

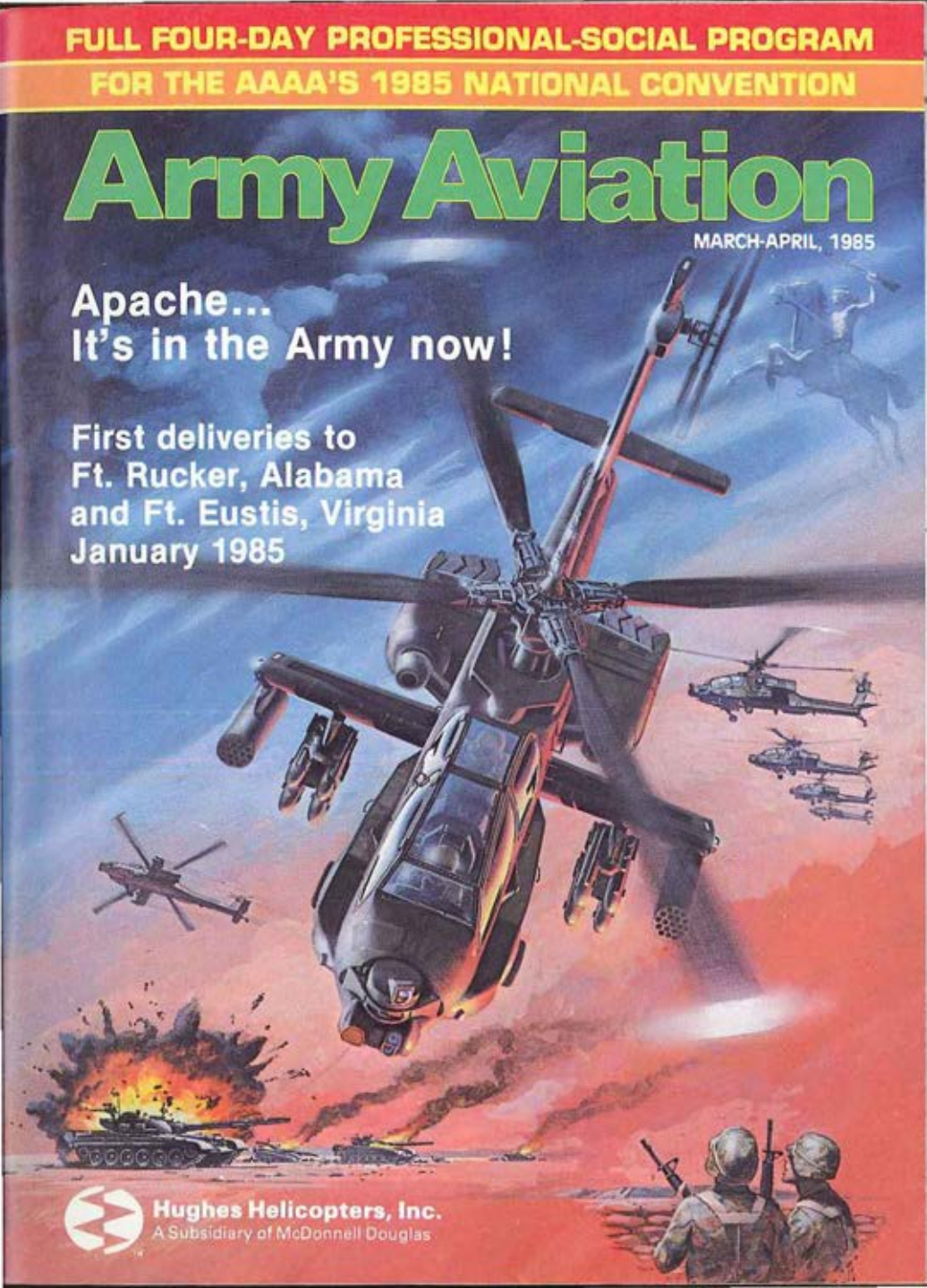
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Army Aviation

MARCH-APRIL, 1985

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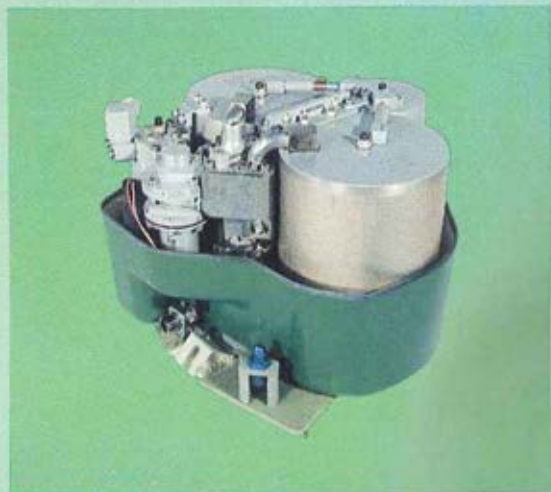
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Army Aviation

MARCH-APRIL, 1985

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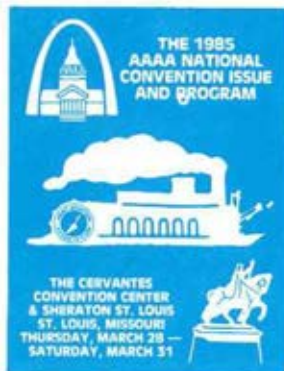
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AAAA NATIONAL
CONVENTION ISSUE**

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Along with Thyra Bonds — who communicated with you in this column last month — my term of office as a National Vice President will terminate at the end of the 1985 Convention. . . I've served on the AAAA's Executive Board since April, 1981, and have done so the last three years in the role of Co-Chairman of the Industry Affairs Committee.

I'd like to report that the AAAA has enjoyed an acceptable growth pattern in its Industry Membership over the years and has enjoyed a particularly exceptional rate of growth in the year since the 1984 Convention. Some 30 new Industry (Corporate) Member firms joined the Ass'n since April, 1984, reflecting a gain of almost 25% in the corporate membership category.

How do such firms support and participate in AAAA activities? . . . Many of you have probably been "briefed" at the Chapter level by visiting industry representatives who update our active and retired military members at Chapter professional luncheons, mid-afternoon meetings, and dinners. Still others have been "briefed" at the Regional level at Garmisch gatherings. Lastly, most National Conventions feature a substantial programming segment at which key industry representatives discuss their ongoing programs and future proposals as they apply to Army Aviation.

The National Convention also affords many of our commissioned, AWO, enlisted, and DAC members with a four-way opportunity to hear about and see the hardware that our Industry Members produce. This year, some 32,000 square feet of AAAA's 80,000 square foot Exhibit Hall will display the aerospace and defense products of 85 Industry Member firms. Many of our active military members will also mix and mingle with their industry contemporaries at the Convention's four major receptions, its 18 Chapter hospitality suites, and the National Awards Banquet at our Industry Member firms will host over 500 military guests at their company tables.

The forum of AAAA provides for countless informal interchanges. As a fellow member, I'm happy to have played a small role in furthering this process.

William P. Jones
Vice President, AAAA

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fight in the Fighting Falcon.

The Magic series of modular computers was developed by GM to operate in severe military environments. More than 10,000 Magic III units are now in the field, with millions of operational hours. Soon one of the newest will become the mission-control computer on the HH-60 Night Hawk; another, with two million words of bubble memory, will be the heart of the MADAR II system on the C-5B; still another will control the LANTIRN navigation and targeting pods.

Delco's Magic IV all-LSI series reduced size, weight, cost, and power requirements, while enhancing modularity and increasing reliability. Magic IV's do the computing for the Fuel Savings Advisory/Cockpit Avionics System (FSA/CAS) in the KC-135.



For the future, Delco has developed Magic V—an all-VLSI series of computers that will put even greater capability in an even smaller, less expensive package: addressing of up to a million words of memory; throughput of 850 KIPS (DAIS mix); and near 100% fault detection while drawing approximately two watts of power. Magic V has already been selected for a multi-processor configuration with a system throughput in excess of five MIPS.

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The Aviation Branch gets "off the ground"

By Maj. Gen. Ellis D. Parker
Chief of the Aviation Branch
Fort Rucker, Alabama

ALTHOUGH it has only been two years since Army Aviation became a branch, tremendous strides have been made in getting us "off the ground" as the Army's newest member of the combined arms team.

Sitting at the helm as the Aviation Branch Chief is as honorable as it is exciting with many accomplishments to our credit and with as many initiatives on the horizon.

Training

At the U.S. Army Aviation Center, Ft. Rucker, Ala., we have witnessed the creation of the Aviation Officer Basic Course (lieutenants' training) in July 1984, two years ahead of schedule; the Aviation Officer Advanced Course (captains' training) which began six months early in June 1984; and the Army's first Enlisted Aerial Observer Course in September 1984.

The Aviation Officer Basic Course provides newly commissioned lieutenants with general knowledge of common military and combined arms training. Soldiering is stressed heavily and if the students see an aircraft during this portion of instruction, it is more a matter of coincidence than design. The course has been extremely successful and the Aviation Center will graduate nine classes this **fiscal year (FY)**.

The Aviation Officer Advanced Course graduated 160 officers during FY 84 and that will increase to 400 in FY 85. For FY 86 we will start a 126-student class every ten weeks. It is noteworthy to mention that in January 1985 all 67J (Medical Service Corps) aviators started attending the Aviation Officer Advanced Course as a departure from the Health Services Command advanced course. This change was brought about to give the 67J captains the com-

bined arms flavor lacking in their advanced course.

Our fifth enlisted Aerial Observer Course is in session and at the end of this fiscal year will provide us with 64 badly needed aeroscouts. Input, however, will soar to 300 in both FY 86 and FY 87.

Personnel

The total warrant officer study group, a satellite of the recently adjourned OPMS study group is looking at several Aviation warrant officer proposals we have developed. Their purpose in this review is to determine if our proposals have applications to other than Aviation warrant officers, specifically the technical services warrant officers. Some of the changes we have proposed are:

- **Military occupational specialty (MOS)** restructure.
- Position grading in TOE/TDA.
- Job hierarchy.
- Management by branch.
- Regular Army integration at promotion to CW3.

The total warrant officer study is scheduled to adjourn in June 1985 and we will know shortly thereafter if our proposals, which we consider essential, have been adopted.

In the enlisted arena, reclassification from MOS 71P to MOS 93P was accomplished on 1 March 1985.

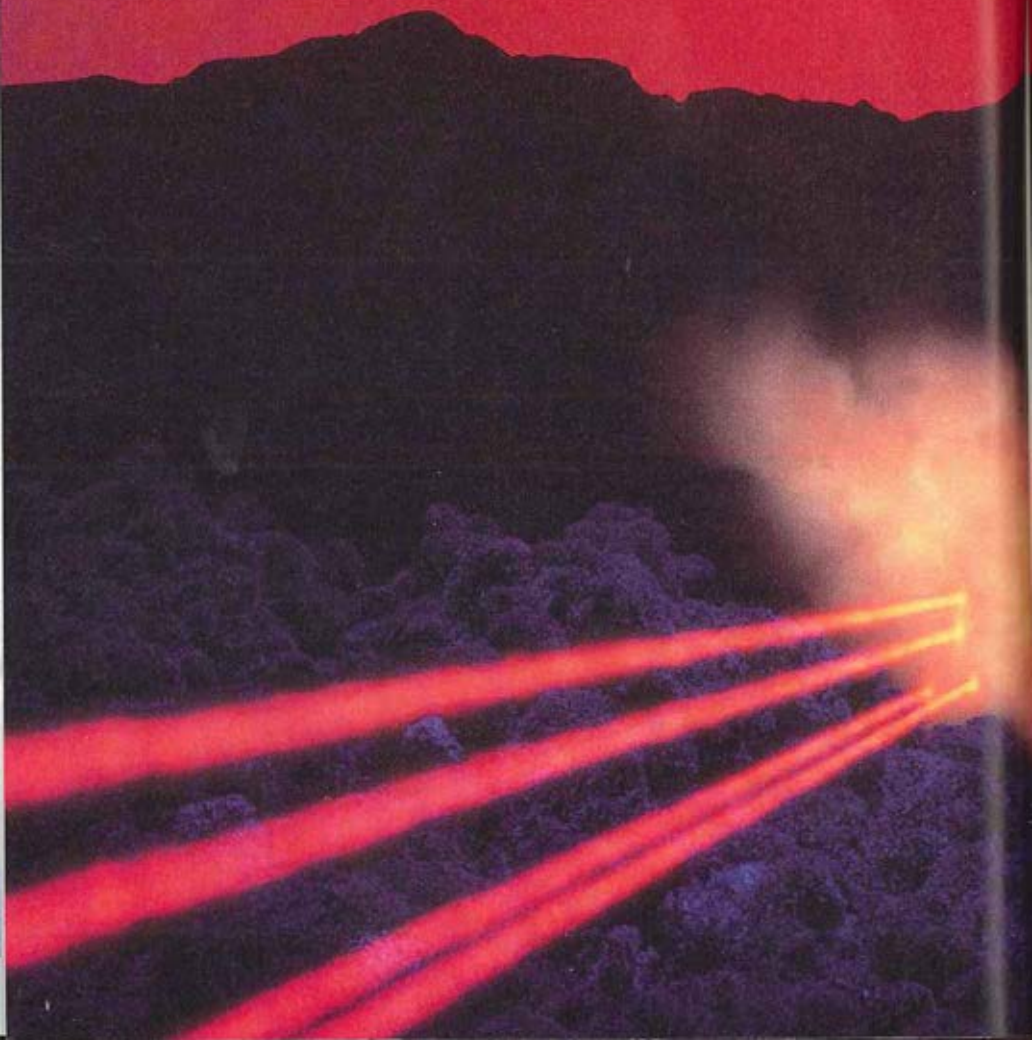
Coordination between the Aviation Center and the U.S. Army Signal School at Ft. Gordon, GA, is ongoing to effect the pronency transfer of Career Management Field 28, Aviation Communications/Electronics Systems Maintenance to Aviation. Finalization of this transfer is expected shortly.

The view from the helm is truly an inspirational sight as the Army Aviation Branch moves forward into position with the Army of Excellence. I promise to share more of this view with you in the future.

IIII

OPPOSITE PAGE: Fort Rucker, Ala. — Secretary of Defense Caspar W. Weinberger dons a flight suit in preparation for his flight aboard the AH-64 APACHE helicopter at the U.S. Army Aviation Development Test Activity. At right is COL John H. Turnage, AVNDA commander.

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Something for everyone!

By Brig. Gen. Wayne Knudson
Director of Force Requirements
and Army Aviation Officer, DA

THIS will be a great convention in St. Louis! The program is first rate and offers a professionally and socially rewarding experience for those who can attend. As you can see, there is something for everyone and our speakers include most of the Army Aviation Leadership. Enjoy!

A better way

In March, 1984, The Office of the Adjutant General selected AR 95-series regulations for conversion to the UPDATE automated system for publication and distribution in FY 85. Since conversion and automation of each regulation will significantly reduce its thickness, related regulations will be published in volumes.

Following an initial planning meeting at HQDA, AR 95-series proponents met at the Aviation Center to review the regulations and develop a proposed plan for consolidation/revision. The consolidation/revision will put 25 current 95-series regulations as they now exist into two volumes and should be accomplished by the end of this fiscal year. Concurrently, the contents of each volume will be organized so that information is "user friendly".

- Each volume will contain an alphabetical cross-reference to all subjects in the other volume. This will provide users easy access to desired information that has not been available in the past. Reference to other related AR's such as the AR 385-series is being planned to provide more information to the reader.

- Each volume will list proponent agencies indicating responsibility for each part of each volume. Recommended changes submitted by users will be directed to the proponent agency

so that appropriate changes can be developed. Custodianship for Volume I will be the responsibility of the U.S. Army Aviation Center, Fort Rucker, AL and for Volume II, the Aeronautical Services Office, U.S. Army Air Traffic Control Agency, Cameron Station, VA. Custodians will not be responsible for the content of each volume but will act as coordinators to ensure timely changes are prepared and transmitted to the master computer file.

- A separate document may be published specifying the contents of each volume, proponents for each regulation, procedures for coordinating changes, and the custodian for each volume.

A permanent steering council, made up of representatives of the proponent agencies, will be established and will meet annually to coordinate regulation changes/revisions for the following year. The council will report its findings and recommendations to the annual DA Aviation Policy Committee.

Avionics update

Two new systems are on the horizon that will ultimately change the way we navigate and terminate our missions. The NAVSTAR **Global Positioning System (GPS)** and the **Microwave Landing System (MLS)** will add flexibility to current procedures and permit us to establish new ways to get the job done.

- **Global Positioning System:** GPS is a satellite based radio-navigation system designed to provide users world-wide three-dimensional position and velocity information along with coordinated universal time. GPS consists of three segments: the space segment,

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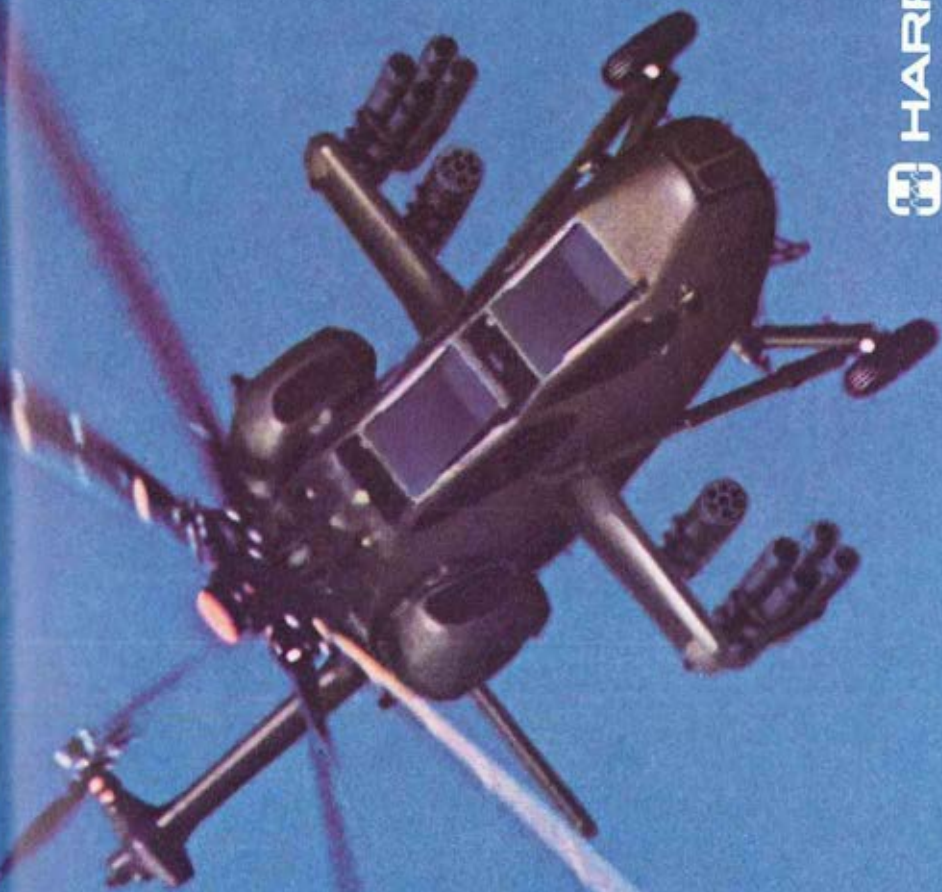
They'll need a totally integrated system...such as our IMS. It does everything with one computer. One software system. One set of support equipment. Its automatic digital flight control/director both flies and navigates. The

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 HARRIS

satellites that transmit radio signals; the control segment, groundbased equipment to monitor the satellites and update their signals; and the user segment, devices to passively receive and convert satellite signals into user information.

Although GPS has been developed as a Department of Defense system, the civil aviation community is expected to use the system once suitable procedures have been put in place. The Army expects to install user equipment in a variety of land and air vehicles as well as a man-pack. Army Aviation will be a major user with installation in most of the aircraft fleet.

GPS will provide the aircrew with present position or range and bearing from present position to a way point allowing navigation between any two points the aircrew selects. Once in place, this capability will allow the gradual phase-out of most DOD TACAN, VOR, NDB, LORAN and Omega systems worldwide. With its 3-D capability, BPS offers a potential landing capability better than current non-precision approaches. As an update for other navigation devices, such as doppler or inertial, it provides redundancy to increase the probability of mission success.

The GPS system will provide a two dimensional capability in FY88 and the third dimension the following year. Because of the broad impact on DOD position/navigation capability, a Joint GPS Steering Committee has been formed to oversee the implementation of GPS and the development of user procedures.

● **Microwave Landing System:** The Army **Microwave Landing System (AMLS)** program, part of the **National Microwave Landing System (NMLS)** program, will provide a near all-weather precision approach and landing capability. The tactical ground subsystem is expected to be employed in division rear areas, corps, and echelons above corps. AMLS will be fully compatible with the civil fixed based MLS system as those systems are installed to replace ILS worldwide. In fact the Aviation Center will be one of the first recipients of fixed base systems, in 1987, as we gear up to equip the instrument training fleet and install civil MLS equipment at Cairns AAF and Troy Municipal Airport to support training.

Why MLS? The ILS has been the world's standard precision approach system since 1948. Throughout these 37 years, the system has undergone significant improvements in performance and dependability. It has served the

world well and will continue to serve for some years since the transition to MLS will take time. There are three basic reasons for making the change from ILS to MLS.

● The VHF/UHF frequencies used for ILS have technical limitations. Antennas cannot be built large enough to be completely independent of ground effects. This limitation results in problems such as costly site preparation, interference, multipath reflections, and weather effects. Large antenna size is a primary reason tactical ILS systems have not been fielded.

● The ILS has a maximum of 40 channels available which limits facilities in some areas.

● The ILS provides only a single, narrow ($\pm 3^\circ$ to 6°) course and a single glidepath limited to 4° on the upper side.

These technical limitations are eliminated or sharply reduced with the higher frequencies and smaller antennas of MLS.

From an operator's point of view the operational advantages of MLS over ILS are impressive.

● The accuracy at threshold of all MLS will be suitable for autoland operations at all runways regardless of the operational IFR minimums. This single accuracy standard is an advantage to the operator and the airframe manufacturers.

● There are no bends, no false courses, no false paths, no wiggles, and no bumps in an MLS approach. Most pilots that fly MLS for the first time indicate that "it's like flying a wire."

● Cockpit selection of azimuth and elevation will provide lower operating minimums for qualified aircraft at some locations. This provides a significant capability for Army aircraft, particularly the rotary wing fleet.

The Army plans to buy fixed base MLS replacements for all its ILS installations by 1995 and is participating with the Air Force in the development of a mobile **Tactical MLS (TMLS)** ground subsystem. For avionics, both military specification and 'off the shelf' airborne equipment will be examined before a decision is reached on how best to equip the aircraft fleet.

A closing word

As we move into the Spring months, we begin to fly more hours. This is the beginning of our prime training period of the year. The winter months may have taken the edge off those polished skills you had last fall. Take time for thorough planning and have a safe flight! IIII



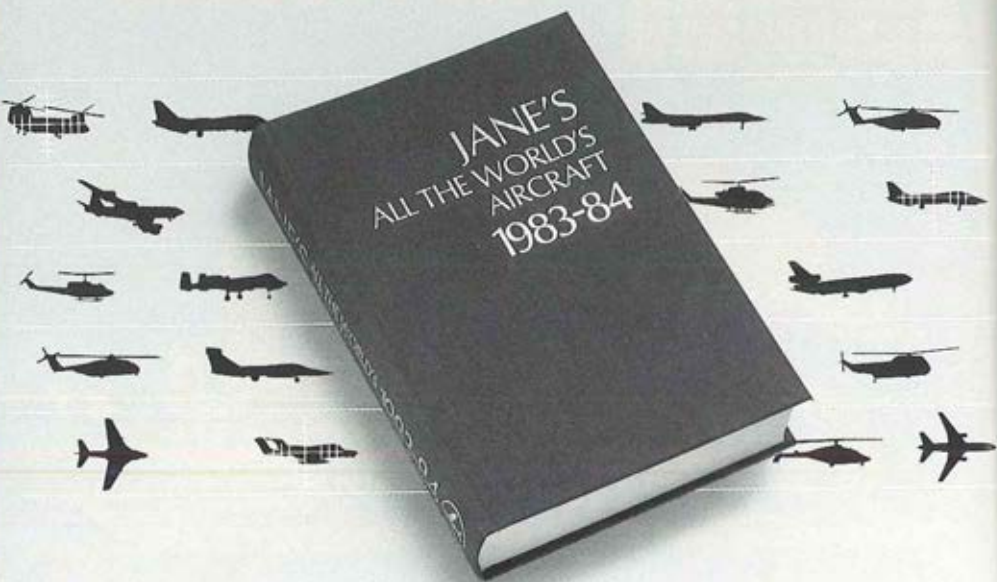
**THE 1985
AAAA NATIONAL
CONVENTION ISSUE
AND PROGRAM**



**THE CERVANTES
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Objectives and Purposes

BACKGROUND

The Army Aviation Association of America (AAAA) was formed in early 1957 by a small group of senior aviation officers in the active Army, the Reserve Forces of the U.S. Army, and industry. Following the incorporation of the AAAA as a membership corporation without capital stock under the laws of the State of Connecticut, this group took over control of the affairs of the AAAA from the incorporators on April 18, 1957.

Modeled after several of the professional technical societies in existence, the AAAA grew rapidly, receiving the membership support of a majority of those military and civilian persons having an interest in this segment of the armed forces.

GENERAL PURPOSES

To advance the status, overall esprit, and the general knowledge and efficiency of those persons who are engaged professionally in the field of U.S. Army Aviation, including the Active Army, the Reserve Components, the aerospace industry, the various activities in the Department of the Army which support Army Aviation, such as the Army development, supply, and maintenance agencies, and all other activities, military and civilian, that contribute to the furtherance of Army Aviation.

To preserve and foster a spirit of good fellowship among military and civilian persons whose past or current duties affiliate them with the field of U.S. Army Aviation.

SPECIFIC OBJECTIVES

FOSTERING a public understanding of Army Aviation and arousing a public interest in this segment of the military forces.

EXCHANGING ideas and disseminating information pertinent to Army Aviation through the media endorsed by the Association.

STIMULATING good fellowship nationally, regionally, and locally.

INSPIRING Army-wide and nationwide interest in Army Aviation careers.

CEMENTING relationships between

those interested in Army Aviation in the active U.S. Army forces and the Reserve Forces of the U.S. Army.

MOTIVATING Army Aviation personnel to increase their knowledge, techniques, and skills.

MAINTAINING historical records.

CONDUCTING meetings, seminars, briefings, symposiums, exhibitions, air meets, etc.

RECOGNIZING outstanding contributions within Army Aviation.

PROVIDING special types of group programs of benefit to the individual membership.

SPECIFIC PROGRAMS

An **AWARDS PROGRAM** in which outstanding individual and unit calendar year achievements receive National, Regional, and/or Chapter recognition.

A **CHAPTER ACTIVITIES PROGRAM** in which outstanding military and civilian leaders address the widespread Chapter organizations on specific areas of Army Aviation interest.

A **LOCATOR SERVICE PROGRAM**, augmented by bi-monthly "segment rosters" of Retired, AWOs, DACs, industry, ARNG-USAR, and Company Grade members, all of which serve to assist the member in his efforts to keep abreast of the location and professional qualifications of his contemporaries.

A **SCHOLARSHIP AWARDS PROGRAM** in which the sons and daughters of members and deceased members receive scholarship aid is pursued annually through the AAAA Scholarship Foundation, Inc., a separate, non-profit foundation that works closely with the AAAA.

A **HALL OF FAME PROGRAM** that recognizes broad, long term individual contributions to Army Aviation and to those who serve within it.

An **ANNUAL NATIONAL CONVENTION** at which distinguished panelists update attendees on current Army Aviation programs.



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attack helicopters, acquiring targets at extended range from a masked position so they can employ their weapons at maximum standoff distance.

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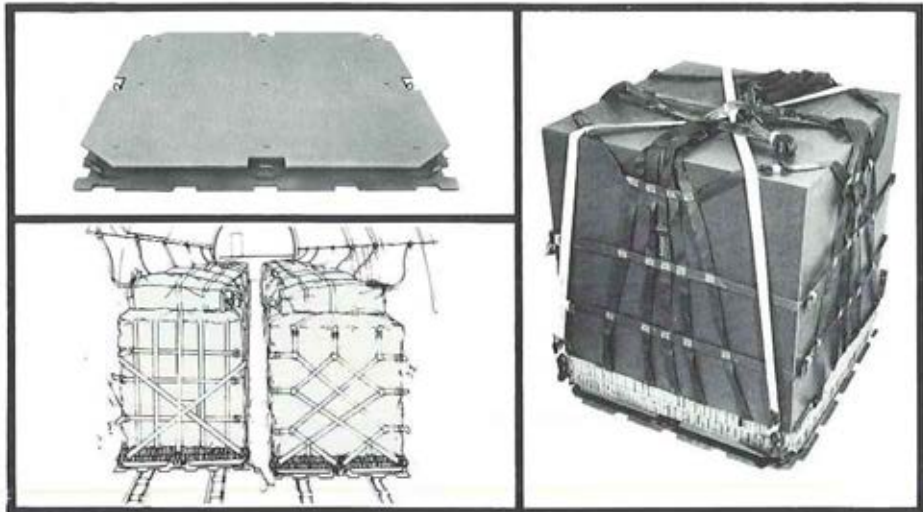
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A wealth of small engine technology has been funded by both the Army and the Air Force in recent years. With the production of LHX, two of America's most respected turbine engine manufacturers stand ready to turn those investment dollars into reliable horsepower for the Army. Paying back knowledge gained from success in current military engine programs.

Together, Allison and Garrett propose to develop the low-risk

Advanced Technology Engine ATE109 for LHX, then compete for its production.

Garrett, with experience gained from over 50,000 aircraft and ground turbine engines, is developing the Advanced F109 Air Force Trainer Engine. The first engine planned for inventory to meet the strict Engine Structural Integrity Program (ENSIP). It demonstrates the power section technology that will be used in the ATE109. This

ensures the Army of an LHX engine that offers advanced durability and high performance. At the lowest possible risk.

Allison's production base incorporates over 20,000 helicopter engines delivered, including 5,000 engines in the U.S. Army inventory alone. They have just completed a program on the Advanced Technology Demonstrator Engine (ATDE). This engine has exceeded all the Army's performance goals for advanced helicopter



THAT ALREADY HAS THE RIGHT STUFF.

engines. This technology will be fully implemented in the new ATE109.

New production techniques can be implemented quickly, too. Garrett production facilities utilize some of the latest manufacturing and testing techniques known. And Allison, with its "factory of the future" program, has the capability to meet any production needs. Several times during this century Allison has turned out impressive numbers of engines, when America needed engines.

Both companies have spent years perfecting the art of building small, powerful turbine engines at low cost. And on schedule.

In fact, both Garrett and Allison have a reputation for producing highly-reliable, low-cost turbine engines in the extremely competitive commercial market.

We are pleased to work as a team, because together we will advance gas turbine technology beyond our individual accomplishments. And

build a superior LHX engine.

We bring a diversity of talented personnel, working with experienced suppliers and vendors. Resources which cannot be manufactured. What's more, our combined extensive facilities are geographically dispersed throughout major portions of the country. Providing the added benefit of increased job opportunities across the United States.

Allison and Garrett.
America's LHX team.



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Office of the
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The President of the 13-Chapter USAREUR Region, COL Robert S. Frix, serves as a member of the National Board. He is joined on the Board by the following USAREUR Chapter Presidents: CW3 William A. King (Malnz), LTC Julian Sullivan (Rhine Valley), and LTC James L. Mowery (Wings of the Marnel). Other Chapter Presidents are MAJ John S. Schwab, III (Checkpoint Charlie), LTC Patrick J. Bodelson (Fulda), LTC John H. Dick (Hanau), CPT Jan Paul Ithier (Nurnberg), MAJ David Fowler (Schwaebisch Hall), MAJ Clayton M. Cushing (Stuttgart), CPT Robert W. Soniak (Taunus), and CW2 Thomas Ostrowski (Valley View). The Bonn Area Chapter does not have a President at the present time.

AAAA Chapter Structure

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CPT Larry R. Dunavant Secretary
Mtg: 21 Mar 85 — 765 Members

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CPT Thomas V. Hart Secretary
Mtg: 18 Dec 84 — 49 Members

ALOHA OF HAWAII CHAPTER

(Schofield Barracks, Hawaii)

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Mtg: 27 Feb 85 — 201 Members

ARMY AVIATION CENTER CHAP.

(Fort Rucker, Alabama)

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Mr. Ervin P. Robbins Secretary
Mtg: 19 Mar 85 — 997 Members

BONN AREA CHAPTER

(Bonn, Germany)

To be elected President
COL Robert Sherman, Ret. Secretary
Mtg: 7 Mar 85 — 113 Members

CEDAR RAPIDS CHAPTER

(Cedar Rapids, Iowa)

Mr. R. E. Derr President
Ms Dianne L. Diseth Secretary
Mtg: 11 Dec 84 — 77 Members

CHECKPOINT CHARLIE CHAPTER

(Berlin, Germany)

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CPT Robert L. Waters Secretary
Mtg: 22 Dec 84 — 33 Members

CHESAPEAKE BAY CHAPTER

(Aberdeen, Maryland)

CW4 Keith G. Harris President
CPT James C. Swartz Secretary
Mtg: 16 Feb 85 — 178 Members

CHICAGO AREA CHAPTER

(Chicago, Illinois)

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MAJ Raymond A. Lossing Secretary
Mtg: 27 Mar 85 — 98 Members

CITADEL CHAPTER

(Charleston, South Carolina)

CDT James P. Cassella President
CDT Frank P. Fricchione Secretary
Mtg: 12 Feb 85 — 102 Members

COASTAL EMPIRE CHAPTER

(Hunter AAF, Georgia)

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CPT Stuart D. Artman Secretary
Mtg: 22 Feb 85 — 141 Members

COLONIAL VIRGINIA CHAPTER

(Fort Eustis, Virginia)

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MAJ John E. Pennypacker, Jr. Secretary
Mtg: 1 Mar 85 — 308 Members

COMBINED ARMS CENTER CHAP.

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To be elected Secretary
Mtg: 24 Feb 84 — 108 Members

CONNECTICUT CHAPTER

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Mr. Edward M. Francis Secretary
Mtg: 6 Feb 85 — 243 Members

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(Corpus Christi, Texas)

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Mtg: 13 Mar 85 — 164 Members

AAAA Chapter Structure

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MAJ Mark G. Cloutier..... Secretary
Mtg: 27 Mar 85 — 130 Members

"FOLLOW ME" CHAPTER

(Fort Benning, Georgia)

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MAJ (P) Howard R. Elliott..... Secretary
Mtg: 15 Mar 85 — 150 Members

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(Fort Bragg, North Carolina)

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Mtg: 21 Mar 85 — 296 Members

FORT HOOD CHAPTER

(Fort Hood, Texas)

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Mtg: 2 Mar 85 — 403 Members

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(Fort Sill, OK)

Chapter Inactive in 1984

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(Germany)

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Mtg: 22 Mar 85 — 107 Members

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Mtg: 29 Jan 85 — 154 Members

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(Germany)

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Mtg: 26 Feb 85 — 136 Members

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MAJ Mario Meola..... Secretary
Mtg: 11 Nov 84 — 141 Members

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Mtg: 3 Apr 85 — 815 Members

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Mtg: 26 Nov 84 — 94 Members

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CW3 Kenneth Cardwell..... Secretary
Mtg: 24 Apr 84 — 65 Members

MAINZ CHAPTER

(Germany)

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CPT Raymond M. Vargo, Jr..... Secretary
Mtg: 11 Jan 85 — 149 Members

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(Fort Riley, Kansas)

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Mtg: 21 Dec 84 — 56 Members

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(Fort Monmouth, New Jersey)

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Mtg: 22 Mar 85 — 281 Members

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Mtg: 3 Mar 85 — 348 Members

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(Korea)

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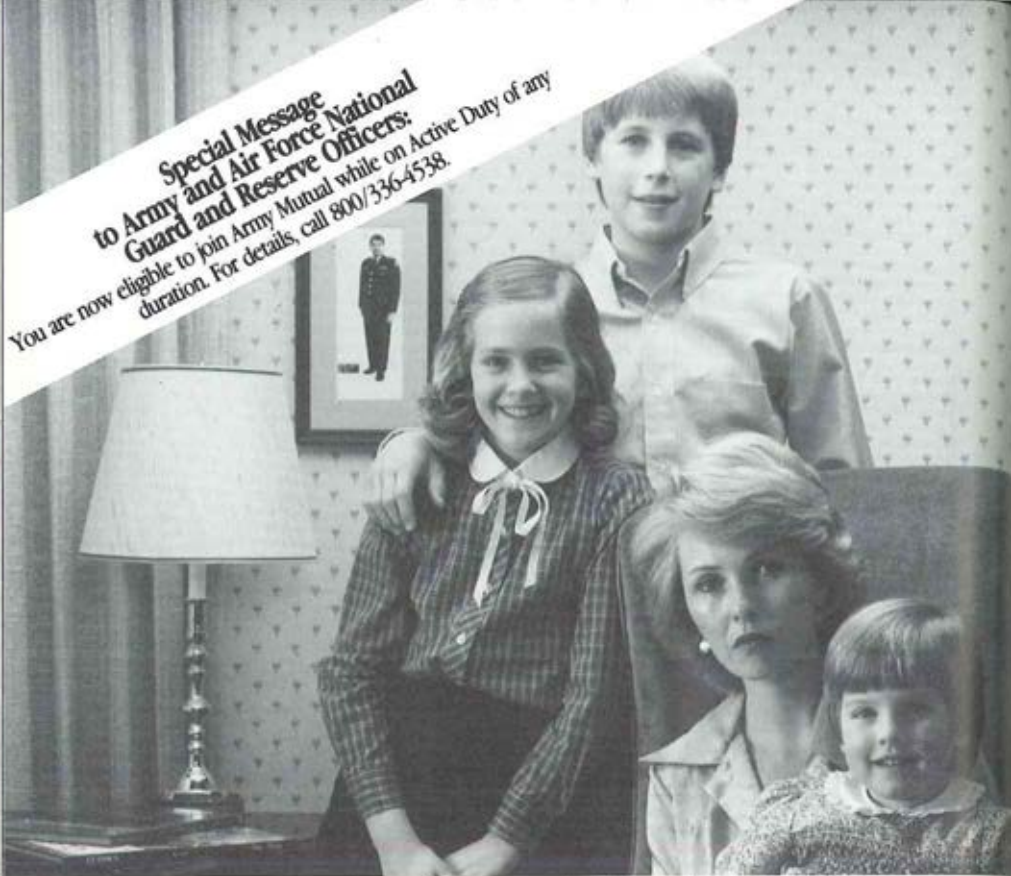
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Mtg: 19 Sep 84 — 210 Members

NORTHERN LIGHTS CHAPTER

(Fort Wainwright, Alaska)

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To be elected. Secretary
Mtg: 14 Jun 84 — 35 Members

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(Dallas-Fort Worth Area)

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Mr. George Coutoumanos. Secretary
Mtg: 6 Mar 85 — 230 Members

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Mtg: 15 Mar 85 — 67 Members

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CPT Jon P. Moriarty. Secretary
Mtg: 15 Mar 85 — 108 Members

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Mtg: 14 Mar 85 — 73 Members

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(Germany)

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Mtg: 14 Nov 84 — 171 Members

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(Germany)

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Mtg: 28 Feb 85 — 89 Members

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Mtg: 14 Nov 84 — 417 Members

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(Germany)

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To be elected. Secretary
Mtg: 10 Feb 85 — 139 Members

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Mtg: 5 Oct 84 — 122 Members

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(Germany)

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CPT Richard S. Heywood. Secretary
Mtg: 13 Dec 84 — 91 Members

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Mr. Robert D. Wyne. Secretary
Mtg: 14 Mar 85 — 61 Members

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E9 Everett L. Grundon. Secretary
Mtg: 18 Mar 85 — 57 Members

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(Germany)

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CW3 Robert T. Knudson. Secretary
Mtg: 4 Jan 85 — 53 Members

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Mr. Robert W. Conrad. Secretary
Mtg: 19 Mar 85 — 653 Members

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(Germany)

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Mtg: 28 Feb 84 — 169 Members

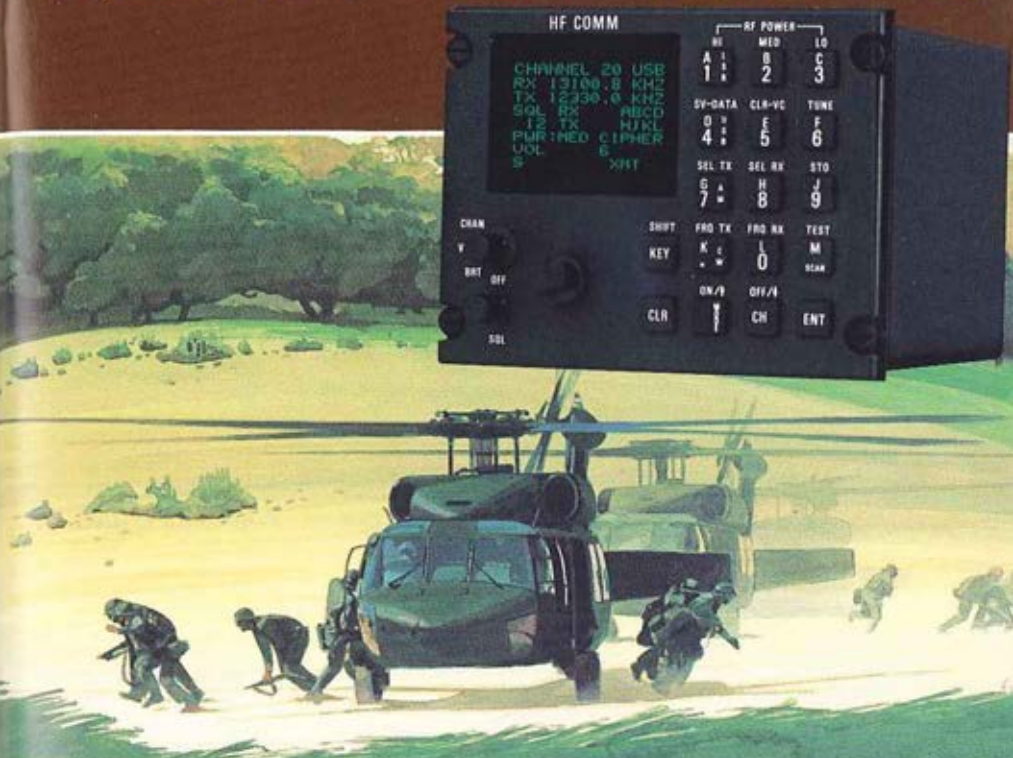
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KING RADIO'S AN/ARC-199 THE LATEST WORD IN TACTICAL HF



The latest word in tactical HF is now in production and will be available to the U.S. Army later this year.

King Radio's AN/ARC-199 will provide Army helicopters (including the UH-60 Black Hawk, OH-58 Kiowa, the CH-47D Chinook, the new AHIP and the UH-1 Huey) with advanced radios for the demanding nap of the earth (NOE) mission.

What does the U.S. Army find so appealing about King HF? Several features make the AN/ARC-199 stand out. One is the MIL-STD 1553B data bus interface which provides compatibility with the new avionic systems architecture. Other points in King's favor include the small size and light weight of the AN/ARC-199 (approximately 30 pounds including the CDU) and the reliability associated with King equipment. These weight and space savings allow for the addition of other mission payloads.

Using four microprocessor chips, the AN/ARC-199 is able to automatically scan up to 20 preset channels and will then break squelch only when it receives a transmission containing its unique address. Add to this feature BITE, selectable power output, secure voice and data compatibility plus the growth potential for frequency agility, frequency link analysis, anti-jam circuits, automated communications and electronic operating instructions—and you have the capability for a truly ADAPTIVE HF SYSTEM.

King Radio is also producing the companion radio to the AN/ARC-199—the AN/VRC-86. This radio, which is functionally identical to the AN/ARC-199, will be installed at fixed sites or in Army vehicles. Both radios work with telephone-like simplicity, allowing helicopter pilots to keep in touch with ground forces during tactical operations.

Since winning the initial Army

contract, King Radio's successes in tactical HF haven't gone unnoticed. Another HF contract has come our way—this time to build an advanced HF for use in the rugged operational environment of tactical fighter aircraft. King is now producing this radio, the AN/ARC-200 (a derivative of the AN/ARC-199), which will be used in an RAAF version of the F/A-18 strike fighter aircraft.

If King's tactical HF story interests you either from the standpoint of off-the-shelf products or adaptations of the systems we are building, contact: Director, Special Programs Department, King Radio Corporation, 400 North Rogers Road, Olathe, Kansas 66062, (800) 255-6243, Telex WUD (0) 4-2299. Cable: KINGRAD.

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the theater commander far more flexibility to counter the threat.

The C-17's supercritical wing design and propulsive lift system make direct delivery possible. Engine exhaust blows on the wing flaps to increase wing lift. The result is a much steeper angle of approach to the airfield, a lower landing speed, and routine operations to 3,000 foot runways.

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FAA certified Pratt & Whitney 2037 turbofan engines, the most efficient available, save fuel and cut maintenance costs.

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SCIENCE / SCOPE

Helicopter pilots can fly low-level missions at night by using a new infrared system. Hughes Aircraft Company's Hughes Night Vision System (HNVS) projects TV-like pictures of terrain on the pilot's helmet visor to aid in navigation through darkness, haze, or smoke. It uses a forward-looking infrared (FLIR) sensor mounted in a turret under the nose of the helicopter.

When the pilot glances in any direction, a helmet servo linkage causes the turret to aim automatically along his line of sight. HNVS can superimpose flight symbology on the helmet to further save the pilot from looking down at cockpit instruments. Hughes designed, developed, and produces the system.

The new TOW 2 antitank missile can be guided through battlefield smoke, haze, or dust—day or night—because of improvements made to the basic TOW launcher and night sight. The sight now functions as a totally independent, redundant fire control sensor, operating in parallel with the optical sight used to track the missile in daylight and clear visibility. In addition, a thermal beacon has been added to the aft end of the missile.

Digital electronics help make the TOW 2 more precise than its predecessors. The launcher contains dual digital microprocessors in its guidance set instead of the original analog computer. The more powerful computing capabilities of the digital equipment provide more accurate guidance. The TOW 2 launcher can also be used to fire the original TOW missile and the Improved TOW version. Hughes produces the wire-guided TOW 2 for the U.S. Army and Marine Corps.

For more information write to: P.O. Box 11205, Dept. 67-13, Marina del Rey, CA 90295

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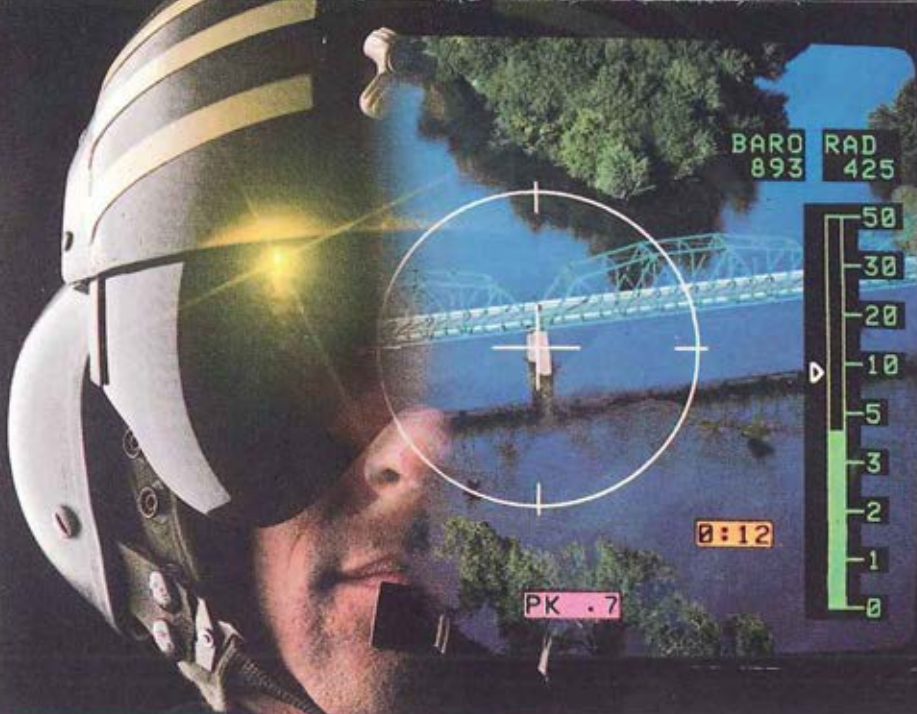
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As close as a CRT has ever come to thinking like a military pilot.

A pilot on a military mission has little time to make decisions. Split seconds at most.

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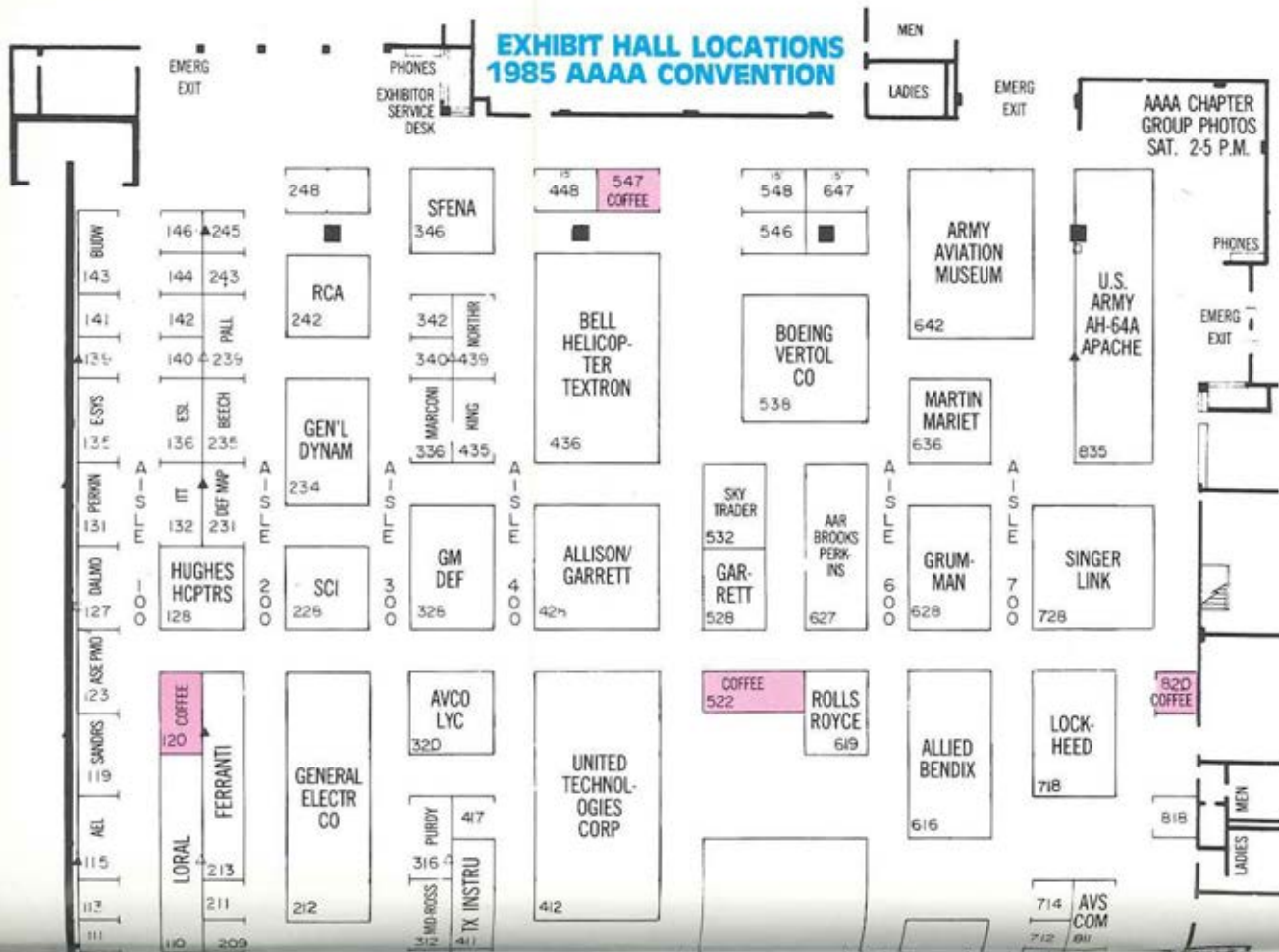
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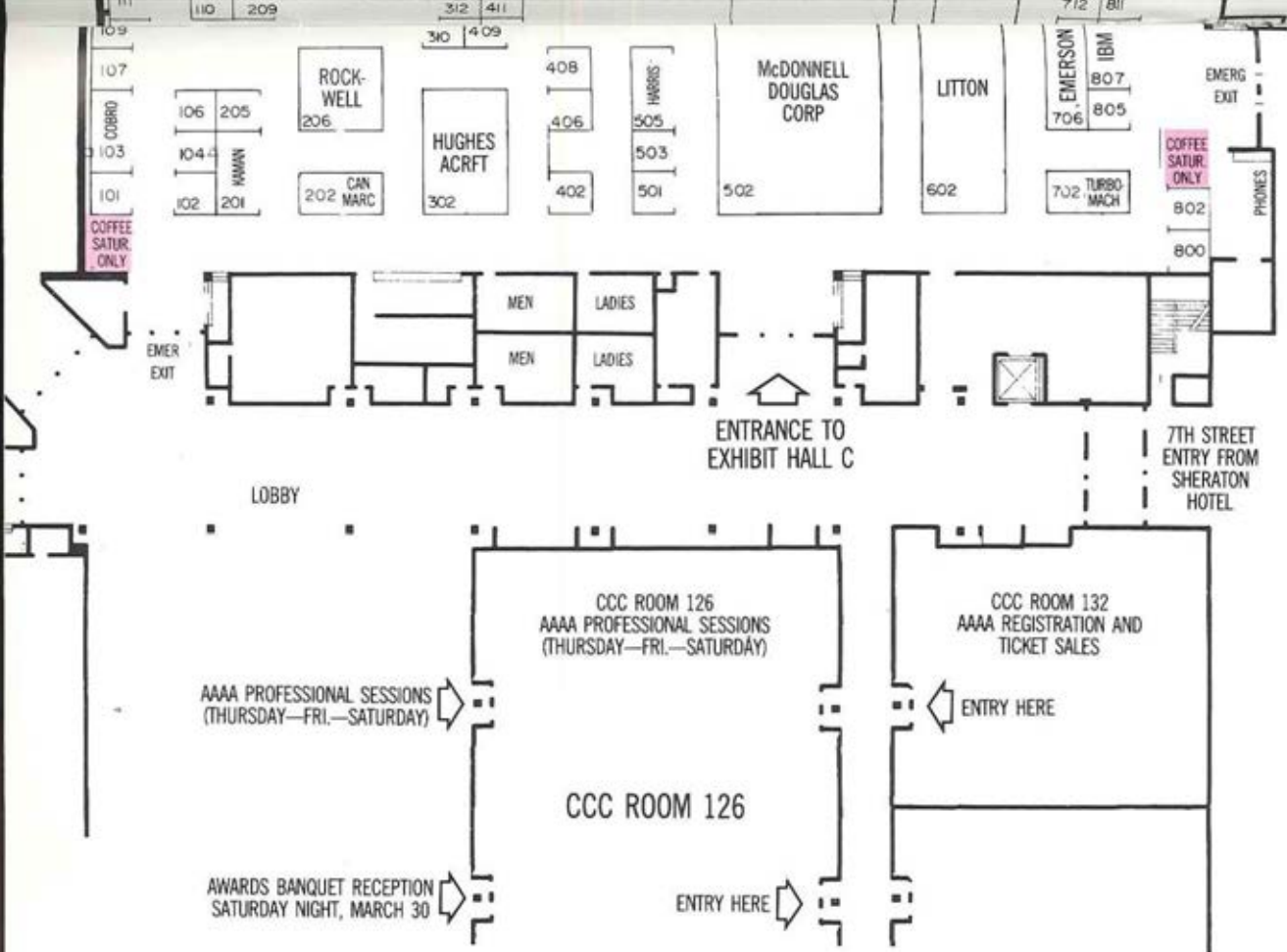
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Grumman's team members bring to the Joint STARS project outstanding, well-recognized credentials. Norden is one of the nation's foremost radar systems designers. Boeing has extensive large airframe and systems experience. And Grumman is a leading integrator of avionic systems.

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Aircraft survivability in the modern battlefield depends on the deployment of sensors responsive to new threats.

Perkin-Elmer has developed the AN/AVR-2 Laser Warning Receiver to protect U.S. Army and Marine helicopters from hostile laser-aided weapons. The AN/AVR-2 detects, identifies and locates the laser radiation source. Modular design provides for pre-planned product improvement meeting the requirements of new laser threats. The AN/AVR-2 Laser Warning Receiver is integrated with the AN/APR-39 Radar Warning Receiver for video display, audible alert and BITE functions.

The U.S. Army has successfully completed tactical performance

evaluations of the AN/AVR-2. Simulated attack missions conducted at Fort Knox, Kentucky demonstrated that laser warning substantially improves combat helicopter survivability and effectiveness. Field tests in Army and Marine helicopters and Navy fixed-wing aircraft continue.

Other Perkin-Elmer laser warning receivers, based on this test-proven design, have been field tested in a U.S. Army ground vehicle and by the U.S. Air Force.

For additional data contact Electro-Optical Division, MS 967, 100 Wooster Heights Road, Danbury, CT 06810, or call (203) 797-6015.

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1630-1715 — CCC Room 126
Questions & Answers—Thurs. P.M. Presenters

PANEL SESSION

Moderator: Brig. General Ronald K. Andreson
Chairman, 1985 Presentations Subcommittee



1715-1730 — CCC Room 126
Preliminary Planning for the 1985 Competition

LT. COLONEL ROBERT E. HARRY

A briefing on the forthcoming Ft. Rucker trials
for the U.S. Helicopter Team



1730-2030 — CCC Exhibit Hall C

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2200-0100 — Cloud 9*

CHAPTER HOSPITALITY SUITES

The Thursday Night Hosts are the Chapters in
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sylvania, Maryland, and U.S. Army, Europe.
(Admission by Registration Badge Only)



0700-2100 — CCC Room 132
1985 AAAA National Convention

REGISTRATION AND TICKET SALES

*Denotes functions held in Sheraton Hotel



0715-0815 — Robert E. Lee Room*
PANELISTS-PRESENTERS' BREAKFAST
AAAA Working Breakfast for '85 Presenters
Host: MG James C. Smith, Nat'l President



HOW THE HIDE-WHILE-YOU-SEEK SIGHTING SYSTEM TAKES THE SHAKES OUT OF BATTLEFIELD TARGETING.

While the helicopter hovers below tree and ridge lines, only the steerable, ball-shaped Mast-Mounted Sight is exposed to hostile eyes. The crew sees without being seen.

The crew also has a sharp, more jitter-free view of targets because the sensor mounts float in a magnetic field, virtually free of vibration. The result is crisp, unblurred images on the cockpit interactive displays. The mast-mounted sensors include telescopic TV for day sighting and infrared thermal imaging for missions previously limited by night, weather or battlefield smoke and haze conditions.

The McDonnell Douglas Mast-Mounted Sight is now being flown on Bell Helicopter Kiowa Aeroscouts under a fixed price development contract.

The Mast-Mounted Sight, the result of ten years of stabilized platform research, is now in production.

Today's weapons are built to strike with great accuracy—if you can find the target! The technology is here to make possible clear, jitter-free sighting aboard helicopters and mobile land vehicles—wherever sensors are required in high-vibration environments.



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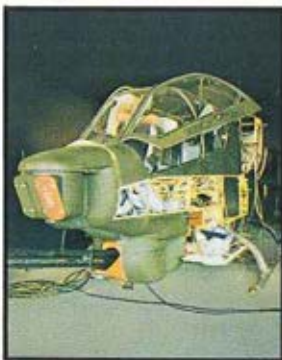
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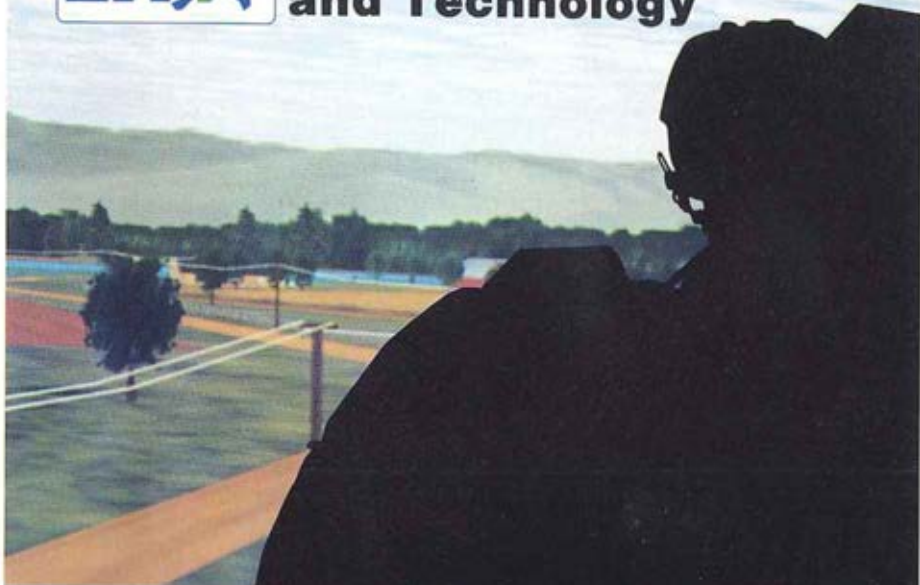
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The challenge: the single-pilot LHX.

It's a challenge that is being met by the Hughes Helicopters LHX team conducting man-in-the-loop simulation with the McDonnell Aircraft Company (MCAIR) LHX simulator.

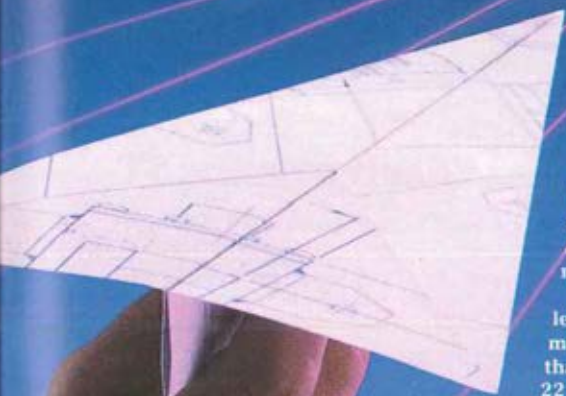
Full mission simulation for the Army's LHX is now in place at MCAIR, home of the world's most advanced manned aircombat simulation facility. The unique MCAIR facility provides high-fidelity simulations of a wide variety of operational missions and scenarios encompassing countermeasures, weather, weapons, tactics and threats.

Engineers, scientists and test pilots from the Hughes Helicopters LHX team—working in conjunction with Army pilot evaluators—will appraise candidate LHX cockpit configurations having various levels of automation to determine the operational desirability of the single-pilot cockpit.

In addition to MCAIR, members of the Hughes Helicopters LHX team include Hughes Aircraft Company and Honeywell.



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How the enemy sees the Apache at night.



How the Apache sees the enemy.

Thanks to the TADS/PNVS.

The Apache, unlike the illustrious warriors it's named after, stays on the warpath at night.

Flying low-level night missions, the Apache pilots can see where they're going and, for the first time, can see targets without depending on flares and other illumination.

What enables the Apache to find and attack targets day and night is TADS/PNVS.

The Pilot Night Vision Sensor (PNVS) permits battlefield navigation at night and in adverse weather. Army helicopter pilots can now confidently fly nap-of-the-earth in darkness.

The Target Acquisition and Designation Sight (TADS) locates and designates a target with laser, day or night, tracking it for attack with Hellfire missiles or other weapons.

The laser designator can also mark targets for attack by ground artillery firing laser-seeking Copperhead projectiles.

By providing longer recognition ranges and shorter exposure to enemy fire, TADS/PNVS—designed and produced by Martin Marietta—gives the U.S. Army's powerful attack helicopter a better chance to survive. And it enables the Apache to do something the enemy can no longer do: hide under cover of darkness.

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1900-2030 — Plaza Ballroom*

"Meet the Prez!"—Receiving Line

THE PRESIDENT'S RECEPTION

Informal—5 Steamship Rounds—First Two
Cocktails the House—Hot Hors D'Oeuvres



2200-0100 — Cloud 9*

CHAPTER HOSPITALITY SUITES

The Friday Evening Suites are hosted by the
Avn Center, Fort Hood, Colonial Va., Ft. Bragg,
Monmouth, and Far East Chapters of AAAA.
(Admission by Registration Badge Only)



0700-2030 — CCC Room 132

REGISTRATION AND TICKET SALES

AAAA Desks open for Exhibit Hall Registration
and the pickup of Saturday-Sunday Tickets.
* Denotes functions in Sheraton Hotel



0730-0830 — Plaza Ballroom*

"1985 First Light Breakfast"—By Invitation Only

MS. AMORETTA M. HOEBER

Principal Deputy Assistant Secretary of
the Army (RDA), Guest Speaker

"The Chemical Warfare Threat to Army Aviation"



0845-1245 — Sheraton Lobby to Start*

AAAA SPOUSES' TOUR

Sightseeing Tour of Downtown St. Louis*
Co-Chaired by Mrs. "J" Andreson and Ilah Rosher



0845-0925 — CCC Room 126

A Joint Presentation on the AH-64A Program by

MAJ. GENERAL CHARLES F. DRENZ

Program Manager—Advanced Attack Helicopter
St. Louis, Mo.





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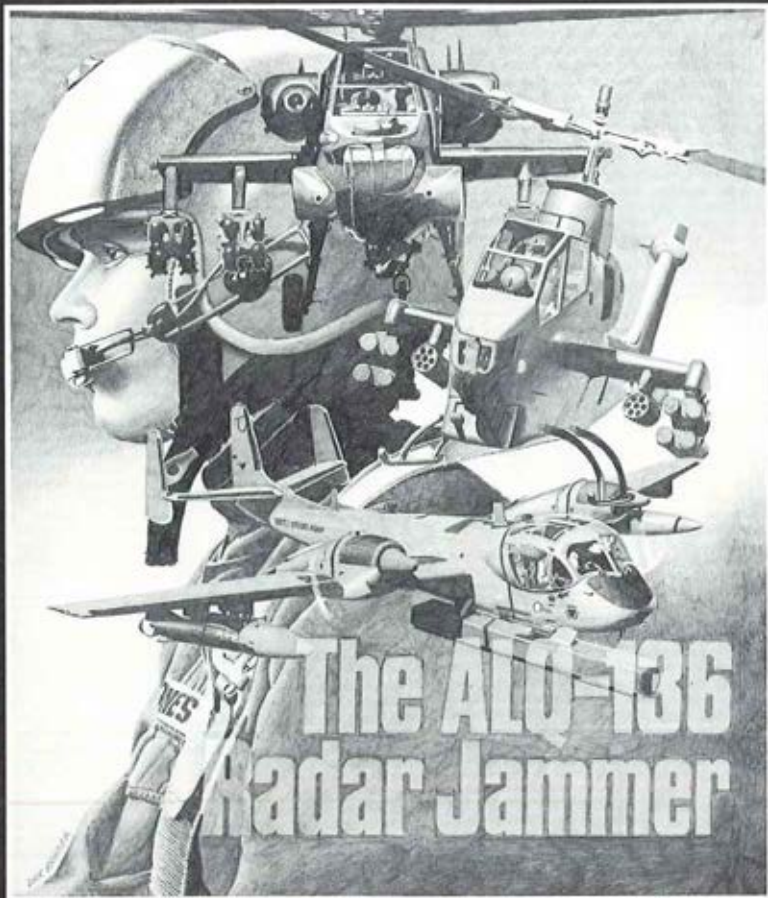
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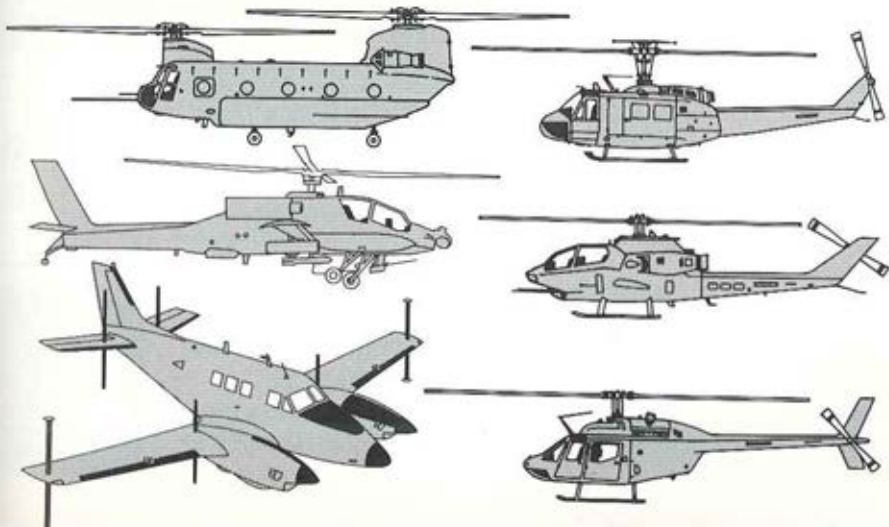
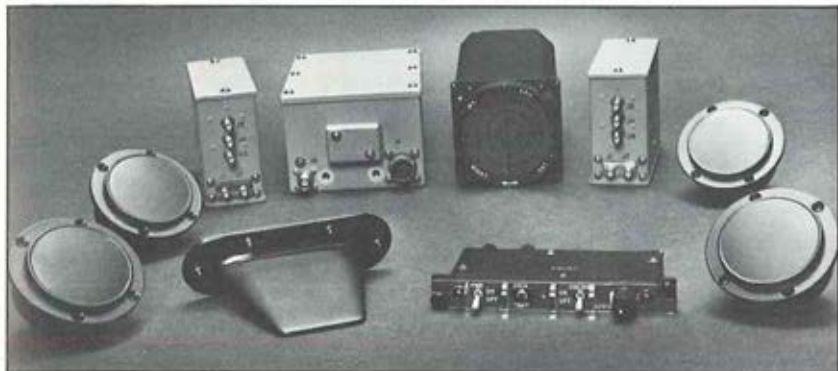
Blackhawk helicopters and others. It is deployed in SEMA fixed-wing platforms. The AN/APR-39(V)1 is also in use on various Allied Forces high-performance aircraft. The system has been qualified and is being procured for U.S., NATO and other Allied Forces.

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Operating Companies in Australia, Canada, France, UK, USA and W. Germany.



SUGGESTED CHAPTER HOSPITALITY SUITE ASSIGNMENTS ★

27TH AAAA NATIONAL CONVENTION

MARCH 28-30, 1985 — ST. LOUIS SHERATON HOTEL



THURSDAY NIGHT, MARCH 28
(10:00 P.M.—1:00 A.M.) ●

FRIDAY NIGHT, MARCH 29
(10:00 P.M.—1:00 A.M.) ●

SATURDAY NIGHT, MARCH 30
(10:30 P.M.—1:00 A.M.) ●

Ballroom East
Georgia Suite
Co-Hosts: COL(P) Rod Wolfe*, Greater Atlanta; LTC Jim Kenton*, "Follow Me"; LTC Billy Pearson*, Coastal Empire Chap. (Hunter-Stewart)

Ballroom East
Army Avn Center Chapter
Host: COL Norm Ferguson
Chapter President
Ft. Rucker, AL

Ballroom East
Army Avn Center Chapter
Host: MG "Don" Parker
Hon. Chapter President
Ft. Rucker, AL

Ballroom Center
Texas Suite
Co-Hosts: Ray Swindell*, North Texas Chapter; COL Jack Turecek*, Ft Hood Chapt.; CW4 Ken Pruitt*, Lone Star Chapter
DFW-Ft.Hood-Austin, TX

Ballroom Center
Texas Suite
Co-Hosts: COL Jack Turecek*, Ft. Hood Chapter; Ray Swindell*, North Texas Chapter; CW4 Ken Pruitt*, Lone Star Chapter
Ft. Hood-DFW-Austin, TX

Ballroom Center
Texas Suite
Co-Hosts: COL Tom Walker*, Corpus Christi Chapter; and COL Engle Scott*, Jack H. Dibrell (Alamo) Chapter
Corpus Christi-San Antonio, TX

Ballroom West
Connecticut Chapter
Host: LTC Vince Balley
Chapter President
Stratford, CT

Ballroom West
Colonial Virginia Chapter
Host: COL Ron Bellows
Chapter President
Forts Eustis-Monroe, VA

Ballroom West
Air Assault Chapter
Host: COL Barry Sottak
Chapter President
Fort Campbell, KY

Ballroom Foyer (4)
Keystone-Link Suite
Co-Hosts: COL John Stanfield*, Delaware Valley Chapter; MAJ Simon Miller*, Indiantown Gap Chapter; Dave Woods*, Edwin A. Link Chap.

Ballroom Foyer (4)
Fort Bragg Chapter
Host: MAJ Mike Reid
Chapter President
Fort Bragg, NC

Ballroom Foyer (4)
Lindbergh Chapter
Host: BG "Andy" Anderson
Chapter President
St. Louis, MO

Boulevard "B" (5)
Chesapeake Bay Chapter
Host: CW4 Donald E. Beatty
Chapter Senior V.P.
Fort Meade, MD

Boulevard "B" (5)
USAFFE Suite
Co-Hosts: COL Bill Page*, Morning Calm (Korea) Chap; MAJ Ronnie Hopkins, Aloha of Hawaii Chapter
APO San Francisco, CA

Boulevard "B" (5)
Washington, D.C. Chapter
Host: COL "Buz" Lasch
Chapter President
Washington, D.C.

Boulevard "A" (6)
USAREUR Suite (Tentative)
Co-Hosts: COL Jim Lloyd, USAREUR Regional Sr VP, and all Regional members in attendance from
APO New York, NY

Boulevard "A" (6)
Monmouth Chapter
Host: Dick Steele
Chapter Vice President
Fort Monmouth, NJ

Boulevard "A" (6)
PAC-2 Suite
Co-Hosts: COL Dan Delany, S. California Chapter; LTC Bill Reeder*, Mt. Rainier (Ft Lewis) Chapter

★ The suggested assignments are based, in part, on the Chapter's total membership, its known and anticipated member/spouse attendance, the size of the suite, and the Chapter's expressed additional space needs for food and music. ● Thursday and Friday night suite starting and closing times are fixed; the Saturday night suite closing time is arbitrary. The names of the "Hosts" shown are those of the Chapter Presidents (*), are subject to change, and may not necessarily be those of the actual members who'll serve as the Suite Hosts on the dates shown.

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Loral's radar frequency interferometer (RFI) systems quickly and quietly pinpoint hostile radars. The non-radiating Loral RFI is perfectly suited to scout helicopters and other applications where targeting accuracy is essential.

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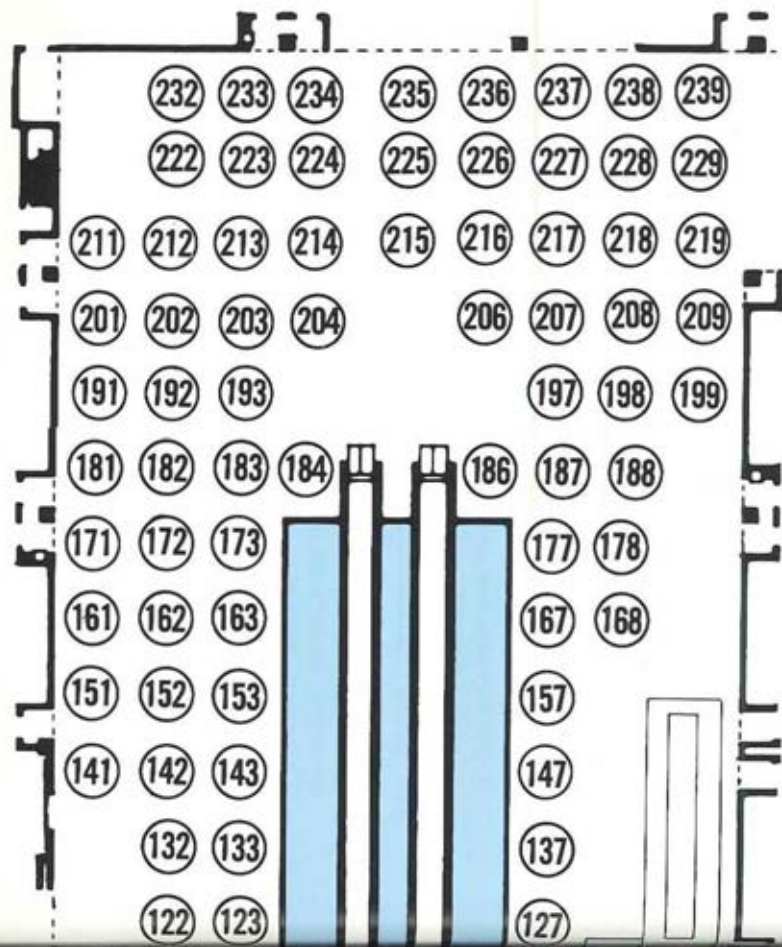
Small, compact and tough, the Loral RFI is the ideal tactical partner for almost any airborne or surface combat platform.

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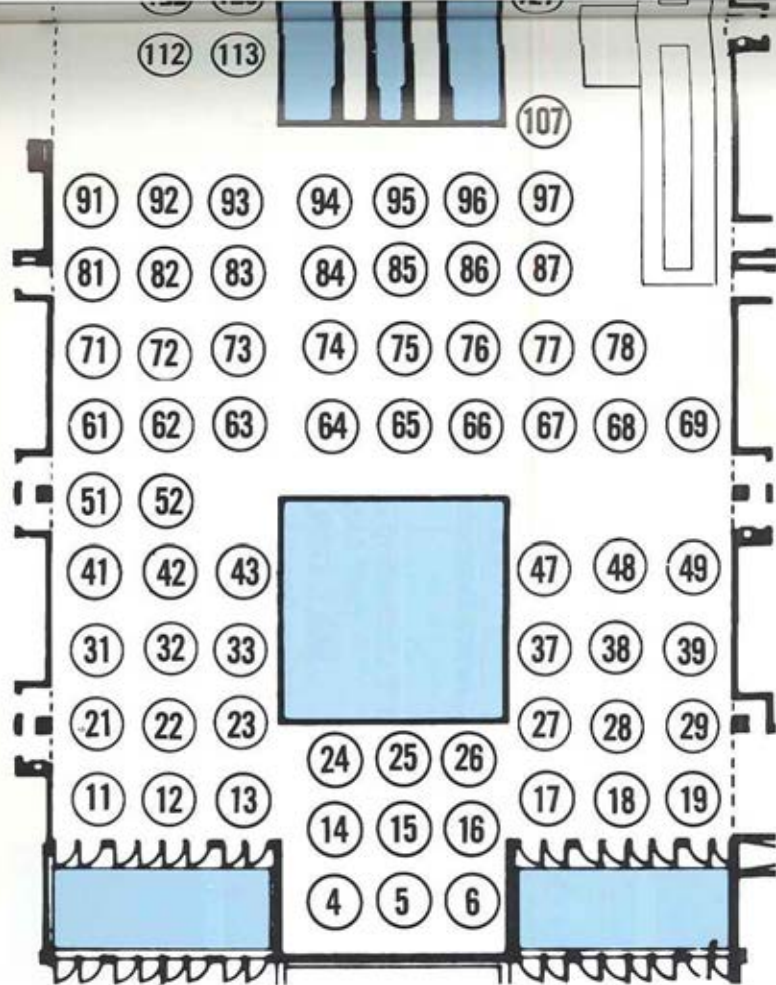
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A DIVISION OF LORAL CORPORATION



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1985 Awards Banquet



Welcome to Attendees by
PAUL L. HENDRICKSON
Co-Chairman of the
1985 AAAA National Awards Banquet



Introduction of the Head Table Guests by
MAJ. GEN. JAMES C. SMITH, RET.
National President
Army Aviation Association of America



Presentation of Colors
and Invocation by
**CHAPLAIN (MAJOR)
DAVID T. FANTA**
Chaplain, St. Louis Area Support Center



The "Robert M. Leich Special Award"
presented by
MAJ. GEN. JAMES C. SMITH, RET.
National President
Army Aviation Association of America

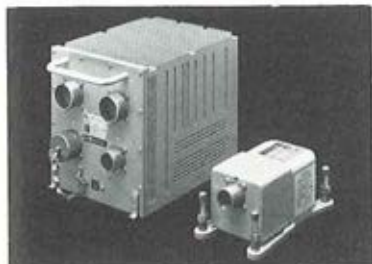


The "Outstanding Reserve Component Aviation
Unit Award" presented by
MAJ. GEN. ELLIS D. PARKER
Commanding General, U.S. Army Aviation Center, and
Ft. Rucker, Ala., and Chief of the Aviation Branch



The "James H. McClellan Aviation Safety Award"
presented by
HON. HOWARD E. HAUGERUD
President, The McClellan Foundation
Washington, D.C.

Lear Siegler System Enhancement Thru SOLID-STATE DATA MANAGEMENT



Signal Acquisition Unit (SAU)
Crash Survivable Memory Unit (CSMU)



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Developed under Joint Service Review Committed Standard Initiative, Lear Siegler's Standard Flight Data Recorder is the first U.S. Tri-Service recorder. This all solid-state recorder will be used in a flight test program to develop a unit level condition monitoring & predictive maintenance capability for the UH-60 BLACKHAWK and AH-64 APACHE. ---all within one low cost SFDR system.



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INSTRUMENT DIVISION

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1985 Awards Banquet



The "Department of the Army Civilian of the Year Award" presented by
MAJ. GEN. ORLANDO E. GONZALES
Commanding General, U.S. Army Aviation Systems
Command, St. Louis, Missouri



The "Aviation Soldier of the Year Award" presented by
LT. GEN. JOSEPH T. PALASTRA, JR.
Commanding General, I Corps and Fort Lewis,
Washington



The "Army Aviator of the Year Award" presented by
LT. GEN. CHARLES W. BAGNAL
Deputy Commanding General, U.S. Army Training
and Doctrine Command, Fort Monroe, Virginia



The "Outstanding Aviation Unit of the Year Award" presented by
GENERAL RICHARD H. THOMPSON
Commanding General, U.S. Army Materiel Command
Alexandria, Virginia



Remarks by
PRESIDENT SMITH
and Transfer of the AAAA Gavel to 1985-1986
National President



Closing by
MAJ. GEN. GEORGE W. PUTNAM, JR., RET.
and Benediction by Chaplain Fanta followed by
the Retirement of the Colors



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This is the voice of Dalmo Victor's unique APR-39A Digital Threat Warning System. It synthesizes a voice alert while simultaneously displaying visual threat symbols.

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1985 Award Winners



Aviator of the Year Award

COL Robert L. Stewart
NASA Astronaut
Lyndon B. Johnson
Space Center,
Houston, TX

Soldier of the Year Award

SSG Ronnie Garrett
11th Combat Aviation
Squadron, 11th
Armored Cavalry Rgmt
APO New York 09146



Aviation Unit of Year Award

210th Combat
Aviation Battalion
Fort Kobbe, Panama
Accepted for the unit by
LT COL Theodore A. Duck
the unit commander.



PHOTO
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Aviation Unit of Year Award

210th Combat Avn Bn
Fort Kobbe, Panama
Accepted for the unit by
1SGT Victor L. Moss, one
of the unit's Senior Non-
Commissioned Officers



Aviation Unit Award (RC)

40th Combat
Aviation Battalion
California ARNG
Accepted for the unit by
LT COL James Ghormley,
the unit commander.

Aviation Unit Award (RC)

40th Combat
Aviation Battalion
California ARNG
Accepted for the unit by
CSM William Sellings,
the unit's senior Non-
Commissioned Officer.



DAC of the Year Award

Mr. Robert A. Robbins
Test Pilot
U.S. Army Aviation
Engineering Flight
Activity
Edwards AFB, California



McClellan Safety Award

CW4 Ralph V. Tolbert
6th Cavalry Brigade
(Air Combat)
Fort Hood, TX



Robert M. Leich Special Award

The U.S. Army
Safety Center
Fort Rucker, AL
Accepted for the unit by
COL Terence M. Henry,
the unit commander.

Robert M. Leich Special Award

The U.S. Army
Safety Center
Fort Rucker, AL
Accepted for the unit by
COL Joseph R. Koehler,
Ret., the unit's former
commander.



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Awards Background

In presenting its annual National Awards, the Army Aviation Association has been honored by the Awards Banquet attendance and participation of many of the key leaders of the United States Army who have served as presenters.

Among those who have presented AAAA National Awards over the years were:

Presenters of the

"Aviation Soldier of the Year Award"

- Hon. Elvis J. Stahr, Secr. of the Army, 1961
- Hon. Stephen Ailes, Under Secretary, 1962
- Hon. Cyrus R. Vance, Secr. of the Army, 1963
- Hon. Stephen Ailes, Secr. of the Army, 1964
- Hon. Stanley R. Resor, Secr. of the Army, '65, 1967-70
- GEN Frank S. Besson, CG, AMC, 1966
- Hon. Robt. F. Froehke, Secr. of the Army, 1971
- Hon. Kenneth Belieu, Under Secretary, 1972
- Hon. Norman R. Augustine, Under Secr., '73, 1975-6
- Hon. Herman R. Staudt, Under Secretary, 1974
- Hon. Walter B. LeBerge, Under Secr., 1977
- GEN Frederick J. Kroesen, Vice Chief, 1978
- GEN Robt. M. Shoemaker, CG, FORSCOM, 1979-80
- LTG Marion C. Ross, DCG, FORSCOM, 1981
- LTG John N. Brandenburg, CG, I Corps, 1982-3
- LTG James H. Merryman, DCSRDA, 1984

Presenters of the

"Outstanding Aviation Unit Award"

- LTG John C. Oakes, DCSOPS, 1960
- GEN George H. Decker, Chief of Staff, 1961
- GEN Earle G. Wheeler, Chief of Staff, 1962
- GEN Barksdale Hamlett, Vice Chief, 1963
- GEN Harold K. Johnson, Chief of Staff, 1964-7
- GEN William C. Westmoreland, CoFS, '68, 1970-1
- GEN Bruce Palmer, Jr., Vice Chief, 1969
- GEN Creighton W. Abrams, Jr., CoFS, 1972-3
- LTG John R. Deane, Jr., Acting VCS, 1974
- GEN Frederick C. Weyand, Chief of Staff, 1975
- GEN Walter P. Kerwin, Jr., Vice Chief, 1976
- GEN Frederick J. Kroesen, Vice Chief, 1977
- GEN Bernard W. Rogers, Chief of Staff, 1978-9
- GEN Edward C. Meyer, Chief of Staff, 1980-1
- LTG Marion C. Ross, DCG, FORSCOM, 1982-3
- GEN Donald R. Keith, CG, DARCOM, 1984

Presenters of the

"Army Aviator of the Year Award"

- BG Robert M. Leich, Pres., AAAA, 1959
- Bryce Wilson, President, AAAA, 1960
- BG Robert M. Leich, Past Pres., 1961
- BG Robert M. Leich, Past Pres., 1962
- Hon. Stephen Ailes, Under Secretary, 1963
- Hon. Paul R. Ignatius, Under Secretary, 1964
- Hon. David E. McGiffert, Under Secretary, 1965
- Hon. Robert A. Brooks, ASA (I&I), 1966
- Hon. Russell D. O'Neal, ASA (R&D), 1967

- GEN Bruce Palmer, Jr., Vice Chief, 1968
- Hon. John Beal, Under Secretary, 1969
- GEN Bruce Palmer, Jr., Vice Chief, 1970-2
- GEN Frederick C. Weyand, Vice Chief, 1973
- GEN Henry A. Miley, Jr., CG, AMC, 1974
- LTG John W. Vessey, Jr., DCSOPS, 1975
- LTG Hal G. Moore, DCSPER, 1976
- GEN John R. Guthrie, CG, DARCOM, 1977
- GEN Geo. S. Blanchard, CG, USAREUR, 1978
- LTG John M. Wright, Jr., Ret., 1979
- GEN Hamilton H. Howze, Ret., 1980
- GEN John R. Guthrie, CG, DARCOM, 1981
- LTG Jack V. Mackmull, CG, XVIII Abn, 1982-4

Presenters of the

"Outstanding Reserve Component Aviation Unit Award"

- GEN William C. Westmoreland, CoFS, 1971
- LTG Harris W. Hollis, CORC, 1972
- LTG John J. Hennessey, CORC, 1973
- MG LaVern E. Weber, Chief, NGB, 1974
- MG Charles A. Ott, Jr., Dir, ANG, 1975
- MG LaVern E. Weber, Chief, NGB, 1976
- GEN Donn A. Stary, CG, TRADOC, 1977
- GEN Robt. M. Shoemaker, CG, FORSCOM, '78
- LTG Eugene Forrester, CG, Sixth USA, 1979
- MG John W. McEnery, CoFS, FORSCOM, 1980
- MG William R. Berkman, CAR, 1981
- LTG Marion C. Ross, DCG, FORSCOM, 1982
- LTG LaVern E. Weber, Chief, NGB, 1983
- LTG LaVern E. Weber, RF Policy Board, 1984

Presenters of the

"James H. McClellan Aviation Safety Award"

- Hon. John L. McClellan, US Senate, 1963, 1970, 1975
- Hon. Howard E. Haugerud, 1962, 1964, 1968, 1969, 1971-73, 1976-82, 1984

Presenters of the

"Dept. of the Army Civilian Award"

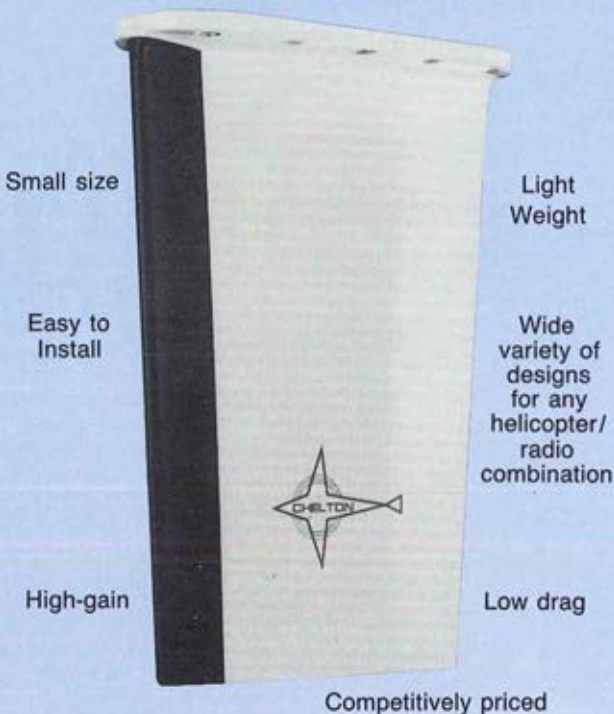
- Hon. Walter B. LeBerge, Under Secretary, 1978
- LTG Eivind H. Johansen, DCSLOG, 1979
- MG Robert L. Moore, CoFS, DARCOM, 1980
- LTG LaVern E. Weber, Chief, NGB, 1981
- MG Emil L. Konopnicki, CG, TSARCOM, 1982
- LTG James H. Merryman, DCSRDA, 1983
- LTG (P) Richard H. Thompson, DCSLOG, 1984

Presenters of the

"Robert M. Leich Special Award"

- GEN Henry A. Miley, Jr., CG, AMC, 1974
- LTG Robert R. Williams, DCSOPS, 1977
- LTG Eugene D'Ambrosio, DCG, DARCOM, '79
- MG Story C. Stevens, CG, AVRADCOM, 1982-3
- LTG Charles W. Bagnal, DCG, TRADOC, 1984

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F. Knight



COL Lewis J.
McConnell



COL James H.
Burns

Robert M. Leich Special Award

BACKGROUND—This AAAA Award is named in memory of BG Robert M. Leich, the AAAA's first president (1957-59), and Awards Committee Chairman for 23 years. The award is given for service to by a unit over an extended period.

1973—34th General Support Group (AHM&S). Presented Oct. 1973 by GEN Henry A. Miley, Jr., Commander, AMC, to MG Alton G. Post and COL Donald H. Jersey, and CSM Samuel Ring. (For 1965-1972 Period).

1976—101st Airborne Division (Air Assault). Presented Oct. 1977 by LTG Robert A. Williams, AAAA President, to MG John A. Wickham, Jr., Cdr., for the officers and men. (For REFORGER 1976).

1978—Corpus Christi Army Depot. Presented Oct. 1979 by LTG Eugene J. D'Ambrosio, Deputy Commander, U.S. Army DARCOM to COL Charles F. Drenz, Commander. (For 1961-1978 Period).

1979—U.S. Army Aviation Board. Presented Oct. 1980 by MG Carl H.



McNair, Jr., USAAVNC Commander, to COL Robert A. Bonifacio, President, USAVNB. (For 1976-1980 Period).

1980—U.S. Army Aviation Development Test Activity and All Predecessor Units. Presented June 1981 by COL John W. Marr, President, to COL William E. Crouch, Jr. (For 1945-1981 Period).

1981—Applied Technology Laboratory. Presented in April 1982 by MG Story C. Stevens, Commander, USA Aviation R & D Command, to COL Emmett F. Knight. (For 1957-1982 Period).

1982—U.S. Army Engineering Flight Activity, Edwards AFB, California. Accepted for the members of the unit by COL Lewis J. McConnell, the unit commander. (For 1960-1983 Period).

1983—Mississippi Aviation Classification Repair Activity Depot, MSARNG. Accepted for the unit by COL James H. Burns, the unit commander. (For the 1971-1984 Period).

Outstanding Aviation Unit (RC) Award

BACKGROUND—The Reserve Component Aviation Unit Award is sponsored by the Avco Lycoming Division and is presented annually at the AAAA National Convention.

1969—1105th Aviation Company (Assault Helicopter) Iowa-ARNG, MAJ Robert C. Cummings, Commander, and 1SG Arnold J. Newsum, Senior NCO.

1970—24th Medical Company (Air Ambulance) Nebraska-ARNG, MAJ Roger W. Fosbender, Commander, 1SG Andrew M. Alexander, Senior NCO.

1971—997th Aviation Company (Assault Helicopter) Ariz-ARNG, MAJ James H. Cowan, Commander, and 1SG Dale S. Swensen, Senior NCO.

1972—307th Aviation Company (Heavy Helicopter) Ala-ARNG, MAJ Arthur E. Fleet, Commander, and 1SG John F. Hoskins, Senior NCO.

1973—445th Aviation Company (Assault Helicopter) OK-ARNG, MAJ Karl M. Frank, Commander, and 1SG Kenneth Inman, Senior NCO.

1974—536th Aviation Company (Assault Support Helicopter) TX-ARNG, MAJ Joe E. Harry, Commander, and SGT Joseph R. Kimball, Senior NCO.

1975—1042nd Military Intelligence Company (Aer Surv) OR-ARNG, MAJ Loren W. Franke, Commander, and 1SG Donald MacPherson, Senior NCO.

1976—300th Aviation Company (Assault Helicopter) Texas-USAR, MAJ Jerry Stokely, Commander, and 1SG Jack Powell, Senior NCO.

1977—Troop E, 19th Cavalry 29th Brigade, HI-ARNG, MAJ Bernard M. Watson, Commander, and MSG Richard Y. Tabe, Senior NCO.

1978—49th Transportation Company (Medium Helicopter) CA-ARNG, MAJ Lawrence Faller, Commander, and 1SG Sidney G. Richards, Senior NCO.

1979—Brigade Aviation Section, HHC, 92d Separate Inf Div Puerto Rico ARNG, CPT Anibal Torres, Commander, and 1SG Hector Doran, Senior NCO.

1980—190th Aviation Company (Medium Helicopter) KA-ARNG, MAJ Thomas A. Staadt, Commander, and 1SG Paul M. Green, Senior NCO.

1981—717th Medical Detachment, New Mexico ARNG, MAJ George B. Faulhaber, Commander, and SFC Nancy J. Reutner, Senior NCO.

1982—138th Aviation Co. (EW), FL-USAR Orlando, Florida, Accepted for the unit by MAJ Arthur S. Johnson, the unit commander, and SFC James E. Dennis, Senior NCO.

1983—D Company, 28th Combat Aviation BN, NCARNG, Accepted for the unit by MAJ Julius H. Avant, the unit commander.





**MAJ Robert
C. Cummings**



**MAJ Roger W
Fosbender**



**MAJ James
H. Cowan**



**MAJ Arthur
E. Fleet**



**MAJ Karl M.
Frank**



**MAJ Joe E.
Harry**



**MAJ Loren
W. Frankle**



**MAJ Jerry
Stokely**



**MAJ Bernard
M. Watson**



**MAJ L.
Faller**



**CPT Anibal
Torres**



**MAJ Thomas
A. Staadt**



**MAJ George
B. Faulhaber**



**MAJ Arthur
S. Johnson**



**MAJ Julius
H. Avant**



**Joseph P.
Cribbins**



**John B.
Greenwell**



**Sherman C.
Hines**



**M. Margaret
Brown**



**John J.
Stanko, Jr.**



**Michael J.
Hoffman**



**Frank
Soliz**



**Carolyn
Chapman**

DAC of the Year Award

BACKGROUND—This Army Aviation Association Award is sponsored by the Boeing Vertol Company and is presented annually to the Dept. of the Army Civilian who has made an outstanding individual contribution to Army Aviation in the previous calendar year.

1976 — Joseph P. Cribbins, Special Assistant for Aviation Logistics; Office, Deputy Chief of Staff for Logistics; Dept. of the Army.

1977 — John B. Greenwell, Deputy Director of Materiel Management, U.S. Army Troop Support & Aviation Materiel Readiness Command, St. Louis, MO.

1978 — Sherman C. Hines, Equipment Specialist, U.S. Army MIRCOC Field Maintenance, 2d Armored Cavalry Regiment, APO NY.



1979 — M. Margaret Brown, Aircraft Equipment Manager, Aviation Office, U.S. Army Troop Support & Aviation Materiel Readiness Command, St. Louis, MO.

1980 — John J. Stanko, Jr., Chief, Army Aviation Division, National Guard Bureau, Aberdeen Proving Grounds, Maryland.

1981 — Michael J. Hoffman, Aerospace Engineer, U.S. Army Troop Support and Aviation Materiel Readiness Command, St. Louis, Missouri.

1982 — Frank Soliz, CCAD, Corpus Christi, Chief of Engine Shops Division, Corpus Christi Army Depot.

1983 — Carolyn Chapman, Aviation Program Specialist, Office, Deputy Chief of Staff for Logistics, Department of the Army.

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advantage of the nearly vertical incident skywave (NVIS) mode of propagation. This mode is especially applicable for short range communication coverage where terrain masking obstructs the radio line of sight path. In addition to a complete line of airborne antenna systems, DG also produces electrostatic protection equipment, lightning protection devices, and portable survival radios.

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Outstanding Aviation Unit Award

BACKGROUND—The AAAA's "Outstanding Aviation Unit Award" is sponsored by Hughes Helicopters, Inc. and is presented at the National Convention of the Army Aviation Association.

1959—First Recon Squadron (Sky Cavalry), 2nd U.S. Army Missile Command (Medium), LTC Robert F. Tugman, Commander.

1960—937th Engineer Company (Aviation) (Inter-American Geodetic Survey), LTC Jack W. Ruby, Commander.

1961—45th Transportation Battalion (Helicopter), accepted by MAJ Milton P. Cherne for LTC Howard B. Richardson, Commander.

1962—USA Utility Tactical Transport Company, MAJ Ivan L. Slavich, Commander.

1963—11th Air Assault Division and attached 10th Air Transport Brigade, MG Harry W. O. Kinnard, Commander, 11th Air Assault Division.

1963—11th Air Assault Division and attached 10th Air Transport Brigade, COL Delbert L. Bristol, Commander, 10th Air Transportation Brigade.

1963—13th Aviation Battalion, LTC

Jack V. Mackmull, Co-Commander, 13th Aviation Battalion.

1964—13th Aviation Battalion, LTC J. Y. Hammack, Co-Commander, 13th Aviation Battalion.

1965—1st Cavalry Division (Airmobile), MG Harry W. O. Kinnard, Commander, and with SGM Kenneth W. Cooper as the Senior NCO.

1966—1st Aviation Brigade, MG G. P. Seneff, Jr., Commander, and with Brigade SGM Douglas W. Sims as Senior NCO.

1967—52nd Combat Aviation Battalion, Lieutenant Colonel Raymond G. Lehman, Jr., Co-Commander, and SGM Ernest J. Winters as the Senior NCO.

1967—52nd Combat Aviation Battalion, LTC Edward P. Luckert, Jr., Co-Commander.

1967—52nd Combat Aviation Battalion, LTC Paul C. Smithey, Co-Commander.

1968—25th Aviation Battalion (Infantry Division), LTC Kenneth J. Burton, Commander, and with CSM William H. Bennett as the Senior NCO.

1969—101st Airborne Division (Airmobile), LTG Melvin Zals, Co-Commander, and CSM Robert A. Young, as Co-Senior NCO.

1969—101st Airborne Division (Airmobile), LTG John M. Wright, Jr., Co-Commander, and CSM William T. Mixon as Co-Senior NCO.

1970—1st Squadron, 9th Cavalry, 1st Cav Div (Airmobile), COL Robert H. Nevins, Commander, and with CSM John F. Adams Jr., as the Senior NCO.

1971—F Battery, 79th FA, 3rd Brigade, MAJ Lawrence F. McKay, Jr., Commander, with SFC Lionel S. McDonald as the Senior NCO.

1972—227th Aviation Battalion, 1st Cav Division, LTC Frank L. Henry, Commander, with CSM James W. Reed as the Senior NCO.

1973—155th Aviation Company (Attack Helicopter), MAJ Kermit E. Larson Jr., Commander, with SFC Ray M. Teer as the Senior NCO.





LTC Robert F.
Tugman



LTC Jack W.
Ruby



MAJ Milton
P. Cherne



MAJ Ivan L.
Slavich



COL Delbert L.
Bristol



COL Jack V.
Mackmull



LTC J.Y.
Hammack



MG Harry W.O.
Kinnard



MG G.P.
Seneff, Jr.



LTC Raymond
G. Lehman, Jr.



LTC Edward
P. Lukert, Jr.



LTC Paul C.
Smithey



LTC Kenneth
J. Burton



LTG Melvin
Zals



LTG John M.
Wright, Jr.



COL Robert H.
Nevins



MAJ Lawrence
F. McKay



LTC Frank L.
Henry



MAJ Kermit E.
Larson, Jr.



LTC Joseph R.
Koehler



MAJ Gary F.
Ramage



LTC Gary F.
Dolin



MAJ Gary D.
Johnson



COL George F.
Newton



MAJ Kenneth
Loudermilk



LTC Albert E.
Hervey, Jr.



MAJ Roy E.
Mann



LTC William E.
Turner



COL Terence
M. Henry

UNIT AWARD

1974—210th Aviation Battalion (USARCARIB), LTC Joseph R. Koehler, Commander, and with CSM Stephen M. Cole as the Senior NCO.

1975—334th Aviation Company (Atk Hel), MAJ Gary F. Ramage, Commander, with 1SG Charles Lewis, as the Senior NCO.

1976—7th Squadron (Atk Hel), 17th Cavalry, 6th Cav Brigade (Air Combat),

LTC Gary F. Dolin, Commander, with 1SG Leon S. Wozniak, as the Senior NCO.

1977—242nd Aviation Company (ASH), MAJ Gary D. Johnson, Commander, with 1SG James E. Fuller, as the Senior NCO.

1978—17th Aviation Group (Combat), COL George F. Newton, Commander, with CSM Albert P. Liwang, as the Senior NCO.

1979—146th ASA Company (Aviation) (Forward), MAJ Kenneth Loudermilk, Commander, with 1SG James Jones, as the Senior NCO.

1980—59th Air Traffic Control Battalion, LTC Albert E. Hervey, Jr., Commander, with CSM Johnnie M. Byram, as the Senior NCO.

1981—The U.S. Helicopter Team, MAJ Roy E. Mann, Coach, and SGM John P. Traylor, Senior NCO.

1982—70th Transportation Battalion (AVI), APO New York, accepted for the unit by LTC William E. Turner, the unit commander.

1983—160th Aviation Battalion (AHX Reinforced), Fort Campbell, KY, accepted for the unit by COL Terence M. Henry, the unit commander, and SGM Mitchell G. Yahner, Senior NCO.





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Aviation Soldier of the Year Award

BACKGROUND—The AAAA's "Aviation Soldier of the Year Award" is sponsored by Bell Helicopter Textron. It is presented at the National Convention of the Army Aviation Association.

1960—MSG Robert R. Young, Airfield Operations Command, Fort Rucker, Alabama.

1961—SFC James C. Dykes, 225th Signal Detachment U.S. Army, Vietnam.

1962—SFC James K. Brock, First Aviation Company (Caribou), U.S. Army, Vietnam.

1963—SFC Robert M. George, Utility Tactical Transport Company, U.S. Army, Vietnam.

1964—MSG Cyril G. Manning, 13th Aviation Battalion, U.S. Army, Vietnam.

1965—SFC Donald MacNevin, 114th Aviation Company, U.S. Army, Vietnam.

1966—SP5 Dennis L. Faló, 1st Cav Division (Airmobile), U.S. Army, Vietnam.

1967—SFC Jesse J. Dodson, Jr., 405th USA Transportation Maintenance Detachment, U.S. Army, Vietnam.

1968—SFC William R. Baum, 122nd Maintenance Battalion, 3d Armd Division, U.S. Army, Europe.

1969—SFC Dennis L. Jantz, 240th Aviation Company (Assault Helicopter), U.S. Army, Vietnam.

1970—SP5 Dennis M. Fujii, 237th Medical Detachment (Air Ambulance), U.S. Army, Vietnam.

1971—SP5 Richard G. Hatch, 3rd Brigade, 1st Cavalry Division (Airmobile), Fort Hood, Texas.

1972—SFC Robert H. Vaughan, 4th Battalion (Aerial Field Artillery), 77th Field Artillery, 101st Airborne Division (Airmobile) Fort Campbell, Kentucky.

1973—SFC Robert J. Coleman, C Co., 159th Aviation, (ASH), 101st Airborne Division (Airmobile), Fort Campbell, Kentucky.

1974—SP5 Gregory J. Maurakis, B Company, 101st Aviation Battalion, 101st Airborne Division (Airmobile), Fort Campbell, Kentucky.

1975—MSG John R. Montgomery, USA Aviation Precision Demonstration Team Fort Rucker, Alabama.

1976—SP5 Charles W. Ball, 146th Medical Detachment (Helicopter Ambulance), West Virginia ARNG.

1977—SGT Chris B. Archer, 236th Medical Detachment (Helicopter Ambulance), APO New York.

1978—SFC James L. Fielder, 129th Aviation Company (Assault Helicopter), Fort Bragg, N.C.

1979—SFC Leland E. Hinely, Co A, 501st Aviation Battalion (Combat), APO New York.

1980—SFC James D. Glendinning, Air Troop, 11th Armored Cavalry Regiment, APO New York.

1981—Staff SGT William G. Patterson, 54th Medical Detachment (Helicopter Ambulance), Fort Lewis, Washington.

1982—SFC Ronald L. Boese, APO New York, Platoon Sgt, Aeroscout Platoon, Cbt Aviation Troop, 11th Armored Cavalry Regiment.

1983—SP4 David T. Amos, 196th Aviation Co., (ASH), 269th Combat Aviation Battalion, Fort Bragg, N.C.





MSG Robert R. Young



SFC James C. Dykes



SFC James K. Brock



SFC Robert M. George



SFC William R. Baum



MSG Cyril G. Manning



SFC Donald MacNevin



SP5 Dennis L. Falo



SFC Jesse J. Dodson Jr.



SP1 Dennis L. Jantz



SP5 Dennis M. Fujii



SP5 Richard G. Hatch



SFC Robert H. Vaughan



SFC Robert J. Coleman



SP5 Gregory J. Maurakis



John R. Montgomery



SP5 Charles W. Ball



Chris B. Archer



SFC James L. Fielder



SFC Leland E. Hinely



SFC James D. Glendinning



SSG William G. Patterson



SFC Ronald L. Boese



SP4 David T. Amos

McClellan Aviation Safety Award

BACKGROUND—Sponsored by the many friends of the late Senator John L. McClellan in memory of his son, James L. McClellan, a former Army Aviator who was killed in a civil aviation accident in 1958, the award is presented annually to an individual who has made an outstanding contribution to Army Aviation safety in the previous year.

1958—MAJ Arne H. Eliasson, Aviation Safety Division, Hqs, Seventh Army, APO New York.

1959—COL John L. Inskip (Co-Winner), U.S. Army Primary Helicopter School, (USAPHS), Fort Wolters, Texas.

1959—Raymond L. Thomas, (Co-Winner), Southern Airways Company (Manager, Contract Operations).

1960—No award given.

1961—COL Spurgeon H. Neel, Jr., U.S. Army Hospital, Ft. Rucker, Alabama.

1962—COL James F. Wells, U.S. Army Board for Aviation Accident Research (USABAAR), Ft. Rucker, Alabama.

1963—COL Conrad L. Stansberry, Hqs, U.S. Army, Europe, APO New York.

1964—Ralph B. Greenway, Army Aviation Directorate, OACSFOR, Department of the Army.

1965—Gerard M. Bruggink, U.S. Army Board for Aviation Accident Research (USABAAR), Ft. Rucker, Alabama.

1966—CPT Gary R. Ramage, 228th

Assault Helicopter Battalion, U.S. Army Vietnam.

1967—Francis P. McCourt, U.S. Army Aviation Laboratories (AVLABS), Ft. Eustis, Virginia.

1968—COL Russell P. Bonasso, U.S. Army Board for Aviation Accident Research (USABAAR), Ft. Rucker, Alabama.

1969—COL Robert W. Bailey, U.S. Army Aeromedical Research Laboratories Ft. Rucker, Alabama.

1970—COL Eugene B. Conrad, U.S. Army Board for Aviation Accident Research (USABAAR), Ft. Rucker, Alabama.

1971—BG William W. Spruance, Air National Guard, Wilmington, Delaware.

1972—CWO Ralph S. Park, 155th Aviation Company (Attack Helicopter) Fort Ord, California.

1973—CPT Charles F. Nowlin, U.S. Army Agency for Aviation Safety (USAAVS), Ft. Rucker, Alabama.

1974—CWO George L. Allen, Simons Army Airfield, Ft. Bragg, N.C.

1975—CWO Alfred J. Cargen, Ret., Hqs, Fifth U.S. Army, Fort Sam Houston, Texas.

1976—MAJ Arthur M. Mountcastle, 101st Aviation Group, 101st Abn Division (Air Assault), Fort Campbell, Kentucky.

1977—CWO Fate (Jim) Hutchins, 129th Aviation Company (Assault Helicopter), Ft. Bragg, N.C.

1978—CWO Frankie C. Wilson, 207th Aviation Company, APO New York.

1979—CWO Harold D. Hintze, Student, U.S. Army Warrant Officer College Ft. Rucker, Alabama.

1980—CWO Peter D. Maskunas, 5 Troop, 4th Squadron, 7th Cavalry, 2d Armored Division, APO San Francisco.

1981—SFC Gerald L. Johnson, U.S. Army Aeromedical Research Laboratory Ft. Rucker, Alabama.

1982—No award given.

1983—CW2 Richard L. Williams, HHD, 2d Combat Aviation Battalion Camp Casey, Korea.



1970 Flashback — Senator John L. McClellan, left, presents the "James L. McClellan Aviation Safety Award" to Colonel Robert W. Bailey, center, as the Hon. Howard Haugerud, head of the McClellan Foundation, looks on.



**MAJ Arne H.
Ellason**



**COL John L.
Inskip**



**Raymond L.
Thomas**



**COL S. H.
Neel, Jr.**



**COL James F.
Wells**



**COL C. L.
Stansberry**



**Ralph B.
Greenway**



**Gerard M.
Bruggink**



**CPT Gary R.
Ramage**



**Francis P.
Mccourt**



**COL Russell
P. Bonasso**



**COL Robert
W. Bailey**



**COL Eugene
B. Conrad**



**BG William
W. Spruance**



**CWO Ralph S.
Park**



**CPT Charles
F. Nowlin**



**CWO George
L. Allen**



**CWO Alfred J.
Cargen**



**MAJ Arthur
Mountcastle**

McClellan
Aviation
Safety
Award



CWO Fate
(Jim) Hutchins



CWO Frankie
C. Wilson



CWO Harold
D. Hintze



CWO Peter D.
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SFC Gerald
L. Johnson



CW3 Richard
L. Williams

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Army Aviator of the Year Award

BACKGROUND—Sponsored by the Sikorsky Aircraft Division of UTC, this Association award is presented annually at the AAAA National Convention to the active duty or Reserve Component Army Aviator who has made an outstanding individual contribution to Army Aviation during the previous calendar year.

1958—CPT James T. Kerr, U.S. Army Transportation Test and Support Activity, Ft. Rucker, Alabama.

1959—CWO Clifford V. Turvey, U.S. Army Aviation Test Board, Ft. Rucker, Alabama.

1960—CWO Michael J. Madden, U.S. Army, Transportation Board, Ft. Eustis, Virginia.

1961—CPT Leyburn W. Brockwell, Jr., HS, XVIII Airborne Corps, Ft. Bragg, N.C.

1962—CPT Emmett F. Knight, 57th Aviation Company, U. S. Army Vietnam.

1963—MAJ Marquis D. Hilbert, The John F. Kennedy Center for Special Warfare, Ft. Bragg, N.C.

1964—MAJ Paul A. Bloomquist, 57th Medical Detachment (Helicopter Ambulances), U.S. Army, Vietnam.

1965—CPT James A. Scott, III, 219th Aviation Company, U.S. Army, Vietnam.

1966—CWO Jerome R. Daly, 121st Aviation Company, U.S. Army, Vietnam.

1967—CPT Robin K. Miller, 114th Assault Helicopter Company, U.S. Army, Vietnam.

1968—MAJ Patrick H. Brady, 54th Medical Detachment (Helicopter Ambulances), U.S. Army, Vietnam.

1969—CWO John I. O'Sullivan, 174th Aviation Company, U.S. Army, Vietnam.

1970—LTC Robert M. Molinelli, 2d Squadron, 17th Cav, 101st Airborne Division (Airmobile), U.S. Army, Vietnam.

1971—CPT Ronald A. Radcliffe, F Troop, 4th Cavalry, 1st Aviation Brigade, U.S. Army, Vietnam.

1972—MAJ Theodore J. Dolloff, Company D, 227th Aviation Battalion, 1st Cavalry Division, Fort Hood, Texas.

1973—CWO Norman E. York, 71st Aviation Company, (Assault Helicopter), APO New York.

1974—MAJ Eugene L. Richardson, Hq & Hq Detachment, Military Bureau, Maine Army National Guard.

1975—CWO Robert R. Hawkins, 7th Squadron (Assault Helicopter), 17th Cavalry, Fort Hood, Texas.

1976—CWO Randy F. Dyer, 155th Aviation Company, (Attack Helicopter), Ft. Ord, California.

1977—MAJ William S. Reeder, Jr., 334th Aviation Company (Attack Helicopter), APO New York.

1978—CWO Michael B. Farmer, Air Troop, 2d Armored, Cavalry Regiment, APO New York.

1979 CWO Ernest W. Rickenbacker, 60th Co., 6th Battalion, 1st Aviation Brigade, U.S. Army Aviation Center, Ft. Rucker, Alabama.

1980—CWO Richard S. Seefeldt, Project Manager's Office (BLACK HAWK), U.S. Army Materiel Development and Readiness Command, St. Louis, Missouri.





**CPT James T.
Kerr**



**CWO Clifford
V. Turvey**



**CWO Michael
J. Madden**



**CPT L. W.
Brockwell, Jr.**



**CPT Emmett
F. Knight**



**MAJ Marquis
D. Hilbert**



**MAJ Paul A.
Bloomquist**



**CPT James A.
Scott, III**



**CWO Jerome
R. Daly**



**CPT Robin K.
Miller**



**MAJ Patrick
H. Brady**



**CWO John I.
O'Sullivan**



**LTC Robert B.
Molinelli**



**CPT Ronald
A. Radcliffe**



**MAJ Theodore
J. Dolloff**



**CWO Norman
E. York**



**MAJ Eugene
L. Richardson**



**CWO Robert
R. Hawkins**



**CWO Randy
F. Dyer**

Aviator
of the
Year
Award



MAJ William
S. Reeder, Jr.



CWO Michael
B. Farmer



CWO Ernest W
Rickenbacker



CWO Richard
S. Seefeldt



CWO George
D. Chrest



2LT Richard
G. Hatch



CW3 Anthony
G. Kraay

1981—CWO George D. Chrest, D Troop, 1st Squadron, 9th Cavalry, 1st Cavalry Division, Fort Hood, Texas.

1982—2LT Richard G. Hatch, 2d

Staff and Faculty Company, Fort Eustis, Virginia.

1983—CW3 Anthony G. Kraay, C company, 3rd Combat Aviation Battalion, APO New York 09702.

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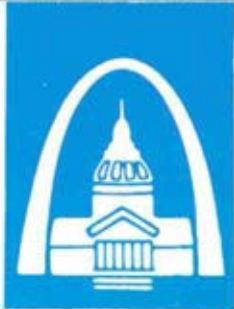
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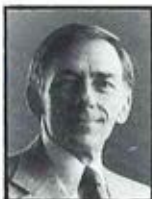
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*Denotes Co-Chairman

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Lt. Generals..... 23	Captains..... 1,463	MIL. TOTAL... 10,096
Maj. Generals.... 61	Lieutenants... 723	Indus (Indiv)... 976
Brig. Generals... 41	CWOs-WOs... 2,350	Indus (Corp)... 1,073
Colonels..... 679	DAC's..... 1,395	For. Nat'ls... 319
Lt. Colonels... 1,181	E7-E9..... 291	CIV. TOTAL... 2,368
Majors..... 1,304	E5-E6..... 293	1 JAN TOTAL 12,464





USAAVNC establishes 29 April — 1 May as dates for 1985 U.S. Helicopter Team trials

PENDING approval by the Secretary of Defense, the U.S. Precision Helicopter Team Trials are tentatively scheduled to be held at Fort Rucker, Alabama, during the period 29 April - 1 May. The competition will be held to determine the final composition of the 1985 Team from representatives of all the Armed Forces plus those civilian entrants who are present at the Trials.

The eye of a needle

Judged competition will cover four precise flying events:

- **Event No. 1** consists of an approximately 60 km navigation course with at least two turning points, terminating at a fixed point where the crew will have to lower a bottle on a 7-meter rope through a 50-cm hole. Both take off and arrival times will be given the crew as well as a precise course to fly. The objective is to start and finish at a precise time while flying a designating course and not breaking the bottle while it is lowered through the hole.



- **Event No. 2** Each aircraft will have suspended from it two ropes with small weights attached at the end, two and three meters in length respectively. The requirement is to navigate a 50 x 50 meter box shaped course along a 1-meter wide corridor while keeping the nose of the aircraft into the wind at all times. Two 360° turns will also be required along the course. The objective is to keep the two ropes within the 1-meter course and to keep one of the attached weights in contact with the ground.

- **Event No. 3** consists of navigation course of approximately 160km with an 8 kilometer-diameter circular search area with designated entry and exit points — a pick-up point and two turning points. The crew will be given a map with course line drawn, start time, search area entry and scheduled arrival time at the finish line plus 8x10 photographs. Along the flight route and in the search area will be objects that have to be identified and their positions located by grid coordinates. Some of the objects will be shown by the photographs while others will be panel markers. The objective is to meet all the time requirements, fly the course and correctly identify the location of each object.

- **Event No. 4.** The Slalom will consist of 12 gates, measuring one meter across by two meters high and oriented in different directions. The objective is to navigate a bucket of precisely measured water suspended on a five meter rope through these and then place the bucket precisely on a small top without losing any water — all within a four-minute time limit.

Encore!

Although the Army will sponsor and host both the team trials and the preparation for world level competition, team composition will be decided as a result of individual crew performance at the trials — not by any type quota system.

The U.S. won the last world competition in 1981 and is planning to make it two in a row! ■■■■

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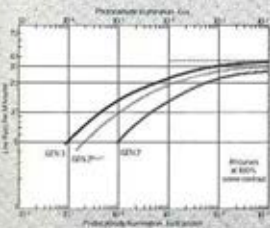
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