



40 YEARS OF  
ARMY AVIATION MAGAZINE

# ARMY AVIATION

ENDORSED PUBLICATION OF THE ARMY AVIATION ASSOCIATION OF AMERICA • DECEMBER 31, 1993





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### FORTHCOMING ISSUES

January 1994 — C<sup>1</sup>, UAV, and Electronic Warfare Special Focus.

February 1994 — Maintenance and Product Support.

The Honorable Togo D. West, Jr., became Secretary of the Army on 23 November 1993 when he took the oath of office in a private ceremony at the Pentagon. Secretary West was confirmed by the Senate on 20 November. A lawyer since 1968, he was commissioned in the Army's Judge Advocate General Corps and served on active duty with the Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs). He has served in a variety of positions, including the Department of the Navy's General Counsel, Special Assistant to the Secretary and Deputy Secretary of Defense, and as the DoD General Counsel. For his military service, West received the Legion of Merit and Meritorious Service Medal.

The 4th Bi-Annual Reunion of the 1st Brigade (Separate), 101st Airborne Division, will be held 26-30 May 1994 at the Marriott Pavilion Hotel, St. Louis, MO. For more information, contact: Barry Hana, P.O. Box 31788, St. Louis, MO 63131, Tel: (314) 993-2952, evenings and weekends.

Harris Corporation of Melbourne, FL has awarded Litton Systems Canada Ltd. an \$8M contract to produce advanced active matrix liquid crystal displays for the RAH-66 Comanche. The contract calls for delivery of 66 color and monochrome displays in 6 x 8" and 6.6 x 3.5" sizes. Delivery of the displays to Harris, the cockpit electronics integrator, started this summer for use in the program's demonstration and validation phase.

Frasca International, Inc. delivered the first TH-67 Cockpit Procedures Trainer (CPT) as part of Bell Helicopter Textron's \$85M contract with the Army for the New Training Helicopter (NTH) program. The Army will use the CPT to train students in the proper procedures for engine startup, shutdown, and ground emergencies. Nine Frasca CPTs are on order.

CW4 Mark E. Metzger has been awarded the American Defense Preparedness Association's Tester of the Year for his service as an Experimental Test Pilot with the Airworthiness Qualification Test Directorate (AQTD) at Edwards AFB, CA. CW4 Metzger was the test director/test pilot on the integration of the T700-GE-701C engine on the Apache, and became the Army expert on this integration. CW4 Metzger retired from the Army last spring as a Master Army Aviator with almost 6,000 flight hours.

The 110th Aviation Company (SETAF) is seeking all former unit members (or their dependents) that served and lived in Verona, Italy between 1963 and 1970 for establishment of a roster leading to a possible reunion. Interested parties should write to John K. Carpenter, 5440 East Colby Street, Mesa, AZ 85205 or telephone (804) 888-2475 (Ft. Eustis, VA, during business hours) or (804) 220-0352.



Dear Readers:

Welcome to a brief trip down memory lane. As you read through our founder Art Kesten's review of some of the highs and lows over the years, keep in mind that what he has put together as a historical perspective is just the tip of the iceberg.

When we started this project last year, we thought we might reprint some landmark articles that had appeared over the years. Every major personality in Army Aviation since 1953 has contributed to the magazine, from those who developed its mission and doctrine like LTG Robert R. Williams and GEN Hamilton H. Howze to logistics support like LTG William Bunker and Joseph P. Cribbins, and even to the Branch itself like LTG Ellis D. Parker. We quickly realized that we would need a magazine issue about the size of your average dictionary just to scratch the surface.

We decided instead to condense each decade into a few montages of the various headlines, bylines and photos that Art felt best captured many of the most significant events. Contrary to his contentions, you may need a magnifying glass, but we're sure you'll enjoy the retrospective.

As for today and tomorrow, take a look at the next few pages for a fascinating look ahead to the next forty years of Army Aviation by the Branch Chief, MG Dave Robinson.

A special thanks is due to all the people who contributed Anniversary Messages. The new Secretary of the Army, The Honorable Togo D. West, Jr., sets the tone on page six and GEN Gordon R. Sullivan, the Chief of Staff, U.S. Army, leads off the special section on page 50. Where some of these people were, and what they were doing when they first read ARMY AVIATION are, to say the least, unique.

Additionally, please take a moment out to help us show our support to some of the advertisers in this issue who have been such outstanding supporters over the years by casting your ballot for your favorite ad. See page 62 for details.

Finally, and most importantly, we thank you, the readers and authors of ARMY AVIATION. The last forty years were in your hands. Certainly, the next forty years are as well. Fire up your word processor and send us an article. We'll do our best to make sure you're on the montages for the '90s when we publish our Golden Anniversary issue in 2003.

On behalf of all of us at Army Aviation Publications, Inc., thank you!

Lynn Coakley  
Publisher

William Harris  
Editor

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*Arthur H. Kesten*

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## FRONT COVER

***Paid advertisement: Sikorsky Aircraft, Division of UTC.** Sikorsky Aircraft congratulates ARMY AVIATION Magazine on its fortieth anniversary with a montage of contributions to the U.S. Army's helicopter forces. From the beginnings of this industry, Sikorsky has been the leader in rotary flight and will continue to advance it well into the next century.*



SECRETARY OF THE ARMY  
WASHINGTON

December 13, 1993



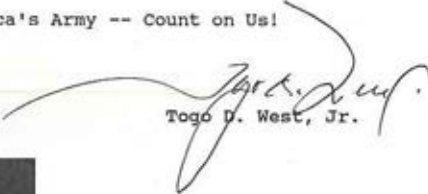
TO ARMY AVIATION

Army aviation was born over fifty years ago. A decade later, the progress of Army aviation began to appear in your publication. During the past 40 years, we have experienced a great deal of change, both in the world and in Army aviation. The aircraft of the 1940s have little resemblance to the helicopters of Desert Storm and Somalia. However, it is the same spirit of those early visionaries that provides a continuity in today's Army.

Another continuum is the American soldier. During my confirmation hearing, I said that the individual soldier is the ultimate smart weapon. The Army and the Department of Defense have to do our part to maintain support for America's ultimate smart weapon. I am committed to doing just that. I challenge your magazine to remember the soldiers as you continue to report on Army aviation. In taking care of America's soldiers, we must ensure they have the best equipment available as America's Army prepares for the 21st Century.

Congratulations on your 40th anniversary.

America's Army -- Count on Us!

  
Togo D. West, Jr.



## THE NEXT FORTY YEARS

### *The Branch Chief looks ahead to the future of Army Aviation in the 21st Century.*

The humor of Yogi Bera's quotation, "The future ain't what it used to be" has subtle and profound meaning today. As major changes sweep the globe, predicting even a year or two into the future challenges even the most perceptive thinkers. It is therefore with some trepidation that your Branch Chief attempts to respond to ARMY AVIATION Magazine's request that I look at Army Aviation 40 years into the future.

Forty years ago, when ARMY AVIATION Magazine began publishing, Army Aviation was completing a period of phenomenal growth resulting from the tremendous role it was able to play in the Korean Conflict. Its aircraft inventory had more than tripled in three years to a total of 3,500. Its role and mission, although some-

what expanded, was limited for the most part to observation, reconnaissance, fire adjustment, medical evacuation, and battlefield resupply. The old Department of Air Training of the U.S. Army Field Artillery School at Fort Sill had just become the U.S.

Army Aviation School, and the move to a location other than Fort Sill was being considered. Who could have predicted then what Army Aviation would experience and become by 1993? Can the past 40 years be a prologue to the next 40?

How Army Aviation will evolve during the next four decades is inextricably linked to future directions in the world and our Nation's future need for military forces. Complex ideological, political, and economic interactions will cause some analysts

to question whether the exercise of military power remains a relevant means of achieving national goals. Autonomous operations will become less common as calls for collaborative commitment increase; this will greatly complicate the political and military decision processes.

**F**uturists Alvin and Heidi Toffler have perceptively labeled the current "Information Age" as the "Third Wave" in the development of civilization. The other two great revolutions in human history, the Agrarian Revolution of 8,000 B. C., and the Industrial Revolution of the eighteenth century provide a sharp contrast to the present — when digital circuits enable us to pass almost infinite quantities of information around the world in nanoseconds.

The Tofflers postulate that this information and knowledge explosion has significantly influenced the ideological, political, and economic underpinnings of civilization. While other observers believe that contemporary change is being driven largely by the demise of the Cold War, the Tofflers conclude that the increase in knowledge during this age, perhaps the most rapid increase since the Enlightenment, is the principal reason for change in the world today. They suggest that our national strategy may currently be in somewhat of a vacuum, having been un-

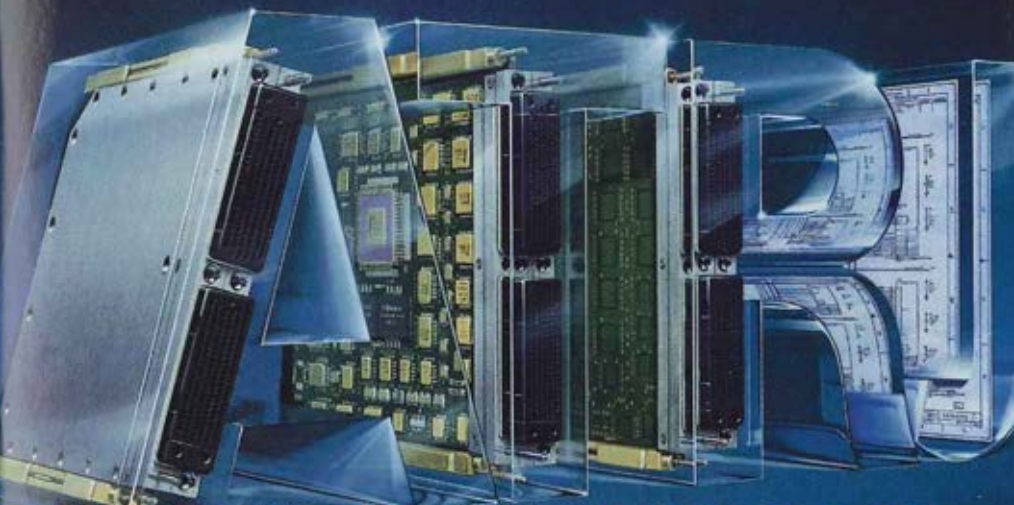
hinged by the loss of the Cold War paradigm.

Ancient hatreds and intolerant attitudes persist, however, confirming the probability of future conflicts ranging from high technology battlefields to operations other than war. Sovereign nations will be increasingly assertive and will tap the high technology weapons producers of the world, who will tend to respond when presented with hard currency. Because of the proliferation of high technology, there will be a movement away from large standing armies.

**R**equirements for lethal and precise weapons that have the effect of massed forces will increasingly influence defense investment decisions. There will be considerable interest in space-based and terrestrial sensor communications, ballistic missiles, systems capable of precision fires, and perhaps non-lethal weapons. Agile, stealthy weapons platforms, both manned and unmanned, along with sophisticated electronic countermeasures will become increasingly important for battlefield survivability. The Army will likely increase its investment in manned and unmanned sensors, intelligence-producing systems, space-age communications, joint precision fires, agile and maneuverable armed reconnaissance, attack and assault platforms, and missile technologies.



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As much as we might like to think otherwise, the peace dividend will probably remain elusive. During the Industrial Revolution, fewer workers could weave far more cloth with the new power looms than they could before, but far more cloth was required by the rapidly growing world population. During the Information Age, as armies are reduced in size, most of the resulting cost savings will perforce be directed into Information Age technologies so as to provide the necessary means for the promotion of our national interest and a concomitant free, democratic world.

The capability for successful operations in the third dimension of the ground battle regime will become paramount. In the next 40 years, war is not likely to become a "push-button" affair, nor will it be conducted solely from the air. Joint forces operating in coalition with other nations will be the norm. Air maneuver in the ground regime will become commonplace in maneuver battle punctuated with high technology infantry and special operations soldiers. As T.R. Fehrenbach astutely observed,

***"During the Information Age, as armies are reduced in size, most of the resulting cost savings will perforce be directed into Information Age technologies. . ."***

"We can fly over the land, bomb it, atomize it, and wipe it clean of life; but if we desire to preserve it for civilization, we must ultimately put soldiers in the mud."

In the future high-technology ground environment, the role of Army Aviation will greatly increase. We will consummate the Aviation Restructure Initiative, gaining a streamlined force of fewer personnel equipped with the highest technology systems possible.

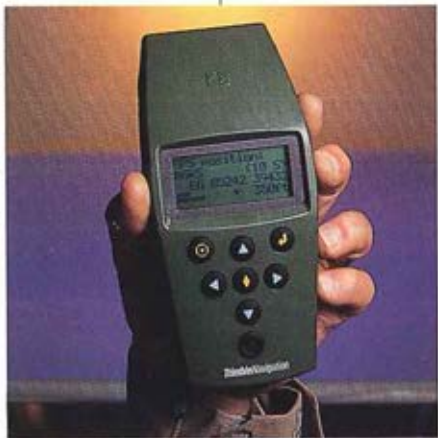
Systems such as Longbow Apache, Comanche, Black Hawk, and the Chinook upgrade will be pivotal in meeting the ground commander's needs in all dimensions of the battlespace. Research and development will focus on advanced composites, propulsion, sensors, missiles, avionics, visionics, electronic survivability equipment, and digital communications.

The recent publication of FM 100-5, *Operations*, gives insight into future warfighting. The focus is on force projection, operations other than war, overwhelming combat power, versatility, simultaneous operations, and joint, combined, and interagency dimen-

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sions of warfare. The Army must respond quickly to uncertain contingencies by fielding lethal, flexible, expandable, and supportable forces. Concepts long associated with aviation, such as "fighting in the spirit of cavalry" and operational parameters like agility, initiative, and flexibility must characterize the fighting capability of the entire Army of the next century. Since Army Aviation is already well acquainted with the precepts of FM 100-5, we should not find it difficult to relate to the Army's emerging operational concepts of battle across the full range of military operations.

**A**viation tactics, techniques, and procedures will be adjusted to gain decisive victory against increasingly sophisticated adversaries. The training base will be challenged to shift from brute-force-thinking to harness the power of the human brain. Information Age technologies will demand agile-minded, intuitive leaders empowered to make quick battle decisions. As more powerful sensors become available and lethal systems with greater precision and lethality emerge, training regimes must change to harness soldier intellect. As we move from the era of the Huey and Cobra, significant investment must be made in the training base now to transition aviator and maintenance personnel from these

faithful but mature systems to modern equipment.

**T**here is no reason why traditional hierarchical staffs cannot be flattened. We must be capable of identifying the most outstanding and intuitive leaders and of training them to use the information produced in these new battlefield circumstances. The time is near when large, cumbersome staffs can be streamlined. Information Age technologies will do much of the work currently done in the acetate and grease pencil environment. You can be certain many will resist, just as the computer has been resisted by many during the last decade. While Information Age technology will permit large amounts of information to be processed very quickly, the question remains: To what end shall we use this information?

Simulation technology will be powerfully harnessed for training and combat development purposes. Sophisticated networks will link combined arms elements in real, constructive, and virtual environments. Much of our individual, crew, and collective training will be done in a simulation environment; we can and should trade off some OPTEMPO to accomplish this. The simulation environment will permit mission rehearsal on terrain developed from a worldwide database con-

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taining natural and manmade terrain; dynamic terrain will be commonplace in our training environments. Sophisticated opposing forces with blue-grey technologies will offer significant challenge in these simulation environments. The time is not far off when aviators will go "on line" with their home personal computers and interact with other warriors on a simulation network. This Information Age technology has significant implications for the National Guard and the USAR components.

**A**rmey Aviation can and must lead the way in harnessing the power of the Reserve Components. In the post Cold War environment, all components must be shaped for short-notice contingency operations. Large reserve forces for mobilization purpose are a vestige of the Cold War. Statutes must be changed to give the National Command Authority immediate access to fully modernized Reserve Components. While offering tremendous potential, breaking the paradigm of past attitudes and practices will prove a formidable task.

In the next 40 years, we will harness information technologies to sustain the force. Smaller, high tech-

nology forces must be complemented with state-of-the-art diagnostic equipment in the hands of highly trained technical specialists. Aviation's "Stripes on the Flight Line" and Technical Career Track for our non-commissioned officers are exactly on target and must be promulgated.

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Technology will also greatly increase our knowledge of how to protect our investment from mishaps. We are just beginning to understand risk and its impact on crew coordination and cockpit decisions. In the past 30 years, Class A mis-

***"Army Aviation  
can and must  
lead the way in  
harnessing the  
power of the  
Reserve  
Components."***

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haps have been reduced from 30 to fewer than two per 100,000 flying hours. While system reliability has increased, we are flying smarter. In the coming decades, we must push the envelope of knowledge to reduce risk by lessening cockpit workload with better avionics and improved visionics. Much was said earlier about intuitive thinking; such thought can be applied in preventing avoidable accidents. Safety must be predominant to protect our expensive personnel and equipment investment from needless mishaps.

**M**inority American representation will continue to increase in all phases and levels of Army Aviation during the next decades. Women will find great opportunity to progress in the Branch. We are justly proud of recent progress made in these areas.

While we all have great pride in what has been accomplished, the demand for change in the next four decades will greatly alter attitudes and investment priorities in the Army. The time has come to confirm Aviation leaders as full participants in the Combined Arms Team. With full acceptance, many future senior leaders will wear Army aviator wings, serve in Army and Joint positions of significant responsibility, and rise to the highest positions in the Army. Essentially, the Army will transition as

it did in earlier times when Field Artillery officers were finally accepted as capable of commanding divisions and corps, thus permitting service at the highest levels.

**A**viation warrant officers' duties will be greatly expanded; they will be placed in increasingly important command and staff positions throughout the force where aviation technical expertise is needed. Noncommissioned officers will possess greatly broadened technical skills and become specialists and experts in their aircraft field. As such, aviation maintenance must remain integral to the Aviation Branch.

The human mind is able to predict the future only as through a glass darkly. Just as someone in 1953 attempting to plot the course of Army Aviation for 40 years in the future would have been hard-pressed to predict the Comanche and the simulation technology we use today, perceiving the latter decades of the next 40 years can be done only in vague outlines. In one thing, however, I am very confident: in the year 2033, Army Aviation soldiers will be able to reflect on the previous four decades as truly remarkable.

★★

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





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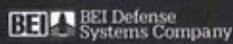
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## YOU'VE COME A LONG WAY, BABY!

When the editor recently asked me to help by contributing to this 40th Anniversary Issue, I said, "How?"

"Look, you were there at the very beginning. Just summarize the 40 years as best as you can, and give us a bit about how this whole thing came about."

How does one summarize — repeat, summarize — 40 years. . . ? Not easily. In the following six spreads and five photo pages that cover the '53-'93 period, you have our best shot. You'll find data and trivia that touch upon a great many of the highlights of this 40-year span.

We've compressed over 1,350 of the headlines and by-lines of many of the magazine's feature articles, and added a random assortment of

*Compressing  
some  
40 years of  
ARMY  
AVIATION  
Magazine  
into seventeen  
pages.*

AAAA and corporate logos. We even fit in a few cartoons and aircraft silhouettes in these itty-bitty two-page mosaics . . .

Itty-bitty? Judge for yourself! How else can one condense over five years of history into a single page? Read the stuff! I'll tell

you this: My 72-year-old eyes can read all of the pages quite easily so legibility can't be your cop-out.

By our count, there are 227 individual by-lines appearing in the spread pages. Perhaps yours is one of them. You'll find many of the names of the "true giants" of Army Aviation squeezed into those spread pages somewhere.

Why did wife "Dotty" spend almost three weeks at the reduction copier and I spend equal time cutting-and-pasting the 1,374 in-



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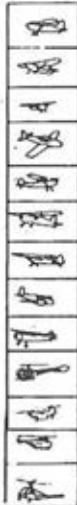
Cockpit integration by CMC. For integrated systems that perform better.



CANADIAN MARCONI COMPANY  
AVIONICS DIVISION



MARCH 1, 1953



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

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

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

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

spread covering the '90-'93 period.

Yes, the format and content of ARMY AVIATION Magazine changed gradually over the years and it's very discernible.

Beginning in the mid-1980s, the publication became less personal as 36 to 40 global correspondents contributed their "Here's what we're doing!" summaries each month. Where before the volunteer scribes wrote about their battalions, the new authors wrote about their aviation brigades. If you aren't impressed by this major quantum growth in structure and don't mutter, "Wow!" at this point, we'll say it for you: "Wow!"

dividual items in the two page spreads...? Yes, someone actually counted the 1,374!

Why this effort? Simply because we wanted to make certain each one of you could capture the "flavor" of Army Aviation history as told through the headlines we published in each decade.

Some of our younger CWOs, as well as the Lieutenants and Captains who came on board later, may enjoy noting the very personal "makeup" of the early '53-'59 issues as contrasted with the high tech editorial approach shown in the

This change did not come about without pain . . . Many of our 2,000+ vintage readers whose subscriptions date back to the '50s and '60s regularly bemoan the fact that today's columns, "Arrivals and Departures" (yesterday's "PCS" columns), do not list any familiar names to which we are prone to respond, "Where have you gone Bill Bailey, Perry Como, and Joe DiMaggio? We don't see your names in the papers anymore."

One disclaimer: In going through the 40 years of issues, page by page, with a rigid publisher's deadline,



## IT CRUISES AT 468 KNOTS AND HAS THE ROOMIEST, MOST COMFORTABLE CABIN IN ITS CLASS.

The Beechjet 400A does not sacrifice comfort for speed. Quite the contrary.

The 400A's "vertical oval" cabin design provides more head and shoulder room and more interior volume than competitors' cabins can offer.

And the Beechjet 400A flies at real jet speeds. With a maximum cruise speed of 468 knots plus the ability to climb direct to 41,000 feet in just 22 minutes and operate routinely at 45,000 feet, it pro-

Crew/Max. Passengers	2/9
Maximum Altitude	45,000 FT
Maximum Range (with reserves)	1,900 NM
Maximum Speed (FL 270)	468 KTAS
Weights:	
Maximum Ramp	16,300 LBS
Maximum Takeoff	16,100 LBS
Maximum ZFW	13,000 LBS
Basic Operating	10,450 LBS
Useful Load	5,850 LBS
Maximum Payload	2,250 LBS

vides superb performance in every regime.

For more than 60 years, Beechcraft has built high-quality airplanes to meet the requirements of U.S. military services. The Beechjet 400A, in service with the Air Force as the T-1A Jayhawk, is the latest Beechcraft to join this tradition of excellence.

For more information, call Bill O'Neal, Director - Aerospace Aircraft Marketing, at 316-676-7168.

IT'S NOT JUST AN AIRCRAFT. IT'S A BEECHCRAFT.

# Beechcraft

A Raytheon Company

we had to make some quick decisions and grabbed what we could for the copier. What you see in the spreads only represents a fraction of the hundreds of articles and column heads that ran in the magazine, so don't be miffed if something, or someone, or some by-line is missing.

### The beginnings

As a Reservist flying weekends from Governor's Island in N.Y. Harbor in '53, we edited a monthly mimeograph newsletter for First Army Reservists (ARNG and USAR) and active Army Aviators. We did so at gov't expense (Uncle Sam's mimeo machine, paper, and postage, but our sweat).

The "Why?" of the effort is outlined on the cover of our very

first mimeograph issue dated March, 1953 that's reproduced on the previous page.

We were subsequently thrown off post five months later when the G-1 told us the newsletter and its use of the First Army patch were unauthorized. Our action? We upped the subscription to a big \$2 and, in today's vernacular, "privatized" the magazine. A little over a year later, some 2,600+ had sent in their two dollars.

### The staff

Initially a true "Mom and Pop" operation run as a hobby from a 14th story, two-bedroom apartment in downtown NYC (as shown in Joe Gayhart's cartoon immediately below), the magazine staff in Connecticut went to two full-timers in



# C-27A Spartan



**H**arsh, corrosive tropical climates... Short, undeveloped runways... for the Air Combat Command and the U.S. Southern Command, they're a way of life. But how to perform the mission when the right aircraft does not exist?

**Chrysler Technologies Airborne Systems, Inc.** is providing the sensible solution: Combine the proven ruggedness of Alenia's G222 STOL airlifter with state-of-the-art avionics to produce the reliable, multi-mission C-27A Spartan aircraft. When the mission calls for airland, airdrop, aeromedical, LAPES or follow on in-flight tanker refueling support capabilities, the versatile C-27A meets the challenge. Chrysler Technologies Airborne Systems then backs it with the industry's most comprehensive support package.

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- Design and integration of new avionics systems
- Testing and certification of aircraft and systems
- Fabrication and installation of systems and mission-specific elements
- Flight and maintenance crew training
- Technical publications
- Field logistics and technical support

*C-27A Spartan...Flexible, Supportable, Available!*



**CHRYSLER  
TECHNOLOGIES**

AIRBORNE SYSTEMS, INC.

July, '55 ("Mom and Pop" plus a part-time working mother); went to four in '70 as more AAAA administrative tasks were assumed by the staff (and here began the down-in-the-basement residual smoke operation); and to eight people in '83.

The current masthead lists 11, a good many of whom are primarily involved in direct AAAA support, and there are no shirkers or lurkers among them.

Peel away the four-color veneer and you'll find that "Mom" was the real dynamo in this exercise . . . How does one work side-by-side with one's wife day after day for 36 years, and still remain civil, yet alone married?

We agreed early on that anything that pertained to "num-

The Ground Pounders May, 1957



*"This is the last straw! Now those damned pilots have got a Flight Pay Protective Association!"*

During 1957-89, more than 4,200 Army Aviators were covered under the AAAA-endorsed "Flight Pay Protection Plan" with claimants receiving more than \$2.1 million in payments.

## Time lurches on!

The very small troublemaker who appears under the "Yeah, sebben!" balloon in the Joe Gayhart cartoon on the previous page is now the "Publisher" listed on this issue's page 3 masthead.

bers", be it checks, deposits, accounting, IRS, bills, etc. would be her responsibility. And anything that applied to "letters" — editorials, page paste-ups, ghost-writing, production, advertising, AAAA communications, etc. — would be our job. It was this very simple and clear cut division of workplace duties that kept us amicable marriage and business partners.

### Additional duties

The load that she assumed was formidable, particularly as we grew in circulation, ad support, and AAAA administration in the 40 years. We happened to have two children right from the start who had to be transported, mothered, clothed, and fed — these were "add'l duties" that fortunately did not fall on my shoulders. One "plus" — they weren't after school latchkey children; one of us was always working at home when the school bus arrived.

Call me a deadbeat if you must, but I never paid a personal or magazine bill in 36 years, and I'm sort of proud of that. The bills were "numbers" and she paid every one of them. Amazing.

As you might guess, not every-



---

*What really goes  
on inside your  
engine?*



Find out . . . soon.

---

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thing was rosy all of the time . . . there were frequent post-Vietnam, Hamburger Helper and Rice Krispies days when our paid circulation and ad support hit worrisome "lows." (Bill Harris, the editor, in reading the galley proof, quipped, "Are you sure you don't mean Alpo, SOS, and Rice Krispies?") Things really weren't *that* bad, however, and the magazine managed to remain solvent throughout each of its "lows."

When we did hit a "low" and needed industry support it always seemed to be Gene Tallia, Bill Jones, Hans Weichsel or Carl Perry who were there as were others, of course.

#### **Skill and humor**

Our favorite authors. . . ? There were many, but for sheer literary brilliance we could not help but marvel at the many creative and highly professional personal efforts of Carl Hess, "Ris" Rawlings, Don Parker, Bob Williams, and Bill Maddox. We invariably found most aviators to be quite articulate as well as having a wonderful ability to inject humor into every possible situation.

Also, these aviator-writers were always forgiving. As you can guess, for many years we did not have access to the "Spell Check" software of today, and the embarrassing editorial "typos" were somehow rarely mentioned and in most cases entirely overlooked.

Pet gripe. . . ? We have only one: Military acronyms! JTGDM . . . Just Too GD Many!

#### **What's in the future?**

I regard the individuals on the current staff to be dedicated professionals who truly take great pride in their work — it's a personal pleasure to visit the beehive downtown occasionally (and beehive's a true description!), and to note the intensity of their efforts. They are a great crew and I assure you that ARMY AVIATION Magazine is indeed in good hands.

We'd like to say, in signing off, "It's been fun!" We've met and enjoyed the eyeball-to-eyeball company of several thousand subscriber-correspondents, a good many of whom, we're happy to say, are now close personal friends.

Of more importance, I feel that this one-to-one personal relationship exists between today's magazine staff and the countless subscribers and correspondents they now serve. How fortunate we all were . . . and are!

We've come full circle . . . We're right back at the title of this piece, "You've come a long way, baby!" A very happy 40th!

★★

*Senior Aviator Art Kesten was the magazine's initial editor-publisher. He is the AAAA's Past Executive Vice President, and serves as the AAAA Archivist and Vice Chairman of its National Awards Committee. "Doty" Kesten, the Scholarship Foundation's Vice President, now helps transport, mother, clothe, and feed two granddaughters (and still pays all of the family's bills).*

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# NO SHADOW TOO DEEP.

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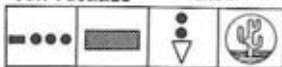
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AIRCRAFT  
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LTD**



# The Month's Takeoffs!

# LETTERS

## 'DER FLUZZEL'



It's your lantern -- Don't poke holes in the paper

Mike Button



MAINTENANCE TIPS FROM TSMC

# GUIDELINES



Officer Career Program

ARMY AVIATION

A Many-Sided Thing

Letters to the Editor

Congratulations!



4/18/87

USAREUR REPORT

AO'S CORNER

Hiller Helicopters

LUCKY FINS

VIEWPOINT



HOPSCOTCHING

## The Camp Wolters Story

## Civilian Contract Training

## 1000-HOUR ACCELERATED FLIGHT TEST

IT COULD HAPPEN!

By Joseph K. Cochran, Jr.

Kaiser

Crew Chief of Month  
Sp-3  
Robert W. Davis



Clearer! Just don't come late just like Pilot! Negot - just when we had this Saturday afternoon off, too!

I've had it!



AA's Mourn Passing of Jim McClellan

PCS  
CHANGES OF ADDRESS

TRECOM

Anniversary Messages  
VERTOL

TRENDS

BY  
Brig. Gen. Ernest F. Enterbrook  
Director of Army Aviation, ODCSOPS

Simulators? Let's have more - and better ones!

ANOTHER ARMY AVIATION MILESTONE

STEVE CANYON



ARMY AVIATION IS COMING OF AGE - AND EVERY GEAR JOCKEY KNOWS IT AND IS GLAD OF IT!

Best wishes to ARMY AVIATION!

## Branch Representation?

A REPORT ON  
usasatsa

INITIAL IROQUOIS RECEIVED

TMC GLOBAL SUPPLY NET AIDED BY IBM COMPUTERS



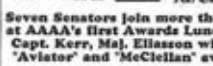
## month's takeoffs

FIRST JAMES H. MCCLELLAN SAFETY AWARD PRESENTED TO MAJ. ARNE H. ELIASSON

KANSAS TO ALASKA H-21 FLIGHT

AAAA News Insert 2

SEVEN SENATORS JOIN MORE THAN 450 AT AAAA'S FIRST AWARDS LUNCHEON; CAPT. KERR, MAJ. ELIASSON WIN THE 'AVIATOR' AND 'MCCLELLAN' AWARDS



## Announcing the Formation of the ARMY AVIATION ASSOCIATION

Pro's Say

Exclusive for AAAA Members

Don't Jeopardize Your Flight Pay!

The Accident and Health Program for AAAA Members



USAREUR REPORT BY COL. WARREN R. WILLIAMS

NEW WORLD RECORDS ESTABLISHED

AROUND THE WORLD WITH SIKORSKY HELICOPTERS

Senior Officer Flight Pay

GEMS: GROUND EFFECT

MACHINES On Guard!

BY BRIG. GEN. RICHARD D. MEYER  
Deputy Chief of Transportation for Aviation, USAF



A REPORT FROM THE U.S. ARMY AVIATION BOARD, 8007 BAYVIEW, ALABAMA

SPLINTERS

from the BOARD

Cessna

OPERATION GRASSHOPPER  
BYVO  
BRITISH-GERMAN ARMY AVIATION ORGANIZATION

THE BUREAU DRAWER

ARNG Aviation Passes 1,100 Pilot Mark

TIPS/MIKE BUTTON

TRENDS  
BY COLONEL HALLETT D. EDSON  
Acting Director of Army Aviation, ODCSOPS

ON GUARD!  
CAPT. JAMES T. KERR NAMED AS THE FIRST "ARMY AVIATOR OF YEAR"

AAAA ANNUAL MEETING  
JUNE 1-6, 1987  
Sheraton Hotel, Washington, D.C.

one for a friend

The Month's Takeoffs!

OPERATION GRASSHOPPER  
BYVO  
An open letter to Lycoming Aeroscouts!  
ARMY AVIATION

DONT QUOTE



TEAMWORK IN LIBYA

A Many Sided Thing

2nd Training Completed by Eight Army Aviators

## Foundational '50's

THE PHOTOS UTILIZED IN THE PHOTO PAGES COVERING THE FIVE DECADE "PERIODS" DO NOT PURPORT TO REPRESENT ALL OF THE MAJOR ARMY AVIATION MILESTONES, AND ARE ARBITRARY SELECTIONS. MANY ARE TO BE REGARDED AS BEING PURELY "SYMBOLIC."



AERIAL VIEW OF THE WORLD'S FIRST HELIPORT AT FELKER ARMY AIRFIELD, FT. EUSTIS. 1954.



ARMY ACCEPTS FIRST PIASECKI H-21C IN PENNSYLVANIA IN '54.



BG HOWZE HEADS NEW AVIATION DIRECTORATE IN DA IN '55.



LATER DESIGNATED A CENTER, THE AVIATION SCHOOL MOVED TO FT. RUCKER, AL. IN 1954.



FULL-SCALE MOCKUP OF BELL'S XH-40, THE NEW UTILITY HELICOPTER, UNVEILED IN 1955.



WALTERS AFB, TX, TRANSFERRED TO THE ARMY FOR ROTARY WING FLIGHT TRAINING IN 1956.



A 2,700-MI. NON-STOP 1956 SAN DIEGO TO D.C. FLIGHT MARKED FIRST AERIAL REFUELING.



INITIAL HELICOPTER ARMAMENT UNDERWAY IN '55-56.

## AN AA ASS'N HAS BEEN ORGANIZED

AN AA ASS'N. QUICK-STARTS WITH 2,000+ 1957 MEMBERS.



COL. R.R. WILLIAMS, R., IS 1ST MASTER AA ('57).



HQDA ORDERS INDIAN NAMES FOR AIRCRAFT.



DA PLANS, EXECUTES MID-1957 AERIAL DELIVERY OF TWO L-23D'S TO EUROPE.



THE ARMY'S NEW IROQUOIS HELICOPTER, THE HU-1A, UNDERGOES RIGID TESTING IN 1958.



MG B.S. CAIRNS DIES IN 1958 CRASH.



AAAA HOLDS FIRST CONVENTION (1959).



ARMY'S NEW YHC-1A MAKES FIRST FLIGHT IN AUG. '59.



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For more information, please contact Mr. S.J. Ignat,  
Stinger Program Development, Rancho Cucamonga Facility,  
P.O. Box 50800, Ontario, California 91761-1085, (909) 945-8189.

AAAA'S JOIN A GARMISCH GET-TOGETHER

WHY THE FOOT?

chipmunk

High Altitude Training

Mike Button

1941-1942

TEST BEDS

monthly takeoffs

PROGRESS SUMMARY

In the Field

Splinters from the Board

WELCOME TO AAAA!

AAAA

TC Briefs

THE FACTS ON INDUSTRY MEMBERS

ARMY HELICOPTERS REACH WORLD'S NORTHERMOST TIP OF LAND

FIRST ARMY TEST PILOTS GRADUATED BY U. S. AIR FORCE

"Top of the World" Aviation Duties Offer Unique Operational Problems

ARMY RECEIVES MODERNIZED H-24

USAAC REPORT

ARMY AVIATION

Maintenance Tips

BELL HILLER DESIGNS WIN LOH COMPETITION

The Nuclear Battlefield

BY CAPT. BRIAN C. MOORE

AA IN PHOTOS

OPEN LINE

MIKE BUTTON MAINTENANCE TIPS

BAMC DEDICATES HELICOPTOR

Significant '60's

We Top Out at 6,438

THE GEN-GETOL MARRIAGE

MAPS!

a foot in the door

AAAA

ARMY-INDUSTRY TEAM

ARMY'S 7TH-10th DIVISIONS COMPLETE FIRST FLIGHT

CHAPTER OFFICER SLATES

COMMITTEES OF INTEREST

AAAA IN PHOTOS

1962 ANNUAL MEETING

COMMEMORATING THE 20TH ANNIVERSARY OF ARMY AVIATION BY THE U.S. ARMY

AAAA ORGANIZATIONAL NEWS

Iroquois Program

HUMRO ACTIVITIES

FY '61 FUNDS UNDERWRITE 'COPTER ARMAMENT

PANEL Q & A

RUN FOR THE RECORD

USAREUR REPORT

USAREUR REPORT

THE ABC'S OF R & D

'COPTER FLIGHT TRAINERS

ENJOY JOE

SCIENCE AWARDS

ARMY AVIATION PROGRESS IN VIETNAM

THE BUILD-UP FOR CUBA

VIETNAM RECEIVES FIRST AAAA SCHOLARSHIP

SENIOR OFFICERS IN ARMY AVIATION

D.C. SCIENCE AWARDS

Congressional Record

LETTERS TO THE EDITOR

1961 ANNUAL MEETING

COMMEMORATING THE 100TH ANNIVERSARY OF AIRBORNE OBSERVATION BY THE U.S. ARMY

NAP-OF-THE-EARTH TACTICAL TRAINING

THE SECOND TRIPARTITE ARMY AVIATION CONFERENCE

AAAA PANEL DISCUSSION

THE ARMY LOOKS AT ITS AVIATION FUTURE

BY BROADCASTER GENERAL UELA M. OGDEN

FORT EUISTS CWO RECEIVES ARMY AVIATOR OF YEAR AWARD

CORROSION OF AIRCRAFT COMPONENTS

A POSSIBILITY...

UNPAINTED AIRCRAFT

AAAA MEMBERSHIP BUSINESS SESSIONS

THE FLIGHT PAY PROBLEM

THE ARMY LOOKS AT ITS AVIATION FUTURE

20TH ANNUAL MEETING COMMITTEES

SI

THE FLIGHT PAY PROBLEM

claims review

20th ANNUAL MEETING

THE ARMY LOOKS AT ITS AVIATION FUTURE

TOP GUN

20TH ANNIVERSARY CELEBRATION

USAPHS CELEBRATES SIXTH ANNIVERSARY

CONARC REPORT

TECHNICIAN TRAINING

SOME ADVICE BEFORE GOING TO VIETNAM

CDC REPORT

IT'S TIME TO POLL ON AAAA AWARDS

AAAA PRESIDENT'S ANNUAL REPORT

Congratulations to Army Aviation on its 20th Anniversary... from the Mohawk

GEN. HOWZE TO HEAD NEW MOBILITY BOARD

OLD PLANES NEVER DIE

DOES AVIATION OFFER A VISIBLE CAREER PATTERN

AAAA ANNOUNCES \$1,500 SCHOLARSHIPS

GEN. HOWZE RECEIVES AAAA SILVER MEDAL AWARD

10th AIR ANNUALLY UNDERGOING FINAL TESTS

U.S. ARMY SETS 107 TEN WORLD RECORDS!

THE WEIGHT LIMITATION - MAY IT REST IN PEACE!

CALENDAR MANNED AIRCRAFT

VIETNAM REPORT

THE TIGER PROGRAM

COMES TO AN END...

BY COL. JAMES E. GONSETH

COMMANDANT, USAPHS

monthly takeoffs

ARMY AVIATION PROGRESS IN VIETNAM

VIETNAM RECEIVES FIRST AAAA SCHOLARSHIP

SENIOR OFFICERS IN ARMY AVIATION

D.C. SCIENCE AWARDS

Congressional Record

LETTERS TO THE EDITOR

DEEP FREEZE

monthly takeoffs

Don't Jeopardize Your Flight Pay!

NEWSLETTER PURPOSE TO PASS ALONG NEW CONCEPTS

HUGHES OHG-A TAKES FIRST FLIGHT

CONARC REPORT

WHY ARMY AVIATION?

USAAVNS USES 7,000 TRAINING SCHEDULES WEEKLY

FORT RUCKER REPORT

ARMY AVIATION

Sympathy .....or Cash?

20TH ANNIVERSARY CELEBRATION

USAPHS CELEBRATES SIXTH ANNIVERSARY

CONARC REPORT

TECHNICIAN TRAINING

SOME ADVICE BEFORE GOING TO VIETNAM

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IT'S TIME TO POLL ON AAAA AWARDS

AAAA PRESIDENT'S ANNUAL REPORT



INITIAL 240 AAAA DONORS  
1965 SCHOLARSHIP FUND

McNAMARA ACTIVATES  
AIRMOBILE DIVISION

ARMY ORDERS LOH

TAKE A QUICK QUIZ!



MAY, 1968

THE BIRTHDAY OF THE  
**AIR TRANSPORT  
BRIGADE CONCEPT**

COLONEL DELBERT L. HOPKIN,  
SENIOR MEMBER OF ARMY AVIATION,  
NATIONAL DEPARTMENT OF THE ARMY

EXTENDING  
OUR  
NIGHT  
OPERATIONAL  
CAPABILITIES



BY  
BY COLONEL  
GEORGE F. McMEIKEN  
SENITT, JR.

CHINOOK COMPLETES EUROPEAN TOUR ...

USAAVNS  
AVIATOR  
INPUT  
REDUCED  
IN FY 66

Vietnam  
Report

A  
BRIEFING  
ON THE  
ARCSA II  
STUDY

A 25 YEAR  
STRUGGLE  
FOR  
MATURITY

U.S. ARMY  
SUPPORT  
COMMAND  
VIETNAM

Decentralized  
Operations  
Characterize  
Present Day  
British  
Army Aviation

CHANGING:  
THE ESSENCE  
OF A MILITARY  
CAREER

Father-Son

USAFS  
TESTS  
MISSION  
SUITABILITY  
OF TH-55A

USAFS ELIMINATES  
ONE OF EVERY THREE  
WO CANDIDATES

FIRST MASTER WINGS RETIRED

FPPP CLAIMS  
ANALYSIS

ATTLEBORO!

CALENDAR

**BUFFALO ACCEPTED**

BRIEFS  
JULY, 1968

SEN. OGDEN CITES VIETNAM  
FEASIBILITY AND LIKELIHOOD

VIETNAM'S  
13TH AVIATION  
BATTALION  
"OUTSTANDING  
AVIATION UNIT"

OBITUARIES

A NEW  
HELMET

BETTER TRAINING  
FOR NO AVIATORS

TWIN OTTER DEBUT

Former Secretary  
Stephen Altes  
Receives AAAA  
Silver Medalion

AVCOM Contracts  
Exceed \$1 Billion  
For Second Year

CALENDAR

New Equipment  
Training

AVCOM Contracts  
Exceed \$1 Billion  
For Second Year

**AVIATOR  
PERSONNEL  
PLANNING**

DSC Awards

GERMAN  
ARMY  
AVIATION

The New  
Army  
Aviation  
Ring

General Howze  
to Lead AAAA  
in 1968-1969

GROUND FORCE AVIATION  
THE AIRMOBILITY CONCEPT IS BORN

**AIRMOBILE  
LOGISTICS**

Army Team  
Tops Four  
Altitude  
Records

More news from the  
SEMA-PMO; MOHAWKS  
point round the world.

USAF O-2A

VIETNAM DIALOGUE

Veritable  
Giant!

Controlled training:  
The Eastern ARMO  
Aviation Training Site

LARGEST NIGHT  
COMBAT ASSAULT

'69 AAAA  
REGIONAL  
AWARDS



**THE MOHAWK  
IN VIETNAM**

Nominations  
Sought  
for AAAA  
National  
Awards

DA  
ESTABLISHES  
INTENSIFIED  
CONFIRMATORY  
TESTING

AS ORDERED BY THE SECRETARY OF THE ARMY

Fifteen  
U-S's  
Complete  
Trans-  
Atlantic  
Ferry  
Flight

USACOC  
Envisions  
Fireproof  
Outfitting

NEW ALL-RISK  
FLIGHT PAY  
INSURANCE  
WITH FULL  
COMBAT COVERAGE  
TO BE PROVIDED  
TO AAAA MEMBERS  
ON NOVEMBER 1ST

The  
New  
AR  
95-1

OBITUARIES  
AVSCOM  
In  
Transition

OPERATIONAL  
CAPABILITIES

1967  
Briefings  
To Cover  
The 70's

IS RETENTION A PROBLEM?  
YOU'D BETTER BELIEVE IT!

ECOM-APCEA-AAAA BRIEFINGS  
HIGHLIGHT "AVIONICS" FUTURE

LOGISTIC SUPPORT  
OF ARMY AVIATION

Why not consider  
low-cost  
AAAA-endorsed  
"cash value" life insurance  
for added protection  
for your family?

1ST AVIATION  
BRIGADE NAMED  
"OUTSTANDING  
UNIT OF YEAR"

ITALIAN  
ARMY  
AVIATION

V/STOL  
JEEPS,  
AND GEMS

YOUR ENTITLEMENT  
TO FLIGHT PAY

THE EVOLUTION  
OF TODAY'S  
ARMY AVIATION

HIGHLIGHTS  
OF REFORGER I

AVIATION-  
ELECTRONICS

MEDEVAC: A Proud  
Member of the Army  
Aviation team

NEW MEMBERS  
JOINING AAAA

THE AM-1 Flight and  
Weapons Simulator

SPEAKING OUT  
THE VIETNAM LIGHTNING BUG MISSION  
WHY NOT A COMBAT AVIATION BADGE?  
ARMY AVIATION: FULL OR PART-TIME JOB?

AERIAL  
GUNNERY  
COURSE  
AN ARMY  
"FIRST"

Nightsun  
LADD AGENCY

An PCS  
Emphasis  
on R&D

How Far  
Should We  
Go With  
Propensity?

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

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Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

VTOL IN  
THE USSR

THE  
INFANTRY-  
AVIATION  
TEAM

A  
CENTURY OF PROGRESS

The  
Doubts  
Are  
Being  
Answered

General Howze  
to Lead AAAA  
in 1968-1969

GROUND FORCE AVIATION  
THE AIRMOBILITY CONCEPT IS BORN

AIRMOBILE  
LOGISTICS

Army Team  
Tops Four  
Altitude  
Records

More news from the  
SEMA-PMO; MOHAWKS  
point round the world.

USAF O-2A

VIETNAM DIALOGUE

Veritable  
Giant!

Controlled training:  
The Eastern ARMO  
Aviation Training Site

LARGEST NIGHT  
COMBAT ASSAULT

'69 AAAA  
REGIONAL  
AWARDS

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition



**COMPOSITE!**

Profile of the AWC Student Aviator

THE NEW ARMY AVIATION  
POLICY STATEMENT

VULNERABILITY!

SOLAR

"Equalization of  
Flight Pay" Alred  
At AAAA-OPO  
Personnel Seminar

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

AVSCOM  
In  
Transition

'69 AAAA  
REGIONAL  
AWARDS

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

Weapons  
Acquisition

## Significant '60's



SEVEN ARMY AVIATORS COMPLETE 1961 USAF TEST PILOT TRAINING AT EDWARDS AFB



THE ARMY RECEIVES ITS INITIAL GRUMMAN OV-1 DELIVERIES THROUGHOUT 1960-1961



HILLER AND BELL SELECTED FOR 1961 LOH DESIGNS



LTG H.H. HOWZE HEADS '62 "MOBILITY" BOARD



SECDEF APPROVES ARMY '61 TAKEOVER OF THE CORPUS CHRISTI ARMY DEPOT (CCAD)



FIRST GLOBAL DEPLOYMENT OF AA UNIT. 1ST AVIATION CO. FLIES TO VIETNAM IN 1962.



FIRST SUCCESSFUL FLIGHT OF THE ARMY'S OH-6A "LOH" AT HUGHES TOOL CO. IN 1963



SECDEF MCNAMARA OK'S NEW AIRMOBILE DIV IN '65



1ST CAVALRY DIVISION (AIRMOBILE) ENTERS COMBAT AS DIVISIONAL UNIT IN VIETNAM IN '65



ARMY GETS 18 SIKORSKY CH-54A TARHE IN 1966



1ST AVIATION BRIGADE ACTIVATES IN 1966



ALO OPENS IN DA IN '67 WITH J.P. CRIBBINS



FIRST AH-1 COBRA DELIVERED TO THE ARMY BY BELL HELICOPTER IN MAY, 1967



BELL WINS RE-OPENED LOH COMPETITION; GETS 1968 ORDER FOR 2,200 JETRANGERS



SFC RODNEY J.T. YANO, A 1969 MOH WINNER



AMC GIANT, LTG W.B. BUNKER, DIES IN 1969



ARMY ADOPTS NEW SPH-4 HELMET ('69)

# Is It Really Worth Spending Over A Billion Dollars On The Huey To Get Better Gas Mileage?

It's time we put this whole Huey upgrade program into perspective. It's time we stop talking about gas mileage and horsepower and which engine has what features.

And it's time we start looking at the big picture.

Replacing the T53 engine currently in the Huey will mean retro-fitting hundreds of helicopters. It will mean re-training thousands of mechanics, and building a new parts inventory. It's a process that will cost America over a billion dollars.

As for gas mileage? It will take a more fuel-efficient engine over thirty years of continuous flying to recoup this

billion dollar investment. Thirty years, just to get us back to zero. Somehow it just doesn't add up.

Of course, there's more to the

Huey upgrade program than money. The T53

is the only engine that has a proven track record in a single engine environment. No matter how much you spend, you can't replace that.

All told, we think you'll agree: the argument for switching away from the T53 engine doesn't hold water. Or gas, for that matter.

**TEXTRON Lycoming**

Textron Lycoming Turbine Engine Division  
Subsidiary of Textron Inc.

Like it is... **Command and Staff**

Could we field the Cheyenne?

**CHANGES IN THE MOS STRUCTURE**

**PROFILE: JO/WO's in action**

101st Airborne Division Selected as 1969-1970's "Outstanding Unit"

ARMY TO RECEIVE THREE CH-54'S IN JULY-AUGUST

**The wings you wear!**

The birthday is wrong!

**AWOAC-1**

The In Box

**AAAA: WHY JOIN?**

Mission Support Aircraft

The Army's Aviation Requirements for the 70's



Question: Can a Redeye Cobra knock down an enemy high performance Jet?

Sikorsky unveils new gunship

ARMY PERFORMING DUAL SERVICE IN TARS FACILITIES

OVERLOOK AND INATTENTION! THE HELICOPTER INDUSTRY IN AUTORTATION!

Realistic optimism marks today's AWO program

Blow your horn! **1970 CLOSES ON THE UPEAT!**

Leadership

**HIGH INTENSITY WARFARE**  
The Light Side

**FAMILY AFFAIR!**

Progress Report on Cheyenne procurement

USARY RETURNEES BOOST OVERALL ARNG ENROLLMENT

Would you believe 32 in a UH-1D?

**QUOTES UNICARE**

AAAA Charter to Europe!

**1970 APBI**

**99** ARMY AVIATION GOES "AROUND THE WORLD"

Attend the Big one! **AAAA's 15th Year Convention**  
October 13-15  
Deerfoot Park Hotel, Washington, D.C.

Dear Editor:

"COMMAND AND STAFF"

The Fly-by-Wire and Model 347 by CW3 Stan Becker

AAAA in action!

Improving the Image

DA TO REVISE SEVERAL MOS OF WARRANTS

AAAA's 1971 Sweepstakes!

FIRST REGION - AAAA SET FOR 20-22 MARCH ATLANTA CONVENTION

Fifth Region postpones its 9 April Convention until 3-5 September

Atlanta Quad-A places stress on the "cockpit"

Model Winners

Senator Goldwater supports the AAH

What's a grasshopper?

A separate Branch?.. Yes!

No, says another veteran!

The time of your life!

FIRST REGION - AAAA PLANS MARCH 20-22 CONVENTION IN ATLANTA, GEORGIA

New Aircraft Survivability "suit" to clothe most Army 'copters

DA Happenings

Anachronisms Revisited

Flying Evaluation Boards

AAAA's Charter Life Enrollment Continues

**SPEAKING OUT**

Enterprise's boll weevil stolen

**The Protection game**

Objectives and Purposes

**Duty, Honor, Country**

Pioneer MAST unit files 2,000th mission

**About Warrants**

# Searching '70's

**LAWSON 719**

Fort Sill Conducts All-Post Survey on Flight Pay Inequity

TOP GUN AND "ACE" CW4 DON JOYCE TARS to Provide NGB with General Support Capability

**HELICOPTER VULNERABILITY**

General Kinnard to Lead AAAA during 1970-1971

ARMY COPTER TRAINING, 1944-1954

Army position is clear: Equalize flight pay!

**The Question of a Separate Branch**

**SPEAKING OUT!**  
AERIAL SURVEY MEETS...  
TO MEASURE PROFESSIONALISM!

CW2 in Alaska Wins 1971 AAAA Grand Sweepstakes

Army claims world altitude records in Sikorsky CH-54B

**AAAA-1971**

All about **EPMS**

The "Why" of UTTAS

Aviation in the Army Reserve takes off!

**On Guard!**

Protect your flight pay with low-cost insurance!

AAAA REGIONAL ACTIVITIES

AAAA Now Pressing for ARNG-USAR Programs

**\$1.2 million.**

**In the field!**

AIDATS flight tested! Wanted! Test Pilots!

**On Guard!**

1975 Army Aviation Hall of Fame

AAAA's 1971 Sweepstakes!

**BRANCH BRIEFS**

The night can have eyes!

The Flight Gate Review Board

AVIATION: A State of Mind

Aviation Hall of Fame inducts seven

1975 AAAA Product Support Symposium Chase-Park Plaza, St. Louis, Mo.

Aviation is now an OPMs specialty. Plan has 76 implementation date.

Major Components in the Total Army

AAAA initiates "Life Membership" Program; Charter Members Enrolling through Oct. 24

Army National Guard Dedicates Its Newest Aviation Support Facility at Davison AAF

**Milestones**

Who leads the troops?

Army selects Hughes design for its AAH

AIRCRAFT TESTING: A SIX-STEP PROCESS

AAAA Hospitality Suites

ARMY PREPARES FOR TRANSITIONING IN CH-47, CH-54A

The Mast Mission

What's in it for me? Plenty.

January-June Drawings for Models

AAAA Hospirality Suites



January-June Drawings for Models

AAAA Hospirality Suites

DA Happenings

Anachronisms Revisited

Flying Evaluation Boards

AAAA's Charter Life Enrollment Continues

**SPEAKING OUT**

Enterprise's boll weevil stolen

One Army at work!

The time of your life!

AAAA's Charter Life Enrollment Continues

**SPEAKING OUT**

Pioneer MAST unit files 2,000th mission

About Warrants

WE'RE REVIEWING  
ALL PROFICIENCY FLYING!

THE  
ARMY  
AVIATION  
HALL OF  
FAME  
IS  
AIRBORNE!

Aviation Logistics  
Directorate Wins  
Top Presidential  
Management Award

West  
Point  
cadets  
seek  
wings

Army Aviation in the  
Modern Volunteer Army

PROFESSIONALISM!

Project MASSTER:  
Putting all together!

OPMS  
Dual Track  
Development

EXHIBITORS

THE CHEYENNE  
DECISION

Alabama Tornado Lashes  
Ft. Rucker Area; Kills 4

Opinion

WE FACE MANDATORY  
STRENGTH REDUCTIONS

Snapshots

TOW-Equipped  
Attack 'Copters  
Can Stop Armor

There's an

SFTS

in your future!

Map-of-the-earth Flight!

Close Air Support

Worldwide AAAA  
60-60 Golf Tournament

SPECIAL  
INSIDE 79

THE

POINTS:

'70-'73

ABOVE  
THE  
BEST!

Joint effort develops  
crashworthy seats

There's a basic unfairness  
in the dual flight pay system

Sikorsky UTAS flies first ...  
and Boeing's not far behind!

This is Cobra  
Country

Remote Set  
rocket fuzes

"The  
largest  
fly-by?  
The  
1st  
Cav!"

In the field

Hall of Fame Opens  
at Rucker Museum



UTAS ACCEPTANCE - A REAL BEGINNING

AAAA seeks new enrollees for  
its Life Membership Program

Three  
favorable  
DOD  
decisions  
bring  
good  
news  
for  
Army  
Aviation  
this  
spring!

A July, 1978 Report  
by GENERAL GEORGE S. BLANCHARD,  
Commander-in-Chief, U.S. Army, Europe

First Delivery of  
the Black Hawk to  
an operational unit

OPINION

General Williams  
Re-elected as  
AAAA President

Civil Schooling  
for  
Aviation Warrant  
Officers

AAAA REFLECTS  
LTG JOHN WRIGHT  
AS ITS TWELFTH  
NAT'L PRESIDENT

USAAVNBND to evaluate  
interface of Black Hawk

A GREAT  
Day!

The DARCOM chief  
cites industry at the  
time of reorganization



JAWS and ACE:  
Two new games in town

MODERN WINGS FOR  
THE BRITISH ARMY

A Key  
Position

The Chief of Staff  
sets a multi-mission  
role for the UH-60A

Aviation Warrant  
They play key roles  
in the AAAA on a  
worldwide basis!

THE TYPES OF U.S. ARMY AIRCRAFT FOUND  
AT 67 WORLD-WIDE INSTALLATIONS

First GE T700 helicopter engine  
delivered to U.S. Army March 13

AN AVIATOR SHORTAGE

UH-60A Black Hawk in  
850 nautical mile flight

144 AWOs Picked for Senior Courses

Integration of Air  
and Ground Units

NEW  
HARD  
LOOK!

The YAH-64:  
The Future is Now!

IS  
ARMY  
AVIATION  
VIABLE  
ON  
THE  
HIGH  
THREAT  
BATTLE-  
FIELD?

DATA  
MANAGEMENT  
AT AVSCOM

A HAPPY 30TH  
TO U.S.  
ARMY AVIATION

The Case for  
White Air Ambulances

IGOR I. SIKORSKY DIES AT 83;  
Pioneer Advanced Army Airmobility

No Fly-No Pay

ARMY AVIATION  
WORLDWIDE

Realistic optimism marks  
today's AWO program

"Das Flieger Fluzzle!"

UH-60A ROLLOUT

NAVCON Alphabet Soup

THE WHIRLY-GIRLS:  
FLYING AMBASSADORS!

SOVIET VTOL TECHNOLOGY

Responding to a letter  
from the AAAA President,  
Secretary Callaway asks,  
"I encourage you to view  
the disestablishment of  
the Aviation Directorate  
in a most positive light."

HELICOPTER R&D  
IS PAYING OFF

Hardy Quad-A group  
shivers in Red Square

Annual CW4 Reunion!

What is a Chinook?

The Pilot's View

(Cont. from Page 41)

Army Aviation Museum Foundation Launches  
A \$2 Million Campaign for a New Building

144 AWOs Picked for Senior Courses

Integration of Air  
and Ground Units

NEW  
HARD  
LOOK!

The YAH-64:  
The Future is Now!

OPERATION NORTHERN LEAP

The Roundout Study

Flight Pay for  
Colonels and Generals

Iranian Army Aviation

USNS Corpus Christi Bay Returns  
after Six-Year Tour in USARV

THE "HOMER"  
THE RUSSIAN HLH - LARGER THAN THE DOD

ARNG crews aid  
in truck strikes  
and Coast floods

AAAA TO HONOR SENATOR THURMOND  
AT NOV. 12 "APPRECIATION LUNCHEON"

The Hon. Herman R. Staudt,  
Under Secretary of the Army,  
lauds the accomplishments  
of AAAA's award winners ...

ARMY SLAR  
AIDS SHIPPING

HLH Cargo  
Handling

WARRANT OFFICER  
BRANCH Q & A

Our goal is  
85 percent!

The Army's  
production  
UH-60A  
helicopter

Why  
don't they?

Air-to-air combat is coming  
and we'd better be ready!

BY THE HONORABLE BILL DICKINSON  
Member of Congress

ATC Concept and  
Programs

The multi-Service/DOD  
Global Positioning System

A look at OPM,  
NAVCON

1979  
SPOOF ROSTER

Official Publication of the "Society for  
the Preservation of Old Friends"

DA study group rejects  
aviation separate branch

"Aerial combat between attack  
helicopters will be like putting  
two scorpions in a bottle."

AAH debated in confirmation hearings  
"Iran is making enormous strides!"

OPERATION NORTHERN LEAP

The Roundout Study

## Searching '70's



101ST CG'S ZAIS AND WRIGHT CO-HOLD AAAA'S "TOP UNIT" AWARD IN 1970



GEN W. C. WESTMORELAND, 1ST RATED CS



ARNG ACCEPTS ITS 1ST UH-1D HUEYS IN 1970



JAN. '72 TORNADO LASHES FT. RUCKER, KILLS FOUR



AVIATION WD DIVISION CREATED IN DA IN 1972



LTD GP SENEFF MOLDS 1972 AIR CAV CONCEPT



IGOR SIKORSKY, R/W PIONEER, DIES IN 1972



SECARMY TERMINATES AH-64 CHEYENNE DEVELOPMENT PROGRAM IN LATE 1972



SHORTLY AFTER THE 40,000TH R/W STUDENT GRADUATES, VIETNAM WAR ENDS IN JAN. '73.



THE ARMY AVIATION HALL OF FAME OPENS IN 1974 AT FT. RUCKER WITH SEVEN INDUCTEES



'74 AAAA PLEA TO OSA TO SAVE AVN DIRECTOR FAILS



HOOD'S 6TH CAV BDE (AIR CBT) ACTIVATES IN 1975



CW4 MEL COOK HEADS AAAA'S D.C. CHAPTER



A 2824 SFTS AT FT. CAMPBELL BECOMES FIRST TO BE INSTALLED IN FIELD IN 1975



HUGHES YAH-64 WINS AAAH PROGRAM IN '76



101ST DEPLOYS 318 CHOPPERS TO USAREUR TO SUPPORT EXERCISE "REFORGER 1976."



'77 CHANGES IN AVN DIV NGB; AVRADCOM

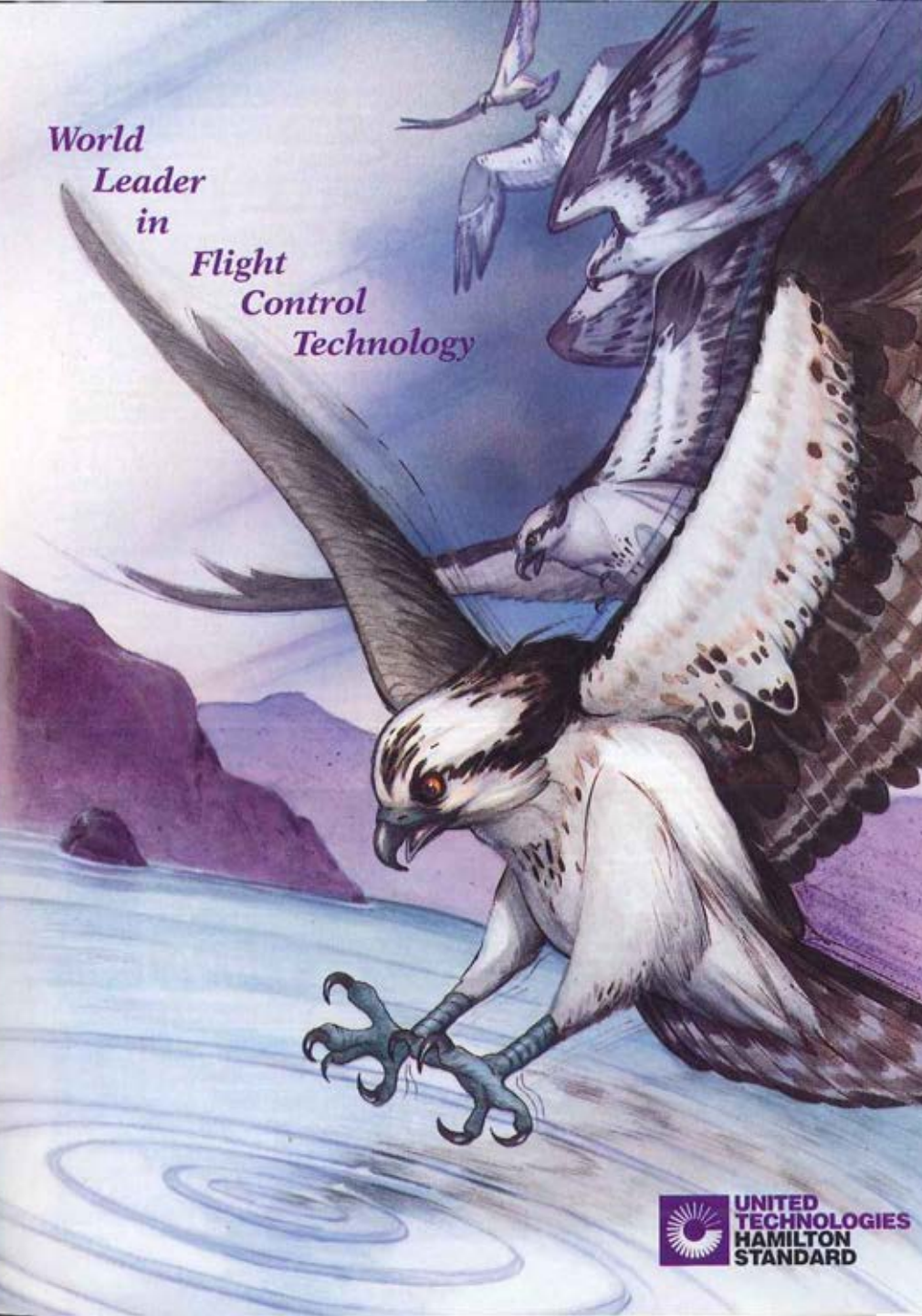


1ST PRODUCTION UH-60 ROLLS OUT IN 1978



FOUR CH-47C'S FLY 5,200 NMS TO USAREUR IN '79

*World  
Leader  
in  
Flight  
Control  
Technology*



Aviation  
Warrant  
Officer  
Overview

**WOTIZZ?**  
IT'S QUICK QUIZ #2  
Yesterday

USAAVNC to host Army's World Helicopter  
Championship Competitive Flyoffs in March

Operations Industry Displays

Congressional  
Corner

AAH:  
A Total System  
for Battle

Army Avionics  
Development

How much  
does it  
shake, rattle,  
and roll?

**TADS/PNVS**

JRX "Bright Star 81":  
An Aviation Overview



MANAGEMENT

AAH PROGRAM MANAGEMENT TEAM  
(ARMY)

THE COMPLEX WORLD  
OF  
AVIATION ELECTRONICS

AIR DEFENSE TACTICS OF  
SOVIET AIRBORNE UNITS

R&D: THE SOLUTION TO  
TOMORROW'S THREAT

Aviation Hall of Fame  
to induct seven

Hardware:  
How it evolved,  
where we are  
now, and where  
we are going

SITREP:  
The USAHEL  
Army Aviation Scene

Lessons in Desert Warfare

Hospitality Suites

1980 Professional-  
Social Program

AIRBORNE TARGET HANDOFF  
IN THE ARMY TODAY

THE ARMY STAFF'S ROLE  
IN AVIATION  
MATERIEL DEVELOPMENT

Uniform  
Madness

Annual CW4 Reunion set for  
June 14-15 at Ft. Rucker

THE ARMY'S NEXT  
HELICOPTER

# Enervating '80's

**SPEAKING OUT**

AAAA Cob Club



(THOSE SHOWN ADMITTEDLY UNRECOGNIZABLE)  
THE LARGEST GROUP PHOTO EVER PUBLISHED IN  
"ARMY AVIATION" - A FOUR PAGE, 34-PERSON GATE.  
FOLD OVER YOUR US ARMY AVIATIONCOM, ST. LOUIS, MO

PM NAVCON:  
PASSING IN REVIEW

Army Aviation's Doubting  
Thomases are many!

People Hall of Fame

AWO HIGH-TIMERS

UPDATE

USAREUR Region holds largest meeting yet

Wire Strike Protection  
for Helicopters

1980  
EQUIPMENT  
ISSUE



Airmobility

JOIN THE PROFESSIONALS

U.S. Team Effort for 1981 World Helicopter  
Championship under HCA Sponsorship

Chapter  
Group  
Photos

THINK SAND!

1980 DAC

New  
Members

Professional Sessions

PACK

The Sweepstakes'  
"Top Gun"

AVIADCOM  
THE HISTORY AND  
DEVELOPMENT

1980 Spool  
Roster



WHO'S  
WHO



Vietnam and  
the military mind

Fort Rucker celebrates  
AA's 40th Anniversary

M The AAAA  
Industry Team



How  
did  
more  
than  
12,000  
Army  
Aviators  
share  
over  
\$2 million  
during  
the  
past  
23  
years?

1982  
AAAA  
SCHOLAR-  
SHIP  
WINNERS

Ronald Reagan  
"Questions and answers"  
WWII Pittsburg, Kan. L-Pilot training  
site to celebrate 40th Anniversary

WOTIZZ?  
IT'S QUICK QUIZ #1  
Cheyenne

The Army  
Transportation  
Museum:  
A Link to  
the Past

The Role  
of the  
TSM

Join AAAA in Atlanta!

Firsts

1982 WHO'S WHO  
IN THE  
AVIATION

ELITE DRAWINGS NO PURCHASE NECESSARY  
ENROLL ONE NEW AAAA MEMBER TO COMPETE

1980 AAAA  
SWEEPSTAKES

AIRCRAFT MODEL TRIPS, MANY OTHER PRIZES  
HELP AAAA REACH ITS 100th CELEBRATION

AEFA - THE ARMY'S  
ENGINEERING FLIGHT TESTER

This Issue's  
24 authors

The 1982  
Aviator Officer

WHO ARE THE BEST  
"ABOVE THE BEST"?

CALENDAR YEAR 1981  
NOMINEES ARE SOUGHT FOR  
AAAA'S NATIONAL AWARDS

AHIP meets the  
requirements

The wrong stuff.  
An ARNG aviator cites a problem

Army gets first production  
CH-47D on-cost, on-time

AHIP and the new  
acquisition process

The right stuff.  
Army Engineering Test Pilots

THE 1982  
SPOOF ROSTER

A forum for  
sharing information

The wrong stuff.  
An article "consciously self target"

Aquila Medevac unit  
aids paraplegic  
climbers

HELLFIRE: In production

HELLFIRE: In production

The U.S. Army  
UH-60A  
BLACK  
HAWK:  
A multi-  
mission  
helicopter  
nears  
maturity

The BLACK HAWK  
Production Story

Technical  
Advances Mark  
UH-60A Program

HELLFIRE: In production

HELLFIRE: In production

The role of the  
project manager

APACHE goes  
international

ACAP airframes  
to fly in 1984

This Issue's nineteen authors

1982  
EQUIPMENT  
ISSUE

For the 2000's  
just ahead: LHX!

HCA

Why belong?

LATE LISTINGS

The APACHE  
Attack Helicopter:  
In Production!

IHADSS: Heads  
out, night or day

Rucker

Report

QUESTION:  
ARE THE  
MAINTENANCE MAN  
AND AVIATOR ON  
THE SAME TEAM?

Let's communicate!

ARMY AVIATION MAINTENANCE

The Mesa facility is underway!

Aviation Warrants!  
They play key roles  
in the AAAA on a  
worldwide basis!

UNITED  
TECHNOLOGIES  
SILVERDALE  
AIRCRAFT

Be a  
part  
of the  
"Who's  
Who In  
Army  
Aviation"  
by  
meeting  
others  
at  
AAAA's  
Silver  
Anniversary  
Convention!





Above the Best! — 1983 Award Winners

**POTPOURRI:** SEMA Support  
Atlanta, the New Branch,  
and Modernization (AAMP)

**COBRA's bite  
gets bigger!**

The 1983  
AAAA  
DAC Pack  
Special Insert:  
**Special Electronics  
Mission Aircraft  
(SEMA)**



**USA TSARCOM  
PRODUCT AND PROJECT  
MANAGERS AND RPO'S**

ARMY AVIATION'S IN-PLANT  
WATCHDOG: THE ARPRO!

The 1983  
Aviator Officer  
Roster



**AHIP  
Program  
Update**

100%  
AAAA!

**QUICK FIX:**  
Force  
Multiplier  
for the  
Division  
Commander

**Atlanta-1983**  
Sustaining for everyone!

**Raffle  
Winners**

AAAA EXHIBIT  
HALL  
GEORGIA WORLD CONGRESS  
CENTER EXHIBIT HALL "C"

AAAA

**Takeoffs - PCS**

Let's not have a dual  
combat arms track!

AAAA Membership Survey

AAAA to honor top 1983  
Air Traffic Control efforts

**ARPRO: Insuring  
a quality product**

**ADAS**

**EAATS:  
The Eastern ARNG  
Aviation Training Site**

Event #2—Precision Flying Event

WITH LOSS OF YOUR FLIGHT PAY...  
**HOW BIG THE BITE!**



TEN ARE INDUCTED INTO THE  
AVIATION HALL OF FAME

AAAA Meeting Calendar, Chapter  
Membership, and Fiscal Status

Bell gets \$17.9 million award  
for AHIP long-lead items

The old order  
cangeth... **ILS  
Today**

The CH-47D:  
Combat Ready!



**LATE LISTINGS**



**AAH Position Report**

Brig. Gen. Edward M. Browne updates the  
attendees at a recent AAH Team Meeting

21 Chapters host Convention  
attendees at nighttime suites

Attended as a University Chapter member at South Texas Tech

**THE AVIATOR OFFICER**

4th Army Aviation Regiment, 1 Cavalier and 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th

**F** The  
1983  
SPOOF Roster

**Modernization  
equals success**

**A 28-Page  
Update on  
SFTS's**

**Corporate Members  
Aid Museum Drive**

Decoy  
dispensers



The  
Industry  
Team  
Where do we  
go from here?

TRADOC Commander tells AAAA  
to make Branch the right choice

AAAA group studies US-based  
World Helo Championship in '84

Statement of Ownership, Management,  
and Circulation

**MG Jim Smith installed  
as 15th Nat'l President**



**HOLY  
LIFE INSURANCE PLAN**  
ENDORSED BY THE ARMY AVIATION ASSOCIATION

Life Membership

TRADOC offers  
Benning as site

Three primes select "teams"  
for '85-'88 LHX competition

AAAA conducts major  
nationwide survey

ASE: A view  
from the Pentagon



**The new Branch:  
An opportunity or a  
threat to the AWO?**

By Colonel Gerald E. Lathrop  
By Sergeant Major Andrew Hule

Updating  
Four A's:  
AVNEC,  
Aviation  
Branch,  
APACHE,  
and  
ASE

The First Annual AAAA Aircraft  
Equipment (ASE) Symposium  
1983 Electronic Systems, Norfolk, N.C. — 15-16 November 1983

First AH-64 rolls out two  
months ahead of schedule

**LOOKING BACK AT  
URGENT FURY**  
ARMY AVIATION IN GRENADA

Commanded  
**U.S. Army Aviation  
Logistics School**  
FORT RUSSELL, VIRGINIA

Exercise the new USAAALS  
**Exercising USAAALS  
logistic repositioning capabilities**

**Are medical waivers  
being denied? ...  
Yes and no.**

**THE AVIATION  
LOGISTICS OFFICE**  
BY CAROLYN L. GRAYSON

Top Army and ROK aviation leaders  
cited by AAAA at Christmas Formal

The Army-Hughes Helicopters AH-64  
wins the '83 Robert J. Collier Trophy



**"Dustoff" in  
Grenada**

**The 1984  
DAC Pack**



**ILS**

The Aviation Logistics  
School's source for the  
doctrinal training of NCO's

Maj. Gen. Maddox receives the first  
set of new Aviation Branch insignia

DEPOT SUPPORT TO KEEP  
US "ABOVE THE BEST"

A special report on the worldwide  
aviation logistics support situation

**OPERATORS AND LOGISTICIANS:  
A CLOSE KNIT FAMILY**  
BY JOSEPH F. CRIBBING  
CHIEF, AVIATION LOGISTICS OFFICE, DODDSDLO, DA

ARMY AVIATION SONG  
WORKED BY SAMMY CAJEN  
MUSIC BY JIMMY VAN DUSEN

Fifth Annual  
"DUSTOFF" Reunion  
Downtown Marriott Hotel  
San Antonio, Texas  
24-26 February 1984

**MY BIG  
HELICOPTER  
COLORING  
BOOK**



Here I am in my flying  
machine. I have just auto-  
rotated from the top of  
Pikes Peak to sea level.  
Color my paints brown.

**THE ARMY RECEIVES  
PRODUCTION AH-64'S**  
BY BRIGADIER GENERAL DR CHARLES F. DRINE

**APACHE PRODUCTION  
"TAKES OFF"**  
BY JACK E. ROK

**THE AVIATION  
LOGISTICS OFFICE**  
BY CAROLYN L. GRAYSON



**CH-47D: DARCOM  
REVISITS THE DELTA**

**A VERY IMPORTANT YEAR**  
BY GENERAL JOHN W. VESSEY, JR.

**A TALE OF TWO SOLDIERS**  
BY GENERAL MAXWELL R. THURMAN

**"THEN AND NOW"**  
BY LEUTENANT GENERAL ROBERT H. WILLIAMS, RET.

**THE 1984  
AVIATOR  
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**LHX: Advancing Army Aviation into the 21st Century**

by **60 ways** K. Knudson, Director of Force Requirements and Army Aviation Officer, OCCDCRS, SA



**LHX Industry Program Managers**  
**ARMY AVIATION IN HONDURAS**

## The Army's LHX Development Program

In this Special Report, the LHX Project Manager gives an overview of the program and introduces the five industry presentations on LHX being in Washington at the 1984 AAAA Professional Sessions.

**GEN Frank S. Benson,** aviation politician, dies at 79 . . .

**The CH-47D: now operational at Fort Campbell**

**AVRADA: KEY TO VICTORY**

BY GENERAL DONALD R. KEITH, RET.  
**A<sup>2</sup>C<sup>2</sup> SYSTEM**

## Corpus Quad—A covers all aspects of aviation

**AHIP: Meeting Aeroscout Needs**



**E-SYSTEMS**



**Q.A.**

**OPS: GLOBAL POSITIONING**

**OH-58D: NOW AND TOMMORROW**

BY COLONEL WILLIAM H. FORSTER

## Special Report The U.S. Army's Avionics Research and Development Activity



**AVIONICS: THE EMERGING GIANT**

BY ENGINEERING COLONEL JESSE J. JONES

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**The Army Helicopter Improvement Program**

BG G. Glenn Goodhand dies at 75; Was three-time AAAA President

**AVIATION IN AN "ARMY OF EXCELLENCE"**

**1984 AWO "HIGH TIMERS"**

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**ARTI: Proving the single pilot thesis**

**The 1st Cav Combat Avn Brigade looks back on a full year**

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**Army Aviation: A microcosm at work**

**The challenges we face**

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**RPV's: ABOVE AND BEYOND THE BEST**

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**U.S. Army Helicopter Team trials**

**THE NEW AVIATION SYSTEMS COMMAND**

**THE UH-1 THROUGH THE YEAR 2000**

**New Aviation Division created in DA**

**Two industry teams to compete for LHX engine contract**

**New approaches to problems in acquisition and fielding**

**Corpus Christi Army Depot's mission is singular: Readiness**

**Meeting the operational challenges in Korea**

**This is January, 1986! We're in Air-to-Air!**

**Atlanta-86 sets new highs in turnout, briefings, & exhibits**

**Atlanta-86 sets new highs in turnout, briefings, & exhibits**

**The Single Pilot Issue**

**How can we be more effective?**

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**11th CAG to be the 1st corps combat aviation brigade overseas**

**Why were two firm teams selected for the LHX engine?**

**An OCLL staff of 113 works hard to tell the Army Aviation story**

**CH-47D completes historic first air-to-air refueling**

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**We must go on, or go under.**

**COBRA: EVOLUTION OF THE ATTACK HELICOPTER**

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## U.S. is 1986 World Helicopter Champ!

THE 1986 AVIATION SOLIDARITY

ARNG Aviation is now at 96% of its authorized strength!

AAAA ASE Symposium a rousing success in San Francisco

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by GEN John A. Wickham, Jr.

Aviation Activities in the Health Services

Army aviators' leaders: Who are they? Where are they?

The "Blue Book"

Boots, Tanks and Things That Fly

by General Glenn K. Orr, Commander-in-Chief, U.S. Army Europe and Seventh Army

Developing the mission for the Y-22 OSPREY

Readiness: AMC's Business

by General Louis C. Wagner

The Army Aviation Flight Simulator Family

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by General Maxwell R. Thurman, Commanding General, U.S. Army Training and Doctrine Command, Ft. Monmouth, NJ

LHTEC Chosen to Qualify Army's 7800 Engine

Conventional Design for LHX is Reaffirmed

by Lt. General Arnold E. Barkley Howard

Night Vision Goggles

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Air-to-Air STINGER

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by CWI E. Daniel Kingley

The U.S. Army Space Command

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Stormscope ENSTRON

Army Selects Allison-Garrett Team to Build Engines for Light Attack Copter

Special Report: HELICOPTERS INTERNATIONAL

Time for Interception: Flexibility vs. Constraints

by General Glen K. Orr, Commander U.S. Army Europe and Seventh Army.

Top AIC Soldiers and Units Honored at Ft. Rucker

Army's first Air-to-Air Combat Test is successful at Ft. Hunter-Liopol

The Future of Italian Army Aviation

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by Louis A. Berthong

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AAAA members elect seven to the Army Aviation Hall of Fame

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Canadian Army Aviation

Army Pilots Receive 'Top Gun' Training

Army Aviation: Challenges for the Next Decade

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by General Carl E. Vuono, Chief of Staff, U.S. Army

Aviation's Task: Training for the Army of Excellence

by General Joseph T. Palanca, Jr., Commanding General, U.S. Army Forces Command, Fort Monmouth, Georgia

APACHES join the 6th Cavalry

LHTEC: Going Business in a New Way

Attack Helicopter: Close Operations

by Lieutenant General Corbin E. Saint, Commander, III Corps and Ft. Hood

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Army Aviation in Latin America: The Key to Crisis Response

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

AAAA redefines its multi-faceted National Awards Program

Training: APACHE Training Bde: First Class

AAAA — The Silent Partner

by SFC (P) William C. Hawkins, LHX's "First Team": Boeing Sikorsky

11th Aviation Brigade: New Beginning

Air-to-Air Singer: Testing A Concept

Personal: "Bundeswehr" Army Aviation

1st Aviation Brigade's 20-year Reunion Dinner draws a crowd!

CH-47D CHINOOK Reaches Germany

1989 AAAA JROTC R. Crisbans Annual Product Support Symposium Schedule of Events

The LHX Moves Army Aviation Into the 21st Century

by General Carl E. Vuono, Chief of Staff, U.S. Army

200,000 Accident-free Hours

THE 1988 BLUE BOOK

Congressional Authorization Support

MANPRINT

1ST CAVALRY DIVISION NAMED "OUTSTANDING UNIT OF YEAR"

TRW

ACAB

DynCorp

Systems Company

Aviation Applied Technology Directorate

## Enervating '80's



CSA APPROVES THE CONCEPT & ACTIVATION OF AIR CAVALRY ATTACK BDE (ACAB) IN 1980



ARMY ACCEPTS CH-47D AT FT. RUCKER, AL; MARTIN MARIETTA WINS TADS/PNVS FLYOFF



ATL/DARPA DIRECT HUGHES TO BUILD A NOTAR (1980)



LAST WWII L-PILOT, MG JIM SMITH, RETIRES IN 1981



'81 MILITARY PAY BILL EQUALIZES FLIGHT PAY



GEN JOHN VESSEY, 1ST AA AS CHAIRMAN, JCS



ARMY INITIATES ITS LIGHT HELICOPTER EXPERIMENTAL (LHX) PROGRAM IN 1983



SECARMY OK'S CREATION OF AVIATION BRANCH IN 1983 WITH USAALS FORMED AT EUSTIS



82D ABN UH-60'S AND 57TH MED DET CREWS ABET '83'S OPERATION URGENT FURY IN GRENADA



ARMY GETS FIRST PRODUCTION AH-64 IN 1984 AT MESA



NAVSTAR SATELLITE LAUNCH OPEN GPS ERA IN 1985



ATC "PROPRONENCY" GOES TO AVN ('85)



ARMY SET TO PROCURE 231 USMC JMX (1986)



268TH AHB HOLDS THE FIRST AIR-TO-AIR COMBAT TEST AT HUNTER-LIGGETT IN 1986



WESTERN ARNG AVN TRAINING SITE (WAATS) OPENS IN AZ IN '86 AND SERVES 27 STATES

PEO COMBAT AVIATION

PEO COMBAT SUPPORT AVN

PROGRAM MGR LHX

SECARMY INITIATES PEO SYSTEM IN '87



CSA APPROVES '88 AVIATION MOD PLAN



AA RULES '89 NIGHT IN PANAMA'S JUST CAUSE

*G*rumman  
salutes  
forty years of  
Army Aviation  
Magazine

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### Army Aviation and the War on Drugs

By Colonel Michael H. Abbott



### THE NATIONAL AIRSPACE SYSTEM

AVIATION SOLDIERS

### Army Aviation Medicine

### Airframe Condition Evaluation (ACE)

### Why Join AAAAP

by Major General Charles F. Drenz, Ret.  
AAAA Senior Vice President



### Helping Protect Peace in the Republic of Korea

By General Louis C. Menstryo

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The Lessons We Didn't Learn

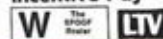
EVANS & SUTHERLAND

1990 Equipment Issue

### Strength and the UAV

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### Just the Facts: Aviation Career Incentive Pay



### Army Aviation Owns the Night!

By Major General Rudolph Ostovich, III



### Special Operations Aviation

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AN M102 ROCKET BRANCH

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BLUE  
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### AAAA Gifts for the Holidays!

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### Weapon System Management

By General William G. T. Tuttle, Jr.

### ASPR ORGANIZATION

A Quick History of the U.S. Army's Aviation Night Vision Goggles

By Major Jack L. Kennedy, Jr.

### West Point Memorial to Flight

AAAA anticipates offering \$100,000 aid in 1991 for college-entry Freshmen

John W. Matt, Colonel, USA (Ret), President, AAAA

### Central Europe Battlefield 2000: the Combat Helicopter

By General Crosbie E. Saint

### Training Tomorrow's Observer

SSG Michael Wood & SGT Christopher Muletner

### Aviation Systems Program Review

"Society for the Preservation of Old Friendships"

### Why the U.S. Needs The LH Program

By The Honorable Stephen R. Conner

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### AVSCOM: A DESERT STORM Overview

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### DESERT SHIELD/STORM WRAP-UP

By Major General Stephen D. Sauer

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2 for 1 Offer  
Send your story...  
John Star  
Professional  
John AAAA  
for more info

### A QUALITY FORCE FOR THE FUTURE

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By Sergeant First Class Steve Davis

### Top Guns

### AirLand Battle-Future and the Aviation Brigade

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### DESERT STORM and the 3-D Maneuver Battlefield

### International Focus on Interoperability

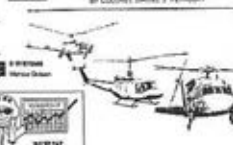
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### Branch insignia for Commissioned Aviation Warrant Officers

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AAAA offers \$108,000 in 1992 Two scholarships now open to upperclassmen

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Longbow Apache

### ARMED CHINOOKS IN COMBAT

By Captain Carl C. Lathrop

198 Annual Meeting...  
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June 8, 1942

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Happy Holidays from Denny and Aet Kester

**"New Look" '90's**



ENTERING THE '90's AAAA'S NAT'L EXECUTIVE BOARD HAS 72 INDIVIDUAL MEMBERS



AFTER IRAQ'S 1990 INVASION, 82D AND 101ST TROOPS DEPLOY TO SAUDI ARABIA



SPECIAL OPNS AVN BEGINS WITH ORGN OF 160TH SOAR



LONGBOW APACHE PASSES ITS 1990 USER TESTING



ARMY AVN MUSEUM CUTS 1990 RIBBON



STORMIN' NORMAN READIES 1991 FORCE



101ST AH-64'S BLOW AWAY IRAQI COMMO WHILE SHERPAS RUN MINUTEMAN EXPRESS



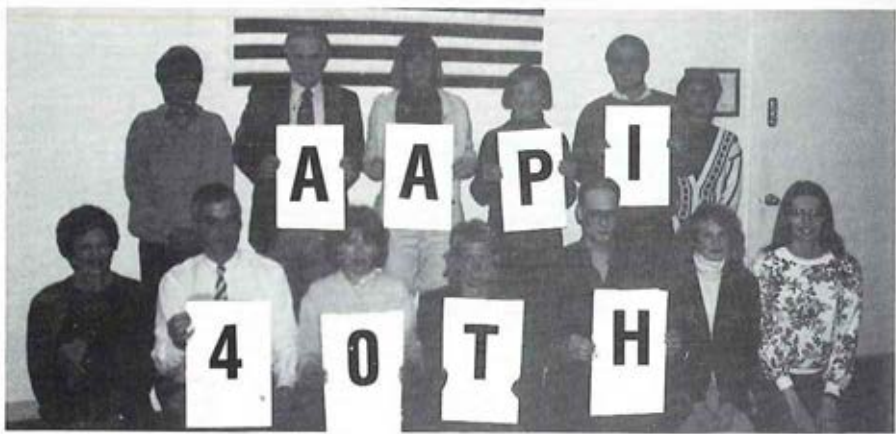
BOEING SIKORSKY LHX DESIGN WINS IN 1991



THE "50TH ANNIVERSARY" ISSUE IN DEC., '92 HAS AA GIANTS LTJG HWO KINNARD (L.) AND GEN ROBERT M. SHOEMAKER (R.) AS CONTRIBUTORS



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**"ARMY AVIATION MAGAZINE" STAFF:** (FRONT ROW, LEFT TO RIGHT) JILL THOMAS, BILL HARRIS, BARBARA ROSS, DEIRDRE FROST, STEVE MOORE, DEB SIMONS, DEBBIE COLEY; (BACK ROW, LEFT TO RIGHT) MARY ANN STIRLING, ART KESTEN, LYNN COAKLEY, DOTTY KESTEN, TERRY COAKLEY, MARY ELLEN KOTHER.



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## 40TH ANNIVERSARY MESSAGES

*A number of Army Aviation Leaders, both military and civilian, were invited to contribute brief remarks and reminiscences on the occasion of the 40th year of ARMY AVIATION Magazine.*

Congratulations on your 40th Anniversary. Your magazine has encouraged a healthy and open discussion of issues of interest to everyone in America's Army — Active, National Guard, Army Reserve, Department of the Army civilians, contractors and industry, retirees, veterans, families, and friends. ARMY AVIATION is not just for pilots. It's for all of us.

I first read ARMY AVIATION as a young lieutenant of Armor back in the early 1960s. The publication's candor, professional content, and determination to reflect the cutting edge of developments in Army Aviation impressed me then. I am still impressed. You have made a significant contribution to America's Army and to the common defense. Keep up the great work!

GEN Gordon R. Sullivan  
Chief of Staff, U.S. Army

Congratulations to ARMY AVIATION, especially its publishers, editors, and staff for 40 years of outstanding service to our Army and to Army Aviation.

I've been a dedicated reader since first using the magazine as a research aid while serving as an author/instructor in the Armor School's Command and General Staff Department. From the beginning, I've valued it as an authoritative reference, for professional development, and for keeping in touch. I'm convinced it's a "must read" for all Army Aviators.

Best Wishes on your 40th anniversary!

BG Ronald E. Adams  
Director of Requirements  
ODCSOPS, DA

A lot has happened since the first issue of ARMY AVIATION Magazine. Man has been to the Moon. Supersonic passenger flights have become a daily event. And through it all,

ARMY AVIATION has sustained its commitment to the Army community. Congratulations from Textron Lycoming.

David G. Assard  
President, Turbine Engine Division,  
Textron Lycoming

Forty years old. It's hard to believe. You have come a long way since I first heard about you at San Marcos, TX, during flight school in 1958. Over the years, your goals and objectives have changed as you've matured. They have definitely all been for the better and most importantly improved AAAA support to the membership. I'm looking forward to participating in your future growth and continued support of The Army, Army Aviation, and its Industry counterparts. Congratulations on your 40th Anniversary — continue the great work.

COL Sy Berdux, Jr., Ret.  
Boeing Helicopters

Since my job depends upon keeping the U.S. Army Black Hawks and Apaches flying, I have always considered ARMY AVIATION Magazine an important resource. Your talented crew keeps us well informed on critical issues facing a rapidly changing industry. Forty years is a long time to stay on top of aviation — and I've been one of your avid readers over half of that time. Congratulations on a job well done.

**Lou Bevilacqua**  
General Manager,  
Turboshaft/Turboprop Project  
Department, GE Aircraft Engines

I'm proud to say that for 25 of your 40 years we have been friends. That period extends through my time with McDonnell Douglas, with the U.S. Army Aviation Systems Command and back to 1968. That was when, as a young aeronautical engineer working in the Army's Aviation Research Lab at NASA Ames, Moffett Field, CA, that I first read ARMY AVIATION. Congratulations. It's been an excellent friendship.

**Dean C. Borgman**  
Senior VP/General Manager,  
McDonnell Douglas Helicopter Co.

**Acme-URDC congratulates ARMY AVIATION Magazine on forty years of superb performance. The work you do is a great help in keeping up with both the technology and the excellent people involved in this important part of our defense structure.**

**Lowell K. Brown**  
President, Acme Electric

On behalf of the Collins Avionics & Communications Division of Rockwell International's Defense Systems business unit, I extend warm congratula-

tions to ARMY AVIATION on its 40th anniversary.

Your publication has carried news and events that have brought a sharper focus on Army Aviation, its goals and its accomplishments. It has brought us a better understanding of the Army's airborne needs and requirements because it is written by people who have dedicated their careers to Army Aviation. We salute you as we celebrate our own 60th anniversary in 1993.

**Jack Cosgrove**  
President, Collins Avionics &  
Communications Division

**ATCOM is an avid supporter of your magazine. ARMY AVIATION plays a vital role in keeping the Army and civilian communities well informed of the latest aviation developments. On behalf of USAATCOM, happy 40th to the staff and best wishes for the next 40 years.**

**MG John S. Cowings**  
Commanding General, USAATCOM

Congratulations to ARMY AVIATION Magazine on its 40th Anniversary and our most grateful thanks for a job well done. Forty years ago I was in the U.S. Army Forces Far East (USAFFE) in Japan having completed a one-year tour in Korea. Two personal memories come to mind. A trip to Seoul when Bed Check Charlie flying a World War II biplane paid us a visit and our real danger was from our own Air Defense which filled the air with ack-ack. A second memory was questioning why any message advising Korea that an airlift of bananas was on the way was classified Secret. The only secret involved was who got the bananas.

**Joseph P. Cribbins**  
DynCorp

ARMY AVIATION Magazine has served the Army Aviation community magnificently for 40 years. It has kept our military and industry aviation personnel well-informed in vital areas such as operations, tactics, doctrine, training, R&D, logistics and other important aspects of Army Aviation. The magazine has "talked the talk and walked the walk"; it has been a valuable source of information for me since first reading it during my flight training at Ft. Rucker in late 1959. Congratulations and best wishes for the future.

MG Charles F. Drenz, Ret.  
AAAA President, 1991-1993

I first read ARMY AVIATION shortly after coming to COBRO Corporation, and discovered that COBRO, on a per capita basis, is one of AAAA's most active corporate members. Congratulations on attaining your 40th Anniversary.

James J. Durney  
President & CEO, COBRO

This significant milestone marks 40 years of dedicated service to the entire Army Aviation Community. I remember reading my first issue at Fort Wolters, TX in 1966 where I was trying to find that elusive hover button. Then, as now, ARMY AVIATION Magazine continues to provide the most current information on Army Aviation. On behalf of myself and the entire "DUST OFF" community, Happy 40th Anniversary.

BG Jerome V. Foust  
Deputy Commander, Army Medical  
Department Center & School  
and Chief, Medical Service Corps

CONGRATULATIONS to a magazine representing the finest aviation force in the world. I first saw the magazine as a Warrant Officer Candidate at Fort Wolters, TX, in 1966. My appreciation of your magazine grew along with my career. In addition to the excellent articles and yearly Blue Book, it has become part of the history of Army Aviation. The real value of the magazine is it has been a reflection of every soldier and civilian who helped make Army Aviation what it is today!

COL George Francioni  
Chief, Aviation Office  
U.S. Army Reserve Command

Thank you for the opportunity to congratulate you on your 40th Anniversary and allowing me to mentally relive my days as an Army Aviator! ARMY AVIATION has kept aviators in touch by sharing information (before we became a Branch) and has successfully transitioned into a forum for sharing our good ideas. As I look back on my career as an Army Aviator, I believe my first exposure to AAAA was as a "Mohawk driver" assigned to the 23d Aviation Special Warfare Detachment (AV-1) in Vietnam. My 31 year association has resulted in a rewarding relationship. Keep up the great work!

LTG Merle Freitag  
Comptroller of the Army

From April 1963, when I first joined AAAA in flight school, until now, the ARMY AVIATION Magazine has kept me up-to-date in our Army. The service it provides is invaluable, and it has helped foster the closeness and team-

work necessary to make Army Aviation the winner it is. Best wishes for another 40 plus years.

Above the best!

MG Robert S. Frix  
DCG, Sixth U.S. Army

ITT Electro-Optical Products Division, a unit of ITT Defense & Electronics, extends our best wishes in celebration of the 40th Anniversary of ARMY AVIATION Magazine. As the world's leading producer of the AN/AVS-6 Aviator's Night Vision Imaging System (ANVIS), ITT values our long-standing relationship with U.S. Army Aviators. Your informative feedback about our products has better enabled US to provide YOU with night vision capabilities so critical to "owning the night."

Neil A. Gallagher  
President & General Manager  
ITT Electro-Optical Products Div.

Congratulations on the 40th Anniversary of ARMY AVIATION Magazine. I know of no publication that has been read with more interest or greater enthusiasm over the past 37 years by myself and my contemporaries. The magazine has been a welcome and persuasive influence on our careers and on our personal lives. Although I can't remember when I first read ARMY AVIATION Magazine, I think it is significant that I can't recall not having it around to read.

You are to be congratulated for making it all happen for so many years.

MG Orlando E. Gonzales, Ret.  
Commanding General, USAAVSCOM  
1983-1986

I first read ARMY AVIATION at Fort Benning, GA in 1969 as a new flight school graduate. As I transitioned from Infantry to Aviation, the information contained in this magazine assisted greatly and contained much of the technical reference I retain and use today. Thanks for a great job over the years in keeping us all current with the issues. "Above the best".

MG Robert A. Goodbary  
DTIG for Inspections, Training and Automation, OTIG, OSA

Forty years ago, as Army L-5 Sentinels flew over Korea on observation missions, our company was producing CH-21 transport helicopters for the U.S. Army.

In the future, I expect to read about the success of Army Chinook and Comanche units in ARMY AVIATION Magazine as you continue your valued informational and educational roles for the Army Aviation community.

Congratulations to your magazine and AAAA on your accomplishments and best wishes for great achievements to come.

Denton R. Hanford  
Vice President & General Manager  
Boeing Defense & Space Group  
Helicopter Division

Reality has far exceeded the vision of forty years ago. Army Aviation has become a full-fledged member of the Brotherhood of Combat Arms!

BG Jack W. Hemingway, Ret.  
Commander, 1st Aviation Brigade  
1970-1971

I am pleased to offer congratulations to ARMY AVIATION Magazine's 40th Anniversary on behalf of all the employees at Litton Precision Gear. The first forty years have been filled with rich tradition and excellent performance. We wish you only the best for your next 40 years! Thanks to everyone that has helped make it a success.

Elmer W. Hill  
President, Litton Precision Gear

CAE-Link's 4,000 employees congratulate ARMY AVIATION Magazine on four decades of publishing excellence. As a key supporter of the Army Aviation community, we look forward each month to the little book with the big message. ARMY AVIATION Magazine keeps us up-to-date on the latest developments in training and simulation, avionics, weapons, and the U.S. Army's strategic thinking. We're proud to be members of AAAA, advertisers, and most important — regular readers.

George G. Houser  
President, CAE-Link Corporation

Congratulations on the magazine's 40th birthday! Sometime in my 1956-57 tour as the first Chief of Army Aviation (a staff title), Glenn Goodhand and another officer came into my office with a question: Would I approve an action to start an Army Aviation Association? I said I would. Now look at the thing.

GEN Hamilton H. Howze, Ret.  
Director of Army Aviation, 1956-1957

On behalf of the more than 7,000 employees of Bell Helicopter Textron Inc. around the world, it gives me great pleasure to congratulate you on the 40th Anniversary of ARMY

AVIATION Magazine. These past four decades have witnessed a remarkable transformation of Army Aviation from a primarily utility service of the post Korean War period to what it is today — the leading technological edge in the prosecution of land warfare. ARMY AVIATION is the publication of record chronicling the amazing growth and transformation of the Army Aviation community. I find ARMY AVIATION Magazine to be an invaluable source of information.

Webb F. Joiner  
President, Bell Helicopter Textron

Congratulations to an organization and magazine that supports the Branch of the Army that fights and trains across the entire battlefield. Ideas, facts, reports, news, and the vision of our Branch get a voice in this publication. The blend of contractors and Warriors is about right and blends teamwork and success. Lots of firefights ... many victories!

The first time I really read a copy of the magazine was in 1976 when I was trying to get back into a combat aviation unit, and the Army was starting to build a modified AH-1 with a full-up M-65 TOW system onboard. I've read every edition since then. From the B Model UH-1 to the AH-64 and into the Comanche, we continue to get our news from ARMY AVIATION Magazine.

Who knows for sure what the future holds, but changes are happening now. Whatever we face, we can count on hearing about it ahead of time in our publication. So 40 looks pretty good to me ...  
Scouts Out!

BG R. Dennis Kerr  
Director of Army Safety &  
Commander, USASC

ARMY AVIATION Magazine, and all Army Aviators, past and present, you need no congratulations from me, or anyone else, on this 40th Anniversary. By your deeds, through all 40 years, you have written your own mighty testimonials of consistent and vital contributions, from day one until this very moment. And it takes no prophet to foretell an even brighter future. I will say I consider it an honor and privilege to count myself among your company.

LTG Harry W. O. Kinnard, Ret.  
AAAA President, 1970-1972

Twenty-six years ago I was feverishly rolling the throttle and thrashing the cyclic around the cockpit of a wooden-bladed OH-13 trying to earn my wings. Change to Army Aviation since then has been exciting and awesome. I am proud to have been a minor contributor to the most dynamic, flexible and technologically-driven branch that hovers over the leading edge of force structure, modernization and conceptual change in the U.S. Army today. I look forward to reading about Army Aviation's high adventure in the next 40 years of ARMY AVIATION Magazine.

BG Thomas J. Konitzer  
U.S. Army First Regiment  
U.S. Army ROTC Cadet Command

Back in the period of uncertain memory, there was an Army Aviation composed of only 10 VLA (Very Light Aircraft) per division, all assigned to division artillery. While I was herding L4s and an occasional heavy horsepower L5 in 1st CAV DIV Artillery near Tokyo, Art Kesten was nursing the same machines around Sendai for the 11th Airborne Division Artillery.

Few could even dream the VLAs would grow into Chinooks, Apaches and Mohawks. Probably not even Art. But he did grasp the airmobility concept — and bet his professional life on it. That the magazine celebrates its 40th Anniversary is a tribute to Art and to those who boosted the 10 VLAs to a maneuver brigade per division while subscribing to this sterling professional publication.

P.S. I read my first mimeographed ARMY AVIATION while flying from Sendai's Lanier Field shortly after Art rotated home from Sendai's Camp Schimmelpfennig.

P.P.S. Congratulations to ARMY AVIATION Magazine, to Art, and to Dotty who was with both all the way.

MG William J. Maddox, Jr., Ret.  
Director of Army Aviation 1970-1973  
Commander, USAAVNC 1973-1976

I salute and congratulate ARMY AVIATION Magazine for 40 years of devoted service to Army Aviation professionals around the world. I caught my first glimpse of the magazine in 1960 during class orientation by the Aviation School Assistant Commandant, then COL Delk Oden, as my aviator training began. Keeping up through the magazine with what leading professionals in Army Aviation were saying and doing appealed to me. This fine publication has served me well for more than a third of a century and I continue to rely upon it as one of the most authentic sources on what the leading professionals are saying and doing.

COL John W. Marr, Ret.  
AAAA President, 1981-1983

Having just graduated from West Point in 1955, I immediately entered flight training at Gary AFB, then tactical training at Fort Rucker, pinning on my wings in March 1956. My initial overseas tour was to the MAAG in Taiwan with the Nationalist Chinese Army of the Republic of China, in 1957.

It was there, in early 1958, over 35 years ago on the other side of the globe, that another aviator shared his copy of ARMY AVIATION Magazine with me at a remote airfield in Tainan, Southern Taiwan. I relished any magazine in English especially an aviation related magazine, since the local newspapers and magazines were all in Chinese.

Needless to say, I wanted my own subscription and the associated AAAA membership — hence I joined AAAA in 1958 and have been a member ever since. Three and a half decades have now passed and I have never missed an issue. In turn, I have contributed articles, humorous and otherwise, including a monthly column during my tour as Aviation Officer at DA, and even later as Commanding General at the Aviation Center and First Chief of the Aviation Branch.

The magazine has followed me through Vietnam and Korea and a dozen other assignments in between. I have always enjoyed the magazine, its form and contents serving to keep AAAA members worldwide informed as to the important issues and actions affecting Army Aviation.

Keep up your good work for another 40 years.

MG Carl H. McNair, Ret.  
President, Support Systems Division,  
DynCorp

General Cairns, Commandant of the Aviation Center and School at Fort Rucker pinned wings on General Easterbrook and me in November, 1956 ... then handed each of us a copy of ARMY AVIATION Magazine. He told us to join our association and to read its periodical because ARMY AVIATION Magazine will keep all aviation personnel well informed as aviation grows.

Congratulations to ARMY AVIATION Magazine and its vibrant staff for a job well done, and on its 40th anniversary.

MG Delk M. Oden, Ret.  
AAAA President, 1972-1973

As we recognize the 40th Anniversary of ARMY AVIATION Magazine, we should be grateful for the fraternity which brought us together in the early years when we were comprised of numerous branches of our Army. The AAAA was that fraternity and ARMY AVIATION served to link us together as professionals involved in a common endeavor — to be the best we could be in service to our Army and our Nation.

As we reflect on the challenges faced and the sacrifices made by those who preceded us, the greatest contribution we can make is our investment in the future — our young branch and those who will lead it to our rendezvous with destiny.

I know that you join me in recognizing the enormous role of the magazine and that we all draw confidence in knowing that this professional journal stands ready to assist us as we move toward that destiny.

Happy Anniversary, ARMY AVIATION, and thanks to all those professionals, past and present, who comprise your proud heritage.



As to the question of recalling my first introduction to ARMY AVIATION Magazine, such is not easy. Once again, I am reminded that, contrary to popular belief, the legs are not the first thing to go as we mature. To the best of my recollection, I was a young second lieutenant struggling through flight school at Camp Gary, TX in 1958 — I think.

**LTG Ellis D. Parker, Ret.**  
Chief, Aviation Branch and  
Commanding General, USAAVNC  
1985-1989

Congratulations on the 40th Anniversary of a high-performing magazine. ARMY AVIATION Magazine is clearly part of our proud history. Its articles have been on target for 40 years. I have read almost every issue for the last 24 years.

I first read ARMY AVIATION Magazine in June of 1969. I was sitting on a rocket box deck we had just added to our "sea hut" hootch in Camp Evans, Vietnam. I was flying with the "Griffins", C Battery 4th Battalion, 77th Aerial Rocket Artillery (ARA) in the 101st Airborne Division.

I enjoy ARMY AVIATION Magazine even more today. Not much has changed for me. I'm still in the great 101st Airborne Division — this time at Fort Campbell.

Best wishes for the next 40 years.

**BG Daniel J. Petrosky**  
Assistant Division Commander (S)  
101st Airborne Division (Air Assault)

Congratulations on 40 years of keeping us up-to-date on Army Aviation's newest and latest equipment, tactics, operations and personnel assignments. Piasecki Air-

craft Corporation is celebrating its 50th Anniversary this year. ARMY AVIATION recorded our Army H-21's record of completing the first helicopter non-stop transcontinental flight in 1953. We wish continued success to AAAA and ARMY AVIATION. Again, CONGRATULATIONS.

**Frank N. Piasecki**  
President  
Piasecki Aircraft Corporation

Congratulations, ARMY AVIATION, on 40 years faithful service to Army Aviation. 40 years? Wow! Or only 40 years. Either way, it's been great! Aviation's and ARMY AVIATION Magazine's remarkable achievements fostered each other, and neither resembles the babes of 1953.

"When did I first read the magazine?" Gary AFB, 1956? At the Aviation Board same year? More relevantly, 1953 began my first Pentagon tour, threw me into the AA expansion flight, and caused me to apply for flight training.

**BG Edwin L. Powell, Jr., Ret.**  
Director of Army Aviation, 1967-1969

I became very involved with ARMY AVIATION Magazine in June 1956 when I reported to my first aviation assignment as Chief, Aviation Section, Career Management Division, Office of The Adjutant General. We were responsible for determining aviator requirements, recruiting and meeting the monthly input to flying training. We had a budget of about \$450,000 (a large amount at the time) specifically for recruiting aviators. A substantial part bought and distributed the magazine to the USMA, ROTC, officer clubs and dayrooms through-

out the Army. Our recruiting program was enormously successful. My newly-assigned two star boss, who was impressed by our success, thought we were getting far too many of the best young officers and found it "personally repugnant" that we would resort to advertising in civilian publications to meet an Army requirement.

He said, "Prove you can't meet requirements through the chain of command." We couldn't and he cancelled our program. The magazine was just getting off the ground and our action was a major setback. Great credit is due Art and Dotty Kesten. For now 40 years, the magazine has educated, informed and created cohesiveness among the diverse elements of the complex and exceedingly important activity called Army Aviation.

MG George W. Putnam, Jr., Ret.  
AAAA President, 1985-1987

Hughes Danbury Optical Systems, Inc. (HDOS) has been closely associated with the Army Aviation community since the mid-1970s. HDOS developed, in concert with the Army and Navy, the AN/AVR-2 and AN/AVR-2A Laser Detecting Sets which greatly improved the survivability of air crews. We at HDOS celebrate the delivery of the 400th Laser Detecting Set and congratulate the ARMY AVIATION Magazine for providing 40 years of excellent communications in support of Army Aviation roles, missions and issues. We wish you continued success in this unique role.

John C. Rich  
President  
Hughes Danbury Optical Systems

Congratulations and Happy 40th Anniversary of ARMY AVIATION Magazine. Over the years, ARMY AVIATION has provided an outstanding forum for presenting issues and topics relevant to aviation's contribution to our Army. I urge you to continue this superb effort in the same professional literary manner and style.

I also encourage AAAA to continue its excellent representation of our entire Branch. In the days and years ahead we will need your loyal support more than ever.

As to where I first read ARMY AVIATION Magazine, I know it was 1970 in Vietnam. Can't remember exactly where, but it must have been in that huge latrine in Cam Ranh Bay. They had the finest selection of reading material I have ever witnessed.

BG John M. Riggs  
Aviation Center Chapter President

Congratulations on the 40th Anniversary of ARMY AVIATION. It has been a most welcome helping hand for many years. I first read ARMY AVIATION in mid-1958 while I was a B-47 bomber pilot for SAC. I have been reading it ever since. ARMY AVIATION is still going strong, while both the B-47 and SAC are gone. Keep up the good work. We all need and appreciate your efforts.

S. Harry Robertson  
President & CEO  
Robertson Aviation

It was the Fall of 1963 when I first read ARMY AVIATION Magazine. As a new aviator stationed at Hanau, Germany in the 3d Armored Division, ARMY AVIATION was the only

publication available giving information on the Army's emerging aviation capabilities. Besides keeping up with my friends, the magazine carried informative articles on a new concept called Air Assault.

We have come a long way since those days more than thirty years ago. The AAAA and ARMY AVIATION Magazine have kept us in contact through the years and done a great service to our profession. Happy 40th Anniversary!

**MG John D. Robinson**  
Chief, Aviation Branch and  
Commanding General, USAAVNC

Congratulations to ARMY AVIATION Magazine on 40 years of dedicated service to Army Aviation! ARMY AVIATION Magazine has provided an invaluable forum for information and dialog which has supported the growth of Army Aviation to its current position of battlefield dominance. This forum has never been more important than today as we chart the path for Army Aviation into the 21st century.

Rodney S. Rougelot  
President & CEO  
Evans & Sutherland

ARMY AVIATION Magazine — the magazine that helped lift the Army from the ground by its own wings. The magazine that spread the word in both an informative and an inspirational way. I congratulate all those of ARMY AVIATION Magazine that have made it possible today for tomorrow.

**GEN Crosbie E. Saint, Ret.**  
Former CinC USAREUR  
and COMCENTAG

Congratulations on forty years of splendid service to the men and women of Army Aviation. As the Voice of AAAA, you have lived and reported their achievements as they happened.

When I first read ARMY AVIATION Magazine, Twenty First Corps Headquarters was at Indiantown Gap Military Reservation, PA, Newcumberland Army Depot was a beehive of Army Aviation activity, and I was a First Lieutenant aviator in the 104th Armored Cavalry, PAARNG, transitioning into a first issue L-19 Bird Dog. All of those have passed into history but the magazine remains a beacon for future generations. Thank you.

John J. Stanko, Jr.  
Former Director, Army Aviation  
& Safety Directorate, NGB

Forty years back introduced a ten year old Army Aviation family to its "scrap book" of tomorrow; the ARMY AVIATION Magazine. The magazine, and its nephew in publishing, *Playboy*, proved to have instant and in some cases, identical interest and appeal to the earlier Army Aviators. Instant success has led to sustained success. Continuous improvement and customer focus work every time! Congratulations on a proud history and an exciting future in this wild world and time of 1993.

**MG Richard E. Stephenson, Ret.**  
Vice President  
Strategic Planning, Government  
Services Group, DynCorp

ARMY AVIATION Magazine — Congratulations on your 40th Anniversary. Your contributions to Army Aviation cannot be overstated. More importantly have been the contributions to bridge the gap between military planners, opera-

tors, concept and requirement developers and industry. The publication is accurate and timely. It represents the philosophy of senior military leadership and we find the feature articles stimulating and highly informative. Your publication keeps us in touch. Keep up the good work.

Gregory L. Summe  
President, Allied Signal Aerospace

On behalf of all 6,000 employees at Lockheed Support Systems, Inc., we congratulate ARMY AVIATION Magazine on achieving 40 years of outstanding service and support of Army Aviation. As a recipient of an AAAA Industry award for the last four years, LSSI considers this publication essential as a professional source of information sharing and camaraderie for all Army Aviation team members. Upon my assignment as President in 1990, I read my first copy of ARMY AVIATION during my transition and have looked forward to every issue since. Best wishes for continued success, leadership and support of a strong and viable Army Aviation Team in the 21st Century!

Robert Tokerud  
President  
Lockheed Support Systems, Inc.

Few periods in our history have been more eventful, or more challenging for the Army and the nation, than the years since 1953. The Cold War, Korea and Vietnam, Panama, DESERT STORM — each placed unique demands upon the men and women of the Army's aviation team.

Through it all, ARMY AVIATION Magazine has been there to chronicle their progress and achievements, their

courage and sacrifice.

As the official publication of AAAA, you've done a splendid job keeping members abreast of important aviation developments. You have also helped foster public awareness of the Army Aviator's needs, today and tomorrow.

Again, congratulations. We know that your next 40 years will benefit our country as much as your last.

Albert Verderosa  
President  
Grumman Aerospace & Electronics

Congratulations on your 40th birthday!

When we first met in the Fall of 1959 you were six years old, and I was starting my tour as Director of Army Aviation. In the years to follow you continued to do your job and did it well. You were undoubtedly a factor in the successful growth of Army Aviation to its preeminent battlefield role.

You have accomplished your mission. God bless and keep you!

MG Clifton F. von Kann, Ret.  
Commanding General, USAAVNC  
1959-1961

Congratulations, ARMY AVIATION Magazine, on your 40th Anniversary! Allison is honored that we have been an integral part of the AAAA and the Army Aviation heritage. The association has been instrumental and contributory to the successes Army Aviation has achieved over the years.

The employees of Allison pledge their continued support over the next 40 years.

F. Blake Wallace  
Vice President and General Manager  
Allison Gas Turbine Division, GMC

Beechcrafters are proud to have been a participant in Army Aviation during its development, and to have rendered a contribution during the war years of American history.

ARMY AVIATION Magazine's reporting of people and events that have shaped this growth has been outstanding. The AAAA Annual Convention is tops in its field and, along with ARMY AVIATION, provides a forum for government and industry to continue to share in the defense of America. We applaud your efforts, and salute ARMY AVIATION and the outstanding soldiers you represent!

Arthur E. Wegner  
Chairman and CEO,  
Beech Aircraft Corporation

Congratulations on reaching the mature age of 40. I knew your parents even before you became a magazine. You were conceived (I have been told) in a small apartment in one of those massive high-rises in New York City.

I remember meeting you when I visited your parents in October 1954. I believe they called you the "Army Aviation News" back then. You were a brash young brat competing with two kids named Dale and Lynn for space and your parents' attention in that very small apartment.

It is amazing how you and the other kids grew and prospered when they moved you to the wide open spaces of Connecticut.

LTG Robert R. Williams, Ret.  
AAAA President, 1976-1978

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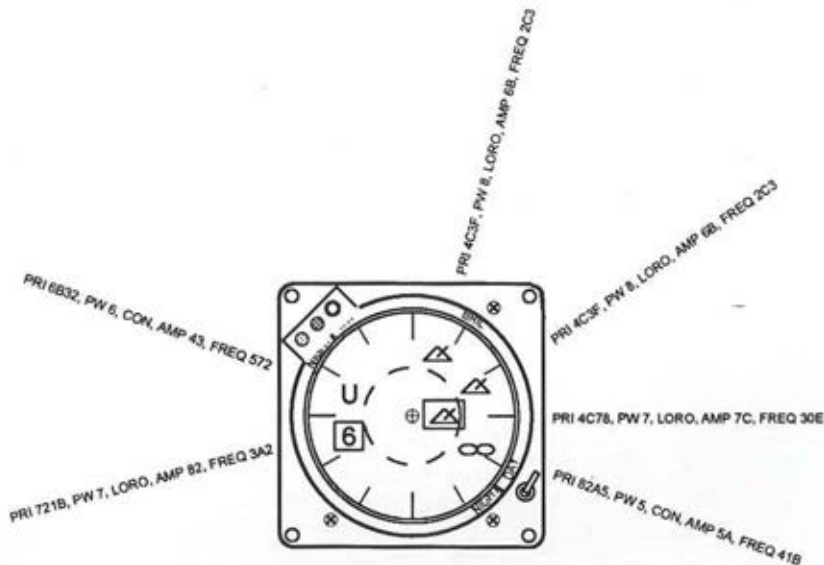
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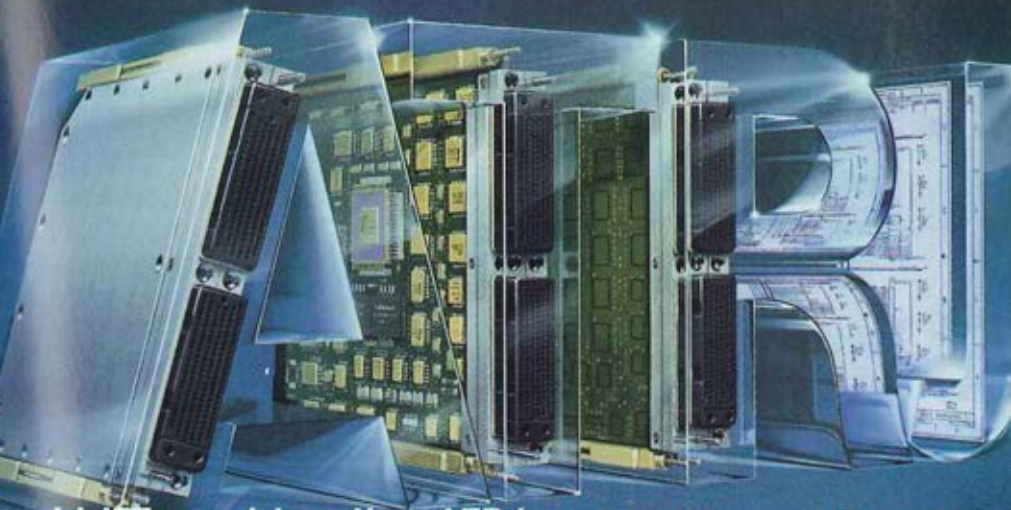
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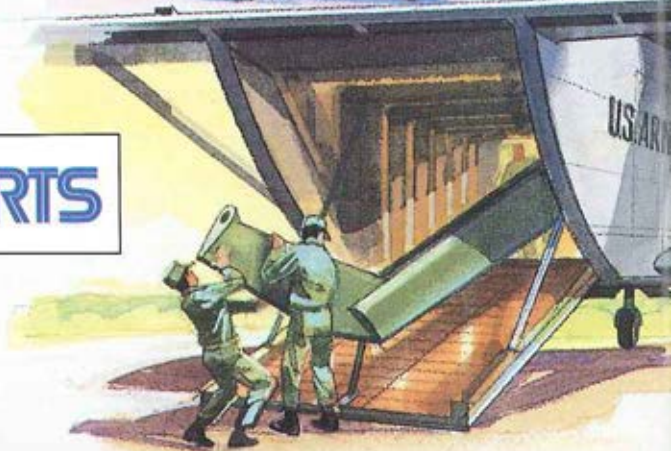
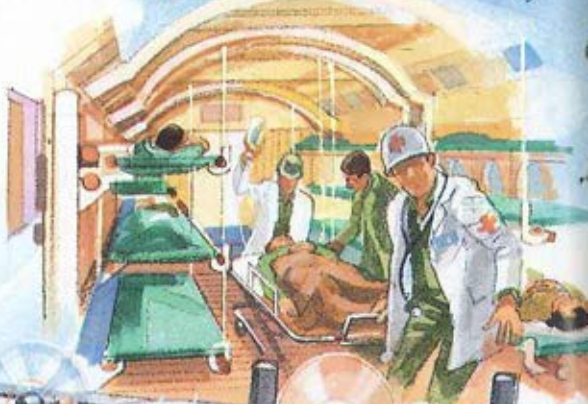
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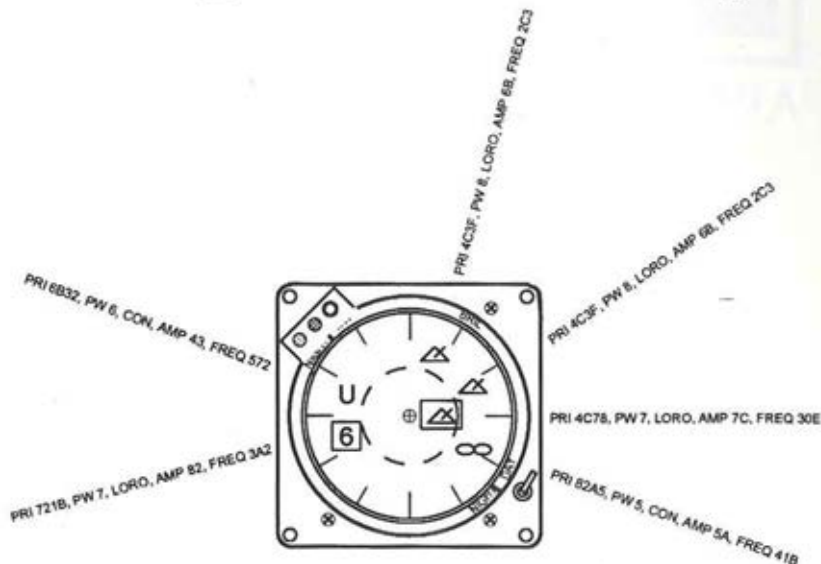


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Above: Terry Coakley, AAAA Executive Director (left) visits with CW4 Donald E. Beatty, Indiantown Gap Chapter President (right) at the Eastern ARNG Aviation Training Site (EAATS), Ft. Indiantown Gap, PA. The two met on 23 July 1993 to review Chapter programs and future membership enrollment ideas following the retirement ceremony held for COL John J. Stanko, Jr., Ret.

Below: MG John D. Robinson (left), Commanding General, USAAVNC and Aviation Branch Chief, presents COL David F. Sale (center), then TSM Longbow, with a Silver Order of St. Michael Award at COL Sale's retirement dinner on 15 September 1993. COL Sale's wife, Kathy (right), joined him in accepting the award.


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# AAAA AEC Symposium



The 1993 Aviation Electronic Combat Symposium (formerly the Aircraft Survivability Equipment Symposium), hosted by Grumman Melbourne Systems, was held at Melbourne, FL, 2-3 November.

AAAA Senior Vice President, MG Richard E. Stephenson, Ret., greeted the attendees and introduced this year's host, MGEN Thomas S. Swalm, Ret., Vice President, Special Programs, Grumman Melbourne Systems. COL Thomas E. Reinkober, AEC Program Manager, followed by presenting his opening remarks. The Keynote Address was delivered by MG John D. Robinson, Commanding General of USAAVNC and Ft. Rucker, and Aviation Branch Chief.

Nineteen technical papers were presented during the classified symposium, and included:

**Aviation Mission Area — The Future** by Mr. Thomas L. House, Executive Director, Aviation RD&E Center, U.S. Army Aviation and Troop Command; **Foreign EO Systems — Expanding the Threat Environment** by Donald R. Fetterly, Project Engineer, Foreign Technology, Hughes Missile Systems Company; **Advanced Threat Infrared Countermeasures Demonstration** by Mr. Russell O. Stanton, Assistant Project Manager, Aviation Electronic Combat PMO; **OSD Band IV Testing** by Michael Schuck, Director, Precision Guided Weapons Countermeasures, Test and Evaluation Directorate, White Sands Missile Range; **Advanced Threat Radar Jammer / Escort Jamming** by Ms. Cheryl L. Meier, Assistant Project Manager, Aviation Electronic Combat PMO and Mr. Robert M. Zanzalari, Project Leader, Suite of Integrated RF Countermeasures, Night Vision Electronic Sensors Directorate, U.S. Army Communications Electronics Command; **Aircraft Survivability Equipment Trainer (ASET) IV** by Mr. John Kamadulski, Assistant Project Manager, Aviation Electronic Combat PMO; **Digitization of the Battlefield** by LTC Joseph T. Boylan, Product Manager, Avionics,

Aviation Electronic Combat PMO; **Battle Labs — National Training Center Rotation 94-7 (Joint STARS)** by John J. Czura, Senior Engineer, SAIC, Aviation Electronic Combat PMO; **Global Positioning Systems for Army Aviation** by CPT(P) Harlene N. Coutteau, Assistant Project Manager, Aviation Electronic Combat PMO; **HAVE QUICK** by Joseph G. Ruggiero, Chief, Field Office, Aviation Electronic Combat PMO; **High Frequency Radios** by Arlie D. Keister, Assistant Project Manager, Aviation Electronic Combat PMO; **Interactive Battlefield Defensive Simulation (IBDSIM)** by Roger A. Schleper, Operations Research Analyst, U.S. Army Aviation and Troop Command; **Improved Data Modem** by Richard L. Powell, Assistant Project Manager, Aviation Electronic Combat PMO; **Aviation Mission Planning System Demonstration** by MAJ Richard M. Esposito, Assistant Project Manager, Aviation Electronic Combat PMO; **Command, Control, and Communications** by CPT(P) Richard B. Pennycook, Assistant Project Manager, Aviation Electronic Combat PMO; **Electronic Warfare Officer Update** by CW2 John B. Hall, Electronic Warfare Officer, Aviation Electronic Combat PMO; **Embedded ASE Training** CW4 Peter R. Kalorgis, ASET System Manager, Directorate of Simulation, U.S. Army Aviation Center; **Distributive Interactive Simulation System** by LTC Jan S. Drabczuk, Acting Project Manager, Distributive Interactive Simulation System, U.S. Army Simulation, Training, and Instrumentation Command (STRICOM); and **Digital Imagery for Tomorrow's Army** by Raino Trifonoff, Aviation Electronic Combat PMO and LTC Allen D. Butler, Ret., Phototelesis, Inc.

The high point of the Annual AEC Symposium was the AEC Awards Banquet. Following an address by MG Dewitt T. Irby, Jr., PEO Aviation, the AAAA "Aircraft Survivability Equipment Award" was presented to CW4 Bradford A. Powell, MH-47D Sys-



Above, left to right: Chris W. Bochen, Director, Avionics Business Development, Cubic Defense Systems; Becky Kranhold; CPT Keith J. Kranhold, first AAAA AEC Avionics Awardee; MG Dewitt T. Irby, Jr., PEO, Aviation; CW4 Bradford A. Powell, ASE Awardee; Kathleen Powell; COL Thomas E. Reinkober, PM, Aviation Electronic Combat; and Terry Coakley, Executive Director, AAAA.

tem Integration and Management Office, 160th Special Operations Aviation Regiment (Airborne).

The AAAA Award, sponsored by Loral Electronic Systems, is presented annually during the AEC Symposium to the individual who has made an outstanding contribution to Army Aviation in the area of ASE during the period encompassing August 1, 1992 through July 31, 1993. The trophy is on permanent display at the U.S. Army Aviation Museum at Ft. Rucker, AL.

As the Co-Chairman of the rapidly formed Process Action Team (PAT) with PM AEC, CW4 Powell led the transition of the MH-47D airframe from the standard M-130 system to a more capable state-of-the-art dispensing system. He built, installed, and flight tested the new system in a 90 day period. The MH-47D aircraft with the Smart Dispensing System installed provided a remarkable increase in aircraft protection against missile attack, which was not expected until the year 2001. Mr. Powell's aggressive management approach, combined with innovative, streamlined acquisition principles, rapidly provided state-of-the-art capabilities to Special Operations Aircraft.

Next, CPT Keith J. Kranhold, Brigade Signal Officer, 128th Aviation Brigade, U.S. Army South, was honored as the

recipient of the Avionics Award.

Sponsored by Cubic Defense Systems, Inc., this award is presented annually by the AAAA to the person who has made an outstanding individual contribution to Army Aviation in the area of Avionics during the awards period encompassing August 1, 1992 through July 31, 1993.

CPT Kranhold developed an aviation architecture for Central and South America that solved operational communications shortcomings, enabled flight following with aircraft deployed throughout the region, and established a communication reliability level that exceeded 95%. CPT Kranhold also developed a comprehensive aviator and ground-based operator training program that allowed equipment to be operated at its highest potential.

To quote his commander, COL Michael J. Vanairsdale, "CPT Keith Kranhold has done more in 12 months to improve command and control in the 128th Aviation Brigade and Army Aviation in the U.S. Southern Command area of responsibility than in the entire history of the brigade."

The next day, the last eight papers were delivered and AAAA Certificates of Appreciation were presented to COL Reinkober, CPT(P) Harlene N. Coutteau, AEC PMO, and Stephanie Moss and Michael N. McCloy of Grumman Melbourne Systems.

## HELEN T. CRIBBINS

Helen T. Cribbins, wife of AAAA NEB member Joseph P. Cribbins, passed away 24 November 1993 at the Hospice of Northern Virginia.

She is survived by Joseph P. Cribbins, her husband of 48 years, who recently retired from the Army with 52 years of combined military and civilian service.

Donations may be made to the Hospice of Northern Virginia, 6400 Arlington Blvd, Falls Church, VA 22042 or to the AAAA Scholarship Foundation, Inc. c/o the Helen T. Cribbins Scholarship, AAAA 49 Richmondville Ave., Westport, CT 06880.

### New AAAA Chapter Officers

#### Iron Mike:

MAJ John E. Arthur, V (VP, Prog); CSM Zeandrew Farrow, Ret. (VP, Enlisted Aff.).

#### Lindbergh:

CSM R. Craig Bernier (VP, Enlisted Aff); Leroy Horvath (VP, Retired Affairs).

#### Morning Calm:

MAJ Matt S. Granger (VP, Prog.); LTC James L. Laughlin (VP, South Membership).

#### Wings of the Marne:

LTC Ray A. Nelson (SrVP).

### Honorary Member

The following person has been selected by his Chapter as an Honorary Member. He will receive a complimentary one year membership, citation in these pages, and a "Certificate of Honorary Membership."

**MG Josue Robles, Jr.**  
Mid-America Chapter



MAJ Richard A. Sparks, Ret., disconnects the battery on an OH-58A at the conclusion of his last flight as an Army Aviator. A Charter and Life Member of AAAA, Sparks joined up in April 1957, the same month he graduated from the Army Helicopter Pilot Training Course (AHPTC) 57-3. He was on flight status from August 1956 to February 1993, and would like to share some stories with his surviving classmates. He can be reached at 945 W. Edmundson Ave., Morgan Hill, CA 95037-5311.

## AAAA CALENDAR

A list of upcoming AAAA Chapter and National dates.

### January, 1994

✓ **Jan. 28.** AAAA Scholarship Board of Governors Meeting, Arlington, VA.

✓ **Jan. 29.** AAAA National Awards Committee Meeting to select CY93 National Award Winners.

### February, 1994

✓ **Feb. 2-4.** 20th Annual Joseph P. Cribbins Product Support Symposium sponsored by the AAAA Lindbergh Chapter, Stouffer Concourse Hotel, St. Louis, MO.

✓ **Feb. 3.** AAAA Outstanding Aviation Logistics Support Unit of the Year Award Presentation & Industry Award Presentations, Stouffer Concourse Hotel, St. Louis, MO.

### March, 1994

✓ **Mar. 24-25.** AAAA USAREUR Region Professional Sessions and USAREUR Region Ball.

### April, 1994

✓ **Apr. 20-24.** 1994 AAAA Annual Convention, Cervantes Convention Center, St. Louis, MO.

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