ARMY AVIATION

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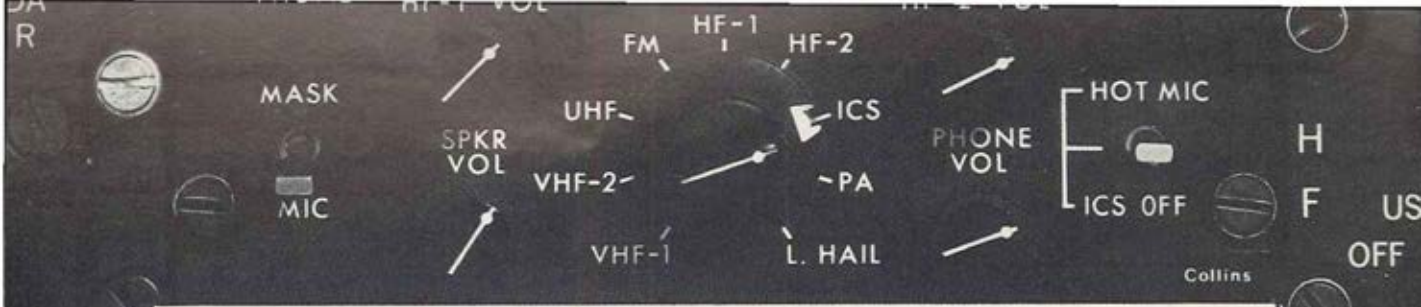
Apache:
The fielding begins...



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FORTHCOMING ISSUES
March-April 1986—A combined issue that serves as the Program for the April, 1986 AAAA National Convention in Atlanta.

May 31, 1986—A General News Issue featuring a Post-Convention Report on the 1986 AAAA National Convention.

June 30, 1986—A Special Report on the production and fielding of the AH-64 APACHE attack helicopter.

FRONT COVER
The McDonnell-Douglas AH-64 APACHE Attack helicopter in flight.

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Army Aviation

VOLUME 36 **NUMBER 2**

FEBRUARY, 1986 FIELD REPORTS

OTHER DEPARTMENTS

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.

HOW A HELICOPTER THAT WON'T FLY KEEPS AN ENTIRE FLEET IN THE AIR.

The U.S. Army/Boeing CH-47D Maintenance Trainer/Simulator is doing more to help Army mechanics keep helicopters aloft than any other training program in existence.

It's the world's first computer-integrated helicopter maintenance trainer/simulator — using a Digital VAX-11/730 minicomputer paired with a CH-47D helicopter. And it's the only trainer/simulator in the world that integrates all the major subsystems of a helicopter *in a single unit.*

With the CH-47D Maintenance Trainer/Simulator, a mechanic can learn to correctly diagnose the condition of anything from a small part to a major component — all on one trainer/simulator. And learn to systematically maintain the CH-47D instead of having to rely on hit-or-miss troubleshooting.

CH-47D computer-integrated maintenance trainer/simulator

In one year of service at the U.S. Army's Aviation Logistics School at Fort Eustis, Virginia, the CH-47D Trainer/Simulator has helped train more than 2,000 pilots and mechanics. It's been so successful that the Army has now ordered the development of similar trainers/simulators for future aircraft, such as the LHX.

It all adds up to more time in the air for the Army's Chinooks — through lower cost, improved maintenance, and reduced repair parts requirements.

The CH-47D Maintenance Trainer/Simulator. The best helicopter that never got off the ground.

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1985 AAAA National Award Winners

"Outstanding Aviation Unit Award"
210th Combat Aviation Battalion
Ft. Kobbe, Panama

"Outstanding ARNG Aviation Unit Award"
Company C, Combat Support Aviation Company,
26th Aviation Battalion, Florida ARNG
Jacksonville, Florida

"Outstanding USAR Aviation Unit Award"
219th Transportation Company (Aircraft Maintenance)
(Intermediate Support),
102d United States Army Reserve Command
Scott AFB, Illinois

"Army Aviator of the Year Award"
Chief Warrant Officer (W4) Roger W. Duprey
HHC, 229th Attack Helicopter Battalion
101st Airborne Division (Air Assault)
Ft. Campbell, Kentucky

"Aviation Soldier of the Year Award"
Specialist Fourth Class James A. Clement
568th Transportation Company
222nd Aviation Battalion (Combat)
Ft. Wainwright, Alaska

"Dept. of the Army Civilian of the Year Award"
Paul L. Hendrickson
Aircraft Systems Division, Directorate for Materiel
Management, U.S. Army Aviation Systems Command
St. Louis, Missouri

"James H. McClellan Aviation Safety Award"
Chief Warrant Officer (W4) Thomas M. Cloud
D Company, 7th Aviation Training Battalion
Aviation Training Brigade
Ft. Rucker, Alabama

Army Aviation: Reaching for the Stars!

by MG Ellis D. Parker
Commanding General, U.S. Army Aviation Center and Fort Rucker

THE new year 1986 is upon us and the pace continues to be a furious one. As we project issues and items concerning Army Aviation it becomes apparent that we can expect another banner year and might well say we're reaching for the stars, literally.

Below are some of the ongoing projects and policies, beginning with our space initiatives, that will shape our reach into the future.

Space initiatives

At the end of 1985 the Army Space Initiatives Study (ASIS) results were briefed to VCSA, **General Maxwell R. Thurman**. The recommendations, contained in a four volume report, are expected to reach USAAVNC shortly. Some of the significant recommendations are that the U.S. Army pursue space systems development particularly relative to communications, navigation, and intelligence. All such systems are vitally linked to Army Aviation.

Another recommendation anticipates the need for vigorous development of personnel and education requirements for those who will be awarded the Space Activities skill identifier.

In the coming year the U.S. Army and NASA will work closely to conceptualize and propose development of those systems recommended by ASIS. In general, recommendations from the ASIS study are expected to be incorporated into the Army's Space Master Plan, which is currently in development.

The Army Space Field Office, part of the new Unified Space Command in Colorado Springs, will now be a key player for the Army in space developments. This Field Office will be one of the possible assignments for Army aviators who qualify for the Space Activities skill identifier. USAAVNC continues to be in on this ground floor development by maintaining a Space Cell within the Directorate of Combat Developments here at Ft. Rucker. Look for fast paced development during the year as momentum builds from this solid beginning.

Developments

Last month's special issue focused on LHX developments. During the year we can expect initiatives to take further form. Likewise, we expect further fielding of the AH-64 APACHE.

A spin-off of AH-64 development is the XM-43 NBC Protective Mask. Originally developed for AH-64 use, it has been determined to be compatible with ANVIS, AN/PVS-5, AH-1 TSU and the SPH-4 helmet. (OV-1 pilots may require a separate mask). As a result the VCSA has made a decision to procure the XM-43 as a standard aviator's mask.

The mask consists of a faceplate assembly, filter/blower unit (providing filtered forced air to the mask), carrier, harness assembly, battery pack, winterization kit, and comfort cap. It will be an item of individual issue — issued one per aviator.

For non-aviator crewmembers, a determination has not been reached as to the type of mask to be utilized. However, USAAVNC has established a doctrinal requirement for all

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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 JVX. 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.

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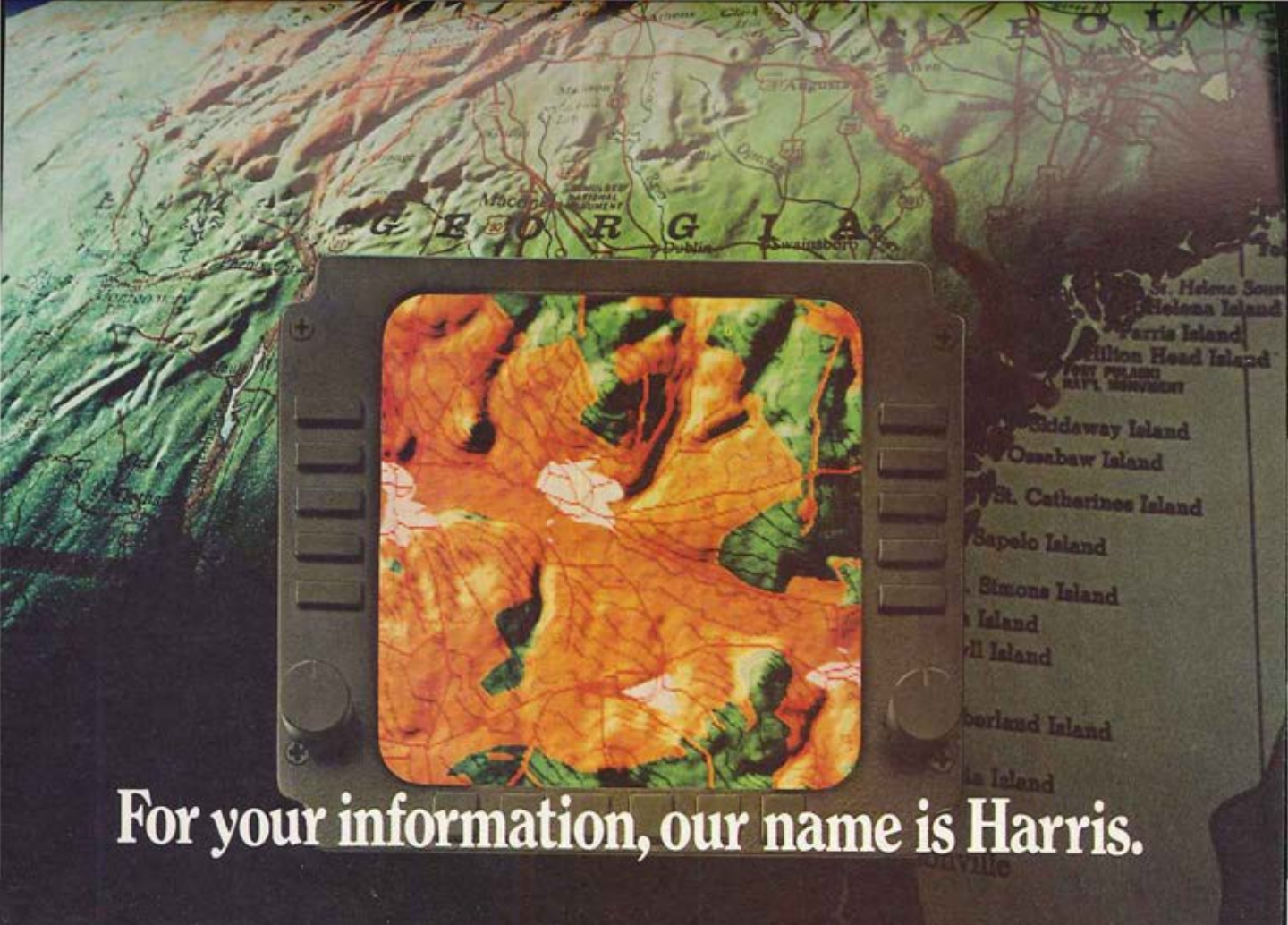

For your information, our name is Harris.

crewmembers to have NBC compatibility.

In the OH-58D arena, production is currently limited to 104 aircraft in support of the Field Artillery Aerial Observer mission. A follow-on evaluation (FOE) to the OH-58D Operational Test II is designed to evaluate the enhanced combat effectiveness and survivability of the OH-58D over the OH-58C.

Also linked to the FOE will be an assessment of the best ratio of scout to attack helicopters in various mission configurations.

Training

As an ambitious program of preparation for the OH-58D FOE, a provisional unit is being formed at USAAVNC to fully validate scout-attack doctrine, tactics, organization, and training. The unit will be equipped with OH-58C, OH-58D, AH-1S, and AH-64 aircraft. It will progress through individual, crew, team, and company training with a series of ARTEP type field exercises.

Another scout related item is the scheduling of fourteen Aeroscout Observer Courses for 1986. This is an eleven-week, one-day course featuring 67 flight hours and qualifies the observer for NVG operations in the OH-58. Graduates will hold the MOS designation of 67V2FZ1 but, after 1 October 1986, they will be accessed into a new MOS-93B. The October '86 date is the anticipated start date of an AIT Course currently being developed for the 93B Aeroscout Observer MOS.

Officer flight training may also develop a new look if the proposed multi-track flight training concept is adopted. This concept is to have the Initial Entry Rotary Wing (IERW) Program of Instruction (POI) changed to break combat skills training into four tracks: UH-1H, UH-60, OH-58, and AH-1S.

This training concept is designed to increase the tactical proficiency of graduating flight students and at the same time reduce the need for field units to return aviators to Ft. Rucker for additional aircraft qualifications.

Look for a TV tape in early 1986 outlining lessons learned from aviation play at the National Training Center.

Publications

One of the fastest moving trains in the aviation community is in the publications arena. A sampling of manuals now being updated, written, and distributed:

- FC 1-222 (Rotary Wing Instructor Pilot Handbook)
- Enlisted Aerial Observer Supplement to FC 1-215 (OH-58 ATM)
- FC 1-140 (Aerial Gunnery)
- FM 1-106 (Aviation Self-Deployment Planning)
- FM 1-108 (Aviation Employment in Special Operations [c])
- FM 1-130 (Joint Air Attack)
- FC 1-214 (AH-64 ATM)
- FC 1-210 (Commander's Guide)
- FC 1-211 (UH-1 ATM)

A number of these publications are now reaching field units. The remainder should be fielded during FY '86 - 87.

Ever wonder who does all this writing? The above list is being produced by members of the Department of Gunnery and Flight Systems, the Department of Combined Arms Tactics, and the Aviation Training Brigade — all found at Ft. Rucker.

U.S. Helicopter Team

Under the auspices of the Helicopter Club of America, the United States will send a team to England to compete in the World Helicopter Championships, 22-28 June 1986. USAAVNC hosted the U.S. Precision Helicopter Competition and is conducting a training camp for the selected team. Eight crews have been selected to represent the U.S. in the Championships.

The Ft. Rucker Flyoffs, 3-7 February 1986, determined the military crews that vied for team slots during the 10-14 February 1986 Precision Competition which was held in four events:

1. Timed Arrival and Rescue,
2. Precision Hovering,
3. Navigation Exercise,
4. Helicopter Slalom.

More details on the 1986 U.S. Precision Helicopter Team may be found in the "International" section of this issue.

Although this is just a brief sampling of events in the aviation community, you can see that our reach into the future aims higher than ever before.

As we aim at the heights, we are reminded that such events make it an exciting time to be part of Army Aviation. IIIII

Air Traffic Control

Progress toward Air Traffic Control MOS Consolidation

FT. HUACHUCHA, ARIZ. — In its early years, Army Air Traffic Control (ATC) was a single MOS with a Military Occupational Specialty Code (MOSC) of 901. This MOSC was later designated as MOS 93B.

In the latter part of the 1960s, in recognition of the Army's needs in the Republic of Vietnam for a highly trained and specialized individual, the MOS was split into four separate parts:

- 93H, ATC Tower Operator;
- 93J, ATC Radar Specialist;
- 93K, Enroute Specialist; and
- 93L, ATC Chief.

With the end of the Vietnam era, the Army's needs changed and these four MOS were consolidated into the MOS 93H and 93J, where it remains at the present time.

The modern battlefield requires a versatile individual whose expertise can be applied over a greater spectrum than that of his predecessor. To accomplish this, the U.S. Army Communications Command, now known as the U.S. Army Information Systems Command, submitted a proposal to consolidate MOSs 93H and 93J into a single MOS. A decision on the proposal was deferred pending resolution of the aviation proponency issue.

After initiation of the Aviation Branch Implementation Plan, HQ Department of the Army tasked the U.S. Army Aviation Center (USAVNC) to study the management of MOS 93H and 93J and to determine the feasibility of consolidating into a single MOS. A study group was formed and study efforts have been ongoing since February, 1984.

The consolidation study was predicated upon indications that MOS 93H and 93J have an infeasible grade structure which affects the accessions, distributions, training, training developments, promotion opportunities, renlistments, and retention in these MOSs.

The objective of the study group was to determine the feasibility of consolidating MOS 93H and 93J while ensuring that air traffic control career patterns provide necessary career opportunity and best satisfy the needs of the Army.

A Report by Colonel Charles L. Woodhurst

Field surveys conducted by the group indicate overwhelming support by commanders, supervisors, and controllers for consolidation of advanced individual training (AIT) for the 93H and 93J MOS. This would eliminate a large part of the costly, time consuming cross-training programs that all ATC commanders must endure in order to ensure that the unit mission can be carried out effectively.

A major issue within the MOS consolidation is the need for a means to provide the 93H/93J controller currently in the field with transitional training on AIT tasks not covered during AIT training.

This instruction will be provided with an exportable package developed by the USAAVNC and administered by the unit. Guidance will be forthcoming by official correspondence to major commands outlining procedures for obtaining the packages and the instructions for administering the training.

The consolidation proposal has been favorably endorsed by TRADOC and submitted to the Soldier Support Center (SSC) for approval/disapproval.

If the consolidation is approved the following milestones for implementation are proposed:

- 15 May 1986 — Letter of Notification from SSC.
- 30 May 1986 — Exportable package for transitional training available.
- 1 April 1987 — Start first class of AIT training for a single track MOS.
- 1 August 1987 — Reclassification of all personnel effective 1 october 1987.
- 1 October 1987 — Graduate first single track MOS AIT class.
- 1 April 1989 — Complete all transitional training.
- 1 April 1990 — Complete all transitional training for the National Guard/Reserve.

The study group recognized the additional training burden placed on the units to conduct the transitional training but felt the benefits heavily outweighed the burden. In the opinion of the study group, consolidation will improve the state of Army air traffic control and provide a means of assuring that air traffic controllers are properly qualified to perform their assigned duties.

— COL Charles L. Woodhurst
Commander, U.S. Army Air Traffic Control Activity

C-17

"C" as in computerized

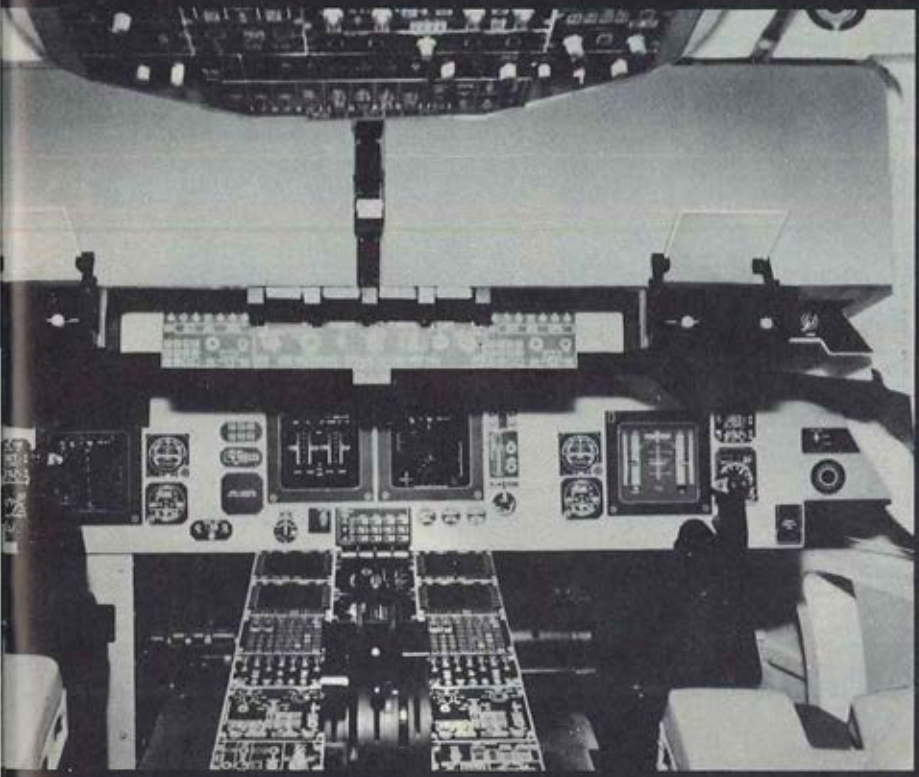
MODERN AIRLIFTER'S SYSTEMS CUT AIRCREW TO THREE.

Advanced avionics including head-up displays, combined communication/navigation controls, and multi-function CRT displays will reduce markedly C-17 pilot workload, compared with existing airlifters.

Equally important: With a basic crew of two pilots and one loadmaster, Air Force crew costs will drop dramatically compared with other airlift aircraft. And because ease of maintenance is engineered into the C-17, operations and support costs will also be reduced. The USAF Airlift Master Plan estimates a $16 billion savings over the life of the fleet compared to other airlift options.

The C-17 now is in development. When it flies in 1990, it will reach new highs for operational utility and new lows for cost of ownership.

MCDONNELL DOUGLAS



Awards and Honors

BEST OF 1985 — The AAAA Morning Calm Chapter presented its top awards at a Christmas Ball in Seoul attended by more than 400 people TOP LEFT: MG J.B. Farris, Jr, Ass't Chief of Staff, U.S. Forces, Korea (L) presents the Aviation Unit of the Year Award to CPT Thomas Fletcher, Cdr, 377th Medical Company, 18th Medical Command. TOP RIGHT: CPT Fletcher accepts the Aviator of the Year Award for CPT Matthew Granger (377th Medical Company) from MG Gary E. Luck, CG, 2nd Infantry Division. BOTTOM LEFT: COL David J. Allen (L) XO to the CG, U.S. Forces, Korea, presents the Outstanding Safety Soldier of the Year Award to CW4 Herbert O. Hicks. BOTTOM RIGHT: CSM Gates (L), CSM of U.S. Forces, Korea, presents the Aviation Soldier of the Year Award to SGT Ace A. Fields, Company A, 3rd Military Intelligence Battalion.

TOP HONORS — The AAAA Fort Hood Chapter has also honored it's best. TOP LEFT: BG John Bahnsen, III Corps Chief of Staff (L) presents the Outstanding Aviation Unit of the Year Award to MAJ Terry Miksic, Cdr of 4th Squadron, 9th Cav, 6th Cavalry Brigade (Air Combat). TOP RIGHT: BG Bahnsen presents the Army Aviator of the Year Award to CW4 Clifford Brown, Company D, 34th Support Battalion. Looking on is Army Astronaut COL Sherwood Spring. BOTTOM LEFT: CW4 Michael Harris (R) accepts the 1985 Aviation Safety Award from BG Banhsen. BOTTOM RIGHT: COL Albert Hervey, III Corps Aviation Officer (R), is congratulated by "Atlantis" Astronaut Dr. Mary Cleave after accepting the Ft. Hood Chapter's Special Award which recognizes distinguished aviation-related service by a unit over an extended time period.

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

★ Distinguished Graduate + Honor Graduate

JAN. 29, 1986 — Guest Speaker: COL Tommy C. Stiner, Commander, 9th Cavalry Brigade (Air Attack), Ft. Lewis, Washington.

Officer Rotary Wing Aviator Crs Class 85-28:
★ 1LT John W. Polanowicz; + CPT Christopher C. Foltz; 2LTs Charles H. Ellison; Jeffrey N. Shelton; David P. Hinkle.

FEB. 6, 1986 — Guest Speaker: COL John A. Lasch III, Commander, Davison Aviation Command, Ft. Belvoir, Virginia.

Aviation WO Advanced Course Class 86-1:
★ CW2 Jeffrey J. Lucarelli; + CW2s John R. Hunter; Peter H. Smart; Thomas E. Brown; Steven E. Nee.

FEB. 12, 1986 — Guest Speaker: COL (P) John D. Robinson, Dep. Asst. Commandant, USAAVNC, Ft. Rucker, Ala.

Officer Rotary Wing Aviator Crs Class 85-30:
★ 2LT Gregory D. Phillips; + 2LTs David P. Champion; Walter LaCount Jr.; 1LT James W. Purvis.

Warrant Officer RW Aviator Class 85-29:
★ WO William A. Cheek; + WOs Alexis B. Tatistcheff; Valerie A. Lee; Ronald A. Baze; Gary B. Ryder.

FEB. 13, 1986 — Guest Speaker: COL Lawrence Karjala, Cdr, USA Aviation Development Test Activity, Ft. Rucker, AL.

Warrant Officer Senior Course Class 85-9:
CW4 Donald M. Sepe (Class Leader).

FEB. 26, 1986 — Guest Speaker: BG Peter A. Kind, DCG & Ass't Commandant USA Signal Center & Ft. Gordon, GA.

Officer Rotary Wing Aviator Crs Class 85-32:
★ 2LT Shawn M. Cuff; + 1LTs Michael T. Shifflett; Robert D. Lane; 2LT Jeffrey S. Caster.

Warrant Officer RW Aviator Class 85-31:
★ WO Richard T. Shillo; + WOs Jeffrey A. LeTempt; Thomas F. Holly; Thomas W. Story; Charles R. Kind.

U.S. ARMY AVIATION LOGISTICS SCHOOL FT. EUSTIS, VIRGINIA

OUTSTANDING GRADUATES

(Since our last report in November, 1985)

AH-64 Aircraft Fire Control Systems Repairer: SP4 Bruce M. Heim.

AH-64 Aircraft Fire Control Technical Inspector: SSgt. Ramiro Trevino.

AH-64 Aircraft Powertrain Repairer: SP4 Michael L. Isenberg, SP4 Timothy L. Reynolds, Pvt. Donald T. Grogan.

AH-64 Aircraft Weapons Systems Repairer: SP4 Delmer B. Manaiza.

AH-64 Attack Helicopter Component Repairer: SFC Danny W. McCray, SFC Kenneth Thomas, SSgt. Martin F. Wilmoth.

AH-64 Attack Helicopter Repairer: Pvt. Steven M. Lee, PFC Peter S. Bassett.

AH-64 Attack Helicopter Technical Inspector: SSgt. Patricia A. Hodges.

Aircraft Armament Maintenance Technician: CW2 Donald C. Miller, CW1 Robert M. Hilarides.

Aircraft Armament Technical Inspector: SSgt. Daniel L. Mace, Sgt. Ronnie W. Phillips, Sgt. David L. Wallace, Jr.

Aircraft Electrician: PFC Carl R. Haggard, Pvt. Eric L. Lozano, Pvt. Robert A. Hunter, Sgt. Holger Vierheller, Pvt. Michael E. Brannon.

Aircraft Fire Control Repairer: Pvt. Michael D. Watson, Pvt. Clarence L. Jackson, Pvt. William J. Robertson, Pvt. Todd D. Klinger, Pvt. Jorge E. Sosa.

Aircraft Maintenance NCO Advanced Course: Sgt. Floyd A. Richardson.

Aircraft Pneudralic Repairer: Sgt. Guillermo A. Baca.

Aircraft Powerplant Repairer: Pvt. Robert W. Smiley, Pvt. Curtis C. Lenderman, Sgt. Allan D. Lowe, Pvt. Sharron A. Hart, Sgt. Michael D. Hudon, PFC Michelle A. Pearsall, Pvt. Allen R. Damn, SSgt. Arthur L. Anderson.

Aircraft Powertrain Repairer: Pvt. Bill Shultz PFC Edward H. Casey, Sgt. James W. Germann, Pvt. Eric M. Barmay, SSgt. Charles A. Basaloua, Sgt. Zeb N. Parker, PFC Thomas W. Dwyer, Pvt. Joseph A. Tuffley, PFC William G. Heidenreich.

Aircraft Structural Repairer: PFC Creg M. Mellema, PFC Gregory L. Arnold, Pvt. Alvin L. Morgan, Jr, SSgt. Randall R. Perry, Sgt. Harold E. Clifford, Pvt. James E. Letts, Sgt. William G. Heidenreich, Pvt. Scott A. Lawson,

Aircraft Weapons System Repairer: Pvt. Kathleen A. Schaub, Pvt. Michael G. Gilmore.

Attack Helicopter Repairer: PFC Gareld M. Christensen, PFC Mario A. Lattanzio, PFC Kenneth S. Lightner, SP4 David J. Lewis, Sgt. Richard T. Riggs, Pvt. Darren C. Huggins, Sgt. Mark A. Wiseman, Sgt. Paul J. Murphy, Pvt. Alex C. Block, Sgt. Ted A. Breil, Pvt. Claude F. Collins, II, Pvt. Darin J. Magras, PFC Richard T. Stearns, Pvt. Ronald L. Wong, PFC Thomas J. Burgham, Pvt. David W. Burns.

Attack Helicopter Technical Inspector: Sgt. Harry J. Drake, SSgt. Annina G. Pope, SSgt. Wendell Venable, SSgt. Dumrong Tonkphontong, Sgt. James H. Reynolds.

Attack/Observation/Scout Helicopter Course: SSgt. Matthew C. Poore, SSgt. Charles M. Johnson.

Aviation Life Support Specialist: SP4 Milton E. Payne, PFC Timothy L. Davis, Sgt. David G. Kerton, SP4 Michael S. Walsh, 1LT Robert L. Shulz.

Aviation Logistics Officer Course: CPT Eugene Pawlik, Jr., 1LT Elliott M. Benson.

CH-47 Medium Helicopter Maintenance Supervisor: Sgt. Samuel M. Ponce.

CH-47 Medium Helicopter Repairer: Pvt. Eric J. Lee, Pvt. Wayne C. Nunes, PFC Lori J. Phillips, SFC Mark L. Drouin, PFC John D. Stenberg, PFC Roger L. Stepp, PFC Daniel R. Waters, SP4 Sandrew S. Jirak, SP4 Jaquin A. Aviles.

CH-47D Medium Helicopter Repairer: SP4 Jeffery K. Storms, Pvt. Darryl F. Hugaboom, SFC John T. Green, PFC Gregory M. Arford, PFC John D. Stenberg, SP4 James E. Disley, Pvt. Anthony M. Stickelmaier, Pvt. George M. Berken.

CH-47D Medium Helicopter Technical Inspector: SSgt. Matthew M. White, SSgt. Idus L. Glass, Jr.

CH-54 Helicopter Repairer: Pvt. Edmund B. Fabbi.

Medium Helicopter Technical Inspector: SSgt. Matthew M. White, Sgt. Larry K. Botkins, SSgt Albert J. Moore.

Observation Airplane Repairer: Sgt. Dwight D. Gee, Pvt. Kevin Perezlopez.

Observation Airplane Technical Inspector: Sgt. Randall L. Schleicher.

Observation/Scout Helicopter Repairer: SSgt. Willie Jackson, Jr.

Observation/Scout Helicopter Technical Inspector: Sgt. Jeffrey W. Street, SSgt. Charles H. Rice, Sgt. Michael S. Rohrbaugh, Sgt. Thomas W. Tompkins, Sgt. James R. Patterson, Sgt. James G. Walsh.

Tactical Transport Helicopter Repairer: Pvt. David W. Keith, SP4 Randy E. Hardwick, SSgt. Joseph R. Bachus, SP4 Steven R. Mace, SP4 William D. Roser, Sgt. Michael S. Deane, Pvt. Charles A. Hodges, Pvt. Paul H. Asato, Pvt. Paul M. Cross, Pvt. David S. Walker, Pvt. Travis H. Hillesheim, Pvt. Eric S. Gross, Pvt. Jeffrey P. Morin.

Tactical Transport Helicopter Technical Inspector: Sgt. Kenneth Warmbles, SP5 Kathryn E. Tharp, Sgt. Kurt V. Hagarman, Sgt. Eric R. Messer, SSgt. Joel P. Baptist, Sr.

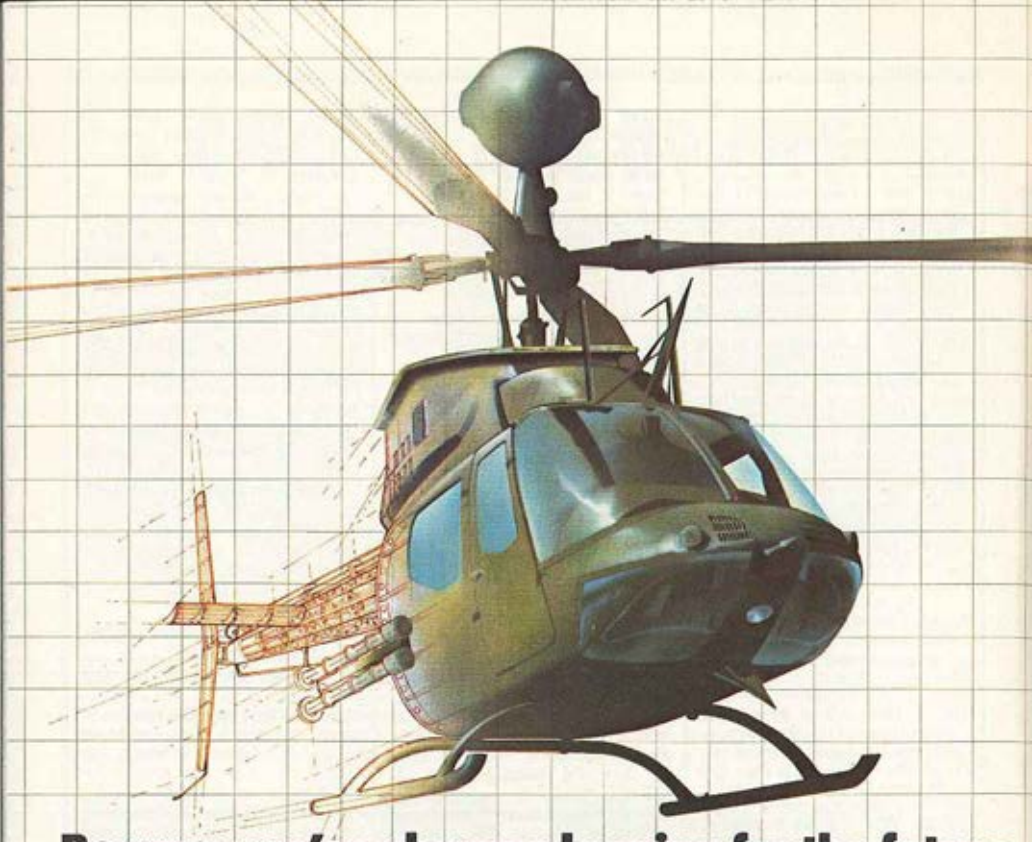
UH-60A Helicopter Repairer: Sgt. James A. Mosebach, IV, SP4 Jon K. Crocker, SP4 James R. Davis, SP4 Gary W. Terwilliger, SP4 Steven L. Klatt, Sgt. James E. Woods, SP4 Jeffrey D. Eggemeyer, Sgt. Jeffery B. Oliver, SP4 Kim Kiburz.

Utility/Cargo Airplane Repairer: Pvt. James W. Anderson, Pvt. Richard W. Enfinger.

Utility/Cargo Airplane Technical Inspector: SSgt. Heather M. Voboril, Sgt. Dennis K. Shall, Sgt. Fransisco G. Rubio.

Utility Helicopter Repairer: Sgt. John W. Wagner.

Utility Helicopter Technical Inspector: SSgt. Marvin E. Fackler, SSgt. Lyle W. Lee.



Because we're always planning for the future, the Bell OH-58D takes aim with advanced technology.

The OH-58D – it's a fully integrated aerial scout. For target acquisition. Target designation. And target handoff. In adverse weather. Day or night.

Its mission: accurate control of all forms of firepower – with advanced systems that help the commander "see" the battlefield and synchronize the combined arms effort.

Atop the new all-composite rotor, a mast-mounted sight (TV, laser range finder designator, thermal imaging) enhances mission versatility in a number of ways.

It can operate with AH-1S and AH-64 attack helicopters, acquiring targets at extended range from a masked position so they can employ their weapons at maximum standoff distance.

For field artillery, the OH-58D can designate targets for laser-seeking Copperhead rounds, as well as direct conventional artillery, firing for effect *several times* faster than standard means.

Additionally, the OH-58D can integrate Air Force fire support by designating targets for smart bombs.

Bell Helicopter TEXTRON

The future is ours by design.

Hardware

U.S. Army accepts initial production model OH-58D AHIP scout helicopters

ST. LOUIS, MO — The Army took delivery of its first two production OH-58Ds in December, 1985. This was an important

A Report by Colonel John N. Tragesser

achievement because it proves an accelerated development (with significant concurrency built-in) can be delivered on time, within cost, and with the performance characteristics the Army paid for.

• **Production Verification Test** — The first production OH-58D will undergo both contractor and Government Production Vertification Testing (PVT) beginning in January and extending into June 1986.

The PVT is a First Article Test that evaluates the total aircraft and its mission equipment and verifies that no significant performance variation has occurred during the transition to production, that the performance of the production configuration remains acceptable, and that improvements incorporated to correct prototype deficiencies are effective.

• **Instructor and Key Personnel Training** — The next five production aircraft will be delivered to the Bell Helicopter Textron (BHTI) facility for Instructor and Key Personnel Training (IKPT). This phase of training prepares flight and maintenance instructors for "School Houses." IKPT will provide these instructors (the target audience) with the knowledge, skills, and techniques to successfully operate, troubleshoot and maintain the OH-58D. IKPT runs from March to September, 1986.

• **Initial OH-58D Fielding** — Subsequent deliveries will go to Ft. Rucker to support Attack Helicopter Company Field Exercise (AHCFE) training and Follow-on Evaluation (FOE).

As you may have heard by now, the recent Operational Test II (OT II) demonstrated that the OH-58D meets or exceeds all of its performance requirements and is ready to fulfill the Field Artillery Aerial Observer (FAAO) role. Subsequently, a production go-ahead was received for 179 aircraft to fill the total FAAO requirements, with initial fielding to units to begin in 2Q87.

However, OT II did not adequately demonstrate the OH-58D's contribution to the Attack and Air Cavalry roles. Therefore, the Army will conduct an FOE in 1987 to fully validate these two, very important AHIP missions.

The FOE will consist of battalion level force-on-force trials at locations representative of worldwide environments. In preparation for FOE, the Aviation Center at Ft. Rucker is forming the AHCFE — consisting of AHIP and APACHE helicopters. The AHCFE will develop and validate the organizational/operational concepts and tactical doctrine for employment in the FOE.

The Army is confident that well trained, cohesive crews which are fully proficient in AHIP operations will clearly substantiate the need for an Army scout as part of the APACHE team.

1986 will be another active year for AHIP as we move into fielding and FOE phases. We'll update the Aviation Community as we go.

— COL John N. Tragesser
Project Mgr, Advanced Scout Helicopter

CHINOOK modernization program reaches another fielding milestone

ST. LOUIS, MO. — The CH-47D Modernization Program reached another fielding milestone with the arrival of the "D" model CHINOOK at Ft. Bragg in December, 1985.

Fielding at Ft. Stewart continues with Ft. Campbell now complete. Ft. Lewis will be next (in June, 1986) to be followed by Ft. Sill in September.

A total of 90 CH-47D models in the field have achieved an impressive 26,000 flight hours while maintaining a 74% cumulative mission capable rate.

The New Materiel Introductory Briefing Team has been busy visiting the future operators of the D model. About one year prior to aircraft delivery at a unit, a team of representatives from the AVSCOM Project Manager's Office and Boeing Vertol provide the unit with a series of introductory briefings and fact-finding meetings.

These on-site visits have proven to be invaluable in the early identification and resolution of unit peculiar problems in the areas of personnel, tools, spare parts, and maintenance facilities. Meetings have been held at Ft. Lewis, Ft. Sill, and Ft. Carson and Ft. Hood is next in line.

Materiel Fielding Teams are on site at Ft. Stewart and Ft. Bragg. These teams consist of Government and contractor representatives who remain with the unit throughout the deliveries to ensure that tools, spare parts, publications, and training are in place as the aircraft arrive.

This total commitment by the materiel developer guarantees that the user will have everything they need to perform their mission during the aircraft changeover period.

The CH-47D joins a small group of other systems in the Army being delivered with a warranty. The program requires the contractor to repair and return to service designated components which fail prior to 200 flight hours or 24 months.

About 20 primary components and 58 secondary components are under warranty on the CH-47D.

The third CH-47D User's Conference hosted by the PMO was held in St. Louis, in January, 1986. These well attended conferences provide the user a forum to collectively share problems, solutions, and ideas on getting the most out of the CH-47D. The primary goal of the conference is to share information and assign action items to resolve problems.

A Report by Colonel Norbert I. Patla

The outstanding versatility, performance and availability of the D model were recently demonstrated with the self-deployment to Honduras by the 159th Aviation Battalion, 101st Airborne Division. The 159th flew four CH-47Ds configured with internal fuel tanks from Ft. Campbell to Palmerola Air Base with only two refueling stops during the 1,470-nautical mile flight.

The longest non-refueled leg of the flight encompassed in excess of seven hours (750 nautical miles) over water from New Orleans to Belize City, Belize.

The modernized CHINOOK, with its increased readiness, effectiveness, and supportability, continues to provide the Army an increased medium lift capability while reducing both the maintenance workload and operating and support costs.

— COL Norbert I. Patla
Project Manager, CH-47
Modernization Program

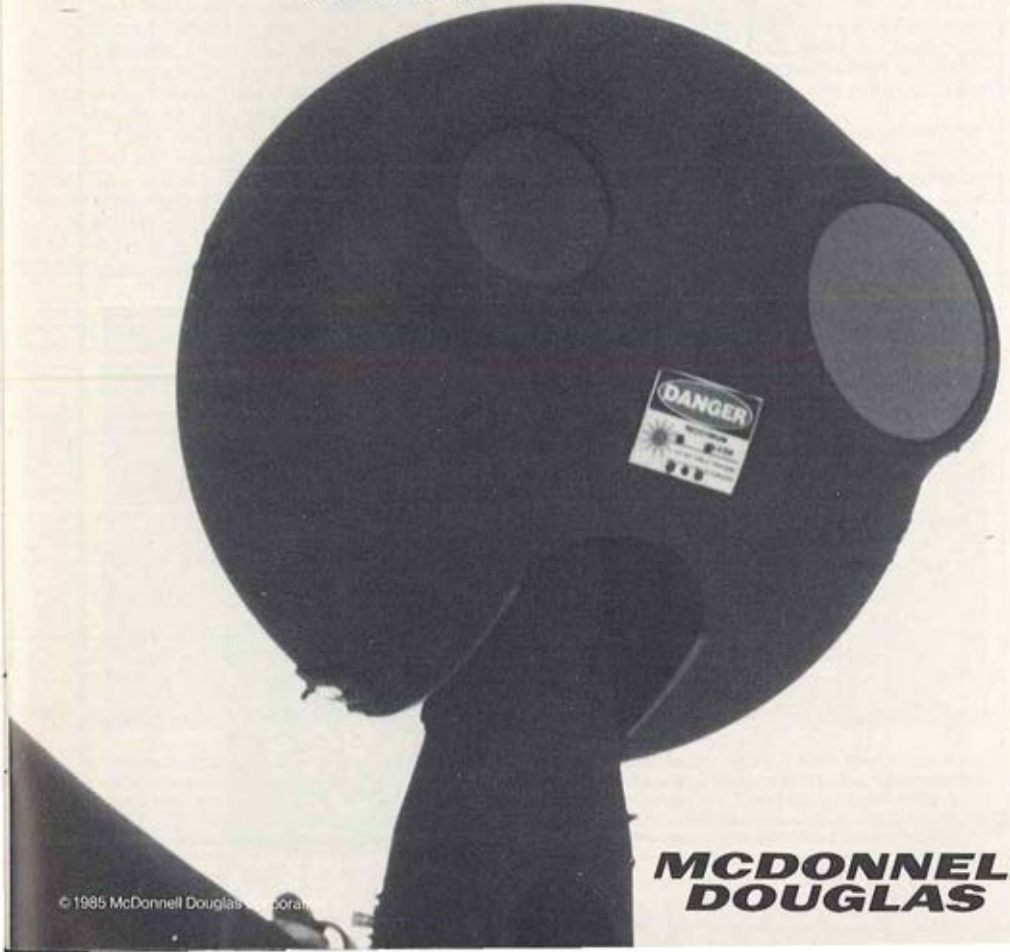
YOU'RE BEING WATCHED

...by the crew of an Army OH-58D Aeroscout helicopter equipped with a McDonnell Douglas Mast-Mounted Sight.

The sight is a system in itself for battle surveillance, target acquisition and handoff. It is field-supportable: Major components including sensors, electronics, and the upper shroud can all be replaced in the field.

The sight has exceeded performance specifications. It is now in production for the Army Helicopter Improvement Program.

Watch for it.



MCDONNELL DOUGLAS

International

U.S. Precision Helicopter Championship picks eight crews to vie for World Title

FT. RUCKER, ALA. — The 1986 U.S. Precision Helicopter Championship was held here during February 9-14, 1986, and in spite of the weather, was completed on schedule.

25 teams from six MACOMs and two civiliam teams from Hynes Aviation Industries, Inc. of Frederick, OK, were involved in the competition. Competing aircraft included the UH-1, the OH-58 and the Hynes H-2.

Event One — the Timed Arrival and Rescue — and events Two and Four — the Precision Hover and Slalom events (see the March, 1985 issue of *Army Aviation* for details) — were held in the vicinity of Hanchey Army Airfield. Event Three — the navigation exercise — began and ended at the Marianna Airfield in Marianna, Florida.

Chief judges for the national competition were chosen by the Helicopter Club of America, and were civilians prominent in helicopter aviation. **Charlotte Kelly** and **Jean Tinsley**, who were both members on the helicopter team representing the United States in the 1973 international competition, are both fixed and rotary-wing qualified and have performed in some official capacity in every international helicopter competition held since the United States started competing in 1973.

Sergei Sikorsky, son of **Igor Sikorsky**, was born into the mainstream of history-making helicopter aviation, and has over 3,000 hours of helicopter flight time. Assisting them were **COL Alex Rankin, Ret.**, who is fixed and rotary-wing and carrier qualified, and **COL Ray Johnson, Ret.**, former commander of the rotary-wing division at Ft. Rucker and holder of the 32nd Master Aviator Award presented in the Army. Both are former Presidents of the U.S. Army Aviation Test Board and both have been involved in Army and rotary-wing aviation for more than three decades.

The top eight teams participating in the events were selected to train together and compete for slots to represent the United States in the World Helicopter Championships to be held in England in June, 1986.

THE AMERICAN TEAM — The 16 individuals who excelled as team members in the 1986 U.S. Precision Helicopter Championship are FRONT ROW (left to right): CW2 Raymond Kent; CW2 Noel Seale; WO1 Hal Harless; CW4 John Loftice; CW2 James Maddox; and CW3 James Church. MIDDLE ROW: CW2 Patrick King; CW2 Michael Pascalar; CW2 Howard Fancher; CW2 Gary Reed; and CW3 Jimmy Green. BACK ROW: CW3 Don Jewkes; CW2 George Egbert; CW2 Paul Hendricks; CW2 Kenneth Wright; and CW2 Jon Iseminger.

The first, second and third place winners received a sculpture modeled after Leonardo DaVinci's conceptual helicopter and colored gold, silver, and bronze to symbolize the awards given at such competitive events.

The teams that placed fourth through eighth received certificates of appreciation from the Helicopter Club of America, and the right to continue training with the organization — the U.S. Precision Helicopter Team — until the competition is completed.

A Report by CW3 E. Daniel Kingsley

These eight teams will be continually tested throughout the training period and five of them will ultimately be selected to fly in the 1986 World Helicopter Championships.

The top eight teams were:

1. **CW2 Raymond D. Kent**
   CW2 Patrick H. King, II
   7th Aviation Training Bn
   Ft. Rucker, AL
2. **CW2 James A. Maddox**
   CW2 Howard H. Fancher
   7th Aviation Training Bn
   Ft. Rucker, AL
3. **CW2 Jon A. Iseminger**
   CW3 Jimmy A. Green
   7th Aviation Training Bn
   Ft. Rucker, AL
4. **CW3 Don E. Jewkes**
   CW2 Gary R. Reed
   4th Aviation Bn (Combat)
   Ft. Carson, CO
5. **CW3 James R. Church**
   WO1 Hal G. Harless
   229th Attack Helicopter Bn
   Ft. Campbell, KY
6. **CW2 George W. Egbert**
   CW2 Paul W. Hendricks
   D Troop 1/124 Cavalry
   Texas ARNG
   Austin, TX
7. **CW4 John E. Loftice**
   CW2 Kenneth W. Wright
   A Troop 1/17 Cavalry
   Ft. Bragg, NC
8. **CW2 Noel C. Seale**
   CW2 Michael C. Pascalar
   7th Aviation Training Bn
   Ft. Rucker, AL

ABOVE: Kelly, Sikorsky, and Tinsley

There was one last award — given in recognition of the team with the most sportsman-like conduct. The award presented was a chromed bucket, identical to the one used in the slalom event, with an engraved brass plate on one side.

The general audience didn't have any idea that the award was to be presented, but a loud round of applause and laughter showed their agreement and approval when **Mike Hynes** of Hynes Aviation was awarded the trophy. His parting comment showed the real mettle of the man... "Just wait 'til next year!"

The top eight teams finally joined the U.S. Precision Helicopter Team organization at Ft. Rucker on Feb. 24, 1986. These men have been tested severely and have proven they are the finest aviators available in the Army.

The training they will receive at Ft. Rucker will be the most extensive in the world. Their only goal — their entire focus of training — is to defend the title of World Helicopter Champion for the United States.

Every one of them feels the responsibility is almost sacred. Every one of them intends to win!

— CW3 E. Daniel Kingsley
Aviaton Safety Officer, U.S. Precision Helicopter Team

1986 U.S. PRECISION HELICOPTER CHAMPIONSHIP

Place	Team	Event # 1	Event # 2	Event # 3	Event # 4	Total Pts.
1	Kent - King	150	169	150	122	591
2	Maddox - Fancher	122	165	148	92	527
3	Iseminger - Green	123	193	151	44	511
4	Jewkes - Reed	148	157	120	85	510
5	Church - Harless	142	150	127	88	507
6	Egbert - Hendricks	80	179	97	106	462
7	Loftice - Wright	92	179	139	38	448
8	Seale - Pascalar	81	163	114	88	446

Maintenance

Corpus Christi Army Depot has a HOTLINE for Aviation Readiness

CORPUS CHRISTI, TX — The Corpus Christi Army Depot (CCAD) HOTLINE is the depot's direct link to aviation and aviation maintenance units for identifying and fixing critical problems.

The HOTLINE is manned during normal duty days (0700 - 1530 Central Time Zone) and monitored by a recording device during non-duty hours. The HOTLINE gives field units direct access to depot technical expertise on aviation maintenance related questions.

A Report by Major Alan D. McKeag

While many questions are answered on-the-spot, others require research and discussion with additional experts before they can be answered. Still other calls result in the dispatch of a depot repair team to the unit to repair the aircraft, engine, or other component.

CCAD teams are dispatched to locations around the world to accomplish depot-level repairs. The depot currently has a 17-man Quick Response Assistance Team which responds to engine related HOTLINE calls. Team members have an average of 20 years experience.

When team personnel are in the field, host units are encouraged to allow their personnel to work with them to get an "over-the-shoulder" exposure to depot repairs and learn more about the end item related to the soldier's MOS.

In FY 1985, CCAD received 1,427 HOTLINE calls. Telephonic advice to units assisted in returning 22 engines to service. CCAD dispatched engine teams to 166 locations and returned an additional 246 engines to service. In the process, they achieved over $11.45 million in documented cost avoidance savings.

These CCAD "quick reaction teams" are subject to travel anywhere in the free world and, once notified, can be on-site within 72 hours. Although the HOTLINE is manned by engine personnel, questions on any aspect of aviation maintenance — including test flights and trouble-shooting — are referred to appropriate depot personnel.

The HOTLINE telephone number is **AV 861-2651.**

In addition to our Engine Service Center quick response assistance team effort, CCAD can dispatch field service teams in support of aircraft airframes, avionics, electrical, sheet metal and/or transmissions. Coordination for any of these teams is done through the applicable Logistics Assistance Representatives to the Directorate for Maintenance, AVSCOM.

After scrutinizing your request and/or problems, AVSCOM determines priority and funding and coordinates between your unit and CCAD for repair items and team arrival dates.

Team composition and size is dictated by the situation. These field service teams not only support active duty aviation, they assist in the on-the-job training of USAR, National Guard, and military personnel of allied nations.

In FY '85, CCAD dispatched 58 service teams worldwide to assemble and/or repair 103 aircraft. Without question, the use of "quick reaction teams" markedly enhances CCAD's number one mission of supporting Army Aviation readiness worldwide.

— MAJ Alan D. McKeag
Aircraft Maintenance Officer, CCAD

Operations

2d Combat Aviation Squadron fights the "First Battle"

NURNBERG, FRG. — The 2d Armored Cavalry Regiment (2ACR) is using the "First Battle" simulation system to prepare leaders and tactical operation centers (TOC) for REFORGER 86.

The game board has the 2ACR REFORGER War Plan arrayed on the REFORGER terrain map. The game board is manned by all of the Regiment's Troop Commanders. The Squadron Commanders and their staff control the battle from their TOCs.

This allows the ground and air troop commanders to stand beside each other as they fight the war. The result is an air/ground battle plan that is clearly understood at the fighter level.

"First Battle" rules allow the attack helicopter to be used in a realistic environment. The attack commander can execute his fire and maneuver techniques using a realistic timetable. The helicopters are limited to 1½ hours in the air and must spend one turn in three in the FARP.

Additionally, attack helicopter targets have to be realistically deployed before they can be killed. For instance, enemy armor cannot be in a forested area or dug-in. The attack helicopter killing power rises sharply when they are attacking an enemy being delayed by an obstacle, allowing flank or rear shots. This emphasizes real world employment against modern armor.

The game adds further realism by greatly increasing the vulnerability of the attack helicopter that engages targets at distances less than 3000 meters. The Combat Results Tables give the best credit ratio for employing attack assets as a company (J-series TO&E).

A Report by Lt. Colonel Daniel J. Petrosky

All of the above "First Battle" features combine to teach the proper employment of aviation as a maneuver force.

The air scout also influences the free play of "First Battle". The scout rapidly moves about the battlefield to locate the enemy or verify intelligence reports. He also becomes a lethal killer when he extends the eyes of the Field Artillery as an aerial observer.

The orange forces (enemy) also have attack helicopters. Their "First Battle" capabilities are the same as ours. When 2ACR ground maneuver Squadrons were engaged by enemy attack helicopters they were stunned by the casualties they suffered. They asked 2CAS to do something to take out the enemy helicopters. However, "First Battle" currently does not have this feature.

During the offensive phase of the exercise, 2CAS was given an attached ground cavalry troop. This provided us the opportunity to practice combined arms planning and execution. We developed control measures that allowed us to conduct a movement to contact mission while maintaining contact with adjacent friendly units. This is an excellent teaching vehicle that prepares Air Battle Captains to control ground assets.

"First Battle" allows the attack and air cavalry assets of 2CAS to demonstrate their maneuver and combat multiplier effect. Side benefits are the opportunity for the air commanders to spend four days with their ground counterpart sharing ideas.

I strongly recommend "First Battle" as a viable exercise for aviation when used in conjunction with a deployed, brigade-sized, ground-maneuver unit.

—LTC Daniel J. Petrosky
Cdr, 2d Combat Aviation Squadron, 2d ACR

Personnel

ODCSPER: Planning for future aviation personnel needs

WASHINGTON, D.C. — Over the next ten years the Army will undertake the most ambitious force modernization effort in its history. This process involves the fielding of hundreds of new material systems or components of systems, development of new organizations, and implementation of evolving concepts and doctrine.

In order to provide trained soldiers at the right time and place to man new systems and fill out the Army's force structure, quality men and women must be recruited, trained, distributed and retained in an environment of constrained resources.

To accomplish these difficult tasks, the Army must be able to identify its personnel skill requirements early enough to allow the personnel and training communities requisite lead time to produce the required numbers of trained soldiers.

Within the Office of the Deputy Chief of Staff for Personnel (ODCSPER), Personnel Systems Staff Officers (PERSSO) are assigned to provide personnel input to the Department of the Army management team for force modernization.

PERSSO are affiliated by functional area within combat, combat support, and combat service support branches and provide the HQDA focal point for all manpower, personnel and training (MPT) issues associated with changing force structure, new systems development and fielding, new organizations, changing doctrine and revised authorization documents.

The PERSSO represent the personnel concerns of their assigned functional area while working in concert with the Force Integration Staff Officer (FISO) in ODCSOPS, the DA Systems Coordinator (DASC) in ODCSRDA, and the DA Logistics Staff Officer (DALSO) in ODCSLOG. The joint goal of this team is to smooth the force modernization process.

A Report by Lt. Colonel David H. Hicks

As the Aviation PERSSO, my responsibilities to you, the Aviation Community, are far-reaching. A daily concern - with long-range implications - involves the resolution of Manpower and Personnel Integration (MANPRINT) questions associated with the development of new equipment, particularly LHX.

MANPRINT forces a proactive look at MPT issues, systems safety, elements of human factors engineering, and an assessment of health hazards, in order to ensure we don't design and field a piece of equipment for which we have no qualified operator or one which puts the operator at risk.

Of more near-term interest is my role in managing the personnel issues associated with Program Objective Memorandum 86-92 force structure changes. Each proposed reorganization and activation must be reviewed and the officer and enlisted personnel supportability architecture determined.

Additionally, recruitment and training strategies must be established for the Active and Reserve forces and priorities must be set in concert with fielding plans. This is a joint effort for which I attempt to gain as much real-time information as possible through input from you — the "field aviator."

Recently, our focus has been on the Functional Review and Functional Area Assessment provided for the DCSPER and Vice Chief of Staff. This was a tremendous effort on the part of many players, particularly the hard-working personnel associated with U.S. Army Aviation School, U.S. Army Military Personnel Center and U.S. Army Soldier Support Center - National Capital Region.

Their efforts resolved many questions and gave rise to new issues which are now being worked by the DA staff. The fallout should only see a better, stronger Aviation Branch.

This is an active time for those associated with aviation personnel-related programs. Fielding of AH-64 battalions, conversion to an Army of Excellence structure, and development of the Aerial Observer (MOS 93B) are all tremendous challenges which will require sound, coordinated efforts to ensure we meet all program requirements.

As I mentioned earlier, I will be in contact with many of you to seek your advice on how we may best deal with these and other challenges. However, if

(Continued on Page 39)

Reserve Components

U.S. Army Reserve: Readiness for mobilization in the Army of Excellence

ATLANTA, GA — Recent articles in *Army Aviation* and other professional journals have highlighted the unprecedented force structure changes associated with the transition to the Army of Excellence (AOE).

The AOE force and the doctrinal changes it caused — combined with the recognition of aviation as a combat arm — will dramatically effect the role aviators and their units play on the battlefield. Although significant across the total force, this transition is especially dramatic in the Army Reserve.

Many USAR aviators will soon find themselves flying in a totally new environment. Their positions in TDA organizations and small aviation elements within larger TO&E units will be eliminated from the force and replaced by AOE aviation units organized along traditional military command lines.

Aviation groups, with subordinate battalions and companies will replace Engineer, ASA, and Army Reserve Command (ARCOM) aviation sections.

Thanks to AOE, the USAR is finally moving into the mainstream of Army Aviation with four attack helicopter battalions, five combat aviation battalions, two medium helicopter battalions, and a theater aviation company.

This evolution will present many challenges to our soldiers and their leaders. Not only will they have to learn to operate and maintain new equipment like the UH-60 and the AH-1, but they will also have to learn to tactically employ them as "weapons systems" using new combined arms doctrine in a scenario wherein the Corps Aviation Brigade provides substantial combat power for the Corps commander to influence the outcome of the battle.

A Report by Lt. Colonel Ronald R. Tamaccio

Because the present USAR aviation force does not contain these kinds of units, a very close relationship with similar units, both Active and Army National Guard, will be essential to train them properly.

Each CONUS Army considered these training relationships when it developed its stationing plans. They also considered the benefits to the "total" Army.

For example, Second Army is planning to station a USAR combat aviation battalion at Ft. Benning. The unit will accomplish its training objectives while helping support FORSCOM's Ranger Battalion and the Infantry School's curriculum.

In addition, for the first time, our field grade officers will either command aviation groups or battalions or fill positions on their staffs. Both duties are radically different from the kinds of positions they now hold and offer a more realistic training environment for them to develop the kinds of skills the Army will expect field grade aviators to have in a general mobilization.

Indeed, the next few years will be exciting times for USAR aviators. Our mission, equipment, doctrine, and tactics will all change. So must our attitudes. The challenge is clear. We must evolve from flying that concentrates on maintaining individual proficiency to flying that concentrates on developing and maintaining proficiency in tactical unit operations.

In short, we must be become indistinguishable from our active component counterparts in our approach to unit training if we are to successfully execute our increased responsibilities for defending our country in the Army of Excellence.

— LTC Ronald R. Tamaccio
USAR Aviation Officer
HQ FORSCOM

AVIONICS SYMPOSIUM

The AAAA Monmouth Chapter will conduct its Fifth Army Aviation Electronics Symposium for industry, academic, and military participants at the Berkeley Carteret Hotel in Asbury Park, New Jersey, on May 5-7, 1986. The Honorable James R. Ambrose, Undersecretary of the Army, will be the banquet speaker on May 6.

For further details, please contact Sherman DuBois at (201) 544-4609 or Autovon 995-4609. For hotel reservations, call the Berkeley Carteret directly at (201) 776-6700.

Survivability

ALSE PM: Seeking new Aviation Life Support Equipment

ST. LOUIS, MO. — Requirements for Aviation Life Support System Equipment (ALSE) have existed since the beginning of manned flight and will continue through all phases of manned aerospace weapon systems development and use.

Some ALSE is reaching obsolescence and some is just entering the conceptual phase. A large bulk of ALSE will of necessity always be in the development phase if we are to provide aircrew protection in present and future aircraft systems. The concern for full life cycle management of the system equipment will require early consideration be given to logistics support of these systems.

Basic Structure — The U.S. Army Aviation Life Support Equipment System and organization is described below to acquaint the reader with its origin, the system as defined, and the major Army elements who have a role in pulling together the research and development, testing and evaluation, readiness management, and the integrated logistics materiel support of this vital equipment.

A provisional product management office was established by the U.S. Army Materiel Command (US AMC) on April ll, 1985, with **LTC Karl R. Griffin** designated as the Acting Product Manager for ALSE pending the approval by AMC of the Product Manager (PM) Charter.

The charter was approved on November 22, 1985. This approval will enable the Army to provide much needed unified management of ALSE.

Prior to the establishment of the PM, there were two separate elements working on ALSE within AMC and AVSCOM. There was the AMC Project Office for ALSE headed by myself, which orchestrated actions for the support of ALSE. There was also the research and development group within AVSCOM which was tasked to develop ALSE to meet the Army Aviation and aircrew personnel needs. **Richard "Dick" Bee,** directed the R&D group.

Both of these elements have worked diligently to provide aircrew personnel with ALSE that will provide maximum protection and enhance their mission effectiveness and give them a better chance for survival.

By pulling these elements together and consolidating efforts in a PM office, it is believed much more can be accomplished.

A Report by A.B.C. Davis

Today, as never before, with the rapid growth of Army Aviation, as well as the projected expansion, significant emphasis is placed on the man/woman-machine relationship and the problems stemming from the peculiar types of operations the Army conducts. Army Aviation life support system equipment must be designed for the aircrew personnel and their operational environment.

The PM ALSE works in close coordination with the Army Aviation Life Support Equipment System Management Steering Council, which was formed in 1976 and meets quarterly — or more often as necessary. The council is composed of knowledgeable representatives of the following organizations, and their technical advisors:

- Surgeon General's Office;
- U.S. Army Training and Doctrine Command;
- U.S. Army Forces Command;
- U.S. Army Aviation Center;
- U.S. Army Aviation Safety Center;
- U.S. Army Aeromedical Research Laboratories;
- Office of the Chief, Army Reserves;
- U.S. Army Materiel Command;
- Army National Guard.

You can see that there are many players in the development and management of ALSE.

Development Efforts — Many significant ALSE development programs are ongoing. One of the most significant is the development of a new Chemical Biological Mask (XM-43) for the AH-64 aircraft. This development effort is a joint venture with this office and the Chemical Research and Development Center.

The program was initiated in late 1982 on a time track designed to meet the needs of the first unit equipped with the AH-64 aircraft. The XM-43 has been designated as the general aviation mask and will be fielded to support the new Attack Battalion.

Another high priority program is the development of a new aircrew integrated helmet system to replace the current SPH-4 aviator helmet.

(Continued on Page 39)

Test & Evaluation

The well-dressed Army Aviator's aircrew equipment

FT. RUCKER, ALA. — The U.S. Army Aviation Development Test Activity conducts development tests of Army Aviation systems, subsystems, product improvements, and programs.

The AH-64 First Article - Government and Production Validation Tests were recently completed and the report was written prior to APACHE distribution to FORSCOM in February.

The 1,200-hour AH-64 Logistical Evaluation is well underway, some subtests of air-to-air Stinger missile have been completed, and Progressive Phase Maintenance Special Studies for the OH-58, UH-60, and AH-1 are in various stages of completion.

Many more tests are ongoing, ranging from specially coated turbine engine blades, through aircraft survivability equipment, to AHIP First Article Testing. However, I'd like to focus now on recent developments in air crewmember personal equipment.

The accompanying picture is not **COL Bob Stewart** prepared for another historic spacewalk. It simply shows what the well-dressed combat Army aviator will wear in the late 1980's.

• **Item 1** — The Aircrew Uniform - Integrated Battlefield

1. **Aircrew Uniform - Integrated Battlefield (AUIB)**
2. **Aircrew Micro-Climatic Cooling System (AMCS)**
3. **Aircrew Survival Armor Recovery Vest, Insert and Packets (SARVIP)**
4. **XM-43 Protective Mask**
5. **Blower/Filter Assembly for XM-43 Mask**
6. **NBC Tactile Gloves**
7. **SPH-4 Helmet with AN/AVS-6 ANVIS Goggles**

(AUIB) is a two-piece flight suit made of Nomex with a charcoal liner and is designed to be fire retardant and provide NBC protection. The Test Activity is providing data on design and material acceptability to support a type classification decision.

• **Item 2** — The AUIB, without compromising CB protection, accepts the flexible hose connecting a microclimatic cooler to the cooling vest worn under the flight suit, reducing adverse effects of heat stress. The Test Activity is conducting engineering development and flight testing on two prototype designs (an air cooler and a liquid cooler) to determine system capabilities.

• **Item 3** — The Aircrew Survival Armor Recovery Vest, Insert and Packets (SARVIP) is a three-part system providing essential survival features including signal communications, 12.7mm armor protection (removable chest plate), environmental packets (all climates, over land and water), and built-in hoisting provisions.

The Test Activity evaluated SARVIP previously and found a number of discrepancies. We are now working with the developer on redesign prior to further development testing.

• **Item 4** — The XM-43 protective mask was designed to meet the unique requirements of the AH-64 crew using the Integrated Helmet and Display Sight System (IHADSS). However, it may become the standard mask for Army air crews.

• **Item 5** — Unique features of the XM-43 mask are the eyepieces, designed to permit use of IHADSS, and the portable blower unit and battery pack which provide both cooling air to the face and defogging for the eyepieces. The blower unit mounts in aircraft and uses aircraft power except when the crewmember exits the aircraft.

The Test Activity is evaluating compatibility and design characteristics of the XM-43 pending a production decision.

• **Item 6** — The NBC tactile glove is an Air Force-developed item similar to the standard butyl rubber NBC glove except it is approximately one-half the thickness (14 mils).

This provides NBC protection while affording an improved dexterity and sense of feel. The Test Activity is testing glove compability with the AUIB.

A Report by Colonel Lawrence Karjala

• **Item 7** — While ANVIS goggles were tested several years ago, we recently completed an assessment of the variable density daylight training filters designed for ANVIS daylight training under varying light conditions. Evaluation of a symbology overlay on the ANVIS field of view, providing airspeed, altitude, and other critical data in a heads-up display, is a potential future task for us here at the Test Activity.

Not shown in the photograph is the Multipurpose Rain/Snow/CB Overboot (MULO). The MULO will provide both climatic and CB protection for the crewmember. The Test Activity is testing American, Canadian, and German-manufactured versions of the MULO against established requirements to provide data for subsequent independent evaluation.

As you can see, a great deal of activity is ongoing to develop the equipment necessary for our Army aircrews to survive and operate effectively on the modern, high-intensity battlefield.

All of us at the Test Activity are dedicated to assist the materiel developer in providing the ve ry best equipment possible to the Army Aviation community.

Test for the Best!

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

The NCO's role in Army Aviation Operational Testing

FT. RUCKER, ALA. — After aviation related equipment, concepts, and training programs have been developed for the Army, they must be tested to ensure they will satisfy the user's needs, particularly in the areas of operational effectiveness, logistic supportability, reliability, and maintainability.

Such operationally oriented testing is the prime function of the United States Army Aviation Board, one of nine operational test activities chartered by the United States Training and Doctrine Command.

Formally activated by TRADOC on 1 July 1976, the Aviation Board was assigned to the U.S. Army Aviation Center, Ft. Rucker, Alabama.

Since its relatively recent beginning, the Aviation Board has firmly established itself as a valuable member of the testing community, continually meeting the challenges that face Army Aviation and taking great pride in the professional execution of its mission.

However, meeting challenges and accomplishing the Aviation Board's mission depend in great measure upon the performance

of a variety of knowledgeable personnel skilled in their respective tasks. Chief among these is the non-commissioned officer.

Increased Responsibilities — Changes in TDA have reduced the number of officers and enlisted personnel authorized to support the Aviation Board's mission. Meanwhile, the need for additional operational testing has substantially increased. These TDA changes, coupled with the lack of experience of newly assigned personnel, have placed increased responsibilities on all personnel, especially the Test Project NCO.

In many instances, he is directly responsible for the programming of test personnel worldwide. He must also maintain direct liaison with other testing agencies such as the U.S. Army Aviation Systems Command, the Test and Evaluation Command, and the Operational Test and Evaluation Agency.

In addition, he must coordinate with TRADOC and Forces Command to integrate test requirements and support. The Test Project NCO is totally involved in areas of planning, funding, coordinating, and executing the assigned tests.

While each Project NCO is a subject matter expert in his respective field, he is often required to work outside his MOS in testing new, untried equipment not yet fielded as well as newly developed tactics and doctrine.

Examples can readily be found among such tests as the Light Air Cavalry Troop Test, the Liquid Methane Test, the Mobile Airborne Data System, the Helmet Mounted Visual System, and various flight simulator tests for new aircraft.

Equal to the task — Although the integration of improved or new systems, tactics, doctrine, and force structure is a demanding job, the Test Project NCO has proven himself equal to the task. Most Test Project NCOs assigned to the Aviation Board possess a CMF 67 or a CMF 28 background, and their previous assignments include commands and organizations within FORSCOM, USAREUR, Eight Army Korea, and the U.S. Army Western Command. Consequently, their training, coupled with their experience, enables them to adequately perform the required tasks.

A Report by Sergeant Major Nicholas K. Smythe

Among their duties are the scheduling of personnel, the formulating of flight hours and the planning of equipment requirements. They perform cost analyses and are responsible for identifying needs relative to the host installation. These include the unit support needed as well as the travel requirements of test units and test directorates.

In addition, the Project NCO is responsible for obtaining necessary lodging facilities and providing adequate security for equipment and collected data, as needed, in compliance with appropriate regulations.

In the past, Project NCOs have been involved in more than 90 operational tests completed by the Aviation Board as well as in numerous Concept Evaluation Programs, Follow-on Evaluations, Customer Tests, and Force Development Testing and Experimentation. In some instances, non-commissioned officers have served as Test Project Officers at CONUS and overseas installations.

New challenges — In the future, the Project NCO is slated to take an even more active role in the performance of operational tests, some of which will include such diversified subjects as maintenance equipment, avionics, and NBC.

The reasons for his more active participation can be readily seen. They include a TDA that reduces the authorized number of Test Project NCOs from 26 to 13 at a time when 9 tests remain to be completed in FY 1985 and 15 are scheduled for FY 1986.

Considering that the duration of each test averages approximately five months, it becomes obvious that increased demands will be placed on the Project NCO. To meet these demands, this NCO must be well trained, skilled, and highly motivated.

As the Sergeant Major of the Aviation Board, I feel that I have a once-in-a-lifetime opportunity to exert a positive influence on the relationship that exists between the Test Project NCO and the soldier in the field — ensuring that the Test Project NCO not only remains constantly aware of the soldier's needs but also receives adequate training and ample opportunity to gain experience and develop the skills he needs to do his job.

Then, as increased demands and responsibilities are placed on his shoulders, the Test Project NCO will be capable not only of coping with every challenge that may confront him, but will be able to do so with the utmost confidence.

— SGM Nicholas K. Smythe
Sergeant Major, U.S. Army
Aviation Board

Training

New helicopter simulators are on the way!

ORLANDO, FLA. — Over the years we've seen the fielding of helicopter simulators proceed at a painfully slow pace primarily because of the need for exhaustive development and operational testing (DT/OT) and also because of unpredictable funding.

For example, 17 months elapsed between initiation of DT/OT II on the prototype CH-47C CHINOOK simulator and completion of the process leading to the follow-on production decision. Because of inadequate funding another thirteen months elapsed before a contract could be awarded to enter the production phase.

Even when funding became available, it was enough to buy only three of the five required simulators. Another four years went by before we had sufficient funds to complete the procurement. By this time, the CHINOOK helicopters in the field were being upgraded to the "D" model, resulting in a new requirement to build the final two simulators in that configuration and to transform the prototype and first three production units from "C's" to "D's".

This way of doing business is behind us and at last there is good news! Because of relaxed testing requirements for institutional trainers such as the Synthetic Flight Training System, it will no longer be necessary to undergo full blown, independent development and operational testing.

All required testing on future simulators can be accomplished as part of the Government's acceptance program when taking delivery of the simulator from the contractor.

Perhaps a more important improvement has been the implementation of multi-year contracting procedures for the procurement of flight simulators. These procedures have enabled us at the office of the Product Manager for Aviation Training Devices (PM-AVD) to accelerate and stabilize production schedules by removing funding uncertainties for the program out years.

A Report by Paul S. Walker

This multi-year concept for procurement is now applied to all PM-AVD simulators when appropriate. Rewards of this approach are best illustrated by the current, stabilized delivery schedule established in the production contract for the UH-60 BLACK HAWK flight simulator.

Under previous conventional annual contracting procedures, the delivery schedule of these 15 required production simulators would be uncertain at best because the number of devices bought would be determined annually through the Congressional authorization and appropriation process.

The multi-year approach has still another benefit in that it stabilizes the program for construction of facilities to house the trainers. Because of the complexity and cost of flight simulator buildings, it is understandable that the Corps of Engineers is reluctant to initiate construction of a building at a specific site until a firm date for delivery of the simulator can be established.

Under the multi-year concept, a firm delivery date for each device is established at the time of contract award. This provides sufficient advance notice to the Corps of Engineers to enable an orderly design and construction schedule that will dovetail with military construction appropriation lead times.

With adequate schedule time, the Army installations designated to receive these devices have the opportunity to include in the building design any special features they may desire, such as classrooms and other administrative requirements to support the unique needs of a particular location.

As the direct result of the above innovations and changes, this office will be fielding 32 simulators over the next four years in support of CHINOOK, BLACK HAWK, COBRA, and APACHE helicopter training.

This enormous workload presents a situation which requires help from the field to resolve. When considering that each of these trainers will undergo approximately two months of onsite acceptance testing by the Government project team, it can be readily seen that we will be checking an average of two trainers concurrently throughout the period.

Because of this workload, it will be necessary that gaining

units make available as part of the acceptance team at least one of their experienced aviators — preferably a standardization instructor pilot — to assist in checking out the performance of the simulator at their location. With local pilot assistance, acceptance of the training devices should proceed smoothly and continue on schedule.

In summary, your simulators are on the way in an expedited fashion. We at PM-AVD are confident you will find them to be useful and challenging training systems that will be effective tools in maintaining a high state of combat readiness within the Army Aviation community.

— Paul S. Walker
Deputy Product Manager
Aviation Training Devices

Developing professional leaders: The Aviation Center's Advanced NCO Course

FT. RUCKER, ALA. — The Advanced Noncommissioned Officer Course (ANCOC) for MOS 93H, Air Traffic Controller/Tower Operator, MOS 93J, Air Traffic Controller/Radar Operator, and MOS 93P, Flight Operations Coordinator, is unique in that it is the only professional development course offered at the U.S. Army Aviation Center for non-commissioned officers.

The ANCOC is designed for the senior staff sergeant and newly promoted sergeant first class to develop the required skills to perform as a platoon sergeant in today's Army of Excellence. The course contains a blend of general military subjects (Common Core) and MOS peculiar subjects (Phase II).

The development of the Common Core was initiated with a front-end analysis and a course design which was approved for development by the Commander of TRADOC in January, 1983.

The Sergeants Major Academy fielded this Common Core in October, 1983, and it was implemented at Ft. Rucker in January, 1984. The Department of Enlisted Training (DOET) was tasked to implement and subsequently carry-on instruction for the ANCOC.

This Army-wide implementation of the Common Core enables all noncommissioned officers, regardless of MOS, to receive standardized training for the first time.

Common Core subjects are grouped into six areas:

- Leadership;
- Communications (writing and speaking);
- Training Management;
- Resource Management;
- Professional Skills; and
- Military (tactical) Skills.

These subjects are studied during the Common Core (Phase I) during the first five weeks and three days and are used to support MOS specific subjects, which follow immediately after Phase I.

The ANCOC Common Core is a fast-paced course consisting of 172 hours of programmed instruction. The Common Core schedule provides for a seven or eight hour academic day and two hours of supplemental study in the evening. Hands-on training is strongly emphasized whenever possible.

The Sergeants Major Academy, based on input from the service schools, continues to improve the Common Core. As the Army moves forward and changes, the Common Core will also flex to prepare the platoon sergeant for the battlefield of the sergeant for the next battlefield.

After completion of the Common Core, the non-commissioned officers are divided into two groups. The 93P NCOs form one group and the 93H and 93J NCOs form the other.

93P Phase II subjects are grouped into three areas: Planning a Field Training Exercise; Administrative Procedures; and Airfield Management. These subjects are studied for two weeks and two days to prepare the senior flight operations coordinator to perform duties at both the airfield and the Combat Aviation Battalion.

Photo not Available At Press Time

A Report by Master Sergeant Randall Shultz

93H/J Phase II subjects are also grouped into three areas: Tactical Air Traffic Management; Rule making/Non-rule making Procedures in the National Airspace System; and Terminal Instrument Procedures (TERPS). These subjects are studied for three weeks and one day to prepare the air traffic controller to perform duties at both the ATC facility and the Tactical ATC Battalion.

The Program of Instruction for the ANCOC Phase II is continually being updated and revised to meet the Army's need for the flexible, well trained aviation noncommissioned officer required on today's battlefield.

— MSG Randall Shultz
NCOIC, ATC Division
DOET, USAAVNC

ONE LHX ENGINE GOES ABOVE AND BEYOND ARMY REQUIREMENTS.

On March 7, 1985, our ATE109 Turboshaft powered its Huey test bed aloft. For the first time an LHX engine candidate flew. Above and beyond the Army's requirements.

Earlier, another first. On February 11, a Bell 206 fitted with an ATE109 adaptive fuel control actually anticipated the commands of its veteran test pilot. Unprecedented response in a rotary wing craft. Again exceeding U.S. Army requirements.

A vastly superior LHX engine has emerged. Designed by Garrett and Allison. A joint venture that's no paper tiger. For production competition that's on time and on budget.

Based on Garrett's F109 Trainer Engine and Allison's Advanced Technology Demonstrator Engine (ATDE), our ATE109 blends the technology of both.

The results have been rewarding.

The ATE109 has already exceeded the Army's 1200 shp requirement, while meeting tough SFC goals. Modular components, mounted for battle survivability, will modernize on-condition maintenance concepts. Projected operating costs fall far below current inventory engines.

The Allison/Garrett team. We have consistently taken our LHX engine a bit further than the rest. To the development and refinement of the first airworthy LHX engine prototype.

Allison and Garrett. America's LHX propulsion team.

Professional-Social Program
1986 AAAA National Convention
April 9-13, 1986 — Atlanta, Ga.

(This is a preliminary program. All times, speakers, and presentation titles are subject to change.

Tuesday, 8 April 1986

1200-1700
Registration and Ticket Sales

Wednesday, 9 April 1986

0800-2000
Registration and Ticket Sales
1000-1215
Scholarship Foundation Board of Governors Meeting
1215-1345
National Executive Board Luncheon
1400-1730
National Executive Board Meeting
1600-1800
Hall of Fame Trustees Meeting
1800-2100
AAAA Early Birds Reception

Thursday, 10 April 1986

0700-2030
Registration and Ticket Sales
0745-0845
Chapter Presidents/Secr. Breakfast
0845-0930
Panelists and Speakers Breakfast
0900-1130
MILPERCEN Career Guidance
0900-0945
AAAA General Membership Meeting
Annual Report—National Elections
1000-1005
Welcome to Atlanta—MG George W. Putnam, Jr., AAAA President
1005-1010
The 1986 Professional Program
"A Combined Arms Partner"
MG Ellis D. Parker, CG, USAAVNC
1010-1040
Keynote Address—Speaker TBA
1040-1110
"Aviation Branch Update"
MG Ellis D. Parker, CG, USAAVNC
1110-1130
"Aviation Branch Update—NCO"
CSM Tilden R. Kirkland, Hq, USAAVNC

1130-1430
Membership Luncheon Reception and 1986 Membership Luncheon
(Introduction of US Helicopter Team)

1300-1630
USABAA Professional Session I
1430-1630
MILPERCEN Career Guidance
1430-1450
"USAALS Update"
MG Fred E. Elam, CG, USATC
1450-1510
"U.S. Precision Helicopter Team"
LTC Robert E. Harry, USAAVNC
1510-1530
"The AH-64 Fielding Plan"
COL Walter H. Yates, Jr., Fielding Bde
1530-1550
"Aviation Safety"
COL Terence M. Henry, Safety Center
1550-1630
Panel — Questions and Answers
MG Ellis D. Parker, Moderator

1630-2030
AAAA Exhibitors' Reception
Exhibit Hall Opening
2100-0100
Chapter Receptions
(Six Chapter-Hosted Open Receptions)

Friday, 11 April 1986

0700-1800
Registration and Ticket Sales
0715-0815
Panelists and Speakers Breakfast

0900-1030
Spouses Breakfast
0830-1030
MILPERCEN Career Guidance
0830-0850
"RD&A Update"
LTG Louis C. Wagner, DCSRDA
0850-0910
"Sustaining to Fight"
LTG Benjamin F. Register, DCSLOG
0910-0930
"Current ODCSPER Policies"
MG John S. Crosby, ADCSPER
0930-0950
"Aviation as a Maneuver Force"
LTG Carl E. Vuono, DCSOPS**
0950-1030
Panel - Questions and Answers
MG Ellis D. Parker, Moderator

1030-1800
AAAA Exhibit Hall Displays
1045-1430
1986 AAAA Awards Luncheon
Reception and Awards Luncheon
1130-1300
USABAA Luncheon

1315-1645
USABAA Professional Session II
1430-1700
MILPERCEN Career Guidance
1430-1450
"Combat with Heavy Forces (Avn)"
LTG Charles D. Franklin, CG, FUSA**
1450-1510
"Combat with Light Forces (Avn)"
MG William H. Harrison, CG, 7th ID
1510-1530
"Combat with Special Opns (Avn)"
MG Leroy N. Suddath, Jr., CG, Special Operations Command
1530-1610
Panel - Questions and Answers
BG Rudolph Ostovich III, Moderator

NCO Professional Programming
1430-1445
"Update on CMF 28"
SGM James Lloyd, Avn Prop, USAAVNC
1445-1500
"Update on CMF 93"
MSG Hartwell Wilson, DOET, USAAVNC
1500-1515
"Update on MOS 93B"
(Both of the Above Speakers)
1515-1535
"Update on USAREUR Aviation"
CSM Bobby Burnette, 11th CAG
1535-1555
"Update on U.S. Forces, Korea"
CSM Joseph M. Rynne, Jr., 17th CAG
1555-1610
Closing Remarks
CSM Tilden R. Kirkland, Hq, USAAVNC

Spouses' Programming
1430-1455
"Importance of the Family Structure"
MG Robert M. Joyce
CG, Commun & Family Support Center
1455-1520
"Stress Management"
COL Jose G. Garcia, Aeromedical Center
1520-1545
"Women in the Army"
Dr. Herbert P. Lepore, Historian, USAAVNC
1545-1610
Panel - Questions and Answers
MG Robert M. Joyce, Moderator

1630-1800
1986 Cub Club Reunion
1830-2000
AAAA President's Reception
2000-2245
20th Anniversary Dinner of the 1st Aviation Brigade
2100-0100
AAAA Chapter Receptions

Saturday, 12 April 1986

0700-1700
Registration and Ticket Sales
0715-0830
First Light Breakfast (By Invitation)
HON James R. Ambrose, Speaker
0830-1200
MILPERCEN Career Guidance

**Invited Guest Speaker.

0830-1000
NCO Panel — Questions and Answers
CSM Tilden R. Kirkland, Moderator
0830-1200
Spouses' Tour of High Museum and Selected Shopping Sites
0900-1700
Exhibit Hall Displays
0830-0850

Professional Programming

"Weapons: Update on LHX Armament"
LTC(P) Wallace D. Gram, TSM-U/LHX
0850-0910
"Air-to-Air and the LHX"
LTC Ward Coleman, TSM-LM
0910-0930
"Air-to-Air Combat Test (T-120)"
COL Ronald H. Bryce, Army Development and Employment Agency
0930-0950
"New Aviation Simulators"
COL(P) James W. Ball, PM-TRADE
0950-1000
Stand-in-Place Program Break
1000-1010
"UH-60A BLACK HAWK Update"
COL Ralph H. Lauder, PM-BLACK HAWK
1010-1020
"CH-47 Mod Program Update"
COL Norbert I. Patla, PM-CH47M
1020-1030
"AHIP Update"
COL John N. Tragesser, PM-ASH
1030-1040
"ASE Program Update"
COL Curtis J. Herrick, Jr., PM-ASE
1040-1050
"AAH Program Update"
MG Charles F. Drenz, PM-AAH
1050-1110
"LHX Program Update"
BG Ronald K. Andreson, PM-LHX
1110-1145
Panel - Questions and Answers
MG Orlando E. Gonzales, Moderator
1145-1200
1986 AAAA Professional Program Closing Remarks
MG Ellis D. Parker, CG, USAAVNC and Chief of the Aviation Branch
1200-1345
Pre-Luncheon Refreshments and Saturday Sitdown Luncheon
1345-1400
Dessert and Coffee - Exhibit Hall
1400-1700
Exhibit Hall Displays and Exhibit Hall "Social"
1400-1700
MILPERCEN Career Guidance
1415-1630
USABAA Professional Session III

1700
Exhibit Hall closes
1830-1930
1986 Awards Banquet Reception
1930-2200
1986 National Awards Banquet
2200-0130
AAAA Chapter Receptions
(Six Chapter-Hosted Open Receptions)

Sunday, 13 April 1986

0830-0930
National Executive Board Meeting
0930-1200
The "Aviation Brunch" and "See You in Ft. Worth in 1987!"

If you decide to attend at the last minute:

AAAA Registration: Members and non-members may register and obtain function tickets at the AAAA Registration Desks in Room 360 of the Georgia World Congress Center starting at noon, Tuesday, April 8.

1986 Professional Sessions: Persons desiring to attend the professional sessions are required to pay the appropriate Military or Civilian Registration Fee.

Exhibit Hall Attendance: While the payment of a Registration Fee is **not** required to view the exhibits, the non-Registrant must secure a complimentary "Visitor's" Badge.

NOTE: The recent Texas Air/Eastern merger will NOT affect this offer!

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We earn our wings every day™

IMPORTANT NOTE: This offer is valid through March 15, 1986 ONLY!

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Eastern Airlines is offering all attendees at the 1986 AAAA National Convention in Atlanta its "lowest applicable air fare, subject to availability, or a 35% **discount** off the regular coach air fare, whichever is less. This will guarantee a **minimum 35% discount** for all the attendees."

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TOLL-FREE NUMBERS!

You can make your reservations by calling **Eastern's** toll-free number: **(800) 468-7022.** Please identify yourself as an "AAAA/Army Aviation Ass'n" member and cite the AAAA's **E-Z Access (file) Number: EZ4 AP73.** In Florida, please call **(800) 282-0244.**

LOCK IN YOUR LOW FARE!

The special AAAA Convention Fare will be valid for all **Eastern** flights between Sunday, April 6, 1986 and Monday, April 14. Tickets should be purchased at least 21 days prior to departure in order to guarantee delivery. However, **Eastern** urges you to protect yourself against future fare increases by purchasing your airline tickets without delay.

March-May, 1986 Calendar of AAAA Chapter Activities

March, 1986

■■Mar. 5. Ft. Bragg Chapter. Afternoon Professional Meeting. LTC Gerald Crews and CW4 Grant South, MILPERCEN, guest speakers. "Aviation Personnel Matters". Yntema NCO Club.

■■Mar. 12. "Follow Me" Chapter. General Membership Meeting and Luncheon. Ft. Benning NCO Club.

■■Mar. 12. Corpus Christi Chapter. Professional Luncheon Meeting. Mr. Steven White, AVCO-Lycoming, guest speaker. "Modern Technology Engines". NAS Officers' Club.

■■Mar. 12. Greater-Atlanta Chapter. General Membership Meeting and Dinner. LTG Johnny J. Johnston, guest speaker. Howard Johnson Downtown, Atlanta.

■■Mar. 13. Nurnberg Chapter. General Election Meeting. Presentation by Bell Helicopter. Pegasus FARRP. Feucht AAF.

■■Mar. 20. North Texas Chapter. General Membership Meeting. BG David Funk, guest speaker. "Trends In Army Aviation Development". Sheraton Center Park Hotel, Arlington.

■■Mar. 20. Corpus Christi Chapter. Professional Social Meeting. "AvWeek Paris Air Show Videotape". NAS Officers' Club.

■■Mar. 20 - 23. 26th USAREUR Region—AAAA Convention, AFRC, Garmisch-Partenkirchen, Germany. (Ski Week starts Mar. 19).

■■Mar. 25. Aviation Center Chapter. General Membership Meeting and Awards Luncheon. Ft. Rucker Officers' Club.

■■Mar. 21. Arizona Chapter. General Membership Meeting. Stan Desjardins & Randall Taylor, guest speakers. Presentation on Aircraft Crash Safety.

April, 1986

■■Apr. 5. Ft. Hood Chapter. Professional Dinner Meeting. "2nd Annual AAAA Aviation Ball." LTG Crosbie E. Saint, Commander, III Corps, guest speaker. Soldiers' Dome.

■■Apr. 9-13. AAAA National Convention. Atlanta Marriott Marquis Hotel and the Georgia World Congress Center (Exhibit Hall-Professional Sessions), Atlanta, Georgia.

■■Apr. 15. Washington D.C., Chapter. Professional Dinner Meeting. MG John W. Woodmansee, Jr., guest speaker. "Force Structure & Army Materiel Requirements". Ft. McNair Officers' Club.

May, 1986

■■May 5-7. Ft. Monmouth Chapter. "1986 AAAA Electronics Symposium". Berkeley Carteret Hotel, Asbury Park, N.J.

ALSE
(Continued from Page 27)

Readiness Efforts — Many significant readiness programs are ongoing. These include the establishment of an ALSE training school at Ft. Eustis, Virginia, and Survival and Rescue training by the Army National Guard and Reserves.

The ALSE school at Ft. Eustis is writing six Field Manuals on ALSE Operations, Maintenance, Supply, Inspection, Medical, and Oxygen Systems and Related Equipment.

Army Regulation 95-17 — the Army Aviation Life Support System Program — was fielded May 15, 1984 and has had a marked improvement on the critical area of ALSE.

— A.B.C. Davis
Deputy ALSE Product Manager for Readiness

ODCSPER
(Continued from Page 25)

you have a question or an opinion about any aviation-related topic you want introduced into the Pentagon, don't wait for my call.

Please contact me at AV 227-2221 in order to ensure that **"they"** don't make another mistake.

— LTC David H. Hicks
Chief, Cbt Organizations Branch ODCSPER, DA

FATHER AND SON — 1LT G. Scott McConnell (L) received his RW aviator wings recently from his father, COL Lewis J. McConnell, Ret., a member of the first class to graduate from Ft. Rucker on 29 January 1955.

CORRECTION — Two photos on Page 74 of the January 31 issue are mis-captioned. The Ozark Mountains Chapter officers are actually shown below their caption while the Indianapolis Chapter officers are pictured above their caption.

AAAA Scholarships

WITH some 16 scholarship awards being awarded to the sons and daughters of members or deceased members of AAAA on 10 February, I felt that all Association members might like to know a bit more about the AAAA Scholarship Foundation itself, and perhaps several of the details of the very unique selection process pursued by the AAAA National Awards Committee in selecting each year's Scholarship Award winners.

For the February, 1986 selection process just completed, an applicant's chances of winning one of the 16 national scholarship awards were better than one in five — there were 78 applicants in all; however, four of the 16 scholarships were Chapter-financed awards limited to the sons and daughters of specific Chapters.

Who applies for these scholarships? The box on the opposite page gives you a breakdown of the membership category and the rank/grade of the applicant's member-parent.

A word or two about the Foundation . . The AAAA Scholarship Foundation, Inc., is a separate corporate entity governed by a 15-member Board of Governors, the primary tasks of which are to establish the requirements for a workable scholarship assistance program, to determine the number and the dollar amount of scholarship aid to be given in any particular year (and this is dependent upon donations received), and to coordinate with the AAAA on the establishment and implementation of Memorial Scholarships and Association-wide fund-raising programs.

ABOVE: MG Delk M. Oden, Ret. (seated) Awards Committee Chairman, and Dale Kesten, a National Office staff member, are shown during the February Committee deliberations.

The AAAA Scholarship Foundation is a tax-exempt organization under the IRS Code; as a separate, distinct corporate entity from the AAAA its donations, bequests, etc., are deductible from income or estate taxes.

The Foundation Board of Governors does **not** select the annual AAAA Schol-

AAAA SCHOLARSHIP FOUNDATION BOARD OF GOVERNORS

Chairman of the Board	Bryce Wilson
President	MG John L. Klingenhagen
Vice Pres.	COL Rudolph D. Descoteau
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COL John W. Marr	COL Wayne N. Phillips
Frank N. Piasecki	Richard S. Steele

at work!

arship Winners. This task is performed by the AAAA's National Awards Committee annually, the same committee that selects the AAAA's National Award Winners ("*AA of the Year*," etc.) each year.

Major General Delk M. Oden, Ret., chairs this 25-member committee.

An impartial selection

While the possibility always exists that several members of the AAAA National Awards Committee might know some of the parents of a particular year's competitors, it feels that the AAAA has taken adequate steps to assure that an impartial and confidentail selection is made every year — one that would meet with your personal approval.

This is accomplished in three steps:

- All applications for scholarship forms, and all completed forms (personal, academic, interview, etc.) are provided by and returned to **one** source, the AAAA National Office, and
- National Office staff members censor all documents prior to their review by members of the Awards Committee, the censoring consisting of the removal of the names of all applicants, parents, and AAAA interviewers, and the placement of a "file number" on the supporting documentation submitted by each applicant, and his or her guidance counselor, teacher, and AAAA interviewer.
- The members of the AAAA National Awards Committee, in reviewing the records associated with a given "file number", do so *without* knowing the identity of any applicant.

The actual process is a bit more complicated, but the fact remains that the Awards Committee members, in being unaware of the identity of all applicants, are in a position to judge and compare the academic and personal qualifications of each applicant, and do so without prejudice.

Having worked with "file numbers" only, the Awards Committee does not know the names of the winners it selects; it first learns these winners' names *after* the selection of the last Scholarship Award has been made. Here, the Committee Chairman directs a National Office representative to open the proverbial "sealed envelope", and to provide the names of those applicants having the winning "file numbers."

RANK/GRADE BREAKDOWN OF PARENTS OF APPLICANTS FOR '86 SCHOLARSHIPS

Category	Appl.	Win	%
Major General	1	1	100%
Brigadier General	1	1	100%
Colonel	11	3	27%
Lt. Colonel	25	1	4%
Major	7	1	14%
Captain	3	1	33%
CW4	9	1	11%
CW3	3	0	0%
Enlisted	3	1	33%
DAC	7	3	43%
Industry	7	3	43%

The Awards Committee is not shown the entire list of applicants at any time, in that Foundation policy dictates that the names of each year's non-winning applicants remain confidential.

I hope that the foregoing has provided you with some insight into the process the Foundation and the AAAA pursue to assure the impartial selection of winners each year. The truth of the matter is that the real problem is not one of guarding the competitors' identities'; the real problem is the tough selection.

A very large number of exceptionally bright young men and women compete for the AAAA's scholarship awards each year. *Selection* is the problem!

Suggestions solicited

Your comments on all facets of this AAAA program — announcement date, forms, selection, notification, etc. — are welcome. Many of the program's refinements were initiated through suggestions made by AAAA members, and the applicants and their parents.

It's a source of some satisfaction to the Foundation Governors and the AAAA National Awards Committeemen that several divisional units and Army posts — in initiating their own scholarship programs — have heard about the AAAA selection process and have written to the Association for details.

The fact that two Chapters, the Monmouth and the Washington, D.C. Chapter, let the National Office (and National Awards Committee) handle their scholarships also reflects the confidence these organizations have in the selection process.

Having given you this background following the announcement of the 1986 AAAA Scholarship winners, the Board of Governors believes that you'll be in a better position to appreciate the worthiness of this fine AAAA program.

—John L. Klingenhagen
President, AAAA
Scholarship Foundation, Inc.

Below: LTG Charles D. Franklin, CG, First US Army (4th from left), guest speaker at the Connecticut Chapter's February 13 dinner meeting, is shown with the new Chapter slate. L-R: are William Stuck, VP-Memb; Charles Harmon, VP-Programming; Vince Bailey, outgoing Pres.; LTG Franklin; Ward Hemenway, Pres; and Ken Horsey, Secretary.

St. Louis Product Support Symposium Addresses Vital Issues

The 12th Annual Joseph P. Cribbins Product Support Symposium sponsored by the AAAA Lindbergh Chapter welcomed military and industry attendees from around the world to St. Louis earlier this month.

MG Orlando E. Gonzales, Commanding General of the U.S. Army Aviation Systems Command, was the keynote speaker at the Symposium. He focused attention on the need for a team effort to address vital issues such as:

- the spare parts program;
- the flight safety parts program;
- flight data recorders; and
- non-developmental items.

These issues demand that the military and industry work together "to avoid jeopardizing the readiness of the fleet," **Gonzales** said.

He stressed that the purpose of the Symposium was to teach its participants how to "buy smart and sell smart."

By learning those lessons, he concluded, we will be able to foster open competition for the development and acquisition of spare parts while improving readiness and safety in Army Aviation.

Five principals at the Feb. 5-6 AAAA Product Support Symposium sponsored by the Lindbergh (St. Louis) Chapter are, l-r, GEN Richard H. Thompson, CG, AMC/Guest Speaker; Paul L. Hendrickson & Don Luce, PSS Co-Chairman; MG Orlando E. Gonzales, CG, US Army Aviation Systems Command; and BG Richard E. Stephenson, DCG (P&R) and Lindbergh Chapter President. Missing: A sixth principal, Joseph P. Cribbins, ODCSLOG/Moderator.

Thomas J. Doyle, left, Grumman Aerospace Systems Division, accepts AAAA's *Major Company Industry Award* from GEN Richard H. Thompson, CG, AMC.

Donald Manaham, right, Pres., COBRO Corporation, receives the 1985 *Small Business Organization Award* during the 1985 Product Support Symposium.

Paul Shurko, VP, Sikorsky Support Services, accepts the AAAA's *Team, Group, or Special Unit Industry Award* from GEN Thompson at the PSS Luncheon.

Bill Lauth, President, Bodine Tool and Machine Company, receives the AAAA plaque from the AMC Commander denoting the *Individual Industry Award.*

Briefs

Triple Winner

Unnoticed by most, the Canal Zone's **210th Aviation Battalion,** which has been selected by the AAAA National Awards Committee as the **1985 Outstanding Aviation Unit,** and is to be cited at the Saturday evening, April 12, AAAA National Awards Banquet in Atlanta, has won the top unit award **three** times!

The aviation unit was the CY 74 winner under **LTC Joseph R. Koehler** and **CSM Stephen M. Cole,** while **LTC Theodore A. Duck,** and **1SG Lorenzo Osorio** of the 210th, accepted the CY84 **Outstanding Aviation Unit Award** for the second time at last year's Awards Banquet in St. Louis.

No other aviation unit has won the award twice.

New Member

LTC Thomas E. Johnson is the new President of AAAA's **Hanau Chapter** and with his Chapter having in excess of 150 members, he assumes a "seat" on AAAA's National Executive Board.

Fresh Start!

Gathering after a late afternoon pre-meeting "social," some 44 members residing in the Ft. Leavenworth area reactivated a new AAAA membership activity to be known as the **Leavenworth Chapter.**

With a high student turnover, two earlier efforts (the **Fort Leavenworth Chapter** and the **Combined Arms Center Chapter)** had difficulty staying afloat.

The new officer slate, a photo of which will appear in next month's issue, includes **COL George D. Fuller,** Pres; **LTC Lewis D. Ray,** SrVP; **MAJ Steven R. Accinelli,** Sec; **MAJ (P) D. Lowman,** Trea; **MAJ Michael L. Crossett,** VP, Memb; **CPT Neal E. Lang,** VP, Prog; **MAJ (P) Kenneth Sharpe,** VP, Stu Memb; **LTC Grant Fossum,** VP,Bene.

AAAA Overview

Paris Air Show Videotapes

Eleven CONUS Chapters have already signed up for "loan" of the *"1985 Paris Air Show"* two-volume videocassette package by the editors of *Aviation Week & Space Technology.* Purchased by AAAA, the VHS videotapes were offered for CONUS Chapter use through September 1 on a "first come, first served" basis. The **Citadel Chapter** (Feb. 27), **Chicago Area Chapter** (Mar. 5), **Corpus Christi Chapter** (Mar. 20), **Pikes Peak Chapter** (Mar. 31-Apr. 3), **Indianapolis Chapter** (Apr. 14-18), **Ozark Mountain Chapter** (Apr. 18-May 1), **Arizona Chapter** (May 12-15), **Indiantown Gap Chapter** (May 26-29), **"Follow Me" Chapter** (Ft. Benning)(June 9-12), and **Colonial Virginia Chapter** (June 23-26) have booked the tapes. Four CONUS dates remain open; the tapes will be made available September 7 to USAREUR's twelve AAAA Chapters with bookings arranged through the USAREUR Regional office.

We're breaking our DOW!

Don't look now, but AAAA's overall membership is riding right along with the Dow Jones averages! AAAA went to 16,000 members at just about the same time the Dow went to 1,600. The Association is now pressing 17,000 in total membership, and the Dow is hovering right at the 1,700 mark. It'll be interesting to see which tops which at mid-year.

While the full year Chapter Membership Enrollment Competition ended this past January 15, new membership "starts" have continued at a steady pace with overall gains by all Chapters in the interveing period. The Association's rank/grade and membership category figures as at March 5 appear below:

Rank/Grade	Active	ARNG	USAR	Ret.	Total
General	2	0	0	5	7
Lieutenant General	4	0	0	19	23
Major General	28	3	2	28	61
Brigadier General	24	2	2	16	44
Colonel	275	30	11	413	729
Lieutenant Colonel	667	39	14	550	1,270
Major	1,060	70	35	140	1,305
Captain	1,610	41	18	22	1,691
Lieutenant	1,260	41	8	0	1,309
Chief Warrant Officer	1,738	120	36	216	2,110
WO—WOC	917	18	12	1	948
Dept of the Army Civilian	2,251	0	0	52	2,303
Enlisted (E7-E8-E9)	381	16	3	48	448
Enlisted (E5-E6)	706	35	9	6	756
Enlisted (E1-E2-E3-E4)	824	8	2	0	834
Military Total	**11,747**	**423**	**152**	**1,516**	**13,838**
Industry Members (Individual)				1,370	
Industry Members (Corporate)				1,412	
Foreign				332	
Other				7	
Industry-Civilian Total					**3,121**
Military-Civilian Membership Total					**16,959**

Nocturnal — Some 28 Chapters will co-host eighteen (18) separate "Chapter Receptions" at the forthcoming AAAA National Convention in Atlanta, Ga., April 9-13. Offering an informal way to mix and mingle, six Chapter-hosted open receptions will be open on Thursday, Friday, and Saturday nights.

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1st Aviation Brigade Anniversary Dinner features Vietnam Vignettes, Songs, Slide Show, Sing-Along

WHO: All persons who have served with a unit of the 1st Aviation Brigade, past and present, and their Spouses.

DATE: Friday evening, 11 April 1986.

TIME: 2000-2245 Hours.

PLACE: Imperial Ballroom of the Atlanta Marriott Marquis Hotel.

COST: Dinner—$25.00 per person, plus a $10 "Program Expenses" Fee for each Golden Hawk in attendance.

MENU: Caesar Salad, Prime Rib, Baked Potato, Fresh Green Beans, Tomato Provencale, Baked Alaska.

HEAD TABLE: The former seven Brigade Commanders, and the current Commander (All paying their own way!)

DINNER GUESTS: Several current soldiers (WOs, EM) of the 1st now at Ft. Rucker.

ATTENDANCE ESTIMATE: 350 firm (Some listed below) with a 585 ceiling.

COL Sidney W. Achee*
COL Bobby R. Adams
LTC (P) Richard M. Adams
Ron Alto
LTC John H. Anderson*
BG Ronald K. Andreson
COL Richard C. Antross
Charles Baker
Charles C. Baker
LTC Marvin H. Baker
LTC Gary S. Beck
COL Norman M. Bissell
COL Rodney D. Bither
LTC Patrick J. Bodelson
COL George S. Bosan*
Danon L. Brantley
COL James E. Brayboy
LTC Charles R. Brockway
COL Charles L. Brown, Jr.
LTC Joe N. Calhoun
COL Jos. Campbell, III
COL R. Potter Campbell*
LTC Lee R. Cantlebary*
COL Stanley D. Cass
MAJ Edw. Chambers, Jr.
COL Jerry W. Childers
BG Samuel G. Cockerham*
LTC Terry J. Coker
MAJ Christopher L. Cole
COL Eugene B. Conrad*
LTC Ace A. Cozzalio
COL Eugene F. Crooks*
MAJ Dennis W. Crowe
Clarence A. Cruse, Jr.
LTC G. Kirk Curran
Robert L. Daboub
COL John N. Dailey
Charles L. Davis
COL John Dibble, Jr.*
COL Arne H. Eliasson*
CPT Dannie L. Dillard
COL Moses Erkins
COL Ernest F. Estes
LTC Robert P. Fallis
LTC James M. Fisher
CW4 John V. Fowler
Rudolf A. Frasca
COL B. H. Freeman*
MG Orlando E. Gonzales
LTC Elton T. Gordon, Jr.
LTC (P) Wallace D. Gram
MAJ David L. Grieger*
COL David S. Grieshop
COL Turner E. Grimsley
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