WILSON AVENUE
OZARK, AL 36360

LYNCH, KEITH A.
XO CO, 159TH AVIATION REGT
8TH BATTALION
APO NEW YORK 09025

MESSERSMITH, DAVID L., JR.
306 S. CHESTNUT AVENUE
NEW HAMPTON, IA 50659

MUZIO, DAVID S.
1050 MINNEWAWA, APT. 107
CLOVIS, CA 93612

PHIPPS, CURTIS R.
G CO, 3RD AVIATION REGT.
APO NEW YORK 09182

PIPKIN, PAUL E.
117 FALCON DRIVE
ENTERPRISE, AL 36330

RAGLAND, JOHNNY
1220-A WERNER PARK
FORT CAMPBELL, KY 42223

RAYMON, RODRICK L.
1304 B OPAL ROAD
KILLEEN, TX 76543

ROTBERG, STEVEN J.
580TH AVN CO, BOX 51
APO NEW YORK 09028

VANGROLL, ALAN P.
G CO, 4TH AVIATION REGT.
APO NEW YORK 09111

WOC

MERTES, LUCKY LEE
126 JORDAN ROAD
CLARKSVILLE, TN 37042

MEYER, MARK A.
105 LIGHT FOOT DRIVE
ENTERPRISE, AL 36330

NUTT, MICHAEL T.
62 FOREST PARK
ENTERPRISE, AL 36330

RITTENHOUSE, DEWAYNE
BRIARWOOD TOWNHOUSES
625 BRIMWOOD DR, NO. A8
ENTERPRISE, AL 36330

SEXTON, TIMOTHY W.
229TH MEDICAL DET.
FORT DRUM, NY 13602

Enlisted

BEZORE, JEFFREY SSG
1910 WHITE BLUFF RD, Q-1
SAVANNAH, GA 31419

BINGHAM, EUGENE H. SGM
31 BAKER STREET
FORT RUCKER, AL 36362

BRYAN, KEVIN T. E7
7520 POTRANCO, NO. 702
SAN ANTONIO, TX 78251

BUSTAMANTE, ARTHUR MSG
HQ 6TH US. ARMY
ATTN: AFPC-TX PERSIDG
SAN FRANCISCO, CA 94129

CREED, DANIEL F. SFC
200TH TAMMC, BOX 255
APO NEW YORK 09052

CROUCH, TERRY L. SFC
65 JOHNSON STREET
ST. IGNACE, MI 49781

FLOYD, CLYDE L. SGM
10665 CARSWELL
BIGGS FIELD
FORT BLISS, TX 79908

JOHNSON, FREDDIE SSG
B CO, 3-58TH AVN REGT
BOX 23385
APO NEW YORK 09250

JOHNSTON, JEFFREY L. E4
253 E. I-30, NO. 101
GARLAND, TX 75043

LOGAN, PAUL E. MSG
120 WOODRING LANE
NEWARK, DE 19702

LOZIER, GARRETT J. SFC
643 ULULANI STREET
KAILUA, HI 96734

MCallISTER, JOHN A. SGT
PO. BOX 4321
FORT EUSTIS, VA 23604

TARSA, MICHAEL J. SGT
1213 DEERBRUSH DRIVE
OLYMPIA, WA 98503

WEBER, JOHN H. MSG
B CO, 22 & F BN, USASMA
PO. BOX 180
FORT BLISS, TX 79918

WHEELOCK, RAYMOND H. SSG
A CO, 1-501 AVIATION BN.
APO SAN FRANCISCO 96301

ZUEL, MICHAEL N. SSG
31 ANDERSON AVENUE
DEFERET, NY 13629

Civilian

BAKER, RUSSELL K.
BAKER AND ASSOCIATES
PO. BOX 2189
BRANDON, FL 34299

BURSON, KEITH L.
P.O. BOX 1085
SABINE PASS, TX 77655

CARLSON, RICHARD
ASTRONAUTICS CORP/AMER
1111 JEFF DAVIS HWY, 605
ARLINGTON, VA 22202

COENSON, MARTIN
WESTINGHOUSE ELEC SYS
2411 SAND LAKE ROAD
ORLANDO, FL 32809

DUARTE, ROBERT G.
1014 PINCAY COURT
FLOISSANT, MO 63034

FLOYD, JACK D.
6446 E. TRAIL RIDGE CIRCLE
NO. 57
MESA, AZ 85205

HAMILTON, RONALD P.
10 E. ST. JOSEPH COURT
WILMINGTON, DE 19808

HEMMER, JAMES N.
1610 N. STAPLEY, NO. 101
MESA, AZ 85203

HUFFMAN, STEVE B.
10959 RIDGE FOREST
AFFTON, MO 63123

KILKENNY, JOHN M.
TEXTRON LYCOMING
1919 COMMERCE DR. 460
HAMPTON, VA 23666

LINK, GARY V.
122 AUGUST DRIVE
SEAFORD, VA 23696

LOSSE, KATHLEEN A.
2667H TFC
TRAVEL SECTION
APO NEW YORK 09081

MACARI, JUDITH K.
407 MEADOW DRIVE, APT. 5
TROY, IL 62294

MARTIN, LARRY K.
ROUTE 1, BOX 170
SLOCUM, AL 36375

MCGRADY, ANTONIETTE
10812 BELVOIR ROAD
CHESTER, VA 23831

MORRIS, ROBERT D.
2552 BETHEL ROAD
OXFORD, PA 19383

NIEHAUS, PATRICIA
295 AWANT, APT. D
HAZELWOOD, MO 63042

SHUPE, RAY M.
UNL SUPPORT SERVICES
BING 1406, NAS WHITING FLD
MILTON, FL 32570

SPARKS, JOHN E.
CMC ELECTRONICS
10 CYPRESS POINT
COLLINSVILLE, IL 62234

SZABO, SANDRA M.
4 OAK STREET, APT. 24
BINGHAMTON, NY 13905

TILLMAN, SHARON E.
3020 MAGNOLIA
ST. LOUIS, MO 63118

TOWNSEND, KEN A.
703 HACKBERRY
LAMARQUE, TX 77568

WEEKS, LINDELL M.
6 STONEFIELD DRIVE
PROSPECT, CT 06712

WRIGHT, W. STAN
5706-A BIXBY WOODS COURT
COLUMBUS, OH 43252

ZABENCO, NICHOLAS
513 JEFFERSON ROAD
EDWARDSVILLE, IL 62025

Retired

ADAMS, RODNEY A. MAJ
NORTH TEXAS CHAP SECY
ROUTE 3, BOX 96
GREENVILLE, TX 75401

CHAPIN, ROBERT L. MAJ
1820 MEADOW GLEN
GRANTS PASS, OR 97527

CONNER, VICTOR S. LTC
HQ USAMC, BOX 119
APO NEW YORK 09333

FRASER, ROBERT E., II CW3
1783 OILDA CIRCLE
SIMI VALLEY, CA 93065

ISAACS, DAVID C. CW4
938 ORIDE STREET
COPHUS CHRISTI, TX 78418

JAGGERS, JOSEPH N. MG
13219 FLU WAY
MARINA DEL REY, CA 90292

KUNDE, GERALD R. COL
PO. BOX 308
BASYE, VA 22810

MARSHALL, WALTER D. COL
4205 ARGONNE DRIVE
FAIRFAX, VA 22032

MERRITT, RONALD H. LTC
PO. BOX 866
ENTERPRISE, AL 36330

MILLS, JON R. LTC
15464 EAGLE TAVERN LANE
CENTREVILLE, VA 22020

MYERS, THOMAS C. MAJ
4258 ECONLOCKHATCHEE TR
ORLANDO, FL 32817

NOSAKA, HERBERT F. SGM
1552 KOMOHANA STREET
HILO, HI 96720

OSTLUND, DONALD T. LTC
3650 DATA DRIVE
APT. 100
RANCH, CORDOVA, CA 95670

PATE, JOHN T. CSM
PO. BOX 1291
ARLINGTON, TX 76004

QUEENES, BERNARD B. COL
PO. BOX 4921
APO NEW YORK 09057

SLYE, WM. T., JR. LTC
4523 DUNBARTON DRIVE
WICHITA FALLS, TX 76702

TACKETT, JOHN A. LTC
12750 SHADYCREEK LANE
APT. C
ST. LOUIS, MO 63141

THAYER, GEORGE E., JR. COL
1224 SW 100 TERRACE
OKLAHOMA CITY, OK 73139

THIBEAULT, WILLIAM R. LTC
917 ELDER ROAD
NEWPORT NEWS, VA 23602

WEBER, RALPH P. LTC
514 EUCLALYPTUS
EL SEGUNDO, CA 90245

WILLIAMS, ROBERT L. CW4
8034 KIRKTON COURT
SACRAMENTO, CA 95628

WINFREY, RALPH V. CW4
1117A HUNTINGTON STREET
WATERTOWN, NY 13601

CAREER TRACK

If you'd like to take advantage of the Career Track employment referral service, but you're not yet a member of AAAA, the solution is simple: Fill out a membership form and send it in along with your request for a Career Track application. Your ad will run in the next available issue.

Active AAAA members may have a 30-word classified employment ad published in two consecutive issues of ARMY AVIATION MAGAZINE free of charge. Write to the AAAA National Office, 49 Richmondville Avenue, Westport, CT 06880-2000, or call (203) 226-8184 for Career Track applications. Inquiring organizations, please contact the National Office.

Seeking management opportunity: Captain, former AAAA Chapter VP; MS in Bus. Mgmt; two Company Commands (700 and 300 people). Experience in Maintenance and Training (six years); Long Range Planning. Will travel/relocate. 3-01

Retiring June 89. Dual-rated Master Army Aviator, Masters degree in Systems Mgmt. Extensive Safety background with higher staffs. Exp includes investigation, education, and program management. Seeks employment with industry. 3-02

Retired Army Non-Commissioned officer wishes to serve as a part-time supply

representative consultant on United States Army supply procedures. Background knowledge in General Supply management, inventory management, and Logistics Management. Specialist under Civil Service experience as General Schedule Grades i.e. GS-09, GS-11, GS-12 respectively. 5-01

Colonel, Aviation Lab Commander, seeks R&D/Logistics program management position in defense/aviation industry. Sensor Fusion, Weapons Integration, Air-to-Air, Fly-by-Light, Propulsion, Expert Systems Diagnostics, and Materials Program management experience. 5-02

Captain, USMA 1979, B.S. Engineering. 10 years active. Company commander, Executive and Operations Officer, Platoon Leader. UH-60 Assault, 5 years. TRADOC Instructor, 3 yrs., OH-58D Systems Integration. Seeking Aviation Industry Management or Instructor position. Available Spring '90. 5-03

NEW MEMBERS



AIR ASSAULT CHAPTER FORT CAMPBELL, KY

Mr. Charles R. Aldole
Mrs. Joe Archulla
Mr. George W. Arnold
SPC Scott A. Barker
Mr. G. Batie
SGT Kelly H. Baugh
CPT Timothy R. Bury
CPT Steven L. Campbell
SPC Clarence L. Carroll, III
Mr. Robert C. Cayce
CPT Thomas W. Charron
Mr. Benny G. Cheek
SFC David A. Clark
Mr. Sam A. Collins
PFC William A. Connell
Mr. Edward Cooke
1LT John C. Davidson
2LT Heinz P. Dinter, Jr.
Ms. Kathryn Dority
Ms. Carolyn Ellis
CPT M. Celia Evesque
SPC Donald R. Haigler
E7 Robert D. Hall
CW3 Danny R. Harrison
Mr. Aubrey B. Harvey
CPT Jeffrey W. Hesson
Mr. John Ho
SFC Jeffrey L. Huber
COL Jack M. Keane
Ms. Susan J. King
CPT(P) Jesse D. Kreinop
2LT Edward C. Ledford
CW2 Charles M. McDaniels
1LT John M. McDuffie
2LT William D. McMickle
SFC Tony R. McNew
SSG Raul N. Miranda
CW4 Stephen C. Moss
Mr. Eddie Page
SGT Samuel Pena
CW3 Bradford A. Powell
CSM Robert G. Ritzstaff
CPT Ross E. Rlidge
SFC John W. Ring
Mr. Ben Rosenthal
Mr. Robert A. Samuels
SPC Mark J. Scannell
CWO David J. Scribner
SGT Scott O. Sowers
WO1 Bernard O. Stokes
CPT Lance A. Vogt
CSM Herman R. Wheeler
MAJ Howard W. Yellon

**ALOHA CHAPTER
HONOLULU, HI**

CPT Frederick O. Campbell
CPT Richard L. Eccles

CPT Gary Gann
SSG Carey J. Grayson

ARIZONA CHAPTER MESA, AZ

Mr. Kenneth R. Bult
Mr. Mike Flynn
Mr. Kirk Kennedy
Mr. Bill McLean
Mr. Alex L. Pal
Mr. Zane D. Parzen
MG Davis C. Rohr, Ret.
Mr. Paul J. Setaro
Mr. Michael Paul Suhr

ARMY AVN CENTER CHAPTER FORT RUCKER, AL

WOC Kevin D.H. Aki
WOC Paul J. Alexander
2LT Manley R. Allford
SGT Gary L. Allen
2LT Scott R. Alpelar
WOC John T. Alspaugh, Jr.
CPT Darrell B. Altizer
2LT John W. Amick
WOC Darin M. Anderson
CPT Billy W. Antley
SFC Gerald Dale Arrington
2LT Charles L. Atkins
WOC Paul G. Austin
CW4 Dennis W. Avenell
WOC David M. Bachelider
WOC Douglas L. Baer
WOC Robert K. Bailey
WOC Glenn F. Baker, Jr.
WOC Richard Lee Baldwin, Jr.
WOC Harvey A. Barker
2LT Paul D. Barnett
WOC John E. Bassett
2LT Joseph P. Baumann
2LT Stephanie J. Baxley
WOC Richard E. Baylie
2LT John D. Beatty
2LT William G. Beavers
WOC Sean J. Belown
2LT Jeffrey W. Bellon
WOC James G. Berberich
WOC Charles W.M. Bergeron
CW4 Jack G. Berry
WOC Peter C. Bigley
WOC Frank M. Black
2LT Holly E. Black
WOC Todd Stephen Blake
WOC John J. Blank, Jr.
CPT Jim D. Bodenheimer
MSG Kenneth C. Bowie
2LT Michael R. Brasher
WOC Terry W. Braughton
WOC Arthur E. Brown, III
WOC Michael R. Brown
2LT Timothy M. Brownsberger

2LT James A. Bryant
Mr. Milan Buchan
CWO Roger A. Bulis
SFC Devin C. Burbank
2LT Daniel T. Burdick
CPT James H. Burns, Jr.
WOC Paul L. Burns
2LT Michael P. Busted
Mr. Jerry W. Byrd
2LT Alfred J.T. Byrne, Jr.
2LT Mark T. Calhoun
CW3 William A. Campbell
WOC Jeffrey J. Caniglia
2LT Christopher B. Carlie
MAJ Lloyd W. Carr
WOC Mark A. Cassell
WOC Bradley G. Churchill
Ms. Patricia Cisaros
WOC Joseph M. Cogella
WOC Daniel S. Cole
CW2 Tommy R. Collins
CPT Richard A. Coppola
2LT James M. Corcoran
CPT Jerry L. Corneil
Mr. Noel T. Cowart
WOC David J. Cowles
WOC David H. Crain
2LT William R. Cristy
2LT Julie A. Crosby
CW4 Ronald H. Crowe
MAJ James F. Cully, Ret.
WOC Alan F. Dalton
CW3 Butch Daniel
WOC William E. Daughtrey
WOC Todd J. Day
2LT Gary W. Dean
1SG William K. Dehart Jr.
2LT James Patrick Delaney
2LT Ronald W. Dement
WOC Peter J. Demos, Jr.
WOC Brian B. Dew
2LT Lawrence R. Dishal
2LT Steven E. Donnelly
WOC Michael S. Drantiel
2LT Danny E. Drew
2LT John D. Dubeck
2LT Peggy M. Duzenack
Mr. Donald C. Egerton
2LT Stewart M. Ebaugh
CPT Scott Elchebaser
2LT James M. Ellerbee
WOC Brian C. Ellis
Mr. Clarence D. Evans
2LT Frederick J. Evans
2LT Adrian R. Farrall
CW3 Ronald V. Farrington
CPT Edward S. Fields
2LT Victor Figueroa
2LT William O. Fisher
WOC Brian J. Fitzpatrick
CW4 Thomas M. Flynn
CPT Stephen M. Fontenot
WOC Kenneth R. Gatewood
CPT Dennis Genualdi
2LT Donald P. Gilliland
WOC Katrina J. Gossman
2LT Leslie W. Grace
Ms. Monica L. Grasso
2LT Robert D. Green
WOC William R. Gurley
WOC John W. Hammond
WOC Timothy R. Hanaly
2LT Sherri Kathleen Hanley
Mrs. Tommie A. Harding
WOC Erich R. Hardy
2LT Jon M. Harrison
SPC Michael S. Harris
WOC Michael W. Hawley
CPT Robert G. Heinzmann
WOC Donald L. Hemric, Jr.
SPC Paul J. Hershberger
SPC James L. Hietner
WOC Kevin E. Hill
Mr. Dan R. Hinderlister
2LT Mark A. Hinds

2LT Robert A. Hoekstra
CW4 Eugene E. Holbrook
2LT Jeffrey R. Holcomb
2LT Larry A. Holcomb
2LT William L. Holmes
CW3 Leslie W. Holt
WOC Gene S. Horstman
Mr. Britt Hoskins
COL John S. Howard
CW2 Brian E. Hudson
2LT Mitchell L. Hudson
WOC Timothy A. Hughes
Mr. Jesse S. Hunt
WOC Donald J. Hunter
WOC Jeffrey A. Huss
1LT John F. Iampietro
2LT Christopher J. Impens
2LT Gregory K. James
WOC Lee J. Jinks
WOC Steve G. Jones
2LT William C. Jones
WOC David A. Kaltoun
SGT Evelyn E. Kelly
2LT William J. Kelly, III
WOC Robert R. King, III
CW3 Richard R. Kiem
WOC Bruce T. Kuepfer
1LT John Kuyler
CPT Peter D. Kowal
2LT Troy D. Krings
CW2 Jesse A. Lambert
WOC Gregory A. Lloyd
2LT Stephen Ray Loftis
CPT Michael A. Lozano
WOC James E. Lundberg
WOC Chester R. Magee, III
WOC Jon E. Magouan
2LT Kenneth R. Manning
2LT Spencer A. Manthorpe, Jr.
WOC Christopher A. Martin
WOC Jeffrey A. Martin
CW3 John W. Martin
WOC Kevin L. Martinez
CPT Kell Martinson
MAJ Kevin T. Mason
WOC William W. Matthews
E5 Robert G. May, Jr.
WOC Dennis E. McCain, Jr.
2LT Edward J. McCrary
WOC John T. McFarland
WOC Brian S. McLaughlin, Jr.
CW2 Dennis B. McNamara
2LT Steve W. McQuiston
WOC David Mercado
WOC Peter G. Mercier
CPT Michael D. Mertins
WOC Lail A. Mikkelson
2LT Christine J. Millard
WOC William P. Miller
2LT Thomas P. Mitchell
WOC Michael D. Mock
WOC Scott A. Monticelli
WOC John T. Moore, Jr.
2LT Edgardo I. Morales
CW2 Victor E. Mosley
2LT Chris M. Mudge
WOC John R. Musser
1LT Dana Neal
WOC Cary E. Newberry
WOC John D. Niedzwiedzki
WOC David A. Nuss
WOC George J. O'Boyle, Jr.
WOC William S. Odum
2LT James P. Olofson
Mr. James W. Orr
WOC Ronald R. Orr, Jr.
WOC Jerry L. Orsburn
CW3 Jay D. Osslander
WOC Mark D. Otterstatter
WOC Dale V. Patwa
WOC Lawrence A. Pasnaude, Jr.
2LT Cheryl L. Pauley
SPC Kathleen M. Peckham
CW3 Yaro W. Pence III

WOC Bradley R. Pepper
WOC Arthur F. Peterson
Mr. M. Roger Peterson
Mr. Roger Peterson
CPT Christopher R. Philbrick
WOC Peter R. Phillips
CW4 Robert K. Phillips
2LT Steven L. Phinney
2LT Allen M. Pilgrim
WOC Charles D. Pogue
WOC Michael S. Pope
2LT Lee A. Powell
WOC Scott M. Powell
CPT Michael D. Proulx
2LT Mark J. Radtke
WOC John H. Redfield
WOC Robey R. Reed
WOC Todd E. Reed
WOC Mark E. Reimier
CPT Steven R. Reynolds
2LT Richard A. Rheinsmith
WOC John W. Rich, IV
WOC Craig S. Richardson
2LT Dale A. Riden
Mr. Jerry R. Riley
WOC Bradley J. Roberson
Mr. Mary C. Roberts
WOC Steven J. Roberts
WOC James R. Rogers
Ms. Janie T. Rogers
WOC Charles E. Romesburg II
CW2 Walter R. Rose
WOC Stirling S. Ross
2LT David John Russell
WOC John C. Rutledge
2LT Edward J. Sanchez
WOC Kent T. Sapp
CPT Daniel N. Sauvigne, Jr.
2LT Frederick T. Schipke, Jr.
WOC Randall D. Schienig
Mr. Robert H. Schrimsher
2LT Kenneth A. Sexton
2LT Michael P. Shea
Mr. Richard I. Shepard
WOC Richard L. Shreve
WOC James A. Sialehr
WOC Michael B. Stevens
Mr. Ronald R. Simmons
WOC Richard A. Sloan
2LT Dennis D. Smith
WOC Michael A. Smith
WOC Dino B. Sorfer
2LT Allen D. Spoutak
WOC Matthew M. Spears
2LT Joseph R. Spivay
2LT Stewart P. Stanton
WOC Randall J. Stewart
2LT Jeffrey D. Stocks
2LT Patricia A. Stout
CW2 Eddie L. Sullivan
WOC Anthony C. Surrow
CPT James G. Sutton
WOC Timothy F. Sutton
CW2 William B. Swears
WOC James K. Sweatman
WOC David S. Taylor
Mr. Henry W. Teich
CW3 Mary K. Templeton
WOC William K. Terhaar
WOC Michael E. Thiel
Mr. William C. Thomas
WOC Joseph V. Thompson
CPT Matthew E. Thompson
WOC Eric A. Tscharanany
SSG Andres Z. Tuzano
SFC Anthony D. Underwood
2LT William J. Van Bree
WOC Timothy L. Vincent
2LT Van J. Voorhees
WOC David F. Voinow
WOC Scott A. Wade
2LT Raymond L. Wagner
2LT Scott K. Wagner
WOC Matthew J. Wain
WOC Mark S. Wakefield
WOC Ricky L. Walker
WOC Christopher L. Wallick
2LT Timothy L. Watkins
WOC Edwin L. Watson
WOC Jay W. Watson
2LT Lawrence A. Weaver
2LT Patrick A. Weber
WOC Michael J. Weis

CPT Bryan J. Wendling
2LT William W. White IV
WOC Jeffrey S. Whitfield
CW4 Randall C. Wiggers
WOC Derik J. Willis
WOC Shawn H. Wilson
SFC Tony Wilson
WOC Keith T. Yamamoto
WOC Robert M. Zyo

**BENELUX CHAPTER
BELGIUM**

CW4 Van D. Westmoreland, Ret.

**BLACK KNIGHTS CHAPTER
WEST POINT, NY**

CPT Scot D. Allen
CDT David M. Balbough
2LT Steven C. Calhoun
CDT Richard A. Chism
CDT Keith A. Flail
CDT Steven A. Gruening
CDT George P. Hasselquist
CDT Sandra J. Hasselt
CDT Dale C. Henderson
2LT Steven T. Joanis
CDT Matthew J. Kennedy
CDT Robert S. Kimbrough
CDT Dennis P. Kirby
CDT Scott E. Murphy
CDT Robert M. Notch
CDT Javier Rodriguez
CPT F. David Sheppard
MAJ William C. Sippo, M.D.
CDT Scott A. Sparks
CDT Brian L. Thompson
CDT Wiley C. Thompson
CDT Charles T. Tully, Jr.
COL Robert A. Turner
CDT Isaiah Wilson, III

**BONN AREA CHAPTER
BONN, GERMANY**

Mrs. Barbara Evans
Mr. Harald Hartmann
Mr. Hermann Hellwig
Mrs. Elfi Roeder

**CEDAR RAPIDS CHAPTER
CEDAR RAPIDS, IOWA**

Mr. Richard A. Fidler
Mr. James M. Hanson
Mr. Theodore A. Johnson
Mr. Robert D. Joy
Mr. Donald Sturgeon
Ms. Kimberley A. Van Eck

**CHECKPOINT CHARLIE CHAP
GERMANY**

CW4 Daniel G. Swan

**CHESAPEAKE BAY CHAPTER
FORT MEADE, MD**

Mr. Richard W. Delker
Mr. Robert D. Moten
Mr. John C. Nichols, Jr.
CW4 Bernard J. Poulin
Mr. Michael A. Schall

**CITADEL CHAPTER
CHARLESTON, SC**

CDT Tristan R. Ansell
CDT Roy D. Banzon
CDT David C. Brown
CDT Alan E. Cave
CDT William C. Downer
CDT Justin D. Hadley
CDT Danny J. Helm
CDT John S. James
CDT Stephen G. Kreis
CDT Stefan C. Mack
CDT Christopher E. Many
CDT Raymond Mazzyck
CDT Dennis B. Owen
CDT John R. Poston
CDT Todd B. Prince
CDT Jerry W. Reeves
CDT David L. Smith
CPT Beau R. Turner
CDT Matthew R. Tyler
CDT Daniel J. Weaver

**COASTAL EMPIRE CHAPTER
FT STEWART/HUNTER AAF, GA**

CPT Brennan Bass
MAJ James A. Corniglia
1LT Tristan P. Coyle
1LT(P) David G. Gordon
1LT Brent M. Hart
WO1 Adam R. Heinicke
CW4 George Kepp
MAJ Richard F. Leach
CPT Kelly J. Marunde
CPT Danny G. Miller
WO1 Terry Rubio
CW4 Larry R. Solana
CPT Elizabeth A. Sonovich
CPT Frederick O. Stepat

**COLONIAL VIRGINIA CHAPTER
FORT EUSTIS, VA**

Ms. Gloria B. Bell
SFC Victor E. Barger
CW3 Bruce E. Bulger
Ms. Dru Chittum
Mr. L.T. Girdguy
Ms. Mary E. Harding
SFC William H. Hunting
Mr. J.G. James
E2 Paul R. Jensen
Mr. James R. Short
Mr. T.L. Zaskowski

**CONNECTICUT CHAPTER
STRATFORD, CT**

Mr. Robert Auhl
Ms. Celia Edwards
CW2 John A. Erickson
Mr. Harry V. Gates
Mr. Thomas C. Helmay
Mr. Steve Hull
Mr. Warren Johnson
Ms. Marie Korteck
Mr. George Pond
Mr. Jimmy A. Watt

**CORPUS CHRISTI CHAPTER
CORPUS CHRISTI, TX**

Mr. Ricardo Cantu
Ms. Linda S. Dixon
Mr. Ron D. Gracey
Mr. Howard Lusk
Mr. William Munson
CPT Katherine J. Tiffany
Mr. James M. Williams

**DELAWARE VALLEY CHAPTER
PHILADELPHIA, PA**

Mr. Henry M. Belman
Mr. David M. Blake
Mr. Raymond Conneen
Mr. Frank Dipasquale
Mr. Robert F. Felton
2LT John J. Kestic
Mr. Kenneth W. McCord
Ms. Marjorie K. Schulte
Mr. Anthony Seraphin
Ms. Janet Seraphin
Ms. James E. Talbot
Mr. Timothy P. Wright

**EDWIN A LINK MEM CHAP
BINGHAMTON NY AREA**

1LT Mark D. Andrus
1LT John P. Archuleta
CPT Mark F. Burke
WO1 Leslie S. Caldwell
Mr. William L. Calhoun
CSM Lloyd E. Douglass
CPT Darrell R. Overcash
SGT Edgar Roman
Mr. Parshotam Kumar Ruchandani
CPT Stephen K. Ryder
2LT Stephen M. Sines
CPT Robert W. Simpson
Mr. Gordon L. Treichler

**FOLLOW ME CHAPTER
FORT BENNING, GA**

Mr. Benjamin F. Vandervoort

**FORT BRAGG CHAPTER
FORT BRAGG, NC**
LTC Tommie C. Brown

LTC Joe N. Calhoun
CW3 Andrew B. Meyer
MAJ Gary A. Pendrak, Chaplain
SSG Troy A. Peterson
MAJ Thomas M. Ryan
MAJ Donald T. Stuck
CW3 Donald S. Terrell
1LT Charles Wright

**GREATER-ATLANTA CHAPTER
ATLANTA, GA**

CPT James E. Adams
CPT Arthur T. Ball, Jr.
CPT(P) Joseph W. Bost
CPT Michael E. Cantor
LTC Dell L. Dailey
Mr. Gary P.A. Diver
CPT Charles E. Fletcher
CPT Edwin J. Gaither
MAJ Ken J. Goodrow, Ret.
Mr. David L. Graham
CW3 Stephen J. Howis
Mr. Ivan Kahn
Mr. Paul Kingstom
Mr. Robert E. Lanzotti
Mr. William E. Lovett, Jr.
Mr. Douglas G. Matthews
CPT James C. McConville
Mr. Felton McLaughlin
Mr. Jhan Praetz
MAJ Ricky C. Smith
LTC John H. Sydon
CW3 Joseph M. Tygart
Mr. Gene P. Villava
CPT James R. Wikkie, IV

**HANAU CHAPTER
GERMANY**

2LT Thomas B. Adams
WO1 Jeffrey A. Aldrich
CPT William E. Ailey
CPT Leslie E. Barnett
CPT James A. Bond
CW4 Lawrence D. Davidson
1LT Mikhail Dorfman
CW2 Byron K. Dozier
1SG Robert F. Eckrich
SPC Rodney T. Freeman
1LT Mark S. Galloway
PFC Christie G. Galloway
SGT Gilles A. Halley
SSG Nancy Hill
MAJ Charles K. Hunt
2LT Gregory J. Janosik
CW4 Carl J. Klemm
1LT Steven A. Matyagoshi
2LT Loretta A. Olsen
SPC Aaron R. Poff
CW2 Frank I. Stoneking
1LT Suzanne Wade
CW3 Eric L. Waltz
CPT James E. Whaley
SPC David B. Worthan

**INDIANAPOLIS CHAPTER
INDIANAPOLIS, IN**

CW4 Frank D. Geaben, Ret.

**INDIANTOWN GAP CHAPTER
INDIANTOWN GAP, PA**

SGT Deborah L. Heafner
2LT Patrick J. Manning
SGT James J. Mesaros
CW2 David W. Rogers

**LEAVENWORTH CHAPTER
FORT LEAVENWORTH, KS**

MAJ Joseph A. Smith

**LINDBERGH CHAPTER
ST. LOUIS, MO**

Mr. Steven G. Ackermann
Ms. Bobbie Jean Allen
Mr. Kenneth A. Anderson
Ms. Leanne F. Armstrong
Mr. Matthew M. Arnold
Mr. John A. Bartin
LTC Helmer H. Behrens, Ret.
Mr. Frank Best
Mr. John K. Blakely
Mr. Steven J. Butler
Mr. Robert E. Butler

Mr. Charles R. Chartrand
Mr. Jonathan E. Croom
Mr. Harold W. Davies
Mr. Robert L. Dodson
Mr. Robert G. Duane
Mr. Alvin Farless
Ms. Kathryn E. Fischer
Mr. Albert H. Greer, Jr.
Mr. Bob D. Hanks
Mr. David A. Hicks
Mr. Charles L. Horn
Ms. Jeanette G. Huck
COL James T. Huey
SFC Robert H. Johnson, Sr.
Mr. Daniel R. Kern
Mr. Jerry Kipsch
Mr. Jack Kubicki
Ms. Anne Lauder
Mr. Shaun F. McKee
Ms. Maria L. McKinzie
Mr. Daniel L. McKitrick
Mr. Michael F. Monahan
Mr. Ernest M. Moore
Ms. Frances H. Morgan
Ms. Dawn L. O'Keefe
Mr. Victor Don Perrin
Ms. Constance M. Perry
Mr. Lamone A. Plog
Mr. Roland W. Price
Mr. Mark A. Raglin
Mr. Alfred R. Reed
Mr. Rodney J. Rieken
Ms. Christine L. Ruble
Ms. Dana J. Simmons
Ms. Dolores R. Smiley-Grandy
Mr. Siegfried H. Stange
Mr. Curtis J. Stevens
LTC Larry Neil Stewart
Mr. Wayne A. Suchman
Mr. Jack L. Vaughn
Mr. Jack C. Walkenhorst
Mr. David M. Wallingford
Mr. John W. Watson
Mr. James F. Williams
Ms. Pamela D. Woolery
Ms. Christine A. Zoller

LONE STAR CHAPTER

AUSTIN, TEXAS

Mr. Don Bailey
CWA Rodney C. Brooks
CW2 John W. Sartor
CWA Rodney David Williamson

MAINZ CHAPTER
MAINZ, GERMANY

1LT Eric T. Bishop
CW2 Joe F. Broadaway
1SG Edward A. Carter
CW2 Adrian I. Cerdedo
SGT Carlos A. Diaz
2LT David S. Dunlap
PFC Marc D. Farrin
2LT Ronald J. Garner
CPT Charles F. Gessell
CW3 Richard M. Golob
PFC Scottie Duane Howington
CW2 Crittenden J. Kennedy
CW2 Ronald E. Klusacek
SSG Sheryl D. La Salle
CW2 Jeronica L. Logan
2LT Colleen C. Lutz
CPT Vincent F. Mercadante
SGT James D. Miller
2LT John E. Novalis, II
PFC Dominic P. Vincenty
CW3 Ronald L. White

MONMOUTH CHAPTER
FORT MONMOUTH, NJ

WOC David W. Archer
WOC James J. Denhartog
Mr. William T. Fitzgerald, Jr.
Ms. Alexandra M. Gillies
Mr. Karl Huang
Mr. Michael J. Madden
Mr. Nareesh Narayan

MONTEREY BAY CHAPTER
FORT ORD, CA

LTC William M. Durbin
CPT Bruce A. Hall

MORNING CALM CHAPTER
SEOUL, KOREA

CPT Randall G. Anderson
CW4 Joseph E. Bew
WO1 Sandra Y. Dacey
CPT William T. Harrison
CPT James P. Kester
BG Choulung Kim
BG Jung Won Lee
1LT Joseph A. Ponce
CPT Louis P. Schurott
1LT Daniel R. Shea
2LT Stephen G. Solymosy
CPT Christopher C. Sullivan

MOUNT RAINIER CHAPTER
FORT LEWIS, WA

Mr. James B. Boone
2LT Bruce C.R. Linton
Mr. Larry D. Ogburn

NORTH TEXAS CHAPTER
DALLAS/FORT WORTH

Mr. Russ Baker
Mr. Ed Black
Mr. John M. Breton
Mr. Michael L. Crunk
Mr. William Deescker
Mr. Nichols B. Dennis
CW2 Donald R. Duncan
Mr. Richard Geist
Mr. Jeff C. Green
Mr. Mark W. Hansard
Mr. Michael K. Harnedy
Mr. Earl H. Larkin
Mr. Ron G. May
Mr. Nathan P. Newburn
2LT Robert K. Patterson
Mr. H. Wayne Priest
Mr. Gary D. Sanders
Mr. Lance A. Schroeder
Mr. John R. Sears
Mr. Monty J. Stans
Mr. Jerry E. Wechter
Mr. Ronald G. Wertz

NORTHERN LIGHTS CHAPTER
FT WAINWRIGHT/FAIRBANKS AK

CW4 Myron F. Babcock

OLD IRONSIDES CHAPTER
ANSBACH, GERMANY

CPT James A. Casconi
1LT Michael J. Francesconi
CPT Greta L. Moore
SSG Steven L. Peterson
Mr. Steven L. Retherford
MAJ George S. Webb

OLD TUCSON
MARANA, AZ

Mr. Michael McNeas
Mr. Jose J. Olivera

PHANTOM CORPS CHAPTER
FORT HOOD, TX

CW2 Jerry A. Anderson
CPT Andrew B. Arnsberg
SGT Bobby G. Barker
1LT George W. Bentler, IV
CPT Danny P. Boitnott
CPT James R. Chapman
1LT John G. Dean
1LT Calvin C. Dewitt
CW2 Bradley W. Felton
1LT Kirk R. Fields
MAJ Daniel T. Fitzpatrick
CW2 Ronald W. Gray
WO1 Stephen J. Honzcarensko
1LT John M. Howden
1LT Richard A. Howell
1LT Zachary S. Kern
CPT Thomas R. Kirkland
CW3 L. C. Leblanc
CW4 Leonard N. Lemay
MAJ Byron R. Lester
1LT Orlando Lopez
CSM John B. Marlow
CPT Scott B. McCallister
2LT Tammy S. McKenna
1LT Joseph D. McMillen
WO1 Peter B. Montrono

CW4 Victor J. Petricka
1LT Mark F. Powell
CW3 Thomas P.E. Rachels
1LT Judd E. Reynolds
2LT Christopher J. Rigoni
WO1 Richard M. Satter
WO1 Steven C. Scrivner
CW2 Steve H. Stephens
1LT Turner B. Thackston IV
1SG Gary J. Walker
2LT Alan E. Williams
WOC Michael A. Winn

PIKES PEAK CHAPTER
FORT CARSON, CO

CPT James T. Brockway
Ms. Trish Coodley
CPT Gregory T. Goodall
2LT Michael K. Halder
Mr. Keith Johnson
1LT Warren D. Knapp
2LT Erik K. Poole
CW2 Robert B. Reynolds
Mr. J. Floyd Tacey
Mr. Jay F. Talley

REDCATCHER CHAPTER
NURNBERG, GERMANY

2LT Robert S. Baumberger
SGT Arthur A. Bowling
CPT Peter E. Curry
CW4 Ronald R. Doucette
2LT Monte C. Ferguson
SGT Peter F. Grebner
SFC Robert J. Grotzinger
PFC David D. Homer
PFC Jeron L. Johnston
SPC Timothy R. Joiner
SPC Timothy F. Kane
Mr. Thomas S. McDonald
1LT Scott E. Sarnon
WO1 Michael E. Smith
PV2 John A. Taylor
SFC Buford Thomas
PV2 Kenneth W. White

RHINE VALLEY CHAPTER
GERMANY

1SG Larry M. Helgeson, Ret.
Mr. Kevin P. Madigan
MAJ T.E. Pardue
SOUTHERN CALIFORNIA CHAP
LOS ANGELES, CA

Mr. David A. Beerman
Mr. Bruce S. Betschart
Ms. Nancy R. Blumel
Mr. Stephen M. Borowko
Mr. Arnold Brema
Mr. Tom J. Christick
Mr. Rudolph Dixon
Mr. Frederick M. Eckert
Mr. David J. Edlaesen
Mr. Ben B. Feinreich
Mr. Joe Garcia
Mr. Larry E. Girard
Mr. Richard A. Girvin
SSG Pascal Dweil Hawley
Mr. Bob Hebson
Mr. Dick Hoogee
Mr. Rick A. Karnes
Mr. Robert A. Katz
Mr. Jack L. Keller
Mr. Lawrence A. Lacotti
Mr. Robert C. Lawson
Mr. Charles W. Lefever
Mr. Robert Louch
Mr. Peter A. McGuire
Mr. Gilbert John McSheehy
CPT Gary P. McVaney
Mr. Mun W. Park
Mr. Mike Picardi
Mr. John Robinson
Mr. Guy A. Russell
Mr. Robert E. Sewyer
Mr. Bill Sylvester
Mr. Tyronne M. Tibovich
Mr. Edward Van Lier Ribbink
Mr. Kaye Willet

STUTTGART CHAPTER
STUTTGART, GERMANY

SGT Horace M. Atkinson
SSG Deborah S. Brazel

SPC Michael T. Buss
WO1 Gary L. Cheeks
PFC Scott E. Coarnelius
SPC Gary S. Cronin
SGT John H. Cummings
CW2 Wayne A. Denmark
CW2 William M. Early
PV2 Terry J. Fuller
WO1 Richard D. Godfrey
WO1 Michael D. Larrabee, Jr.
SGT Lance D. Russing
SPC John R. Russing
SGT Kirtland D. Smith
SSG Peter S. Suits
SSG Thomas W. Tompkins
SGT Gary E. Zisselsberger

SUNCOAST CHAPTER
SOUTHWEST FLORIDA

Mr. William G. Barnes
Mr. John E. Blackburn
Ms. Nancy J. Blue
Mr. John Philip Carley
LTC Robert Henley, Ret.
Mr. Michael E. Henshaw
Ms. Faye R. Heiler
LTC Russell W. Johnson
Mr. John H. Lattin
Mr. Robert Newman
Ms. Elizabeth J. Perkins
MAJ Frank A. Perkins, Ret.
Mr. Irvin G. Vazquez
2LT Jorge L. Watzquez
Ms. Carol W. Wilson
MAJ Bernard H. Wojtasik
Mr. Gregg Wood
Mr. Arthur R. Ybarra

TAUNUS CHAPTER
GERMANY

2LT John L. Cullivan
MAJ Russell A. Gallagher
CW2 Kenneth C. Jensen
WO1 William S. Johnston
CW2 Timothy W. Slaton
CW2 Kenneth W. Wright

TENNESSEE VALLEY CHAPTER
HUNTSVILLE, AL

MAJ Robert T. Chastine, Ret.
Mr. James W. Neiers
Mr. D. Dale Weaver

THUNDERHORSE CHAPTER
FULDA, GERMANY

SPC Eric V. Branlund
SPC Gary Brownberger
SGT Miriam R. Dean
PV2 Roderick Gaddy
1LT Terry J. Jamison
SGT Mark K. Mastrian
PFC Samuel L. Mercedes
SPC Thomas S. Mina
PFC Michael Olivio
PFC Joseph D. Parker
SPC William L. Phillips, Jr.
SGT Randall H. Pigue, Jr.
SPC Walter S. Porcunan
SGT Kerry D. Stallings

WASHINGTON DC CHAPTER
WASHINGTON, DC

SPC David E. Anderson
Mr. Gerald W. Archbold
SSG Gary L. Bassy
SSG Michael R. Bragg
Mr. Tom Burr
SPC Douglas D. Camp
2LT Mark A. Carter
Mr. Kung-Li Chang
SGT Chris J. Charboneau
Mr. Robert A. Clarke
CPT Mark H. Davidson
Mr. John D. Deane, Jr.
CPT Michael J. Delaney
SPC Paul A. Demster
Mr. Paul Dewitt
Mr. John J. Dillon
Mr. Ed Erhardt
Ms. Holly E. Exalby
CPT Anthony F. Fulco
SGT David W. Garland

Mr. Richard E. Garvey
CW3 Kim E. Gilbert
SSG Rock D. Gilbert
Mr. Al Gleske
SGT David Gonzales
Mr. Grant S. Green
Ms. Alicia G. Gregg
Mr. Robert D. Griswold
CW4 Thomas J. Habitzreuther
SPC Michael L. Heath
CPT Alice A. Hoffman
SGT Leonard J. Huggins
CPT Carl G. Jacka, II
CW2 Joseph W. Johnson
SGT Richard L. Johnson
Mr. Archie J. Kines
SGT Jeffrey E. Koen
Mr. Roger Kranz
SPC Kenneth A. Kuske
SPC Charles N. Loveall, Jr.
SGT Robert G. Mack
WOC Joseph Mann
LTC Abraham Manned
Mr. Richard McConn
SPC Guy F. McQueen
CW2 Rex C. Mercier
SPC James Murphy
Mr. Peter Nebb
Mr. Christopher J. Neubert
Mr. Robert J. Ney
SSG Paul C. Ocker
1LT Vincent Q. Penn
SPC William T. Pettyjohn
SGT Michael R. Phelps
SPC Michael W. Pruitt
Mr. Daniel J. Rice
Mr. Gerald G. Roberts
SPC James E. Rogers
Mr. Terry Rogers
Mr. John C. Schmit
LTC Gary D. Shaw
SPC Doug W. Simms
Mr. John F. Stephenson
Mr. Haio Wi Tang
Mr. Paul R. Thompson
Ms. Mary Thomas
Mr. Matthew D. Utben
SPC Daniel S. Virga
Mr. George D. Walker
Mr. James P. Whalen

SSG Glen D. Williamson
Mr. Donald T. Wilson
SPC Robert W. Winzler
SPC Anthony Wirtz

**WINGS OF THE DEVIL CHAP
FORT POLK, LA**
CPT Carmelo S. Bazzano
Mr. Charles W. Johnson

**WINGS OF THE MARNE CHAP
GERMANY**
CW2 Armand C. Brasseur
CPT Philip J. Cancienne
WO1 Charlie H. Elliott, Jr.
SPC David W. Everett
WO1 Roby F. Sisk
CW2 Ritchie M. Verplank

**MEMBERS WITHOUT
CHAPTER AFFILIATION**

Mr. Raymond A. Andrew
COL Henry Anthony
MSG Walter F. Barfield
CW3 Roy M. Bean
Mr. Guy Belanger
SSG Danny H. Bethune
Ms. Janet J. Beyers
Mr. J.B. Binkewicz
Mr. Michael Blacklock
Mr. Richard L. Borchard
Mr. Hermon Botley
Mr. Peter W. Bradley
LTC Osa D. Buckley
Mr. Robert W. Cameron
Mr. Orlando Campagna
CW4 Coy D. Campbell
Mr. J. Michael Campbell
Mr. Joseph Ray Carda
Mr. Russell J. Carlson
Mr. Steve Cerniele
Mr. James V. Chambers
Mr. Robert H. Chappelle
2LT Douglas E. Christerson
Mr. Jay D. Cline
Mr. Vincent V. Colicci
Mr. Edward H. Colton
Mr. Dewitt D. Crofoot
Ms. Sylvia M.R. Dale
Mr. James Defiore
Ms. Laura Z. Dion

1SG Adam Dubois, Jr.
Mr. Wiley E. Dummich
Mr. Jed Dunbar
Mr. James Dunlop
LTC Joe I. Durant
Mr. Robert Edgerton
Mr. Michael N. Edwards
CW3 Thomas M. Einhorn
Ms. Karen L. Farlow
Mr. Michael H. Ferry
COL John M. Fitzgerald II, Ret.
Mr. Dennis H. Folkerts
COL William I. Fox, Jr.
CW3 David K. Frank
Mr. R. J. Ghiz
Mr. George Gianopoulos
Mr. Phil Glimmer
MAJ Glenn S. Goins
2LT Eric A. Grothe
Mr. Carleton C. Hasbrook
Ms. Danielle Hassan
Mr. Orrie G. Hiett, Jr.
Mr. Ron K. Hille
2LT Mark R. Hirschinger
Mr. Robert S. Holman
Mr. John M. Howard
CWO Stephen J. Ingley
Mr. Rod L. Innes
Mr. Howard G. Jones
Dr. Edward Karnasiewicz
Mr. Michael H. Kelly
Mr. Robert T. Kenney
Mr. Ronno A. Kobold
LTC Roger L. Lane
Ms. Cynthia A. La Presti
LTC Robert L. Lytle
Mr. Donald W. Maness
COL Jack Martin, Jr.
Mr. Harry S. Matties
Mr. Ronald G. Matthews
1SG Eddie R. Maycen
Mr. Michael McCall
Mr. Eugene J. McCluskey
Mr. Bryan McDonough
Mr. Marvin E. McGraw
Mr. William G. McMahon
Mr. Lowell M. McMann
Ms. Shirley A. Moko
MAJ James L. Moore, Ret.
Mr. Alexandru Moraru

BG James Morris
SPC Mark S. Moser
CDT James J. Nachazel
Mr. Timothy S. Nichols
Mr. John R. Nygaard
Ms. Judy A. Oneal
Mr. Marjorie Poulos
Mr. David C. Pebley
Mr. John A. Peerson
Mr. John Potje
2LT Earl V. Price
Mr. Wally Prophet
Mr. Robert W. Puff
Mr. Hubert Rechnitzer
Mr. William L. Reil
CDT Robert C. Rickenbacker
Mr. Keith E. Riley
Ms. Joanne Rizzo
MAJ David C. Roberts
Mr. Ron Robinson
Mr. Gene Rotondi
Mr. John F. Ryan III
Mr. Sam Sallabury
Mr. Keith E. Staded
Mr. David K. Smith
Mr. Kevin R. Sprouson
1LT Rodney L. Stidom
CDT Robert P. Stowe
Mr. Stacey G. Stoykewich
Mr. Joe Strite
LTC John W. Taylor
Mr. Daniel B. Thom
Mr. William G. Trigg
CPT Michael L. Turco
Ms. Barbara Tweedt
Mr. Michael B. Urlic
Mr. Jean-Yves Vachon
COL John Vest
Mr. Donald L. Vetter
Mr. James J. Walker
SPC Robert W. Wallace
Mr. Jim Waugh
MAJ Walter E. Wright
Mr. Jackie W. White
Mr. Bruce Whitman
SPC William G. Winebrenner
Mr. Cyril Witts
Mr. Richard E. Zacaroli
Mr. Fulvio Zamparo
Mr. Michael J. Zielinski

JOIN THE PROFESSIONALS — JOIN AAAA



ARMY AVIATION ASSOCIATION OF AMERICA (AAAA)

49 RICHMONDVILLE AVE., WESTPORT, CT 06880 • PHONE (203) 226-8184 • FAX (203) 222-9863

Please check one: Change of Address; New Membership Application

I wish to join the Army Aviation Association of America (AAAA). As a U.S. Citizen, my past or current status affirms me with U.S. Army Aviation and I wish to further the aims and purpose of the AAAA. I understand that my membership includes a subscription to the AAAA-member magazine "Army Aviation"; and that my membership will start on the subsequent first of the month. The names of the current members who received me are printed in the lower right corner. Contributions or gifts to AAAA are not deductible as charitable contributions for federal income tax purposes. Dues payments are deductible by members as ordinary and necessary business expenses.

Rank/OS Grade	First Name	MI	Last Name	Sex
Mailing Address				
Mailing Address				
City				
State				
Zip + 4 Code				
Active Duty or Civilian Job Title				
Unit or Firm Name				
Area Code	Office Phone	Area Code	Residence Phone	
Nickname				
Spouse's Name				
Date of Birth (Mo/Yr)				
Social Security No.				
Office Use				

AAAA ANNUAL DUES

Applicants other than those listed below:

(1 yr. \$15; (12 yrs. \$29; (13 yrs. \$43

Enlisted, GS-6 & below, Wage Board 12 DAC's and below:

(1 yr. \$10; (12 yrs. \$19; (13 yrs. \$28

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 made payable to "AAAA,"

or charge to: Mastercard, Visa

Card No.

Amc \$ Exp Date

Signature Date

Signature Date

Check Your Professional Qualification

Army Active Duty US Reserve Infantry

US/AFSC Cavalry Cavalry

Army Total Guard Publishing/Other Area

Army Reserve Foreign Military Service

Army Retired Foreign Reserve Infantry

Other US Military Service Other

Are you a former AAAA member? Yes No

If yes, what year did you join?

Print Name of Recruiter

THE SILVER

EAGLES



The SILVER EAGLES Program was established in 1988 to recognize those AAAA supporters who have been members for at least 30 years.

SILVER EAGLES receive a special 30-year membership pin, a listing in ARMY AVIATION magazine and recognition at the AAAA Convention.

We've come a long way since 1957 — when a small group of aviation officers banded together to form the AAAA. Thank you SILVER EAGLES for your continued support. Those 30 year members who joined AAAA in 1959 are:

Adamson, George W., COL
Antros, Richard C., COL
Aranyos, Alexander J., MAJ
BaeB, David E., COL
Barry, John W., MAJ
Bauchspies, James S., LTC
Beatty, George S., Jr., MG
Beckel, Charles E., LTC
Bedsole, William K., COL
Belcher, L. Fred, COL
Berl, Lawrence A., COL
Bennett, Willard M., COL
Best, David M., COL
Bigge, Richard D., CW3
Blach, Frederick R., COL
Black, Charles S., COL
Blubaugh, Thomas C., LTC
Bond, James A., LTC
Boyle, Dennis M., COL
Brandenburg, John N., LTG
Braun, Julius H., BG
Briggs, Ed A., MR
Brown, Chas. L., Jr., COL
Brown, Richard W., LTC
Burdett, Antoinette, MRS.
Cailhoun, George B., COL
Cameron, Stephen F., COL
Canady, Charles E., BG
Carlisle, John C., LTC
Carr, Glenn P., LTC
Carson, Ray M., COL
Ciley, Colin D., Jr., COL
Clark, Davis, COL
Comer, John F., LTC
Conley, Samuel G., Jr., COL
Connell, Thomas E., COL
Corey, Robert R., COL

Cottrell, David D., COL
Crook, George R., COL
Crooka, Eugene F., COL
Crouch, Wm. E., Jr., COL
Crazier, Ted A., COL
Daly, Jerome R., REV.
Davis, Gerald W., CW4
Deel, Arlin, COL
Degeneffe, Delano E., COL
Dillinger, David R., MR.
Eaton, Kenneth C., LTC
Elliott, John W., COL
Ella, Samuel F., CW4
England, Marlon F., COL
Evins, Robert O., LTC
Ferris, Gordon F., COL
Feutz, Lester, MR.
Filby, Robert A., COL
Filer, Robert E., COL
Fleming, Thomas E., COL
Forsyth, Harry L., CW4
Fournier, Albert L., COL
Fugitt, Billy W., COL
Fuller, Christopher, MR.
Fusk, David L., BG
Gale, Paul B., COL
Gant, Preston G., LTC
Garrison, Ritchie, LTC
Garten, Lynn W., LTC
Gimple, Lloyd A., COL
Gondy, Terry L., COL
Gressang, Daniel S., MAJ
Grimm, Adolph H., LTC
Hahn, Jerry D., LTC
Half, Henry R., CW3
Hardwick, Willis C., LTC
Hark, William H., COL

Harper, Ben, L., DR.
Hartert, Richard A., LTC
Hemingsway, Jack W., BG
Henderson, Joseph E., LTC
Heuser, Martin, LTC
Hill, Jack D., LTC
Hill, James R., COL
Hoffman, Glenn F., LTC
Hogan, Wayne C., COL
Horan, Michael J., COL
Howard, Kenneth D., CWO
Howlett, Byron P., Jr., COL
Hoyt, William C., CW3
Hull, Michael H., COL
Hurst, Dale W., LTC
Jackson, Wilfred A., COL
Jacobs, Norman P., LTC
Johnson, Clifford E., LTC
Johnson, Jimmie E., CW4
Jones, Clyde T., LTC
Kastner, Pat, MRS.
Keeler, Gary L., LTC
Kellar, Robert S., COL
Kemp, Freddie L., LTC
Kirby, Kenneth C., MAJ
Kishl, James S., DR.
Klein, Frank J., Jr., COL
Kline, Gerald L., COL
Lauterbach, John W., COL
Lawson, Robert A., COL
Laya, Robert E., LTC
Lehman, Raymond G., Jr., COL
Leonard, Jack E., MR.
Leslie, James M., BG
Lilly, Grady F., COL
Lockwood, Bill G., COL
Logerquist, Benjamin A., COL
Long, Billy J., CW3
Lorenz, Dwight L., LTC
Lupton, Wm. R., Jr., LTC
Lutz, George A., COL
Mengum, Robert A., COL
Mapp, James H., BG
Mason, Robert L., COL
Mathison, Theodore E., COL
McChesney, Frank L., LTC
McCoolle, Delos A., LTC
McGillcuddy, C.F., Jr., COL
McGlockton, William H., COL
McMillon, Don, LTC
McNair, Japha I., Jr., LTC
Meader, Jerome C., Jr., LTC
Mikuta, Joel J., COL
Moeller, Lawrence B., LTC
Morgan, George A., COL
Morton, James O., COL
Mulvaney, Merie L., LTC

Nicholson, Frederick C., CW4
Niles, Gary W., LTC
Oden, Deik M., MG
Parrish, Glenwood N., COL
Patterson, James H., MG
Paulson, Norman W., COL
Peavy, Jack D., LTC
Pershing, Jay W., COL
Phillips, Pete, COL
Putnam, George W., Jr., MG
Quedena, Bernard B., COL
Ramsey, Bobby A., COL
Ratcliff, Walter A., COL
Rawlings, Morris G., LTC
Rockey, James D., COL
Ruffin, William H., CW4
Salmon, Ray W., COL
Scanlan, William H., LTC
Schramm, Walter J., CW4
Scott, Harold R., CW4
Seefeldt, Richard S., CW4
Sibert, George W., COL
Silver, Harold, LTC
Sims, Wesley N., LTC
Smith, William A., LTC
Stearns, Robert D., LTC
Stewart, John P., COL
Stokes, John H., III, COL
Stowell, James L., MAJ
Strickland, Sidney L., LTC
Stringer, Paul G., LTC
Sulpizi, James R., COL
Thayer, George E., Jr., COL
Thompson, Jack H., LTC
Tolfa, Edward, Jr., COL
Townsend, Harry W., COL
Townsend, James O., COL
Trent, William E., COL
Turner, Edwin H., LTC
Urrutia, Carlos E., COL
Vernon, Jerry R., LTC
Vertrees, Carl R., CW4
Vohs, Ralph H., COL
Waddell, Roger W., LTC
Walker, Milton H., LTC
Warner, Charles O., CW4
Washburn, Richard B., LTC
Welch, Hanno F., Jr., MR.
Wheeler, Douglas E., LTC
Wilson, Donald E., COL
Wilson, Max H., MAJ
Wilson, Walter C., Jr., LTC
Wolfe, Rodney D., BG
Wood, Douglas J., LTC
Wulff, Roy A., COL
Wyllie, Clement A., COL
Young, Raymond H., COL

Make Plans
NOW
To Attend the
1990 AAAA
Convention in
Orlando!
April 11-15
See page 76



The Army Aviation Hall of Fame inducts seven new members

Seven new members of the Army Aviation Hall of Fame were inducted in ceremonies held April 6 in Atlanta, GA.

Three Inductees were present; three were represented by family members; and a seventh was represented by two current members of the Hall of Fame.

The new Hall of Fame members were:

CW4 James T. Burnette, who was accompanied by his wife, **Frances**.

COL Ted A. Crozier, who was accompanied by his son, **CPT Thomas Crozier** and his wife, **Mary Dale**; and his daughter, **Mrs. Kari Rassas**, and her husband, **MAJ Mark Rassas**.

COL John C. Geary, deceased, represented by his widow, **Rita**; his son, **John C. Geary, Jr.**; his son, **Thomas**; and his daughter, **Mrs. Sharon Barnett**, and her husband, **Mr. Richard Barnett**.

Mr. Stanley Hiller, Jr., who was accompanied by his wife, **Carolyn**.

COL Richard L. Long, deceased, represented by his widow, **Jane**, and his son, **Richard L. Long, Jr.**

MG Robert F. Molinelli, deceased, represented by his widow, **Donna**; his son, **CPT David Molinelli**; his son, **Robert**; and his father, **Mr. Lambert Molinelli**.

LTC Joseph M. Watson, deceased, represented by **COL A.T. Pumphrey** and **COL John J. Stanko, Jr.**, members of the Hall of Fame.

About the Chairman

General Hamilton H. Howze served as Chairman of the Tactical Mobility Requirements Board in 1961, and cited the need for the development of airmobile theory and doctrine. The adoption of the "Howze Board" recommendations revolutionized mobile warfare concepts based on the use of organic aviation in much the same manner as the introduction of the tank had affected mobility concepts almost 50 years earlier.



CW4 James T. Burnette, Ret., and his wife, **Frances**, stand behind the former's portrait to be hung later in the Hall of Fame in the Army Aviation Museum. **GEN Hamilton H. Howze**, Chairman of the Board of Trustees, and MC at the Induction Ceremonies held at AAAA's April, 1989 National Convention in Atlanta, looks on from the right.

The opening remarks were made by **BG James M. Hesson**, AAAA Senior Vice President, who introduced the AAAA National President, **MG Story C. Stevens**, also a member of the Hall of Fame.

Following the Invocation by the **Rev. Jerome R. Daly** (a 1983 Inductee as an Army CW2/LTC) and luncheon, **President Stevens** commented on the presence of 28 members of the Hall of Fame at the head table and their collective impact on Army Aviation history.

He then introduced **GEN Hamilton H. Howze**, Chairman of the Hall of Fame Board of Trustees who, in turn, introduced each Inductee and read the citation outlining the Inductee's long-term contributions to Army Aviation.

Following the Inductions, **GEN Howze** was cited for his 12 year stint as Board Chairman in leading four separate eight-member Boards of Trustees.

LTG Robert R. Williams, a 1974 Inductee, has been appointed as the 1989-1992 Chairman of the Hall of Fame Board of Trustees.



28 Hall of Fame Members Attend 1989 Ceremonies



Shown above with the seven 1989 Inductees are members of the Army Aviation Hall of Fame. Front Row (L-R): Stanley Hiller, Jr.; MG George W. Putnam, Jr.; Mrs. Richard L. Long*; COL Robert H. Nevins; Mrs. John C. Geary*; GEN Hamilton H. Howze; CW4 Robert L. Hamilton; COL Ted A. Crozier; CW4 James T. Burnette; Mrs. Robert F. Molinelli*; and CW4 Johnnie R. Sandidge. Rear row (L-R): Arthur and Dorothy Kesten; LTG Robert R. Williams; COL A.T. Pum-

phrey; Joseph P. Cribbins; COL John W. Marr; LTG Harry W.O. Kinnard; COL Claude L. Shepard; MG Spurgeon H. Neel, Jr.; MG Story C. Stevens; LTG John J. Tolson, III; CSM Lawrence E. Kennedy; CW4 E.M. Cook; Rev. (CW2/LTC) Jerome R. Daly; COL John J. Stanko, Jr.; and LTG John M. Wright, Jr.

Missing the photo but present at the 1989 ceremonies was GEN Robert M. Shoemaker.

* denotes a family representative of Inductee.



Acceptance Remarks

Mrs. Donna Molinelli (left) is shown making the acceptance remarks at the April, 1989 induction of her husband, MG Robert F. Molinelli, deceased. CPT David Molinelli (far right) later added an anecdote on one of his father's combat experiences in Vietnam. LTG John M. Wright, Jr., (2d from left), a Hall of Fame member and Mrs. Molinelli's escort at the 1989 ceremonies, and GEN Hamilton H. Howze, Hall of Fame Board Chairman, are shown standing in the background.

The Army Aviation Hall of Fame — 1974-1989

Background — Growth — Changes

The Army Aviation Hall of Fame was established in 1974 by the Army Aviation Association (AAAA) to honor those persons — both military and civilian — who have made outstanding individual contributions to U.S. Army Aviation and to record the excellence of their achievements for posterity.

This recognition cites each individual in a permanent display at the U.S. Army Aviation Museum located at Fort Rucker.

In 1974, Army Aviation was only 32 years old. Yet in that short span of 32 years between 1942 and 1974, a proud and distinguished record of growth and accomplishment had been achieved.

The First Year

In the Hall's first year, nearly 5,000 AAAA members of five or more years standing elected seven superb individuals for induction into the Hall of Fame from a ballot that listed 17 nominees.

The 17 candidates had been chosen earlier in 1974 from more than 60 nominations received from the field by an AAAA Hall of Fame Committee selected by the Association's National Executive Board.

Under the ground rules established at the time, one individual was to be inducted for accomplishments during the period prior to the formal establishment of Army Aviation at Fort Sill, Okla., in June, 1942, and two individuals were to be selected for their long term achievements during each of the three succeeding decades — the '40's, the '50's, and the '60's.

In 1975 and 1976 the same basic nomination, membership balloting, and induction procedures were followed and the distinguished membership of the Army Aviation Hall of Fame grew to 22 individuals.

Trustee Selection

In 1977, the AAAA's National Executive Board entrusted the management of the Hall of Fame Program to an independent, nine-member **Board of Trustees** under the Chairmanship of retired General Hamilton H. Howze — who remained Chairman of that Board through April, 1989.

Several basic changes were made that year by the Trustees in the nomination and election procedures for the Hall of Fame.

First, the newly-created **Board of Trustees** assumed full responsibility for selecting inductees from among those nominated.

Second, the selection of inductees on the basis of contributions during a specific time period was discontinued, as was the pre-determination of the number of people to be inducted in any given year.

Third, following the 1977 ceremonies, inductions were to be held on a triennial basis starting in 1980.

Finally, persons serving on active duty in the armed forces, other than DACs, would be ineligible for consideration until after their separation or discharge.

Under these new ground rules, seven more distinguished individuals were inducted into the Hall of Fame in 1977, bringing the total membership up to 29.

The Move to Atlanta

The fifth induction ceremony took place during the 1980 AAAA National Convention in Atlanta, Ga., and represented the first time that such ceremonies were held outside of Fort Rucker.

The next induction ceremony took place in April 1983 — once again at an AAAA National Convention in Atlanta.

In 1986, the inductions were moved to Ft. Rucker to tie in to the December meeting of the aviation brigade commanders that was held at that post.

Selecting the Candidate

By mid-1988, more than 60 Hall of Fame nominations had been submitted from the field. Meeting in Ft. Worth, TX, in August, 1988, the nine-member Board of Trustees narrowed down the list of 60 nominees to 22 candidates for the 1989 Ballot.

During October-December, 1988, more than 4,500 AAAA members with seven or more years of consecutive, continuous membership were designated as the "electors" and received "**Hall of Fame Ballots**" in the mail. Each was asked to vote for seven of the 20 nominees for April, 1989 induction into the **Hall of Fame**.

The individuals honored this April brought the current membership in the **Army Aviation Hall of Fame** to 60.

James T. Burnette

CW4. Retired



CW4 James T. Burnette was inducted into the Army Aviation Hall of Fame for his extraordinary contributions as a leader, innovator, manager, and mentor in the aviation logistics field.

One of those rare "non-rated" Aviation Maintenance Officers who have routinely been the mainstay of aviation maintenance and supply operations, he devoted his entire 28 years of service to the not so glorious, behind-the-scenes world of aviation logistics.

His truly exceptional devotion to duty, superlative leadership, tenacity, and innovativeness produced dramatic improvements to fleet readiness, and, most of all, the sustained professional respect of subordinates, peers, and superiors through Army Aviation.

An exceptional aviation mechanic, he quickly assumed demanding positions early in his career, being maintenance section chief of a VIP L-23 detachment and liaison to the USAF's Southern Air Material Area at Clark AFB, where he supervised contract maintenance and depot

programs for all Army aircraft throughout the Far East.

Promoted to WO1 in 1963, Mr. Burnette deployed to Vietnam where with the 73rd Avn Co, he established one of the first aviation support activities in USARV. Following a second tour as Det 5 Commander, A Co, 15th Trans Bn, his reputation became legendary because of his unit's flawless record on accidents or incidents attributed to material failure or aircraft maintenance oversight.

His later key positions included tours with the 11th Air Assault Division's 228th Hcptr Bn and the CHEYENNE PMO in DA. He was a platform instructor and authored many POI while at USATSCH and the USA WO College at Ft. Rucker, prior to earning BS (Avn Repair Facility Mgmt) and MA degrees.

During '70-'80, he distinguished himself as administrator of TWA's maintenance contract servicing all USA aircraft in the Mediterranean, Middle East, and Africa. On his last active duty tour, he managed a Theater level Intermediate/Limited Depot Facility in Europe where his initiatives resulted in great cost savings and efficiencies.

Now retired, Mr. Burnette continues to influence maintainability and supportability as the Section Manager, Integrated Logistics Support, Military Customer Support, at Textron Lycoming.

Ted A. Crozier

Colonel. Retired



During his 32 years of service Colonel Crozier was always in aviation and infantry units from company through brigade levels — with the troops and making things happen. He commanded the 76-aircraft 101st Avn Co, including the Army's first UH-1As for field testing, a unit that was later reorganized into the Army's first aviation battalion.

His company was the first to demonstrate troop-rappelling from the UH-1A, the first multi-refueling points, and the first camouflage-

painted UH-1As. The 101st Avn Bn (Prov) became the model for future battalions in SOPs, ATTs, etc.

As a LTC(P), Crozier was selected to command and reorganize the division's aviation assets along with the USARV assets into the 160th Avn Gp (later the 101st Avn Gp), while maintaining its combat commitments to include the five-division assault into the A Shau Valley.

This one-year task took six months and included a successful CMMI. During this period the 101st Avn Div (AASLT) was selected as AAAA's "Aviation Unit of the Year."

A member of the Infantry School Hall of Fame and proponent of the Army Aviation Hall of Fame, he then became Chief of the 16,000-member Aviation Warrant Officer Branch, his many innovative approaches improving many aspects of AWO management.

Later, he served as President of the Army

portion of the *DOD Close Air Support Study*, which prevented the Army's attack helicopters from being placed under USAF command and control.

The first Aviator to serve as Chief of Staff of the 101st Abn Div (AASLT), he was responsible for all facets of training and the 101st's deployment to Europe for REFORGER 1976.

General John A. Wickham, Jr., former Army Chief of Staff and Commander of the 101st Airborne Division, called Crozier "the

spirit of the 101st, with contagious enthusiasm, a volcano of enthusiastic ideas, who always took care of the troops." Crozier still serves the 101st as the first "Honorary Colonel of the 101st Aviation Regiment."

On retirement, he became an eight-year Mayor of Clarksville, Tenn., and received the Department of the Army Award for Distinguished Civilian Service because of the greatly improved community relations with Ft. Campbell, Ky.

John C. Geary

Colonel. Deceased



In 1943 John Geary was already a Master Sergeant in the Army when appointed to attend the Military Academy at West Point.

A few years after graduation he took pilot training at San Marcos, Tex., then the site of the Air Force's school for the training of helicopter pilots and crewmen.

Later in his aviation career, he graduated from the Air Force Test Pilot School at Edwards AFB, Calif, where he achieved the highest academic grade in his class as one of a very few U.S. Army pilots to undergo that training.

After earning his Master of Science Degree in Aeronautical Engineering at the University of Michigan in '56, Geary eventually emerged, after his Edwards AFB training, as one of the Army's most qualified and experienced engineering test pilots, with flight time in 35 different varieties of fixed wing aircraft (many of them experimental) and 20 types of helicopters.

A Master Army Aviator with more than 4,000 hours (including 300 logged in combat in Korea and Vietnam), he pioneered, while assigned to the U.S. Army's Transportation Test and Support Activity at Ft. Rucker, the concept of "lead the fleet" testing.

Under his direction new model helicopters were flown under a demanding, accelerated schedule to discover, as early as possible,

potential problems in maintenance and logistic support requirements.

On one sample occasion four helicopters of the same type were flown 1,000 hours each in an elapsed time of 82 days — an astonishing accomplishment that under normal circumstances would take six months to achieve the same results.

For this and other contributions to flight Colonel Geary was given the prestigious *William J. Kossler Award* by the American Helicopter Society.

Above all, John Geary was a soldier, giving to the Army (which he loved) and his country, 34 years of selfless, dedicated, highly effective service.

A CH-47 CHINOOK Project Manager at one point, his last post before retirement was as Director of Research, Development and Engineering at the U.S. Army Aviation Systems Command in St. Louis.

Following his retirement, he took civilian employment with Hughes Helicopters and was the company's direct link with the AH-64 APACHE until his death in 1982.

He was affectionately — and very highly — regarded by everyone who knew him.



Mrs. Rita Geary, wife of deceased inductee John C. Geary, accepted on his behalf. Looking on are (l) COL Robert H. Nevins, Mrs. Geary's escort at the event, and Hall of Fame Board Chairman Hamilton H. Howze.

Stanley Hiller, Jr.

Civilian, Atherton, CA



A major factor in Army Aviation in the '50's and '60's, Stanley Hiller, Jr. was recognized as a "boy genius" when during his high school days in the late '30's he developed a miniature racing car manufacturing business.

During WWII, his firm became a major producer of die castings for the aircraft industry. In 1942, at the age of 18, Hiller left Hiller Industries to devote his entire effort to helicopter development and founded United Helicopters, which subsequently became Hiller Aircraft.

Two-and-one-half years later, he completed the Model XH-44 Coaxial Helicopter. For this accomplishment, Stanley Hiller received the "Fawcett Award" for his "major contribution to the advancement of aviation."

Hiller then incorporated the lessons learned in the XH-44 in his Model UH-4, a coaxial helicopter designed to carry two people. At the same time, the design and testing of a new two-blade rotor control concept took place. Called the Hiller "ROTORMATIC", the control system was much simpler than the coaxial system and more stable in flight.

At 24, Hiller built a single rotor UH-5, the forerunner of the Hiller 360 which received its Civil Avionics Administration Type Certification in October, 1948.

In 1950, at the outset of the Korean Conflict, Stanley Hiller personally directed the sales efforts that resulted in his firm producing its first military helicopter, the H-23A. Used primarily for medical evacuation — and popularized later in the TV series, "MASH" — some 1,200 of his A, B, C, D, and G Models were delivered to the Army in a 12-year period.

Continuing his quest for design simplicity and reduced cost, Hiller then directed his company's R&D efforts into the field of tip propulsion, his HORNET being powered by two 11-lb. ramjet engines mounted at the tips of its two-blade main rotor. In the process, the Hiller 8RJ2B ramjet engine received Type Certification in 1954, the first jet engine to be CAA-certified. In 1956, a quantity of YH-32 HORNETS were delivered to the Army for evaluation.

In other Army-Navy related efforts, Hiller pursued the experimental XROE-1 one-man helicopter and the VZ-1E Flying Platform, both break-through projects. His X-18 VTOL aircraft sustained Tri-Service user interest in a large, four-engine tilt-wing VTOL transport aircraft.

A true aviation pioneer in rotary wing flight, Stanley Hiller merited induction into the Army Aviation Hall of Fame.

Richard L. Long

Colonel, Deceased



Dick Long was inducted for the numerous contributions he has made to Army Aviation during his 37 years of Federal service. Many candidates will be nominated for eventual induction with far less service than Dick Long; several may have somewhat more service; but few will have 37 years of service, each year of which involved direct aviation-related activities impacting on Army Aviation and those who serve in this combat arm today.

From his first days as an Artillery 2LT undergoing L-Pilot training in Nov., 1942, through his combat flight hours in North Africa, Sicily, Italy, and Southern France — and later WWII service as Seventh Army Aviation Officer, to his post-war career as a maintenance officer, test pilot DA staff officer, and eventual assignment as a Department of the Army Civilian (DAC) at the Senior Executive Service (SES) level, Colonel Long's day-in and day-out duties were devoted to Army Aviation.

A special candidate, he performed in an outstanding manner for almost four decades in three separate careers — Army officer, aerospace industry executive, and DAC.

During his 1942-1965 military career, he was a highly decorated Army Aviator who served with distinction in assignments ranging from
(LONG — cont. on p. 66)

"THEY CALL US 'UTILITY' HELICOPTER PILOTS."



"We bring in the Air Assault troops.



"Resupply the 'attack' drivers with ordnance. Fuel. Whatever they need.



"Fly command and control. Haul the Arty's guns.



"Air to Air? Anti-tank? Mine Dispensing?



"Just give us the systems.



"Utility? Hell, we are Army aviation."



**UNITED
TECHNOLOGIES**
SIKORSKY
AIRCRAFT

(Long — cont. from p. 64)

aviation and group commander in the field to Aviation R&D tours at the highest levels.

Following his 1965 retirement, aeronautical engineer Long (Purdue-Princeton Universities) was employed by Sikorsky Aircraft where, as Senior Project Engineer-Advanced Projects, he was responsible for translating new concepts into experimental hardware.

His efforts, which led to "innovation with an identifiable impact on Army Aviation" were concerned with the Advancing Rotor-blade Concept, the S-61F High Speed Compound Helicopter, titanium blade spar fabrication, and composite material fabrication.

Each of these projects led to major hardware advances in Army Aviation.

His third career, that of a DAC, spanned the 1972-1984 period. As Deputy Director of RD&E at AVSCOM, his actions impacted heavily on Army Aviation's \$2.8 billion, 14,000-aircraft fleet in worldwide use at the time.

During 1980-1984, he served as the Director of the Army Structures Laboratory at Langley NASA Research Center, where he directed basic research and exploratory developments to meet Army Aviation's operational needs.

At Langley, his technicians tested new composite materials to increase structural strength and crashworthiness, and made a stable of 1/4-scale wind tunnel models to provide a rapid response to many of today's ongoing programs, and to permit configuration changes to be evaluated before making expensive hardware changes.

Few Hall of Fame nominees have pursued three separate, consecutive careers — military, civilian, government — that have brought them in contact with so many of the elements that make up Army Aviation, or have served in an outstanding manner in almost every job that characterizes this segment of society.

Robert F. Molinelli

Major General. Deceased



Known as a soldier, respected as an officer, and revered as a warrior, General Molinelli's character, courage, and spirit embodied the attributes the Nation seeks in its military professionals.

Rated in 1964, he began his association with aviation as the Armored Platoon Commander, 114th Avn Co, amassing almost 1,000 combat hours. Nineteen years later, he served as the Army Aviation Officer, DA.

In between these tours, this Master Army Aviator accumulated, among many awards,

the DFC/7 OLC, the Air Medal w/V Device/62 OLC, and the Purple Heart/1 OLC. A pilot and AAAA's *Aviator of the Year* in 1970, he led his 2/17 choppers in 1971 into Laos in *Operation LAMSON 719*, taking on heavy Soviet-made tank concentrations, surface-to-air missiles, and ground fire, the first time helicopters faced a sophisticated threat in large numbers.

LTC Molinelli coordinated the attacks and developed the tactics that ensured the survivability of his unit's aircraft and their crews. Flown back to testify before Congress, he made a straightforward, honest presentation and was able to establish continuing Congressional support for the Army's attack helicopter program.

In 1976, while in ODCSOPS, DA, he worked tirelessly to ensure that the BLACK HAWK and APACHE programs — just underway — were pursued with vigor. He was instrumental in forming a Task Force to review the

Constituency of the Army Aviation Hall of Fame*

Generals.....	3	Lieutenant Colonels.....	3	CSMs.....	1
Lieutenant Generals.....	4	Majors.....	3	SFCs.....	2
Major Generals.....	4	CW4s.....	6	DACs.....	1
Brigadier Generals.....	2	CW3s.....	2	Civilians.....	7
Colonels.....	19	CW2s.....	3	*Citation Rank or Grade	

ARCSA III study, which greatly expanded the aviation force structure in the Army, and to secure DA approval for the study's recommended force structure changes.

As Commander, 6th Air Cavalry Brigade in 1978, he pioneered in the new important area of AirLand Battle with many of the officers, AWOs, and enlisted men trained there by him being today's leaders.

Always an avid spokesman for Army Aviation's potential, he served, successively, during 1981-83 as Military Assistant, Acting Deputy, and Assistant Deputy Under Secretary of Defense (Tactical Warfare

Programs).

In 1983-84, while Army Aviation Officer, DA, he led the effort to field a new Aviation Force Structure, which put an Aviation Brigade in all Divisions and multiple Aviation Brigades and Groups at the Corps level.

He was also instrumental in getting the LHX Program started, securing Army, DoD, and Congressional support for this important program.

General Molinelli's many career-long ties with and contributions to Army Aviation made him most deserving of membership in the Hall of Fame.

Joseph M. Watson

Lieutenant Colonel, Deceased



Joe Watson, recognized by many as being one of the "founding fathers" of Army Aviation, received his pilot's license in 1928, and was commissioned in 1930 in the Field Artillery.

A first lieutenant in the Texas ARNG in 1936, he had a "better idea" — a way to use light aircraft of that day to adjust field artillery from the air.

Then the S-4 of the 61st Artillery Brigade, Watson believed the slow-flying J-3 Cub was a perfect platform for directing the placement of artillery fire.

He took his idea to his Div Arty Commander, obtained permission to test his theories, and with his "observer" drove to San Antonio's Stinson Field where he rented a Cub.

Wrestling a bulky SCR-178 radio into the rear seat, he tested and re-tested their ability to spot targets and perform general aerial reconnaissance.

At that time, ground observation and aerial reconnaissance were the jealously guarded missions of the fledgling Army Air Corps. Proponents of light organic aviation argued that the O-49 Air Corps airplane was too expensive, too dependent upon permanent bases,

and too fast for effective observation or artillery adjustment. Eventually, while Watson was struggling in rented aircraft to learn how to use light aviation above the battlefield, the day's military journals began carrying essays calling for the formation of light aviation units organic to the ground forces outside Air Corps control.

The proponents included MG Robert Danforth, then the Army's Chief of Field Artillery; and LTC William W. Ford, a Regular Army artilleryman.

But while others published article after article, Watson was actually testing the concept.

In 1940, Watson got together with William T. Piper, the president of Piper Aircraft, after he had won permission from his Div Arty Commander to conduct a two-day test of the light plane as an artillery observation platform at Camp Beauregard, LA.

In November, 1940, the 36th Division was mobilized and stationed at Camp Bowie, TX.

Here, Watson, Piper himself, and other Piper personnel flew missions for 14 days in three rented Cubs, keeping meticulous records which were sent to the War Department to document the concept.

Their report supported what Watson had been preaching since his initial flights in 1936: organic light Army Aviation worked.

Having the foresight and perseverance of a true pioneer, Joe Watson is a welcome addition to the Army Aviation Hall of Fame.

The next Hall of Fame Inductions will take place in April, 1992, in Atlanta, GA.

The AAAA President's Annual Report

The following remarks are excerpts from the AAAA President's Annual Report delivered by MG Story Stevens, Ret., then AAAA President, during the General Membership Meeting, April 6, 1989, at the AAAA Annual Convention in Atlanta.

"We have a NEW slogan for AAAA — **PUT YOUR FUTURE IN YOUR HANDS...WORKING TOGETHER FOR EXCELLENCE IN ARMY AVIATION.**

We adopted this slogan as a result of surveys we received recently from AAAA members.

And so, what did you tell us?

It seems that our slogan isn't so new after all...AAAA members are joining today for the same reasons that members have always joined.....**PROFESSIONALISM.**

In total membership, the Association is growing with 16,487 active members, up from 15,059 last year.

Life Membership has shown a significant increase with the adoption of a new payment plan allowing members to pay up annually, semi-annually, or quarterly. We now have over 560 Life Members.

Industry Membership is on the rise. There are now 192 members, an increase of 28 since last year.

Sustaining Memberships are still popular among the Chapters with 100 members as of March 1.

At the Chapter level, 67 percent of our Chapters are showing net membership gains. In the area of Regional and Chapter activities, the AAAA continues to grow with each passing year.

A look at the AAAA CALENDAR in each issue of **ARMY AVIATION MAGAZINE** verifies the fact that many professional and social gatherings are being held throughout the Association's worldwide structure.

This year's Annual USAREUR Convention was the 30th successive gathering of Regional members since the inception of AAAA in 1957.

The AAAA National Executive Board strongly supports the USAREUR Convention and increased its financial contribution to \$5,000 this year.

In the area of national meetings the annual **Joseph P. Cribbins Product Support Symposium**, sponsored by the Lindbergh Chapter, in February, set new attendance records for the second year in a row.

The Sixth Annual AAAA Aircraft Survivability Equipment (ASE) Symposium was also held in St. Louis in November and also established a new attendance high.

The **Monmouth Chapter** held its bi-annual Army Aviation Avionics Symposium last May and was more successful than ever.

AAAA's 52 Chapters held 167 meetings in 1988 — which produced \$30,000 in refunds returned from the national organization to Chapters for their use.

To assist Chapters in their planning meetings and activities, the AAAA has developed a Speaker Referral Bureau where leaders in the Army Aviation community

may list their availability as speakers for Chapter events.

We're proud to welcome several new AAAA Chapters: the **Black Knights Chapter** located at the U.S. Military Academy at West Point; the **Central Florida Chapter** based in Orlando, Florida; and the **Benelux Chapter** recently activated in Brussels, Belgium.

.....AAAA's strength comes from the personal participation of its members — and at the heart of this strength are AAAA's Chapters.

Winners of the Chapter Membership Competition will be recognized at the Membership Luncheon on Saturday, and will receive plaques of appreciation.

In the **"Top Gun" Contest** — unbelievably — we had a three-way tie — each winner receiving an all-expense paid trip to the AAAA Annual Convention and a \$300 cash award.

These winners will also receive their recognition and plaques of appreciation at the AAAA Membership Luncheon on Saturday.

For those of you who want to support AAAA membership growth, but may be less ambitious than our TOP GUNS — we now award an **"ACES" Mug** to anyone who sponsors five new members.

By now, every Chapter officer should have received the new edition of the **AAAA INFO FILE**, a comprehensive collection of information on AAAA programs and activities.

A well-informed Chapter Officer goes a long way in recruiting and **RETAINING** members.

ARMY AVIATION MAGAZINE continues to bring comprehensive information about Army Aviation developments to members monthly.

We're also developing new membership recruitment materials along with some very exciting posters.

We initiated a new employment referral service this year called **CAREER TRACK** — and we'll be placing major emphasis to expand this service in the future.

We're developing a library of Army Aviation articles and have established a **Video Library** available for individual and chapter use.

We've also established a mini-warehouse of "AAAA Goodies" for sale — **T-shirts, Caps, Patches** —

In recognition of our long-standing members, we established the **"Silver Eagles"** to honor those who have been members for thirty or more years.

And, we're proud to recognize every new member that joins the AAAA in **ARMY AVIATION MAGAZINE**. Everybody counts!

The Association is also pursuing a new program that is intended to establish a commemorative stamp honoring the first 50 years of Army Aviation — 1942-1992.

In December, the AAAA National Executive Board initiated action to establish a liaison office in the Fort Rucker area.

(REPORT — Continued on page 74)



**Complete
Communications
Control**
...with the ICCS

Canadian Marconi's Integrated Communications Control System (ICCS) provides audio distribution, voice warnings, data transmission, and control of government-furnished crypto equipment and radios in a single package. The ICCS provides high-quality audio distribution of up to 24 channels. Crew-to-crew, crew-to-radio, and aircraft-to-crew communications are handled with complete flexibility via either a MIL-STD 1553B interface or discrete input lines.



Contact us to find out how you can get complete comms control.

eme

Canadian Marconi Company
Avionics Division

Avionics Products Group, P.O. Box 13330, Kanata, Ontario, Canada K2K 2B2, Tel. (613) 592-6500

New AAAA Officers

The following members were elected to the Executive Boards of their respective Chapters:

Steven G. Brookshire, (Senior VP), Cedar Rapids Chapter.

Matthew R. Tyler, (Pres.),
Raymond Mazyck, (Treasurer),
Jerry Wayne Reeves, (VP Memb.),
Roy D. Banzon, (VP Renewals), Citadel Chapter.

MAJ Charles K. Hunt, (Secretary), Hanau Chapter.

CPT Charles Green, (Secretary),
MAJ John E. Decker, (Treasurer), Mainz Chapter.

COL Charles H. Webb, (Senior VP), Morning Calm Chapter.

MAJ Rogers Woolfolk, (Secretary),
CPT Paul Steele, (VP Programming),
Washington D.C. Chapter.

Aviation Soldiers of the Month

SPC Michael S. Harris, Army Aviation Center Chapter (February)

PFC Samuel Mercedes, Thunderhorse Chapter (February)

New Industry Members

AEPCO, Inc., Rockville, MD.
CIRCON ACMI, Stamford, CT.

DONLEE PRECISION, Ontario, CAN.

Flight International, Inc., Newport News, VA.

Kaiser Electronics, San Jose, CA.

Kavouras, Inc., Minneapolis, MN.

Lockheed Support Systems, Inc., Arlington, TX.

Stratoflex/Parker Aerospace Military Connectors, Fort Worth, TX.



AAAA Overview



AAAA's National Executive Board (NEB) conducted its spring meeting during the AAAA Annual Convention in Atlanta, GA.

Among the significant items discussed were:

Review of AAAA Financial Status. COL J.J. Stanko, AAAA Secretary-Treasurer, presented the Financial Statement for the year ending 31 December 1988 and reported that AAAA's financial position is healthy.

Appointments of Hall of Fame Board of Trustees Chairman. LTG R.R. Williams was selected as the new Chairman of the Hall of Fame Board of Trustees replacing GEN H.H. Howze the retiring founding Chairman. A motion to establish a three-year term for the position of Chairman was approved. MG Stevens, outgoing AAAA President, asked LTG Williams to study the issue of attracting more nominations for enlisted and warrant officer candidates for induction into the Hall of Fame.

Membership Status Report. BG JM Hesson, incoming AAAA President, presented membership statistics covering the term of his office as Senior Vice President and Vice President of Membership. AAAA membership is on the rise.

Proposal to Amend Criteria for Robert M. Leich Award. The Board approved the proposal to change the criteria to read "...is presented to a unit for sustained contributions to Army Aviation, or to a unit or individual for a unique, one time outstanding performance."

Proposal to provide CHAMPUS Supplement as a Membership Benefit. A motion was approved to authorize the Executive Group to pursue adoption of a plan.

Army Aviation Museum — Status Report. LTG J.J. Tolson reported that construction was on schedule and would be completed in the fall of 1989 with the grand opening scheduled for February 1990.

AAAA Branch Office in Fort Rucker. BG Hesson reported that the AAAA had contracted with COL N.L. Ferguson to 1) interface with all resident courses on behalf of AAAA in support of the local chapter and national AAAA goals, 2) interface with the AAAA National Office on behalf of U.S. Army Aviation Center and School, and 3) support AAAA activities associated with the U.S. Army Aviation Museum, with such activity to be evaluated no later than the NEB Meeting scheduled for 16 October 1989.

Staff Support for the USAREUR Convention. MG Stevens advised the NEB that the USAREUR Convention in March 1989 was excellent. He further advised that GEN C.E. Saint was elected USAREUR Regional President with COL J.E. Easton now serving as USAREUR Senior Vice President. MG Stevens also advised the NEB that the Regional Board voted to combine the USAREUR Convention with the USAREUR Aviation Ball 28-30 November 1989 in Willingen not Garmisch.

Proposal to establish an AAAA Medal of Our Lady of Loretto. A motion was approved to authorize BG R.D. Wolfe to obtain final cost estimates for the medal based upon the agreed-upon design and present them to the NEB Meeting in October.

AAAA Scholarship Foundation — Status Report. MG J.L. Klingenhagen reported that the general fund was increased from \$398,000.00 in 1987 to \$544,000.00 in 1988 and reiterated that the goal was to reach \$1,000,000.00 by 1991 or 1992. MG Klingenhagen further reported that the Board of Governors approved a loan program and added two scholarships dedicated to the aeronautical sciences for 1990. The AAAA Scholarship Ball is scheduled for 17 February 1990 in conjunction with the Joseph P. Cribbins Product Support Symposium sponsored by the Lindbergh Chapter. GEN W.C. Westmoreland has agreed to serve as the Chairman of the Honorary Board for the event.

Industry Members Cont.

Lear Astronics Corporation,
Santa Monica, CA.

Film Applicators of North America, Inc., Springfield, PA.

New Sustaining Members

A&W Auto Parts, Inc.,
Clarksville, TN.

Advantage Inc. Real Estate,
Clarksville, TN.

Archulita's Sports, Clarksville, TN.

Batie Motor Co., Inc.,
Clarksville, TN.

Beachaven Vineyards & Winery, Clarksville, TN.

Catfish House, Clarksville, TN.

Cayce Mill Supply Co.,
Hopkinsville, KY.

China Star Restaurant,
Clarksville, TN.

Collins Music Store, Clarksville, TN.

Country Stable Liquors,
Russellville, KY.

DBA Stereo World, Clarksville, TN.

Heilig-Meyers Company,
Clarksville, TN.

J.B. Package, Clarksville, TN.

Lemstone Book, Governor's Sq. Mall, Clarksville, TN.

Logan Telephone Cooperative, Inc., Clarksville, TN.

Mercury Finance Company,
Oak Grove, KY.

Page & Taylors Sporting Goods, Clarksville, TN.

Performance Awards, Colorado Springs, CO.

Russellville Concrete Products Co., Inc., Russellville, KY.

Sherwood Realty Co.,
Clarksville, TN.



Chapter News



CENTRAL FLORIDA CHAPTER, ORLANDO, FL — AAAA's newest chapter, activated on 28 March 1989. BG James M. Hesson, Ret., then Sr. VP, now AAAA President, gave a presentation entitled "AAAA and You." Elections were held and the following officers were elected: COL Bobby Adams, President; LTC Ronald Schneider, Senior VP; LT Robert Hoffman, Secretary; MAJ(P) Paul Bernhardt, Treasurer; COL Kenneth Calcaterra, VP Memb. Enrollment; MAJ Kurt Rhodehamel, VP Memb. Renewals; COL Billy Rutherford, VP Programming; COL John Stanfield, VP Industry Affairs; MAJ David Blinkinsop, VP Military Affairs.

TAUNUS CHAPTER, APO NY — The general membership meeting was called to order at 1530 hours at the Wiesbaden Airbase Club, 15 February 1989. An update was provided

on the Army Aviation Professional Week 11-18 March 1989 at Garmisch. CPT Barry L. Cole raised enough money through 1st MI BN contribution to send a battalion soldier to the ski week and professional program at Garmisch. LTC David E. Cowley, Chapter President, welcomed and introduced the guest speaker, LTG Woodmansee, V Corps Commander. LTG Woodmansee provided a most interesting and informative presentation on his vision of Army Aviation in V Corps.



LTG John Woodmansee, Jr. receives a Taunus Chapter stein from LTC Cowley, Chapter President.

Sustaining Members continued

Subway Sandwiches &
Salads, Clarksville, TN.
The Packrat, Clarksville, TN.
Trish's, Monument, CO.
Yellow Gables Home
Furnishings, Clarksville, TN.
WBVR, Russellville, KY.

ACES

The following members have been declared Aces in recognition of their being responsible for the signing up of five new members each.

1SG William M. Bratton
LTC Michael S. Byington
Merlum M. Byrnes
CPT Donald L. Cochrane, Jr.
Terry E. Cunningham
Sharon L. Downs
CPT Kirk M. Fechter
Charles A. Fortner
Janet J. Garmon
CPT Donald M. Hartley
CW2 Sean Kelly
CW3 Bernard R. Lusk
CW2 John W. Martin
1LT(P) Phillip S. Martin
1SG Eddie R. Maycen
MAJ Michael K. Minich
CW2 Bryan D. Newland
1SG Frank Q. Oxendine
CPT Ralph Perez
CPT Michael A. Petrash
CDT Matthew R. Tyler
MAJ David L. Westfall
MAJ Rogers J. Woolfolk

FOUND

At the AAAA Annual
Convention, Atlanta, GA.

Two Garrison Caps
(one MAJ, one LTC)
One pair of glasses in a case
One ladies watch

Contact the National Office:
(203) 226-8184.

ARMY AVIATION ASSOCIATION OF AMERICA, INC. BALANCE SHEET AS OF DECEMBER 31, 1988

ASSETS	DEC. 31, 1988
Cash	\$215,679
Paine Webber Cash Fund	147,769
Investment in Marketable Securities, Less valuation allowance of \$5,118 in 1988	115,951
Inventory of pins	17,691
Prepaid Administrative Fee	117,515
Prepaid Expenses	6,371
Equipment, Less accumulated depreciation of \$16,521 in 1988	11,014
TOTAL ASSETS	\$631,990

LIABILITIES AND FUND BALANCES

LIABILITIES	
Accrued Expenses and Allocations Payable	\$36,585
Deferred Membership Dues	125,347
Deferred Convention Revenues	318,886
TOTAL LIABILITIES	\$480,818

FUND BALANCES

General Fund	31,602
Unrealized Loss on Investment in Marketable Securities	(5,118)

BOARD DESIGNATED FUNDS:

Hall of Fame Escrow Fund	11,688
Emergency Fund	113,000
Total Fund Balances	151,172
TOTAL LIABILITIES AND FUND BALANCES	\$631,990

STATEMENT OF REVENUE, EXPENSES AND CHANGES IN FUND BALANCE — GENERAL FUND YEAR ENDED DECEMBER 31, 1988

Revenues:	1988
Membership Dues	\$254,371
Annual Convention	729,917
ASE Symposium	23,825
Interest	30,269
Total Revenues	1,038,382
Expenses:	
General and Administrative	419,926
Special Allocations	71,500
Annual Convention	496,751
ASE Symposium	16,485
Interest	824
Total Expenses	1,005,486
Excess of Revenue Over Expenses	32,896
Fund Balance — Beginning	9,506
Transfer to Emergency Fund	(5,000)
Transfer to Hall of Fame Escrow Fund	(5,800)
Fund Balance — Ending	\$31,602

IMPROVE AMERICA'S INTELLIGENCE.

The primary imagery intelligence aircraft of the U.S. Army is Grumman's Mohawk. The Block Improvement program will keep it that way into the 21st century. This program will prolong Mohawk's structural life from 7,000 to 12,000 flight hours, upgrade its marginally-supportable communications and navigation systems, and strengthen Mohawk's ability to survive. In addition, "glass cockpit" instrumentation will reduce pilot workload. The improved Mohawk is on its way. Grumman Aircraft Systems Division, Bethpage, Long Island, NY 11714.

Only GRUMMAN



GRUMMAN®

The AAAA President's Annual Report

(Continued from page 68)

...."RECOGNITION" is a key word in this Association. I believe the AAAA's Awards Program attests to that.

AAAA National Award winners represent the best and the brightest!

In addition, many of our Chapters conduct their own local area "Aviator of the Year," "Aviation Soldier of the Year," "DAC" and "Unit of the Year" Awards Programs.

By the way OCONUS National Award Winners now receive full travel funding to attend the Convention. They were previously limited to our covering just their CONUS travel.

In this "Year of the NCO", the Command Sergeant Major of the Aviation Branch reports regularly on enlisted issues in **ARMY AVIATION MAGAZINE**. In July 1988, we devoted a special issue of the magazine to enlisted concerns and included an *Aviation Soldier Membership Directory*. The Sergeant Major of the Army also wrote our Guest Editorial for the January 1989 issue.

And last — one of our most successful chapter programs is the "Aviation Soldier of the Month" where a chapter may award a gift membership to an aviation soldier monthly with the cost underwritten by the National.

AAAA also recognizes several special areas —

The **Trainer of the Year Award** went to co-winners Major Mark S. Wentlent of Task Force 118, 18th Aviation Brigade, Fort Bragg, NC, and CW4 Robert J. Monette, Company D, 1st Battalion, 14th Aviation Regiment, Aviation Training Brigade, Fort Rucker, AL.

The **ASE Award** went to Richard Paoletta of the Electronic Warfare Laboratory in Fort Monmouth, NJ.

The **Outstanding Logistic Support Unit of the Year Award** was awarded to the 3rd Battalion, 9th Aviation Regiment, Fort Lewis, WA, at the Joseph P. Cribbins Product Support Symposium in February in St. Louis.

Industry contributions to Materiel Readiness were also recognized. The **Individual Industry Award** went to Mr. Donald P. Manahan, Chairman of the Board, COBRO Corporation.

The **Industry Team Award** was awarded to Bell Helicopter Textron.

The **Small Business Awards** went to co-winners, Kent Associates, Inc., and the Stalker Corporation.

And, the **Major Contractor Award** was presented to Beech Aerospace Services, Inc.

Other awards include the AAAA **U.S. Military Academy Cadet of the Year Award** and a **ROTC Cadet of the Year Award**.

The Association has been providing sterling wings for some time to the initial entry Distinguished Graduates — and also provides the branch insignia to newly-branched officers to the Army Aviation Branch.

Every three years, the AAAA honors sustained contributions to Army Aviation by inducting members into

the AAAA Army Aviation Hall of Fame. We've just concluded the induction of another fine group of individuals.

The **Top Chapter of the Year Award** will be presented at the AAAA Membership Luncheon on Saturday.

One of AAAA's most outstanding success stories is the AAAA Scholarship Program.

We awarded 25 scholarships this year — sixty thousand dollars — up from 23 scholarships and fifty one thousand dollars in 1987.

As you may know, the United States will be participating in the **World Helicopter Championships** scheduled for September 1989 in Paris, France.

The AAAA has donated \$4,000 towards support of the U.S. Precision Helicopter Team and looks forward to another victory.

With all these strong programs, and memberships on the rise, our fiscal health is sound.

I believe we can derive some satisfaction from the fact that we have not had a dues increase since August, 1980. I belong to a number of similar associations — and AAAA dues are the lowest.

I'd like to point out to you that our membership dues **do not** support our member activities.

So — how do we do all this without becoming insolvent?

The Association derives its surplus funds from our Annual Convention. But, these funds do not come from registrations, banquets, and similar events. The surplus comes from the sale of exhibit space to our industry member firms. Those funds have enabled us to keep our dues at their level and to keep the Association financially solvent.

We owe a debt of gratitude to those industry member firms that have supported us for so many years.

Maintaining fiscal solvency and administering the many AAAA programs is the responsibility of the AAAA National Executive Board — which consists of ten elected members and thirteen National Members at Large who are appointed annually by the President.

We also have the USAREUR Region President and the Presidents of Chapters representing 150 or more members on the National Executive Board to keep us in touch with the real world of our membership.

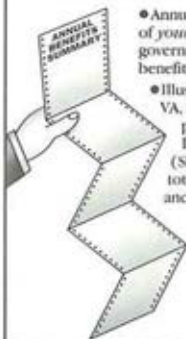
Also, the Past Presidents of the AAAA serve on the Board (in perpetuity) and provide a most important historical perspective.

No member of the National Executive Board receives any compensation for his or her efforts. All, except one, pay their own way. The incumbent President has only his travel and lodging expenses met.

I'd like to close by saying that I've enjoyed my term as AAAA's President and have appreciated the opportunity to serve you. ■■■■

Here Are Just a Few of Our Services

1. Individually tailored summary of benefits



- Annual summary of your family's government benefits package
- Illustration of VA, SS retired pay, Survivor Benefit Plan (SBP) and your total life insurance portfolio

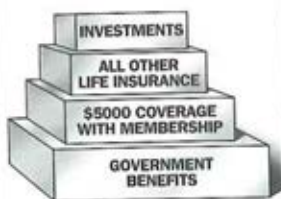
2. Reliable counsel on insurance and government benefit programs

- Reliable, unbiased advice on life insurance; information on health insurance
- Complete authoritative information on VA, Social Security, SGLI, and SBP
- Pre-retirement advice



3. Baseline life insurance included with membership

- \$5,000 coverage comes with membership
- Provides funds for final expenses
- Can grow significantly



Army and Air Force Mutual Aid Association

Join Army and Air Force Mutual Aid Association and you will receive lifetime help to handle your personal affairs planning.

We advise our members and their families on government benefits and at time of need we help them file claims. We also offer impartial counsel on life insurance plans.

We are a century-old non-profit service Association.

Membership is open to Army and Air Force officers and may be retained after separation or retirement.

For more information on our services, call us toll free today:

1-800-336-4538

(1-703-522-3060 in Virginia)

4. Safe deposit of family documents



- Storage of important family documents at no charge in our underground vault
- Itemized list of documents included in annual summary
- Free notarized copies sent anytime

5. Lifetime help to your survivors

- We do all possible paperwork for various government benefits and all life insurance claims
- We wire same day funds to family if needed
- We ensure that your family never misses out on any benefits



Army and Air Force Mutual Aid Association

Ft. Myer, Arlington, Virginia 22211

Send me more information about AAFMAA. My status as an officer is:

- Army Air Force Retired (under age 60)
 Fulltime active duty NG/Reserve on active status
 Cadet: USMA, ASAVA, or ROTC Contract/Scholarship

Name _____ DOB _____

Rank _____ Soc. Sec. No. _____

Street _____

City _____ State _____ ZIP _____

Phone (work) _____

Phone (home) _____



No one else does what we do!

MAJ Frank H. Bloom 30-Year Member

MAJ Frank H. Bloom, Ret. passed away January 31, 1989 in Ft. Myer, FL of cancer. Survivors include his wife, Marilyn of 8475 Penn Blvd., Ft. Myer, FL 33912; two daughters, Kari Hebrank and Kelly Spiro, and one granddaughter, Jocelyn. He had been a member of AAAA for over 30 years.

Ernest F. Easterbrook Aviation Pioneer

One of Army Aviation's pioneers, MG Ernest F. Easterbrook, died February 19, 1989 in Carmel, CA. On completion of pilot training in 1957, he became the Army's second Director of Army Aviation, ODCSOPS, DA, replacing BG Hamilton H. Howze.

He assumed command of the Army Aviation Center and Ft. Rucker in February 1959, following the death of MG Bogardus S. Cairns in a helicopter crash.

MG Easterbrook was buried February 24 in Arlington National Cemetery. He is survived by his wife, Nancy, of P.O. Box 5, Carmel, CA 93921; his daughter, Nancy Sherburne, his sons, Dr. Jim Easterbrook and COL John Easterbrook, USA, Ret., and six grandchildren.

1989 ASE SYMPOSIUM NOVEMBER 7-8

Hosted by
Tracor Aerospace
Austin, TX

For details,
Contact the National Office
(203) 226-8184.



AAAA Calendar



A listing of recent past AAAA Chapter Events
and upcoming National dates

April, 1989

■ ■ Apr. 21. Thunderhorse Chapter. Professional Business/General Membership Meeting. Community Club, Fulda Officer's Bar Room. Bell Helicopter Representative.

■ ■ Apr. 20-21. 1st Annual AAAA Golf Classic. Cole Park, Ft. Campbell. Members Only.

■ ■ Apr. 22. AAAA Nightstalker Biathlon. Fort Campbell.

■ ■ Apr. 22. Annual Colonial Virginia Chapter "Flight of Wings" 5-10K Run. Post Gym, Ft. Eustis.

■ ■ Apr. 25. Edwin A. Link Memorial Chapter. Professional Dinner Meeting. Morey's Restau-

rant, Binghamton. Guest Speaker: LTC William L. McCabe.

■ ■ Apr. 27. Connecticut Chapter. Professional Dinner Meeting. Milford Yacht Club. Guest Speaker: MG Ronald K. Andreson.

■ ■ Apr. 27. Monterey Bay Chapter. Professional Business Meeting. Ft. Ord Officer's Club Ballroom. Guest Speakers: COL Douglas R. Terrell & LTC Paul R. Soderlund.

May, 1989

■ ■ May 5. Phantom Corps Chapter. General Membership Meeting. Soldiers Dome, Ft. Hood. Guest Speaker: BG Robert L. Stewart.

DON'T GET SHUT-OUT OF THE 1990 ORLANDO AAAA CONVENTION EASTER WEEK APRIL 11-15

Delta has been selected as the designated carrier for the AAAA Annual Convention in Orlando..

The reduced fares to and from Orlando will be 40% off Coach Class or 5% off the lowest Super Saver. These apply to advance purchase requirements of the applicable fare.

To make your seat reservations (\$100,000 free insurance, convention mileage, seat assignments, boarding passes), call **Westport Travel**, our official agency. The Group Department toll free number is available to all convention attendees.

1-800-243-3335

(In Connecticut, call 1-800-433-7183)

The savings apply to reservations on Delta flights between Sunday, April 8 and Wednesday, April 18, 1990.



General Support



Medevac



Command and Control

We call it a Panther, but it's really a workhorse.

*Introducing the new Panther 800:
the cost-effective, low-risk solution
to Army light lift helicopter missions.*

The Panther 800. Versatile enough to satisfy all the U.S. Army's light lift requirements. From Medevac to Command and Control to General Support, the Panther 800 is a workhorse ready to be the long-term light lift solution.

The Panther 800 is an off-the-shelf, team effort that integrates proven,

existing technology with the new T800 engine, developed for the LHX program. The result: the low-risk, cost-effective light lift helicopter of tomorrow.

The versatile Panther 800 has been designed to deliver performance that will make it mission-effective well into the next century. It is an American-made helicopter whose time has come.

For more information about the Panther 800, write to LTV Aircraft Products Group, P.O. Box 655907, M/S 194-44, Dallas, TX 75265-5907. Or call (214) 266-5829.



 Aircraft Products Group


aerospatiale





L T V : L O O K I N G A H E A D



**David G.
Whitehead**



**Douglas T.
Lamb**



**Sarah L.
Bisch**



**Jack
Holcomb**



**Michael K.
McGaugh**



**Patrick M.
McNutt**



**Jay R.
Kurowsky**



**Steven
Belliveau**



**Frank H.
Marlo**



**Kimberly
Acreback**



**Sharon D.
Ault**



**Timothy A.
Davis**



**Brandis N.
Leonard**



**Laura A.
Huizi**



**Stacey E.
Byington**



**Tricia S.
Howe**



**Karen R.
Dodd**



**Robert J.
Elliott**



**Loan
Hudson**



**Nicholas T.
DiMercurio**



**Matthew D.
Anceln**



**Joanne M.
Ricciardi**



**Tara L.
Christensen**



**Alexia M.
Arnold**



**Douglas C.
Westerhoff**



AAAA Scholarship Foundation provides \$60,000 to 25 National Winners

The AAAA National Scholarship—\$12,000 (\$3,000 a year for four years) David Glenn Whitehead, son of LTC Erwin E. Whitehead, Carlisle, PA (* LTC L.R. Sloan).

The AAAA National Scholarship—\$7,000 (\$1,750 a year for four years) Douglas T. Lamb, son of Mr. David A. Lamb, Newport News, VA (* Mr. S.J. Lapaugh).

BG Robert M. Leich Memorial Scholarship—\$5,000 (\$1,250 a year for four years) Sarah Lynn Bisch, daughter of COL Frederick R. Bisch, Ret., Huntsville, AL (* COL D.H. Jersey, Ret.).

BG O. Glenn Goodhand Memorial Scholarship—\$5,000 (\$1,250 a year for four years) Jack Holcomb, son of COL Larry D. Holcomb, Ballwin, MO (* COL N.I. Patla, Ret.).

LTG William B. Bunker Memorial Scholarship—\$4,000 (\$1,000 a year for four years to an Engineering School applicant) Michael K. McGaugh, son of LTC Michael F. McGaugh, Ret., Bedford, TX (* LTC M.C. Layfield, Ret.).

GEN Frank S. Besson Memorial Scholarship—\$4,000 (\$1,000 a year for four years) Patrick M. McNutt, son of LTC George R. McNutt, Ret., Williamsburg, VA (* LTC W.H. Scanlon, Ret.).

B. Howard Dean Memorial Scholarship—2,000 (\$1,000 a year for two years) Jay R. Kurowsky, son of Mr. Ronald V. Kurowsky, Manasquan, NJ (* Mr. E. Hansen).

Rudolph Kahl-Winter Memorial Scholarship—\$2,000 (\$1,000 a year for two years) Steven Belliveau, son of Paul E. Belliveau, Eatontown, NJ (* Mr. D.L. Woods).

Chesapeake Bay Chapter Matching Scholarship—\$2,000 (\$1,000 a year for two years) Frank H. Marlo, son of Mr. Joseph C. Marlo, St. Louis, MO (* Mr. H.M. Gilby).

North Texas Chapter Matching Scholarship—\$2,000 (\$1,000 a year for two years) Kimberly Acreback, daughter of LTC James Acreback, Arlington, TX (* LTC G.A. Teague).

LTC Billy Hawkins Memorial Scholarship—\$1,000 Sharon Deann Ault, daughter of CW4 Thomas E. Ault, Ozark, AL (* COL W.R. Bunting).

Ken K. Kelly Memorial Scholarship—\$1,000 Timothy A. Davis, son of Mr. Bruce W. Davis, Lakewood, NJ (* Mr. J.R. Schwartz).

MG Robert F. Molinelli Memorial Scholarship—\$1,000 Brandis N. Leonard, daughter of LTC William B. Leonard, III, Annandale, VA (* LTC J.R. Mills, Ret.).

COL Jack Dibrell Memorial Scholarship—\$1,000 Laura Anne Huizi, daughter of COL Richard A. Huizi, Ft. Lewis, WA (* COL W.E. Golding).

Aviation Center Chapter Scholarship—\$1,000 Stacey Elizabeth Byington, daughter of LTC Michael S. Byington, Ft. Rucker, AL (* COL C.B. Boyd).

Cedar Rapids Chapter Matching Scholarship—\$1,000 — Tricia Suzanne Howe, daughter of COL Henry L. Howe, Ret., Cedar Rapids, IA (* Mr. R.C. Maret).

Colonial Virginia Chapter Matching Scholarship—\$1,000 — Karen Ruth Dodd, daughter of Mr. David W. Dodd, Newport News, VA (* Mr. W.V. Robbins).

"Follow Me" Chapter Matching Scholarship—\$1,000 — Robert Jeffrey Elliott, son of LTC Howard R. Elliott, III, Ret., Athens, GA.

Greater Atlanta Chapter Matching Scholarship—\$1,000 — Loan Hudson, daughter of LTC Gabriel L. Hudson, Fayetteville, GA (* LTC G. Shirilla, Ret.).

Lindbergh Chapter Matching Scholarship—\$1,000 Nicholas T. DiMercurio, son of Ms. Diana L. DiMercurio, St. Peters, MO (* Mr. T.E. Devereux).

Monmouth Chapter Matching Scholarship—\$1,000 Mathew D. Ancelin, son of LTC Donald R. Ancelin, Ret., Toms River, NJ (* LTC W. Pohlmann).

Monmouth Chapter (Perpetual) Scholarship—\$1,000 — Joanne Marie Ricciardi, daughter of Mr. Bernard V. Ricciardi, Manasquan, NJ (* Mr. C.S. Marotta).

Old Tucson Chapter Matching Scholarship—\$1,000 Tara Lyn Christensen, daughter of MAJ John H. Christensen, Jr., South Lake Tahoe, CA.

Phantom Corps Chapter Scholarship—\$1,000 Alexia M. Arnold, daughter of CW4 Jimmie D. Arnold, Ret., Colorado Springs, CO (* CW4 R.J. Gordyn, Ret.).

Southern California Chapter Matching Scholarship—\$1,000 — Douglas Cor Westerhoff, son of LTC Cornelius J. Westerhoff, Mission Viejo, CA (* LTC C.L. Ullman).

Since the inception of the AAAA Scholarship Foundation in 1965 as a separate corporate entity, the sons and daughters of AAAA members and deceased members have received 401 national scholarship awards totaling \$274,275.

* Denotes AAAA interviewer.

One view of Starstreak you'll never see.

Travelling at many times the speed of sound, Starstreak isn't easy to spot. Impossible, in fact.

And as it travels, three guided darts separate out in formation to strike the target. Greatly increasing the hit area.

Too bad if it's you.

Fast, lethal and accurate — Starstreak has no challengers. It's highly immune to countermeasures.

This innovative weapon system was designed by Shorts and is currently under development for production and delivery soon to the British Army.

Its power is awesome. Incorporating the very latest missile technology advances, Starstreak has



completely redefined the state-of-the-art in close air defense. No other system provides such devastating speed and accuracy. The British Ministry of Defence has contracted for the early deployment of Starstreak in Western Europe.

Shorts is teamed with Boeing Aerospace to adapt Starstreak to the Avenger as an upgraded pedestal-mounted air defense system for the U.S. military. McDonnell Douglas Helicopter Company and Martin Marietta Electronics Systems are working together with Shorts to integrate Starstreak as an air-to-air missile on the Apache Helicopter.

Blowpipe, Javelin and Seacat are also produced by Shorts, so Starstreak is only the latest in a succession of proven and technically excellent weapons. But much faster and more lethal than anything that's gone before. Which is good to know. Providing it's not pointing in your direction.

SHORTS

For more information, contact Short Brothers (USA), Inc.,
2011 Crystal Drive, Suite 713, Arlington, VA 22202-3719.
Or call (703) 769-8700.

