

August, 1970

Army Aviation

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(see back cover . . .)



LYCOMING DIVISION
STRATFORD, CONNECTICUT 06497

ARMY AVIATION

AUGUST, 1970

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Command and Staff

"Command and Staff" is a monthly column listing the forthcoming assignments of those active and retired aviation personnel in the rank of colonel and above. Residence information on those listed may appear in the "Change of Address" columns appearing elsewhere in this issue.

Major General George S. Beatty, Jr., as Chairman, Joint Brazil-U.S. Military Commission, APO New York 09676.

Major General (P) Richard T. Knowles, to Assistant to the Chairman, Joint Chiefs of Staff, Washington, D.C. 20301.

Major General (P) John M. Wright, Jr., Office of the Comptroller, Dept. of the Army, Washington, D.C. 20310.

Brigadier General (P) George S. Blanchard, to Hqs, 82d Airborne Division, Fort Bragg, N.C. 28307.

Brigadier General Fred E. Karhohs, as Director, Vietnam Task Force, Office, Asst Secretary of Defense, Washington, D.C. 20301.

Colonel John Bergner, as Commanding Officer, 34th General Support Group, APO San Francisco 96309.

Colonel John E. Cobb, to Office of the Joint Chiefs of Staff, Washington, D.C. 20310.

Colonel Frank O. Grey, Jr., Ret., Grey Real Estate, 20003 S. Wolf Road, Mokena, Ill. 60448.

Colonel Walter F. Jones, to ODCSOPS, Hqs, USA-REUR and 7th U.S. Army, APO New York 09403.

Colonel Frank W. Kiel, Office of the Surgeon, USTASCOMEUR, APO N.Y. 09058.

Colonel John H. Morrison, to Communications Sys Directorate, OACSC-E, Dept. of the Army, Washington, D.C. 20314.

Colonel Lloyd O. Pruitt, to U.S. Army Reserve Adv Group, Chicago, Ill. 60615.

Colonel Robert J. Standley, to Hqs, 931st Engineer Group (Combat), Fort Benning, Ga. 31905.

Colonel Harold B. Van Dyken, to Hqs, U.S. Army Ryukus, Fort Ruckner, APO San Francisco 96331.

Editor's Note: The following postscript to the Director's Newsletter appearing on pages 8-9 was received after those pages had been turned in to the printer. **General Burdett's P.S.** concerns key staff changes and is as follows: "I have just learned that **Colonel (P) Jack Hemingway** has been selected to replace **Brigadier General (P) George Putnam** as CG of the 1st Aviation Brigade. **General Putnam** is now CG, 1st Cavalry Division (Airmobile), as a result of the tragic death of **Major General George Casey**. **Colonel (P) Bill Maddox** will become Director of Army Aviation after my departure. Although the circumstances which necessitated the change are most unfortunate, we are very fortunate in having these outstanding Army Aviators available for this office and for the Golden Hawks."

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AVIATION

IN THE '70'S

An address by Lieutenant General George I. Forsythe, Commanding General, U.S. Army Combat Developments Command (CDC), Ft. Belvoir, Va., at the 32d Annual Meeting of the Aviation Spacewriters Association in Las Vegas, Nevada

THE tendency today is to think that because our NATO deterrent has been effective in the past that we need not overly concern ourselves with the threat posed by forces with superior numbers.

Unfortunately, we have not yet attained that idealistic goal wherein nations can live in harmony with each other with little likelihood of aggression. As Sir John Winthrop Hackett has stated: *"A society of men in which no resort to forces is possible, either for the common good or against it, either for individual advantage or against it, is inconceivable, so long as man remains what he is."*

The Soviets have exercised restraint in recent dealings with the West. This is undoubtedly due to the NATO forces in-being, backed by our nuclear arsenal. At the same time they have continued to build up and modernize their ground and tactical air forces so that their capabilities have improved.

King-sized paradox

Thus today, we have a king-sized paradox, a confluence of two tides, or in simple terms, just plain "gaposis." CDC is looking at this

problem very carefully and attempting to resolve it.

With the numerical odds against us, as they were against Custer and the men of the 7th Cavalry at the Little Big Horn, the question today becomes one of how we can change the odds. At CDC, we feel Army Aviation with its many additives to combat power may bring the scales into balance.

Perhaps the best way in which to place a handle on this problem is to consider Army Aviation and what it offers from the standpoint of the five very fundamental functions of combat in developing combat power on the battlefield: *intelligence, command and control, mobility, firepower, and certainly not least — even though last here — the combat service support* which all forces must have if they are to succeed. All of these functions proceed coincidentally in an integrated fashion to produce the combat power desired.

Intelligence, or the lack of it, was one of the prime factors which led to Custer's predicament. Stated simply, Custer did not know enough about the Indian force he was track-

(Continued on Page 26)



Ever have to give a workhorse a lift?

Sometimes getting a workhorse to work is a problem. That's where Boeing's CH-47C Chinook comes in. It can lift earthmoving equipment, trucks or graders externally. And the men who operate them can ride inside the helicopter cabin.

The CH-47C can provide this combined lift capability up to a payload of 12 tons. A capability nowhere else available today in the free world.

The Chinook's size, power, maneuverability and reliability make it the most versatile helicopter now available for heavy-lift loads.

BOEING HELICOPTERS-VSTOL



1942



1950



3



4



5



6



7

The wings you wear!

BY MAJOR GENERAL ALLEN M. BURDETT, JR.
DIRECTOR OF ARMY AVIATION, OACSFOR, DA

ALTHOUGH Army Aviation just passed its twenty-eighth birthday, the wings which we so proudly wear are only twenty years old.

Yet, during those twenty years the wings of an Army Aviator have been earned and worn by many distinguished and outstanding people. Displayed on the wall in my office are the Senior Army Aviator wings worn by General Hamilton H. Howze, the first Director of Army Aviation. It was these wings that fostered the writing of this article.

In the process of creating a display of Army Aviator wings for the Office of the Director, we delved into the files of the Institute of Heraldry and discovered that the present badge has a very interesting history.

The initial "L" wings

From 1942 until 1950 Army Aviators wore the "L" wings which were simply Army Air Corps pilot wings with the letter "L", for Liaison, superimposed on a plain shield. This technique of placing a letter on the shield was used also for Glider pilots (G) and Service pilots (S) during the period and, as mentioned below, was the basis for one of the early candidate designs for the Army Aviator badge. Incidentally, it may be of interest to point out that the design of the Air Corps Pilot wings, (which serve as the present Air Force wings) dates back to January 1919.

AR 95-5, dated 15 November 1949, established the aeronautical designations of Army Aviator and Senior Army Aviator. Accordingly, in January 1950, action was started to seek approval of appropriate badges for these designations. Early suggestions included the "L" wings (plain and with star) and the "A" wings illustrated at the left.

Luckily, informal coordination with the Air

Force revealed that they would *not* agree to having the Army use wings which duplicated the shape of the Air Force pilot badges. Moreover, the Office of the Quartermaster General took exception to the placing of symbols (the letter A) on the shield of the United States. The next trip to the drawing board produced more exotic nominations as shown (3, 4, 5, 6, 7).

The shape of the shield used in these designs was suggested by that of the insignia of The Adjutant General's Department and the aides' insignia, and was distinctively different from that used by the Air Force. The suggested size — 2 inches from wingtip to wingtip — was considerably smaller than the Liaison wings which measured 3 1/8". This smaller size was considered more in keeping with other badges authorized for Army wear.

Subsequent staffing, however, produced unfavorable comments on the 2 inch size as being too small; therefore, 2 1/2 inches was suggested and the design, substantially as it is today, was approved for procurement on 27 July 1950. Authorization and eligibility requirements for award of the Army Aviator Badges were incorporated in Change 5 to AR 600-70, dated 2 August 1950.

Master Wings

The Master Aviator Badge was considerably less complicated aborning. However, a problem was encountered with the designation. On 26 July 1956, DCSPER requested that the Adjutant General study and make recommendations on the requirements for the aeronautical designation of "*Command Army Aviator*" to recognize those aviators who had gained considerably greater experience than that required for the designation of Senior Army Aviator.

It was determined that the criteria for award of the higher designation should generally parallel those for the "*Command Pilot*" of the Air Force and that the design of the wings would be identical to the Senior Army Aviator wings with the addition of a wreath similar to that on the Master Parachutist Badge.

However, the title of "*Command Army Aviator*" was subsequently scrapped because it was too similar to "*Command Pilot*", and the designation "*Master Army Aviator*" was

TO ORDER "L" WINGS

Forward name, address, and number of "L" wings desired on or before Oct. 15 to LTC William B. Harper, 2734 N. Oakland Street, Arlington, Va. 22207, or to the magazine address on page 2. Send no money. If minimum production order is received, you will be quoted/billed prior to delivery.

selected as most appropriate. The design of the badge was approved by the Army Staff on 12 February 1957 and authorization and eligibility requirements were incorporated in AR 600-70 by Change 7, dated 18 April 1957.

Collectors' items

During the course of the search for wings and their history, it was discovered that "L" wings are pretty scarce. It appears that many of those who were authorized to wear the Liaison pilot wings have misplaced or otherwise lost theirs. After some investigation, the Institute of Heraldry determined that a set of dies is still in existence and a batch of wings (full size and miniature) could be struck if there are enough people who want them to warrant the effort and to keep the price reasonable.

If those of you who were authorized to wear the "L" wings would like a pair or two for your collection of memorabilia, let us know (See Box). If there is enough interest, my office will make the necessary arrangements to have the wings made.

Wear 'em proudly!

Admittedly, the foregoing reflects a bit more nostalgia. But being entirely objective — and here I must define the word "*objective*" as a clear expression of one's personal belief without any consideration whatsoever of the view of others — I have always believed that the wings of an Army Aviator are far and above the best looking of all aeronautical badges worn by all Services throughout the world.

For that reason, I was more than interested to learn of their derivation and wanted to share our findings with others. To those of you who have earned the beautifully designed wings of an Army Aviator, I say continue to wear 'em proudly and keep 'em flying!

Research

SINCE the introduction of high-strength aluminum alloy stress skin panels into aircraft, aviation has been plagued by the threat of catastrophic metal failure caused by bullet impact or other sudden stress that creates cracks which spread rapidly causing failure of the aircraft structure.

In military aircraft, single-shot kills have occurred as a result of bullet penetration on stressed skin panels and commercial aircraft have had failures traced to small cracks that propagated with deadly results.

A novel approach

The problem of preventing the catastrophic failure may have moved a step toward solution with the introduction of a novel approach based on the placing of thin fiberglass strips on the critically stressed sections of the aircraft. The fiberglass strips prevent the spread of cracks by confining this damage to the immediate area.

Charles D. Roach, former Director of Research, and Irving E. Figge, Sr., Project Engineer, Structures Division, U.S. Army Aviation Materiel Laboratories (AVLABS), Ft. Eustis, Va., originators of the fiberglass concept, report that research and testing to date show

Checking the catastrophic metal failures that have resulted in...

Single Shot Kills!

INDUSTRY BRIEFING

The U.S. Army Aviation Systems Command and the Army Aviation Association will co-sponsor an Advance Planning Briefing for Industry on Thursday, October 15. The classified session will be held in the West Auditorium of the State Department in Washington, D.C. Details of the 1970 presentations may be secured through the AAAA, 1 Crestwood Road, Westport, Conn., on or before September 1, 1970.

tis, Va., originators of the fiberglass concept, report that research and testing to date show great promise of overcoming this structural problem.

Purpose of the investigation, the engineers point out, is to determine the effect of thin strips of fiberglass on the crack arrest and residual static strength behavior of aluminum panels (type 7075-T6, the type metal used on most current aircraft).

Tests were carried out on 12-inch wide aluminum alloy specimens similar to aircraft wing and fuselage sections. Fiberglass straps were applied in several ways. These included two straps bonded to either one or both sides of the specimen, other specimens carried one wide strap on the impact side of the panel.

.30 caliber "hit"

The specimens were preloaded in a 100,000 pound capacity hydraulic test machine and a steel rod driven through the panels to simulate the shattering impact of a .30 caliber slug and to produce a running crack. The action was recorded by a high speed camera (10,000 frames a second).

Although elated by the success of the research so far, Figge is quick to point out that additional work must be done to develop a method that doesn't require extensive surface application before strap bonding, and one that permits a cure without pressure or heat. And finally, additional research must be aimed at evaluating the reaction of the straps after being subjected to service loadings and environmental conditions.

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Logistics

IN his recent article, "No Place to Hide,"¹ Colonel C. O. Duty, Deputy for Acquisition, AVSCOM, stressed the importance of the logistic system being responsive to customer needs, and made reference to the Product Assurance element of the Acquisition Activity throughout the article. This article will acquaint our customers with the product assurance efforts being expended to support their aircraft and equipment requirements.

A new concept, known as *Product Assurance*, recognizes that quality must be designed and built into an item if it is to satisfy the quality, reliability, and maintainability demands of Army air mobility. It involves the use of modern statistical and management techniques in solving quality problems and devising means to prevent their future recurrence. Product quality standards are determined and the system is policed to maintain this quality level. It acknowledges and places the responsibility for aircraft quality on all personnel associated with the design, development, production, deployment, and use.

The product assurance concept was born from the need to immediately cope with and resolve the shortcomings of aircraft and related equipment. It is better and cheaper to prevent defects from occurring than to suf-

fer the consequences of deploying substandard material which can have a deteriorating effect on troop morale and operations.

As Director for Product Assurance, I have assembled a capable staff of engineers, quality specialists, and analysts who are experts in the varied aspects of product assurance. Their efforts cover the entire life cycle of an aircraft system. From the conceptual phase through development, production, and deployment to eventual obsolescence, they perform the functions essential to assure you a quality aircraft system and component parts. These functions can be divided into four broad areas; *planning, data analysis, assessment and liaison operations with manufacturers*.

Planning

We develop a product assurance plan early in the conceptual phase of an aircraft system, one in which the expertise of the engineering, technical, and product assurance staff is exercised. They carefully review and evaluate proposed requirements to determine those events which must be controlled to prevent acceptance of substandard material. Then the resource needs are determined, responsibilities assigned, and target dates established for assessing the manufacturer's efforts, based on his development schedule.

In determining those events which must be subjected to product assurance surveillance, consideration is given to its possible future effect on product quality, reliability, and maintainability. In this regard, a blueprint or technical manual which is inadequate can be just as critical as a component which fails endurance testing.

Data Analysis

Field experience discloses errors in the design, development, and manufacture of aircraft, their related subsystems, and supporting hardware. You the user, maintenance officer, crew, mechanic, or clerk serve as a valuable

Getting the best product!

By

MARION F. BUSIERE
Director, Product Assurance
USA/AVSCOM

¹. AVSCOM IN TRANSITION, the Third of a Series, Army Aviation Magazine, Vol. 18, No. 11.

member to the AVSCOM team in determining those characteristics which must be stressed to improve future generation aircraft by reporting unforeseen equipment operating difficulties and excessive maintenance requirements. The information assists us in improving the quality of the aircraft being manufactured and prevents shortcomings in future aircraft designs.

When AVSCOM receives your suggestions for equipment improvement, they are closely scrutinized to determine the corrective action required. Normally, the nature of a problem reveals the contributing factor. This could be related to equipment design, material used in construction, manufacturing shortcomings, environmental operating conditions, or other mission requirements which exceed the design envelope.

When possible, immediate action is taken to adapt your suggested improvement. This may result in an engineering design change on the aircraft or item, evaluation of the manufacture process controls, or establishment of mandatory inspection characteristics. On completion of primary corrective action, your report is compiled with similar data for use in analysis of the aircraft's quality, reliability, and maintainability trends.

As a trend develops, a decision is made as to the value of incorporating a change in present generation aircraft and into future generations. The final decision is based on several factors; however, the prime concern of the evaluator is the benefit to be gained by the users in mobility, reliability, and maintainability.

Assessment

The assessment function is an important aspect of the product assurance program throughout the life of an item. Through this effort, we make a major contribution to the prevention of major deficiencies. Assessment begins during the conceptual phase when contract technical requirements are assessed by Quality Control Specialists, Equipment Specialists, Engineers, and the Contracting Officer to assure the requirements specify the details required to design and produce an aircraft capable of meeting established goals.

As the development of an aircraft system

This is the tenth article of a thirteen article series entitled "AVSCOM in Transition."

progresses, our Product Assurance engineers, specialists, and other AVSCOM personnel review the manufacturer's effort to verify the extent goals have been achieved. Physical and mechanical tests are conducted to measure an aircraft's ability to withstand rigorous environmental and operational requirements encountered during combat. These tests subject the aircraft structure and its components to loading and environmental conditions in excess of those encountered during the most adverse operations.

During the test phase which starts after development approval, major aircraft structural members are stressed and flexed beyond endurance, components are functionally exercised under extreme conditions, and engines and transmissions are subjected to endurance tests to determine their life potential. As these tests are performed, engineering and product assurance representatives evaluate and verify test results.

These tests serve two primary objectives: They provide evidence that performance, reliability, and maintainability goals have been attained as well as indications of program status of the test effort. As the aircraft system

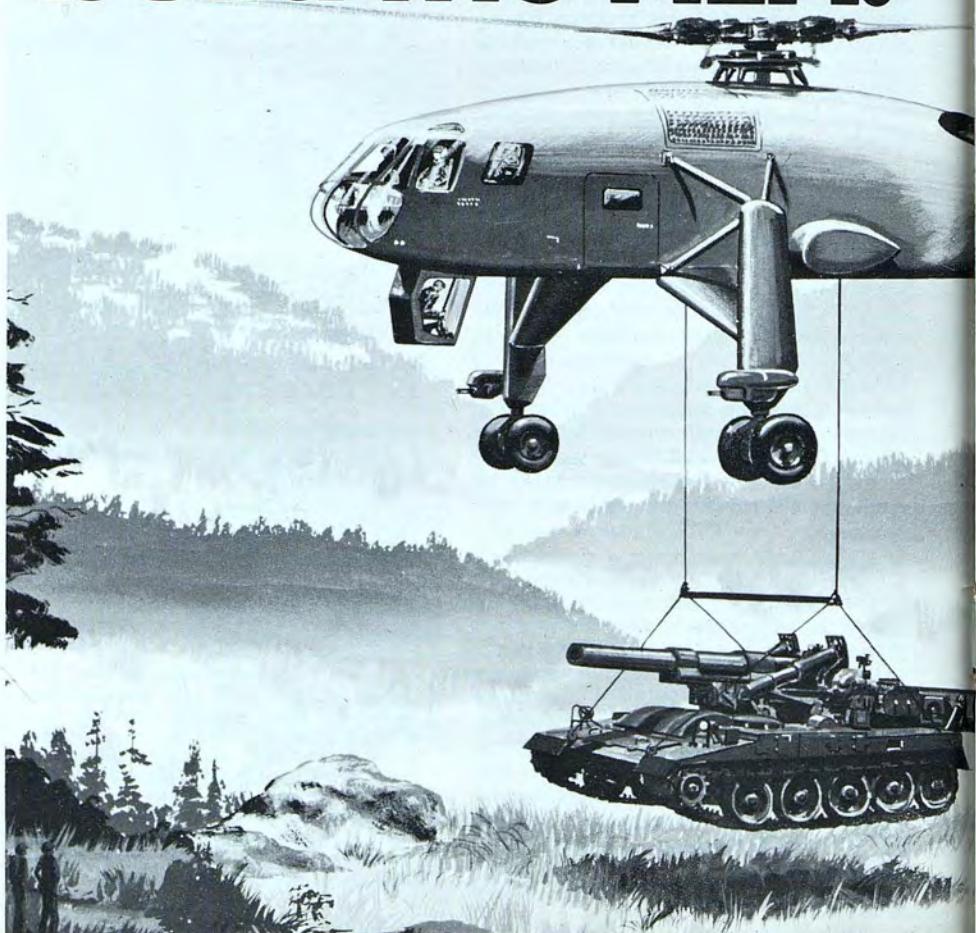


**MARION F.
BUSIERE**

ABOUT THE AUTHOR

Marion F. Busiere has been associated with the Army Aviation Program since 1942 as a result of military service. His civilian career began in 1954 when he joined the Transportation Corps Army Aviation Field Service Office (TCAAFSO), a forerunner to AVSCOM. During his period of service with this Command, he worked primarily in the field of maintenance prior to his current assignment as Director of Product Assurance.

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only crane-type helicopter proven in combat. And we're building the Army CH-54B (the product-improved CH-54A), scheduled for first flight next year.

With all this experience the only thing we need to build the HLH is the go-ahead.

Sikorsky Aircraft DIVISION OF UNITED AIRCRAFT CORPORATION
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THE BEST PRODUCT

(Continued from Page 13)

is developed, the data for operation and maintenance manuals, production drawing, test requirements, and other software, must be generated. The completeness and accuracy of these items must be evident if a new aircraft is to be successfully employed in the field.

On completion of the hardware development effort, a complete physical audit is performed to insure that software and hardware are compatible and that required maintenance can be performed by following the instructions contained in the various manuals.

Assessment of the hardware during development is just a portion of the total Product Assurance Assessment effort. Continued assessment and testing are accomplished during production and reconditioning until phase out. This testing contributes to effective aircraft system management by furnishing the information necessary for timely decisions and program coordination.

Liaison with manufacturers

The success or failure of a deployed aircraft system is directly related to the product assurance effort expended during development and subsequent testing. However, we cannot afford to stop our quality efforts once a design has proven capable of meeting user's needs. We must continue our program to assure that material quality is not degraded during subsequent production and reconditioning phases.

Our efforts at this time become production-oriented. Prior to awarding a contract to a potential manufacturer or overhaul source, their capabilities and quality programs are thoroughly evaluated, an action assuring us they have the capabilities and controls necessary to produce a qualified product. This

DEACTIVATION OF THE 10TH

Once the largest Army Aviation unit in the U.S., Fort Benning's 10th Aviation Group has been deactivated and redesignated as the U.S. Army Infantry Center Aviation Command (USAICAC). Under the new organization, the companies formerly under the 10th Aviation Group, remain under USAICAC as long as they are assigned to Fort Benning.

evaluation occurs regardless of the service being procured, i.e., hardware, technical data, maintenance, etc.

After contract award, a production meeting is held with the contractor's and government plant cognizant representatives to assure a mutual understanding of contract provisions and quality requirements. This meeting also enables us to discuss the production history of the item and the difficulties experienced by other manufacturers or overhaul sources which have had prior production experience.

To assure that items procured conform to the Army's quality standards, we employ several methods, such as first article evaluation, production audit, and periodic quality program evaluations. The first article evaluation and production audit methods are applicable to new production and are a comparison of the finished product to requirements contained in applicable contract provisions and specifications.

Quality audits are a management tool used by AVSCOM to assure that reconditioned aircraft or components have been properly processed and are capable of meeting a design performance parameter. A secondary objective of this approach is to prevent production of unsatisfactory reconditioned or overhauled material. In conjunction with these defect preventive methods, the contractor's quality program is reviewed to identify any manufacturing operations that are out of specified limits. When the quality specialist finds a potential or existing nonconforming condition, action is taken to correct the deficiency.

Customer satisfaction

It would be presumptuous of us to assume that the end product will satisfy all of our customers in *every* respect. However, our product assurance effort is expended toward the following goals: reliability essential for performing mission requirements; minimum maintenance downtime; and material reaching you without damage and ready for installation and service.

AVSCOM is facing the challenges of today's technology advances and striving to provide you with aircraft and equipment that will meet your performance, reliability, and maintainability needs.

Takeoffs

PCS — GENERALS

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COLONELS

ACHEE, Sidney W.

BUCHANAN, Crawford

LT COLONELS

ANDREE, Robert G.

AUSTIN, Maynard A.

BANG, Arne J.

BURNS, Joseph C.

CANEDY, Charles E.

CHAPPELL, Major L.

DEWEESE, Thomas P.

DUNEGAN, Walter L.

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McGEE, Calvin A.

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SANDERS, Neal W., Jr.

SARNECKI, Aloysius

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SCOGGINS, John

SCULLY, Robert C.

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TOW, James L.

TRUBY, Allen G.

VOELZOW, Eugene F.

WARD, Chester L.

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WILKS, Clarence D.

WILSON, Carl A.

WILSON, Frank R.

WINGATE, Charles S.

WIRTHLIN, Floyd R.

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BERGERON, Andrew L.

BERGERON, Leo E.

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BOSTDORF, John M.

BROCK, Jeffrey D.

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CRAIG, Joe F.

DAVIS, Wayne B.

DEAN, William R., Jr.

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ERKINS, Moses

ESTORES, Sofronio J.

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FLEMING, Jerry L.

FLOHE, Donald L.

FORD, Glaston J., Jr.

GAUZE, James E.

GIBSON, Glen D.

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	ROUNSEVILLE, R.G.	BURBANK, Howard N.	HODGE, Michael W.
HOUTS, Ray A.		CAREY, James F.	HOFFECKER, Lee C.
		CHAPMAN, William J.	JONES, Thomas J.
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KALMUS, William E.	SLYE, William T., Jr.	FERGUSON, Frederick E.	MAURER, Klaus J.
KNUDTZON, Thomas A.	SMITH, Glen A., II		
KRAMER, Leo A., Jr.	SMITH, Richard A.		
LAMBERT, Jerry V.	STRATIFF, Robert R.	FOUST, Jerome V.	McGEE, George P.
LONGHOFER, James E.	TAYLOR, William D.	FRANCIS, John R.	McGOWAN, Robert M.
MAHER, James C.	THOMAS, Steven A.	FRANKLIN, Robt. B., Jr.	MILLER, Marjorie L.
MALKOFF, Eugene P.	THOMPSON, Owen R.	GABRIEL, Henry B.	NORRIS, Warren E.
MATHEWS, Charles H.	TRAVIS, Irvin L.	GLATTE, Horst H.	OLSEN, Wesley R.
McMILLAN, Roy F.	TRICKLER, Roger D.	GRAHAM, Roger D.	PERRY, John F.
MOBERG, Robert J.	TROMBLEY, Thomas H.	HAMLIN, Richie L.	PHELPS, Leon N.
MOTES, Clyde L.	WEBER, Victor A.	HARECHMAK, John R.	PORRECA, Joseph F.
MYERS, Charles	WELCH, Elliot J.	HARKER, Fredrick M.	RAMSEY, Randall
NELIUS, Jack C.	WILLIAMS, Jody L.	HARMON, Fern W.	REVELS, Jack W.
NEWMAN, Joe B.	WILLIAMSON, William R.	HARTLEY, David C.	RIBAR, Frank A.
OSTERMEIER, William F.	WILSON, Leonard R.	HATTON, Edward T.	RICHARDSON, Thomas J.
PAASO, Thomas H.	WINTERS, Donald L.	HAUSER, Benjamin C.	RITTER, Jack H.
POTEAT, James D.		HAYES, Lynn H.	ROBERSON, Hugh B.
RAGLAND, Richard C.		HENRY, Joseph C.	RUBIN, Kenneth E.
CAPTAINS			
	BAILLON, Larry P.		

Blow your horn!

A monthly column in which Army Aviation personnel claim individual and unit operational and logistical records . . . Payload, speed, altitude, endurance, length of service, flight time . . . World or service records, in or out of combat . . . Submit 'em!

High flight time by individual in USARV during a calendar month: 197.6 hours by WO1 John Peele, Troop A, 1st Sqdn, 9th Cav, 1st Cav Div (AM), in May, 1970.

Most flight time for any group of Army Aviators enrolled in a career course: AWOIC-2, a 100-man class with a July 2, 1970 graduation date, with 273,617 hours.

Most combat flight time for any group of Army Aviators enrolled in a career course: AWOIC-2, a 100-man class with a July 2, 1970 graduation date, with 133,007.

Most Air Medals held by an Army Aviator: 101. 1LT Scott R. Alwin, 68th Avn Co, 145th Avn Bn. Lt. Alwin was submitted for the 102d through 108th awards on June 13, 1970.

High flight time for a Combat Aviation Group, organic to a division, during one day: 1,273 hours. 11th Cbt Avn Gp, 1st Cav Div (AM), on May 1, 1970.

High flight time for a Combat Aviation Group, organic to a division, during one month: 27,094 hours. 11th Combat Avn Gp, 1st Cav Div (AM), in May, 1970.

High flight time for a CH-47 Assault Support Helicopter Battalion in one day: 270 hours. 228th ASHB, 11th Cbt Avn Gp, 1st Cav Div (AM), May 1, 1970.

High flight time for a CH-47 Assault Support Helicopter Battalion in one month: 5,829 hours. 228th ASHB, 11th Cbt Avn Gp, 1st Cav Div (AM), in May, 1970.

High flight time for a CH-47 Assault Support Helicopter Company in one month: 1,928 hours. A/228th ASHB, 11th Cbt Avn Gp, 1st Cav Div, in May, 1970.

HUEY-MOHAWK HIGHS

In the next few issues, ARMY AVIATION will solicit its readers for the names of the aviators logging the "Highest flight time (P, IP, etc.) in UH-1 aircraft" and "OV-1 aircraft." If you have more than 2,500 hours in Hueys, or 1,500 hours in Mohawks, send us your name, address, and total time and we'll post the high man. Forward the information to ARMY AVIATION, 1 Crestwood Road, Westport, Conn. 06880.

High flight time for a CH-47 Assault Helicopter Battalion in one month: 9,109 hours. 227th AHSB, 11th Cbt Avn Gp, 1st Cav Div (AM), in May, 1970.

High flight time for a CH-47 airframe in one month: 223 hours. C/228th ASHB, 11th Cbt Avn Gp, 1st Cav Div (AM), in May, 1970.

High flight time logged by an Army Aviator: 18,750 hours by CW4 Stewart R. Park, Ft. Rucker, Ala.

High flight time for an Air Cav Squadron during a 24-hour period: 342 hours flown by 1st Sqdn, 9th Cav, 1st Cav Div (AM) on May 1, 1970.

High flight time for an Air Cav Squadron during a month: 8,259 hours flown by the 1st Sqdn, 9th Cav, 1st Cav Div (AM), in May, 1970.

High flight time for an Air Cav Squadron during two consecutive months: 15,719 hours flown by the 1st Sqdn, 9th Cav, 1st Cav Div (AM), during April-May, 1970.

Most Air Medals held by an enlisted crew member: 67 held by Specialist Fifth Grade Thomas G. Kermer, 1st Radio Research Company (Avn). (Roy A. Highsmith).

High flight time for an Air Cav Troop during a month: 2,832 hours flown by A Troop, 1st Sqdn, 9th Cav, 1st Cav Div (AM), in May, 1970.

Most qualified maintenance test flight instructor: CW4 Edward A. Gilmore, who is qualified in the OV-1, AH-1G, U-8, and UH-1A through UH-1H.

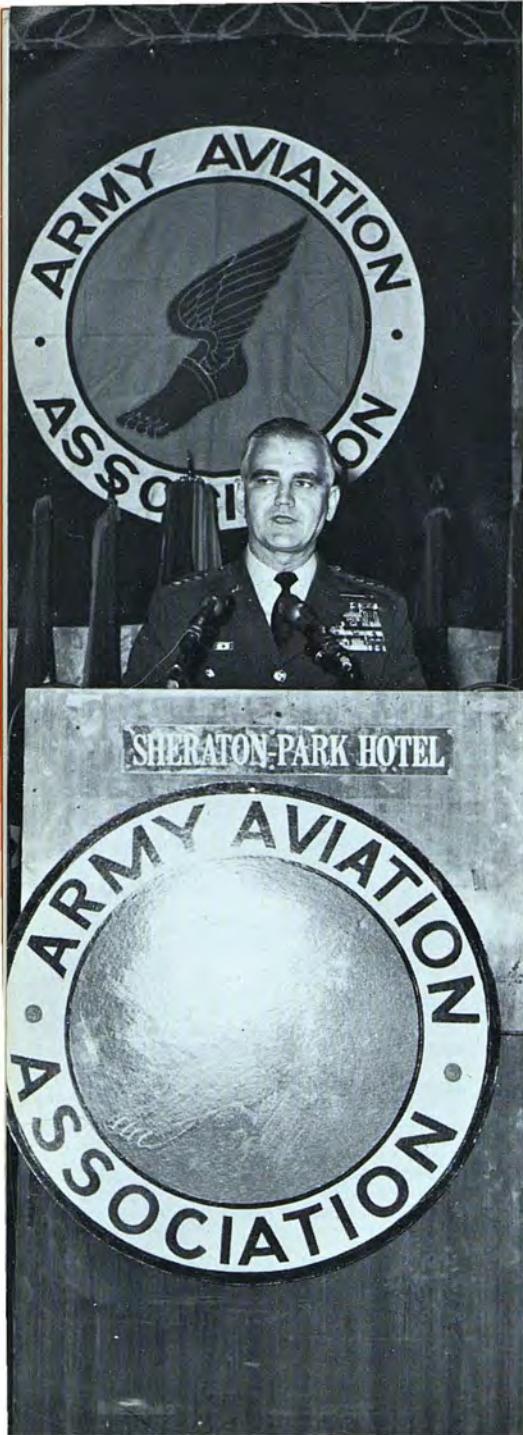
Most medevac missions flown in one month: 282 by the 587th Med Det (Hel Amb), Camp Zama, Japan, in May, 1969.

Most medevac missions flown in one year: 2,412 by the 587th Med Det (Hel Amb), Camp Zama, Japan, during the period June 1, 1968-May 31, 1969.

Most medevac sorties flown in one month: 2,131 by the 587th Med Det (Hel Amb), Camp Zama, Japan, in May, 1969.

Most medevac sorties flown in a year: 19,550 by the 587th Med Det (Hel Amb), Camp Zama, Japan, during the period June 1, 1968 through May 31, 1969.

Only Army Aviator now on active duty who graduated in the first flight class on Sept. 18, 1942: COL J. Elmore Swenson, Hqs, AMC, Washington, D.C.



12TH AAAA ANNUAL MEETING

SHOREHAM HOTEL WASHINGTON, D.C.

WEDNESDAY, OCTOBER 14
Early Bird Reception

THURSDAY, OCTOBER 15
A.M. Panel Presentations

Membership Brunch
(Open to All Attendees)
President's Annual Report
Election of National Officers

P.M. Panel Presentations
Aviation Personnel Seminar
AVSCOM-AAAA Co-Sponsored
Advance Planning Briefing
for Industry

President's Reception

FRIDAY, OCTOBER 16

A.M. Panel Presentations
Honors Luncheon Reception
1970 AAAA Honors Luncheon

Cub Club Reunion
Diehards' Reception



OCTOBER 14-OCTOBER 16

1970 AAAA ANNUAL MEETING

SHOREHAM HOTEL

WASHINGTON, D.C.

ADVANCE REGISTRATION

Advance registrations will be accepted Aug. 1-Oct. 7 (see coupon below). All registrations will be confirmed by mail. Registration badges and social function tickets may be picked up at the AAAA Advance Registration Desk in the Shoreham Hotel, beginning 1 p.m., Tuesday, Oct. 13.

ROOM RESERVATIONS

Write Shoreham Hotel, Connecticut Avenue at Calvert Street, Washington, D.C. 20008, or hotel of your choice. In contacting the Shoreham Hotel, state that you will attend the AAAA Annual Meeting. AAAA cannot accept requests for room reservations. For on-post quarters for military per-

sonnel, write, Hq, Military District of Washington, Attn: G1, Washington, D.C. 20315 on or before Sept. 15.

GUESTS

Only registrants may attend business and professional sessions. Attendance at social functions is open to non-registrants and guests. Full remittance for registration and/or all tickets must accompany this Advance Registration Coupon.

CANCELLATIONS

Phone cancellations of tickets will be accepted through 1 p.m., Tuesday, Oct. 13. Letter cancellations should be postmarked not later than Tuesday, Oct. 6.

ADVANCE REGISTRATION COUPON

Detach and mail to:  ARMY AVIATION ASSOCIATION OF AMERICA
1 Crestwood Road  Make check payable to:

I plan to attend the functions of the 1970 AAAA Annual Meeting indicated below and have enclosed a check made payable to AAAA to cover the cost of my attendance.

Function (All at Shoreham Hotel)	Quantity Desired	Military Member*	Civilian Member	Non- Member	Amount
Registration	\$5.00	\$10.00	\$15.00	\$.....	
President's Reception, 8 p.m., Thursday, Oct. 15	\$6.00	\$10.00	\$15.00	\$.....	
Honors Luncheon and Reception, 11 a.m.-2:30 p.m., Oct. 16	\$8.00	\$10.00**	\$15.00	\$.....	
Ladies Breakfast, 10:30 a.m., Thurs., Oct. 15	\$2.00	\$ 2.00	\$ 2.00	\$.....	
*Active Army, DAC, ARNG, USAR, and Retired AAAA Members.					Total \$.....

Rank/Name

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STITT, Harold W.	McCLAIN, David R.	WAGGENER, Thomas E.	PROSSER, Gary L.	
TETU, Robert G., Jr.	MOTT, Alan E.	WATERFIELD, Herbert M.	SHENGLE, Gerald R.	
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News/Photos



MASTER! — Achieving Army Aviation's highest rating on the symbolic June 6 birthday of Army Aviation, LTC John Thomas, left, Commanding Officer of the 194th Maintenance Battalion, Korea Support Command, receives his Master Army Aviator wings from COL H. E. Hamilton, Chief of the Command Liaison Group. The award presentation took place in Seoul. (USA)



UNDER TEST — An AH-1G HueyCobra equipped with an XM-140 30mm gun is currently undergoing Army evaluation at the Mojave, Calif. Test Range. Capable of a 425 shot per minute rate of fire, the XM-140 is an electrically-powered single barrel automatic gun destined for use against light armored vehicles and emplacements. LTC Dean Wright of the AAWS Office, AVSCOM, and Bell test pilot R. G. Kjellander are shown in the co-pilot/gunner and pilot seats. (Bell)



NUMBER ONE! — CW2 Ronald C. Bean, right, the Distinguished Graduate of Aircraft Maintenance Officer Course Class 17-70, is shown receiving an AAAA Certificate of Achievement along with his diploma from COL Earl L. Russell, Jr., Commanding Officer of the U.S. Army Aviation School Regiment, USAAVNS, at recent ceremonies held at the U.S. Army Transportation School, Ft. Eustis, Va. (USA)



WINNER — COL John R. Adie and Larry M. Hewin, Commanding Officer and Technical Director respectively, of the U.S. Army Aviation Materiel Laboratories (AVLABS), Ft. Eustis, Va., admire the Grover E. Bell Award, recently presented to AVLABS by the AHS "for research and development of advanced helicopters." (USA)



AAAA MEETING — Shown just after MG Robert R. Williams, Deputy ACSFOR, addressed the members of AAAA's Connecticut Chapter at a June 26 professional-social meeting in Westport, Conn., head table guests sit for an informal group photo. Front, l-r, Eugene Tallia, Treasurer; Michael S. Saboe, Exec Vice President; MG Williams; John A. McKenna, Chapter President; COL R. Potter Campbell, Ret., VP, Reserve Affairs. Rear: LTC Leland F. Wilhelm, Ret., Secretary; Art Kesten, Exec VP, AAAA; Kenneth E. Horsey, VP, Programs; COL Richard L. Long, Ret., AAAA National President; and LTC Chester A. Dillahunt, VP, Industrial Affairs. (Rick L.)

AVIATION IN THE '70'S

(Continued from Page 6)

ing. This lack — and there will always be a lack of information about the other fellow — where he is, his strength and weakness, and his capability to inflict damage — these will always be of concern to each commander.

Although aerial surveillance and target acquisition have been used extensively in the past, we see at this time greater application, particularly for collecting *intelligence* in deep forests and rugged terrain through the use of airborne sensors with instant ground readout and devices which permit daytime observation capabilities at night. These devices are developing and have the potential of providing new capabilities.

To enable us to know about the enemy and to preclude an outcome similar to Custer's we have the old reliable O-1 *Bird Dog* and the OV-1 *Mohawk* with its infrared and photographic sensors. A new so-called "quiet" surveillance aircraft is under development and is being tested in Vietnam today. We have considerable hope that this can increase our capability to find them without which, of course, the ability to fix 'em and fight 'em is to no avail.

Intelligence

Reconnaissance is a fundamental element of the *intelligence* function of combat. This task is performed by Army Aviation as well as by aircraft of the other services. We are thinking about new concepts in this area which include such things as making helicopters with armor plate skin. This will obviously require some technological breakthroughs in the areas of lightweight armor, metallurgy, power plants, and lift systems. At this time we are watching with interest some on-going efforts using co-axial rotor systems, fuselages constructed of laminated steel, and a new family of power plants.

There is good reason to believe that the concept is feasible for small aerial vehicles such as those used by aero scouts. Research and evaluation of this concept is proceeding even today. Given that the feasibility and cost prove favorable, it is apparent that such a vehicle would have many applications in any

intensity of warfare. A particularly productive use would be with an aerial fire team ferreting out and delivering effective fires upon the enemy.

Command and control

The second function is that of *command and control*. I wonder how many times Custer wished that he knew where Major Reno was and why he couldn't control or command his actions better than he was able to. One thing that made *command and control* so difficult with Custer also will make it difficult for any commander in the 1970s and that is the size of the operational area.

We envision in the 1970s that the site of the battle area will have forces dispersed to make the battlefield wider, broader, and deeper than heretofore has been accepted. Command over one's forces with such dispersion will require the use of an aerial vehicle to exercise *command and control*. It also goes without saying that the Army helicopter is the best way in which the ground commander can discharge this function.

Mobility

Contributions which helicopters have made to the ability to get about the battle area are almost legendary. The helicopter is much to be preferred for this function because of its ability to relate directly to the commander to whom it responds and because it is independent of the restrictions of terrain. Both Custer and the Indians were about equal as far as mobility was concerned. They both had pretty good horses and they both knew how to use them. The only problem was that the Indians had more of them than Custer did.

Mobility contributes in many ways to all activities in the battle area, not just the movement of tactical troops and the people who will do the actual fighting. *Mobility* means the ability to traverse the battle area with supplies, weapons, and ammunition no matter what obstacles may be encountered, either natural or manmade. Further, it connotes the ability to get from here to there quickly and with forces ready to operate when they get there. This is what *mobility* really is.

We first began to use Army aircraft for tactical *mobility* in Korea when the old flying

banana, the CH-21, and the old H-19 were introduced into that theater. We have come a long way since then. Certainly when someone says, "Huey," this term needs no explanation.

We now have almost 4,500 of these helicopters flying. As you know, the *Huey* has been tremendous as an assault helicopter in Vietnam; however, the *Huey* (a development of the 1950s) has its limitations due to short radius of action and small payload capability.

For this reason CDC is looking for a better vehicle to conduct airmobile operations. We want a squad carrier which has increased survivability, speeds of 150 knots, and better endurance, yet maintains as nearly as possible the agility and low level maneuverability of today's *Huey*.

We are considering two alternatives in this area, the *UTTAS*, which means *Utility Tactical Transport Aircraft System*, and a proposal to extend the *Huey* technology by development of an improved model capable of lifting an infantry squad. The advantages of this machine lie in its increased speed, payload, vertical flight performance, and survivability. CDC is assisting the Department of the Army in comparing the *UTTAS* and the cost of its development against the present and improved version of the *Huey*.

If the Army can move troops quickly from one area to another, it doesn't need as many of them, and, with the ever-decreasing personnel ceiling in the Army, it becomes even more mandatory to maximize our *mobility* potential with an improved squad carrier.

Firepower

Over the centuries *mobility* has been overcome by *firepower*, then alternately *firepower* has been overcome by *mobility*, and this leap-frog situation with one overtaking the other continues even today. The ability to apply this *firepower* when and where it is required and in the appropriate amount has been significantly improved upon by the use of organic armed Army helicopters as demonstrated daily in Vietnam. This potential must be further improved upon to provide the capability of destroying the tanks that may confront us in Europe.

The Army has stated a requirement to CDC

for an advanced aerial fire support system represented in the form of the AH-56 *Cheyenne*, which has had recent problems. We have the utmost confidence that these problems will be solved soon and this much-needed capability will be available to the Army. In the meantime the *HueyCobra* is contributing a capability which we have never had before.

Anti-armor capability

For the *Cobra*, too, we are planning an anti-armor stand-off capability. Aerial anti-tank weapons combined with improved ground systems may portend a new era in tank warfare causing serious problems for a tank-heavy attacker. In fact, the attack helicopter of tomorrow might well be considered a flying tank. We are confident that the disparity in combat power will change. Attack helicopters won't replace the tank in the 70s but they will provide a significant increase in highly mobile, protected firepower.

Actually, CDC believes that the present armed helicopters equipped with anti-tank missiles could cause the Warsaw Pact nations to re-evaluate their professed strategy. The higher mobility of free-roaming tank-killer attack helicopter teams will simply not permit deep maneuvers by fragmented tank elements. With developments in night vision devices, the firepower capability of armed helicopters will soon be available around the clock.

Hardware now undergoing field tests should provide major advances over moonlight, the flare, and the searchlight, and give us the capability to operate at night with near daylight effectiveness.

Combat service support

The last of the five functions of combat — that of *combat service support* — is the area in which Army aircraft can make the most spectacular contribution. Our existing medium and heavy helicopters can lift up to 11 tons of cargo and this is barely scratching the surface. We know that within the present state-of-the-art, industry has the capability to build a 30-ton crane for employment in the late 1970s or early 1980s.

As now seen, flying cranes will be big and expensive helicopters. However, the resulting increase in combat capability and the trade-

AVIATION IN THE '70'S

(Continued from Page 27)

off of conventional facilities could easily result in cost savings. A heavy helicopter could emplace heavy bridging across unfordable rivers; move engineer equipment to clear obstacles; and lift light armor, mechanized infantry vehicles, and medium artillery rapidly to decisive points on the battlefield.

A potentially bigger payoff would be the use of the same heavy helicopter in off-loading ships, distributing cargo down to division and brigade level, and clearing aerial ports. Ports today can be eliminated by one nuclear weapon. But the requirement for ports in the combat area might well be obviated by use of the heavy lift helicopter and the sea-land container. Such use should result in dollar savings since it will enable throughput of cargo from stateside depots to those using units overseas. This concept will reduce manpower, handling costs, trans-shipping costs, route security requirements, and pilferage.

For example, if a heavy lift helicopter and container ships had been available during the Vietnam buildup, we could have saved millions of dollars by eliminating such things as port real estate, dredging, pier construction, port personnel and their facilities, warehouses, access roads, truck units, tugs, and lighters.

The aerial "port"

With the Air Force C-5A lifting tons of equipment into a theater of operation, the heavy lift helicopter will take over at the aerial port and deliver the cargo to the user or to a depot. This capability will not only minimize aerial port congestion but will expedite the delivery of high-priority cargo during the buildup phase of an operation.

Thus, while a heavy lift helicopter is big and expensive, it is very attractive in terms of cost effectiveness. This is due to its many uses which would result in savings in the reduction of requirements for more conventional units and facilities.

Essentially, the Army in the 70s will improve on existing systems and concepts. As Shakespeare put it, "*The past is but a prologue.*" The principal efforts will be to develop doctrine and requirements to further exploit

the mobility potential of aviation uncovered during the '60s; and to concentrate in the immediate time frame upon improvement of present capabilities to attain utmost combat power and effectiveness per available dollar. Thus, a new organization is needed.

A special brigade

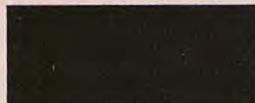
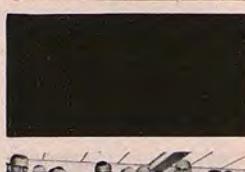
The most revolutionary organization in the 1940s was the airborne division; in the '60s it was the airmobile division. In the 1970s it is envisioned that a special brigade, oriented for mid-intensity or European-type warfare, will enter the Army's force structure. The heart of this brigade will be attack helicopter squadrons which should appreciably delay an enemy armor or mechanized force that is attempting a penetration. The brigade would additionally contain air cavalry, air-mobile infantry engineers, and supporting services to make it a quick reaction force capable of providing immediate, selective application of combat power.

We don't want to go as far out on a limb as some of my aviation compatriots who think that such a unit, and in particular the employment of the attack helicopters — the *Cobra* and *Cheyenne* — will revolutionize tank warfare, and perhaps portend the end of the tank — we do envision drastic changes in mid-intensity warfare as a result of the application of proven air mobility tactics with improved weaponry such as the *TOW* or the *Shillelagh* mounted on attack helicopters.

Reducing the odds

With our improved equipment and our developing tactical concepts the Army can anticipate and predict success in the face of numerically superior forces. One outcome of tomorrow's Little Big Horn will be quite different. Our success will be accomplished by gaining the edge in the classic functions of combat — all managed and supported through faster, more efficient, and more responsive systems.

With troop-carrying helicopters, larger logistic movers, better surveillance devices, and improved attack helicopters with anti-tank missiles, we think we can reduce the numerical odds and bring the scales into balance.



AAAA: WHY JOIN?

Army Aviation

March 31, 1972



BY GENERAL
HAMILTON H. HOWZE,
USA (RET.)
AAAA National President
1967-1969

For its very presence!

THERE are a number of reasons for joining AAAA, but one, in my opinion, is compelling. I'll devote all of my words to that one. The answer is simply the satisfaction of belonging to an association of the professionals (the military pros, plus those in the aviation industry) in what is still a new and unique endeavor.

ARMY AVIATION is a development unmatched elsewhere in the world — it's a pioneer effort following uncharted paths, upsetting all previous ground combat theory, building its own doctrine on its own experience because there is no comparable experience.

MEANWHILE, other worldwide military forces watch and learn. Our allies are carefully developing their own capabilities, much on the pattern of ours and on the basis of what we demonstrate will work and what won't. We may confidently assume that even our friends in Moscow study no other military development more closely than they do that of U.S. Army Aviation.

AIMMOBILE TACTICS are revolutionary. No weaker statement will adequately present the case. Military history will never again record a major engagement (one or both adversaries being modern powers) in which vertical rising aircraft do not play a prominent — and frequently the decisive — part.

THERE ARE PRACTICALLY no combat or combat support units in the Army whose battle mission cannot be better accomplished by the addition of a few light aircraft; but more important than this is the combat potential of air cavalry formations and airmobile infantry divisions. The 1st Cavalry and the 101st Airborne Division (Airmobile) are the two most powerful divisions — for most applications — in the world.

IN SPITE of all this, our Army has no aviation branch. We don't think it should have for an indispensable characteristic of our sort of aviation is its integration into practically all branches of the Army.

BUT FOR LACK of an aviation branch something is necessary to hold together all who belong to Army Aviation, to afford them a society of their own and the strength and the pleasure which come from association with those who share, or have shared, the same exhilarations and dangers, who speak the same professional language, and who in their daily endeavors are changing, forever, the art and science of war on the surface of the earth.



General William C. Westmoreland (center), Chief of Staff, U.S. Army, presents AAAA's "Outstanding Aviation Unit Award" to the several CO's and key NCO's at a recent Quad-A Annual Meeting. Units ranging in size from an aviation company through a brigade have won Army Aviation's top award.



Junior officers and warrant officers are provided with firsthand career development information at informal National and Chapter functions. Here, a Department of the Army staff officer covers a point from the floor during an "Aviation Personnel Seminar" held at the 1969 AAAA Annual Meeting.

CATEGORIES OF AAAA MEMBERSHIP (Totals as at 31 March 1970)

MILITARY MEMBERSHIP (93.5% of total)

Rank or Grade	U.S. Army	ARNG-USAR	Ret.	Total
GEN	2	0	2	4
LTG	4	0	1	5
MG	20	0	10	30
BG	21	1	5	27
COL	205	3	68	276
LTC	1,459	21	269	1,749
MAJ	1,562	37	91	1,690
CPT	1,440	41	6	1,497
LT	807	12	2	821
CWO	1,431	23	63	1,517
WO/WOC	3,457	11	2	3,470
ENL	286	0	12	298
DAC	1,190	2	0	1,192
Totals	11,186	159	531	12,576

NON-MILITARY MEMBERSHIP (6.5% of total)

Aviation Industry	587
Misc. (Honorary, other svcs., widows, etc.)	292
Total	879



BY COLONEL
RICHARD L. LONG,
USA (RET.)
AAAA National President
1969-1970

For its programs!

THE AAAA engages in many individual programs in pursuit of its specific objectives, and an accounting of these chapter, regional, and national programs cannot be digested to one or two paragraphs on a single page of this leaflet.

THESE AAAA PROGRAMS are covered herein by knowledgeable members, each of whom details several facets of AAAA activity. To amplify their words we've added several photos that illustrate some of our major activities.

GENERAL PURPOSES

BROADLY SPEAKING, the AAAA has these general purposes in its corporate charter:

TO ADVANCE the status, overall esprit, and the general knowledge and proficiency of those persons who are engaged professionally in the field of U.S. Army Aviation in the Active Army and the Reserve Components of the U.S. Army.

TO PRESERVE AND FOSTER a spirit of good fellowship among military and civilian persons whose past or current duties affiliate them with the field of U.S. Army Aviation.

SPECIFIC OBJECTIVES

IN SUPPORT of these general purposes, the members engage in the pursuit of specific objectives, several of which are:

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

STIMULATING good fellowship locally, regionally, and nationally.

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

CEMENTING relationships between Army Aviation personnel in the Active Army and the Reserve Components.

RECOGNIZING outstanding contributions within U.S. Army Aviation.

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

FOSTERING a public understanding of Army Aviation whenever possible.

MAINTAINING historical records of individual and unit accomplishments within Army Aviation.

ENDORsing special types of group insurance plans of benefit to the individual members if the Association.

THAT'S ABOUT IT . . . You'll find more detailed reports on our major programs in the subsequent pages . . .

GOVERNMENT

Leadership and control of the AAAA rests with the officers of its Chapter, Regional, and National Executive Boards.

Establishing broad policy and implementing Ass'n-wide programs, the 44-member National Executive Board meets 3-4 times a year. It is composed of ten members elected for staggered three-year terms at the Annual Meeting; an Executive Vice President serving as a five-year appointee; six national Past Presidents; eight or nine National Members-at-Large appointed by the President for one-year terms; the President of the USAREUR Region; and eighteen Chapter Members-at-Large, the Presidents of those CONUS Chapters having 150 or more members, who serve two-year terms.

Its makeup (22 active U.S. Army, 11 industry, 4 DAC, 5 retired, and 2 civilian members) covers all ranks, grades, and categories of AAAA membership.

Chaired by National Board members, the nine major AAAA committees bring additional members into the governing process. Composed of 4-9 members each, the sub-groups include the Annual Meeting, By-Laws & Legal, Fiscal, Membership, Organization & Planning, Personal Programs (Industry, Insurance, etc.), and Reserve Components Committees. Two other major groupings represented at the National Executive Board level are the AAAA Scholarship Foundation, Inc. (with a separate Board of Governors), and the Junior Officer/Warrant Officer Member Councils.

The National Office of the Ass'n is located in Westport, Conn. where the staff of "Army Aviation Magazine," a privately-owned publication, furnishes the contract management and clerical support necessary to administer the day-by-day affairs of the AAAA.



Professionalism at work! . . . Washington, D.C. members gather at a Fort Myer, Va. luncheon to hear the Air Attaché of the Israel Embassy.

For its prestige!

TO BE an Army Aviator is an honor in itself. We who fly the O.D. aircraft of the United States belong to an elite fraternity of gallant men who have proven themselves in the roughest school in the world... combat!

THE AAAA is composed of these gallant men. To be a member of the AAAA is to belong to an organization whose rolls read like "Who's Who in Army Aviation." For me it is an honor to reflect in the brilliance of these individuals.

FOR AN ARMY AVIATOR not to belong to the AAAA is akin to the situation wherein a doctor does not belong to the AMA . . . The Army Aviation Ass'n is our professional organization and it is the "voice" of Army Aviation.

I WAS PRIVILEGED to attend the 1969 AAAA Convention in Washington, D.C., and to meet some of



BY CAPTAIN
FREDERICK E. FERGUSON
First Medal of Honor
Recipient in Army Aviation

the more illustrious members of our profession at that gathering . . . For me those few days in Washington were a real highlight of my life.

WHAT MORE PRESTIGE can any Army organization ask for than to have its members' accomplishments recognized by the authorities in the U.S. Army? . . . The AAAA enjoys the presence and the participation of these dignitaries year after year.



BY LT. COLONEL
JACK DIBRELL
Member-at-Large
National Executive Board

For its "protection"

MORE THAN 4,500 members — aviators, students, and crewchiefs — hold AAAA-endorsed flight pay insurance policies which protect their government flight pay against loss due to groundings caused by illness or accidental bodily injuries.

STARTED in 1957, the Flight Pay Protection Plan (FPPP) has returned almost \$1 million in flight pay

AAAA FLIGHT PAY INSURANCE CLAIMS BY YEAR AND TYPE

Year	Illness	Accident	Total
1957	4	0	\$13,910.00
1958	11	0	\$41,585.00
1959	32	4	\$86,103.38
1960	40	4	\$67,911.19
1961	34	6	\$62,484.86
1962	40	11	\$73,551.67
1963	52	10	\$99,807.64
1964	34	6	\$59,261.79
1965	78	13	\$129,352.52
1966	60	13	\$116,902.87
1967	48	10	\$91,137.32
1968	37	3	\$59,441.67
1969 (Inc.)	45	7	\$64,881.61
Totals	514	87	\$966,331.52

AAAA FLIGHT PAY INSURANCE CLAIMANTS BY RANK/GRADE

Rank/Grade of Insureds	'57-'69 Claimants	'67-'69 Claimants	1969 Insureds
Enlisted	15	4	32
WOCs	2	2	118
WOs	10	8	437
CWOs	131	32	507
LTs	29	3	239
CPTs	156	11	539
MAJs	140	38	1,445
LTCs	96	43	899
COLs	22	6	129
GENs	1	0	11
Totals	602	147	4,356

For its professionalism!

FROM ITS VERY BEGINNING, AAAA has established — and met — high standards of professionalism in its many activities.

IN CONDUCTING Chapter, Regional and National programs, the Association has brought together key military and industry persons as guest speakers, panelists, and participants. In sharing their knowledge with many AAAA members, these pro's have played an important part in developing the best trained, most efficient Army Aviation Team we can produce.

USING JANUARY, 1970 as a typical month, AAAA Chapter members were addressed by the CG of the Electronics Command, the Chief of the Aviation Warrant Officer Career Branch, the former Head Curator of the National Air and Space Museum, a celebrated corporation test pilot, AAAA's national president, a noted Alaskan bush pilot, a registered nurse, who spoke on "The Physical Aspects of an Astronaut in Space, and others . . . The roster of those persons having made presentations to AAAA audiences at both local and national levels over the years truly represents a broad slice of "Who's Who in Aviation."

ARTICLES APPEARING in the Association-endorsed journal have always reflected a high degree of professionalism. The current 13-part series, "AVSCOM in Transition," is one example, providing members with an "in depth study" of the \$2 billion-plus per year logistical complex that supports our aviation program. The series' individual authors are the key commanders and logisticians, those with professional interests similar to yours.

OTHER MAGAZINE TITLES selected at random speak for themselves: "Aviation — 1975!" — "Vulnerability" — "Why is the Army Training Colonels and Generals?" — "Flight Pay Equalization" — "Let's Prepare for Re-Direction" — "Mission Support Aircraft" — and many others.

I'M HAPPY TO SAY that my knowledge of AAAA is first-hand knowledge . . . I've served as a Chapter president, a member of the Annual Meeting Committee, and as the Vice President, Army Affairs on the AAAA National Board. I have also served as Vice Chairman of the National Awards Committee, one of the most hardworking groups of individuals with whom I've ever been associated.

THERE ARE many professionals in Army Aviation . . . the preponderance of them are active in AAAA!



BY MAJOR GENERAL
ALLEN M. BURDET, JR.
Director of Army Aviation,
OACSFOR, DA



Location of AAAA Chapter Activities (As of March 31, 1970)

ALA., Ft. Rucker. ALASKA, Ft. Richardson, Ft. Wainwright. ARIZ., Ft. Huachuca. CALIF., Ft. Ord, Lathrop, Los Angeles. COLO., Ft. Carson. CONN., Stratford. D.C. GA., Atlanta. FT. BENNING, Hunter AAF-Ft. Stewart. GERMANY, Bonn, Fulda, Hanau, Mainz, Mannheim, Schwaeisch Hall, Stuttgart, Wertheim. MAWAI**. KAN., Ft. Leavenworth, Ft. Riley. KY., Ft. Knox. MD., joins D.C. MO., St. Louis. NJ., Ft. Monmouth. N.Y., joins Ft. Monmouth or Connecticut. N.C., Ft. Bragg. OKLA., Ft. Sill. PA., Philadelphia. TEX., Amarillo, Corpus Christi, Dallas-Ft. Worth, Ft. Hood, Ft. Wolters, San Antonio. VA., Ft. Belvoir (joins D.C.); Ft. Eustis, Ft. Monroe. WASH., Ft. Lewis**. CANAL ZONE.

*Under activation. **Chapter inactivated.

Left: Army Aviation Directors from five nations address AAAA convention; Center: Airmobile Brooms built by aerospace giants liven an evening reception. Right: Honor Graduates awarded AAAA Certificates.



For its preoccupation!

QUAD-A IS a narrow-minded organization! This narrow-mindedness is its biggest asset! Unlike any other organization to which we may belong, it has the unique feature of having been founded and perpetuated by professionals within the ranks of Army Aviation for the benefit of those ranks!

ITS ANNUAL CONVENTION in Washington singles out for national recognition those who have excelled in this field, the "Army Aviator," "Aviation Soldier," and "Outstanding Aviation Unit" of that year. Honoring all by presenting AAAA's Annual Awards are the Secretary, Under Secretary, and Chief of Staff of the Army.

AS WITH ALL Ass'n forums, panels, etc. the Convention is also concerned with placing the most highly informed authorities at its lecterns, a policy that is duplicated at AAAA's USAREUR Regional Convention where DA, industry, USAREUR, and foreign dignitaries update those in attendance. Ditto for the co-sponsored AVSCOM - AAAA Advance Planning Briefings for Industry, a top level professional-social gathering!



BY CAPTAIN
JEROME R. DALY
Member-at-Large,
National Executive Board

THROUGH ITS endorsed publication, the Ass'n has served as Army Aviation's advocate over the years, providing a forum for all members to express themselves on any subject. Working within the military family, the Ass'n recently forwarded a resolution to OSD supporting those DA actions undertaken to equalize flight pay for the grades W1/O1 through W4/O4. Parochial action, yes! . . . but an action that is indicative of AAAA's commitment to its membership.

THE ASSOCIATION, then, is admittedly preoccupied with narrow interests . . . Mine! . . . and I hope yours!



BY BRIGADIER GENERAL
ROBERT M. LEICH, USAR
AAAA National President,
1957-1959 and Chairman,
AAAA Awards Committee

For its progress!

AAAA growth in both membership and activities has been constant!

ITS 1,407 FIRST-YEAR members have grown tenfold since 1957, developing an initial year two-Chapter structure at Fort Rucker into a worldwide organization of more than 46 Chapter activities.

GROWTH is also reflected in many of its programs . . . In 1963, 27 applicants competed for its initial scholarship award. Today, more than 110 sons and daughters of members or deceased members compete annually for up to 14 scholarships. In its first seven years, the program has provided \$26,700.00 in scholarship aid to more than 70 young men and women.

IN 1962, the Washington, D.C. Chapter supported a local area Science Fair with member-judges and prizes. In 1963, AAAA member-judges awarded five \$100 cash prizes for the outstanding exhibits at the Albuquerque, N. Mex. National Science Fair. Today,

Chapter and individual members serve as judges at more than 180 local, state, and regional fairs each year, providing AAAA "Certificates of Achievement" for outstanding aviation-related exhibits while AAAA continues to support the annual National Fair.

THE DEVELOPMENT of professional-social programs at the Chapter level has been most extensive . . . Of the 211 Chapter meetings held in 1969, 93 involved a guest speaker or a presentation of some sort where just five years ago, the total number of AAAA Chapter meetings — professional, social, or business — was slightly over 100.

LOCATOR-PLACEMENT SERVICE

While the AAAA-endorsed magazine provides monthly change of address listings on 400-600 subscribers, individual "locator service" on the 14,000+ readers is also provided on postcard request. Information on ARNG-USAR units is also furnished to those members leaving active duty who wish to continue in Army Aviation in a Reserve Component assignment.

THE EMBLEM

Searching for a symbol that would denote Army Aviation's close integration within the ground elements of the Army, AAAA's initial officers selected the winged foot as being an appropriate emblem for an organization of "flying soldiers."



BY
BY CWO (W4)
DONALD R. JOYCE
Member-at-Large,
National Executive Board

For its productivity!

WHEN FIRST asked to write a few words about the "productivity" of the AAAA, I came up with the expected "Who? Me?"

BUT AS ONE of many charter members who has followed AAAA's progress closely over the years, it's quite easy for me to measure and to report on "productivity."

THE ASS'N has produced . . . has turned it on . . . for every category of its membership. Through its endorsed magazine, the Ass'n has picked up the cudgel for every type of member, be he warrant, full bull, an industry rep, or a DAC. In its 17 years the magazine has been the sounding board on almost every Army Aviation subject imaginable.

IF YOU ARE IMPRESSED by figures, the AAAA's programs have returned an estimated 1,400 "Certificates of Achievement" to winners at local, state, and regional science fairs; almost \$1 million in flight pay indemnities to grounded aviators; and close to \$30,000 in scholarship aid to the children of members.

BY MY COUNT, the AAAA has been responsible for more than 1,900 Chapter gatherings of all types since its inception in 1957. While many have been nothing more than an afternoon hoisting of "Free Beer," the majority of Quad A's local meetings have been professional gatherings that have enabled top military and industry speakers to address us. I would guess that every top executive in the aviation industry has spoken to some AAAA audience locally or nationally at some point in the past.

I CAN TELL YOU first hand that the Ass'n has "produced" for its junior officer-warrant officer members.

Left: USAREUR members gather at Garmisch con-
Right: An ASA becomes an "Honorary Member."

Encouraging the development of JO/WO Councils in late '69, the Quad A accepted 39 suggestions from a joint council, and in the ensuing four-month period, took positive action to implement over 30 of the proposals and has plans to implement three more.

A REAL "MIX" at the national level, I feel that the Ass'n is most responsive to the expressed wishes of its membership and has produced, and will continue to produce benefits and programs that will assist that membership.



BY
ARTHUR H. KESTEN
Executive Vice President,
Army Aviation Association

For its promotion of Army Aviation!

THIS MAY BE DIFFICULT for some of our younger aviators to comprehend, but it wasn't too long ago that the general public believed that everything that flew was Air Force. The problem from the late '40's through the early '60's was to convince many citizens—and many military leaders as well—that Army aircraft existed and could play a key role in supporting the Army's mission.

THE VISIONARIES won out—Army aircraft became an integral part of the combat scene in Vietnam—TV brought this scene into the home nightly—the public became aware of Army Aviation.

IN SEVERAL SMALL WAYS, the Ass'n helped the visionaries spread the word during the '50's. It tied them together when they were small in number, fragmented, and more ignored by the press, the aviation industry, and their own non-rated contemporaries than not. The Ass'n gave them a place to hang their hats, to convene, and to communicate both in person and in print. It held up a two-sided mirror for self-praise and self-critique.

IT HAS BEEN and, with your support, will continue to be the "voice of Army Aviation."

Left: "Outstanding Unit" takes USAREUR Trophy;
Right: Symbolic balloon marks "Birthday Party"



For its promise!

AS A VERY YOUNG CAPTAIN, in 1942, I went to parachute school and became "airborne all the way" because I saw in airborne a technique, a tactic, and a philosophy which could give ground combat literally a new dimension. As a Colonel, already nominated for a star, I went to Fort Rucker at age 49 to become an Army Aviator for the same reason — I saw in Army Aviation unlimited potential to improve not just one but all five of the basic functions of ground warfare.

I THEN HAD NO IDEA that some six months later in January, 1963, as a new Brigadier General, I would be standing in the office of the Army Chief of Staff hearing General Wheeler tell me to form a test Air Assault Division and an Air Transport Brigade to test and to determine, in his words, "how far and fast the Army could go, and should go, in introducing aircraft into Army units to perform functions and missions previously done by ground vehicles and weapons."

THE ANSWER to General Wheeler's very comprehensive "how far, how fast" question could, as it turned out, have been answered by a very comprehensive one word reply: "Very!"

IN VIETNAM, Army Aviation has lived up to the full promise of the Howze Board analysis and the 11th Air Assault testing. It has made the way we fight there as much better than the way the French fought as victory is better than defeat. Army Aviation has not just made a difference; it has made the difference!

IN THE SAME WAY in every other combat environment and in every other intensity of combat, I am certain that Army Aviation has the promise to make the difference. It has the promise to put us ahead and to keep us ahead of every army in the world if we — you now with me rooting on the sidelines — will remember the fundamental definition that I have always preferred to describe "the airmobile concept," namely, the use of aircraft every place in our Army where that use will enable us to fight better.



Panelists at the "Aviation Personnel Seminar" held at AAAA's Annual Meeting in Washington, D.C. include OPO officials, junior officers, and warrant officers. The informal discussion areas cover career development, grade structure, assignments, advanced schools, and other professional matters.



BY LT. GENERAL
HARRY W. O. KINNARD,
USA (RET.)
National Vice President
Organization and Planning

THE AAAA, while not an alter ego of Army Aviation, has supported those in this profession in numerous ways, and in its 13-year existence has also come far and fast. It enjoys the backing of all "professionals" in this business, and the favor and endorsement of those whom Army Aviation supports.

THE ASSOCIATION'S PROMISE is as great as your belief in it, and as boundless as your drive, skill, and imagination — and I know this can be very great indeed.

INDUSTRY MEMBERSHIP

Industry persons may join AAAA individually at the regular dues, or as one of twelve members of their firm's Industry (Corporate) Membership in AAAA. The latter type of membership affords member firms advance information, early registration, and priority status with regard to presentations and block seating at major Association gatherings. Some fifty aerospace firms currently hold AAAA Industry (Corporate) Memberships.

ANNUAL DUES

AAAA Annual Dues are \$8, or \$15 for two years. First year members pay dues of \$10 (or \$17 under the two-year option), this amount including a \$2.00 first-year-only Initiation Fee. \$1 of the dues is returned each year to the Chapter with which the member is affiliated.



A highlight of each year's AAAA Annual Meeting, the Association's Honors Luncheon is attended by close to 1,000 persons affiliated with or having an interest in Army Aviation. Held at a major Washington, D.C. hotel, the Luncheon honors those who have made outstanding contributions in this field.

ARMY AVIATION ASSOCIATION



1 Crestwood Road, Westport, Conn. 06880

I wish to become a member of the Army Aviation Association of America (AAAA). My past or current duties affiliate me with Army Aviation and I wish to further the aims and purposes of AAAA. I certify that I am a citizen of the U.S. and understand that the annual membership fee of \$8 includes an annual subscription (\$3.75) to ARMY AVIATION MAGAZINE.

Print Name _____
Address _____
City _____
State _____
Zip _____
Rank _____

CATEGORY OF AAAA MEMBERSHIP

U.S. Government	Aerospace Industry
<input type="checkbox"/>	<input type="checkbox"/>
USA Active	Administration
<input type="checkbox"/>	<input type="checkbox"/>
Duty	Marketing
<input type="checkbox"/>	<input type="checkbox"/>
USA Civilian	Engineering
<input type="checkbox"/>	<input type="checkbox"/>
Army National Guard	Manufacturing
<input type="checkbox"/>	<input type="checkbox"/>
Army Reserve	R & D
<input type="checkbox"/>	<input type="checkbox"/>
Other Services	News Media
<input type="checkbox"/>	<input type="checkbox"/>
Other Industry or Business	Note: Please check all appropriate boxes.
<input type="checkbox"/> \$117 (2-Yr. Membership)	
<input type="checkbox"/> \$10 (1-Yr. Membership)	
<input type="checkbox"/> \$10 (1-Yr. Initiation Fee)	
<input type="checkbox"/> \$117 (First Year \$2 Initiation Fee)	

The initiation fee applies to the applicant's first year membership only and covers the one-time issue of a personal lapel pin and a membership decal.

DETACH, COMPLETE, AND RETURN!

AAAA Activities

Sharpe Army Depot Chapter. Professional-social dinner meeting. LTG Harry W. O. Kinnard, Ret., guest speaker, on "Air Mobility in Army Aviation." Sharpe Officers' Open Mess. July 10.

Fort Hood Chapter. General membership dinner meeting open to all members and prospective members. FHOOM. July 17.

Midnight Sun Chapter. Professional meeting for members only. Guest speaker, NCO Club. July 21.

David E. Condon Chapter. General membership luncheon meeting. Mrs. David E. Condon, guest of honor. FEOOM. July 28.

Southern California Chapter. Professional dinner meeting. LTG Austin W. Betts, Chief of Research and Development, guest speaker. Sportsmens' Lodge, Studio City. July 28.

Lindbergh Chapter. Aviation Cotillion. Annual Summer Dinner-Dance. Chase-Park Plaza Hotel, July 31.

Washington, D.C. Chapter. Annual Potomac River Excursion and Shipwreck. Members and guests. Wilson Lines. Pier #4. August 1.

Connecticut Chapter. Brunch and Annual Summer Skirmish. Members and wives only. 1 Crestwood Road, Westport, Conn. 11:30 a.m.-4:30 p.m., August 9.

Connecticut Firm Joins AAAA as 44th Member

Joining AAAA in late June, the Chandler Evans Control Systems Division of Colt Industries became the Association's 44th Industry (Corporate) Member firm. New members in the 12-member corporate membership, category include D. C. Eaton, Pres.; I. F. Larkey, VP, Marketing; T. Linder, Jr., VP, Manufacturing; and W. E. Ritter, VP, Treas.

Also G. D. Ferree, Chief, Prod Info & Adv.; F. Fucci, Prod Mgr, Gas Turb Comp; D. W. Gilchrist, Mgr, Materials; J. M. Maljanian, Mgr, Engine Controls; A. M. Mazur, Mgr, Finance & Budget; F. P. Schierberl, Mgr, Flt Controls; L. J. Shannon, Mgr, Prod Support; and E. J. Vitali, Mgr, Mfg..

CLASSIFIED

HELICOPTER PILOTS — Get your fixed wing and instrument ratings in scenic mountain and lake country. Approved course includes mountain flying with experienced instructors. Personalized instruction will be tailored to your needs. Strand Aviation, Box 166, Kalispell, Montana. Phone (406) 756-7678.

"Firsts!"

Have you personally — or your crew, unit, agency, or firm — ever participated in establishing a "first" in Army Aviation? ... In '45? ... In '57? ... Last year? Get it on the record! Submit it for publication to ARMY AVIATION MAGAZINE, 1 Crestwood Road, Westport, Conn. 06880. We'll publish them in the order they are received.

First Aviation Group to transition USAF pilots in multi-engine aircraft: 10th Aviation Group, Ft. Benning, Ga., commanded by COL J. Elmore Swenson, who transitioned the USAF pilots in CV-2 Caribou aircraft prior to the transfer of these aircraft to the USAF in December, 1966.

First Army Aviator to be on standardization pilot orders at the same time for the OV-1, AH-1G, and UH-1A through UH-1H aircraft: CW4 Edward A. Gilmore.

First Air Cavalry Squadron to operate with all organic units in Cambodia: 1st Squadron, 9th Cavalry, 1st Cav Div (Airmobile).

First Army Aviator to write an AR on Army Aviation personnel: COL J. Elmore Swenson, Hqs, AMC, in April '50.

First Air Medal Awarded in USARV: March 3, 1962, to CW3 (now CW4, Ret.) Bennie B. Potts, by BG Joseph W. Stilwell, for successfully landing a crippled CH-21C Shawnee aircraft.

First Army aircraft to be struck in combat by an arrow from a crossbow: A CH-21C Shawnee aircraft, piloted by CPT Mark C. Kendall, 8th Trans Co, while flying "nap of the earth" near Qui Nhon, RVN, in September, 1962. Upon landing, a 30-inch arrow was found protruding from the Shawnee's belly. (Source: CW4 Donald R. Joyce).

First Army Aviation Supply and Maintenance Team to assist Italian Army Aviation: CPT (then 1LT) James H. Annear and CWO Howard Chase who comprised the "Team" which launched the Italian

Army Aviation Program with Piper L-21 aircraft on March 6, 1956.

First crossing of the Greenland Ice Cap by Army helicopters: Two USA Transportation Environmental Operations Group CH-34 Choctaws completed the 650 mile crossing from Thule AFB to Camp George Cohn in May, 1960. Pilots: CWOs Michael J. Madden, Michael V. Mayville, Ulysses Morton, and David H. Lindsey.

First world demonstration of the AH-1G HueyCobra: Paris Airshow, May, 1967, with Joseph Mashman, VP, Bell Helicopter Company; and LTC Paul F. Anderson, AH-1G NETT, as team.

First Army Aviator to be qualified in the AH-1G HueyCobra in RVN: MG G. P. Seneff, Jr., with CW2 J. D. Thompson, AH-1G NETT, as IP. Bien Hoa, RVN, September, 1967.

First Quartermaster Corps Officer to become an Army Aviator: CPT Richard H. Wiedman, who graduated from Officer Fixed Wing Aviator Course 69-24 on January 27, 1970.

First AAAA meeting in Cambodia: May 22, 1970, at Krong-Kep, at CP of the 32d Regt, 21st (ARVN) Div. Present: COL (P) William J. Maddox, and LTCs Ronald H. Merritt, Joe Allan, Harvey E. Stewart, Billy McGrill, and Thomas Shaughnessy. AAAA decal nailed high on tree in "Kilroy was here" tradition.

First airmobile exercise conducted in Korea with a battalion size unit of ROKA elements: 239th Aviation Company (Aslt Hel) conducted a 3-day exercise with the 25th ROKA Inf Div during February, 1970.

First general officer to become qualified in the UH-1 Iroquois: MG Ernest F. Easterbrook, then CG of First Rucker, February, 1960.

First USAPHS primary class to complete Phase 1 primary training without losing a member: ORWAC 60-2A which graduated all 31 of its members at Ft. Wolters, Tex., on Dec. 18, 1959.

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