



It takes off like a big-winged bird — with a T53 on each wing.

(See back cover)





CHINOOK HELICOPTERS CONTINUE TO BE ANGELS OF MERCY IN VIETNAM

The U. S. Army CH-47A Chinook helicopters operating in Vietnam are called upon daily to perform a variety of missions. They transport artillery, lift downed aircraft and move supplies and troops.

But to the men and officers who operate Chinooks the most gratifying missions are those involved with the rescue

of Vietnamese refugees.

Chinooks are used extensively to transport refugees and evacuate their belongings when they become endangered by the Viet Cong. Thousands of women and children have been lifted out of the danger zones into safe areas by the Boeing-built "Angels of Mercy."

The photograph on the right is typical of a refugee evacuation. The Chinook helicopter has lifted the refugees to safety and the American soldier adds his personal touch of "tender loving care" that is so necessary in winning the hearts of the Vietnamese people.





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SPEAKING OUT



AN unbroken thread of courage connects the Air Aces of World War I and Army Aviators flying missions over Vietnam today. Just as those dauntless warriors coursed slowly over the battlefield then, the pilots of Army aircraft similarly seem to be caught in the slow motion of yesteryear.

The record of aircraft development seen during World War I had no parallel in the intervening years — until now. Today, a full measure of effort is once again being given to the development of flying machines of the type which have proven their worthiness — rotary-wing aircraft. We are once again moving out of the slow-motion interlude. Current developments, as well as advanced concepts, promise an exciting and rewarding role for the Army Aviator.

Today terms such as AH-1G, AAFSS, M-5 and M-16 systems, the rigid-rotor, and the stowed-rotor concept, unknown a very few years ago, are familiar to all those in Army aviation. A soldier's eyes (and, indeed, all men's) inevitably turn toward the sky. For it has always been those things not held by Earth's surly bonds which capture Man's imagination.

Utility unforeseen

The first powered free flight by an airplane came only 11 years before the onset of World War I. No one could envision the utility of aircraft at that war's beginning. At first, the airplane was used almost exclusively for observation and reconnaissance following the lead of manned balloons and dirigibles.

It was, however, found worthwhile for the airplanes to carry a few small bombs along for general harassment of the enemy. It has never been accurately recorded who fired the first shot, changing all air tactics in doing so.

The popular concept of the air war, up to that time, had the pilot returning from missions and waving to his adversary in (SPEAKING/Continued on Page 48)



From an original pointing for Chandler Evans by Keith Ferris

MAIN FUEL PUMPS

by CECO

Sikorsky's CH-54A, with a lifting capacity of more than ten tons, is illustrated here on a typical retrieval mission. The Skycrane (known commercially as the S-64) is powered by two Pratt & Whitney Aircraft turbine engines equipped with main fuel pumps engineered and precision-produced by Chandler Evans.

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WELCOME TO AAAA!



During the latter part of this week, Army Aviation Association members, Chapter Officers and Delegates, and Regional and National Officers will gather on the occasion of the Eighth Annual Meeting of the AAAA.

To those who attend this meeting at the Shoreham Hotel in Washington, D.C., I again extend my warmest greetings and the fervent wish that the several professional activities comprising the best part of the 1966 Program will prove both informative and productive for each attendee.

This year's AAAA Meeting is attuned to the times . . The Panel Presentation to be held Thursday, October 13, is concerned with today's Army aviation participation in Vietnam, and the support of that effort. The Panel is one of the finest ever assembled, each of the members being a recognized authority with exceptional experience in his particular field. Tied directly to this Panel Presentation are the several showings of the latest Army aviation combat films – footage of equipment and personnel in action that was compiled and edited less than ten days ago.

Affording national recognition to those individuals and units having made outstanding Army aviation contributions in the past year, the 1966 AAAA Honors Luncheon will be attended by an exceptionally distinguished group of senior military, government, and industry leaders. By itself, their presence at this function pays high honor to our national awardees, and indirectly honors the many thousands who serve in and for Army aviation around the world.

Henry Goodband

O. GLENN GOODHAND Brigadier General, USA (Ret.) President

Army Aviation Association of America BEECH "IMAGINUITY" IN MANNED AIRCRAFT



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Accepted and approved by the U. S. Army as its new twin-engine instrument and transition trainer, the Beechcraft T-42A is now under contract for "off-the-shelf" delivery.

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A major personnel study to develop a more effective personnel management program for Army aviation is underway. The study group under Major General Delk Oden's supervision is headed by Colonel George Beatty, former CofS of the 1st Cavalry Division. The objective of the study is to develop a personnel management program which will:

 Provide aviators in adequate numbers and proper grades to meet Army requirements.

 Provide qualified officers to fill Army aviation command and supervisory positions and in addition, qualified commanders and staff officers with aviation skills for other higher level staffs.

Maintain aviator assets in balance with

requirements.

 Provide for career development and adequate career opportunity for all aviators.

The study group is taking a long look at the aviation program to develop a means to preclude the generation of aviators in excess of requirements by grade. It is too early in the study now to determine the most equitable system for accomplishing this important task.

Colonel Beatty and his group have a challenging task before them, but I am confident that their findings will be realistic and in the best interest of the ever growing aviation program.

Warrant Officer Career Program

Warrant officer aviators can look forward to the publication in the next few months of a formal Warrant Officer Career Program. A study being conducted by the Officer Personnel Directorate, Office of Personnel Operations (OPO), is almost completed and will be submitted to DCSPER for staffing in early September. The study group which includes representatives from all branches containing warrant officers was given the following tasks:

 Define the duties a warrant officer is expected to perform.

Publish a career program for each

MOS.

 Evaluate the desirability of centralizing the personnel management of all warrant officers (both aviators and non-aviators) in a separate branch.

Evaluate the need for greater educational opportunity for all warrant

officers.

 Recommend any necessary improvements in the Warrant Officer Career

Program deemed necessary.

The results of this study are not final. When the study is completed a warrant officer career program pamphlet will be published so that each warrant officer or pro-14 spective warrant officer can see for himself what is expected of him and how he is logically to progress through his MOS career pattern.

The USABAAR Effort

Most aviators are aware of the fine job USABAAR is performing, but I'm not so sure that senior commanders and staff officers are aware of the extensive effort that is being made by Army aviation in general and USABAAR in particular in the field of aviation safety. As you know, USABAAR conducts an Aviation Safety Orientation Course.

The following was the comment of a general officer who completed class 66-2 of the Army Commanders and Staff Officers Aviation Safety Orientation Course conducted by the University of Southern California last June: "This has been time well spent and I believe it will be of continuing benefit to me

as a senior commander."

It is typical of the comments made by 24 other commanders and staff officers who attended this course designed to orient major commanders and staff officers whose function includes supervision of aviation units in the command aspects of aviation safety.

An article in the September issue of the U.S. Army Aviation Digest describes this course, its objectives, and the classroom subjects taught. I urge all aviation staff officers to bring this article to the attention of their commanders and encourage them to attend. This course will help non-rated commanders to better understand our problems and the support needed to do a better job.

Aviation Safety Orientation Course

Another course which has proven its value is the one-week Aviation Safety Orientation Course conducted monthly by the U.S. Army Board for Aviation Accident Research (USA-BAAR) at Fort Rucker.

Designed for aviators, safety officers, and other aviation personnel who cannot afford the time to complete the ten-week Aviation Safety Officers Course at the University of Southern California, this course includes classes in Army aviation safety regulations, aircraft accident prevention, aerodynamics, propulsion, aircraft performance and struc-

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tures, safety engineering, aviation physiology and psychology, techniques of aircraft accident investigation, Army aviation safety literature, and the duties of safety officers.

In addition to classroom studies, this course also provides field trips for an exercise in aircraft accident investigation and an accident prevention survey of airfield facilities. Attendees are also given an orientation briefing on the functions of USABAAR and a tour of its facilities.

Graduates of the longer USC course who have served tours of duty unrelated to aviation safety report the one-week ASO course provides excellent refresher training. Further details about the course and quotas may be obtained by writing: Director, USABAAR, ATTN: P&I Division, Fort Rucker, Alabama 36360. Direct communication is authorized by AR 15-76.

Aviation Crash Survival Investigator's Course

A two-week course designed to train aviation medical officers in the theory and practical application of crash survival concepts. Graduates of this course are qualified to report and recommend crash survival design criteria from data produced through investigation of aircraft accidents. Three courses are conducted each year by Aviation Safety Engineering and Research, 2641 East Buckeye Road, Phoenix, Arizona, a division of the Flight Safety Foundation, Inc.

Aviation Courses Revised at USAAVNS

The ever increasing demands being made on Army aviation today have dictated that we constantly evaluate our training program to insure the development of the best possible aviator. USAAVNS has been most responsive in this area as reflected by the many changes in the various courses they conduct.

For example, a new course is being substituted for the old "Aviation Command and Staff Course" at Fort Rucker. This new course, the "Aviation Commanders' Vietnam Orientation Course" was designed specifically to train selected aviation commanders and staff officers with anticipated Vietnam assignments.

Airmobile operations and other problems generated as a result of Vietnam experience will be stressed. The instructors are highly qualified individuals recently returned from Vietnam, who can speak from a background of excellent personal knowledge and experience.

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

- STATEMENT REQUIRED BY THE ACT OF OCTOBER 23, 1962: SECTION 1369: TITLE 39 OF THE UNITED STATES CODE SHOWING THE OWN-ERSHIP, MANAGEMENT AND CIR-CULATION as filed on September 13, 1966, on "ARMY AVIATION MAGA-ZINE" published monthly at 1 Creuwood Road, Westport, Conn. 06880.
- The names and addresses of the Publisher, Editor, and Managing Editor are: Arthur H. Kesten, Publisher and Editor, and Dorothy Kesten, Managing Editor, both of 1 Crestwood Road, Westport, Conn. 06880.
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- The known bondholders, mortgagees, and other security holders owning or holding I percent or more of the total amount of bonds, mortgages, or other securities are: None.
- 9. Paragraphs 7 and 8 include, in cases where the stockholder or the security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which the stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, or mortgages, or other securities of the publishing corporation have been included in para-graphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation.
- 10. The average number of copies for each issue during the preceding 12 months, and the number of copies for the single issue nearest the filing

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ARTHUR H. KESTEN Publisher Army Aviation Magazine



Looking for something new in the line of Army aircraft? Need a few birds to fill out those proficiency and installation support missions? Help is on the way. Starting in October the Army Aviation Materiel Command, via the Cessna Corporation, will deliver 255 T-41B aircraft to twenty-one installations in CONUS.

The T-41B is a 210 horsepower version of the commercial Cessna Skyhawk. It has a cruise speed of 110 knots, a service ceiling of plus 10,000 feet and a specified endurance of 4.5 hours at cruise setting. It has provisions for four, and 200 lbs. baggage capacity.

The major mission of the T-41B will be to supplement the training base and provide for primary fixed wing training. By
PAUL L. HENDRICKSON
Command Commodity Manager
AVCOM, St. Louis, Missouri

One relatively unique factor in this procurement is that the Army depot system will not acquire, stock, or issue support spares or tools. Arrangements have been made through Cessna for Army operators to buy parts and services from licensed Cessna local dealers, with a "favored customer" or military discount from normal rates.

AVCOM has supplied each recipient installation with initial (first year) allocation of funds for local procurement of necessary support. Follow-on support beyond this funding level will be bud-

OFF THE SHELF!

NEW EQUIPMENT ON THE WAY



geted and controlled locally by the installation, utilizing contracts centrally established by AVCOM.

While this type of support is not completely unique to Army aircraft (T-42 and TH-55 support are similar) it is the first time it has been applied to a fleet with this type of distribution. The Department of Army selected this program because the T-41B is not planned for employment outside CONUS, parts are readily available locally, and the cost of documentation and in-house effort was avoided.

Simple exchange system

Further reduction of in-house effort was made by addition of a repairable exchange program. Instead of establishing a bonded government warehouse for handling unserviceable repairables turned in for overhaul by operators, a simple exchange system is utilized.

An operator orders a repairable item (propeller, fuel pump, etc.) and is billed at a flat rate exchange basis. He has five days after receipt of serviceable item to return to the contractor an unserviceable one. This should mean no loss in time in turning in the old one before serviceable one is available.

When an installation wants "shelf stock" it will so annotate the requisition 18 and then be billed for full serviceable item price. For the budget-minded this should provide incentive to minimize shelf stock investments. A Logistic Support Plan for the T-41B will be available in the immediate future which describes the mechanics of this system in detail.

New equipment training

New Equipment training will probably have begun, if not indeed been completed, by the time this issue is out. Classes for Instructor Pilots and Maintenance Instructors will be conducted in late September and early October 1966 for training personnel of Ft. Rucker and Ft. Eustis. These agencies will then conduct necessary future training.

Although spare parts, special tools and publications will be acquired through contractor outlets, AVCOM is still responsible for overall technical management of this program. Any malfunction, deficiency or proposed modification must still be reviewed and disposition action taken by AVCOM.

A brand new steed

So there it is, a brand new steed in the Army aviation stable! And by the time you read this you may have seen one landing at your favorite Army strip. But I couldn't really tell you about it much earlier, for we only got the money to buy them on the 8th of August 1966!



THE "FLYING CIRCUS" BENNING'S BARNSTORMERS

"Barnstorming" aviators, like those who brought aviation to America's millions at county fair back pastures during the "Roaring Twenties," are back. Most of them today, however, belong to Colonel J. Elmore Swenson's 10th Aviation Group at Fort Benning.

Laughingly called "the flying circus" by many of its members, the 10th has had some of its aviators on the road almost continuously since spring. And, like a "flying circus," they have been traveling around the country with their flying machines putting on aerial shows

for the public.

When you add to this, the additional job of participating in airmobile maneuver training, assisting the National Space Agency Gemini program, and supporting research and development, you have a good idea of the numerous missions performed by the 10th's aviators of the 44th and 37th Aviation Battalions.

STUDIER AIRCRAFT

Although the aviators are not so flamboyantly dressed as the old "barnstormers," and their CH-47 *Chinook* and UH-1 *Huey* helicopters are a lot more sturdy than those old *Jennies* that were held together by wire and a prayer, they are the same breed of men who pioneered aviation history. So far this year they have displayed their aircraft on Armed Forces Day at Fort Jackson, S.C., took part in airmobile maneuvers 3,000 miles away on the west coast at Fort Lewis, Wash., and flew at the over 5,000 foot heights in the Rocky Mountains of Fort Carson, Colo., and on the desert floor of Africa.

It was in Africa that the 10th's aviators supported NASA's Gemini 8, 9, and 10 missions in a standby recovery role.

MAJOR U.S. UNIT

The 10th Aviation Group has the largest concentration of Army aircraft anywhere in the United States, outside of the Army aviation schools at Fort Rucker, Ala. and Fort Wolters, Tex. When Army aircraft are requested by someone anywhere in the United States, the mission often filters down to the 10th.

The important role of helicopters in Vietnam has resulted in increased airmobile training in the U.S. This has resulted in the Chinooks and Hueys of the group carrying troops of the 4th Infantry Division at Fort Lewis, Wash., 5th Infantry Division at Fort Carson, Colo., 9th Infantry Division at Fort Riley, Kan., and the 101st Airborne Division at Fort Campbell, Ky.

Can YOU pinpoint the target in this jungle?



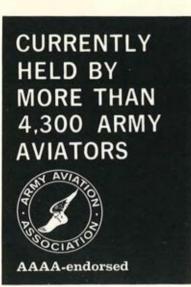
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Airlines Plan Grooved Runways to Cut Skidding by Edward Hudson

Narrow-shaped grooves cut in airplane runways by means of high-speed diamond cutting wheels are to be tested by the airlines of this country in order to reduce skid-

ding on wet runways.

The grooves, which have been employed on some highways in this country and on runways in Britain, are cut across the runway perpendicular to the plane's direction of travel. They are only one-eighth to one-quarter of an inch deep, and one to two inches apart. Special machines cut as many as 13 grooves at a time.

According to the Air Transport Association, the grooves show promise of contributing to greater safety by "destroying the mechanism" that produces skids on wet run-

ways.

3 Kinds of Skidding

Three kinds of wet pavement skidding by airplanes have been identified, Research has indicated that the grooves are effective

in stopping all three kinds,

One kind, called thin film lubrication, is limited to smooth runways. The tires ride on a thin film of water, or water mixed with oil, that separates them from the pavement. The grooves break this film and restore traction, the A.T.A. said,

A second kind, dynamic hydroplaning, occurs when large amounts of water are left standing on the runway and the plane is moving at a certain speed, which varies with tire pressure (low speed with low tire pressure). The tires then ride on a cushion of water, much as a surfboard rides the crest of a wave. Grooves break this cushion by giving the water an escape route, the association said. They also help drain standing water from the runway.

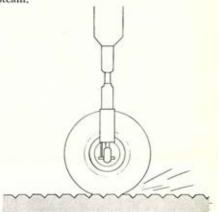
The third kind, called reverted rubber skidding, was identified only recently, it was said, and more research is needed to pin down how it occurs. It was discovered in studies by the National Aeronautics and

Space Administration,

Tire Becomes Overheated

The reverted rubber skid happens after a prolonged wheel skid caused by one of the other forms of skidding and, once started, may persist down to slow speeds. The skid gets its name from the fact that a patch of tire heats to the point where the rubber reverts to the uncured state.

Present thinking, according to the A.T.A. suggests that the braked tire's contact with the wet runway may produce enough heat to turn the water to steam, which would be hot enough to revert the rubber. The patch of soft, uncured rubber may produce a seal that keeps steam and water entrapped. Thus the tire would be riding on a cushion of steam.



DRAWING OF AIRPLANE WHEEL ON WET RUNWAY WITH GROOVES

"The distinctive white tire mark left on the runway by a rubber reverted skid," according to the association, "is in effect a sec-

tion of steam-cleaned runway."

Runway grooving, it was said, appears to offer an escape route for the entrapped steam. Moreover, the sharp edge of the grooves apparently peels off the soft, uncured rubber, breaking the seal and destroying the skid.

IMMINENT PROPOSAL

Clifton F. von Kann, Major General (USA-Ret.), vice president operations and engineering of the association, said his organization was preparing to submit soon to one or more airports a proposal to test the grooves—possibly before the end of this year.

The A.T.A. said that the cost of grooving the full lenth of a 10,000-foot long runway, 150 feet wide, might be \$70,000. The cost would be less if the runway were grooved in strips that alternated with ungrooved portions—an idea being considered. The question of who will pay for the tests will be worked out between the airlines and the airport operator, it was stated.

NO VIBRATIONS OR NOISE

The grooves do not produce a vibration or noise in the plane, the association was told by one American Airlines official who tested-landed on a jet-grooved British runway.

The British have been grooving runways at military airports for 10 years and have recently begun to do so at civil airports, it was said. The airlines of this country want to test the idea at a heavily used airport in this country in all kinds of weather.

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11TH AVIATION BATTALION CITED BY VIETNAMESE

The 11th Aviation Battalion has been awarded the Vietnamese Cross of Gallantry with Palm

in a ceremony in Phu Loi.

The ceremony included the pinning of the cross on the battalion colors, and awards of the medal to Lt. Col. John W. Lauterbach, former commander of the 11th, and to Lt. Col. Joseph B. Starker, present commander.

The citation reads, in part, "The 11th Combat Aviation Battalion is cited for outstanding performance of duty, and extraordinary heroism in action in support of Republic of Vietnam Air Force and Allied Forces throughout the II Corps tactical zone during the period from December 1965 to June 30, 1966."

During this period the battalion logged more than 41,000 combat flying missions, air-lifted more than 260,000 American, South Vietnamese and other free world soldiers, and Vietnamese refugees, and transported more than 27,000 tons of military equipment and supplies in support of combat operations.

The awards, part of a special organizational day program celebrating the battalion's first anniversary, were presented by Maj. Gen. Le 24 Nguyen Khang, commanding general of the III ARVN Corps.

THE BLAST THAT HELPED

Private First Class Richard K. Duhamel can thank the prop blast of a helicopter for sav-

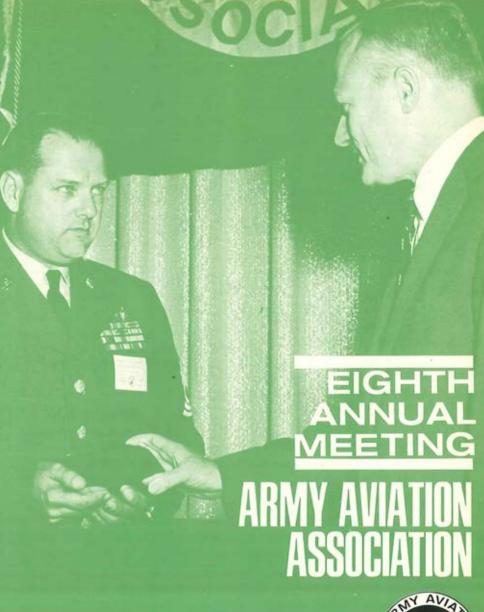
ing his life.

During an operation, east of here, home of the Big Red One's 3rd Brigade, the reconnaissance platoon of the 2nd Battalion, 28th Infantry, was digging in for the night. Duhamel had just finished setting up his poncho as a shelter when a re-supply helicopter swooped over his position: Swish! Away went his poncho. He was in the path of the incoming choppers. The irate private reconstructed his shelter only to have it blown down again by the next chopper.

Gathering his belongings, he moved about fifteen meters from his old position. As he settled down for the night, secretly laughing about his wise move, a grenade scored a di-

rect hit on his old position.

"Glad I moved," mused Duhamel, "It would've made a sizeable hole in my poncho."



cretary Resor presents the 1964-65 "Aviation Soldier the Year" Award to Master Sergeant Cyril G. Manning.



THE ARMY AVIATION ASSOCIATION OF AMERICA

PROGRAM

WEDNESDAY 12 OCTOBER 1966

1200 - 1800 REGISTRATION

General Registration, Caucus Room
Delegates' Registration
Council Room

1200 - 1700 HAPPY HOUR

Marquee Lounge. Cash Bar

1400 - 1600 AVIATION FILMS

Empire Room. Cash Bar Registrants Only

1500 - 1700 NATIONAL EXECUTIVE BOARD QUARTERLY MEETING

First Session. Board Room

1900 - 2200 EARLY BIRDS' RECEPTION Tudor Room, Cash Bar

THURSDAY 13 OCTOBER 1966

0900 - 2000 REGISTRATION

General Registration, Caucus Room Delegates' Registration Council Room

AAAA GENERAL MEMBERSHIP BUSINESS MEETING

The President's Annual Report; Election of National Officers for 1966-1969 Terms of Office; Presentations of Agenda Items by Delegates and Members. Regency Ballroom. Registrants Only.

> 1130 - 1230 HAPPY HOUR

Regency Ballroom. Cash Bar

1100 - 1400 AAAA LADIES' LUNCHEON Tudor Room

1200 - 1400 OPEN LUNCHEON FOR GENERAL MEMBERSHIP

Garden Restaurant

1200 - 1400 CHAPTER DELEGATES' BUSINESS LUNCHEON Palladian Room Front

1200 - 1400 NATIONAL EXECUTIVE BOARD BUSINESS LUNCHEON

Palladian Room Rear

1415 - 1615
PANEL PRESENTATION*
"Army Aviation in Vietnam"

Regency Ballroom Moderator:

Lieutenant Gen. William B. Bunker Hqs., Army Materiel Command, Washington, D.C.

Presentations by: Major General Harry W. O. Kinnard OACSFOR, DA, Washington, D.C.

Brigadier General Alvin E. Cowan Former Chief, Joint Research & Test Agency (Vietnam)

Lieutenant Colonel Jack Ray
U.S. Army Board for Aviation
Accident Research, Fort Rucker

Colonel John F. Sullivan Project Manager, FLATTOP Hqs., AMC, Washington, D.C. Brigadier General Howard F. Schiltz Hqs., U.S. Army Aviation Materiel Command, St. Louis, Mo. Other Panelists:

Colonel John Babbs
Dr. George Chernowitz
Mr. Charles E. Ludwig
Colonel George A. Lutz
Major Rudolph Descoteau

*Limited to Registrants and those in
duty uniform only.

1645 - 1800 AVIATION FILMS AND HAPPY HOUR

Films, Empire Room. Cash Bar, Empire Room Foyer A

1645 - 1800 1966 CUB CLUB REUNION Heritage Room

1900 - 2100 PRESIDENT'S RECEPTION Regency Ballroom.

Admission by ticket

FRIDAY 14 OCTOBER 1966

> 0900 - 1200 REGISTRATION

Caucus Room

0930 - 1030
AAAA GENERAL MEMBERSHIP
BUSINESS MEETING

Empire Room. Registrants only.

0930 - 1000 ESCORT ASSEMBLY Ambassador Room

0930 - 1030 PRESS BRIEFING Board Room. Press only.

THE ARMY AVIATION ASSOCIATION OF AMERICA

PROGRAM

1100 - 1200 HONORS LUNCHEON RECEPTION

> Ambassador Room. Admission by ticket

1200 - 1415
EIGHTH ANNUAL AAAA
HONORS LUNCHEON
Regency Ballroom

1445 - 1600 AVIATION FILMS AND HAPPY HOUR Empire Room. Cash Bar

1500 - 1600 NATIONAL EXECUTIVE BOARD QUARTERLY MEETING

Second Session. Board Room. Installation of National Officers for 1966-1969 Terms of Office; Appointment and Ratification of National Members-At-Large; Selection of Site and Date for the 1967 AAAA Annual Meeting.

> 1800 - 2000 DIEHARDS' RECEPTION The Forum, Cash Bar



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LT. COL. JOSEPH E. HENDERSON
LT. COL. NICHOLAS G. PSAKI
LT. COL. DONALD F. LUCE
ERIC H. PETERSEN





NATIONAL AWARDS 1965-1966

THE JAMES H. McCLELLAN AVIATION SAFETY AWARD Established to honor the memory of James H. McClellan, an Army Aviator who was killed in an aircraft accident 22 July 1958

Presented to Gerard M. Bruggink

THE ARMY AVIATOR OF THE YEAR AWARD

Established by the Army Aviation Association of America

> Presented to Captain James A. Scott, III

THE OUTSTANDING AVIATION UNIT AWARD

Established by the Army Aviation Association of America and sponsored by the

Hughes Tool Company—Aircraft Division

Presented to the
1st Cavalry Division (Airmobile)
U.S. Army, Vietnam

THE AVIATION SOLDIER OF THE YEAR AWARD

Established by the
Army Aviation Association of America
and sponsored by
Stanley Hiller, Jr.

Presented to
Sergeant First Class Donald A. MacNevin

Daylight fading...weather deteriorating...terrai



These are the conditions in which twin-engine power will increase both pilot and commander confidence in a safe return from difficult missions. ☐ The joint Army/Bell/Continental research and development program to provide a twin engine for the Huey has been successfully completed and preliminary evaluations have been made by the Army, Navy and Air Force. This program has demonstrated the compatibility of the T-67 twin powerplant with the UH-1 to provide the combat-proven Huey with still greater mission potential. ☐ Another example of Bell's R & D leadership to deliver more helicopter per defense dollar.



orbidding and hostile...landing intolerable...





single engine cost

Four advantages, without cost penalty, are inherent in Continental's T67-T-1 Twin Turbine powerplant for helicopters: (1) Elimination of the height-velocity "danger zone". (2) Over-all increased mission effectiveness. (3) Improved night flying and all-weather capability. (4) The builtin ability to fly home on a single engine.

The T67 has a horsepower rating of 1600 and a specific fuel consumption of 0.55 pounds per horsepower hour.

The T67 automatic control provides multi-engine benefits without additional pilot duties. This unique powerplant with automatic power sharing has completed service evaluation flight tests in a Bell Huey with these outstanding results . . . single engine flight up to 17,000 feet altitude and at temperatures up to 100°F.

The T67 is another first for Continental, and a major aviation development. It costs no more per horsepower than any available single engine in its power range.



THE ARMY AVIATION ASSOCIATION OF AMERICA

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



Modeled after several of the professional-technical societies in existence, the AAAA has grown rapidly, receiving membership support of the majority of those military and civilian persons having an interest in this segment of the Armed Forces.

General Purposes

To advance the status, overall esprit, and the general knowledge and proficiency of those persons who are engaged professionally in the field of U.S. Army aviation in the active U.S. Army forces and in the Reserve Forces 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.

To advance those policies, programs, and concepts of the Association of the U.S. Army, the National Guard Association, and the Reserve Officers Association that are of benefit to the AAAA membership.

Specific Objectives

Fostering a public understanding of Army aviation and arousing a public interest in this segment of the military forces.

Exchanging ideas and disseminating information pertinent to Army aviation through the media endorsed by the Association.

Stimulating good fellowship nationally, regionally, and locally.

Inspiring Army-wide and nationwide interest in Army aviation careers.

Cementing relationships between those interested in Army aviation in the active U.S. Army forces and the Reserve Forces of the U.S. Army.

Motivating Army aviation personnel to increase their knowledge, techniques, and skills.

Maintaining historical records of Army aviation.

Conducting meetings, seminars, symposiums, exhibitions, air meets, etc.

Recognizing outstanding contributions within Army aviation.

Providing special types of group plans of individual benefit to the membership.

Specific Programs

An AWARDS PROGRAM in which outstanding individual and unit achievements receive National recognition.

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

A LOCATOR SERVICE PROGRAM in which the member is assisted in his efforts to keep abreast of the location of his contemporaries.

A FILM EXCHANGE PROGRAM in which the member is afforded the opportunity of viewing current developments in the state of the art as portrayed through the medium of industry films.

A SCHOLARSHIP AWARDS PROGRAM in which the sons and daughters of members receive scholarship assistance annually is pursued in conjunction with the AAAA Scholarship Foundation, Inc., a separate, non-profit educational foundation that works closely with the Army Aviation Association.

A SCIENCE AWARDS PROGRAM in which the Association endeavors to interest young people in the aviation sciences by sponsoring cash scholarship awards at the Annual Science Fair-International and numerous individual Certificates of Achievement at some 220 local and regional Science Fairs. AAAA individual members serve as judges at local, regional, and national fairs.



AAAA PANEL PRESENTATION "Army Aviation in Vietnam"

Thursday, October 13, 1966-1415-1630 Hours Regency Ballroom, Shoreham Hotel, Washington, D.C.



1415-1435

Operations of the 1st Cavalry Division
(Airmobile) in Vietnam
Major General Harry W.O. Kinnard
OACSFOR, Department of the Army
Washington, D.C.



1435-1455

Materiel Developments and Requirements Brigadier General Alvin E. Cowan Former Chief, Joint Research and Test Agency (Vietnam)



1455-1515

Safety and Survivability
Lieutenant Colonel Jack Ray
U.S. Army Board for Aviation Accident Research
Fort Rucker, Alabama



1525-1540 Project FLATTOP

Colonel John F. Sullivan Hqs, First Materiel Group, ARADCOM Corpus Christi, Texas



1540-1605

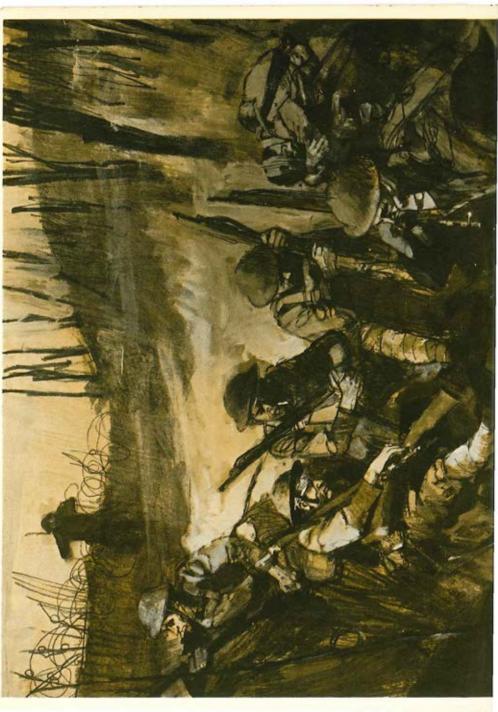
Logistic Support of Army Aviation Brigadier General Howard F. Schiltz Hqs, U.S. Army Aviation Materiel Command St. Louis, Missouri



Moderator: Lieutenant General

William B. Bunker
Hqs, Army Materiel Command
Washington, D.C.

OTHER PANELISTS
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COLONEL JOHN BABBS
COLONEL GEORGE A. LUTZ
MAJOR RUDOLPH DESCOTEAU
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LIEUTENANT GENERAL AUSTIN W. BETTS

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... engines ranging from 1000 to 3400 shaft horsepower

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MAJOR GENERAL HARRY W. O. KINNARD
THE HONORABLE W. BREWSTER KOPP
MAJOR GENERAL WILLIAM W. LAPSLEY
THE HONORABLE FINN J. LARSEN

COLONEL RICHARD M. LEE

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AAAA Ladies Luncheon Committee

Mrs. O. Glenn Goodhand, Chairman Mrs. Robert R. Williams Mrs. Edwin L. Powell, Jr. Mrs. Robert K. Moore

MRS. NELSON A. MAHONE, JR.







RODES

45

PREVIOUS WINNERS

THE ARMY AVIATOR OF THE YEAR AWARD

■ PREVIOUS WINNERS

In 1959, Captain James T, Kerr, assigned to the U.S. Army Transportation Test and Support Activity, Fort Rucker, Ala., received the first "Army Aviator of the Year" Award.

Chief Warrant Officer Clifford V. Turvey, assigned to the U.S. Army Aviation Board, Fort Rucker, Ala., received the Award for the year 1960.

In 1961, Chief Warrant Officer Michael J. Madden, assigned to the U.S. Army Transportation Board, Fort Eustis, Va., was named "Army Aviator of the Year."

Captain Leyburn W. Brockwell, Jr., of Headquarters, XVIII Airborne Corps, Fort Bragg, N.C., received the Award for 1962.

Captain Emmett F. Knight, 57th Aviation Company (Vietnam), was named the 1963 "Army Aviator of the Year," receiving his award from the Honorable Stephen Ailes, then Under Secretary of the Army.

In 1964, Major Marquis D. Hilbert, Aviation Officer at the John F. Kennedy Center for Special Warfare, Fort Bragg, N.C., received the "Army Aviator of the Year Award."

Major Paul A. Bloomquist, Commanding Officer of the 57th Medical Detachment (Helicopter Ambulance), Vietnam, received the 1965 "Army Aviator of the Year Award" from Under Secretary of the Army David E. McGiffert.

THE OUTSTANDING AVIATION UNIT AWARD

■ PREVIOUS WINNERS

In 1960, the First Reconnaissance Squadron (Sky Cavalry), 2nd U.S. Army Missile Command (Medium), Fort Carson, Colorado, received the first "Outstanding Unit Award." Lt. Colonel Robert F. Tugman, CO of the unit, accepted the trophy from Lt. General John C. Oakes, Deputy Chief of Staff for Military Operations, Department of the Army, on behalf of the personnel of his unit,

In 1961, the 937th Engineer Company (Aviation) (Inter-American Geodetic Survey), Fort Kobbe, Canal Zone, received the "Outstanding Aviation Unit Award." Lt. Colonel Jack W. Ruby, the unit's commanding officer, accepted the trophy from General George H. Decker, Chief of Staff, U.S. Army, on behalf of the personnel in his unit.

The winner of the Hughes Trophy in 1962 was the 45th Transportation Battalion (Helicopter), APO 143, San Francisco, Calif., commanded by Lt. Colonel Howard B. Richardson. Subordinate units sharing the award included the 8th, 57th, and 93rd Transportation Companies (Lt Hel), and the 18th Aviation Company. General Earle G. Wheeler, Chief of Staff, U.S. Army, presented the trophy to Majors Milton P. Cherne and William J. Tedesco, representing the winning unit.

The U.S. Army Utility Tactical Transport Helicopter Company (Vietnam) was awarded the "Outstanding Aviation Unit" trophy in 1963. Gen. Barksdale Hamlett, Vice Chief of Staff, U.S. Army, presented the Award to Major Ivan L. Slavich, commanding officer, who accepted the Hughes Trophy on behalf of the men in his unit.

In 1964, the 11th Air Assault Division and the attached 10th Air Transport Brigade, Fort Benning, Ga., jointly received the "Outstanding Aviation Unit Award." The Hughes Trophy was presented by General Harold K. Johnson, Army Chief of Staff, to Major General Harry W. O. Kinnard and Colonel Delbert L. Bristol, who accepted the trophy on behalf of the men in their units.

The 13th Aviation Battalion and its attached units received the "Outstanding Aviation Unit Award" for 1965. Two former commanding Officers of the Vietnam-based unit, Lt. Cols. Jack V. Mackmull and J. Y. Hammack, accepted the trophy from Army Chief of Staff, General Harold K. Johnson, on behalf of their men.

THE AVIATION SOLDIER OF THE YEAR AWARD

PREVIOUS WINNERS

In 1961, Master Sergeant Robert R. Young, Flight Operations Chief, Airfield Operations Command, Fort Rucker, Ala. was named the "Aviation Soldier of the Year," receiving the Award from the Honorable Elvis J. Stahr.

The Honorable Stephen Ailes, then Under Secretary of the Army, presented the 1962 Award to Specialist First Class James C. Dykes of the 255th Signal Detachment (Vietnam).

The 1963 Award was made to Sergeant First Class James K. Brock, Maintenance Chief of the 1st Aviation Company (Caribou) (Vietnam), by the Honorable Cyrus R. Vance, then Secretary of the Army.

Sergeant First Class Robert M. George of the UTT Company (Vietnam) was named the 1964 "Aviation Soldier of the Year." The Honorable Stephen Ailes, Secretary of the Army, made the presentation.

In 1965, Master Sergeant Cyril G. Manning, Operations Sergeant of the 13th Aviation Battalion, Vietnam, received the award from Secretary of the Army Stanley R. Resor.

THE JAMES H. McCLELLAN AVIATION SAFETY AWARD

■ PREVIOUS WINNERS

In 1959, Lt. Col. (then Maj.) Arne H. Eliasson, assigned as the Chief of the Aviation Safety Division of Headquarters, Seventh U.S. Army, APO 46, New York, N.Y., received the "James H. McClellan Aviation Safety Award."

Colonel John L. Inskeep, Commandant of the U.S. Army Primary Helicopter School at Fort Wolters, Tex., and Raymond L. Thomas, General Manager of the Southern Airways Company contract operations at that facility, received the 1960 Award jointly.

The "James H. McClellan Aviation Safety Award" was not presented in 1961.

Colonel Spurgeon H. Neel, Jr., the Commandant of the U.S. Army Hospital at Fort Rucker, Ala., was the 1962 winner.

In 1963, Colonel James F. Wells, Military Advisory Assistance Group, Republic of China (Taiwan), was named the winner.

Colonel Conrad L. Stansberry received the "James H. McClellan Aviation Safety Award" in 1964 for his contributions to flight safety as the Aviation Officer, Hqs, USAREUR.

In 1965, Mr. Ralph B. Greenway, Air Safety Specialist, Department of the Army, was named the winner for his outstanding contributions to the Army Aviation Safety Program.

SPEAKING OUT/Continued

salute. This all changed when an enterprising pilot decided to use his sidearm and fired a round in the general direction of the opposition's aircraft. This unconventional ges-

ture changed things overnight.

Within short order every pilot on either side was attempting to effectively arm his aircraft with a view toward destroying his enemy. No nation had made preparations for aerial combat when the war began, but soon all combatants took to the air with an astounding array of weaponry, limited only by the individual participant's imagination.

Impressing adversaries

There were both automatic and singleshot rifles, pistols, revolvers, steel arrows (originally designed for use against massed ground troops), small bombs, and even hand grenades - towed at the end of a long cable to strike the propeller of the enemy's airplane.

Many instances were reported of simulated weapons being carried on aircraft to further impress the adversary. Combatants who found they had exhausted their carbine and pistol ammunition sometimes resorted to using their Very pistols, a probable waste of good signal

Machine gun problems

The mounting of machine guns on aircraft presented a few unforeseen problems, Among the frustrations experienced by the early would-be fighter pilots was weapon-firing synchronization with propeller r.p.m., thereby accounting for the loss of several of the latter. In time, though, this problem was solved, procedures of engagement were refined, and better sights evolved.

Those were new days to the pilots and as exciting for them as it was to the doughboys watching while they slugged it out on the battlefield. The sight of Allied planes flying across the lines had always been a moralebuilding factor to those weary soldiers who otherwise saw only a countryside shredded by mortar and cannon, and laced throughout by barbed wire and trenches. Their spirits 48

were lifted even more by witnessing the notso-rare dogfights between the German and Allied aircraft in the open sky above.

In those days of fabric-covered airfoil, water-cooled engines, and aircraft without superchargers, the air war was fought in the lower troposphere. There it was viewed by all below in the trenches. It made the soldier of WWI aware that he wasn't alone. The no-man's land still lay before him but its presence was made less so because of the Bristols, Nieuports, Curtisses, and DeHavil-

The first air aces

Within a brief span of months such pilots as Rickenbacker, Luke, and Campbell had accounted for the shooting down of as many as twenty enemy aircraft each and thereby became the Air Aces of WWI.

World War II and the Korean Conflict gave many other pilots the opportunity to become Aces. Five enemy aircraft and the title and recognition came. How the American spirits soared when first word came back to the U.S. of pilots destroying two or three Japanese Zeroes in a single engagement. In the South Pacific campaign five Japanese aircraft fell before the guns of Edward "Butch" O'Hare, from the aircraft carrier Lexington, in a single battle, O'Hare was advanced immediately two ranks to Lt, Commander.

Years later, some of the biggest news of the Korean War concerned MIG Alley and that war's Aces. Still not to be ignored were the promotion opportunities incurred by those intrepid American jet-jockies. (Their rapid promotions gave rise to the original joke about the Air Force officer who felt he was a failure being 29 and still only a Lt. Colonel!) It was just compensation, however, for the destruction of five to ten Communist MIGs and the insuring of air super-

iority over Korea.

The losers unnoticed

Understandably, the achievements of those pilots on the losing team frequently go unnoticed. How many Americans recall the Aces of Germany in either war, or the exploits of certain Japanese pilots during WW II? Most people recognize the name of von Richthofen, who shot down 80 Allied air-



fights.

craft in WWI; they are a little hazy as to the records beyond that, *Immelmann* was the first *Air Ace* of Germany, but proved himself a rather poor shot after that good beginning. His name survives, however, because of the now famous acrobatic maneuver used in air battles.

World War II saw many American (and Japanese) Aces getting their start long before Pearl Harbor. A great number of Americans had a hand in the air war over China as members of the International Squadron and the American Volunteer Group. One has to dig deeply into documentary records of World War II to learn of the records established by Japanese pilots. There were significant achievements, however, by such pilots such as Hiroyoshi, Nishizawa (with a record of 102 enemy aircraft*). (*Mostly ours!)

Why just dogfights?

Too frequently, adequate recognition has not been given to those pilots whose main duties have not been as fighter pilots. It is fairly difficult to account for the destruction of five enemy planes when, say, your main duties were flying an unarmed C-47 over the Hump in the CBI Theatre. Shooting up enemy gun emplacements, flak towers, and pillboxes has never helped an Ace get press notices. Such action is noteworthy, however, and helps a country's effort considerably in a war.

The whole set of criteria in determining who should be an Ace has always been arbitrary and somewhat unfair, It seems moreso when one evaluates the deeds of a few men flying unsophisticated aircraft who did not normally engage the enemy in aerial dog-

rockets, grenade launchers, wire-guided mis-

Rudel's accomplishments

sites, and machine guns.

One person such as this is the former Germany Luftwaffe Stuka pilot, Rudel. Rudel's contribution to his country's effort possibly exceeds all others. Flying Stuka airplanes on the Eastern Front for four years, he accounted for the destruction of over 400 Russian tanks, plus gun emplacements, some shipping (including a cruiser), and a lot of other miscellanea.

He was shot down behind enemy lines three times — always escaping — and was wounded numerous times. His dedication was such that at war's end, he was flying several combat missions each day with one leg amputated and the other far too damaged to use, Flying by aileron control had become necessary long before due to his being frequently wounded.

Now it cannot be denied that Rudel received recognition; he was at times a Group Captain and received a singularly-bestowed medal, the design for which was personally drawn by Hitler. Rudel, however, never was adequately recognized in aviation circles; he was shooting at other targets when he should have been after enemy aircraft!

(SPEAKING/Continued on Page 52)

QUESTION:

what two Canadian sharp-toothed amphibians carry 8 and 14 fully-equipped troops (or 1800 and 4000 lbs. of combat gear) respectively \square can operate out of 1000 ft. airstrips \square run on dependable PT6A turboprops \square operate on wheels, skis, floats, amphibious floats or wheel/skis \square come from a company with 19 years' experience building rugged STOL aircraft \square are ideal for counter-insurgency, liaison and air-ambulance applications \square

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SPEAKING OUT/Continued

In the Vietnam War, the few encounters with Communist MIGs promise the making of few, if any, new Aces. Be this as it may, I feel that it's time to revise our whole set of values and criteria regarding just WHAT should constitute an Air Ace.

No one can dispute the bravery of those airmen who are required to fly north of the 17th Parallel. But the personal touch has gone out of engaging the enemy in the air since 1914. In fact, it has become fairly impersonal when engaging an enemy aircraft at 40,000 feet and at an early closing distance of 20 miles. (There's hardly time to salute your adversary anymore before you shoot him down.)

Computers take over

Our concept of an aerial engagement today could be described thusly: An American jet beating it toward the South China Sea at Mach 1.6 catches a blip on his radar. The other jet is on an intercept course and looks unfriendly. This is confirmed by interrogation through the IFF equipment. The air-to-air missiles under the wings are therefore armed and the in-plane electronic computer takes over. After that, the work is over on the part of the pilot, and, if things go right, it's all over for the MIG.

When things get personal

It does become a very personal thing, however, for many pilots flying other types of missions in Vietnam. "Who can deny the herioc act of the H-43 Huskie belicopter crew going in to rescue a downed jet pilot or a Skyraider pilot making Napalm or rocket runs against a gun emplacement.

It is now considered fairly commonplace for Med-Evac pilots to fly Dust-Off missions in excess of 50 to 100 times per month, and most often, into fresh battle areas still unsecure.

We see in the O-1 Bird Dog pilot firing his marker-rockets into a group of VC, the makings of a quite adequate fighter pilot, given the proper machine.

A single platoon of armed helicopters, utili-52 zing the Lightning Bug technique, destroying 68 sampans and killing an undetermined number of Viet Cong is significant.

The recognition for the crew of a trio of gunships attacking, and providing one another with continuous mutual cover, is too meager. What sight could be more welcome to our soldiers than a covey of UH-1's bringing in reinforcements to a beleaguered outpost in a well-disciplined and precise formation.

Time to reevaluate

Yes, it's time to reevaluate what should constitute an Air Ace. I propose that criteria could (and should) be based on any act in the air, under battle conditions, against the enemy wherever found. In doing so, suitable recognition would come to a pilot who saves three helicopters shot out from under him. The aviator who flies 500 combat troop lifts, or carries out the wounded would be recognized.

A case in point

A case in point might be the extraordinary achievements of Captain Robin Miller, Infantry. Captain Miller recently completed two years' combat flying in Vietnam within a three-year period. In 24 months of flying over Vietnam he logged over 1,800 hours. According to the maintenance record books, his UH-1 gunship was hit more than 100 times during Miller's last year's tour.

His awards for heroism partly speak for Captain Miller: Silver Star, the Distinguished Flying Cross with OLC, an Air Medal with 47 OLC, the Purple Heart with 2 OLC, and Vietnamese Cross of Gallantry with 2 Clusters. Additionally, Captain Miller has been nominated for the Distinguished Service Cross.

New yardsticks needed

An Army Aviator in Vietnam flies varied and often near impossible sorties. Let us establish a measurement whereby the contributions of our very best aviators can be properly heralded. Any yardstick can be used, whether it be a cumulative total of different-type combat missions or a certain number of single-type sorties. The time is long past due when the U.S. Army should count its own Air Aces.



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What else are Skycranes doing in Vietnam?

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If you'd like to know more about the design and performance of the T76 turboprop engine, write: Aircraft Engine Sales, AiResearch Manufacturing Company, 402 S. 36th Street, Phoenix, Arizona 85034.



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Avn Det, Hq. USAREUR APO NY 09102 THOMAS, James E. 613 Gladstone Avenue Richmond VA 23222 THOMAS, John W. USARV CADV APO San Fran 96307 TOW, James L. 59 Bullard Loop Ft Leavenworth KS 66027 TRAPP, Turner J. 695 Scenic Drive Grenada MS 38901 VALLEY, Donald M. 195th Avn Co (AML) Ft Carson CO 80913 VAN WINKLE, Daniel G. 183 Oakland Avenue Somerset NJ 08873 VARNER, Veloy J. 1503 Pawnee Leavenworth KS 66048 VAUGHAN, Charles U. 71 3rd Inf Road Ft Leavenworth KS 66027 VINCENT, Samuel M. Cl 40 Armd Fore St Coll Norfolk VA 23511 VOSEL, Donald M. 157 Harris Drive Ft Rucker AL 36360 WALKER, Milton H. 218 Miami Street Leavenworth KS 66048 WALSH, Eugene R. 1974-A Patton Avenue Ft Eustis VA 23604 WELLS, Billy G. 8618 Norwich San Antonio TX 78217 WESTLAKE, Edgar A. 39 Olson Lane Ft Bucker AL 36360 WHITED, James L. 20th ASTA Detachment APO San Fran 96308 WHITMAN, Paul R. 503rd Aviation Battalion APO NY 09165 WILKS, Clarence D. 4027 Valley View Road Leavenworth KS 66048 WILLIAMS, Robert D. 3117 Carolyn Drive, W. Tacoma WA 98466 WILLIAMS, William F. 22 S. Highland Street Arlington VA 22204 WILSON, Jack A. 1800 S.E. 24th Avenue Mineral Wells TX 76067 WILSON, Robert E. 410-10 Kearney Avenue Ft Leavenworth KS 66027 WOLIVER, Clarence H. 53 3rd Infantry Road Ft Leavenworth KS 66027

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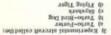


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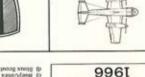
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ime to climb to 3,000 meters (9,842 ft.) 3 minutes 46 seconds

ime to climb to 6,000 meters (19,685 ft.) 9 mins and 9 seconds

ustained altitude in horizontal flight, 32,000 ft. ot: James Peters, Grumman)

00 KM closed-circuit course at 5,000 feet in 12 lutes 44.8 seconds, for average speed of 292 miles hour (Pilot: Col. Edward Nielsen, U.S. Army)



NEW RECORDS

Other records are being set by the Army's Mohawks in day-in, night-out operations in SLAR, IR, photo and eyeball reconnaissance in Vietnam. Working as a team, the OV-1B SLAR and OV-1C Infrared Mohawks see what's ahead for the Army's assault groups in Vietnam. These aircraft play a vital part in identifying enemy installations and movements. Field commanders need this type of air-to-ground reporting to establish tactical superiority.

Pilots Colonel Edward L. Nielsen, USA, and James Peters, Grumman, In center NAA observer Ron Ellico.

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JOHN J. BECKER, JR.

Warrant Officer John J. Becker, Jr., an Army Aviator assigned to the 1st Cavalry Division (Airmobile), sustained fatal injuries in the crash of his UH-1D helicopter. The fatal accident took place in Vietnam on August 16, 1966. He is survived by his widow, Mrs. Cloetta C. Becker, 8592 Cottonwood Drive, Cincinnati, Ohio,

JOHN F. BOYCE

Second Lieutenant John F. Boyce, an Army Aviator on assignment to the 1st Cavalry Division (Airmobile), died as a result of injuries received during hostile action in Vietnam on August 15, 1966. He is survived by his parents, Mr. and Mrs. John E. Boyce, 8620 E. Starlight Way, Scottsdale, Arizona.

ALLAN L. COX

Warrant Officer Allan L. Cox, an Army Aviator, assigned to the 1st Cavalry Division (Airmobile), sustained fatal injuries during hostile action, while on a mission in Vietnam, on August 1, 1966. He is survived by his widow, Mrs. Lois Cox, 1411 Custer Avenue, Apt. E-7, Atlanta, Georgia.

MICHAEL C. DUNDAS

Warrant Officer Michael C. Dundas, an Army Aviator, on assignment with the 1st Cavalry Division (Airmobile), died as a result of injuries received during hostile action in Vietnam, August 15, 1966. He is survived by his widow, Mrs. Lynne E. Dundas, c/o Leonard Ticknor, 2682 13th Street, Naples, Florida.

DENNIS B. EASLEY

Second Lieutenant Dennis B. Easley, an Army Aviator assigned to the 1st Cavalry Division (Airmobile), sustained fatal injuries in the crash of a UH-1B helicopter. The fatal accident took place in Vietnam on July 20, 1966. He is survived by his widow, Mrs. Linda L, Easley, Route 3, Box 521, Arlington, Texas.

HUGH C. GALBRAITH

Chief Warrant Officer Hugh C. Galbraith, an Army Aviator on assignment to the 501st Assault Helicopter Company, died as a result of injuries received in the crash of a UH-1D helicopter in Vietnam on July 24, 1966. He is survived by his widow, Mrs. Virginia M. Galbraith, Daleville Inn, Daleville, Alabama.

PAUL W. JOHNSON

Captain Paul W. Johnson, an Army Aviator, assigned to the 221st Aviation Company, sustained fatal injuries during hostile action in Vietnam on July 22, 1966. He is survived by his widow, Mrs. Jill C. Johnson, 6518 E. 8th Street, Tulsa, Oklahoma,

OBITUARIES

RAYMOND E. JOHNSON

Major Raymond E. Johnson, on assignment with the 25th Infantry Division, died as a result of injuries received in the crash of his a UH-1D helicopter. The accident occurred in Vietnam on July 19, 1966. He is survived by his widow, Mrs. Margaret Johnson, 3414-B Kannel Loop, Schofield Barracks, Oahu, Hawaii.

LESCO G. KAUFMAN

Major Lesco G. Kaufman, USA (Ret.), operations manager of Loving Helicopters in College Park, Maryland, sustained fatal injuries when his Hughes 300 helicopter crashed during the conduct of a traffic reporting flight on September 1, 1966 near Washington, D.C. He is survived by his widow, Mrs. Helen G. Kaufman, 442 Severnside Drive, Severna Park, Maryland, Burial was at Arlington National Cemetery on September 6, 1966. His widow requests donations in his memory be made to the Lesco G. Kaufman Memorial Fund, c/o Civitan Club of Glen Burnie, P. O. Box 94, Glen Burnie, Maryland 21061.

DANIEL A. LAMBDIN

Chief Warrant Officer Daniel A. Lambdin, an Army Aviator assigned to the 68th Aviation Company, sustained fatal injuries during hostile action in Vietnam, while on a mission on July 20, 1966. He is survived by his widow, Mrs. Janet C. Lambdin, 4621 Valley Forge Lane, Virginia Beach, Virginia,

JESUS De La ROSA, JR.

Warrant Officer Jesus De La Rosa, Jr., on assignment with the 119th Aviation Company, died as a result of injuries received in the accidental crash of his UH-1D helicopter. The accident occurred in Vietnam, July 19, 1966. He is survived by his widow, Mrs. Adela C. De La Rosa, 2711 Lagoon Street, San Antonio, Texas.

JOHNNY F. LONG

Warrant Officer Johnny F. Long, an Army Aviator assigned to the 119th Aviation Company, sustained fatal injuries in the crash of a UH-1D helicopter. The fatal accident took place in Vietnam on July 19, 1966. He is survived by his widow, Mrs. Anne M. Long, 3607 Gale Lane, Hopkinsville, Kentucky.

JOHN J. BECKER, JR.

Warrant Officer John J. Becker, Jr., an Army Aviator assigned to the 1st Cavalry Division (Airmobile), sustained fatal injuries in the crash of his UH-1D helicopter. The fatal accident took place in Vietnam on August 16, 1966. He is survived by his widow, Mrs. Cloetta C. Becker, 8592 Cottonwood Drive, Cincinnati, Ohio,

JOHN F. BOYCE

Second Lieutenant John F. Boyce, an Army Aviator on assignment to the 1st Cavalry Division (Airmobile), died as a result of injuries received during hostile action in Vietnam on August 15, 1966. He is survived by his parents, Mr. and Mrs. John E. Boyce, 8620 E. Starlight Way, Scottsdale, Arizona.

ALLAN L. COX

Warrant Officer Allan L. Cox, an Army Aviator, assigned to the 1st Cavalry Division (Airmobile), sustained fatal injuries during hostile action, while on a mission in Vietnam, on August 1, 1966. He is survived by his widow, Mrs. Lois Cox, 1411 Custer Avenue, Apt. E-7, Atlanta, Georgia,

MICHAEL C. DUNDAS

Warrant Officer Michael C. Dundas, an Army Aviator, on assignment with the 1st Cavalry Division (Airmobile), died as a result of injuries received during hostile action in Vietnam, August 15, 1966. He is survived by his widow, Mrs. Lynne E. Dundas, c/o Leonard Ticknor, 2682 13th Street, Naples, Florida.

DENNIS B. EASLEY

Second Lieutenant Dennis B. Easley, an Army Aviator assigned to the 1st Cavalry Division (Airmobile), sustained fatal injuries in the crash of a UH-1B helicopter. The fatal accident took place in Vietnam on July 20, 1966. He is survived by his widow, Mrs. Linda L, Easley, Route 3, Box 521, Arlington, Texas.

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It takes off like a big-winged bird with a T53 on each wing.

The Army's Grumman Mohawk observation plane does indeed take off like a big-winged bird. In 475 feet it's airborne; another 447 feet, and it's grabbed 50 feet of altitude.

For a 12,000 pound plus, twin-engined aircraft, bristling with infra-red detection equipment, side-looking radar, photographic equipment, and electronic sensory devices, that's spectacular. Nothing short of!

Such short field capabilities in an aircraft like this takes real power, among other things. And the OV-1 has it-in the form of two Avco Lycoming T53 turbo-prop engines. They deliver 1,100 shaft horsepower apiece. Enough to whoosh the Mohawk off short runways in 475 feet; enough to scoot it along at 265 knots; and tractable enough at low throttle settings to handle the Mohawk's low stall speed of 59 knots.

The OV-1 is the Army's first jet-prop powered observation plane. But Avco Lycoming gas turbines are no newcomers to Vietnam. Eight out of ten of the helicopters there are Avco Lycoming powered. And behind them lie several million operational hours of gas turbine experience.

The Grumman OV-1 Mohawk is a versatile bird.

With engines to match.



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