

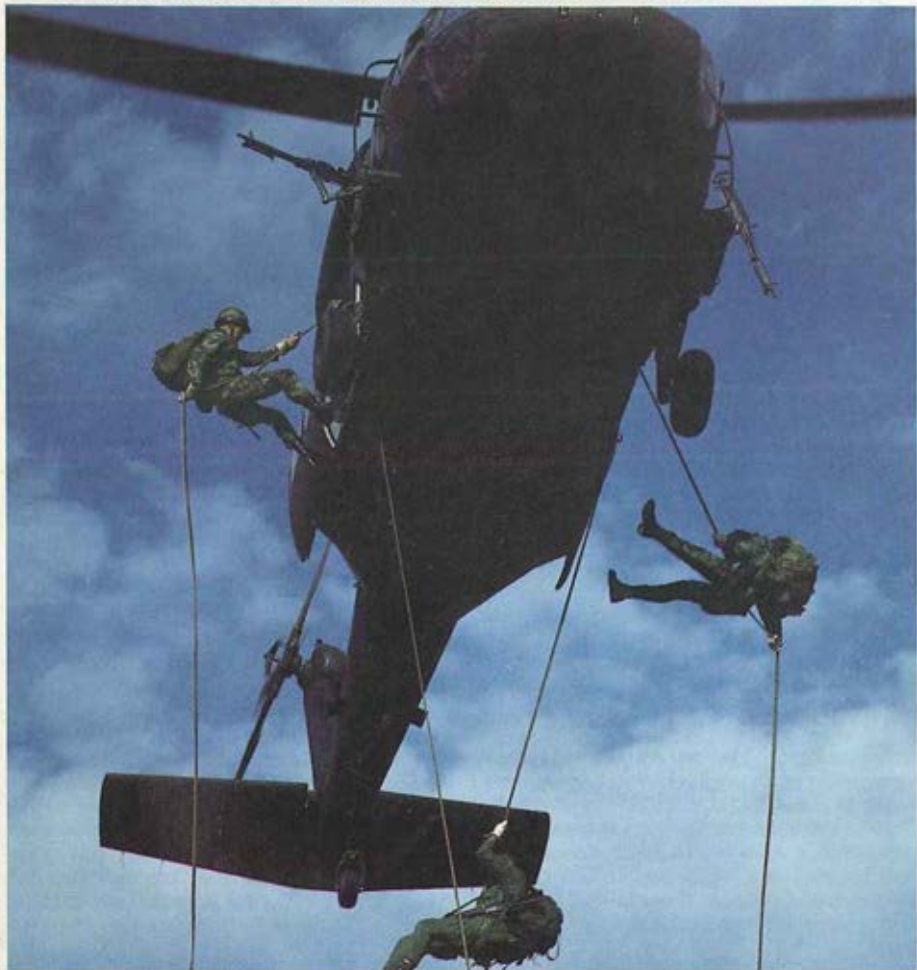
GUEST EDITORIAL • General John R. Galvin, CG, U.S. Southern Command 2

FIELD REPORTS • The X-Wing: A trip into the future of Army Aviation 18

AAAA • Nominations open for the CY86 AAAA National Awards 54

# ARMY AVIATION

ENDORSED PUBLICATION OF THE ARMY AVIATION ASSOCIATION • OCTOBER 31, 1986 • \$2.50





# Army Aviation in Latin America: The Key to Crisis Response

by General John R. Galvin  
Commanding General,  
U.S. Southern Command,  
Quarry Heights, Panama

**A**T 8:50 p.m. Wednesday, November 13, 1985, the Nevado del Ruiz Volcano in northern Colombia erupted in a roar of dark smoke, steam and ash. More than 21,000 people were killed or missing after walls of grey mud buried the town of Armero.

By Friday morning eight UH-60 and four CH-47 helicopters and crews of the Panama-based 193d Infantry Brigade's 210th Combat Aviation Battalion were enroute to Colombia to provide disaster relief and geological survey support. Viewers of television and readers of newspapers all over the world were not surprised at the accomplishments, dedication and professionalism displayed by the 210th during this very trying period: this is what people everywhere have come to expect of United States Army Aviation.

## Carrying the message

Army aviators logged over 680 hours of intense flying, using much oxygen and making repeated landings at the 15,000 to 16,000 foot elevation. Their accomplishments were well reported by the news media, including *National Geographic*, and reflected in a highly positive way on our Aviators and our Nation. These few soldiers sent a very significant message of concern and sup-

port from the people of the United States, to the people of Colombia, and to other countries in the region, a message that the United States is a caring and reliable ally.

## Protecting democracy

Latin Americans, indeed free people all over the world, look to the U.S. for support in time of crisis. Last March the Marxist Sandinista regime in Nicaragua conducted a major incursion into Honduras on a scale beyond the numerous previous incidents.

In reaction, the Government of Honduras sought U.S. assistance to move a task force of four companies of Honduran infantry into blocking positions to prevent further advances of the Sandinistas. Once again, a relatively small number of U.S. Army helicopters took the lead in displaying the firm commitment of the U.S. to help an ally defend itself against aggression.

Fourteen helicopters from Joint Task Force Bravo in Honduras, some of which were in Honduras to support an upcoming exercise, were used to transport Honduran forces. The important message was our obvious commitment and support for our Central American ally, showing **(Crisis Response — Continued on Page 36)**

# Reduce Maintenance Costs!

ETM-600 Now  
STC'd on  
KING AIR  
Model 200,  
B200, and B200C.

ETM-600  
Automates  
Computrend



SEM-1000  
Automates  
Life Cycle Tracking

## With J.E.T. Turbine Engine Monitors you can make application to eliminate a hot section inspection and extend TBO.

The ETM-600 is the first affordable turbine engine trend system to give you a true picture of your engine's condition — and allow real savings in maintenance costs.

It gathers data from your engine's critical parameters, and determines if the engine is following normal degradation curves. If so, you can eliminate a hot section inspection or extend time between overhauls. If your engine shows signs of premature failure, the ETM-600 will warn you, on the fly — and let you know if the problem's in the left or right engine.

The ETM-600 stores data in a removable memory module, which is downloaded into a PC through a ground-based reader. The information determines, with the help of our service experts, the condition of your engine — so you can eliminate a hot section or extend TBO.

The SEM-1000 is a turbine engine life monitor. It provides tracking of cycle life limited components, and determines exceedances in magnitude and duration.

All this information is displayed through an LCD readout on the front of the instrument. A simple sequence menu is displayed and paged through with a single key — allowing maintenance personnel to rapidly recover the information they need. For example: Number of cycles on the turbine wheel? Number of starts? Any hot starts or overtemps? If so, how long and how hot?

The SEM-1000 monitors engine life in real time, and stores the data in a non-volatile memory. It gathers data through the engine/airframe critical parameters, including ITT, fuel flow, OAT, and more. And it's all readily available at the push of a button.

Call today for more information — 1-800-253-9525.



Jet Electronics and Technology, Inc.

A Subsidiary of Gates Learjet Corporation

5353 52nd Street, S.E./Grand Rapids, MI 49508-0239 Telex: 22-6453 JETEECTEC GDR



**PUBLISHER**

Arthur H. Kesten

**EDITOR-IN-CHIEF**

Lynn Cookley

**MANAGING EDITOR**

John Kiernan

**ADVERTISING MANAGER**

Terrence M. Cookley

**EDITORIAL ASSISTANT**

Joan Zinsky

**CIRCULATION MANAGER**

Jill Thomas

**CIRCULATION ASSISTANTS**Mary Ann Stirling, Debbie Coley,  
Beth Bartsch

Army Aviation Magazine is a professional journal endorsed by the Army Aviation Association of America (AAAA).

**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, 1 Crestwood Road, Westport, CT 06880. Phone: (203) 226-8184 and (203) 226-8185. Subscription rates for non-AAAA members: \$14, one year; \$26, two years; add \$7.50 per year for foreign addresses other than military APO's.

**ADDRESS CHANGES**

The receipt of change of addresses is verified by the publication of the residence change in the "Takeoffs" or PCS columns of the magazine. Senior AAAA members (O-6's and above) are asked to provide their new duty assignment for publication in the magazine's "Command & Staff" column.

**POSTAL**

Second class postage paid at Westport, CT.

**FORTHCOMING ISSUES**

November 30, 1986—A Special Focus on the U.S. Army's Aircraft Survivability Equipment (ASE) development program.

December 31, 1986—A General News Issue, containing field reports from Army Aviation units and agencies worldwide.

January 31, 1987—A Special Report on the Army's Light Helicopter Experimental (LHX) Program.

**FRONT COVER**

The Sikorsky UH-60A BLACK HAWK is shown in use as a tactical Air Assault vehicle.

# ARMY AVIATION

**VOLUME 35****NUMBER 10****Guest Editorial — Army Aviation in Latin America**

by General John R. Galvin, CG, U.S. Southern Command.....2

**Aviation Branch — Technology for the Battlefield of Tomorrow**

by Major General Ellis D. Parker, CG, USAAVNC & Ft. Rucker....6

AAAA — \$44,000 in AAAA Scholarships being offered.....53

AAAA — Nominations open for the AAAA National Awards.....54

**SEPTEMBER, 1986 FIELD REPORTS****Air Traffic Control — Big changes at the ATC Activity**

by COL Charles L. Woodhurst, Former Cdr, USAATCA.....10

**Air Traffic Control — The 58th ATC Battalion of XVIII Corps**

by LTC Earl H. Grubbs, Former Cdr, 58th ATC Bn, Ft. Bragg, NC....10

**Avionics — The ACAP Composite Airframe Program at AVRADA**

by Mrs. Bobbi C. Campbell, USAAVRADA, Ft. Monmouth, NJ....11

**Industry — Sikorsky's X-Wing: A trip into the future**

by Dr. Kenneth M. Rosen, Dir. V/STOL Programs, Sikorsky-UTC....18

**Operations — The 210th CAB: The Bolivian Connection**

by LTC Michael H. Abbott, Cdr, 210th Cbt Avn Bn, Panama.....20

**Personnel — The Warrant Officer Division at MILPERCEN**

by COL Joel H. Hinson, Chf, WO Div, MILPERCEN, Alexandria, VA....25

**R & D — MAMP: The key to long-range Army R & D planning**

by Gary L. Smith, Dir. of Adv. Systems, AVSCOM, St. Louis.....26

**R & D — The Propulsion Directorate: Testing Engine Design**

by John Acurio, Dir., Propulsion Directorate, ARTA, Cleveland, OH....28

**Reserve Component — The centralized training of EAATS**

by COL Kenneth D. Rhoades, Cdr, EAATS, Ft. Indiantown Gap, PA....30

**Survivability — Aviation Life Support Equipment on the move**

by LTC Karl R. Griffin, ALSE-PM, AVSCOM, St. Louis, MO.....31

**Test & Evaluation — The USAAVNDA acid-tests equipment**

by COL Lawrence L. Karjala, Cdr, USAAVNDA, Ft. Rucker, AL....32

**Test & Evaluation — From mountains to desert: USAAEFA**

by MAJ Rickey C. Simmons, USAAEFA, Edwards AFB CA.....34

**1986 AVIATION SOLDIER**

The 1986 Aviation Soldier Directory, a voluntary Professional-Personal

Roster of AAAA's enlisted members.....39

AVIATION SOLDIER INDEX.....38

**OTHER DEPARTMENTS**

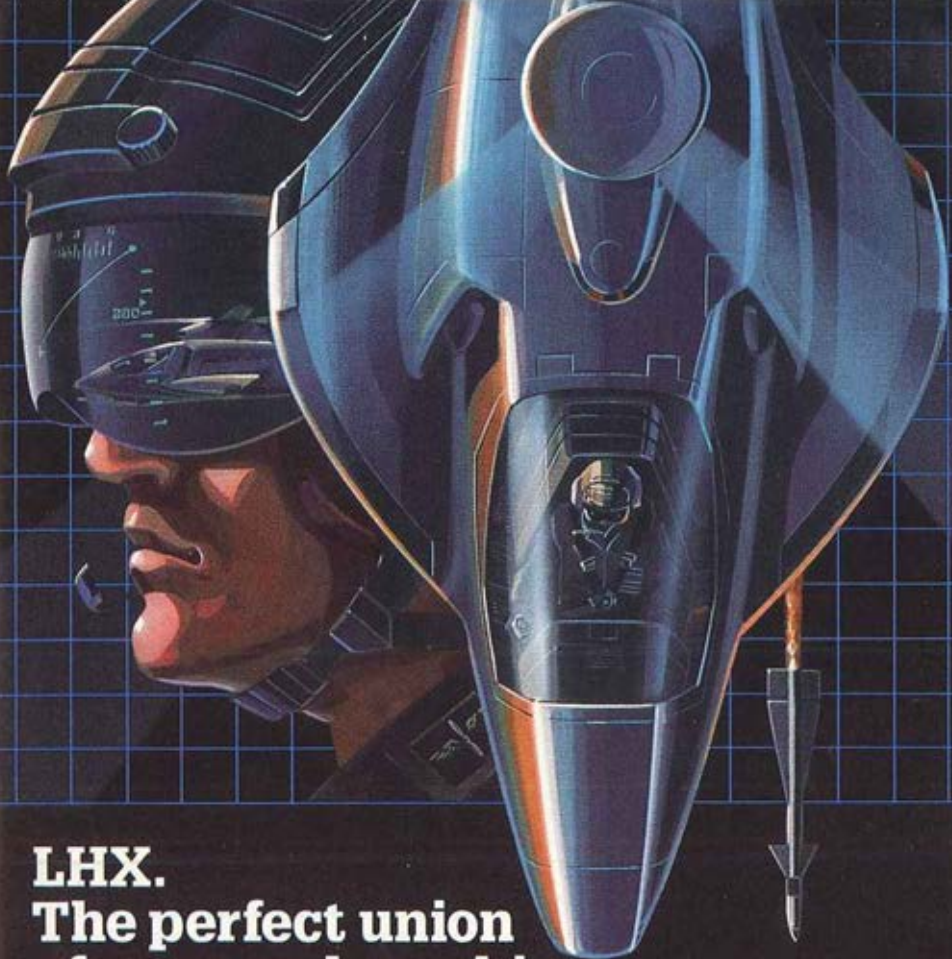
PCS—Changes of Address....45 AAAA Overview.....51

Awards & Honors.....16 Command & Staff.....16

AAAA Calendar.....50

**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.



## **LHX.** **The perfect union** **of man and machine.**

Our goal: the lowest workload in the most lethal helicopter ever built for the U.S. Army — LHX, a machine for tomorrow's AirLand Battles.

McDonnell Aircraft Company, the world's leader in fully integrated single-pilot combat aircraft, is joining the world's leaders in scout and attack helicopters: Bell Helicopter

Textron and McDonnell Douglas Helicopter Company. *This* is the SuperTeam for LHX.

LHX is indeed a machine for tomorrow, but we're flying the aircraft today, in full combat mission simulators, years before the first prototype rolls onto the flight ramp.

This is the beginning of a breakthrough.



MCDONNELL DOUGLAS HELICOPTER  
**SUPERTEAM**  
BELL HELICOPTER TEXTRON



# Technology for the Battlefield of Tomorrow

by  
**Major General  
Ellis D. Parker**

**Commanding General,  
U.S. Army Aviation  
Center and  
Ft. Rucker, Alabama**



**I**N the past few months I have made reference to the V-22 program in a cursory fashion. At this time I believe it necessary to give you an in-depth look at this aircraft — an aircraft which we in Army Aviation believe will revolutionize our ability to fly and fight in future tactical situations.

The Army will be procuring the U.S. Marine Corps production version of the V-22—a multipurpose, multiservice tilt rotor aircraft—in the early 1990s. This is the aircraft the Army has been looking for — it will meet the multimission requirements of utility/assault as well as medical evacuation.

The V-22 will also serve the battlefield commander because its vertical take-off and landing (VTOL) capability means it can insert and/or extract up to 24 combat equipped soldiers in selected areas of the battlefield.

Its fixed wing capability makes it a troop transport and/or a cargo carrier which can fly long distances to and from the battlefield and land on short, rough surfaced runways. When reconfigured, the V-22 becomes a medical evacuation aircraft able to handle 12 litter patients and two attendants.

## **Ideal aircraft for the future**

The characteristics of the V-22 make it the ideal aircraft for most tactical scenarios. It is fast; highly maneuverable; and capable of extended flight operations in daylight visual, night or instrument meteorological conditions, as well as in moderate icing conditions. The aircraft will be able to be refueled in the air-to-air and hover mode.

It will have an internal or external payload capacity of 10-15,000 pounds and a takeoff weight of 59,900 pounds for self-deployment.

Noteworthy is the fact the aircraft will incorporate the latest crashworthy aircraft survivability features.

The U.S. Army Aviation Center (USAAVNC) has been actively involved with the V-22 program, particularly since late 1985 when it drafted the V-22 Operational and Organizational Plan (O&O Plan).

This plan formally describes the Army's requirements concerning the aircraft and how it is to be employed. The USAAVNC has hosted a number of Armywide information briefings to educate the Army community on the V-22.

Currently, representatives from the Army have been assigned to the Naval Air Systems Com-

mand (NAVAIR) in Washington, D.C., to work closely with their Navy and Marine Corps counterparts in the V-22 program, since the Navy is the lead service concerning the propensity of the aircraft.

The USAAVNC and the Army Aviation Systems Command (AVSCOM) have worked closely with one another and with the Assistant Secretary of the Army for Research Development and Acquisition, Dr. Jay R. Sculley, who is a proponent of the program and the technology it represents.

The V-22 program is on schedule, and the first flight of the prototype is scheduled to occur in June 1988. The Army is to take delivery of the first production model in late 1993 or early 1994. I will keep you apprised of the V-22 program and its impact on our mission.

## ANVIS

Previous wars in which the United States has fought indicate a willingness on the part of the enemy to fight at night. For example, the Soviet Bloc nations incorporate sustained nighttime tactical operations as part of their battlefield doctrine. In turn, the U.S. Army has been heavily engaged in training its soldiers in the use of technology to help them fight successfully at night. That training has included the use of night vision goggles (NVG) by aviators.

The first NVG used by Army aviators was the AN/PVS-5A, which had been designed for ground troops. For aviation use it was cumbersome, restricted vision, limited depth perception, and was difficult to focus. Modification of the AN/PVS-5A removed the lower portion of the faceplate, which improved those restrictions somewhat.

Approximately two years ago, the Army began fielding the Aviators Night Vision Imaging System (ANVIS), which is a marked improvement over the AN/PVS-5A. The ANVIS is smaller, consisting of two image intensifier tubes that are mounted on the light helmet and can be flipped up when not in use. The new system also has clarity, such as a blocking filter that precludes the wearer from seeing blue-green lighting in the helicopter. A pilot can also look under and around the ANVIS tubes for map reading and instrument checks. Army aviators who have used the new system have given it high marks.

Currently, the ANVIS is being used in the instructor pilot transition courses. The transition

from the AN/PVS-5A requires some classroom training for the instructor pilots and a one-hour transition flight with an individual who is ANVIS qualified. It is hoped that by 1989 every aviation unit will be equipped with the ANVIS and that every aviator will be current with it.

It is my opinion that the across-the-board use of ANVIS by our aviators will permit us to fly lower, faster and safer at lower light levels, and that it will enhance the achievement of our mission.

## Personnel

Kudos go to the men and women of the Directorate of Aviation Propensity's Office of Personnel Systems at Ft. Rucker for getting the Aircraft Survivability Equipment (ASE) training moved from Ft. Huachuca, AZ, to Ft. Gordon, GA, where training slots, students, and equipment were available. It was found that instruction in the 35K MOS (Aviation Unit Maintenance) and 35R MOS (Aviation Intermediate Maintenance) at Ft. Gordon matched the maintenance concept of Army Aviation, and would be seven weeks shorter than it previously was. Also, no TDY was necessary for students. The first ASE class at Ft. Gordon begins October 6, 1986.

In closing, I want to reiterate my welcome to our new Assistant Commandant, **BG Rodney D. Wolfe**, and his family. **Gen. Wolfe** began his duties August 22, 1986, and you will be hearing more about and from him in future issues. IIIII

## Coming Next Month

The November 30th issue of *Army Aviation* will contain a Special Focus on the Aircraft Survivability Equipment (ASE) program, including an article from COL Curtis J. Herrick, ASE-PM.

Field reports will include two hardware articles on the V-22 Osprey Tilt Rotor Aircraft, an article from the Special Electronic Mission Aircraft (SEMA) PM, and the former PM for the CH-47D Modernization Project Manager.

Other articles will come from the School of Aviation Medicine, the 501st Attack Helicopter Battalion, the Directorate of Combined Arms Tactics, the Corpus Christi Army Depot (CCAD), as well as a Personnel Report from the Aviation Branch of Officer Personnel Management Division (OPMD).



# Who can show a pilot all of Georgia in 3-D?

Harris can, with a full-color digital map.

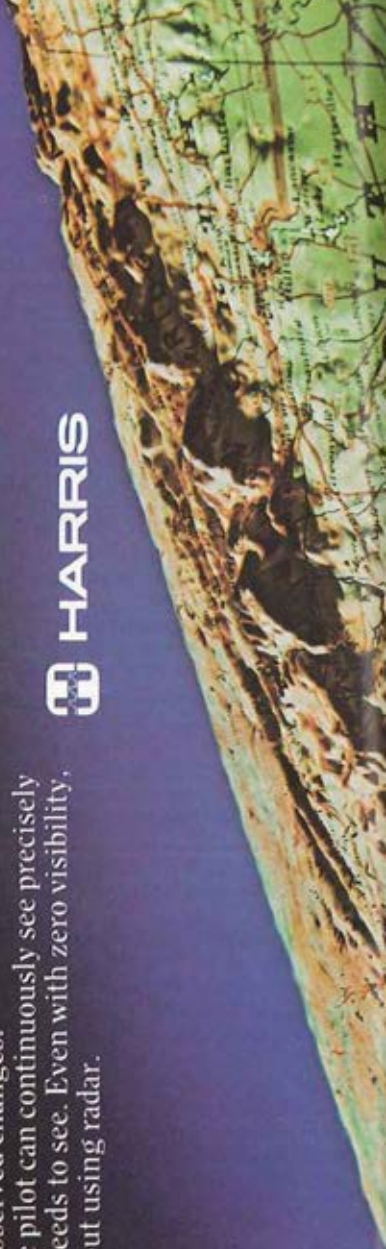
On a single small cassette tape, we can compress and store at least 62,000 sq mi of the earth, in three dimensions. As the aircraft moves, the map display moves accordingly—and the pilot can do remarkable things with it. Make hazards stand out in brilliant color, for example. Selectively display (or erase) features such as roads or enemy antiaircraft emplacements. Show safe areas masked by the terrain. Change scales or see how an area would look from different angles and altitudes. Receive last-minute map changes in flight and enter his own observed changes.

So the pilot can continuously see precisely what he needs to see. Even with zero visibility, and without using radar.

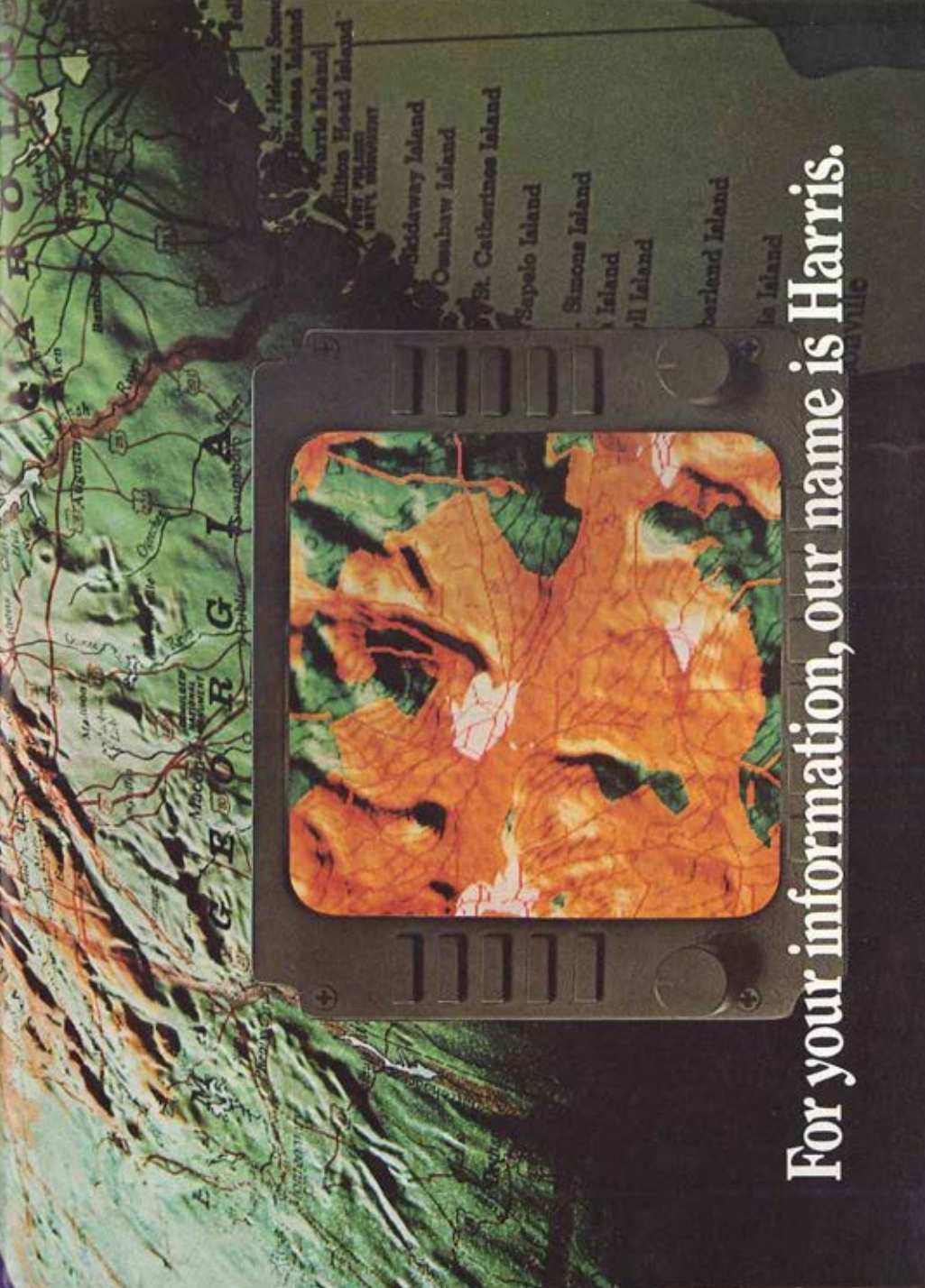
The Harris STARS (Stored Terrain and Access Retrieval System) has been developed under Army and Air Force sponsorship, using Defense Mapping Agency data, for upcoming programs such as the advanced F-16, LHX and JTVX. Think what the same information technology could do for other applications.

It's just one example of how *Harris Aerospace* meets challenges in the information field—by advancing systems technology. Harris Corporation, Government Aerospace Systems Division, Melbourne, FL 32902. Phone (305) 727-5115.

 **HARRIS**







For your information, our name is Harris.

# Air Traffic Control

## Big changes on the screen at the Army's ATC Activity

FT. HUACHUCA, AZ — By now everyone knows that ATC is being transferred from Information Systems Command (ISC) to TRADOC (Ft. Rucker). ATC has been the responsibility of ISC for the past 13 years.

COL Mel McLemore is to be the new ATC boss at Ft. Rucker. The effective date of transfer will be 1 October 1986. COL McLemore has an advance party on the ground at Ft. Rucker and plans are to be fully operational shortly after the new fiscal year begins.

The ATC transfer plan calls for decentralized ATC Command and Control (C<sup>2</sup>). The four ATC battalions will be transferred to the major organizations that they support.

The 59th ATC Battalion will be assigned to USAREUR, the 58th to XVIII Corps, the 16th to III Corps, and the 125th to Eighth Army. C<sup>2</sup> of ATC elements at Army installations in CONUS will reside with the respective garrison commanders.

The U.S. Army Air Traffic Control Activity (USAATCA), in its new home at Ft. Rucker, will conduct its worldwide mission under the direction of the DA and will act as a Field Operating Activity.

It will be responsible for airspace; policy and procedures; flight evaluation; development, programming and procurement of ATC equipment; tech-

nical assistance; standardization, and personnel certification. The ATC evaluation team, which has operated separately, will rejoin USAATCA at its new home. ISC will retain its engineering, installation and test mission for fixed ATC. Tactical ATC combat development will be managed by the USAAVNC Directorate of Combat Developments.



**A Report  
by  
Colonel  
Charles  
L.  
Woodhurst**

This will be my last report from the field as Commander of USAATCA. The past 15 months have been challenging and rewarding. The ATC program is reasonably funded through 1992.

The emerging doctrine for ATC may require some changes in the program, but they should be minor. The leadership at Ft. Rucker is committed to furthering the role of ATC in the AirLand Battle.

My new job will be Defense Attache in Kathmandu, Nepal. My sponsor has already sent me a photo of the ATC facility at Namche Bazaar near Mount Everest — the highest airfield in the world. I wish all ATC soldiers the best and look forward to their future accomplishments.

—COL Charles Woodhurst  
Former Cdr, USAATCA

## The 58th Battalion: ATC from Kentucky to Honduras

FT. BRAGG, NC — As I complete my battalion command tour, I appreciate this opportunity to present this command's recent ATC involvement in Honduras.

The 58th Air Traffic Control Battalion is headquartered at Ft. Bragg, NC, but its units are scattered among three states.

The units provide tactical terminal and enroute ATC support, navigational aids, air warning and inflight assistance for aviation assets of the XVIII Airborne Corps, 101st Airborne Division (Air Assault), 82d Airborne Division, 24th Infantry Division (MECH), and three separate brigades.

In September 1985, the battalion expanded its mission to include Joint Task Force Bravo, headquartered at Pamerola Air Base, Honduras.

In mid-October 1985, three C-141's departed Pope Air Force Base at Ft. Bragg with 38 members of the 3d platoon, 245th ATC Company (FWD) and associated ATC equipment to support this mission.

The battalion's personnel were tasked to learn Spanish, train up and assume control of the airspace by 1 November 1985. With a lot of assistance from our sister unit, the 16th ATC Battalion headquartered at Ft. Hood, TX, the 3d platoon was geared and ready for action.

In support of this mission the



## Air Traffic Control

platoon members employed an AN/TSQ-70A (tactical tower), two AN/TSQ-71B's (Ground Controlled Approach (GCA) radars), several AN/TRN-30 (V) 2's (non-directional beacon), AN/TSC-61B (Flight Coordination Center), and RATT Communications between Honduras and Ft. Bragg.



**A Report  
by  
Lieutenant  
Colonel  
Earl H.  
Grubbs**

The biggest task facing the ATC'ers was learning the uniqueness of Honduran airspace rules and regulations and establishing their GCA's to FAA standards. Due to a few 58th bilingual controllers, the first task was relatively simple — the latter proved to be more

difficult.

After numerous flight evaluation checks by the USAISC Flight Evaluation team from Ft. Huachuca, AZ the task was accomplished and the GCA was commissioned (a first). Additionally, the AN/TRN-30 (V) 2 navigational aid serving Pamerola was flight checked and commissioned.

Besides controlling a multitude of varied air traffic (C-5's, Honduran props and jets, UH-1's) on a 24 hour, seven day a week basis, the platoon members kept themselves busy during their "off duty hours". They built bunkers, remodeled "hootches", fixed satellite TV antennas, performed PMCS and took R & R trips. After five and a half months, the platoon was replaced by its sister platoon, the 2d.

In February 1986, the mission was expanded to include tactical ATC operations at Oso Grande, Mocoran and Puerto

Lempira. Tactical towers and NDB's were employed in support of these road construction projects conducted by the Missouri National Guard Brigade and the 27th Engineer Bn from Ft. Bragg, NC.

In May 1986 the Army's ATC mission was turned over to the USAF. The 58th ATC'ers were elated to return home to their families, but somewhat dejected by having to vacate the best ATC training environment possible; training that certainly enhanced each member's "go-to-war" ATC ability.

More importantly, the platoon members were saddened to leave behind so many close friends, both American and Hondurans; established friendships that further enhanced the American, Aviation and professional Air Traffic Controller image abroad.

—LTC Earl H. Grubbs  
Former Cdr, 58th Air  
Traffic Control Battalion

## Avionics

### Electronics and the Composite Airframe: ACAP at AVRADA

FT. MONMOUTH, NJ — Commercial and military aircraft, both rotary and fixed wing, will be lighter in the future. This weight reduction will be made possible by the use of advanced composite airframes rather than metal airframes.

Composites are advantageous, but for structural

reasons, they complicate avionics issues considerably.

Various composite materials exhibit a wide range of electrical characteristics, so that the auxiliary electrical functions previously performed by the metal fuselage may no longer be so easily provided.

Since production composite airframes had not been evaluated under service conditions with complete avionics systems installed, the Advanced Composite Airframe Program

(ACAP) was developed to demonstrate physical characteristics of composites.

Foremost among the Army's ACAP objectives were reductions in manufacturing cost and weight, relative to a metal airframe while still meeting stringent military requirements, including safety and survivability.

The choices of materials for composite aircraft have a major impact on avionics. Those selected by Bell and Sikorsky were based on a variety of ap-

## Avionics

plications including strength, stiffness, toughness, environment, ballistic tolerance and manufacturing methods.

Advances in synthetic-fiber composites have produced material with structural characteristics superior to metals. They have higher strength to weight ratio, ease of fabrication, and the availability of a broad spectrum of materials with structural characteristics which can be tailored to different applications.

It is now feasible to produce composite aircraft with performance equal to or better than metal aircraft, with substantial

savings of weight and cost.

Kevlar/epoxy, a dielectric material, does not provide electromagnetic shielding, protection against lightning or current return paths. Graphite/epoxy is somewhat conductive, making it useful for some of these purposes, but not all.

Graphite/Epoxy is the predominant material used in the airframe. Due to the specified severe environmental conditions, only stable high temperature cure epoxy resins were selected for long term durability. Electrical properties lost in the transition from metal to composites will have to be

compensated for by the reintroduction of some metal.

Composites are either totally dielectric (non-conductive to electrical current), such as fiber glass and Kevlar, or semi-conductive as in the case of graphite epoxy. These are the predominant materials used in the program.

The Army initiated an Advanced Composite Airframe Program to investigate and demonstrate reduced cost and weight, increased production,

**ABOVE:** The Sikorsky ACAP. **BELOW:** The ACAP instrument panel. **RIGHT:** The Bell Tool Proof Hull (TPA) atop NADC 40 foot tower for antenna evaluation.





In the  
established  
GE tradition  
of continuing  
engine growth  
(up to 2x)  
through infusion  
of new  
technology . . .

. . . T700/CT7 engines are growing:  
10% growth already fielded;  
20% and 30% in development.

Aircraft Engine  
Business Group  
Lynn, Massachusetts



A registered trademark of General Electric Company, U.S.A.

and improved reliability, maintainability, vulnerability, safety, and survivability, by incorporation of advanced composite materials and structural design concepts for both primary and secondary structures.

Conductivity of the aircraft skin is required to provide antenna ground planes, electromagnetic shielding, lightning protection, and elimination of static charge build-up/arcing.

The ACAP airframe has an aluminum screen material impregnated into the exterior Kevlar/epoxy skin to provide these functions. This screen protection was found to be adequate during initial Research and Development testing, but neither this screen or the graphite/epoxy provide protection to the extent of a conventional aluminum airframe.

Under the preliminary ACAP design effort, Bell and Sikorsky developed flyable Tool Proof Article (TPA) helicopters for the United States Army. The Aviation Applied Technology Directorate (AATD) at Ft. Eustis, VA is the lead DOD element for this development, and follow-on efforts.

The U.S. Army Avionics Research & Development Activity (AVRADA) conducted surveys of industry to determine potential problems with avionics used in composite airframes and to determine the technological requirements of integrating avionics into composite structures.

The major problems found involved structural protection against lightning, antenna integration, power system design and electrical safety, elec-

tronic shielding and radar cross section.

The surveys revealed a need for design guidelines and handbooks, revised specifications, standard measurement methods, and data upon which to base those items.

Using the data base established through a survey of Industry and Government experience in composite airframes, additional areas of investigations were identified to aid the Army in establishing guidelines and standards for installation and operation of avionics in composite airframes.



**A Report  
by  
Mrs.  
Bobbi  
C.  
Campbell**

In this effort, AVRADA is supporting the AATD at Ft. Eustis by conducting a series of studies, static tests and flight tests on the Bell and Sikorsky prototype helicopters.

Static tests have been performed on a "tool proof" airframe, to evaluate the performance of aircraft antenna systems designed for specific purposes and over a wide frequency range.

These tests were performed on an antenna test range and the aircraft was mounted on a test tower, dynamically positioned to permit measurements of antenna radiation patterns, input impedance, Voltage Standing Wave Ratio (VSWR),

Gain/efficiency, etc.

Assembling individual avionics systems requires an understanding of the way these units interact with each other and with the environment. The materials from which aircraft are built can have a major influence on how avionics are best installed, and how well they perform the functions they were designed for, particularly when the airframe is of a composite material.

AVRADA was tasked by the Aviation Systems Command (AVSCOM), to integrate a full complement of current avionics equipment, including antenna systems, into the ACAP aircraft.

With the help of the Naval Air Development Center (NADC) in Warminster, PA, a full scale analysis of various antenna systems installed on the Bell Tool Proof Article was conducted. Production prototype antenna systems that essentially meet military specification requirements when installed on Army aircraft were tested and evaluated.

The Bell Tool Proof Article was selected because it contained the same wire mesh as the flyable aircraft. The data is still being analyzed, but performance of the antennas tested was satisfactory. The lowest frequency used during these tests was 30 MHz.

ACAP is a major step forward in helicopter technology. The first application of composite airframes in the U.S. Army is expected to be the LHX family of rotary wing aircraft.

—Mrs. Bobbi C. Campbell  
Plans & Resource Mgmt.  
Division, AVRADA



Q-

What similar purchase  
have more than 12,000  
Army Aviators made in  
the past 15 years?

A-

They've purchased AAAA-endorsed flight pay insurance. As an active duty or or as a Reserve Component Army Aviator, don't you think you owe it to yourself to get the basic facts about this coverage which has returned more than \$2 million in lost flight pay to claimants?

All it costs is a stamp.

**LADD AGENCY, INC.**

1 CRESTWOOD ROAD, WESTPORT, CT 06880

Gentlemen:

Please forward me the pertinent details of the AAAA-endorsed flight pay insurance coverage.

- ☐ I am on flying status with a U.S. Army unit. ☐ AAAA member.  
☐ I am a student pilot undergoing Army flight training.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP \_\_\_\_\_

MY DATE OF BIRTH IS \_\_\_\_\_



# Awards and Honors

## AWARDS

### AAAA CHAPTER—SELECTED "AVIATION SOLDIER / NCO OF THE MONTH"

#### AUGUST 1986 —

**Numberg Chapter**  
PFC Raymond A. Weiss  
**Aviation Center Chapter**  
SSG Aaron Villalpando (NCO)  
SP4 James K. Piette (Soldier)

#### SEPTEMBER 1986 —

**Aviation Center Chapter**  
SGT Bradley L. Seltzer (NCO)  
PFC Jane M. Rawlings (Soldier)

## HONORS

### U.S. ARMY AVIATION CENTER FT. RUCKER, ALABAMA

\* Distinguished Graduate  
+ Honor Graduate

**AUG. 29, 1986 — Guest Speaker:** COL Moses Erkins, Chief, Combat Arms Division, USA MILPERCEN, Alexandria, Virginia.

**Officer RW Aviator Crs Class 86-8: \***  
2LTs Mark L. Holman, Ziad Haikal; +  
2LTs David C. Woods; Joe M. Hines;  
Christopher Corkery; Christopher Smith.

**Warrant Officer RW Aviator Class 86-7:**  
\* WO Stephen B. Brown; + WOs  
John R. Beidler; John L. Wetzel Jr.;  
John A. Brenner.

**AUG. 29, 1986 — Guest Speaker:** COL Charles L. Webb, Deputy Commander for Administration, USA Aeromedical Center, Ft. Rucker, AL.

**Warrant Officer Senior Crs Class 86-5:**  
\* CW3 Troy W. Carbaugh; + CW3s  
Wesley C. Wolf; Richard A. Coats; Roy  
L. Rogers; Jim F. Smithheiser

**SEPT. 5, 1986 — Guest Speaker:** COL Darryl A. Young, Director, Dir. of Logistics, USAAVNC, Ft. Rucker, Alabama.  
**Aviation WO Advanced Crs Class 86-8:**  
\* CW2 Darren S. Trumeter, Sr.;  
+ CW2s Joseph L. Irwin; Marion L. Danley; Gregory A. Rogers; Lilly N. Herring.

**SEPT. 10, 1986 — Guest Speaker:** COL ElRay Jenkins, Commander, USA Aeromedical Center, Ft. Rucker, Ala.  
**Warrant Officer Senior Crs Class 86-4:**  
CW4 John A. Kissel (class leader)

**SEPT. 12, 1986 — Guest Speaker:** MG

James C. Smith, Retired, Former Commander USAAVNC and Past Pres of the Army Aviation Association of America.  
**Officer RW Aviator Crs Class 86-10: \***  
2LT Michael D. Miscoe; + 2LTs Randolph R. Rotte, Jr.; David P. Keller; Charles J. Packard; Richard S. Damm.

# Command & Staff

**Brig. General William H. Forster**, as Program Manager, Advanced Attack Helicopter (APACHE), U.S. Army Materiel Command, St. Louis, Missouri.

**Brig. General Rhoss C. Lomax, Jr.**, as Chief of Staff, 5th U.S. Army, Ft. Sam Houston, TX.

**Brig. General Gerald B. McConnell**, as Assistant Chief of Staff for Plans and Policy, Allied Forces Southern Europe, Naples, Italy.

**Brig. General John H. Stanford**, as Deputy Commanding General, U.S. Army Aviation Systems Command, St. Louis, Missouri.

**Brig. General Rodney D. Wolfe**, as Assistant Commandant, U.S. Army Aviation Center, Ft. Rucker, AL.

**Colonel L. Fred Belcher**, as Senior Army Advisor, 807th Medical Brigade, Seagoville, TX.

**Colonel Rodney D. Bither**, as Commander, U.S. Army Plant Representative Office, McDonnell Douglas Helicopter Company, Mesa, AZ.

**Colonel Peter H. Carr**, as Commander, Aviation Brigade, 4th Infantry Division (Mechanized), Ft. Carson, CO.

**Colonel Albert E. Hervey**, as Commander, U.S. Army Safety Center, Ft. Rucker, AL.

**Colonel Phillip W. Gaskins**, as Commander, Aviation Brigade, 6th Infantry Division (Light), Ft. Wainwright, AK.

**Colonel Robert A. Goodbary**, as Military Assistant to the Deputy Secretary of Defense, Washington, D.C.

**Colonel Howard D. Hill**, as Executive Officer, Army Reserve Forces Policy Committee (HQDA) Washington, D.C.

**Colonel Gerald T. Hipp**, as Deputy Director, Directorate for Advanced Systems, U.S. Army Aviation Systems Command, St. Louis, Missouri.

**Colonel James P. Hunt**, as Commander, Aviation Brigade, 8th Infantry Division (Mechanized), APO NY 09185.

**Colonel Joseph W. Kuppich, Jr.**, as Commander, Aviation Brigade, 24th Infantry Division (Mechanized), Hunter Army Airfield, GA.

**Colonel Richard J. Lundford, Jr.**, as Project Manager, Training Devices, Naval Training Center, Orlando, FL.

**Colonel Ronald F. Massey**, as Dep. Chief of Staff, VII Corps, APO NY 09107.

**Colonel Melvin J. McEldore**, as Commander, U.S. Army Air Traffic Control Activity, Ft. Rucker, AL.

**Colonel William D. O'Hara**, as Deputy Commandant, U.S. Army Aviation Logistics School, Ft. Eustis, VA.

**Colonel Bennett G. Owens, Jr.**, as Commander, USAMEDDAC and U.S. Army Hospital, Vincenza, Italy.

**Colonel Norman L. St. Peter**, as Commander, U.S. Army Readiness Command, Aviation Officer, MacDill AFB, FL.

**Colonel Dennis P. Vassey**, as Assistant Commandant, U.S. Army Aviation Logistics School, Ft. Eustis, VA.

**Colonel Cary E. Williams**, as Director of Resource Management, U.S. Army Aviation Center, Ft. Rucker, AL.



**With Turbomach on board,  
the world is your airfield.**



You're dropping into a landing area and you know you'll have to wait—and wait. But when the word comes to leave, they mean now!

A Turbomach Titan gives helicopters that kind of self-sufficiency. The power to stand by for hours without putting those hours on the main engines.

Of course when the nearest start cart is twenty ridges away, APU reliability is everything. So we build it in every step of the way,

And now that we are part of Sundstrand, your aircraft have the added support of a worldwide service network. One more reason to specify the reliable self-sufficiency of a Turbomach APU.

**Sundstrand Turbomach**

Advanced Technology Group  
Sundstrand Corporation

4400 BLUFFTON RD., P.O. BOX 82757 • SAN DIEGO, CA 92138-5757 • PHONE (619) 569-4699  
© 1995 SUNDSTRAND CORP.



# Industry

## Sikorsky's X-Wing: A trip into the future of aviation

STRATFORD, CT — The DARPA/NASA/Sikorsky X-Wing Rotor Systems Research Aircraft which rolled out at Sikorsky's Stratford, CT plant on Aug. 19 features aeronautical breakthroughs which were considered near-impossibilities only a few years ago.

Now, advances in three areas — composites, computers, and circulation control aerodynamics — are enabling us to develop an aircraft which will hover with the efficiency and maneuverability of a helicopter and cruise with the high speed of fixed-wing jet aircraft.

Future X-Wing aircraft will be able to take off in rotary wing mode, then when traveling at about 200 knots, stop the rotor in an X-shaped (as viewed from above) fixed wing.

The testbed aircraft for the X-Wing rotor/wing system is one of two existing NASA/Army Rotor Systems Research Aircraft (RSRA), built by Sikorsky

in the 1970s to test advanced rotor concepts.

With its 45-foot variable incidence fixed-wing which can support the full weight of the aircraft, the RSRA will allow flight testing to begin with minimal lift on the X-Wing. As testing progresses, less load will be placed on the fixed-wing and more on the X-Wing until it reaches full design lift.



**A Report  
by  
Dr.  
Kenneth  
M.  
Rosen**

Two TF-34 turboprops will provide thrust for fixed wing flight and two T-58 turboshaft engines will power the rotor/wing system.

Advanced composite materials have been instrumental in X-Wing development. Because the rotor/wing must function as both a helicopter-like rotor and as a fixed-wing, flying into the airstream at 45-degree angles

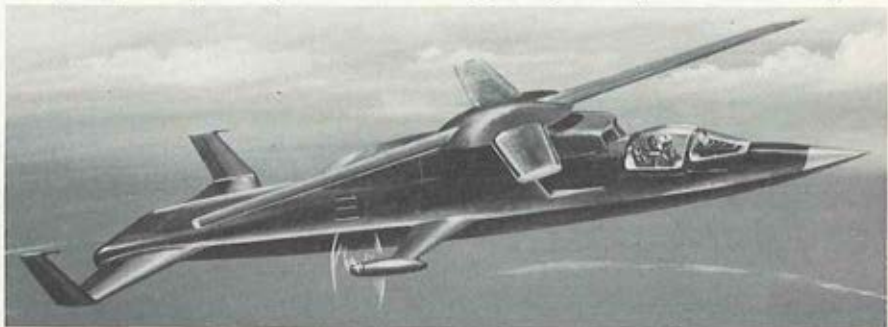
sweeping forward and aft, the blades of the rotor/wing must have great rigidity.

Each blade consists of a hollow sleeve bonded to a graphite I-beam which runs about one-third the length of the blade. Sleeve and I-beam are fastened to a bearingless titanium hub. Although extremely rigid flapwise and edgewise, the I-beam is torsionally flexible and can be twisted mechanically to provide collective pitch control.

X-Wing's pneumodynamic system consists of a compressor, control valves, actuators, and ducts to the leading and trailing edges of the blades. The compressor feeds air into a plenum under pressure, where valves direct the air through hollow leading and trailing edges and out over the curved Coanda surfaces, providing circulation control lift.

The most critical tasks of the pneumodynamic system are to provide lift and to control vibration while stopping or starting

**BELOW:** An artist's concept of the X-Wing Turboprop. Twin propellers provide forward thrust while also serving as anti-torque devices while in the rotary mode.





the rotor/wing. In addition, the pneumodynamic system will take the place of mechanical cyclic control devices in rotary wing operation by changing lift with blowing instead of changing the blade pitch mechanically.

Control of the collective pitch will be available in the same manner, as well as by mechanical means. Variable blowing also will substitute for flaps and ailerons in fixed-wing operation.

The flight control system for the X-Wing RSRA is a full-authority, quad-redundant, digital-based system which controls the pneumodynamic, load control, and rotor/wing stop/start mechanisms, while performing traditional flight control functions with fly-by-wire technology.

Because the work of this system is far more comprehensive than standard flight control systems it is referred to as a Vehicle Management System (VMS).

The VMS's flight control computer system is one of the most powerful ever built, and allows for continued flight



even with as many as three system failures.

As an added safety measure, the RSRA is the first rotary wing craft to have a blade severance and crew escape capability. Should it become necessary, the flight test crew could pyrotechnically sever the rotor/wing blades near the hub and fly the aircraft home on the fixed wing, or eject.

The X-Wing RSRA begins its flight test program this fall

**ABOVE:** The DARPA/NASA/Sikorsky X-Wing makes its first public appearance at Sikorsky's Stratford, CT plant on August 19th.

at the NASA Ames-Dryden Flight Test Facility at Edwards AFB, CA. The DARPA/NASA-Sikorsky X-Wing team is eagerly looking forward to ushering in a new era of flight with X-Wing — the shape of wings to come.

—Dr. Kenneth M. Rosen  
Dir., Advanced V/STOL  
Programs, Sikorsky Acft.

### The Coanda Effect

Dr. Henri Coanda, a Romanian-born scientist, discovered the effect while conducting experiments in 1910.

The effect, simply stated, allows that streams of air forced over a curved aerodynamic surface will follow the contour of that surface, entrain the surrounding air, and provide lift.

Scientists theorized that the Coanda effect could be used to make cylindrical-shaped rotors provide lift for fixed-wing

aircraft. This design was later modified to a more conventional looking wing-like cross section.

In 1976, Robert M. Williams of DARPA introduced the concept of the X-shaped wing which would employ circulation control aerodynamics on one rotor/wing, thus eliminating the need for two separate means of lift.

In Feb. 1983, after extensive studies, DARPA and NASA jointly awarded a development contract to Sikorsky.

# Operations

## The 210th Combat Aviation Brigade: The Bolivian connection

PANAMA — Few aviation organizations have the variety of missions, environmental conditions and frequency of deployments as does the 210th Combat Aviation Battalion, stationed at Ft. Kobbe, Panama.

As the only permanently assigned Army Aviation unit in Central or South America, it is called upon to perform many unique and challenging roles throughout the region.

The battalion is part of the 193d Infantry Brigade and includes five subordinate units, each with its own unique mission: HHB (2 C-12, 1 U-21), the 114th CSAC (15UH-60), 320th GSAC (14 UH-1, 8 OH-58, 8 CH-47), 590th TACM (1 UH-60), and 214th Med Det (6 UH-60).

This 534-man battalion with its 55 aircraft of six different types provides aviation support to both the Brigade and to the U.S. Southern Command (SOUTHCAM).

The 193d Infantry Brigade is unique in itself, having eleven battalions, no two of which alike. These battalions each play a special role in the overall missions of the brigade and SOUTHCAM throughout Central and South America.

For example, the 536th Engineer Battalion has been tasked with three major road building/repair missions in both Panama and Costa Rica throughout the past year. Aviation support to the 536th has included

TDY on-site aircraft to haul heavy construction materials and equipment, personnel, and medical evacuation of injured.

The Jungle Operations Training Center program of instruction includes air assault operations, rappelling and stabo. Both UH-60's and UH-1's share these training opportunities over the combined jungle and water environments. The 2187th Infantry Battalion and 3/7 Special Forces use the 210th CAB to conduct airborne jumps with UH-1's and CH-47's. Artillery transport using CH-47's is conducted with B/22 FA.



**A Report  
by  
Lieutenant  
Colonel  
Michael H.  
Abbott**

By now you're saying "So what, everybody does these things!" And so they do. The mission of SOUTHCAM and its use of aviation is really what puts the 210th to the test and gives AAAA reason for naming her Outstanding Aviation Unit of the Year for 1974, 1984 & 1985.

A major SOUTHCAM mission is to enhance US relations with our Latin neighbors. One means of doing this is through civic action programs such as Medical Readiness Training exercises (MEDRETE) in which teams of doctors, dentists, and veterinarians are flown to small villages, islands and other remote locations for several

days to meet local medical needs.

These are currently being conducted on a monthly basis and may be of a small scale requiring just one UH-1 or UH-60 or may necessitate upwards of two CH-47's. Other civic action programs may involve the engineers in a variety of construction projects using aviation support.

Combined joint military training exercises are another means of providing positive interface in the southern hemisphere. The 210th, along with other Army, Air Force and Navy units, has participated in such exercises in Bolivia, Ecuador and Honduras thus far this year.

Additional exercises scheduled for Peru and Colombia were planned but later cancelled. Interchange between our pilots and those of the host countries provides important and long lasting influence.

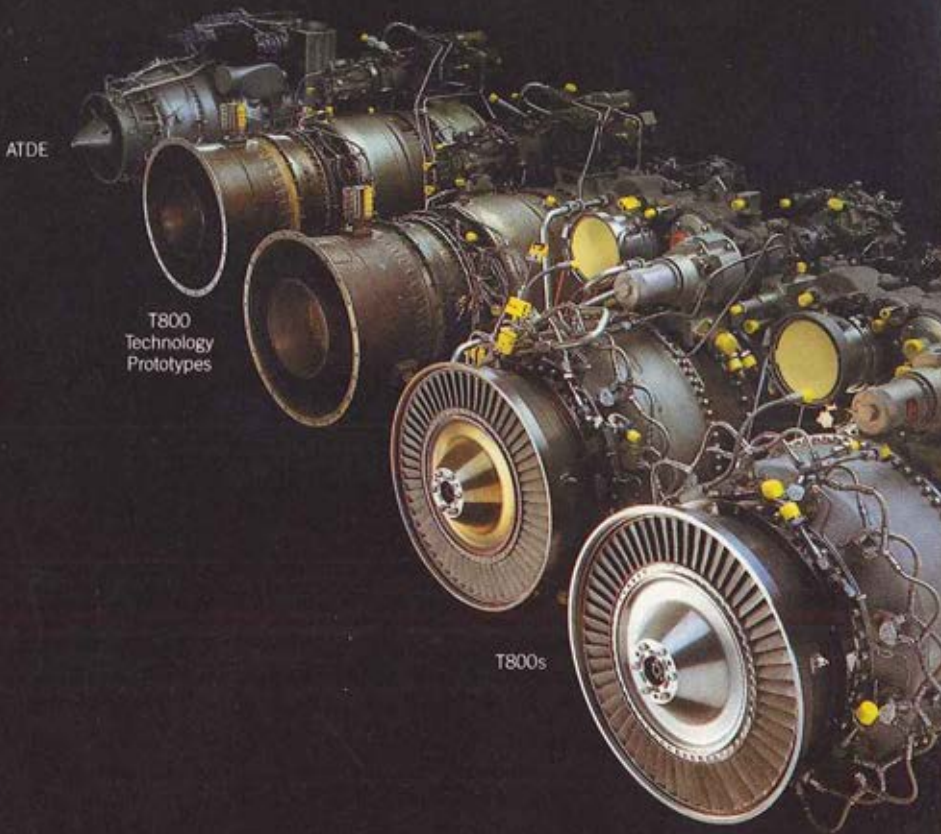
Kindle Liberty is a combined joint training exercise conducted in a different area each year within Panama and includes both Panamanian and U.S. forces of each of the services. Kindle Liberty '86 resulted in over 1100 flying hours by the combined support of the 210th CAB and B/82d Aviation Battalion from Ft. Bragg.

Disaster relief operations are no stranger to the 210th. Earthquakes and volcanic eruptions have led to JCS/SOUTHCAM - directed Army aviation deployments to provide help.

The most recent of these involved eight UH-60's (two were



## THE LOOK OF LHX LEADERSHIP.



We have a history of being ahead.

We formed the first LHX team, combining experience from the U.S. Army's ATDE Program with the latest in F109 technology.

We ran and flew the first LHX demonstrator engine. Flew the first LHX candidate full-authority digital electronic

control. Tested the first two T800 technology prototypes. Demonstrated oil-loss and sand ingestion capability. And now, we're the first to run the T800 at rated power. Ahead of schedule.

We're building upon an impressive base. 12,000 component/rig test hours and 8,000 hours of T800 power class testing since ATDE. Infusing

new technology every step of the way.

LHTEC. Demonstrating a commitment that shows.

**LHTEC**

Allison & Garrett  
America's LHX Propulsion Team.



# C-17

*"C" as in  
close*



## **NEW AIRLIFTER DESIGNED TO FLY DIRECT TO THE FRONT.**

The C-17, now in development, is designed to fly military cargo routinely from the U.S. directly into combat zone airstrips as short as 3,000 feet.

With this short-field capability, plus exceptional ground maneuverability, all Army and Marine Corps battle gear—the biggest tanks, artillery pieces, even helicopters—will move in a rapid, sustained flow right to the fight.

The C-17—it's the fastest way to deliver the goods.

**MCDONNELL  
DOUGLAS**



## Operations

Medevac) and four CH-47's in a self-deployment to Colombia last November and December when a volcano eruption literally wiped out the town of Armero and its 23,000 inhabitants.

Our helicopters rescued people stuck in the mud slide, transported survivors to field medical treatment sites, carried food, water and medical supplies to mountain villages isolated by the eruption and assisted the U.S. Geological Survey team in efforts to install seismographic equipment around the mountain.

More than one UH-60 crew found out from personal experience that their aircraft still had hover-in-ground-effect power when landing on a 17,000 foot mountain top!

Support to the Navy has become a frequent event for 210th crews. During the past 12 months, UH-60, UH-1 and CH-47 crews have trained on and provided support to the aircraft carrier USS Eisenhower and battleship USS Iowa.

This past July opened a new horizon to the 210th when it was tasked to assist Bolivian police forces in drug interdiction operations within Bolivia. Six UH-60s were deployed via C-5 to provide air transportation to the Bolivian police in conjunction with the U.S. Drug Enforcement Agency.

Locations of suspected cocaine laboratories were developed by a variety of intelligence means. Flights of two or three UH-60s would strike one or more such targets per day. While a number of laboratories were actually discovered, the mere presence of U.S. Military forces in the region caused a severe slowdown in cocaine production and export from Bolivia.

As of this writing, anti-drug operations are still continuing. An aviation assignment to Panama is more than just a PCS. It's an international adventure.

—LTC Michael H. Abbott  
Commander, 210th  
Combat Aviation Battalion



### WANTED: APACHE PILOTS!

The United States Army needs operators for the most advanced Attack Helicopter in the world, the AH-64 APACHE.

Highly motivated AH-1S Aviation Warrant Officers in the career status (waiverable with command recommendation and MILPERCEN approval) should submit DA Form 4187 to:

USA MILPERCEN  
ATTN: DAPC-OPW-AV  
200 Stovall Street  
Alexandria, VA 22332-0400

Or contact CW4 Euel Henry,  
Autovon 221-7835/7836.

BELOW: A UH-60A BLACK HAWK of the 210th CAB flies past the Bridge of the Americas while crossing over the Panama Canal.





# Personnel

## The Warrant Officer Division: MILPERCEN fields the pilots

ALEXANDRIA, VA — Maintaining an active duty aviation warrant officer force of almost 7,000 people, moving them to meet requirements worldwide, providing them proper professional development, and satisfying the innumerable personnel actions they generate is the routine - but never dull - job of Warrant Officer Division.

In the year since I last reported in *Army Aviation*, things have been far from routine.

Hopefully we have done a creditable job in meeting our routine responsibilities, because our effectiveness has a direct and measurable impact on the combat readiness of the Army today.

Fielding the AH-64 APACHE attack helicopter is among the most important tasks facing the Army in 1986. By print date two battalions at Ft. Hood will have converted and Task Force 1-112 at Ft. Rucker will have activated.

Many more battalions are scheduled for conversion or activation in the coming years. Each battalion will have 46 warrant officers of which 35 must have APACHE skills.

Getting those skills (aircraft qualification and instructor, armament, and maintenance training) in time to meet activation dates is a tremendous task. The most inhibiting factor is to schedule AH-1 COBRA aviators through the various

training courses (months before actual activation dates) while trying to avoid an unacceptable impact on the missions of the COBRA units. Battalions must continue their missions until 90 days before APACHE conversion.



**A Report  
by  
Colonel  
Joel  
H.  
Hinson**

Much of the required training has to be programmed far greater than 90 days prior to conversion. MILPERCEN, III Corps, the Apache Training Brigade, and converting battalion personnel managers have jointly pieced together a rather complex puzzle that accomplishes the required training but does not render the COBRA units incapable of mission accomplishment.

Most, but not all decisions have been universally applauded. Most importantly, qualified aviation warrant officers are being made available for this crucially important fielding effort.

Although UH-60 BLACK HAWKS have been in the Army for several years, sustaining the using units with qualified operators is a tremendous challenge. The lengthy aircraft grounding in 1985 and the shorter one in 1986 made the task even more difficult.

Lost training seats effective-

ly cost the warrant officer corps 300 BLACK HAWK aviators by denying us the ability to train new aviators to replace losses and meet authorization increases. Overcoming such an impact is a difficult chore, but we do see a ray of light at tunnel's end.

Our major effort, until we overcome, the shortages is to balance the requirements of the training base to produce new pilots and instructors with the requirements of using units with critical, real world missions. APACHE and BLACK HAWK have been the most visible of the force modernization programs with major personnel support impacts. There are others.

The buildup of the CH-47D aviator inventory continues. AHIP requirements are rapidly increasing. Unit moves are occurring and there are two new divisions to support. Organizational changes caused by new authorization documents continue. All of these events will certainly enhance Army Aviation's contribution to the combined arms team and WO Division is proud to be a part of it. We are committed to the best support possible.

Managing the aviation warrant officer force is a tremendous task requiring a great deal of knowledge, ability, and willingness for old fashioned hard work. The WO Division will continue to meet the challenges in fine fashion.

—COL Joel H. Hinson  
Chief, Warrant Officer  
Division, MILPERCEN

# R & D

## MAMP: The key to long-range Army R & D planning

ST. LOUIS, MO — "People don't plan to fail, they just fail to plan."

It is amazing how the truth of this old and well worn quotation continues to plague the R&D world.

In the AVSCOM Directorate for Advanced Systems, long-range planning is our lifeblood. Due to uncertainties in the nature of the future threat, solid, long-range planning is necessary to yield a well developed and flexible technology base.

Experts feel it is primarily through technological superiority that an advantage can be maintained over a numerically superior threat force. Only through a program of close, continuing coordination between the combat and materiel developers can this planning process achieve the desired results.

The Mission Area Materiel Plan (MAMP) process was jointly established in 1984 by AMC and TRADOC to systematically address the user's deficiencies and propose materiel solutions in a timely manner.

In order to understand how the MAMP process fits into the Army's long-range planning, it is necessary to provide a little background on our planning evolution.

Army Mission Area Analysis (MAA) is a series of integrated

studies which assess the capabilities of Army forces to successfully accomplish tasks on the AirLand Battlefield of the future.

The MAAs identify deficiencies in each of the TRADOC Mission Areas (MA), evaluate technological opportunities, and propose corrective actions in the areas of doctrine, organization, training, and materiel. The completed aviation MAA is submitted by the Aviation Center and School through the integrating center to TRADOC.



**A Report  
by  
Gary  
L.  
Smith**

From all the MAA data submitted, a prioritized list of deficiencies on the tactical battlefield will evolve and form the Battlefield Development Plan (BDP). The MAMP process is geared to respond to the BDP deficiencies.

Before suggesting the materiel fixes, the TRADOC MA proponent identifies possible doctrinal, organizational, and training solutions to these deficiencies. The 1986 MAMP process constitutes a major overhaul of the initial year.

First, the basic analysis was divided among the thirteen TRADOC mission areas instead of the seven DA mission areas. Secondly, the 1986

MAMP has a requirement for a multi-appropriation analysis: RDT&E, APA, O&MA, and Military Construction Account (MCA).

The planning process has been split into the Budget Review in the February-June time frame, and the Program Review in the July-September time frame.

The MAMP-B Review (Budget) concentrates principally on the analysis of two years: Budget and Program. The purpose is the final verification of the Budget year submission (1988) and fine-tuning of the Program year projections.

The MAMP-P Review (Program) concentrates principally on the analysis of the subsequent years, the program Objective Memorandum (POM) years (1989-1993) and the Extended Planning Annex (EPA) period (10 years following the POM).

The purpose is to verify the prioritization in accordance with the deficiency analyses and the executability of funded programs in accordance with MA strategies.

A single automation package is also being implemented for all mission areas accompanied by uniform guidance; standardization can thus be achieved which is essential for cross mission area analysis and integration of all mission area data.

Deficiency analysis is a never-ending exchange of information between the TRADOC proponents and the AMC major subordinate commands





## **HOW TO CUT EIGHT HOURS OF MISSION PLANNING DOWN TO 30 MINUTES.**



Every military pilot knows the drill: The charts, checkpoints, weather, fuel calculations, defensive system analysis. And especially the hours it takes.

Now there's a better way. Our computer-based Military Aircraft Planning System lets aircrews plan every aspect of a combat or training mission anywhere in the world in a fraction of the time previously required.

The reference data needed is in the computer. Interactive color graphics show basic geography with contours and population centers; navigation aids, corridors and checkpoints; even hostile defenses with radar terrain masks. As the mission planner develops the route, he gets a comprehensive analysis of his aircraft's performance, necessary navigation information, and an evaluation of the plane's ability to penetrate. Within minutes he can revise the route to minimize exposure to hostile defenses.

The system not only cuts hours off planning time, it can cut attrition rates as well. Operational simulations in Europe predict a 31% increase in mission success with the system.

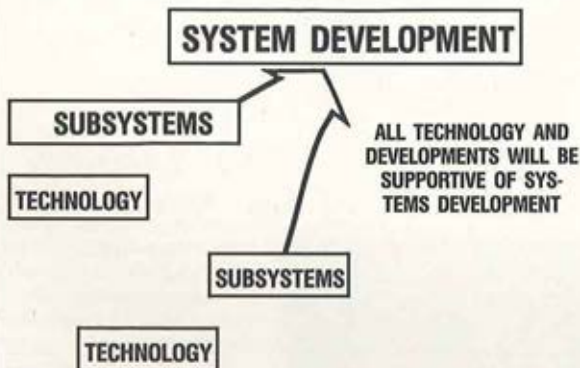
The Military Aircraft Planning System. We've needed it for a long time, and now it's here. It's ready to improve our training and our ability to fight and win.

### **MCDONNELL DOUGLAS**

McDonnell Douglas Astronautics Company, Mission Planning Systems,  
P.O. Box 516, St. Louis, Missouri 63166, Tel: 314-233-0478

## TIME

86 87 88 89 90 91 92



and laboratories. Perceived deficiencies are identified to the materiel developer early on in the MAA process.

The deficiencies, grouped by MA, are distributed to the materiel and combat developers. The materiel developer identifies proposed solutions immediately after receipt of the deficiency statements.

This process requires periodic review/update since there may be many proposed solutions and an evaluation must be made of the value of each system in solving the deficiency. The result of the analysis will be deficiency satisfaction, the joint determination as to the percentage of the deficiency resolved.

This planning process is the key to aviation's future. The MAMP will insure that technology and systems are developed to meet field requirements,

and, at the same time, eliminate costly unwarranted duplication and proliferation of technology for which there is no home.

The schedule shown here shows how technology and subsystem developments have to be aligned to support major systems developments. Even though the aviation developer and user were always well coordinated, this process ties us together even more closely.

The process insures that our R&D efforts will mature in time for incorporation into our future developments, such as the Advanced Cargo Aircraft and the Future Attack Aircraft.

Army Aviation's vigorous efforts in research and development will make these systems a reality.

—Gary L. Smith,  
Director of Advanced  
Systems, AVSCOM

## Propulsion Lab tests new engine designs for economy

CLEVELAND, OH — Now that AVSCOM has selected the contractor teams (AVCO-Pratt & Whitney and Allison-Garrett) to develop the 1200 horsepower T800 engine for the LHX helicopter, the latest propulsion technology is in place. The competing designs are derivatives of earlier Advanced Technology Demonstrator Engine (ATDE) programs conducted by the Aviation Applied Technology Directorate. These demonstrators have proved their value by minimizing risks in design, performance, and integration before committing resources to costly full-scale development and qualification.



A Report  
by  
John  
Acurio

Similar programs, started in the late 1960s, gave us the General Electric T700 engine for the BLACK HAWK and APACHE. More recently, the Modern Technology Engine (MTE) at 5000 horsepower, was pursued in a joint Army-Navy program with GE and Pratt & Whitney.

With these engines available, the Army has established a range of single and multiple engine options that satisfy near-term needs.



Beyond this decade, further leaps in technology (Propulsion XXI) are in store for engines and transmissions. From the early 1950s, enormous gains have been made in turbine engine performance and weight, but the amount left to be gained is diminishing.

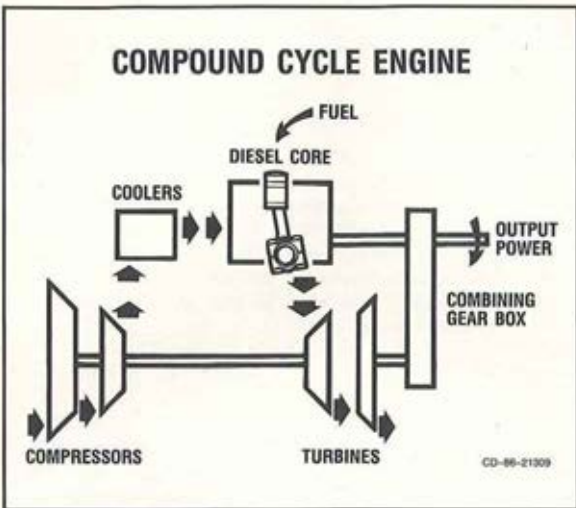
From here on, programs must emphasize new metallic and non-metallic high-temperature materials, and we are considering other forms of propulsion, as well.

One option for the future might be the Compound Cycle Engine (CCE). The concept is not new, having been demonstrated by the British in 1952, at a time when turbine engines began rapid acceptance and growth. Called the Napier Nomad, and it has remained the most fuel efficient aircraft engine ever built.

For the last three years, we have been working on our own version of a CCE. Although it will be heavier than its gas turbine counterpart, its fuel consumption will be at least 30% lower — a huge gain!

For missions that exceed an operating time of one hour, the difference in engine weight will be more than compensated by the fuel savings, opening opportunities for a wide range of applications.

As shown in the schematic, familiar features of a gas turbine (compressor and turbine) are retained, and in place of the combustor is a small, high-speed Diesel core, whose output is combined with that of the turbomachinery through compound gearing, hence the



name, Compound Cycle Engine.

To establish it as an option, emphasis is being directed toward the reciprocating components for demonstrating a core of flight-weight design.

Another major program is the Advanced Rotorcraft Transmission (ART) technology demonstrator, aimed at providing industry with an opportunity to incorporate many component advances (from government laboratories and industry IR&D) into a design that will extend service life while reducing noise (-10dB) and weight (-25%).

We are breaking with tradition, and we recognize that the airframers need more lead time on new transmissions to run the hours and make the fixes before committing their new approaches to a design.

In the past, allotted resources have not reflected the

same early attention given to engines; therefore, the gains have been slow to materialize.

One issue is that each airframer's transmission is so vehicle specific that one does not fit all, and the cost for a technology demonstrator tailored to each new helicopter model would be prohibitive.

Instead, we have chosen to pursue a generic course that will permit all of the majors to incorporate new concepts in a next-generation design, but they must share the cost to reach the goals.

The path ahead for Propulsion XXI is intended to jump past evolutionary development. At a minimum, we will expand the choice of options available for the next round of new systems to follow LHX.

—John Acurio  
Director, Propulsion  
Directorate, ARTA

# Reserve Component

## Centralized training: The Eastern ARNG Aviation Training Site

FT. INDIANTOWN GAP, PA — Since July 1983, the Eastern Army National Guard Aviation Training Site (EAATS) has been conducting Department of Army-directed individual aircrew member training in aircraft systems that are unique to, or found primarily in the Army National Guard (ARNG).

EAATS was established to remove a substantial amount of individual training being done by ARNG Aviation Units throughout CONUS, Puerto Rico, and the Virgin Islands.

All of the aviation flight programs conducted at EAATS are courses that have been approved by the National Guard Bureau (NGB) and reviewed by the Aviation Center at Ft. Rucker. Rucker's Directorate of Evaluations and Standardization (DES) provides quality assurance by having a NGB-staffed branch co-located at the EAATS.

Flight evaluations for instructor pilot courses are conducted by the DES. They also conduct periodic evaluations of all EAATS instructor pilots.

The EAATS is organized into a Command Section and five branches with a total of 15 officers, 31 Warrant Officers, and 26 enlisted personnel. EAATS is entirely staffed by personnel in an Active Guard/Reserve (AGR) military status.

It's branches are Operations and Training, Medical Services, Rotary Wing, Fixed Wing and

Simulator and Instrument.

During FY 1986, the EAATS Rotary Wing Branch conducted courses in:

- UH-1 Terrier Flight Qualification, Night Vision Goggle (NVG) aviator and NVG instructor pilot qualifications.
- OH-58 aviator qualifications, terrain flight qualification, aeroscout, NVG aviator and instructor pilot qualifications.



**A Report  
by  
Colonel  
Kenneth  
D.  
Rhoades**

- OH-6 aviator qualification, instructor pilot, and aeroscout qualification.
- CH-54 aviator qualification, and instructor pilot.

EAATS' Fixed Wing Branch during FY 1986 conducted aviator qualification courses in the U-21 and U-8, and instructor pilot courses in the U-3 and U-8.

A UH-1H Flight simulator became operational at Ft. Indiantown Gap in October 1977 to support all aviators within 200 miles of the facility, the only one operated by the ARNG.

In FY 1986, EAATS' Flight Simulator & Instrument Branch conducted courses in rotary wing instrument qualification, instrument flight examiner refresher, and instrument flight examiner preparatory in the UH-1H FS. The EAATS' Flight Simulator is utilized for 7700 pilot hours per year, and in FY

1988, an AH-1 Flight Weapons Simulator will come on line at the site for formal courses and regional support for more than 400 COBRA aviators.

Formal flight courses for 493 students were conducted by EAATS in FY86. 371 students graduated from the ARNG Aviation Mishap Prevention Orientation Course. This course, developed by the NGB Aviation Division's Safety Branch and conducted by EAATS, is designed to increase officers and NCO's awareness of safety procedures and describes the primary safety responsibility of the individual.

The NGB has positioned a second ARNG Aviation Training Site (Western) at Marana, AZ, and will begin training attack and observation helicopter pilots in FY 1987.

Combining Ft. Rucker's Aviation Center, two ARNG Training Sites, and 87 Army Aviation Support Facilities located throughout CONUS, Puerto Rico and the Virgin Islands, U.S. Army Aviation mission training has reached a high state combat readiness.

The ARNG, with 5,200 aviators in 172 units flying 300,000 hours in 15 different aircraft annually, makes up a significant segment of the total Army's combat power. Working together with the active components, individual states, territories and the District of Columbia, the ARNG Aviation Training Sites are truly training for excellence.

—COL Kenneth D. Rhoades  
Cdr, Eastern ARNG  
Aviation Training Site



# Survivability

## Aviation Life Support Equipment on the move

ST. LOUIS, MO — Aviation Life Support Equipment (ALSE) is something an aviator hopes he/she will never have to use. It is equipment that is needed in those situations in which you hope you never find yourself. It is equipment that's needed after all other systems have failed and you're in an emergency situation.

ALSE must not fail and has to work right the very first time. If it does not, injury or loss of life will most likely result. That is why ALSE is so critical to an aviator and why it must be cared for properly.

At our first ALSE symposium, COL (P) Robert Stewart, Army Astronaut, gave an interesting, informative talk on a typical space mission. He emphasized the importance of life support equipment in that program, and related that importance to Army Aviation life support equipment.

COL Stewart emphasized the importance of good engineering design in ALSE. A piece of ALSE must provide protection, be as comfortable as possible, and interface well in which the aviation system it will be used. If it does this, it will save your life (when properly maintained and used).

MG Richard E. Stephenson, Commanding General of AVSCOM made the welcoming address of the ALSE sym-

posium, and he too emphasized the importance of ALSE. He pledged his support to this critical area in aviation, pointing out the need to be able to operate Army helicopters in all conditions on the integrated battlefield.

A 15 million dollar aircraft is of no value if the crew members are not protected to operate that system. A chemical/biological (CB) environment or hazards such as lasers, are a reality on the battlefield of tomorrow.



**A Report  
by  
Lieutenant  
Colonel  
Dick  
Griffin**

MG Stephenson's challenge to AVSCOM is "Think War". By this he means we all must do our jobs to insure that our aviators are ready to go to war.

That is where the ALSE Product Manager's Office fits into the picture. Our R & D Division, headed by Dick Bee, develops protective systems to allow aviators to operate in CB and other conditions on the battlefield. The most significant item recently developed is the XM-43 CB protective mask. The mask was developed by the Chemical Research Development Engineering Center (CRDEC) and ALSE Research and Development Division specifically to interface with the

AH-64 APACHE Attack Helicopter.

This mask will do that and much more. It is much more comfortable than other masks and provides higher levels of protection because of its blown air design. It has done so well throughout its testing and been so well accepted by aviators that it has been designated to become the general aviator CB mask.

We have several other systems in various stages of development. We are working on a new helmet system (HGU-56) to replace the SPH-4. This helmet will be lighter, provide more crash protection, provide laser and flashblindness protection and be much more comfortable.

There is also the new CB ensemble we have been working on with the Natick Research Development Engineering Center (NRDEC). It consists of the new Aviator Uniform Integrated Battlefield (AUIB) CB flight suit, CB gloves and CB boots.

This CB ensemble, with the XM-43, will be used with the microclimatic cooling vest. The microclimatic cooling will eliminate heat stress and allow operations in CB environments for extended periods. We are looking forward to getting these systems and others fielded as soon as possible.

Our Logistics Readiness Division headed by A.B.C. Davis, Jr., is working with our R & D Division to insure logistic support of newly fielded systems. (ALSE — Cont. on Page 48)

# Test & Evaluation

## Not waiting for the failure: USAAVNDA acid-tests equipment

FT. RUCKER, AL — Just what we need — another acronym. FSP (Flight Safety Parts) will become increasingly familiar to those associated with Army Aviation, especially those in the development community.

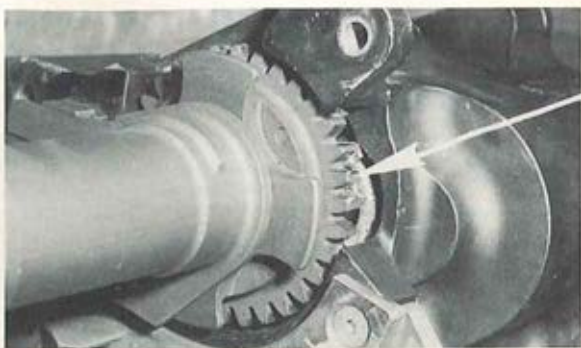
"We can't wait for an aircraft to crash and kill a lot of people to find out a part did not achieve its calculated service life."

With these words, the Vice Chief of Staff of the Army initiated a new safety and quality control program for Army Aviation. AVSCOM has the responsibility to carry out this program; however, the U.S. Army Aviation Development Test Activity (USAAVNDA), with its unique capabilities, has a significant role to play in program execution.



**A Report  
by  
Colonel  
Lawrence  
L.  
Karjala**

The first step initiated by AVSCOM was to identify each component on Army aircraft whose failure could result in catastrophic consequences. AVSCOM accomplished this in a coordinated effort between the PM's and their prime aircraft manufacturers.



Critical parts have been identified for each aircraft expected to be in the Army inventory in the 1990's. These lists are not locked in concrete, and new critical parts will be added or deleted as experience and analysis dictate.

The AVSCOM flight safety parts surveillance program takes on a multi-faceted approach. At established time-in-service intervals, FSP will be drawn from various field units experiencing a wide range of climatological and operational conditions.

These parts will then be analyzed through a variety of procedures appropriate to the specific FSP in question: tear-down and visual inspection, other nondestructive inspections, destructive inspections, and fatigue testing (to determine remaining service life).

The USAAVNDA has historically conducted reliability and logistical evaluations for aircraft both prior to and following system fielding. USAAVNDA testing typically follows an accelerated flying

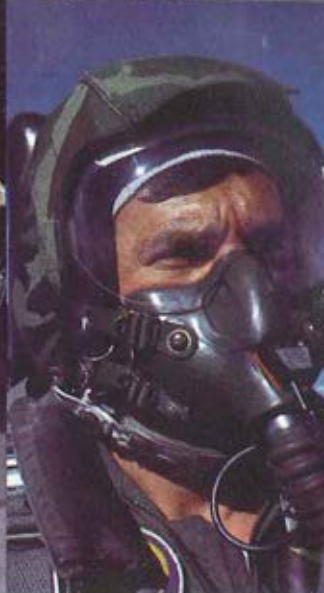
**ABOVE:** An example of LTF Testing Results. Note the sheared teeth on this AH-64A index timing gear. Procedures were corrected prior to fielding.

schedule which causes the test aircraft to lead the fleet in flight-time and experience.

This concentrated flight schedule is not simply a matter of "boring holes in the sky"; specific profiles are flown to replicate as closely as possible actual field use. Specific percentages of total time are flown at maximum gross weight; NOE; cross country, hover OGE and IGE; with internal and sling loads; all mission equipment operating; weapons firing and so on.

Lead-the-Fleet (LTF) testing, especially on early production aircraft, historically has identified problems early, usually before they manifest themselves in the fielded fleet. This allows PM's to make appropriate modifications to future production aircraft, buy more (or fewer) spares than originally planned, or develop new operating procedures. LTF testing results can significantly re-





The Collins CP-1516/ASQ Automatic Target Handoff System (ATHS) helps ensure clear, quick, C<sup>3</sup>I communications. It facilitates air/air and air/ground interoperability, and provides target steering cues on HUDs or CRT displays.

Instead of vulnerable voice communications, Collins ATHS uses digital data bursts to minimize jamming and to reduce enemy detection while speeding the transfer of accurate battle information.

The system uses any MIL-STD-1553B or ARINC 429 transceiver to resolve target location and exchange target information between force elements. It's totally transparent to the system architecture.

## NEVER SAY 'SAY AGAIN' AGAIN. COLLINS ATHS.



ATHS provides data for such HUD symbols as target I.D., range and steerpoint.

Now flying on U.S. Army OH-58D and AH-64s, the 10 lb. Collins ATHS can be easily integrated into aircraft and ground vehicles. And it's interoperable with TACFIRE and the Battery Computer System.

For more information contact: Collins Government Avionics Division, Rockwell International, Cedar Rapids, Iowa 52498. (319) 395-2208. Telex 464-421 COLLENGR CDR.

**COLLINS AVIONICS**



**Rockwell  
International**

...where science gets down to business

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

duce life-cycle operating costs and increase safety.

Additionally, LTF testing is valuable for new/modified major aircraft components or systems such as ESSS for the UH-60, composite main rotor blades for the UH-1, etc.

The USAAVNDA currently has Lead-the-Fleet RAM/Log evaluations on-going for the CH-47D and AH-64A. The AMC Commander recently directed that LTF testing be accomplished on all aircraft expected to be in the inventory in the 1990's. These LTF aircraft are well suited to support FSP testing, and all FSP on them will be specifically monitored by USAAVNDA.

Throughout its tenure as the aviation development tester for the Army, the USAAVNDA has developed considerable experience with part/component teardown using visual and other NDI techniques to evaluate wear progression and other failure modes.

Selected FSP, particularly those from the LTF aircraft, at AVSCOM discretion, will be evaluated at the USAAVNDA. Data from all sources will be forwarded to AVSCOM for consolidation and action.

More is planned. AVSCOM is looking at Flight Data Recorders; not simply crash-survivable ones (after the fact), but recorders that continuously record a wide range of parameters which can be used to diagnose problems and predict impending failure. A first-generation recorder will be installed in a USAAVNDA AH-64A in the very near future to demon-

strate the information that can be made available as well as practical utilization of the data.

As Army Aviation systems become increasingly sophisticated and expensive, the methods to examine and improve reliability and especially safety must evolve to keep pace. The FSP program is one means by which the Army Aviation development community is doing just that.

—COL Lawrence Karjala  
Cdr., U.S. Army Aviation  
Development Test Activity

### From the mountains to the desert floor: USAAEFA has it all

EDWARDS AFB, CA — The U.S. Army Aviation Engineering Flight Activity (AEFA) constitutes an important part of the Army Aviation Research and Development team.

AEFA, co-located with the Air Force Flight Test Center at Edwards Air Force Base in the Mojave Desert, is one of several flight test arms of the Army. The primary flight test responsibility for AEFA is determination of the airworthiness (handling qualities and performance) of the Army's new or modified aircraft.

**Ideal Location** — Edwards AFB, chosen because of the weather, geography and its vast expanse of restricted airspace, provides excellent flight test conditions during the entire year. The proximity of Edwards to the mountains and the low desert means that elevations ranging from 12,500'

feet above to 35' below sea level are only a short flight away.

In addition, Southern California is a major aeronautical research center in the United States, making valuable professional resources available to AEFA.

It is at Edwards that the experimental test pilot becomes part of a dedicated and highly specialized team of flight test engineers, technicians and numerous support personnel to accomplish the difficult and challenging task of testing and analyzing aircraft performance and handling qualities.

**Air-to-Air Combat** — AEFA doesn't conduct flight test in a vacuum. Tests are done to provide increased combat readiness to the field. One good example is recent air-to-air combat tests.



**A Report  
by  
Major  
Rickey  
C.  
Simmons**

What capability is required for a helicopter to be successful in air-to-air combat? AEFA has conducted many flight tests in an attempt to define some small pieces of this complex puzzle. In 1984, AEFA test pilots flew an AH-1S as part of the Air-to-Air Combat Test (AACT) II at Patuxent River, Maryland. This was sponsored by the Aviation Applied Technology Directorate (AATD), (T & E — Cont. on Page 48)





## ***ESSEX... making MANPRINT a reality***

For the last 17 years, Essex Corporation has worked in human factors engineering, system design, training, personnel selection, test and evaluation, and safety analysis — all components of **MANPRINT**.

Today we're applying those techniques, along with analytic models for manpower forecasting, to preliminary system design for a successful **MANPRINT** program.

*For more information, call Larry Durham, Corporate  
Director of Marketing.*



333 North Fairfax Street  
Alexandria, Virginia 22314

(800) 368-3533



## **Development & Readiness MANAGEMENT Needs Good INFORMATION ... COBRO delivers**

**Data Collection, Automation, and Prediction Methods for:**



**Concept • Test • Appraisal  
Operations • Maintenance**

Professional Employment Opportunities, Send Resume to:

**COBRO Corporation**  
11510 Georgia Avenue, Wheaton, Maryland 20902 (301) 933-6950  
Equal Opportunity Employer

---

## **Crisis Response**

### **(Cont. from Page 2)**

---

that we will respond when our friends are threatened.

More recently, the concern and commitment of the United States was displayed by a small group of U.S. Army aviators in Bolivia in support of its battle against the growing and destabilizing drug trade. In response to a request received from the Government of Bolivia and in coordination with other U.S. agencies, six U.S. Army BLACK HAWKS were dispatched to Bolivia from Panama by the 210th Combat Aviation Battalion. Within days the UH-60's were transporting members of the Bolivian police UMOPAR, a special anti-narcotics strike force, in raids against cocaine production laboratories.

### **The Bolivian Strike Force**

Regarding the effectiveness of these six helicopters, I should point out that during their first month in Bolivia, they had been the key element in totally disrupting coca leaf production there. The Bolivian Strike Force, with aviation assistance, was extremely successful in finding and destroying labs. Also, the drug traffickers decided that the speed, mobility and capability of the U.S. Army Aviation Task Force combined to create an opportune time to go out of business, at least temporarily. As a result, coca paste production in Bolivia virtually came to a halt. The price of the coca leaf, which is legally produced in Bolivia, dropped from the former going rate of \$125 per hundredweight to the current price of about \$20 per hundredweight, well below the cost of production.

Army Aviation is also central to the U.S. Southern Command's newly developed Emergency Medical Response Team (EMRT) which was created to deploy anywhere in Latin America to respond to life threatening natural or man-made disasters. The EMRT and its concept was exercised in Costa Rica earlier this year during a simulated earthquake, providing valuable experience. The exercise demonstrated that mobility is directly related to success and confirmed our preparedness and ability to carry out this mission.

Latin America is a complex and changing area. While democratic pluralism is now the norm rather than the exception, the countries of the

region are still challenged by enormous national debts, faltering economies, insurgencies fostered by Fidel Castro, and drug trafficking which has reached astounding proportions. The new democracies in Latin America need the support and encouragement of the United States in order to succeed against these challenges.

The role of Army Aviation will continue to grow in importance, in Latin America as well as in other areas of the world. The U.S. Southern Command (USSOUTHCOM) area of operational responsibility, for example, encompasses an area consisting of close to twenty percent of the earth's landmass. From the geographic viewpoint, the small numbers of Army aircraft operating in the theater would give no hint of the true significance for the Command or for Latin America.

### **A key force in Latin America**

The majority of the Army aircraft in the USSOUTHCOM region operate from the Republic of Panama in support of the USSOUTHCOM's Army Component, the 193d Infantry Brigade (Panama), the only major U.S. Army unit in Latin America. A smaller number, on temporary duty from CONUS bases, operate in support of Joint Task Force Bravo in Honduras on a continuing basis with occasional increases in numbers during major exercises.

Army aviators have been and remain key participants in U.S. activities in Latin America. In numerous joint and combined exercises every possible use has been made of them — from air reconnaissance to rescue missions, from command and control to recovery and evacuation, as well as transporting troops, equipment and supplies. They have enhanced military-to-military as well as country-to-country, relationships, demonstrating not only their own intrinsic capabilities but their professionalism and dedication.

The 210th Combat Aviation Battalion in Panama has won the coveted Army Aviation Association of America Outstanding Aviation Unit award three times (1974, 1984 and 1985), attesting to the caliber of Army aviators operating in Latin America.

Army Aviation has earned an image of professionalism, compassion, supportiveness and strength in this part of the world. The members of Army Aviation's team are welcomed and appreciated by leaders throughout Latin America as key players in future crisis operations. ■■■■



# OH-58D



## The scout that gives a close-up look at multimission versatility.

**OH-58D:** the scout that "looks" for trouble from incredible distances ... for a variety of U.S. Army missions.

**Attack team:** The OH-58D works with attack helicopters. Laser designators help AH-64 Apaches send Hellfire to the target. And put laser energy on TOW missile targets for handoff to the AH-1S modernized Cobra.

**Field artillery:** Quickly, the OH-58D sights stationary and moving targets for precision-guided munitions or conventional ammunition. Result: fast, accurate engagement.

**Air cavalry:** The OH-58D's day/night eye covers the battlefield. For reconnaissance. Surveillance. Target acquisition. And it adds a precious commodity to the effort: *speed.*

Its performance exceeded Army demands. Its components are proven. And it's backed by the world's best service and support.

For more information, call or write Military Business Development, Bell Helicopter Textron Inc., Dept. 680, Box 482, Ft. Worth, Texas 76101, U.S.A. (817) 280-2288. Telex: 75-8229, Cable: Bell Craft.

**Bell Helicopter** **TEXTRON**

*The future is ours by design.*

# THE 1986 AVIATION SOLDIER DIRECTORY

Data sheets were sent to the over 1,500 enlisted members of the Army Aviation Association requesting information for the following directory. The members listed in the "Aviation Soldier" directory are those who returned their forms with more than just the basic name and address information.

## INDEX

ACEVEDO, F. — CREED, D.F.....	39
CROUCH, T.L. — GUZMAN, F.....	40
HACKNEY, R.L. — MASON, A.T.....	42
MAZZA, M.A. — SANDERS, D.R.....	43
SCHABEL, W.L. — YUSUP, C.....	44

## ROSTER CODE

Last Name, First Name, MI (Rank)	Residence
(First AAAA Membership Year)	Spouse Name
(Nickname)	Date of Birth (Excluding Year)
Residence Address	PROFESSIONAL DATA:
City, State and ZIP Code	Duty Description
Duty Phone	MOS
	AAAA Offices held

### AVIATION MOSs LISTED

35K - Avionics Mechanic	Technical Inspector	67Z - Aircraft Maintenance	Systems Repairer
35L - Avionics Communicatns	67G - Utility/Cargo Helicopter	Senior Sergeant	76C - Equipment Records &
Equip. Repairer	Repairer	68D - Aircraft Powertrain	Parts Specialist
35P - Avionics Equipment	67N - Utility Helicopter Repairer	Repairer	76W - Petroleum Supply
Maint. Spec.	67T - Tactical Transport	68F - Aircraft Electrician	Specialist
66H - Observation Aircraft	Helicopter Repairer	68G - Aircraft Structural	76V - Materiel Storage and
Technical Inspector	67U - Medium Helicopter	Repairer	Handling Specialist
66N - Utility Helicopter	Repairer	68J - Aircraft Fire Control	76Y - Unit Supply Specialist
Technical Inspector	67V - Scout/Observation	Repairer	91A - Medical Specialist
66T - Tactical Transport	Helicopter Repairer	68K - Aircraft Component	91B - Medical NCO
Technical Inspector	67X - Heavy Lift Helicopter	Repair Supervisor	93H - ATC Tower Operator
66U - Medium Helicopter	Repairer	68H - Aircraft Pneumatics	93J - ATC Radar Controller
Technical Inspector	67Y - AH-1 Attack Helicopter	Repairer	93P - Flight Ops Coordinator
66Y - AH-1 Attack Helicopter	Repairer	68M - Aircraft Weapon	00Z - Command Sgt. Major



# AAAAAAAAAAAAAA

**ACEVEDO, Fernando**, (E4)(M85)(Ave) 47 Woodland Home Pk, Clarksville, TN 37040. Dy: (502) 798-6704. Res: (615) 431-5072. W: Mayra. B: Feb. 4. Dy: A Co, 159th Avn Bn. MOS: 68H.

**ADAMS, Michael L.**, (MSG) (M83) 406 Thor St, White Sands Mill Range, NM 88002. Dy: (505) 678-3311. Res: (505) 678-3185. W: Junko. B: Feb. 16. Dy: Nat'l Range Opts. MOS: 35P.

**ADKINS, Robert L.**, (SGT) (M83) (Pugs) 7 Fairview Avenue, Waterbury, CT 06708. Dy: (203) 445-6595. Res: (203) 754-8015. B: Apr. 4. Dy: CT ANVARD, MOB Det. MOS: 68D.

**ADKINSON, Harry B.**, (E7) (M84) 300 Ala Moana, Room 9112, Honolulu, HI 96850. Dy: (808) 546-7138. Res: (808) 637-5525. B: May 11. Nat'l Narcotics Border Int'diction System, Western Pacific Dist., ODCSOPS. MOS: 93P.

**ALEMAN, Benny Jr.**, (1SG) (M76) (Ben) 4306 Clarno Drive, Austin, TX 78749. Dy: (512) 280-2065. W: Isabel. B: Aug. 18. Dy: Trp D 1/124 Cav (Air). VP & Past VP, Lone Star Chapter.

**ALLEN, John M.**, (PFC) (M86) 203rd Avn Co, APO NY 09025. W: Carol. B: Oct. 20. Dy: VII Corps. MOS: 67T.

**ARMSTRONG, Richard C.**, (SP4) (M82) P.O. Box 6037, El Paso, TX 79908. Dy: (915) 568-8555. Res: (915) 568-8001. B: Aug. 3. Dy: G Trp, 3rd CAS, 3rd ACT, Ft. Bliss. MOS: 67N.

**ARNOLD, David L.**, (SFC) (M84) 2364 Apolopoe Street, Pearl City, HI 96782. Dy: (808) 655-0688. Res: (808) 455-5430. W: Pamela. B: Dec. 29. Dy: 17th Alt HC, Avn Bde, 25th ID. MOS: 67T.

# BBBBBBBBBBBBBB

**BAE, John H.**, (E7) (M83) Hq, 17th Avn Gp, APO SF 96301-Hoop. W: Joyce. B: Jul. 3. Dy: NCOIC H208 VP. MOS: 93P. VP, Morning Calm Chapter.

**BAKER, Eugene A.**, (E4) (M86) (Belushi) 7-a Kansas Avenue, Ft. Leavenworth, KS 66027. Dy: (913) 684-8455. Res: (913) 682-5566. W: Kelly. B: Aug. 25. Dy: HHC, USDB, MN, BN, Sub-F Machine Shop. MOS: 44E.

**BAKER, Quentin A.**, (SFC) (M86) (Quint) B Co, 205th Trans Bn, Box 83, APO NY 09165. W: Margaret. B: May 9. Dy: QC Supvr. MOS: 67T.

**BARRINGTON, Aubrey D.**, (SFC) (M85) (Bear) Cobra PMR, P.O. Box 179, APO NY 09333. W: Eloise. B: Mar. 26. MOS: 68K.

**BATEMAN, Jon F.**, (SP4) (M86) (Batman) B Co, 308th AHS, APO NY 09165-1540. B: Oct. 7. MOS: 67Y.

**BEASLEY, Robert**, (SFC) (M86) HHC 1st 10th SFG, P.O. Box 354, APO NY 09500. W: Nese. B: Dec. 31. MOS: 67T.

**BEATTIE, Dennis M.**, (CSM) (M86) (Mike) Hq, 307th AHB, Ft. Ord, CA 93941. Dy: (408) 242-7601. Res: (408) 384-7627. W: Gail. B: Dec. 10. MOS: 00Z.

**BEDARD, Alex R.**, (SFC) (M85) (Rick) 1004 N. 4th St, Copparras Cove, TX 76544. Dy: (817) 287-9939. Res: (817) 542-1863. W: Lon. B: Sep. 24. Dy: HHT, 1st Cav, 6th CAB. MOS: 68J.

**BETHNE, Duwayne**, (SSG) (M82) (B) HHT, 11th CAS, 11th ACR, Box 399, APO NY 09146. W: Marisa. B: Dec. 11. Dy: Utility Hel. Ti. MOS: 66N.

**BEZORE, Jeffrey**, (SSG) (M86) (Beez) A Co, 1st Mi Bn (AC), APO NY 09457. W: Jean Marie. B: Apr. 13. MOS: 67H.

**BIGGERS, Sandy J.**, (PFC) (M86) 320th GSAC, Box 134, Fort Kobbe, APO MIA 34006. B: Dec

11. Dy: Supply. MOS: 76Y.

**BINGER, Eric S.**, (SSG) (M85) HHC 4th Bde, APO NY 09250. W: Gabriela. B: Jul. 11. MOS: 76Y.

**BINGHAM, Eugene H.**, (1SG) (M84) 2877-A Hammond Hgts., Fort Campbell, KY 42223. Dy: (502) 798-7514. Res: (502) 439-4134. W: Kim. B: Feb. 20. Dy: B Co, 159th Avn Bn. MOS: 67Z.

**BLAND, Robert T.**, (SP4) (M86) B Co 205th Trans Bn, Box 56, APO NY 09165. W: Kimberly. B: Aug. 25. MOS: 68G.

**BODILY, Cecil L.**, (1SG) (M85) 244th CAC, Box 1756, APO NY 09250. W: Mary. B: Nov. 22. MOS: 67M.

**BOESE, Ronald**, (SFC) (M82) (Ron) HHT, 11th RCAS, 11th ACR, Box 15, APO NY 09146. W: Petra. B: Sep. 9. MOS: 67Y.

**BOYE, Guy S.**, (SSG) (M83) 561 Arrowhead Trail, Carol Stream, IL 60188. Dy: (312) 657-2283. Res: (312) 462-1888. W: Patricia. B: Apr. 23. Dy: Maint Platoon Spt. 305th Avn Co (CS), NAS Glenview. MOS: 67N.

**BROWN, Dennis C.**, (E4) (M85) B Co, 394th Aviation Bn, Box 584, APO NY 09061. B: Jul. 2. Dy: Maint Platoon. MOS: 67N.

**BROWN, Odessie H.**, (SGT) (M86) 203rd Avn Co, APO NY 09025. B: Feb. 8. MOS: 76C.

**BUHLER, Allen H.**, (SP5) (M84) (Al) 48th Avn Co, APO NY 09457. B: Dec. 23. MOS: 67T.

**BUMBAR, Michael**, (SGT) (M84) (Merc) 18827 Lenny Street, Salinas, CA 93906. Dy: (408) 242-4286. W: Vicki. B: Aug. 25. Dy: A Co, 397th Aviation Battalion. MOS: 68J.

**BURGESS, Lawrence**, (PFC) (M86) 9400 Aberdeen, Ext., Apt. 502, Savannah, GA 31406. Dy: 352-5401. Res: (912) 925-3411. W: Tamara. B: Feb. 26. Dy: A Co, 24th CAB. MOS: 67Y.

**BURNETTE, Bobby**, (CSM) (M85) HHC, 11th Avn Gp (Cbt), APO NY 09025. W: Jonnie. B: Oct. 6. Dy: VII Corps. MOS: 00Z. VP Enlisted Affairs, AUSA USAREUR Region.

**BYRAM, Johnnie M.**, (CSM) (M81) HHD, 59th ATC Bn, APO NY 09325. W: Hein. B: Jun. 26. MOS: 00Z. Past VP, Schwarzbach Hall Chapter. Retiring 30 Oct. 86.

# CCCCCCCCCCCCCCCC

**CAIN, Earl D.**, (SGT) (M86) 25th Avn Co, APO NY 09061. W: Wendy. B: Aug. 8. Dy: Phase Team Leader. MOS: 67N.

**CAIN, Wendy L.**, (E4) (M86) 25th Avn Co, APO NY 09061. H: Earl. B: Oct. 9. Dy: Supply Clerk. MOS: 76V.

**CAMPBELL, Larry T.**, (SSG) (M86) 1920-C Batts Lane, Clarksville, TN 37042. Dy: (502) 798-2074. Res: (615) 647-7671. B: Dec. 17. Dy: Co A, 159th Avn Bn, Ft. Campbell. MOS: 35P.

**CAPPEL, Frank A.**, (SGM) (M86) P.O. Box 24, Ft. Sheridan, IL 60037. Dy: (312) 926-3831. Res: (312) 432-3829. B: Feb. 27. Dy: Hqs. Fourth U.S. Army DCSF, Ft. Sheridan. MOS: 11B.

**CARD, John A.**, (E6) (M85) (Bushy) P.O. Box 395, Hayes, VA 23072. Dy: (804) 678-6147. Res: (804) 595-6834. B: Feb. 3. Dy: 1st S & F Co, ITD, DOTO, USAALS. MOS: 67N.

**CARDY, Philip R.**, (SP4) (M86) (Flip) HHD 52nd Avn Bn, APO SF 96301. Dy: 293-3758. Res: 794-1055. W: Mar. B: Apr. 2. Dy: S-3 Ops, HHD, 52nd Avn Bn. MOS: 93P.

**CARLSON, Connie L.**, (SGT) (M86) 305 North 18th Avenue, Beech Grove, IN 46107. Dy: (317) 835-2128. Res: (317) 786-8912. H: John. B: Jan. 1. Dy: Co E, 38th Avn Bn (Cbt), 38th ID, OH-58A Mechanic. MOS: 67V.

# The 1986 Aviation Soldier A

**CARELL, Brett J.**, (E2) (M86) F Troop, 11 CAS, 11th ACR, Box 433, APO NY 09146. B: Jul. 16. MOS: 67V.

**CARROLL, Charles**, (SP4) (M86) (Chuck) C Trp, 377 Cav, APO NY 09702. B: May. 29. MOS: 67Y.

**CARVER, Richard W.**, (1SG) (M83) (Pops) 4708-201 Windshore Drive, Virginia Beach, VA 23455. Dy: (804) 422-7985. Res: (804) 464-6111. B: Aug. 11. Dy: 331st Trans Co (ACV), Ft. Story, VA. MOS: 67Z.

**CAVE, James W.**, (MSG) (M86) (Caveman) HHD 70th Trans Bn, APO NY 09028. W: Gloria. B: Dec. 10. MOS: 67Z.

**CHESTER, Jacques**, (E5) (M85) (Jock) 191st ATC Co, APO SF 96301. B: Jan. 5. MOS: 93H.

**CHICKORY, Thomas P.**, (E3) (M86) (T.C.) 25th Avn Co, APO NY 09061. B: Aug. 20. MOS: 67N.

**CLARK, Steven M.**, (MSG) (M82) 229 Creekside Drive, Clarksville, TN 37042. Dy: (502) 798-7512. Res: (615) 553-0118. W: Gloria. B: Apr. 25. Dy: Ti, LH-60A, C Co, 160th TF. MOS: 66T.

**CLEMO, John E.**, (SFC) (M73) PO Box 795, Claypool, AZ 85532. Dy: (602) 225-5509. Res: (602) 425-9755. W: Charlotte. B: Jun. 30. Dy: 1120th QM Bn. MOS: 62B.

**COCHRAN, William A.**, (MSG) (M86) 2122 B Irwin St., Fort Eustis, VA 23604. Dy: (804) 878-3065. Res: (804) 887-3255. W: Sandra. B: Jun. 1. Dy: 3rd Staff & Faculty Co, 1SG. MOS: 67Z.

**COHILL, Larry**, (SFC) (M86) 526 Cambertree Way, Newport News, VA 23602. Dy: (804) 878-6115. Res: (804) 874-1715. B: Nov. 2. Dy: 1st Staff & Faculty Co. MOS: 67Y.

**COLEY, James L.**, (CSM) (M85) (Jim) HHC, Cbt Avn Bde, Fort Ord, CA 93941. Dy: (408) 242-4214. Res: (408) 384-2025. W: Norvell. B: Sep. 8. Dy: 7th ID (Light), Ft. Ord. MOS: 00Z.

**COLLINS, James P.**, (SP4) (M86) (Jim) 4848 Lee Village, Ft. Campbell, KY 42223. Dy: (502) 798-4972. Res: (502) 439-3982. W: Hyon. B: Oct. 17. Dy: A Co, 123rd Aviation Bn, 101st Airborne Division. MOS: 67N.

**COMBS, Donald C.**, (SGT) (M86) 308 Tartan Place, Fayetteville, NC 28301. Dy: (919) 396-8964. Res: (919) 822-6139. W: Susan. B: Oct. 6. Dy: Co E, 82nd CAB, Ft. Bragg. MOS: 67T.

**COONEY, James T.**, (1SG) (M86) (Jim) HHC 2-68 AR, APO NY 09034-2176. W: Shirley. B: Oct. 4. MOS: 19Z.

**COOPER, Lynn A.**, (SFC) (M86) (Coop) 806 Amanda Drive, Clarksville, TN 37042. Dy: (502) 798-4787. Res: (615) 645-1372. W: Linda. B: Oct. 31. Dy: HHC, 101 AB. MOS: 67T.

**CORDERA, Leslie S.**, (SGT) (M86) 720 21st St., #4, Hermosa Beach, CA 90254. Dy: (213) 493-8445. Res: (213) 379-1375. B: Mar. 14. Dy: Co A, 40th Avn Bn, CAARNG. MOS: 67N.

**CORY, Tony**, (SGT) (M85) 320 GSAC Box 101, APO MIA 34006. W: Marva. B: Aug. 2. Dy: 210th Combat Avn Bn.

**COWART, Billy R.**, (1SG) (M86) 6325 Kellow Dr, Jacksonville, FL 32216. Dy: (904) 399-4884. Res: (904) 725-0584. W: Angela. B: Jan. 13.

**CRAIGIE, Glen M.**, (SGT) (M86) 193rd Avn Co, APO NY 09454. B: May. 31. MOS: 35K.

**CREEDE, Daniel F.**, (SFC) (M81) E Co, 71st Bn Trng Bde, Ft. Eustis, VA 23604. Dy: 927-3363. Res: (804) 220-2513. W: Margaret. Dy: Drill Sgt. MOS: 67T.



# C

## The 1986 Aviation Soldier

**CROUCH, Terry L.**, (SFC) (M85) 55 Wake Road, Eatontown, NJ 07724. Dy: (201) 544-3554. Res: (201) 389-0951. W. Chong Ave. B. May 8. Dy: AVRADA. MOS: 93D.

**CROW, John S.**, (SGT) (M80) 4684A Pierce Village, Fort Campbell, KY 42223. Dy: (502) 798-2233. Res: (502) 439-5665. W. Dyanna. Dy: HHC, 101st Avn Bn. MOS: 66T.

**CUEVAS, Gilbert**, (SFC) (M86) HHC, 223d Avn Company, APO NY 09025. W. Elke. B. Jan 10. MOS: 93P.

**CULP, Jeffrey R.**, (CSM) (M83) (Jeff) 1809 Janet Ave, Lebanon, PA 17042. Dy: (717) 865-8795. W. Bonnie. Dy: Eastern ARNG Avn Tng Site. MOS: 00Z. Treas, Indianapolis Camp (Bil).

**CURRY, Blanchard L.**, (SGM) (M84) 14423 Briarledge, San Antonio, TX 78247. Dy: (314) 263-3821. Res: (512) 494-1556. W. Yoon. B. Dec 2. Dy: Hq AVSCOM, OH-58D NETT NCICD. MOS: 67Z.

**CURTICE, Donald J.**, (SFC) (M85) B Co, 70th Trans Bn (AVIM), APO NY 09028. MOS: 35P.

### DDDDDDDDDDDDDD

**DAILY, John W. Jr.**, (SP4) (M85) E Trp, 11th CAS, 11th ACR, Box 258, APO NY 09146. W. Annette. B. Feb 17. Dy: OH-58C Crew Chief. MOS: 67V.

**DARDEN, Antoinette**, (E5) (M85) (La'T) HHC, 4th Bde, Box 2627, APO NY 09250. B. May 4. MOS: 93P.

**DATO, Thomas L.**, (SGT) (M85) 1305 Balwin Court, Daltone, IL 60067. Dy: (312) 657-2283. Res: (312) 358-4749. B. Feb 27. Dy: 305th Avn Co. MOS: 67N.

**DAVIS, March C.**, (PFC) (M86) HHT, 11th ACAS, 11th ACR, APO NY 09146. B. Mar 17. MOS: 68J.

**DE LA CRUZ, Edwin K.**, (E5) (M86) 6234 Alva Circle, Fayetteville, NC 28301. B. Dec 31. Dy: 503rd Maint, Ft. Bragg. MOS: 94B.

**DELEON, Carlito S.**, (SFC) (M85) (Lito) 295th Avn Co, APO NY 09028. W. Tina. B. Dec 23. Dy: Coleman Barracks. MOS: 67U.

**DENARO, Leonard**, (E5) (M85) B Co, 394th Avn Bn, Box 595, APO NY 09061. B. Mar 21. Dy: Airframe Sgd Leader. MOS: 68G.

**DERENDA, Robert V.**, (PFC) (M82) 32 Girard Avenue, Cheektowaga, NY 14227. Res: (716) 895-4192. B. Jul 27. Dy: CSC 1174th Inf, 42d Div USARNG. MOS: 11B.

**DEROSIER, John D.**, (SP4) (M84) (Rowsh) 2030 W. Illinois Ave., Apt. F, Aurora, IL 60506. Dy: (312) 896-2805. B. Mar 8. MOS: 67N.

**DESPARS, Charles W.**, (SGT) (M86) (Chuck) 4229 La Pointe, Cc, Ft. Campbell, KY 42223-1511. Dy: (502) 798-4781. Res: (502) 439-6798. W. Ellen. B. May 11. Dy: B Co, 5th Trans Bn. MOS: 67T.

**DIBBLE, Gregory M.**, (E5) (M86) 1129 Cornell Drive, Savannah, GA 31406. B. Mar 23. Dy: 609th Aircraft Maint Co.

**DRAKE, Billy J.**, (SGM) (M86) (Smash) HHC 501st Spd Gp, USACSC-FE, APO SF 96301. W. Kyong. B. May 15. Dy: USACSC-FE. MOS: 00J.

**DRUMWRIGHT, Elton L.**, (SGM) (M86)

Rt 1, Box 260A, Montgomery LA 71454. Res: (318) 627-5156. W. Ruth. B. Sep

12. MOS: 67Z. Past VP, Corpus Christi Chap.

**DUFFY, Michael J.**, (SFC) (M85) 100 Woodbridge Road, Enterprise, AL 36330-9247. Dy: (205) 255-4800. MOS: 71L.

**DUFRESNE, Norman J.**, (E4) (M86) (Frenchy) C Co, 501st ABC, Box 2634, APO NY 09326. B. Jan 4. MOS: 67T.

**DUNN, John M.**, (SFC) (M85) (Mike) Box 5379, APO NY 09009. W. Marian. B. Oct 10. Dy: B Co, 70th Trans (CL). MOS: 67T.

### EEEEEEEEEEEEEEEE

**EDGEINGTON, Mark L.**, (E5) (M85) (Sledge) B Co, 394th Trans Bn, Box 451, APO NY 09061. W. Friederike. B. Aug 28. Dy: Arcrft Tech Insp. MOS: 66Y.

**ELLIOTT, Cynthia L.**, (SSG) (M85) (Cynde) 17th Avn Group (Cbt), APO SF 96301. B. May 18. Dy: HHC, 17th CAG/Hotel 208. MOS: 93P.

**ELLIS, Scott L.**, (PFC) (M85) 82 Cable Street, Ft. Leonard Wood, MO 65473. Dy: (368) 216-9000. Res: (329) 480-7000. W. Renee. B. Sep 17. Dy: TRADOC, Avn Div DPTS. MOS: 67N.

**ELZIE, Danny L.**, (E7) (M80) (Danny) 4873 Hurley Drive, Fayetteville, NC 28303. Dy: (919) 425-3881. W. Hilde. B. Dec 28. Dy: C Co, 2nd Avn Bn. MOS: 67Z. Past VP, Ft. Bragg Chap.

**ENNIS, Joe K.**, (SP4) (M86) (Enos) B Co, 205th Trans Bn, APO NY 09165. B. Sep 9. MOS: 68D.

**EVANS, Troy J.**, (SSG) (M85) 117 Emerald Dr, Enterprise, AL 36330. Dy: (205) 255-6448. Res: (205) 393-3940. W. Marilyn. B. Dec 1. Dy: Instr, B Co, 1st Bn, Ft. Rucker. MOS: 67V.

### FFFFFFFFFFFFFFFF

**FARROW, Zeandrew**, (CSM) (M85) (Zee) 49788 Lee Village, Fort Campbell, KY 42223. Dy: (502) 798-4842. Res: (502) 439-5446. W. Christine. B. Jun 9. Dy: Task Force 160.

**FEWELL, Anthony A.**, (PFC) (M85) (Tony) HHT, 11th CAS, 11th ACR, APO NY 09146. B. Aug 30. Dy: AVUM Troop. MOS: 68G.

**FISH, Norman A.**, (SSG) (M86) (Norm) 193rd Avn Co, APO NY 09454. W. Sally. B. Sep 3. Dy: Head Tr. MOS: 66N.

**FITCH, Heidi J.**, (SP4) (M86) 220th AHC, Box 2529, APO NY 09250. B. Sep 6. Dy: 220th AHC. MOS: 93P.

**FLEURANT, Donald M.**, (SGT) (M86) (Flo) 1108 Madison Street, Apt. 112, Clarksville, TN 37040. Dy: 798-5398. Res: (615) 647-9420. B. Feb 27. Dy: C Co, 123rd Avn Bn, Ft. Campbell. MOS: 67V.

**FLOYD, Clyde L.**, (1SG) (M85) Rt 4, Box 304, Ozark, AL 36360. Dy: (205) 255-4102. Res: (205) 714-5970. W. Diana. B. Dec 7. Dy: D Co, 6th ATB. MOS: 67Z.

**FORD, Robert L.**, (E7) (M86) (Bird) 189th GSAC, APO NY 09165. W. Cecile. B. Aug 25.

**FORRY, Dennis L.**, (SSG) (M81) (Denny) 400 N. College Street, Myerstown, PA 17067. Dy: (717) 865-8959. Res: (717) 866-7369. W. Janet. B. Jun 28. Dy: Crew Chief UH-1, Co B, 26th Avn Bn. MOS: 67N.

**FOX, Bruce R.**, (1SG) (M81) 51st Chem Co, Box 602, APO NY 09160. B. Aug 13. MOS: 54Z.

**FOX, Donald**, (SGT) (M84) 1st Bn, 1st Avn Bde, Box 3012, Fort Rucker, AL 36362. Dy: (205) 255-5512. B. Apr 24. Dy: Army Avn Logistics Mgmt Bn. MOS: 66N.

**FOX, Patrick R.**, (PFC) (M86) (Trish) B Co, 205th Trans Bn, Box 235, APO NY 09165. B.

Jun 8. MOS: 68G.

**FRAZIER, Harry H.**, (E9) (M86) 52779-2 Sioux Circle, Ft. Hood, TX 76544. Dy: (817) 287-7550. Res: (817) 532-4649. W. Helga. B. Nov 19. Dy: Hst, 2nd Sqn, 6th Cav. MOS: 00Z.

**FRENCH, Daniel W.**, (SP4) (M86) 203rd Avn Co, Box 9, APO NY 09025. B. Mar 17. Dy: Tech Support Clerk. MOS: 68D.

### GGGGGGGGGGGGGG

**GALLAGHER, George D.**, (SP6) (M85) 31-189th, Box 2551, APO NY 09031. W. Andrea. B. Jan 3. Dy: ATC Maint Chief. MOS: 93D.

**GARCIA, Ramiro**, (SGT) (M86) Box 721 Avn Det, APO NY 09611. W. Cynthia. B. Jun 16. MOS: 67N.

**GARRIDO, Gaspar**, (PFC) (M86) 25th Avn Co, Box 187, APO NY 09061. W. Dassinia. B. Mar 1. Dy: Arcrft Struct Repair. MOS: 68G.

**GEHARDT, Vincent L.**, (SGT) (M85) 220th AHC, APO NY 09250. W. Alicia. B. Nov 30. Dy: Crew Chief. MOS: 67T.

**GETKIN, Jay E.**, (SGT) (M84) (Pt. Tulo) 2372C Smith Circle, Fort Eustis, VA 23604. Dy: (804) 878-5497. Res: (804) 887-8949. W. Becky. B. Nov 12. Dy: 1st Staff & Faculty. MOS: 67T.

**GILBERT, Dennis A.**, (SGT) (M81) HHC, 79th Engr, Cbt Bn, APO NY 09360. W. Julie. B. Jan 25. MOS: 81B.

**GILBERT, Tommie**, (SP4) (M85) (G-Man) HHC, 7th Inf Div, Fort Ord, CA 93941. Dy: (408) 242-3742. Res: (408) 242-7279. B. Sep 7. MOS: 76C.

**GILMORE, Kenneth J.**, (E3) (M86) 207th Avn Co, Box 15, APO NY 09102. B. Oct 1. Dy: 70th Trans Bn, Arcrft Elect. MOS: 68F.

**GLASSCOCK, Albert R.**, (SSG) (M82) Lester Trailer Pk, Lot 28, Fort Eustis, VA 23604. Dy: (804) 878-3001. Res: (804) 877-8444. W. Theresa. B. Aug 10. Dy: CH-47D Instr, 1st Staff & Faculty Co. MOS: 67U.

**GORDON, Michael**, (SP4) (M85) (Opie) 838 Sandberg Road, Frewsburg, NY 14738. Res: (716) 569-3422. B. Mar 28. MOS: 67N.

**GOSS, Nelson G.**, (SGT) (M85) (Glenn) C Co, 308th AHB, APO NY 09165. W. Linda. B. Jul 19. MOS: 67V.

**GRADLE, Randall W.**, (PV2) (M86) (Randy) B Co, 205th Trans Bn, Box 257, APO NY 09165. B. Mar 31. MOS: 67N.

**GRANT, Jeffery C.**, (E5) (M85) 56th Avn Co, APO NY 09028. B. Aug 17. Dy: Flight Line Crew Chief, FW Sec. MOS: 67G.

**GRAY, Douglas A.**, (MSG) (M75) (Doug) HHC CAB, 24D, Ft. Hood, TX 76546. Dy: (817) 287-4323. W. Angle. B. Jul 24. MOS: 67Z.

**GRIESS, Kevin M.**, (E4) (M86) B Co, 205th Trans Bn, APO NY 09165. W. Linda. B. Jan 9. Dy: UH-1 Maint. MOS: 67N.

**GROTE, Karl A. W.**, (E7) (M84) 17 Cottage Lane, Newport News, VA 23603. Dy: (804) 878-6270. Res: (804) 888-2184. W. Trinda. B. Feb 16. Dy: USAALS, DTD ITO SQT, 1st Staff & Faculty Co. MOS: 68K.

**GRUBB, Jimmy D.**, (SGT) (M85) (Jim) 720 McGraw Street, Clarksville, TN 37040. Dy: (502) 798-5523. Res: (615) 647-5421. W. Roseanne. B. Jun 28. Dy: C Co, 229th Aik Hel Bn, Ft. Campbell. MOS: 66N.

**GUZMAN, Francis**, (SSG) (M85) 1812 Doornar Drive, Tallahassee, FL 32308. Dy: (904) 877-7282. W. Katherine. B. Aug 13. Dy: 201st Avn Co. MOS: 67T.





AMERICAN ELECTRONIC LABORATORIES, INC.



# AERO DIVISION

**Integration, installation and testing of weapons systems and avionics**

The Aero Division of AEL provides system engineering to integrate and install these systems in production and QRC modes. This capability applies to both rotary and fixed wing aircraft. The Aero Division of AEL, located at Allaire Airport, Farmingdale, NJ and Reading Municipal Airport, Reading, PA, offers unmatched efficiency and economy in the retrofit of armament/protection systems such as the AIM-9L



Sidewinder missile system and the AN/ALE-39 chaff dispensing system and communications, navigation and identification equipment.

Whether your requirements entail assembly of kits and wiring harnesses, EMI/EMC/TEMPEST testing, or updating of aircraft with equipment manufactured by AEL and other leading organizations, the AEL Aero Division is ready to provide cost effective service.

AEL has immediate, long-term employment opportunities in many challenging advanced technology areas. For more information, contact: Director of Recruitment

©1984, American Electronic Laboratories, Inc.



American Electronic Laboratories, Inc.  
Subsidiary of AEL Industries, Inc.  
P.O. Box 552  
Lansdale, PA 19446  
(215) 822-2929  
TWX: 510-661-4976

# H

## The 1986 Aviation Soldier

### HHHHHHHHHHHHHHHH

**HACKNEY, Ronald L.**, (SGT) (M85) (Ron) P.O. Box 1241, APO MIA 34001. W: Bonnie. B: Apr 3. Dy: HHD, 210th CAB. MOS: 93P.

**HALL, Kerry D.**, (SSG) (M74) F Co, 82nd CAB. Fort Bragg, NC 28307. Dy: (919) 396-6964. Res: (919) 868-3710. B: Aug 9. Dy: AVIM Maint Platoon, Safety NCO. MOS: 67V.

**HAMMONDS, Remedios E.**, (SP4) (M85) (Rhemie) 56th Avn Co, APO NY 09028. B: Sep 28. MOS: 76V.

**HANCOCK, Alan D.**, (SFC) (M83) 8322 Milwaukee, Fort Lewis, WA 98433. Dy: (206) 967-2364. Res: (206) 964-1007. W: M.L. B: Aug 19. Dy: 243rd Avn Co. MOS: 67Z.

**HANFORD, William J.**, (E4) (M86) B Co, 394th Trans Bn, APO NY 09061. W: Sherry. B: Mar 9. MOS: 68G.

**HARDY, Ann S.**, (SSG) (M86) 240th GSAC, 4th Bde, APO NY 09111. B: May 10. MOS: 66N

**HAWKINS, William C.**, (SFC) (M81) (Bill) HHC, 11th Avn Co (Cbt), APO NY 09025. W: Margie. B: Sep 11. Dy: 1SG. MOS: 93P. Past VP, Schwaebisch Hall Chapter.

**HAYES, James F.**, (SGT) (M85) (Jim) HST 517 Cavalry, Ft. Hood, TX 76545. B: Apr 10. MOS: 67T.

**HAYHURST, Arthur D.**, (SFC) (M85) (Dean) 3607 Bahama, Hokenville, KY 42240. Dy: (502) 798-2887. Res: (502) 885-7435. W: Mickey. B: Feb 19. Dy: Plat Sgt. B Co, 158th Avn Bn, Ft. Campbell. MOS: 68D.

**HAZELRIGG, Danny R.**, (SFC) (M83) (Dan) Quarters 29-5 SLASC, Granite City, IL 62040. W: Kathy. B: Oct 25. MOS: 09W.

**HENSLEY, Scott B.**, (E4) (M86) (Scotty) 48th Avn Co, APO NY 09457. B: Jun 10. MOS: 67T.

**HERNANDEZ, Steven R.**, (E3) (M86) 25th Avn Co, P.O. Box 79, APO NY 09061. W: Michelle. B: Jan 25. Dy: Crew Chief. MOS: 67N.

**HITCHCOCK, Jerry L.**, (E4) (M86) 244th CAC, Box 1804, APO NY 09250. W: Debbie. B: Oct 21. MOS: 67N.

**HITE, Leon, Jr.**, (E7) (M85) (Boogie Man) 2518 Jacqueline Drive, Apt 227, Wilmington, DE 19810. Res: (302) 475-1590. W: Bobbie. B: Feb 6. Dy: AFRPO, Boeing, PA. MOS: 67U.

**HOLDER, James D.**, (SFC) (M84) (Jim) 725 FM 1959, Apt 207, Houston, TX 77034. Dy: (713) 486-1400. Res: (713) 484-6109. B: Aug 18. Dy: Opns Sgt Hqs, 149th AHB. MOS: 93P.

**HORN, Charles D.**, (E4) (M86) 17 Hilltop Court, Toombs, VA 23168. Dy: (804) 878-6155. Res: (804) 586-1908. W: Sharon. Dy: 1st S & F Co, DOTD/UTD. MOS: 67Y.

**HOUC, Roger F.**, (SFC) (M83) A Co, 101st Avn Bn (AH), Fort Campbell KY 42223. Dy: (502) 798-2858. Res: (502) 439-6866. W: Mary. B: Mar 6. MOS: 67T.

**HUENINK, Gary L.**, (SSG) (M86) B Co, 394th Trans Bn, Box 195, APO NY 09061. W: Sherry. B: May 23. Dy: AH-1 Section Sgt. MOS: 67Y.

**HUGHES, Joseph M.**, (E4) (M86) (Michael) HHT, 217 Cav, Fort Campbell, KY 42223. Dy: (615) 798-5059. Res: (615) 798-5090. B: Apr 22. Dy: Crewmember. MOS: 67T.

**HUMMEL, Roger**, (E6) (M82) RR #2, Box 665-B, Pine Grove, PA 17963. Dy: (717) 865-444. Res: (717) 345-6344. W: Janice. B: Dec 7. Dy: 108th Trans Co, CH-54A. MOS: 67X.

**HYMAN, Charles A.**, (PSG) (M82) (Chuck) RD No. 2, Box 2450, Grantville, PA 17028. Dy: (717) 865-8967. Res: (717) 469-0704. W: Christine. B: Apr 10. Dy: EAATS. MOS: 67U.

### IIIIII — JJJJJJ

**IVERSON, Steven K.**, (SFC) (M83) Hq, 4th U.S. Army, Attn: CART Team, Ft. Sheridan IL 60037-0000. Dy: (312) 926-3960. Res: (312) 432-2374. W: Ayten. B: Mar 4. MOS: 93P.

**IWATA, Allen R.**, (MSG) (M71) (Al) 3072 Ursula Street, Aurora CO 80011. Dy: (303) 340-9855. B: May 1. Dy: Hq STARC (-). COARNG, Aircraft Maint Sgt.

**JAMES, Donald W.**, (PFC) (M85) (Porky) 940 Summit Blvd, Bismarck, ND 58501. Dy: (701) 223-4151. W: Mary Ann. B: Feb 17. Dy: 213th Avn Co, CH-47 Helicopter Repair.

**JOHNSTON, Jeffrey M.**, (MSG) (M80) (J.J.) 3301 Tabb Lane, Apt. 22, Newport News, VA 23602. B: Dec 3. Dy: 1st Staff & Faculty Co, Ft. Eustis. MOS: 67Z.

**JOINER, Earl L. Jr.**, (E7) (M83) Co A, 394th Trans Bn, Box 617, APO NY 09061. B: May 29. MOS: 67Y.

**JORGENSEN, Greg C.**, (SSG) (M85) (Charlie) 415 Little Belle Lane, Clarksville, TN 37042. Dy: 798-7594. Res: (615) 552-0145. W: Virginia. B: Mar 11. Dy: B Co, 5th Trans Bn, Ft. Campbell. MOS: 66U.

### KKKKKKKKKKKKKKK

**KANARDY, Robert M.**, (CSM) (M85) HSC, 501st AHB, APO NY 09326. W: Lula. Dy: CSM. MOS: 00Z.

**KARNEY, James M.**, (SFC) (M86) A Co, 150th Avn Bn, Fort Campbell, KY 42223. Dy: (502) 798-5240. Res: (615) 645-5461. B: Sep 20. MOS: 67U.

**KELLEY, Timothy W.**, (SSG) (M85) HHC 4th Bde, Box 1681, APO NY 09250. W: Kim. B: Sep 13. MOS: 68B.

**KERFOOT, Frederick J.**, (SFC) (M68) 245th ATC Co (Fwd), Fort Bragg, NC 28307-5000. Dy: (919) 396-9730. B: Nov 29. Dy: ATC Support. MOS: 93J.

**KIRKLAND, Tilden R.**, (CSM) (M78) (Ray) Post Sergeant Major, Fort Rucker, AL 36362. Dy: (205) 255-4600. W: Betty. B: Feb 11. Dy: CSM, USAVNC. MOS: 00Z. NEB. Nat'l VP, Tauhis Chapter. Member, AAAA Nat'l Board.

**KNIGHT, Jeffrey B.**, (E3) (M85) 25th Avn Co, Box 104, APO NY 09061. B: Sep 24. MOS: 67V.

**KNOTT, James**, (CSM) (M83) (J.P.) Route 1, Box 240-A, Shannon, NC 28386. Dy: (919) 396-9538. Res: (919) 875-5327. W: Delores. B: Nov 14. Dy: HHC, 82d Cbt Avn Bn, Ft. Bragg. MOS: 00Z.

**KNUDSON, Ricky L.**, (E4) (M86) (Chicken Man) 528th Trans Co, 13th Support, Fort Hood, TX 76544-7055. Dy: (817) 287-3544. B: Nov 22. Dy: Avionics Tech. MOS: 35L.

**KOPP, Robert C. Jr.**, (PFC) (M86) (Jocko) B Co, 205th TC Bn, Box 425, APO NY 09165. B: Mar 13. Dy: Cobra Maint. MOS: 67Y.

**KUBASAK, Barry**, (PV2) (M86) Box 1239, APO NY 09611. B: Jun 28. Dy: Berlin Aviation Detachment. MOS: 67N.

**KUNTZ, Samuel F. II**, (E4) (M86) (Siam) 203rd

Combat Aviation Company, APO NY 09025. B: Feb 6. MOS: 67T.

### LLLLLLLLLLLLLLLL

**LAANSDO, Herb**, (MSG) (M79) 622 Arrowhead, Collinsville IL 62234. Dy: (618) 256-2925. Res: (618) 344-5871. B: Sep 20. Dy: 219th Aft Maint Co, Prod Control MCO. MOS: 67Z.

**LANIER, Joel E.**, (CSM) (M85) HSC, 8th AHB, APO NY 09185 W: Marva. B: Apr 1. MOS: 00Z.

**LAWRENCE, Gene**, (SFC) (M78) (George) 2249 Robin Road, Clarksville, TN 37042. Dy: (615) 798-2224. Res: (615) 431-6978. W: Beverly. B: Apr 28. Dy: 1SG, A Co, 229 AHB, Ft. Campbell, KY. MOS: 67Y.

**LAWSON, Jimmy L.**, (SFC) (M82) 950 Pentwood Rd, Apt. C, Bel Air, MD 21204. Dy: 575-6930 Res: 838-9379. Dy: 1329th TAMC 29 LID

**LEITZEL, Harry M. Jr.**, (SSG) (M86) Route 1, Box 668, Cedar Creek, TX 78612. Dy: (512) 465-5010. Res: (512) 247-2425. W: Carol. B: Oct 26. Dy: Co E (-), 149th Avn Bn. MOS: 67N.

**LENIX, William R.**, (MSG) (M85) (Mad Dog) PSC Box 13, Fort Gillem, Forest Park, GA 30050. Dy: (404) 362-7854. B: Oct 5. Dy: Sr Avn Maint Adv, Hqs 2d US Army. MOS: 67Z.

**LENTZ, Ralph L.**, (1SG) (M81) 2545 Seilmadow Ln, York, PA 17404. Dy: (717) 787-5770. Res: (717) 784-3713. W: Sandra. B: Dec 10. Dy: Co A, 28th Avn Bn, PAARNG. MOS: 67Z.

**LEWIS, Wiley C.**, (SFC) (M84) 60 Wake Road, Eatontown, NJ 07724-3234. Dy: (532) 514-3000. Dy: Hq, CECOM (NET Div). MOS: 35P.

**LINDGREN, Lester J.**, (SSG) (M83) (Les) 6703 5th Court S.E., Lacey, WA 98503. Dy: (206) 967-3051. Res: (206) 438-0320. W: Edith. B: Mar 21. Dy: 54th Med Det, Ft. Lewis. MOS: 67N. Past VP, Nurnburg Chapter.

**LONEY, John**, (CSM) (M83) 204 Dale Terrace, Clarksville, TN 37042. Dy: (602) 798-2137. Res: (615) 648-1018. W: Mary. B: Apr 28. Dy: 123d Cmb Avn Bn, Ft. Campbell. MOS: 00Z.

**LOOMIS, Robert**, (E5) (M85) HHT, 11th CAS, 11th ACR, APO NY 09146. B: Jun 17. Dy: Fulda Gap Border AVUM Troop. MOS: 67T.

**LOZIER, Garrett**, (SSG) (M83) 390A Deputy Ln, Newport News, VA 23602. Dy: (804) 878-3595. Res: (804) 875-0765. B: Dec 25. Dy: Instr, Atk & Obs Hel Div, 1st S & F. MOS: 67Y.

**LYKENS, Robert W.**, (SFC) (M81) (Bob) RD 1, Box 7465, Grantville, PA 17028. Dy: (717) 865-8780. Res: (717) 865-5540. B: May 19. Dy: Eastern ARNG Avn Trng Site. MOS: 93P.

### MMMMMMMMMMMM

**MAKIE, Robert L.**, (MSG) (M77) (Mac) HHC, VII Corps, Post Box 637, APO NY 09107. W: Martell. B: Jul 4. MOS: 93P.

**MALABED, Carlos D.G.**, (SGT) (M85) (Dave) B Co, 70th Trans Bn (AVIM), APO NY 09026. W: Anabel. B: Aug 29. Dy: B Co, 70th Trans Bn (AVIM). MOS: 67G.

**MALCOLM, Mark G.**, (PFC) (M85) (The X) B Co, 394th Trans Bn, APO NY 09061. B: Jan 10. MOS: 67Y.

**MALESA, Chester**, (SGM) (M75) HHC, 11th Avn Co, APO NY 09025. W: Anna. B: Jan 5.

**MARTINEZ, Remberto F.**, (SP4) (M85) HSC 501st AHB, Box 1927, APO NY 09250. W: Irma. B: Oct 16. MOS: 68J.

**MASON, Arnold T.**, (PFC) (M86) (Todd) AVUM Trp, 11 RCAS, 11 ACR, APO NY 09146. B: Mar



6. Dy: Maint. Phase on UH-1. MOS: 67N.

**MAZZA, Michael A.**, (SGT) (M85) (Mike) RD 1, Box 2407, Jonestown, PA 17038. Dy: (717) 865-8686. Res: (717) 865-6434. W: Susan. B: Mar 12. Dy: EAATS. MOS: 71L.

**McCANN, Gregory L.**, (SFC) (M81) 103-B Andrews Rd, NBU 17-8, Ft Huachuca, AZ 85613. Res: (602) 459-4050. W: Tia Cha. B: Jun 10. Dy: Avn Div, USA Electronic PG. MOS: 93P.

**McLENDON, Dorothy A.**, (SGT) (M85) (Ann) 244th CAC, Box 2409, APO NY 09250. B: Jun 5. Dy: Quickfix, 4th Avn Bde. MOS: 98G.

**McCOMBS, James**, (E6) (M85) (Jim) 5080 A Hammond Hts, Ft Campbell, KY 42223. Dy: (502) 798-4797. Res: (502) 439-1973. W: Frances. B: Dec 2. Dy: B Co, 229th ABH. MOS: 67V.

**McDONALD, Norman H.**, (SSG) (M86) (Mac) USA AVRA, Ft Monmouth, NJ 07703. Dy: (201) 544-4004. B: Sep 17. Dy: AVRA, Navigation Div. MOS: 35P.

**McKENNA-MESTREZ, Mary E.**, (E5) (M75) Naval Reserve Center, P.O. Box 4586, Missoula, MT 59806-4586. Res: (406) 721-7202. H: L. Robert E. Mestrez. B: Aug 21. Dy: Ft. Missoula, MT. MOS: 71P.

**McKINNEY, Carl D.**, (SFC) (M84) (Big Mac) 629 Georgia Drive, Columbus, GA 31907. Dy: (404) 544-2687. Res: (404) 687-1902. W: Ada. B: May 20. Dy: A Co, Rec Bn, Ft. Benning. MOS: 11B.

**MELTON, Donald W.**, (SGM) (M82) (Don) 75-39 Selwyn Ct, Fayetteville NC 28303. Dy: (919) 396-5511. Res: (919) 864-0530. W: Ike. B: Jan 20. Dy: HHC, XVIII ABH Corps. MOS: 93P.

**MESTRE, Mark C.**, (SP4) (M85) B Co, 70th Trans Bn (AVIM), Box 133, APO NY 09028. W: Karol. B: Aug 13. MOS: 93P.

**MEYERS, Howard B.**, (E5) (M85) 3351 Moore St, Los Angeles, CA 90066. Dy: (818) 909-2200. Res: (213) 397-6663. W: Sandra. B: Sep 19. Dy: 146th TAW Cam Sqdn. MOS: 67B.

**MEYERS, John C.**, (E5) (M85) (Mots) B Co, 205th Trans Bn, Box 539, APO NY 09165. W: Kathy. B: Mar 5. MOS: 67Y.

**MILLS, Ricky**, (1SG) (M86) 232 No. School St., Carthage, NY 13619. Dy: (315) 772-6209. Res: (315) 493-3925. W: Judy. B: Jun 21. Dy: 121st CAC, Ft. Drum, NY. MOS: 67Z.

**MITCHELL, Calvin G.**, (SSG) (M85) (Bibby) PSC Box 4889, APO MIA 34001. W: Cheyenne. B: Feb 24. Dy: 210th CAB, Aircraft Tech Inspcr, UH-1H. MOS: 66N.

**MOELLER, Robert A.**, (E7) (M84) (Bob) 391-0 Deputy Lane, Newport News, VA 23602. Dy: (804) 878-5497. Res: (804) 875-0418. W: Tsuneko. B: Jun 4. Dy: 1st Staff & Faculty, Ft. Eustis. MOS: 67T.

**MORGAN, Michael F.**, (SSG) (M86) B Co, 394th Avn Bn-Maint, Box 362, APO NY 09061. W: Christine. B: Jul 16. MOS: 67Y.

**MOORE, Stephen M.**, (SSG) (M85) 3241-B Harris Court, Dover, NJ 07801. Dy: (201) 538-6066. Res: (201) 989-2547. W: Marina. Dy: Tech Insp, AMCCOM Avn Det (D). MOS: 66N.

**MORENO, Amador M.**, (MSG) (M85) (Sgt Mo) Hq, 21st SupCom-ACSLG Avn, APO NY 09325. W: Gertrud. B: Apr 30. Dy: Aircraft Maint Sgt, Hq 21st SupCom. MOS: 67Z.

**MORGAN, Earl A.**, (E6) (M86) HHT 3/7 Cav, APO NY 09702. B: Jun 28. MOS: 66Y.

**MORRIS, Josie**, (SGT) (M85) (Slim) HHC, 223rd Avn Bn, APO NY 09025. B: Dec 16. MOS: 75B.

**MOSELEY, Todd V.**, (SP4) (M85) B Co, 394th

Avn Bn, Box 669, APO NY 09061. B: Apr 1. MOS: 67N.

**MULJU, L.J.**, (SFC) (M86) 193rd Avn Co, APO NY 09454. W: Jan. B: Aug 31. MOS: 68K.

**MULLEN, Richard P.**, (CSM) (M83) (Moon) Hq 205th Trans Bn (AVIM), APO NY 09165. W: Gloria. B: Feb 16. MOS: 00Z. VP, Hanau Chap.

**MULLEN, Terry D.**, (SP4) (M86) (Dude) Box 38, B Co, 394th Trans, APO NY 09061. W: Wendy. B: Sep 0. Dy: 4th Avn Bde, 42nd TAMC. MOS: 68J.

**MYERS, Richard T.**, (1SG) (M77) (Dick) OPM-SANG, APO NY 09038. W: Cecilia. B: Jun 18. Dy: OPM-SANG, Riyadh. MOS: 91B.

## NNNN - QQQQ

**NEWCOMB, Fred A.**, (SGT) (M84) Rt 2, Box 187, Kenbridge, VA 23944. Dy: (912) 352-5401. W: Debra Lynn. B: Dec 20. Dy: A Co, 24th CAC, Cobra Section. MOS: 67Y.

**NEWLIN, Allen H.**, (E4) (M86) Bluegrass Lodge Apts, 255 Clara Dr, #3-N, Pembroke KY 42266. Dy: (502) 798-4972. Res: (502) 475-4001. W: Waynette. B: Sep 13. Dy: A/123 Cmd Avn Bn, 101 Abn Div, Ft. Campbell. MOS: 67N.

**NORTON, Gary L.**, (SGT) (M85) B Co, 70th Trans Bn, APO NY 09028. W: Velinda. B: Sep 12. MOS: 67T.

**ORTIZ, Luis G.**, (SSG) (M85) (Lou) 6604 Wolford Court, Fayetteville, NC 28301. Dy: (919) 396-0875. Res: (919) 822-1097. W: Susan. B: Mar 15. Dy: C Co, 82nd CAB. MOS: 66N.

**PARISH, Robert A.**, (E5) (M84) (Bob) A Trp, 218th Cavalry, Fort Hood, TX 76544. Dy: (817) 287-8300. Res: (817) 699-3253. B: Jun 10. MOS: 67Y.

**PARKER, Wayne R.**, (SSG) (M85) 143220 DeLoche Cir, Newport News, VA 23602. Dy: (804) 878-3624. Res: (804) 875-5372. W: Frances. B: Nov 18. Dy: 3rd S & F Co, 1st Tng Bde, Ft. Eustis. MOS: 68J.

**PATE, John T.**, (CSM) (M86) 20-1 SLASC, Granite City, IL 62040. Dy: (314) 263-1100. W: Robbie. B: Sep 21. Dy: AVSCOM.

**PEREZ, Manuel F.**, (E7) (M86) (Manny) 404 White Wing, Round Rock, TX 78664. Dy: 465-5010. Res: 255-4504. W: Teresa. B: Apr 19. Dy: Hq STARC, Austin. MOS: 67G.

**PETERSON, Theresa L.**, (SP5) (M86) (Terry) 307 N. East Street, Carlisle, PA 17013-2008. Dy: (717) 274-4864. B: Dec 7. Dy: Eastern ARNG Tng Site, Ft. Indiantown Gap. MOS: 71L.

**PINNEY, Michelle**, (SGT) (M86) Co B, 205th Trans Bn, Box 592, APO NY 09165. B: May 12. MOS: 67T.

**PLASKY, Alan**, (SSG) (M74) (F.A.) 75 Barnard Drive, Newington, CT 06111. Dy: (203) 521-6296. W: Debra. B: Sep 25. Dy: 208th Trans Co (Hvy Hel) CT ARNG, Ft. Eng. MOS: 67X.

**PRATT, Paul W.**, (SSG) (M86) Route 1, Box 50, New Baden, IL 62265. Dy: (618) 256-2925. Res: (618) 588-4455. B: Sep 7. Dy: 219th Trans Co, Scott AFB, UH-60 Aircraft Repair Insp. MOS: 66T.

**PRICE, Walter**, (E4) (M86) Rt 4, P.O. Box 598, Lugoff, SC 29078. Res: (803) 438-3574. B: Apr 11. Dy: 320th GSAC. MOS: 67V.

**PRUITT, Jeffrey J.**, (SSG) (M83) 1009 Yorkshire Street, Pillagerville, TX 76660. Dy: (512) 465-5013. Res: (512) 251-2829. W: Shirley. B: Aug 3. Dy: 1249th TC. MOS: 67N.

**QUINN, Thomas W.**, (1SG) (M86) (Tom) 6441 37th Street, Ft. Hood, TX 76544. Dy: (817) 287-5069. Res: (817) 532-4243. W: Linda. B: Oct

## The 1986 Aviation Soldier

# M

10. Dy: HHT, 1/6th Cav, 6th C8(AC). MOS: 67Z

## RRRRRRRRRR

**RABER, Terry L.**, (SFC) (M82) 301 Brandy Ln, Mechanicsburg, PA 17055. Dy: (717) 790-6755. Res: (717) 697-4955. W: Beverly. B: Jul 23. Dy: Opns Sgr, 28th Avn Bde. MOS: 93P.

**RESTUCCI, Marc S.**, (SGT) (M84) (Stuch) 5059 Spruce Pk, Apt 59, Lebanon, PA 17042-3555. Dy: (717) 865-8827. Res: (717) 272-5413. W: Charlene. B: Jan 24. Dy: Eastern ARNG Avn Tng Site (Med). MOS: 91B.

**RETZLAFF, Robert G.**, (MSG) (M86) 4005 Hillside, San Antonio, TX 78217. Dy: 221-2828. Res: (504) 650-5081. W: Mary. B: May 0. Dy: Hq, 5th Army Inspector Gen. MOS: 67Z.

**RICHTERS, Renate**, (SP4) (M85) HHD, 17th Cst Avn Gp, APO SF 96301. B: Jan 12. Dy: Yongsan Heliport (H208). MOS: 93P.

**RIGSBY, Terry A.**, (E7) (M86) B Co, 394th Trans Bn, Box 462, APO NY 09061-0298. W: Marixa. B: Aug 26. MOS: 67Y.

**RIVERS, Scott M.**, (SSG) (M85) (Mickey) 5609 45th Ave S., Minneapolis, MN 55417. Dy: (612) 291-0134. Res: (612) 727-2913. W: Darcy. B: Oct 4. Dy: Det 1/185th Trans Co. MOS: 100B.

**ROBERTS, Larry L.**, (SFC) (M84) (Big Foo) 563 Clarendon Ave, Columbus, GA 31906. Dy: (404) 545-3410. Res: (404) 689-1851. W: Judy. B: Nov 29. Dy: 498th Med Co (AA), Ft. Benning. MOS: 91B. Past VP, "Follow Me" Chapter.

**ROBERTS, Tommy R.**, (CSM) (M85) 1815 Camilla Road, Fort Hood, TX 76541. Dy: (817) 287-2559. Res: (817) 634-2669. W: Mielko. Dy: CAB, 1 Cav Div, VP, Fort Hood Chapter.

**ROBINSON, Harold L.**, (E5) (M86) (Harry) HHT, 3/7 Cav, Box 11, APO NY 09702. W: Linda. B: Oct 20. MOS: 68M.

**RODRIGUEZ, William J.**, (E6) (M86) (Bill) AVUM Trp, 11 CAS, 11 ACR, APO NY 09146. W: Marl. B: Aug 25. MOS: 66V.

**ROLDAN, Efrain, Jr.**, (E3) (M86) (Junior) 203rd Avn Co, APO NY 09025. W: Myrna. B: Jan 3. MOS: 76W.

**ROMAN, Richard**, (SSG) (M86) 203rd Avn Co, APO NY 09025. W: Anita. B: Mar 10. MOS: 35P.

**ROSE, Jean L.**, (CSM) (M84) HHC, 1st ABH, Ft. Riley, KS 66442. Dy: (913) 239-3366. Res: (913) 784-3548. W: Grace. B: Jun 19. MOS: 00Z.

**ROWE, Michael**, (SSG) (M83) (Jethro) P.O. Box 567, Gloucester, VA 23061. Dy: (804) 878-2532. Res: (804) 699-7881. W: Deborah. B: Nov 27. Dy: HHC Post, Ft. Eustis. MOS: 67U.

**RUNK, Adam E.**, (SFC) (M85) Co B, 394th Trans Bn, Box 427, APO NY 09061. W: Cynthia. B: Sep 20. MOS: 68K.

**RYNNE, Joseph M. Jr.**, (CSM) (M84) (Joe) USA Garrison, Honshu, Japan, APO SF 96343. W: Tomiko. B: Jan 12. MOS: 00Z.

## SSSSSSSSSSSSSSSS

**SAGANICH, Gregory D.**, (SGT) (M85) (Greg) 360 Payson Street, Hoffman Estates, IL 60194. Dy: (312) 657-2263. Res: (312) 490-0357. B: Dec 31. Dy: UH-1 Crew Chief, 305th Avn Co (CS). MOS: 67N.

**SANDERS, Donald R.**, (SGT) (M85) 23



# S The 1986 Aviation Soldier

Urell Street, Fort Rucker, AL 36362. Dy: (205) 255-5404. Res: (205) 588-9422. W: Lynn. B: Dec 30. Dy: HHC, 1st Bn (ALMO). MOS: 66G.

**SCHABEL, William L.**, (SFC) (M85) (Bil) FAMC, TF Phoenix, Box 1552, APO NY 09326. W: Margio. B: Sep 25. Dy: 1SG. MOS: 67Y.

**SCHLUCHT, Erwin W.**, (SFC) (M85) (Bil) 4983A Harrison St. Ft. Campbell, KY 42223. Dy: (502) 798-7240. Res: (502) 439-1342. W: Bonnie. B: Sep 20. Dy: HHC, AB, 101st Abn. MOS: 31Z.

**SCHURMPF, Michael W.**, (MSG) (M86) (Mike) HHC, 11th Avn Gp Cst, Box 55, APO NY 09025. W: Terry. B: Jul 8. MOS: 67Z.

**SCHULTZ, Michael L.**, (SFC) (M84) HSC, 308th AHB, APO NY 09165-1540. W: Gail. B: Jan 23. Dy: S-3 NCOIC. MOS: 67T.

**SCONVYER, Lawrence W.**, (CSM) (M86) (Larry) HHD, 19th CAB, APO SF 96271. MOS: 60Z.

**SCOTT, Eric T.**, (SSG) (M86) (Musch) B Co, 394th Avn Bn, Box 655, APO NY 09061. W: Claudia. B: Feb 25. Dy: Airframe Struc Rep. MOS: 66G.

**SELLING, William J.**, (CSM) (M85) (Bil) 715 York Street, Lodi, CA 95240. Dy: (209) 736-2589. Res: (209) 368-3574. W: Darlene. B: Oct 20. Dy: Bde CSM, 40th Cav Bde (A4), 40th ID (Mech) CAARNG. MOS: 00Z.

**SHEPPER, Roy E., III**, (SGT) (M86) (Cool Ray) A Co, 1st MI Bn (AE), APO NY 09457. W: Wendie. B: Jan 11. MOS: 66H.

**SHERIDAN, Dean C.**, (SGT) (M85) 4537 Wicklow Pl #101, Virginia Beach, VA 23452. Dy: (804) 497-0398. Res: (804) 499-9890. B: Sep 19. Dy: H-11 FA, VAARNG. MOS: 91B.

**SHOOPMAN, Danny K.**, (SGT) (M74) 11th Cbt Avn Bn, APO NY 09457. W: Connie. B: Dec 12. MOS: 00Z. VP, Taurus Chapter.

**SHROYER, Raymond**, (1SG) (M80) 4735 Fairview, Downers Grove, IL 60515. Dy: (312) 254-6551. Res: (312) 969-1144. W: Diane. B: Jan 25. Dy: 18th Trans, Glenview NAS. MOS: 67Z. VP, Chicago Area Chapter.

**SIPLES, William E.**, (1SG) (M85) (Bil) 25th Avn Co, APO NY 09061. W: Margaret. B: Apr 23. Dy: 11th CAG, Corps Avn SMC. MOS: 67Z.

**SKAMANICH, Ronald**, (SSG) (M81) 15 Fairview Street, Pine Grove, PA 17963. Dy: (717) 865-8882. Res: (717) 345-4691. W: Susanne. B: Mar 22. Dy: EAATS, ACRFT Maint Supv. MOS: 67T. VP, Indianapolis Gap Chapter.

**SLENKER, Elmer L.**, (SFC) (M84) (Bud) 313 Willow Oaks Dr, Ozark, AL 36360. Dy: (205) 255-3982. Res: (205) 774-4628. W: Diane. B: Jan 24. Dy: Sr Test Prog NCO, USAATB. MOS: 35P.

**SMITH, Albert**, (PV2) (M86) (Chris) 203rd Avn Company, APO NY 09025. W: Sondra. B: Jan 9. MOS: 67T.

**SMYTHE, Nicholas**, (SGM) (M83) (Nick) USA Aviation Board, Fort Rucker, AL 36362. Dy: (205) 255-2179. Res: (205) 393-4372. W: Judith. B: Aug 26. MOS: 67Z.

**SPALLA, Vincent J.**, (SGT) (M85) (Spock) Co C 160th Ft. Ft. Campbell, KY 42223. Dy: (502) 798-7512. Res: (502) 798-7512. B: Sep 30. MOS: 67T.

**SPENCER, Ronald J.**, (SP4) (M85) (Spence) B Co, 70th Trans Bn, APO NY 09028. B: Feb 24. MOS: 67V.

**STAKIAS, George A.**, (PFC) (M86) (Karate Kid) B Co, 205th Trans Bn, Box 777,

AP0 NY 09165. B: Nov 9. MOS: 67V.

**STANDRIDGE, Ricky S.**, (SSG) (M86) 180th Avn Co, APO NY 09025. W: Katherine. B: Aug 2. MOS: 67U. VP, Schwaebisch Hall Chapter.

**STARLING, Enoch R.**, (SP4) (M86) 320th GSAC MR Box 126, APO MIA 34006. B: Aug 24. Dy: 210th CAB, 320th GSAC. MOS: 67U.

**STASIAK, Stephen J.**, (E4) (M85) (Stas) HSC 18th AHB, Box 165, APO NY 09185. B: Aug 29.

**STATTON, Harold D.**, (SFC) (M82) 714 Allison Avenue, Manhattan, KS 66502. Dy: (913) 239-4810. W: Shirley. B: Feb 12. Dy: USA Garrison, Ft. Riley. Past VP, Schwaebisch Hall Chapter.

**STIDLEY, Richard D.**, (E5) (M86) (Rick) HHT, 2F-17 Cav, Ft. Campbell, KY 42223. Dy: (502) 798-3375. Res: (615) 647-2115. B: Oct 10. MOS: 66G.

**STINCHCOMB, B. J.**, (MSG) (M84) PO Box 14, Edgewood, MD 21040. Dy: (301) 671-3932. Res: (301) 939-3132. W: Jo. B: Nov 30. Dy: ACRFT Maint. MAEC. MOS: 67Z.

**STORY, Robert**, (MSG) (M85) (Bob) 12200 Nutmeg Court, Woodbridge, VA 22192. Dy: (202) 325-7440. Res: (703) 491-4194. W: Peggy. B: Apr 19. Dy: USA Soldier Spt Ctr NCR, Alexandria, VA. MOS: 67Z.

**STREET, David B.**, (SP4) (M85) HHT, 11th RCAS, 11th ACR, Box 288, APO NY 09146. B: Oct 30. Dy: Ft Ops Coord. MOS: 93P.

**STROM, Kevin A.**, (SGT) (M85) (Stromboli) B Co, 394th Avn Bn, Box 453, APO NY 09061. B: Oct 5. Dy: Airframe Repair. MOS: 66G.

**SUCHARSKI, Patrick**, (SFC) (M85) (Ski) 9 Aviation Dr, Clarksville, TN 37042. Dy: (615) 318-3188. Res: (615) 552-6162. W: Kimmie. B: Apr 19. Dy: B Co, 158th Avn Bn, Ft. Campbell.

**TEHERO, Edna C.**, (PFC) (M85) (Lady) HHC, APGISA, Box 135, Aberdeen PG, MD 21006. Dy: (301) 278-3483. Res: (301) 272-9808. B: Nov 30. MOS: 93P.

**THOMAS, Mark W.**, (SP4) (M85) HHC, 501st AHB, APO NY 09250. W: Judith. B: Dec 25. MOS: 66D.

**TRAYLOR, John P.**, (CSM) (M86) Route 11, Box 325, Othman, AL 36301. Dy: (205) 255-2454. Dy: B Co, 1st Bn, 1st Avn Bde, Dr Enlisted Trng. VP, Army Avn Center Chapter.

**TRIPP, Charles E.**, (E3) (M86) (Charlie) RD 1, Box 68, Port Crane, NY 13833. Dy: (607) 693-2231. Res: (607) 772-3606. W: Valerie. B: Feb 17. Dy: Co F, 505 PIR, 82d Abn Div.

**UNSELL, Roger L.**, (SSG) (M86) 513-B Stryker Village, Ft. Campbell, KY 42223. Dy: 798-3355. Res: 315-7410. W: Bonnie. B: Aug 26. Dy: A Co, 123 Avn Bn, 101st Abn Div. MOS: 67N.

**UPTAIN, Carol**, (SP4) (M85) 203rd Avn Co, APO NY 09025. W: David. B: Jul 25. Dy: Ft Ops Spec, 203rd Avn Co. MOS: 93P.

**UTTER, Larry J.**, (E4) (M86) 805 Hanover Dr, Virginia Beach, VA 23464. Dy: (804) 467-6216. B: May 30. Dy: Fire Control Repair. MOS: 68J.

**VALENCIA, Jeff J.**, (E4) (M86) (El Gato) HHT 377 Cav, Box 17, APO NY 09702. B: Oct 3. Dy: Petroleum Supply Specialist. MOS: 76V.

**VALIGORA, John M.**, (MSG) (M82) (Val) 1306 Harbor Village Drive, Corpus Christi, TX 78412. Dy: (578) 848-0000. W: Darlene. B: Apr 19. Dy: HHC, 26th Sup Gp, Heidelberg. MOS: 76Z.

**VANDENHEEDE, Mich. Roy**, (SP4) (M84) 942-C

Burr St, Ft Benning, GA 31905. Dy: (404) 545-2018. Res: (404) 687-6304. W: Eileen. B: Jan 4. Dy: DPT, Avn Div, Hq, 1st Bn TSB. MOS: 67T.

**WALTERMYER, Patricia**, (SSG) (M85) (Patty) P.O. Box 402, Jonestown, PA 17038. Dy: (717) 865-8961. Res: (717) 865-5040. B: Dec 29. Dy: ATC Tech, 26th Avn Ptl. MOS: 150A.

**WASHENFELD, Louis F.**, (SSG) (M82) (Lou) 4845 Philadelphia Road, Aberdeen, MD 21001. Dy: 621-2423. Res: 272-3441. W: Paula. B: Jul 10. Dy: 1329th AMC. MOS: 66T.

**WATKINS, Brian J.**, (SP4) (M85) B Co, 394th Avn Bn, Box 258, APO NY 09061. W: Suzanne. B: May 0. MOS: 67V.

**WEAVER, Richard A.**, (SGT) (M85) (Rick) PSC Box 5796, APO MIA 34001. W: Betty. B: Dec 21. Dy: 210th CAB. MOS: 67N.

**WESSON, Evelyn**, (SP4) (M85) HHC, 223rd Avn Bn, APO NY 09025. H: Larry. B: Jun 19.

**WESTHOFF, Mark A.**, (SGT) (M86) (Crash) A Co, 205th Trans Bn, APO NY 09165. W: Fern. B: Oct 7. Dy: Flight Ptl Sgt. MOS: 67N.

**WHISNANT, Danny R.**, (E3) (M86) (Whiz) HHT 377 Cav, Box 45, APO NY 09702. Res: (704) 433-7950. B: Mar 12. MOS: 66D.

**WHITE, Alfred**, (SGM) (M81) (Al) USA Safety Cen., Ft. Rucker, AL 36362. Dy: (205) 255-3005. Res: (205) 774-0172. W: Mildred. B: Dec 10. MOS: 67Z.

**WHITE, George R.**, (MSG) (M83) HHC, 1st CosCom, Ft. Bragg, NC 28307. Dy: (919) 396-5503. W: Elizabeth. B: Aug 11. Dy: Exercise NCOIC. MOS: 67Z. Past VP, Checkpoint Charlie.

**WILKINS, Terry**, (MSG/Pl) (M86) HHD, 59th ATC Bn, Box 146, APO NY 09025. W: Kathy. B: Dec 23. MOS: 93J.

**WILSON, Charles D.**, (SGT) (M86) (Chuck) B Co, 394th Trans Bn, Box 124, APO NY 09061. W: Vicki. B: Apr 14. Dy: Power Plant Repairman. MOS: 66B.

**WILSON, Kurt**, (SP4) (M84) 346 Robinwood Ave, Whitehall, OH 43213. Dy: (614) 235-0986. Res: (614) 235-0986. W: Kris. B: Nov 28. Dy: B Co, 101st Avn Bn, Ft. Campbell. MOS: 67T.

**WIRTH, Michael J.**, (SFC) (M85) (Mike) HSC, 501st AHB, Box 2047, APO NY 09250. W: Jean. B: Jan 1. MOS: 67V.

**WOJCIWICZ, Steven**, (SP4) (M86) B Co, 394th Trans Bn, Box 587, APO NY 09061. W: Linda. B: Mar 23. MOS: 44E.

**WOOD, William D.**, (E5) (M86) (Woody) P.O. Box 138, Benson, NC 27504. Dy: (919) 733-5069. Res: (919) 694-8816. B: Dec 19. Dy: Hq, 330th Avn Bn, Morrisville. MOS: 68D.

**WOODARD, Elmer L.**, (1SG) (M85) HHC, 4th Bde, Box 1946, APO NY 09250. W: Annie. B: Nov 19. Dy: Task Force Phoenix. MOS: 67Z.

**WRIGHT, Marianne G.**, (E6) (M86) (Mair) 2411 Riverside Farms Rd, Austin, TX 78741. Res: (512) 385-0473. B: Oct 6. Dy: 12th Evac Hosp, San Antonio. MOS: 91A.

**WYNNIE, Tony M.**, (SSG) (M86) 25th Avn Co, Box 204, APO NY 09061. W: Cherie. B: Jan 27. Dy: Tech Inspector. MOS: 66N.

**YAHNER, Mitchell G.**, (SGM) (M84) (Piot) Box 1054, Hq, VI Corps, APO NY 09107. W: Delta. B: Apr 16. MOS: 93P. AAAAA Aviation Unit of the Year Award, 1983.

**YORK, Mark D.**, (SP4) (M86) B Co, 394th Trans Bn, Box 708, APO NY 09061. W: Laura. B: Feb 11. MOS: 67V.

**YUSUP, Chris**, (SSG) (M86) (Chris) B Co, 206th Trans Bn, Box 911, APO NY 09165. W: Sonhul. B: Aug 18. MOS: 68G.





## Lt. Generals

WETZEL, Robert L.  
PO. Box 5387  
Columbus, GA 31906

## Maj. Generals

TONER, Francis J.  
4212 Ann Fitzhugh Drive  
Annandale, VA 22003

## Brig. Generals

HARVEY, Thomas H. Jr.  
PMA, J-5, OJCS  
Washington, DC 20301

## Colonels

BITHER, Rodney D.  
ARPRO/MC 5000 E, McDowell  
Mesa, AZ 85205

CARR, Peter H.  
4th Avn Bde  
Fort Carson, CO 80913

GINN, Jerry W.  
HHC, 4th Bde, 3AD  
APO NY 09165

GRIDER, Robert J.  
511 Woodland Terrace  
Alexandria, VA 22302

MASSEY, Ronald F.  
HHC VII Corps  
APO NY 09107

MORTON, James O.  
1111 Army Navy Dr, B-501  
Arlington, VA 22202

PRESTON, Edward J.  
412 Dickman  
Fort Sam Houston, TX 78234

TERRELL, Douglas R.  
Hq, 6th Army IG  
Presidio of SF, CA 94129

## Lt. Colonels

ANDERSON, James R.  
American Embassy  
APO NY 09085

BALMOS, Edward J.  
USAPSC-H Unit 2, POB 347  
APO SF 96503

BRUNS, Thomas E.  
5513 Broadmoor Street  
Alexandria, VA 22310

BIYAN, John P.  
HQ, 204  
APO NY 09333

## Lt. Colonels

CARLIN, Dennis  
14 Boyce Lane  
Fort Rucker, AL 36362

CHANDLER, Edward D.  
405 Broken Arrow Drive  
Enterprise, AL 36330

CLARK, John N. Jr.  
131 Chevalier Drive  
Enterprise, AL 36330

COLE, Stephen J.  
94125 Kilahe Loop  
Milliani, HI 96789

DUCK, Theodore A.  
9 Buchanan Court  
Newport, RI 02840

EDWARDS, Floyd E.  
569 Craig Road  
Carlisle, PA 17013

EDWARDS, Warren C.  
HHC, 47 Cav  
APO SF 96251

FROST, Gary C.  
904 NE Pleasant Lane  
Lawton, OK 73507

GANNON, Terry C.  
12904 Covington Tr  
Austin, TX 78727

GUNN, Thomas A.  
8601 Etna Drive  
Springfield, VA 22152

GUPPY, Chris M.  
2935 Summerville Circle  
Ft Eustis, VA 23604

HAILES, Sherman W.  
5575 E. Shields  
Frederic, CA 93727

JACKSON, David C.  
24 Hope Terrace  
Carlisle, PA 17013

KEEFE, Gary L.  
2278 Market Street  
Leesburg, PA 15656

KING, Boyd E.  
5523 Dunsmore Road  
Alexandria, VA 22310

KISLER, Alvin R.  
P.O. Box 1421  
Telluride, CO 81435

KLUENDER, James L.  
2042 Lection Road  
Leavenworth, KS 66048

LOFTIN, William D.  
115 Thomas Lane  
Prestville, AL 36067

MCCORD, James H.  
HHC, 11th Avn Gp  
APO NY 09025

## Lt. Colonels

MITTEER, Jack A.  
2019 Freeport Lane  
Gilbert, AZ 85234

MOWERY, James L.  
324-4 Doniphan  
FI Leavenworth, KS 66027

MUMBY, Roger L.  
581 Sumner Road  
Carlisle, PA 17013

NASH, William L.  
6825 Coleman Road  
Fort Hood, TX 76544

NELSON, Michael A.  
420 Harlow Street  
Fayetteville, NC 28303

ORR, Robert, Jr.  
Frankfurt MILCOM, Box 1  
APO NY 09700

PATTERSON, Harry O. Jr.  
4501 Overridge Drive  
Chester, VA 23831

ROBERTS, William E.  
DMI-USMA  
West Point, NY 10996

RUDY, James J.  
4458 Bouquet Road  
Carlisle Barracks, PA 17013

SHEEHY, James J. Jr.  
821 Watts Drive  
Huntsville, AL 35801

SWIFT, Ivan C.  
7611 36th St. Ct. W  
Tacoma, WA 98466

TACKETT, John A.  
c/o Walton, 6749 N. Ojai  
Ventura, CA 93001

TANGUY, Paul K.  
TSM-SEMA  
FI Huachuca, AZ 85613

THOMPSON, Lee  
4915 Gloxinia Court  
Annandale, VA 22003

VOSS, Daniel R.  
P.O. Box 95  
Dartmouth, MD 21034

WOOD, Gail W.  
7303 Gardner Hills  
FI Campbell, KY 42223

WYATT, Jake W.  
HHC, 7201 Trans Bn (AVIM)  
APO NY 09028

## Majors

ACKERLY, William G.  
3558 Woods Court  
Manhattan, KS 66502

ADAMS, John M.  
244 CAC, 4th Bde, Box 1501  
APO NY 09250

ADEE, Daniel S.  
135 Enclosure  
Lansing, KS 66043

ANDERSON, William F.  
1116 Leyte AFSC NORVA  
Norfolk, VA 23511

ATKINS, Frank G.  
1508 B Casey Court  
Leavenworth, KS 66048

BISHOP, Gary M.  
8600 Canima Spring Ct  
Springfield, VA 22152

BOWNS, Nicolas D.  
1040 Drennan Park  
Fort Campbell, KY 42223

BROWN, Dennis C.  
SMC #2998, Nav. PG School  
Monterey, CA 93943

BURT, Nancy J.  
HHC, 11th Avn Gp  
APO NY 09025

CLAFLIN, Robert C.  
28 Dragoon Drive  
Fort Leavenworth, KS 66027

COLEMAN, Gary S.  
30434 Stony Lonesome  
West Point, NY 10996

COMBS, John R.  
809 River Run  
Clarksville, TN 37043

## Majors

CORREIA, James R.  
28 Buckner Avenue  
Fort Leavenworth, KS 66027

CULLING, Laurence J.  
HHC, 4th Bde, 3d Armd Div  
APO NY 09165

DAN, Larry W.  
205 Hancock  
Fort Leavenworth, KS 66027

DEFORD, Roy S., Jr.  
134 Martin Drive  
Fort Bragg, NC 28307

DEGRASSE, Robert A.  
HHC, 11th Avn Gp  
APO NY 09025

DONLEY, Freeman R.  
229 Hancock Avenue  
FI Leavenworth, KS 66027

DRIVER, William L.  
79 3d Infantry Road  
FI Leavenworth, KS 66027

EDWARDS, Steven G.  
275 Hancock  
Fort Leavenworth, KS 66027

FERGUSON, Mercer E.  
103 5th Artillery  
Fort Leavenworth, KS 66027

FLUKE, Bryan C.  
2928 Carnaby Street  
Indianapolis, IN 46229

GLASGOW, Frank L.  
2022 Rutger  
St Louis, MO 63104

GOODWIN, William P.  
4 Dragon Drive  
Fort Leavenworth, KS 66027

HACKERSON, Michael W.  
227 Valley Drive  
Lansing, KS 66043

HANCOCK, Rick  
7 Walker Avenue  
Fort Leavenworth, KS 66027

HARRIS, Stephen M.  
c/o Eliza, 20 Eliza Street  
Daleville, AL 36322

HART, Gerard  
38 Dragoon Avenue  
Fort Leavenworth, KS 66027

HEDGPETH, James L.  
800 Bn 104  
Fort Irwin, CA 92310

HENDRIX, Ossie L.  
7 Dragoon Drive  
Fort Leavenworth, KS 66027

HILL, Jeffrey S.  
15623 Vantage Hill Rd., #12C  
Reston, VA 22090

HINOJOSA, Jose  
PSC Box 1584  
APO MIA 34003

HUDGENS, Richard C.  
13202 Percival Drive  
Huntsville, AL 35893

JOHNSON, Terry L.  
9521 Sandbur Drive  
Salinas, CA 93907

KREJCI, Michael F.  
105 Harland Creek  
Enterprise, AL 36530

LAMA, John A.  
8715 S. Kingston Avenue  
Chicago, IL 60617

LONG, Clyde L.  
2076 Marjorie Circle  
Leavenworth, KS 66048

LYNDE, Gary G.  
300 Seminole  
Enterprise, AL 36330

MADDEN, Gary E.  
6th Army CART, Buckley ANGB  
Aurora, CO 80011

MADDOX, Dale F.  
1949 Caledonia Road  
Cadiz, KY 42211

MARSHALL, A.R. Jr.  
3306 Edwells Road  
Fort Belvoir, VA 22090

MCCORD, Robert E.  
6 Dragoon Avenue  
Fort Leavenworth, KS 66027

## Majors

**McKENNON, Alton C., Jr.**  
49 4th Artillery Road  
Fort Leavenworth, KS 66027

**McKENTY, Bruce G.**  
8019 65th St Ct (Ct)  
Tacoma, WA 98467

**MERCHEN, Lee A.**  
18 Howard Street  
Fort Rucker, AL 36362

**MEYER, Stanley F.**  
201st Ave Co (Ct)  
APO SF 96271

**MILLER, Barry W.**  
94-152 Hukula Place  
Mililani, HI 96789

**MORRIS, David**  
520-4 Kearny Avenue  
Fort Leavenworth, KS 66027

**MULVENON, Michael T.**  
108 Gilbert  
Lansing, KS 66043

**NEGRET, Bernardo C.**  
HSC, 223d Avn Bn, P.O. Box 3  
APO NY 09025

**NELSON, James P.**  
9879 Burke Pond Ct  
Burke, VA 22015

**PARAMORE, Jerry S.**  
59 4th Arty Road  
Fort Leavenworth, KS 66027

**PARNELL, Ronnie B.**  
JUSMAGTHAI Box 18  
APO SF 96346

**PETERSON, Raymond E.**  
94 Third Infantry Road  
Fort Leavenworth, KS 66027

**PLANT, John T.**  
P.O. Box 1417  
Centerville, VA 22020

**PREWITT, David S.**  
Quarters 702A, 7th Street  
Maxwell AFB, AL 36113

**RANDLE, Robert B. II**  
310 Hancock  
Fort Leavenworth, KS 66027

**RANDOLPH, William J.**  
6805 24th Street  
Fort Hood, TX 76544

**ROTCLIFF, Ronald E.**  
2808 Turner Circle  
Dothan, AL 36303

**RICHARDS, James G.**  
1157 Jeffrey Drive  
Crofton, MD 21114

**ROSS, Danny W.**  
70 4th Artillery Road  
Fort Leavenworth, KS 66027

**RUSHO, Michael E.**  
100 Cahaba Drive  
Enterprise, AL 36330

**SCHILLERER, John L.**  
205th Spt Gd, Glenmore Road  
Troy, NY 12180

**SCHOONOVER, John C.**  
189th GSAC  
APO NY 09165

**SHUPNER, Ronald E.**  
70 4th Artillery Road  
Fort Leavenworth, KS 66027

**SCHWOEBEL, Charles G.**  
1232 Mindoro  
Norfolk, VA 23511

**SHEAHAN, Patrick J.**  
100 5th Artillery Road  
Fort Leavenworth, KS 66027

**SIMMONS, Hollis**  
5061 W. Albatross Place  
Tucson, AZ 85710

**SIMMONS, John W.**  
7710 Pine Springs Drive  
Orlando, FL 32819

**SPENCER, Robert D. Jr.**  
7 Stillwell Avenue  
Fort Leavenworth, KS 66027

**STAADT, Thomas A.**  
2840 Woodland Drive  
Northbrook, IL 60062

**STEVENS, Shelby T.**  
5014 W. Timberlake Court  
Columbus, GA 31907

## Majors

**STEWART, Thomas F.**  
P.O. Box 257  
Fort Campbell, KY 42223

**SUMNER, Herman W.**  
251 Hancock Avenue  
Fort Leavenworth, KS 66027

**SWANK, David W.**  
118 Iniquity Street  
Enterprise, AL 36330

**TONEY, Gordon D.**  
5 Hancock Avenue  
Fort Leavenworth, KS 66027

**TOWNSEND, Daniel J.**  
608 Pondview  
Killeen, TX 78541

**TRAMMELL, Louis B.**  
220 Hancock Avenue  
Fort Leavenworth, KS 66027

**UMSTAEDTER, William B.**  
906 Cliffside Drive  
Harker Heights, TX 78543

**VEIGA, Edwin F.**  
162 5th Artillery Road  
Fort Leavenworth, KS 66027

**VINCENT, Richard L.**  
321 Poole, Apt 4  
Fort Leavenworth, KS 66027

**VRAZEL, Gary J.**  
308 Hancock  
Fort Leavenworth, KS 66027

**WHITACRE, Chas. Jr.**  
1002 Whispering Oaks  
Salado, TX 78571

**WHITESIDE, Douglas R.**  
2712 S. 22nd Street  
Fort Leavenworth, KS 66048

**WHITSON, John A.**  
164 J Ave, Ncad  
New Cumberland, PA 17070

**WILDES, David G.**  
62 4th Artillery Road  
Fort Leavenworth, KS 66027

**WILKINSON, Dennis**  
93 3rd Infantry Road  
Fort Leavenworth, KS 66027

**WRIGHT, Dennis L.**  
308 Hancock  
Fort Leavenworth, KS 66027

## Captains

**BAKER, Anthony A.**  
HHT, 4th Sgdn II ACR  
APO NY 09146

**BLACKBURN, Myron V.**  
1b Apache Drive  
Enterprise, AL 36330

**BRAUN, William G.**  
285 S. Broadway, 2d Floor  
Saratoga Springs, NY 12866

**BRIGGS, Randall N.**  
CUBR 3, Box 5791  
Fort Rucker, AL 36362

**BUCHAN, Grady**  
35-9 Queens Way  
Camillus, NY 13031

**CARROLL, Lawrence W.**  
114-H Windsor Castle Rd  
Newport News, VA 23604

**COUCH, Jerry R.**  
1111-D Thompson Circle  
Fort Eustis, VA 23604

**COURTIS, Michael P.**  
805 Cedar Oaks  
Harker Heights, TX 78543

**CRADDOCK, Brian M.**  
P.O. Box 4157  
Fort Eustis, VA 23604

**CULP, Martin J. II**  
50 Bridge St, Rm 140  
Manchester, NH 03101

**DAVIS, Richard A.**  
HHC 223d Avn Bn, Box 5  
APO NY 09025

**DOWNEY, David A.**  
7 Glasgow Circle  
Edwards AFB, CA 93523

**DWYER, Stephen R.**  
303 Emerald Drive  
Enterprise, AL 36330

## Captains

**FIELDS, Patricia B.**  
19 Pine Drive  
Roosevelt, NJ 08555

**FINLEY, Marsha S.**  
12451 Horizon Vg Dr, Apt C  
Spanish Lake, MO 63138

**FURR, Philip**  
41 Student Bn  
Fort Rucker, AL 36362

**GANT, Ronald D.**  
1504 Patrick Drive  
Junction City, KS 66441

**GROTE, Mark L.**  
HHD, 52nd Cbt Avn Bn  
APO SF 96301

**HALL, Heyward, Jr**  
Rte 3, Box 348  
Enterprise, AL 36330

**HAM, Johnnie A.**  
905 Clearbrook Course  
Marietta, GA 30064

**HAMPTON, Greg R.**  
111 Valley View Drive  
Enterprise, AL 36330

**HASSEL, Michael E.**  
11th ACR Avn Squad  
APO NY 09146

**JENNINGS, James**  
Rte 3, Box 201, Valley View Dr  
Enterprise, AL 36330

**JOHNSON, Thomas A.**  
408 Abbey Circle  
Abingdon, MD 21009

**KNIGHTON, Christine**  
2509 A Bermuda Drive  
Killeen, TX 76542

**LANG, Jeanne M.**  
205 Kelms Court  
Ozark, AL 36360

**LEBOEUF, Maureen K.**  
574-C Connor Road  
West Point, NY 10996

**LEE, Frederick L.**  
840 Johnson Drive  
Mages, MS 39111

**LEIST, Edward G.S.**  
620 West University Pkwy  
Baltimore, MD 21210

**LLOYD, Karen E.**  
HMC, 4th Bde, Box 2237  
APO NY 09250

**MATSON, Jerry F.**  
Rte 1, Box 354-D  
Ashland City, TN 37015

**McGOWAN, James R.**  
P.O. Box 33752  
Fort Lewis, WA 98433

**MERCADO, Ruben**  
102 Raven Drive  
Enterprise, AL 36330

**MINADEO, Gary A.**  
62 5th Avenue  
Fort Rucker, AL 36362

**NAPOLI, John C. Jr.**  
1705 Williamsburg Place  
Clementon, NJ 08021

**O'BRIEN, Thomas J.**  
Ct 3, Box 813 E Co, 4th ATB  
Fort Rucker, AL 36362

**ORTIZ, Miguel A.**  
59 Hook Road  
Ramey, PR 00804

**PACK, John E.**  
48 Dragoon Drive  
Fort Leavenworth, KS 66027

**PANKEY, Rodney A.**  
51 Appaloosa  
Deridder, LA 70634

**PHILLIPS, Gregory S.**  
5827 S. 29th  
Auburn, WA 98001

**PRY, Gerald R.**  
930 Lacon Drive  
Newport News, VA 23602

**RIGSBEE, Thomas E.**  
59 Delafield Drive  
Fort Belvoir, MO 65473

**SALES, Vance**  
HHT, 11 ACR  
APO NY 09146

## Captains

**SCHUETT, Robert J.**  
Box 1196, NPGS  
Monteale, CA 93943

**SUMMERS, Kim L.**  
A Tps 2 CAS, Box 62  
APO NY 09092

**TARR, Andrew M.**  
43 Forest Park Apts  
Enterprise, AL 36330

**WALTERS, Robert G.**  
144 Tide Ave  
Monteale, CA 93940

**WELDON, Marcus J.**  
HSC, 10th AHB, Box 527  
APO NY 09140

**YARBOROUGH, Michelle F.**  
118 Springdale Way  
Hampton, VA 23666

**ZIENTEK, William J.**  
HHT, 117 Cav, Box 6  
Fort Bragg, NC 28307

## 1st Lieutenants

**ADAMS, Caroline**  
P.O. Box 826  
Ft. St. Croix 00840

**BEVILLE, Stephen C.**  
2442b S. 10th Street  
Fort Lewis, WA 98433

**BROWN, Dennis T.**  
108 Winchester Place  
Smyrna, GA 30080

**BUCHANAN, John D.**  
422 Acklen Park Dr, Apt 3  
Nashville, TN 37205

**CHAMPION, Pamela J.**  
401 Twin Creek Dr, No. 8D  
Killeen, TX 76541

**COHEN, Robert H.**  
A Co, 205th Trans Bn, Box 114  
APO NY 09165

**COLBERT, Michael B.**  
2400 Ocean Pines  
Berlin, MD 21811

**DEFOOR, Barry A.**  
41 Boyce Lane  
Fort Rucker, AL 36362

**EDMONSON, M. J.**  
172-E Westop Drive  
Fayetteville, NC 29301

**FOX, Roy W.**  
4245-E 59th Street  
Fort Wainwright, AK 99703

**KUCH, Sharon L.**  
B Co, 18 AHB, Box 113  
APO NY 09185

**ROBBINS, Michael J.**  
5216 Lee Road, Apt. 4  
Maple Heights, OH 44137

**SCANTLAN, Donald L.**  
P.O. Box 707  
Daleville, AL 36322

**SOOS, John A.**  
79 Bowline Street  
Barnegat, NJ 08005

**SOUZA, Mark K.**  
Box 92, 207th Avn Co  
APO NY 09102

**SPARKS, Daniel C.**  
HHC 7th ATC Bn 3504  
APO NY 09114

## 2nd Lieutenants

**CUMBIE, Robert M.**  
220th AHC Box 1645  
APO NY 09250

**GARMAN, Larry**  
206 Smith Street  
Benton, IL 62812

**HAGER, Jay**  
501E 4th Street  
Spencer, OH 45887

**McINTOSH, Richard W.**  
P.O. Box 804  
Biggs Field, TX 79908

**MERRITT, Layne B.**  
230 Field Stone Lane, 102  
Newport News, VA 23602



## 1st Lieutenants

PETERS, Mark J.  
18 Mt Bn, Box 106  
APO NY 09108

## CW4s

DYKES, James A.  
P.O. Box 3004  
Giletsville, IN 47216  
GAMBLE, William H.  
JHC, 4th Bde, 3AD  
APO NY 09165  
GIBSON, William E.  
612 Willow Oaks Drive  
Ozark, AL 36360  
HOLLIDAY, Donald B.  
218 Chetyan Avenue  
Colorado Springs, CO 80903  
MACDONALD, Joseph C.  
201 Harland Creek Drive  
Enterprise, AL 36330  
MILLER, John R.  
RD 4, Box 4499  
Berwick, PA 18603  
ROSSITER, David R.  
1515 Industrial Way, MD20A  
Belmont, CA 94002  
RYAN, Dennis A.  
B Trp, 47 Cav, Box 98  
APO SF 96524  
VAUGHAN, Carroll A.  
13 Black Forest Drive  
Savannah, GA 31410  
VIETOR, Klaus L.  
P.O. Box 166  
APO NY 09359  
WAGNER, Randy D.  
C Trp, 19 Cav, 1st Cav Div  
Fort Hood, TX 76544  
WESTBROOK, Roy A.  
430 Cottonwood  
Copperas Cove, TX 76522  
WINFREY, Ralph V.  
94-390 Hamau Street  
Walpahu, HI 96797

## CW3s

BAKER, James W.  
7916 NW Terrace Hills  
Lawton, OK 73505  
COATES, David A.  
Box 192, 11th CAS, 11th ACR  
APO NY 09146  
DEXTER, Stephen H.  
L-2 Regency Place  
Lawrence, KS 66044  
GERSON, Rodney O.  
9480 Vollmerhausen Drive  
Columbia, MO 21049  
JOHNSTON, Fletcher S.  
5340 Holmes Run Pkwy, 104  
Alexandria, VA 22304  
NORTON, Bruce M.  
19 Barrington Circle  
Savannah, GA 31419  
OSBURN, Charles L.  
2210 Charleston Road  
Clarksville, TN 37043  
ROUNTREE, Ed  
3706 Rainfree Drive  
Tucson, AZ 85741  
SIMP, Hal D.  
2511 Hoelter Avenue  
Rapid City, SD 57701  
SKAANDEN, Richard A.  
2901 Willowbend Drive  
Killeen, TX 76541

## CW2s

BERRY, Charles R.  
163 Kirby Drive  
Clarksville, TN 37042  
BOLEY, James I.  
392B Circuit Lane  
Newport News, VA 23602  
ESTRADA, Roberto  
101 W. Centex Expwy, No. 302  
Killeen, TX 76541

## CW2s

FERGUSON, Danny L.  
55th TAMC  
APO NY 09185  
HEADRICK, Jo L.  
501 W. Cent Expwy, #2105  
Killeen, TX 76541  
HOLYCROSS, Mark B.  
D Troop, 3/7 Cav  
APO NY 09702  
HOWARD, David Jon  
8866 N. Prospect Street  
Niles, IL 60048  
KENNY, David A.  
4175 Jane Road  
Troy, AL 36081  
LAGUNA, Daniel, Jr.  
1142 B Drennan Park  
Fort Campbell, KY 42223  
O'BANNON, Gareth A.  
Box 655A  
Locust Grove, VA 22508  
SCHWARTZBERG, Richard R.  
63rd Med Det  
APO NY 09180  
WALKER, Wayne K.  
A Co, 501st AHB, Box 2222  
APO NY 09250  
WILLIAMS, Ronny G.  
HSC, 8th AHB  
APO NY 09185  
WILSON, William D.  
A Co, 394th Avn Bn, Box 315  
APO NY 09061  
WOLD, Robert S.  
116 Piercedrive Drive  
Richmond Hill, GA 31324

## WO1s

BAXTER, Scott C.  
305 Tartan Court  
Fayetteville, NC 28301  
BUCK, Stanley J.  
17th CAC, CAB 2AD  
Fort Hood, TX 76542  
DESROCHES, Pierre  
3715 Hickory Hill Drive  
Colorado Springs, CO 80906  
LASATER, John M.  
205 Stephanie Drive  
Ozark, AL 36360  
NEWMAN, Ryan B.  
377th Med, Box 39  
APO SF 96301  
PRIDE, Marden  
Box 752, 62nd Avn Co  
APO NY 09039  
REYNOLDS, Randall L.  
Rte 9, Box 870  
Bucyrus, MO 65444  
STORY, Thomas W.  
P.O. Box 6231  
Fort Hood, TX 76544  
STOVER, Allen V.  
306 Oak Drive  
Lake Jackson, TX 77566  
WASHBURN, Lon C.  
944 14th Street  
Martinez, CA 52302  
WELSH, Daniel W.  
Bldg 2997, Box 105  
Fort Campbell, KY 42223

## Enlisted

GETKIN, Jay E. SGT  
2372C Smith Circle  
Fort Eustis, VA 23604  
MILLS, Ricky 1SG  
232 No. School Street  
Carthage, NY 13619  
PRICE, Walter E.  
Rte 4, P.O. Box 598  
Lugoff, SC 29078  
VAN DYKE, Arnold T. E7  
10 Princess Anne Circle  
Newport News, VA 23602  
WEAVER, Richard A. SGT  
PSC Box 5796  
APO MIA 34001

## Enlisted

WERMANN, Paul K. SFC  
13625 Avebury Dr., No. 11  
Laurel, MD 20708  
WOJCIK, Ray P. E5  
1400 Harco Bldg Apt. 709  
Daytona Beach, FL 32014  
BORGMAN, Dean C./McD  
5000 E. McDowell, 530/B325  
Mesa, AZ 85205  
BRONKHIM, David/CASA  
14102 Sullyfield Cir, 200  
Chantilly, VA 22021  
CHANDLER, Jimmy J.  
PSC Box 1746  
APO MIA 34003  
CHARLTON, Scott E.  
4311 Santa Cruz Avenue  
San Diego, CA 92107  
COFFIN, Robert T.  
5000 E. McDowell, 530/B250  
Mesa, AZ 85205  
CRUCE, Robert D.  
155 Country Roads Drive  
Scottsdale, AZ 85261  
DE URIARTE, Juane/CASA  
14102 Sullyfield Circle, 200  
Chantilly, VA 22021  
DEWITT, Joyce  
P.O. Box 256  
Earlysville, VA 22936  
ECHO, Daniel  
P.O. Box 516  
Springfield, NJ 07081  
EFURD, Ray  
7220 Richardson Road  
Smyrna, GA 30080  
FREELAND, Ron S.  
350 Collins Rd, NE  
Cedar Rapids, IA 52498  
FULLER, William L.  
Rte 6, Box 167  
Chippewa Falls, WI 54729  
HANSON, Dennis M.  
1426 Park Court  
St. Charles, MO 63303  
HENRY, Thomas J./Kollman  
220 Daniel Webster Hwy.  
Merrimack, NH 03054  
HILL, Stewart F.  
P.O. Box 39  
Drewsville, NH 03604  
HOPKINS, Joseph A.  
Cinderella Station, Box 1442  
Charleston, SC 29409  
JAGGERS, Joseph N./A&S Corp  
P.O. Box 728  
Belton, TX 76513  
KENNEDY, Edward J.  
P.O. Box 234  
Middle Granville, NY 12849  
KING, Paul D.  
15317 Beaufort Court  
Corpus Christi, TX 78418  
MC ATEE, C.W./Lifton Sys.  
353 W. 1st St., Ste. 356  
Dayton, OH 45402  
MILLER, Jon M.  
46950 Sentinel Drive  
Fremont, CA 94539  
MOE, Timothy A./Hughes Aft  
700 Boulevard South, 501  
Huntsville, AL 35892  
MORGAN, Frank  
US Soldiers/Airmans Home  
Washington, DC 20317  
PEREZ, Veronica L.  
5018 Corner Drive  
Corpus Christi, TX 78415  
PINEO, Ralph E. III  
POB 2271, Hq USAREUR  
APO NY 09403  
ROSSE, Andrea/CASA  
14102 Sullyfield Cir, 200  
Chantilly, VA 22021  
RYAN, Joseph  
P.O. Box 255  
Atlantic Highlands, NJ 07716

## Civilian

SAWYER, Marshall W.  
1001 Flynn Road  
Camarillo, CA 93011  
SIFUENTES, Raul A.  
2615 Brightwell Drive  
Wilmington, DE 19810  
SIJANSKY, Frank  
3706 Shoal Creek Circle  
Corpus Christi, TX 78410  
ST. JOHN, John E.  
58 Carter Road  
Thornton, PA 19373  
SUEVER, William H.  
RR 2, Box 378A  
Belleville, IL 62221  
TAYLOR, Frank D./West'n Gear  
1235 Jeff Davis Hwy, 406  
Arlington, VA 22202  
THOMPSON, Dale J.  
PO Box 256  
Earlysville, VA 22936  
WERNER, Richard E.  
6A Latchmore Ave, Garrards  
Cross, Bucks SL9 8LL England

## Retired

ADAMS, Rodney A. MAJ  
2613 Walnut Lane  
Piano, TX 75075  
ANCELIN, Donald R. LTC  
528 Gold Street  
Toms River, NJ 08753  
ATWOOD, Walter W. MAJ  
5521 E. Gelding Drive  
Scottsdale, AZ 85254  
BAEBS, David E. COL  
503 Jefferson Street  
Waupaca, WI 54981  
BAUMGARTEN, John R. COL  
291 Chestnut Street  
San Carlos, CA 94070  
BROWN, Patty E. COL  
27 Dunbar Road  
Palm Beach Gdns, FL 33418  
CHERNE, Milton P. LTC  
2929 C Cowley Way  
San Diego, CA 92171  
CRACK, Garnett E. LTC  
110 Whitfield Street  
Athens, AL 35611  
DENSFORD, Charles F. COL  
ERAU, Box 7809, Reg. Airport  
Daytona Beach, FL 32014  
DRAKE, Ven T. LTC  
P.O. Box 280  
Midway, UT 84049  
FRASER, Harry L. LTC  
8315 E 63rd St.  
Derry, KS 67037  
HENDRICKSON, Paul L.  
36 Telluride  
St. Peters, MO 63376  
HOFFMAN, Glenn F. LTC  
2922 Gainesborough  
San Antonio, TX 78230  
HOUSTON, Steven P. CW3  
209 S. 500 W.  
Rexburg, ID 83440  
JONES, Harry L. COL  
525 Foxgate Cir  
Chesapeake, VA 23320  
KUNSMAN, Robert A. CW3  
1323 W. Lajon Blvd, Apt 42  
Goodysville, AZ 85338  
LANGLOIS, Arthur R. LTC  
P.O. Box 1002  
New Smyrna Beach, FL 32070  
RESTIVO, Charles J. CW4  
46 Bradley Avenue, NE  
Palm Bay, FL 32909  
THOMPSON, James B. COL  
P.O. Box 784  
Salado, TX 76571  
TYSON, Robert M. LTC  
Rte 2, Box 229F  
Esberta, VA 22607  
WALKER, John J. COL  
1306-3A Randolph Ave  
Huntsville, AL 35801



# Sept.-Dec., 1986 Calendar of AAAA Chapter Activities

**OCTOBER**

	1	2	3	4
5	6	7	8	9
10	11	12	13	14
15	16	17	18	19
20	21	22	23	24
25	26	27	28	29
30	31			

## September, 1986

■ Sept. 24. Army Aviation Center Chapter. Professional-social dinner meeting. Guest speaker: W.E. Butterworth (Pen name—W.E.B. Griffin, author of the "Brotherhood of War" series); "Researching the series". Main Ballroom, NCO Club.

■ Sept. 25. North Texas Chapter. Professional-social dinner meeting. Charles D. Gernar, U.S. Army Astronaut, guest speaker; "Application of NASA technologies to Army Aviation Programs." Great Southwest Holiday Inn, Highway 360, Arlington.

■ Sept. 26. Mainz Chapter. Late afternoon business-social meeting. Discussion of Chapter's 1987 program. Beverages and snacks. Village Inn OOM, Mainz University Area.

■ Sept. 27. Army Aviation Center Chapter. "Run for the Museum." 5K Race and One Mile Fun Run. T-Shirts to first 400 5K runners. \$1.00 entrance fee for Fun Run. All proceeds go to the Army Aviation Museum. Checks payable to "AAAA Run."

■ Sept. 29. Mid-America Chapter. Professional luncheon meeting. Message of GEN John A. Wickham, Jr., to Army Aviation videotele. Golf Bar, Ft. Riley Officers' Club.

## October, 1986

■ Oct. 1. Washington, D.C. Chapter. Professional-social dinner meeting. MG Ellis D. Parker, CG, USA Aviation Center, guest speaker; "New Trends in Army Aviation." Ballroom, Ft. McNair Officers' Open Mess.

■ Oct. 7. Lone Star Chapter. After dinner professional-social meeting. Sergel Sikorsky, United Technologies Corporation, guest speaker; "Update on Sikorsky Programs." Austin Army Aviation Support Facility Classroom #2. AAAA Members only.

■ Oct. 8. Chicago Area Chapter. After dinner professional-social meeting. LTC "Pete" Peduzzi, FAA; "The FAA Heliports/Airports Program." Palwaukee Motor Inn, Palwaukee Airport, Wheeling, Ill.

■ Oct. 9. Connecticut Chapter. Professional-social dinner meeting. Joseph P. Cribbins, Special Assistant to the DCS for Logis-

tics, DA, guest speaker; "Aviation Support: How to get to the 21st century". Hillandale Country Club. Trumbull, Conn.

■ Oct. 10. Taunus Chapter. Late afternoon business-social meeting. Beverages and snacks. Wiesbaden Air Base Club. AAAA members only.

■ Oct. 13. National Executive Board. Professional-social dinner meeting. Residence of MG and Mrs. Richard D. Kenyon, Quarters 12B, Ft. Myer, Va.

■ Oct. 14. National Executive Board. Quarterly business meeting. 2 p.m., Annapolis Room, Sheraton Washington Hotel.

■ Oct. 15. The Citadel Chapter. After dinner professional-social meeting. MAJ Michael Masterson, guest speaker; "Air Cavalry." Free refreshments. Jenkins Hall Auditorium.

■ Oct. 18. Lindbergh Chapter. "First Annual AAAA Road Rally — A Scavenger Hunt on Wheels." Bring the family - prizes and free beverages at the end of the journey. Starting point: SLASC PX parking lot.

■ Oct. 18. Ft. Hood Chapter. "3rd Annual Pegasus Run, Championship Chili Cookoff, and Car Show". Fee: \$5 advance registration, \$7 on day of the run; T-Shirts to all entrants; free chili. Yellow Ribbon Park, Ft. Hood.

■ Oct. 19. Corpus Christi Chapter. "Family Picnic". Chicken, Hot Dogs, and All the Trimmings. CP & L Park, Corpus Christi, Texas.

■ Oct. 21. Indiantown Gap Chapter. Professional luncheon meeting. LTC Eric Braman and MAJ William Squires, NGB Aviation Division Operations, guest speakers; "Army of Excellence" briefing. Indiantown Gap Community Club.

## November, 1986

■ Nov. 1. USAREUR Region. "7th Annual USAREUR AAAA Ball". Guest speaker TBA. Entertainment. Formal/Black Tie. Heidelberg Officers' and Civilians' Club. AAAA members only.

■ Nov. 4-5. Fourth Aircraft Survivability Equipment (ASE) Symposium sponsored by the AAAA. Classified sessions and Awards Dinner. First presentation of the "Aircraft Survival" (CALENDAR/Continued on Page 52)



## Briefs

**New Chapter Officers:** The Taunus Chapter has elected LTC Paul N. Yacovitch as its new President; LTC George R. Spiczak (SrVP); and CPT Daniel S. Brown (Trea).

**MAJ Ricky C. Simmons** has been elected as the VP, Programming, at the S. California Chapter.

The Corpus Christi Chapter has made some organizational changes. They installed Joe J. Guzman (SrVP); Ms. Virginia Allen (Sec); Ms. Barbara Riebschlag (Trea); Ed Douglas (VP, Activities); and Homer Garcia (VP, Benefits).

At the Delaware Valley Chapter, Thomas R. Carmanico and MAJ Steven Och-sner have been elected as VP, Membership and VP, Military Affairs respectively.

## Three-Timer

The AAAA's largest membership activity, the Army Aviation Center Chapter, has installed BG Rodney D. Wolfe as its new President. General Wolfe had served as President of the Greater Atlanta Chapter and the Air Assault Chapter on earlier tours.

## Recognition

The Rhine Valley Chapter membership voted to sponsor the attendance of ten outstanding AAAA soldiers at the USAREUR Region's forthcoming AAAA Ball on November 1. The names of the top soldiers would be solicited and a Chapter drawing would be held to select ten.

## Did you know . .

. . that some 9,016 individual votes were cast for the 22 candidates during the recent Hall of Fame balloting, and that the seven '86 inductees received votes on more than one-third of the ballots?



# AAAA Overview

## ■ ■ A First!

This issue carries the Association's initial bi-annual "Aviation Soldier" professional-personal membership directory. Invited to participate were some 1,600 AAAA members in grades E-1 through E-9.

## ■ ■ Hail and farewell!

The Association wishes to recognize the substantial personal efforts made by four departing Chapter Presidents: BG Rudy Ostovich (Aviation Center Chapter), COL Ron Bellows (Colonial Virginia), LTC Julian Sullivan (Rhine Valley), and LTC Edward Chandler (Taunus). Each of the four provided strong Chapter leadership during their terms of office.

The AAAA welcomes their replacements, each of whom is a new member of AAAA National Executive Board: BG Rod Wolfe (Aviation Center Chapter), COL "Duke" Vasey (Colonial Virginia), LTC Jake Wyatt (Rhine Valley), and LTC Paul Yacovitch (Taunus).

## ■ ■ Innovations worthy of duplication

You may not pick it up if you skip reading this month's AAAA Calendar, but several of the Chapter's are conducting some very unique membership activities. For example, the Lindbergh Chapter will hold its

first "Annual AAAA Road Race", subtitled by the St. Louis Chapter of the AAAA as a "Scavenger Hunt on Wheels." Quoting from the meeting notice, "Drivers bring their best headgear and plenty of gas." There will

be Chapter prizes and free refreshments at the end of this Saturday morning, Oct. 18 gathering.

The Fort Hood Chapter obviously believes in catering to the wishes of as many members as possible in conducting a meeting. Believe-it-or-not, on Saturday, Oct. 18, the members will participate in their 3rd Annual Pegasus Run, a Championship Chili Cookoff, and a Car Show! The giveaways will include a T-Shirt to each entrant, and free chili to all!

The Aviation Center Chapter is also "on the run." It conducted a Sept. 27 "Run for the Museum" with the modest \$5.00 entry fee being donated to the Museum. So—there's a Run and Eat at Hood, a Run and Show-er at Ft. Rucker, and plain old "Eat" at Corpus where the Chapter plans a mammoth "Family Picnic" Oct. 19





# Sept.-Dec., 1986 Calendar of AAAA Chapter Activities

**OCTOBER**

	1	2	3	4
5	6	7	8	9
10	11	12	13	14
15	16	17	18	19
20	21	22	23	24
25	26	27	28	29
30	31			

## November, 1986 (Continued)

vivability Equipment Award" sponsored by Loral Electronics, MG Story C. Stevens, Ret., MC. Northrop Defense Systems Division, Rolling Meadows, Illinois.

■ ■ Nov. 13. Checkpoint Charlie Chapter (Berlin). Late afternoon professional-social meeting. Program: Planning for Christmas activities. Free refreshments. TCA Aviation Detachment Classroom.

■ ■ Nov. 13. Corpus Christi Chapter. Professional luncheon meeting. William P. Jones, Vice Pres., Boeing Vertol Co., guest speaker. Limited seating. NASD Officers' Club.

■ ■ Nov. 14. Indianapolis Chapter. Professional-social dinner meeting. LTC James H. Fraser, Pan American Games Counter-Terrorism Officer, guest speaker; "Industrial Terrorism". Murat Shrine Temple.

## December, 1986

■ ■ Dec. 4. 1986 Hall of Fame Induction Ceremonies. By invitation. 3 p.m., Classroom #1, Building 5206, USA Aviation Center, Ft. Rucker, Ala.

■ ■ Dec. 4. Army Aviation Center Chapter. Professional-social dinner meeting honoring the 1986 Hall of Fame Inductees and the "Aviation Trainer of the Year." Guest speaker TBA. Formal/Black Tie. Ft. Rucker Officers' Open Mess.

■ ■ Dec. 5. National Executive Board. Quarterly business meeting. 1:30 p.m., Classroom #1, Building 5206, USA Aviation Center, Ft. Rucker, Ala.

## January, 1987

■ ■ Jan. 12-13. 1987 Nat'l Convention Committee. Initial coordination meeting of Ft. Worth principals. 2 p.m., Tarrant County Convention Center, Ft. Worth, Texas.

■ ■ Jan. 13. North Texas Chapter. Professional-social dinner meeting. Arthur H. Kesten, Executive Vice President-AAAA, guest speaker; "Get ready, Ft. Worth!" Hyatt Regency, Ft. Worth, Texas.

## February, 1987

■ ■ Feb. 6-7. AAAA National Awards Committee. Selection of 1986 AAAA National Scholarship Winners and CY85 AAAA National Award Winners. Ft. Myer, Virginia.

■ ■ Feb. 4-5. The 13th Annual Joseph P. Cribbins Product Support Symposium sponsored by the Lindbergh Chapter-AAAA. Airport Hilton Hotel, St. Louis, Missouri. Details available from AAAA National Office o/a Nov. 15.

## March, 1987

■ ■ Mar. 15-21. AAAA Ski Week and the 1987 USAREUR Regional Convention. Armed Forces Recreation Center and Kongresshaus, Garmisch, Germany. Details available from the AAAA National Office o/a Dec. 15.

## April, 1987

■ ■ Apr. 8-12. 1987 AAAA National Convention. Tarrant County Convention Center and five area hotels, Ft. Worth, Texas. Details available from AAAA National Office, Jan. 2.



**AAAA AWARD**—SSG Aaron Villalpendo (center) is shown receiving an AAAA plaque sponsored by Sikorsky Aircraft in being selected as the "NCO of the Month". Jack Hill, left, Sikorsky's representative at the USA Aviation Center, makes the presentation. SP4 James K. Plette (right) also was cited by AAAA in being the "Aviation Soldier of the Month" for July. Both awardees are members of Company C (Pathfinder/Airborne), 509th Parachute Infantry Regiment, 1st Aviation Brigade (Air Assault). The AAAA now provides complimentary memberships to selectees at four participating Chapters.



## AAAA offers \$44,000.00 in scholarships to twenty 1987 college-entry Freshmen

**BACKGROUND** — The AAAA Scholarship Foundation, a separate non-profit educational activity created to provide scholarship aid to the sons and daughters of AAAA members and deceased members, announces the availability of \$44,000 in assistance funds for the 1987 college-entry year.

**1987 AWARDS** — Twenty scholarships will be presented — One \$8,000 four-year scholarship (\$2,000 a year); and several \$4,000 four-year scholarships (\$1,000 a year), to include the William B. Bunker Memorial Scholarship limited to Engineering School applicants; and several \$2,000 two-year scholarships (\$1,000 a year).

**AWARD PHILOSOPHY** — Operating on the premise that ample scholarship assistance is available to those in need, the AAAA National Scholarships are awarded primarily on the basis of academic merit and personal achievement. The AAAA seeks to honor those outstanding students whose well-rounded secondary school activities indicate solid career potential.

**APPLICATION PROCEDURE** — Student

applicants are asked to request the appropriate application forms by writing to the AAAA Scholarship Foundation at 1 Crestwood Road, Westport, CT 06880. Requests for applications must be received on or before December 15. All forms, together with other supporting data, must be returned to the Foundation on or before January 20 to receive Awards Committee consideration. The student-prepared application should state the full name of the applicant's parent-member and address of student if different.

**ELIGIBILITY CRITERIA** — An AAAA applicant must be unmarried, a citizen of the United States, and a high school senior who has applied to an accredited college or university for Fall 1987 entry as a freshman. Program participation is limited to the children of members with an effective date of membership on or before March 31, 1986.

**SELECTION AND NOTIFICATION** — Selection of winners will be made by the 22-member AAAA National Awards Committee during the February 15-28 period with each applicant to receive a list of the winners not later than April 1.

### Application Form for AAAA National Scholarships

\_\_\_\_\_  
APPLICANT'S NAME (PLEASE PRINT)

\_\_\_\_\_  
STREET

\_\_\_\_\_  
CITY

\_\_\_\_\_  
STATE

\_\_\_\_\_  
ZIP

\_\_\_\_\_  
PARENT'S NAME

\_\_\_\_\_  
RANK/GRADE, IF APPLICABLE

\_\_\_\_\_  
PARENT'S ADDRESS

\_\_\_\_\_  
CITY

\_\_\_\_\_  
STATE

\_\_\_\_\_  
ZIP



# **Solicitation now underway for CY86 AAAA National Awards; Jan. 15, 1987 suspense date set**

## **"Award Presentations"**

Seven AAAA National Awards for accomplishments made during Calendar Year 1986 will be presented at an Annual Awards Luncheon on April 9 and an Awards Banquet to be held on April 10 at the 1987 AAAA National Convention

In Ft. Worth, Tex. The individual awards will be made on Friday; the unit awards will be presented on Saturday. Senior members of the U.S. Army and U.S. Army Aviation will be invited to present the AAAA's top awards on both occasions.

### **"Army Aviator of the Year Award"**

Sponsored by the Sikorsky Aircraft Division, this award will be presented "to the Army Aviator who has made an outstanding individual contribution to Army Aviation during the awards period encompassing the previous calendar

year." Membership in AAAA is not a requirement. A candidate for this award must be a rated Army Aviator in the Active U.S. Army or Reserve Components, and must have made an outstanding individual achievement.

### **"Aviation Soldier of the Year Award"**

Sponsored by Bell Helicopter Textron, this award will be presented "to the enlisted man serving in an Army Aviation assignment, who has made an outstanding individual contribution to Army Aviation during the awards period encompassing the previous calendar year."

Membership in AAAA is not a requirement. A candidate for this award must be serving in an Army Aviation assignment in the Active U.S. Army or in the Reserve Components, and must have made an outstanding individual achievement.

### **"Outstanding DAC of the Year Award"**

Sponsored by the Boeing Vertol Company, this award will be presented "to the Department of the Army Civilian who has made an outstanding contribution to Army Aviation in the awards

period encompassing the previous calendar year." Membership in AAAA is not a requirement for consideration. A candidate for this award must be a current Department of the Army Civilian.

### **"James H. McClellan Aviation Safety Award"**

Sponsored by the many friends of Senator John L. McClellan in memory of his son, James H. McClellan, a former Army Aviator who was killed in a civil aviation accident in 1958. The award is presented to any individual who has made an outstanding contribution to Army Aviation safety during the awards encompassing the previous calendar

period. Membership in AAAA is not a requirement; any individual, military or civilian, is eligible as a nominee for this award. The award is NOT intended to be given for competitions between units for safe flying, or for the accumulation of operational hours without accidents by any aviation unit or individual.



---

### **"Robert M. Leich Special Award"**

Sponsored by the Association, the Award is named in memory of Brig. Gen. Robert M. Leich, the AAAA's first president (1957-1959) and Chairman of its Awards Committee for 23 years. Normal

ly given to a unit for distinguished aviation-related service over an extended period, the Robert M. Leich Special Award may be presented to an individual recipient.

---

### **"Outstanding USAR Aviation Unit Award"**

Sponsored by the Avco Lycoming Division, this award will be presented "to the U.S. Army Reserve aviation unit that has made an outstanding contribution to or innovation in the employment of Army Aviation over and above the nor-

mal mission assigned to the unit during the AAAA awards period encompassing the previous calendar year." Any U.S. Army Reserve aviation unit or organization that has met the foregoing criteria is eligible for award consideration.

---

### **"Outstanding ARNG Aviation Unit Award"**

Sponsored by the Avco Lycoming Division, this award will be presented "to the Army National Guard aviation unit that has made an outstanding contribution to or innovation in the employment of Army Aviation over and above

the normal mission assigned to the unit during the awards period encompassing the previous calendar year." Any Army National Guard aviation unit or organization that has met the foregoing criteria is eligible for consideration.

---

### **"Outstanding Aviation Unit of the Year Award"**

Sponsored by McDonnell Douglas Helicopters, this award will be made "to the aviation unit that has made an outstanding contribution to or innovation in the employment of Army Aviation over and above the normal mission assigned to

the unit during the awards period encompassing the previous calendar year." Any Army Aviation unit or organization that has met the foregoing criteria is eligible.

---

### **Administrative Details**

**ACCOMPANYING DATA FOR INDIVIDUAL AWARDS:** Documentation should include the nominee's name; his unit assignment, unit name, and address; and the name of his current unit and commander. A cover sheet should provide a brief outline of not more than 100 words citing the main reason(s) for the

nomination. Detailed supporting information should be attached as inclosures; and be limited to 1,500 words or three pages (whichever is greater). The documentation should be typed, and must include a recent photo and the nominee's bio sketch. Winners will be asked in March to provide add'l "slides".

---

**ACCOMPANYING DATA FOR ALL UNIT AWARDS:** Documentation should include the name and address of the unit, and the name of the present commander and senior NCO. A cover sheet should provide a brief outline of not more than 100 words citing the main reason(s) for the nomination. Detailed supporting information may be attached as inclosures

and is limited to 1,500 words or three pages (whichever is greater). Photos of BOTH the commander and senior NCO must accompany the nomination. Winners will be asked in March to provide add'l "slides". This form may be reproduced locally. Receipt of each nomination will be acknowledged by the National Office of the AAAA.

---

**SUSPENSE DATE:** The nomination(s) and accompanying data should be mailed before 15 Jan. to: AAAA Nat'l Awards Chair-

man, 1 Crestwood Road, Westport, Connecticut 06880. Please use stiffeners to protect the photo(s) being submitted.

---



***Limitless  
flexibility.***

Flying into the heat of battle. Moving men and materiel through hostile territory. Operating in desert heat and mountain cold. To accomplish its many missions, Army Aviation makes severe demands on its helicopters. For troop transport. Combat resupply. Rapid deployment. Forward assault. Reconnaissance. SAR. Medevac.

Only one helicopter has the flexibility to do so much. And the potential to do even more. BLACK HAWK.



**UNITED  
TECHNOLOGIES  
SIKORSKY  
AIRCRAFT**

***The first. The finest. The future.***

