

POWER TO LIFT ARCTIC TROOPS

The Vertol Chinook, powered by Lycoming T55 turbine engines, lifted troops on maneuvers in Alaskan weather -50°F. Even in Arctic cold, Lycoming gas turbines go from start to full power in seconds. Lycoming's all-weather turbine engines have logged over 1,000,000 hours of flight time.



Lycoming

Division—Avco Corporation Stratford, Connecticut

Chipook

PROGRESS









HEIDELBERG

CHINOOK COMPLETES EUROPEAN TOUR . . .

During late May and June the U.S. Army's CH-47A CHINOOK participated in the German Army's Helicopter Forum in Buckeburg, Germany and the Paris Air Show. Prior to and after these events the CHINOOK demonstrated its flight characteristics and payload capabilities to high ranking military officers at U.S. Army and German Army installations throughout Germany.



ARMY AVIATION

VOL. 14-NUMBER 7 JULY, 1965

п	CONTROLLED PRACTICE13
	by Colonel George P. Seneff, Jr., Di-
	rector of Army Aviation, OACSFOR
-	USAPHS ELIMINATES 1 OF EACH 3
ч	
	WO CANDIDATES21
	by Major Melvin K. Goulding, Flight
	Evaluation, USAPHS, Ft. Wolters, Tex.
	XM-58 SIGHTING DEVICE10
	Bell Aerosystems receives contract
	for helicopter-mounted gunnery sight
	ARNG REPORT FOR FY 196423
н	Excerpts from the Annual Report of
	the Chief of the National Guard Bureau
220	
	SHIP-TO-SHORE!27
	A unique method for off-loading cargo
	is tested by USAGETA, Fort Lee, Va.
	USAAVNS FLIGHT INSTRUCTOR RE-
	CEIVES HIGH DA AWARD29
-	SEMI-ANNUAL REPORT OF FLIGHT
1000	PAY INSURANCE CLAIMS45

ANTENNA ANTENNA 1996	AALY, 1965
POWER TO JET ARCTIC TROOPS	
the country of the date or good, the country of the date or good, the country of	
NATURE NAMED IN	W - W
Lycoming	I man and the same of the same

DEPARTMENTS

	AAAA News	40
	AAAA Photos42,	
	Awards and Decorations	
	Faces in the News	
	News Photos12,	
	Obituaries	38
	PCS-Changes of Address	31
	Placement Service	47
	Take A Quick Quizl	30
	The LightSide	33
	STAFF	
-	ditorArthur H. Keste	
1	Associate EditorWilliam E. McGe	96
I	Editorial AssistantJessie R. Boro	k
Bı	usiness ManagerDorothy Keste	en
I	Reader ServiceMary Wallac	e
(Circulation Assistant Dorothy DeVac	k
	Circulation Assistant Dhullis Hanse	

ARMY AVIATION is published monthly by Army Aviation Publications, Inc., Westport, Com. Editorial and Business Office, 1 Crestwood Road, Westport, Com. Phone: Cépital 7-8266. The views and opinions expressed in the magazine are not necessarily those of the Department of the Army or the staff of the publication. Articides, news items, and photographs pertinent to Army aviation are sublicited and should be mailed to the Editorial Office so as to arrive on se before the 10th of the month preceding the cover date month. Data submitted for publication should bear the name of the writer and should be acceptancing by a return envelope bearing sufficient postage and the return address of the submitter. Accepted articles pertinent to any Army aviation subject except unit or AAAA activities are reimburible at the rate of ten cents per published line. Subscription fees: Continental U.S., APD, and U.S., Possessiens, 33-50 per year, all other addressees and 90.75 per year. Active Army personnel are requested to submit a residence or quarters address for magazine distribution purposes whenever position. Back issues cannot be held unless an advance "Hold Notice" is furnished by the subscriber tegether with the date on which his "in frantit" status will terminate. Advertising correspondence should be directed to the Business Office. Closing date for insertions is the first day of the month preceding the cover data meeth. Second Class Yorkpet, Connectiont.



world's first twin turboshaft power package

The Continental Model 217A-2 (Military designation XT67-T-1) twinned powerplant is being flight-tested in a modified Bell Iroquois helicopter. This powerplant consists of two 770 horsepower free turbine engines joined to a common output shaft through an integral power sharing controlled combining gearbox.

The powerplant is designed to deliver any combination of engine output from either or both engines without impairing the system transient performance. Thus, an individual engine shutdown or start can be accomplished automatically, and with no compromise of the delivered horsepower or speed up to the maximum capability of the other engine. Unlike conventional twin engine installations, the Model 217A incorporates an automatic power sharing system that permits the pilot to operate his helicopter just as though it were a single engine vehicle.

This twinned powerplant is another aviation first for Continental, where research and development is focused on one objective... to produce the ultimate in dependable, high performance powerplants.



CONTINENTAL AVIATION AND ENGINEERING CORP.

12700 KERCHEVAL AVENUE . DETROIT, MICHIGAN 48215

BEECH "IMAGINUITY" IN MANNED AIRCRAFT



Winner of 2-year Army evaluation test

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

When pilots train and maintain proficiency in instrument flying in the Beechcraft T-42A instead of larger aircraft, savings in operating and maintenance costs can add up to hundreds of thousands of dollars.

Check these advantages the Beechcraft T-42A offers to training and proficiency programs:

High speed. Gets students to training areas faster. Powered by two 260 hp Continental fuel injection engines, the Beechcraft T-42A has top speed of 236 mph.

Long range of over 1,000 miles nonstop with full load—even under instrument conditions—makes possible longer, more productive training missions.

Large cabin permits multiple student sessions. Seats up to 6 in ideal comfort and roominess. Exceptional visibility.

Extremely stable at all speeds. Exceptional single-engine performance.

The Beechcraft T-42A has the best combination of speed, range, comfort, carrying capacity and structural strength.

Beech is proud that the famous Baron has joined the many other Beechcrafts serving the country. For more facts, write, wire or phone: Beech Aerospace Division, Beech Aircraft Corp., Wichita, Kansas 67201, U. S. A.





There's plenty of room for equipment in the T-42A, including full 2½ VHF system; dual omni; dual ILS; ADF; DME; markers; even radar and transponders. A quick-install dual control yoke also is available.

...the Beechcraft T-42A:

Beech Aerospace Division projects include R & D on manned aircraft; missile target and reconaissance systems; complete missile systems; space systems management; programs pertaining to liquid hydrogen propellants and cryogenic tankage systems; environmental testing of missile systems and components; and GSE.

Beech Aerospace Division

BEECH AIRCRAFT CORPORATION @ WICHITA, KANSAS 67201



HELPING BUSINESS GROW FASTER: Only Beechcraft offers such a complete line of planes with so much speed, range, comfort and quiet to help business multiply the money-making decisions that each top man can make. That's how thousands of Beechcrafts have paid for themselves.

EXECUTIVES: Write today for free booklet, "Answers To The 19 Most Asked Questions About Business Flying," It could point the way to major new profits for your company. Address Beech Aircraft Corp., Marketing Services, Wichita, Kansas 67201, U. S. A.

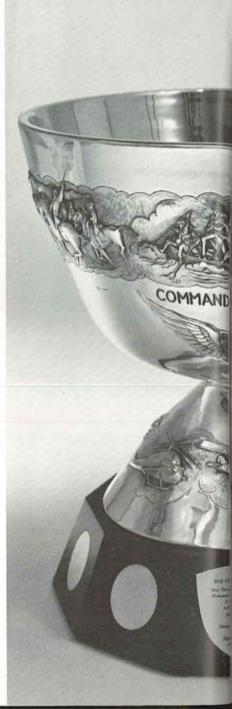
TO POLL ON AAAA AWARDS

Nominations are solicited for the tour National Awards of the Army Aviation Association to cover the April 1, 1964— March 31, 1965 period.

SUSPENSE DATE: AUG. 15, 1965

The four awards include the awards for "Army Aviator of the Year" - the "Outstanding Aviation Unit Award" - the "Aviation Soldier of the Year Award" - and the "James H. McClellan Aviation Safety Award."

Nominations are welcomed from all sources - to include individual members, Chapter activities, industry, military units, etc. Members desiring to submit a nomination are requested to write to the National Office (AAAA, 1 Crestwood Road, Westport, Connecticut) for an Association application form, which spells out eligibility criteria and detailed information on the documentation required. The suspense date for the receipt of nominations for the 1964-1965 National Awards is August 15, 1965.



BRIEFS

JULY, 1965

GEN. ODEN CITES VIETNAM AVAILABILITY AND LOSSES

The helicopter is "the greatest contribution which modern technology has given us for counter-insurgency operations." Maj. Gen. Delk M. Oden, who returned in April from duty in Vietnam, has told the Aviation/Space Writers Association conference.

Oden, a former Director of Army Aviation, said that about 500 Army aircraft are currently deployed in Vietnam, of which 300 are helicopters. The helicopters are flying an average of 80 hours a month in all types of weather and terrain, and are establishing a record of 82 to 93 per cent availability, Oden said.

From Dec. 1, 1963 to March 31, 1965, the Army lost a total of 50 aircraft to enemy ground fire, Oden said. This figure represented a total of 29,510 sorties for each fixed-wing aircraft destroyed and 14,814 sorties for each loss of a rotary-wing aircraft, or a total of 17,459 sorties per destroyed aircraft. Flying time averaged 10,556 hours per aircraft loss, and 6,767 hours per aviator death.

CH-47 PRODUCTION UPPED

Production of the U.S. Army CH-47A Chinook Medium Transport Helicopter at the Boeing Vertol Division plant at Morton, Pa., has been accelerated 100 percent, according to a July 14 announcement by Secretary of Defense Robert S. McNamara. Vertol has delivered well over 100 Army CH-47's since April, '63.

MOHAWKS TO BE MODIFIED

Grumman Aircraft Engineering Corp. has received a delivery order from the Army Aviation Materiel Command for the modification of 19 OV-1 Mohawks. Base value of the order is \$1,758,833, with a ceiling of \$2,022,658. Work is expected to be completed in August 1965.

General Hamilton H. Howze, U.S. Army-Ret., has joined the staff of the Bell Helicoptor Company, Fort Worth, Texas, in the capacity of Vice President. Appointed as the first Director of Army Aviation in March of 1955, General Howze served as the Commanding General of the Eighth U.S. Army and the UN Command just prior to retiring from active service in June of this year.



Alexander J. Rankin, Colonel U.S. Army, Ret., has joined Sikorsky Aircraft as marketing representative, Europe. He is a graduate of the University of Maryland with a B.S. degree. A veteran of 25 years of Army service, he holds the Silver Star and the Bronze Star awarded during World War II. In his new Sikorsky post, he will make his headquarters at the UAI offlices in Cologne, Germany.



Major Richard D, Smith, who recently graduated from the Army Command and General Staff College, has been appointed Secretaryof the General Staff at the Aviation Center, Fort Rucker, Smith served in the Pacific during World War II. He completed flight training in 1951 and was assigned to the 3rd Infantry Division and X Corps as an aviator during the Korrean War.



Val H. Schaeffer has been appointed Chief Ecgineering Test Pilot of Ryan Aeronautical Co. Schaeffer made the first full cycle transition flight by a lift-fan VSTOL aircraft last November in the XV-5A. A graduate of the U.S Naval Academy, he has logged over 3,600 flight hours, 2,000 hours as a test pilot. During the Korean War, he completed three tours of daty as a fighter-bomber pilot.



Capt. William A, Gebhardt, Jr., has been appointed aide-de-camp to Maj. Gen. John J. Tolson, commanding general of Fort Rucker, Gebhardt, a Distinguished Military Graduate of the Texas College of Arts and Industries, recently completed the Fixed Wing Instrument Examiners Course at the Aviation School. The Signal Corps officer served with the 93rd Signal Bn in Germany prior to this tour.



The Army expects a higher target hit ratio with the . . .

XM-58
HELICOPTER
MOUNTED
SIGHTING
DEVICE



THE Bell Aerosystems Company has delivered to the U.S. Army the first units of a helicopter-mounted sighting device for the SS-11 anti-tank missile. Bell is building the sights under a \$1.5 million production contract awarded by the Army's Frankford Arsenal, Philadelphia, Pennsylvania.

ACCEPTED by the Army earlier this year, the sight is designed for mounting in the UH-1B Iroquois helicopter, and shows no detectable blurring even during severe vibration.

"HEART of the sight is the stabilization system that involves gyros and torque motors," said Peter Fernandez, Bell's XM-58 sight technical director. He explained that precise rate gyros act as disturbance sensors and through high performance servos, inertially stablize the sight.

THE SIGHT utilizes a 6 x 42 monocular with a 10 degree field of view. A unity power with a 60 degree field of view is provided so that once the missile is launched, the operator can quickly capture it. Once the missile is within the 10 degree field of view of the open sight he then transfers it to the monocular to view both the missile and the target simultaneously.

BEING inertially stablized, the sight keeps the target within the field of view for the duration of the flight. Should the helicopter translate or the target move, a rate control is provided so the operator can move the sight to keep the target within the field of view.

WITH THE XM-58 sight, the gunner is able to achieve a higher target hit probability than has previously been possible. The SS-11 is a wire-guided, air-to-surface missile with a range of 3,800 yards. The 400 mph missile is manufactured by Nord Aviation, Paris, France, and is employed on the UH-1B with a six-missile launcher.

10 ARMY AVIATION

QUESTION:

what shaggy wild ox

carries 41 troops or 13,840 lbs. of vehicles and weapons a self-deploys 3,500 nautical miles a springs into action even in extremely cold weather a takes off and lands in 1,000 ft. a runs on twin GE T-64 turboprops operates on any surface a jeep can and comes in your favorite colors?



You're right: the Buffalo (CV-7A)







AA IN PHOTOS

RECOGNITION

COLONEL KIM, WON BAE, DIRECTOR OF ARMY AVIATION FOR THE REPUBLIC OF KOREA ARMY, IS SHOWN RECEIVING THE DISTINCTIVE CERTIFICATE AND MEMBERSHIP CARD DENOTING HIS HONORARY MEMBERSHIP IN THE AAAA, COLONEL PETER J. HARRIS (LEFT), AVIATION OFFICER, EIGHTH U.S. ARMY, MAKES THE PRESENTATION AT A RECENT MEETING OF THE KOREAN CHAPTER.

AHS AWARD

COLONEL GEORGE P. SENEFF, JR. (LEFT), DIRECTOR OF ARMY AVIATION, OACSFOR, IS SHOWN RECRIVING THE FREDERICK L. FEINBERG AWARD AT THE 21ST ANNUAL NATIONAL FORUM OF THE AMERICAN HELICOPTER SOCIETY IN WASHINGTON D.C.. COLONEL SENEFF WAS CITED "FOR HIS PERSONAL EFFORTS IN DEVELOPING AND TESTING FLIGHT TECHNQUES OF THE 11TH AVIATION GROUP... AND FOR ORGANIZING AND EQUIPPING A MOBILE STRIKE FORCE BUILT AROUND THE USE OF ROTARY-WING TYPE AIRCRAFT." MR. JOHN L. BUEHLER, THE 1964-1965 SOCIETY PRESIDENT, IS SHOWN MAKING THE MAY PRESENTATION.

WELCOME

COLONEL AND MRS. JOHN L. KLINGENHAGEN CHAT WITH BRIGADIER GENERAL HOWARD F. SCHILTZ (RIGHT), FOLLOWING THE COLONEL'S RETURN FROM THE REPUBLIC OF VIETNAM WHERE HE SERVED AS THE DEPUTY COMMANDER, U.S. ARMY SUPPORT COMMAND. COLONEL KLINGENHAGEN WAS WELCOMED TO THE ARMY AVIATION COMMAND BY GENERAL SCHILTZ AND BREIFED ON MIS NEW COMMAND - THE ARMY AVIATION MATERIEL LABORATORIES, FORT EUSTIS, VIRGINIA,

PROMOTION

BRIGADIER GENERAL JOHN NORTON (LEFT), THE COMMANDING GENERAL OF THE U.S. ARMY SUP-PORT COMMAND, VIETNAM, IS SHOWN CONGRATULATING LIEUTENANT COLONEL JAMES F. HILL ON THE OCCASION OF COLONEL HILL'S PROMOTION. HILL, A SENIOR AVIATOR, IS CURRENTLY SERVING AS THE U.S. ARMY SUPPORT COMMAND AVIATION OFFICER, PROMOTION CEREMONIES WERE HELD AT SUPPORT COMMAND HEADQUARTERS, TAN SON NHUT, REPUBLIC OF VIETNAM. (USA PHOTO)

CONTROLLED, DISCIPLINED PRACTICE

Until a year or so ago, formation flying was rather heavily proscribed for Army aviators. It was frowned upon because people saw no real need for it except in fly-bys, and because some rather unfortunate accidents had occurred in the past as a result of people getting out without proper training and under ill-advised circumstances and goofing off with disastrous results. Army Regulation 95-2 dated 6 March 1964 now reads as follows:

"Paragraph 7a, Formation flights may be authorized by unit commanders . . ." This change in the regulation was made for a very good reason and that is that with the advent of extensive air mobile operations formation flying has become an absolute must for tactical Army aviation units. The factors that apply are as follows:

 Only through formation take-offs and landings can we implement the automatic "battle drills" to meet the tactical needs of the infantry we carry.

2. With the numbers of aircraft we have in the air, even in one airmobile company, the positions of the aircraft must be precisely regulated to avoid taking up too much air space and to avoid the possibility of mid-air collision.

3. In conditions of very marginal weather or at night, tight formation flying is the only way you can get there from

BY

COLONEL GEORGE P. SENEFF DIRECTOR OF ARMY AVIATION, OACSFOR here without really running up chances of collision.

4. Finally, good "parade" formation flying has decided "esprit de corps" value. It is also good training.

PRACTICE IS THE KEYSTONE

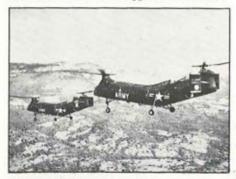
There is nothing dangerous about formation flying provided it's done well. Doing it well takes a tremendous amount of controlled, disciplined practice. Not doing it well can spoil your whole day and a lot of other peoples' as well. This is the reason for the statement in the regulation that "Formation flights may be authorized by unit commanders". I'd like to emphasize that it is not to be engaged in loosely, without authority, for "lark" purposes. In addition, as with any other type of training it is highly desirable to learn how to walk before you start to gallop.

Formation flying should be executed in general as prescribed in Change 2 to TM 1-260 dated 12 September 1961. Certain amplifications to this training manual have proven desirable; some are

covered briefly below.

The techniques of formation flying, as well as the formations themselves to a lesser degree, will vary with environmental conditions encountered. However, the basic fundamentals set forth in this article will have general application and will serve as a common point of departure.

TOE's and other documents will be changed in the future to attempt to standardize the terms applied to different



14 ARMY AVIATION

numbers of aircraft for purposes of uniformity in the Army. A flight of two aircraft will be called a team. A flight of four will be two teams or one section. Two sections comprise one platoon and two or more platoons a company in the case of TO&E units or a detachment in the case of TD/A units.

Formation flying should generally be executed in teams, sections, platoons, or companies. The section and division terminology outlined in TM 1-260 was borrowed from the Navy when the TM was written and is confusing when used in Army formations. The three and six plane formations outlined in the TM generally speaking should not be used as they take up more space in the air, are difficult in turns, and normally don't lend themselves well to a tactical marryup with ground units. When it is desirable to fly three aircraft they should fly as one team and one team minus. When you fly five, six, or seven, fly one section and one section minus.

TYPES OF FORMATIONS

The two basic types of formations are "parade" and "tactical cruise." The latter, tactical cruise, should be used for all initial training and for almost all tactical flying. The parade formation should be used only for air shows, demonstrations, when in the vicinity of airfields, or when directed for practice by flight leaders (we'll say more about this later in night flying). Larger formations are made up on the basis of the section and are thus a column of sections, a V of sections, or a diamond of sections. (A diamond of sections in diamond, incidently, is the best looking formation for fly-bys.)

As a practical matter in helicopters, you will probably find it easier to use a 35 degree angle, rather than the 45 degree angle spelled out in the TM. The 45 degree angle is better in fixed wing as they are less maneuverable and there is less chance of override of one aircraft by another.

Similarly, the cockpit configuration of the aircraft makes a stepped up formation safer to fly in helicopters, the O-1 and Beaver, and a stepped down forma-



ANOTHER USER PAYOFF FROM BELL R & D..THE "DOOR HINGE" ROTOR

A low-vibration, high speed, two-bladed rotor? Impossible? Not in Bell's book! A significant breakthrough in Bell's rotor development history... the production of the "door hinge" rotor for the Army UH-1B armed escort helicopter and the Marine UH-1E assault helicopter...makes the impossible a reality. ** Since the early '40's, Bell has continually explored all types of rotor systems... single, tandem and coaxial; two, three and four blade; semi-rigid, rigid and articulated; foldable-stowable, trailing and tilting. The many advantages of the semi-rigid, two-bladed system inspired Bell engineers to develop such a system with low vibration capability up to all foreseeable helicopter speeds.

The result... the "door hinge" which provides 20 per cent faster cruise at gross weight, 30 per cent greater maneuverability, and a 1,000-pound gross weight increase to 9,500 pounds for current production helicopters.

Bell rotor systems have always led the industry in reliability, simplicity and performance along with low maintenance. And, as an extra bonus, the "door hinge" rotor is lubrication free... no oil or grease required... ever! Vibration levels at cruise speed are 55 per cent lower than with previous systems. Such see-ahead determination puts the punch in Bell's continuing effort to provide more helicopter per defense dollar.



The OV-10A is the newest advance in the aviation state-of-the-art. It is a low-cost, lightweight airplane designed to:



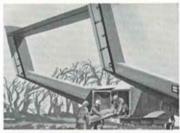
Provide helicopter escort, close air-ground support, and fly reconnaissance missions in counter-insurgency operations.



"Live" with the troops in the field, operate from rough clearings, primitive roads and waterways—has STOL capabilities.



Carry 2,400 pounds of external stores—bombs, napalm, and four 7.62 mm machine guns with a total of 2,000 rounds.



Hold two litter cases with medical attendant or carry five combat-equipped paratroopers, or six airborne infantrymen.



Perform advanced multisensor surveillance; also photographic, radar, or electronic reconnaissance.



Act as a civil action aircraft, performing such peacetime emergency functions as national disaster relief and medical missions.

The North American OV-10A is being built for the U.S. Department of Defense by NAA/Columbus Division for these and countless other applications. The OV-10A offers (1) unique mission flexibility; (2) low cost; (3) a simple, rugged airframe; (4) reliability based on systems simplicity and proven components; (5) extreme accessibility for maintenance; (6) minimum need for support equipment.

tion better in the Mohawk and Caribou. An alternate to "sliding" in turns on the part of the second team of a section, particularly in helicopters, is for the fourth member of the section to slide into a loose diamond. One or the other is absolutely essential to avoid forcing hovering flight on the part of the inside man in a turn into a "heavy" side. Flight leaders can help on this by considering their flight routes and changing sections to heavy right or left enroute to put the heavy side on the outside of turns.

Pilots should not be permitted to fly or practice parade formations until individually cleared by company commanders. Division parade echelon should never be entered from another division parade formation. Echelon should be entered from tactical formation and then

parade distances assumed.

All flight leaders should endeavor to fly as smoothly and steadily as possible—maintaining constant altitudes, headings, and power settings. Radical throttle changes, turns, climbs, etc. can lead only to disaster. Flight leaders on a given route should fly a straight course for as long as possible, making corrections every mile or so as necessary. No deviations of positions such as change of lead should be made until the appropriate signal is given and acknowledged.

VISUAL SIGNALS CONFUSING

Pilots of wing aircraft cannot see lead pilots well enough. Maneuvers such as rocking rotors or swishing tails of helicopters are too easily confused with normal reactions to turbulence. Visual signals can lead only to trouble. Reliance should be on radio or if necessary preset agreement over given points on the terrain.

The duties of the crew should be carefully split and thoroughly understood. The pilot is responsible for his position in the command and for keeping his eyes glued on the ship he is following. The co-pilot should keep his head out of the cockpit to look for obstructions on the flight route, other aircraft, navigate, and be prepared to assume the duties of the pilot at any time. The crew chief should keep a constant watch of all air-



craft instruments to be able to advice the pilot of the first sign of any irregularity, and should be prepared to manguns if required.

Formation take-offs and landings should be practiced and executed when possible. It's important to note that in a heavily loaded condition, ships taking off or landing in formation will lose lift from the turbulence of other aircraft in the formation, and tightness of formations and their ultimate desirability during the landing and take-off phase have to be weighed against the circumstances of the day.

Before departing on a flight in which formation flying is to be practiced, the flight leader should make up a definite sequence of formations to be practiced and brief all members of the flight before departure. A sample sequence follows:

Take-off at ten second intervals, 180 degree rendezvous section heavy right.

Cruise turns (2)
Echelon right
Section heavy right
Echelon left
Parade echelon left
Airfield break-180 degree rendezvous
180 degree rendezvous

BREAKS AND JOIN UPS

New leader start new sequence

Lead change

The formation break outlined in the TM as an emergency procedure in the event of running into bad weather can also be used to break formation in case dispersal is desirable to avoid heavy

ARMY AVIATION 17

enemy ground or air-to-air fire. This can be executed in formations up to company or battalion size provided the sections fan out appropriately before individual section breaks are made (sections as elements break left or right initially depending on position and then break individually after 30 seconds time lapse, turning back to original heading). Breaks of this type and the subsequent necessary join up should also be practiced.

Night formation flying should not be undertaken until units are thoroughly trained in day formation flying and then should only be undertaken with appropriate pathfinder equipment and aircraft lighting. More will be said of this in a subsequent note after the new pathfinder operations manual is published.

END-OF-DAY PRACTICE

A practice that I would like to see grow in Army aviation tactical organizations is one which has long been observed by the other services - this is that of returning to the base field at the end of any given days work (or going into any airfield for that matter) in right parade purely for discipline and show purposes.

When this is done the flight should enter initial over the field in the direction of landing in column of section parade, right or left depending on the direction of break, at 1,000 feet absolute altitude and break over the field to enter a circular pattern for landing. For left hand traffic break from echelon right and vice versa. This practice has the advantage, particularly in congested areas, of bringing the aircraft down in a circular descending path, as opposed to a straight uncleared let down, and helps avoid the possibility of collision with another aircraft taking

NOTE: The above letter was written before the occurrence of the recent tragic mid-air collision at Fort Benning. Its occurrence shguld emphasize to all of us the need for eternal vigilance on the part of all concerned.

GPS

off. It also keeps aircraft within forced landing range of the field. You should encourage your people to become sufficiently precise at this maneuver so that you can tell at a glance when your own people are coming home as opposed to the sloppy flyers in those outfits next door.

Formation flying takes three things: good pilots, practice, and confidence in the other guy. The last comes only as a result of the first two. The same pilots should habitually be kept in the same sections and they should practice together until they all know each other's capability and foibles and know that they can rely on each other. Formation flying can become as natural as walking down the street together, but don't forget how long it takes a child to learn to walk.

OIL ANALYSIS PAYS OFF

I thought you'd be interested in an excellent recent example of the value of the Oil Analysis Program. Well over a year ago, an OH-13 from the 11th Air Assault was selected to participate in the program. Some six months later, an analysis of the oil indicated an unusual amount of wear metal and the aircraft records were tagged with a caution notice.

A couple of months later the crew chief detected several metal particles in the oil filter screen. Another positive analysis by the laboratory at Fort Rucker resulted in a recommendation that this chopper be grounded until the source of metal particles could be determined. After an hour of ground operations, a quarter-inch piece of metal was found in the oil screen along with several smaller bits.

Without further ado, the aircraft was evacuated to a supporting maintenance unit where a tear-down of the transmission revealed the trouble - gears which were chewing themselves to bits and which likely would have caused some aviator to demonstrate his autorotation proficiency.

It is easy to see that the Oil Analysis Program offers real promise in the accident prevention business. As things stand now, our capability is somewhat



HOW FAST CAN A HELICOPTER FLY



WITH ONLY 5% ROTOR LIFT



WITHOUT A MODIFIED ROTOR SYSTEM



WITHOUT AIRPLANE CONTROLS?



On May 18, 1965, Lockheed's XH-51A compound rigid rotor helicopter flew 272 mph—the fastest rotorcraft speed revealed as of that date. In establishing this mark, a single J-60 auxiliary turbojet provided forward thrust, the wings carried 95% of the load, and the rigid rotor stabilized and controlled the vehicle.

Even more remarkable, this new compound helicopter speed was attained with-

out airplane controls—rudder, ailerons or elevators. And it was made without modification of the four-blade rigid rotor system used on Lockheed's pure XH-51A helicopter.

Lockheed's rigid rotor helicopter, with adding characteristics comparable to fixed-

handling characteristics comparable to fixedwing aircraft. The newest high speed platform from the company with more than three decades of airborne weapons systems experience.

LOCKHEED-CALIFORNIA COMPANY, BURBANK, CALIFORNIA: A DIVISION OF THE LOCKHEED AIRCRAFT CORPORATION

LOCKHEED

limited, but we should be able to count on increased benefits from this program in the future as additional laboratories are established.

CONUS ROTATIONAL BASE

As the Army aviation effort in Vietnam continues to increase, some old personnel problems increase while new ones emerge. One which has appeared on the horizon and which concerns us all is the growing imbalance in the CONUS rotational base.

Ideally, we should have enough aviator spaces in CONUS not only to furnish a replacement for each overseas returnee, but also to provide the right CONUS job for the proper utilization of each returnee. Increased overseas commitment of aviation assets has placed increasing

stresses and strains on the CONUS rotational base, making it more difficult to meet requirements for aviators.

A continued imbalance in our rotational system could lead to malassignment of highly skilled aviator personnel, increased training requirements, disruption of career patterns and inequitable rotation particularly to short tour overseas areas.

I know that all of you are well occupied with the jobs at hand and don't have too much time to be concerned with the effect of today's activities on the somewhat "distant" future. However, I did want you to know that we are trying to get on top of this. My shop and the rest of the Army staff are giving it a high priority and working hard to come up with an early solution.

HILLER CREWS DECORATED

■ Outstanding Civilian Service Medals awarded by the Department of the Army were presented to five helicopters pilots and three mechanics of Hiller Aircraft Company in late June in recognition of "courageous and humanitarian action" and "outstanding performance of duty" during the disastrous Northern California floods last December.

The presentations were made at ceremonies in the office of the President of Hiller Aircraft in Palo Alto by Lt. Gen. Frederic J. Brown, Sixth U.S. Army commander.

The award cites the pilots for "courageous and humanitarian action in flying vital relief missions into flood-stricken areas of California." They flew repeated emergency missions to isolated flood victims despite extremely hazardous conditions and near zero visibility which grounded other aircraft.

The three mechanics were commended for outstanding performance as mechanics for helicopters flying vital relief missions into flood-stricken areas of California. They voluntarily shared the hardships caused by the severe weather conditions and limited personnel, and it



Recipients of the Army's Outstanding Civilian Service Medal, shown left to right: pilots Robert Boughton, Charles Hench, Philip Johnston, Bruce Jones, Laurel Lape (not present), and mechanics Everett Barrick, Robert Fortain, and Willard Petzoldt. Lt. Gen. Frederic J. Brown is shown right.

was through their skill and determination that the aircraft were kept in a safe operational condition.

The Distinguished Civilian Service Medal awarded by the Department of the Army to Richard L. Peck, Chief Test Pilot, Hiller Aircraft Company, in recognition of his outstanding action during the floods will be presented to him in Washington, D.C., at a later date by the Secretary of the Army.

USAPHS ELIMINATES

ONE OF EVERY THREE

WO CANDIDATES

THE requirement in Army aviation for a continuing supply of qualified helicopter pilots merits a critical self-examination of existing training methods with a view toward reducing training costs and decreasing the attrition rate of the Fort Wolters Trainees. This is necessary if the most efficient utilization of training manpower is to be accomplished.

Present statistics show that one out of five officer students and one out of three warrant officer candidates are now eliminated. The major cause for this attrition appears to be excess learning pressure exerted simultaneously on the students from too many directions.

A major improvement in one area of flight training has been made through the installation of the "Model 358 engine throttle governor" (in layman's language, an RPM control device) in the TH-55A off-the-shelf primary training helicopter in use at Fort Wolters. Developed by the Hughes Tool Company, this system was recently certified by the FAA.

The device provided complete RPM control through all flight conditions, offers a choice of RPM settings and can also be switched off whenever the pilot desires to fly with manual control. The pilot has override provisions with the device "on." All necessary safety precautions have been provided in order to eliminate any possibility of a malfunction affecting the safety of flight of the helicopter.

This system can be utilized to optimum advantage during the initial steps of helicopter training by providing automatic throttle control. This will provide the student with an earlier feeling of confidence, and will provide more time for him to develop coordination of collective and cyclic pitch controls and yaw control. After this confidence has been developed, the RPM control would be switched off and throttle control would be mastered by the student during the rest of the training.

In addition to the initial confidence

BY MAJOR MELVIN K. GOULDING



ARMY AVIATION 21

building feature there are other advantages offered by this system. It is a desirable safety device with beginning students in eliminating low RPM operation and possible loss of directional control. Also, the device will eliminate actual engine overspeeds, which somehow are never written up in the form 2408. Engines should last longer. Lastly, pilots who may fly turbine powered helicopters later will gain early experience in the simulation of the flight controls.

Another piece of equipment which shows promise in solving the high attrition problem is the "yaw stabilization system." In contrast to the RPM control system, which must be installed at time of aircraft assembly, the "yaw stabilization system" has been developed as a kit for the TH-55A and can be added to the

trainer at any time.

Though not as important as the RPM control device, a modest number of the yaw stabilization installations are ex-

pected to be utilized in connection with the training of those students who display a serious confidence problem at the very beginning of the training course.

The principle of flight familiarization through the use of the "tethered" helicopter is another training device that shows promise. HumRRO trained two pre-flight classes experimentally in the "Whirly-Mite" prior to actual flight training in the OH-23D. The results of this experiment are still being evaluated, and we'll report on them in the future.

We hope that these are the forerunners of many other devices whose ultimate aim is to ease the ground-to-air transition of primary R/W students without an accompanying degradation in flight standards. These devices are certain to reduce flight training attrition with the end result that the morale of the average young man undergoing helicopter flight training at Fort Wolters should be raised substantially.

"PROGRAMMED LEARNING"

The first effort by the U.S. Army to develop a programmed learning sequence for an entire course of instruction is to be made at the Army Aviation School.

A student who studies under programmed learning advances as quickly as he can meet standards of proficiency rather than having to adhere to the rigid hour schedules of a regular training program.

The course selected for possible adoption to programmed learning is the Helicopter Instrument Flight Course in which already rated aviators can achieve instrument qualification.

A programmed learning sequence will be developed for the Army by the American Institute of Research, Pittsburgh, Pa., under a \$131,606 contract awarded June 25 by the Purchasing and Contracting Officer of the Army Aviation Center.

Under the contract, the Institute will develop self-instructional programs for all ground school instruction and instructional materials for flight and synthetic flight training. The firm will also work 22 ARMY AVIATION



■ Harris H. Shettel (left), of the American Institute of Research, and Col. Robert E. Mc-Graw, DOI, Army Aviation School, look over the contract under which the Pittsburgh, Pa. firm will develop a programmed learning sequence for the Helicopter Instrument Course.

out a training plan and sequence which will provide for the best integration of academic and synthetic flight training.

The Institute's plan, which is to be submitted in about one year, will be evaluated by the Aviation School and higher headquarters before a decision is made on implementation, A REPORT ON THE . . .

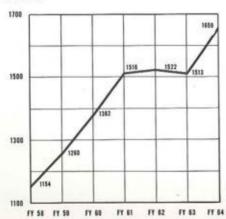
ARMY NATIONAL GUARD **FOR FY 1964**

THE number of ARNG aviators on flying status increased during FY 64 from 1,513 to 1,659 showing a gain of 146 aviators. The average gain per year since FY 58 has been 125 aviators except for the Berlin crisis period when there was a decrease in aviators. Current authorized ARNG aviator strength is 3.651.

The chart immediately following on this page shows the growth in Army Aviator strength in the Army National Guard for the past six years.

ARNG AVIATOR STRENGTH FY 58 - FY 64

NO AVIATORS





For FY 1964, ARNG aircraft flying hours totaled 203,413 which was an increase of 26,348 hours over FY 1963.

MAINTENANCE SHOPS

The Army National Guard operation of three 4th Echelon Aircraft Maintenance Shops continued during the past year. Aircraft maintenance by these shops as part of the "One Army" team was further expanded and the shop of the 217th Transportation Battalion, Fresno, California, supported approximately 450 Army aircraft participating in exercise DESERT STRIKE. This unit was the primary 4th Echelon Maintenance Point in the exercise area. As a result of the record made by the battalion during DESERT STRIKE, additional exercise missions can be expected for the 142nd Transportation Battalion, Missouri, and the 162nd Transportation Battalion, Connecticut. The mobilization readiness of these units was constantly increased through exercise participation and dayto-day operation of each shop by its 50man ARNG technician crew.

TRAINING COURSES

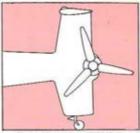
ARNG aviation personnel took full advantage of all the aviation courses offered by the active Army. Approximately 549 officers and enlisted men with an aviation MOS attended the courses

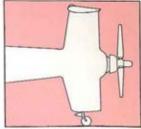
ARMY AVIATION 23

Why is the Sikorsky ROTOPROP... best for AAFSS?



AAFSS (Advanced Aérial Fire Support System) as visualized by Sikorsky Aircraft in its 5-66. Top: in high-speed flight, Bottom: in hover,





Two positions of the ROTOPROP (from the left). For hovering and low speeds it serves as a tail rotor. For high speed flight, it swivels 90° aft to provide forward thrust.

It does two jobs with simplicity.

- 1. The ROTOPROP's simplicity stems from the use of a single tail rotor for two purposes: side thrust at low speeds (as in a conventional helicopter). and forward thrust at high speeds. This is achieved by swiveling it 90°.
- 2. The ROTOPROP does double-duty, working full time. It is less expensive and lighter than two single-purpose tail rotors or any other method. There is no declutching or power loss from an idling propeller, and the loadings associated with a tail rotor operating at high speeds are eliminated.
- 3. The ROTOPROP greatly extends AAFSS effectiveness and versatility without increasing demands on the pilot. He can fly from hover to maximum speed without any attention to the ROTOPROP, as its swivel action and control phasing are handled automatically. However, the transition can be accomplished manually whenever desired.
- 4. The ROTOPROP controls are simple. Any helicopter pilot can fly the Sikorsky AAFSS.
- s. The engineering aspects of the ROTOPROP have been proved in both hover and forward flight. The tail rotors of every Sikorsky helicopter have been subject to the same dynamic and aerodynamic loadings as in the ROTOPROP. The design has undergone extensive wind tunnel tests, and a ROTOPROP is presently flying on a Sikorsky S-61.
- 6. The ROTOPROP's gyroscopic loadings have been tested on Sikorsky tail rotors on swiveling test stands for over ten years. Successful operation of tilt-prop aircraft demonstrates the workability of the ROTOPROP principle.
- 7. The ROTOPROP conserves power at both high and low speeds to provide an extra measure of agility, acceleration capability and performance.

Sikorsky Aircraft has long followed a policy of "homework before hardware." Sikorsky has done its homework on AAFSS. It is prepared to build the hardware.



STRATFORD, CONNECTICUT







offered. A partial breakdown of these courses and the number of Guardsmen attending is as follows:

Fixed Wing Aviator-Primary 113
Fixed Wing Qualification 5
Fixed Wing Instrument Course -
Fourth U.S. Army 20
Fixed Wing Instrument
Flight Examiner 3
Rotary Wing Aviator-Primary 77
Rotary Wing Qualification 63
WO Indoctrination Training
(Preflight) EM80
Army Aviation Safety Course -
University Southern Calif 2
Aviation Maintenance Course 28
Aviation Maintenance Crs. EM 158

In summary, 311 Officers and 238 Enlisted Men attended aviation courses offered by the active Army during FY 1964. During FY 64, ARNG aircraft flew 203,413 hours. This was accomplished using an inventory of aircraft that sustained a reduction as shown below:

As of 30 June 1963, the ARNG had 582 fixed wing aircraft and 303 rotary wing aircraft. On 30 June 1964, the ARNG had 579 fixed wing aircraft and 300 rotary wing aircraft, or a reduction of 3 aircraft in each category. Also included in the 1964 inventory were 70 flight simulators.

The support of ARNG aircraft with 1st through 3rd Echelon maintenance was done primarily by the ARNG technicians manning Army Aviation Maintenance Shops in the several States. Knowledge of equipment and maintenance by these technicians was instrumental in the high aircraft availability that permitted the attainment of more than 200,000 hours of flying time.

WORLDWIDE TECHNICAL ASSISTANCE

THREE months of intensive, highly specialized training and orientation as Army aircraft maintenance specialists ended recently with the departure of five civilian personnel from Headquarters, U.S. Army Aviation Materiel Command for field duty stations in widely separated parts of the world.

THE EVENT, marking the observance by AVCOM of a DOD-wide program to develop in-house capability to assist Army elements in the on-site resolution of aviation maintenance problems, was the second phase of a schedule under which a total of 41 men will be given similar training and assignments.

THE FIVE recently assigned to such posts, with a combined total of 106 years of aviation maintenance experience, exemplify the emphasis on technical ability and background of the men selected.

THEY INCLUDE F.F. Melton, specialist in T-53 turbine engines, whose new duty station will be Headquarters U.S. Eighth Army in Korea; A.C. Carrell, specialist on OH-23 (Raven) helicopters, assigned 26 ARMY AVIATION



Left to right (seated): Finis F. Melton, John T. Russell, James E. Cross, Foster E. Johnson, and Alfred C. Carroll. USA Photo

to Army Map Service with headquarters at Tehran, Iran; and F.E. Johnson, assigned to USAREUR, who will be located at Munich, Germany, in support of the CH-34 and CH-37 helicopters.

TWO OTHERS, both of whom are specialists on UH-1 (Iroquois) helicopters, have been assigned to Army installations in this country. They are J.E. Cross, whose new duty station is Fort Benning, Georgia, and J.T. Russell, who has been detailed to the Army Aviation Test Board.



Adverse shore conditions likely to hinder normal ship-to-shore cargo operations may be a thing of the past if Army tests of an experimental cargo transfer platform prove successful.

The Mark IV Ship's Wing, a portable shipmounted item of materials handling equipment, is expected to turn the trick.

Developed by the U.S. Army Aviation Material Laboratories at Fort Eustis, Virginia, and currently under study by the U.S. Army General Equipment Test Activity (GETA), Fort Lee, Virginia, the device is designed to facilitate delivery of cargoes to the beach from vessels at anchor or under way offshore. It can also be used to land troops, transfer casualties and litter cases to hospital ships, for helicopter-messenger service and for other loading and evacuation activities.

PORT NOT REQUIRED

By taking to the air, the Army's need for port or beach facilities in landing operations can be reduced. Operations can be continued despite unfavorable tide conditions, rough surf, fouled beaches, mined landing areas and other natural artificial obstacles. Use of the platform opens wide possibilities for a two-way route to the landing beach and to more distant inland points.

In operation, an 8'x 14' winch-operated cargo dolly is positioned on a cantilever girder or wing projecting sufficiently outboard of the ship's rigging and superstructure to permit helicopters to approach the pickup point. The aircraft pluck their individual lifts from the dolly using external sling loading techniques.

FAST INSTALLATION

The platform can be installed aboard most cargo vessels in less than an hour's time using regular stevedore labor and the ship's boom. It is 65' long and consists, essentially, of a 40' metal girder with a telescoping 25' extension. Maximum capacity is 14,000 pounds.

Following completion of engineering tests by GETA off Fort Story, Virginia, the test item was installed aboard a Korea-bound cargo vessels for further evaluation. Service tests will be conducted in the Far East by a three-man GETA test team to determine its utility and limitations in field use.

Allison Model 250
turbine and
Hughes "500"
get together.
Result:
a hot new
helicopter



Put the Allison 250-C18 turboshaft in the Hughes "500" and you've got a hot new performer in the light aircraft field. One that flies up to 170 mph in level flight, responds beautifully, and operates with far less noise than piston engine helicopters.

The 250-C18 power plant is a product of the most exhaustive helicopter test program in history. It is a commercial version of the T63 engine in the Army's OH-6A — the first turboshaft to get both FAA certification and complete military approval.

To date, this engine has accumulated over 20,000 bench and flight test evaluation hours. More than five years of joint effort between Allison and the U. S. Army have gone into its development.

The 250-C18 features a high power/weight ratio. Takeoff power is rated at 317 hp. Yet the engine weighs only 138 pounds and measures just over a yard long. Maintenance and accessibility are excellent. Sectionalized design enables one man to replace components without complete engine disassembly.

Hughes will make the "500" in two versions. One, a five-seat executive aircraft, the other a seven-passenger utility model. Both will have fourblade rotors with only 26½-foot circumferences for easy access to tight areas.

The "500" will be offered to private operators and foreign governments; its military version, the OH-6A, has been selected by the U. S. Army for its LOH program.

For more information about this light helicopter and the 250-C18 turboshaft engine, write: Allison Division of General Motors, Box AA5, Indianapolis, Indiana 46205.

Allison
THE EMERGY CONVERSION DIVISION OF GENERAL MOTORS, INDIAMAPOLIS, IND.



OVER ten thousand accident-free hours, spanning more than twenty years of Army flight instruction, have resulted in the presentation of the Meritorious Civilian Service Award to Malcolm F. Landrum of the U.S. Army Aviation School.

Mr. Landrum received the medal-the second-highest Department of the Army decoration for civilians - from Major General John J. Tolson, Fort Rucker's commanding general, in a recent ceremony.

The citation noted that Mr. Landrum's accident-free record has never been equaled in Army aviation history. It also commended him for meritorious service from March 3, 1943, to September 30, 1964, and lauded his skill, willingness to work, and forward outlook.

Mr. Landrum, who is the senior flight instructor - including civilian and military - assigned to the Army Aviation School, has trained students in both rotary-wing and fixed-wing aircraft. He joined the Department of Air Training, U.S. Army Artillery School, Fort Sill, Oklahoma, as an instructor in 1943.



Major General John J. Tolson is shown presenting the Army's Meritorious Civilian Service Award to Mr. Malcolm F. Landrum (right) at recent Fort Rucker ceremonies.

USAAVNS FLIGHT INSTRUCTOR RECEIVES DA AWARD

When given a monetary value, Mr. Landrum's record translates into a substantial benefit to the government - ten thousand accident-free hours means a saving of approximately \$97,000. This figure is computed from data provided by the U.S. Army Board for Aviation Accident Research.

The first civilian government employee to attain the rating of Master Aviator, the significance of Mr. Landrum's unique accomplishment is better understood when it is considered that he has been continually exposed to the type of flying during which most accidents happen. Over the years, approximately 800 students have been assigned to him for flight instruction.

NEW BELL CONTRACT

The Bell Helicopter Company, Fort Worth, Tex., has received a \$50 million letter contract for the production of 720 UH-1 Iroquois helicopters from the Army Aviation Materiel Command, St. Louis, Mo. The contract calls for the delivery of more than 250 "B" models, starting in June, 1966, and more than 460 "D" models, starting in October, 1966. The contract is for airframes only, with the engines and avionics to be provided by the government through separate contracts with the manufacturers. A definitive, fixed-price contract is to follow.

ARMY AVIATION 29

TAKE A QUICK QUIZ!



JULY, 1965

- 1) An Army stroruft known as the: U-6 Beaver
- a) U-6 Beaver b) U-6 Seminole
- U-9 Aero Commander U-19 Hello Courier
- 2) CO of '64s Outstanding AA Unit:
 a) Maj Gen Harry W.C. Kinnard
 b) Maj Gen Erwast F. Easterbrook
 c) Maj Gen John J. Tolsson
 d) Maj Gen Clifton F. von Kann
- St. The former "workborne" of RVN:
- a) CH-37 Mojave
- to CH-34 Choctaw
- c) CB-25 Army Mule d) CH-21 Shawnee









- 4) Unit insignts worn by men of:
- a) 197th Aviation Company b) 611th Transportation Co c) 21st Aviation Company
- 4th Aviation Company
- 5) Ground-to-air distress signal: "Need map and compass"
- "Need firearma" 18
- "Need medical supplies" "Unable to proceed"
- 6) Crew chief's signal indicates:
 - "Hold position"
 "Stop engine"
- "Release aling load"
- "Fasten chin strap"
- 7) How's your Morse? Shown is:
- a) Code letter for "N" b) Code letter for "E" c) Code letter for "W"
- Code letter for "5"











- 8) The distinctive tail of the new:
- a) CV-7A Buffalo b) XV-4A Hummingbird
- XC-142 Tri-service BSSB Baron
- 2) First AA to serve in the Pentago
 - a) Brig Gen Carl L. Button, Net b) Col LB, Washburn, Ret

 - c) Col Robert M. Letch, Ret
- Who's that with the big smile?: Boso the Clovs.
- Speedy Rodrigues
- Happy Hooligan Charley Chocks
- 11) The AAAA National Treasurer:
- a) Carl Stephenson b) Lewis E. Casner
- John W. Oswalt
- Jumes N. Davis









- The meteorological symbol for:
- Hain
- bj Hape
- 0) Snow di Hatt

- 13) The Jeppesen chart symbol for:
- Low frequency range 40
- 助 Bone Marker
- Fan Marker Non directional beacon
- The well known trademark of:
- Heliotek Div., Textron a5 **Hughes Tool Company**
- Hayes Corporation d) Hiller Aircraft Company
- 10) Early Army sircraft known as: a) L-3 Grasshopper
- 10 L-4 Cub
- L-5 Sentinel
- d) L-6 Cadet

YOU GOT TWELVE OR MORE MIGHT, THEN YOU ARE IN THE PRO RANKS! IS B. HOW DED YOU DO? VINE RECEIT ANSWERS IS ABOVE AVERAGE, IF OVER THE UDB FOR FURTHER CLEARANCE! FOURTERUIS B, FIFTERS BOTH B. AND C. SEVEN IS C. HORFT EA. THE GESTMOTTER, HELL FOLKES TO THE EACH THREE S.A. THERE ES.A. THORESEN ES. THORESEN ES. THORESEN ES.A. THORESEN ES.A.

MAN DESIGNED FOR THE FOURTH BY WALT DISNEY, FIVE IS B. SIX IS ONE SE OF THESE SCHEENES ONLY A PERO OF THESE SE, THEN THE SE, THE SE ONE SE OF THE SECOND ONLY A PERO OF THE SECOND ONLY A PERON OF THE SECOND ONLY ASSETT ONLY A RES WELL THEN LET'S CHECK THE ANSWERS AND SEE HOW YOU DED! ONICK ONIX ANSWERS: IS YOUR GREY MATTER ALL CHURNED

manthia taleassia IIIUIUIS VUIS

GENERALS

PARKER, David B., MGen Hq Seventh Army Spt Crd APO New York 09160 WILLIAMS, Robt. R., BGen Hq 1st Cavalry Division APO San Fran 96224

COLONELS

CONRAD, Eugene B.
Qtrs 533-A Miller Drive
Ft MoPherson, Ga. 30330
GUST, Daniel G.
USATC
Fort Ord, Calif. 93941
HAMILTON, Robert M.
Headquarters CONARC
Ft. Monroe, Va. 23351
HEMINGWAY, Jack W.
Office, Undersecy Army
Washington, D.C. 20301

LYONS, Thomas L, 5909 Jane Way Alexandria, Va. 22310 MESZAR, Frank DCS Indiv Trng CONARC Ft. Monroe, Va. 23351 NIELSEN, Edward L. ACTIV

APO San Fran 96243
POWELL, Edwin L., Jr.
Asst Sec Gen Sci Aff
APO New York 09777
SCHULZ, Robert H.
3715 Rose Lane

Annandale, Virginia SHEA, Gerald H. Hq USA Support Comd APO San Fran 96307

TIDMARSH, Harold A. COMZEUR Trans Comd APO New York 09058 UGALDE, Jesse G. 4871 Benton Street

Denver, Colorado 80212 WILLIAMS, Warren R. Director USABAAR Fort Rucker, Ala. 36362

LT. COLONELS

ANDERS, Charles T.
OCRD Dept of the Army
Washington, D.C. 20301
ASBURY, Harold D.
Hq USAAMC 4A-4050
Fort Sill, Okla. 73504
BAKER, Harold L.
Asso CGSOC CGSC 66-1
Ft. Leavenworth, Kansas

LT. COLONELS

BALL, Edmund K, USAREUR Opn Div-Avn APO New York 09403

BENTON, Lucien C. Ayn Officer Hq III Corps Fort Hood, Texas BOSAN, George S.

7619 Webbwood Court Springfield, Virginia BUCHAN, Earl K.

116 Rainbow Avenue Fort Benning, Ga. 31905 CARROLL, Danford S. Army Avn Sect-EUSA

APO San Fran 96301 DEMORY, Richard S. 3410 Park Hill Place Fairfax, Virginia 22030 DYSINGER, William C.

DYSINGER, William C. Naval War College-Stu Newport, R.I. 02844 ELLIOTT, John W. Quarters 2936-A Fort Eustis, Va. 23604

GREER, Herman E. 6327 N. Pershing Avenue Stockton 7, California KNOWLES, William R.

KNOWLES, William R. 1636 Warner Avenue McLean, Virginia LUTZ, George A.

National War College Fort McNair, Virginia MACKMULL, Jack V. 2 East Hudson Avenue

Dayton 5, Ohio PITTENGER, Ronald R, FASCOM SP/O Division APO New York 09160

PRUETT, Lloyd O. KMAG P8-5700 APO San Fran 96302

SWIFT, William R. Quarters 2349 Fort Lewis, Wash. 98433

WALTS, Charles C. USA R&D Off Amer Emb APO San Fran 96209

WEGGELAND, Henry N. 4132 Minton Drive Fairfax, Virginia WELLS, Jack D.

WELLS, Jack D. 3442 Glen Carlyn Drive Falls Church, Va. 22041

MAJORS

ACKERMANN, William A. Hq CDC Organ. Director Fort Belvoir, Va. 22060 MAJORS

ANDERSON, Julian A.
Headquarters DUSAA
Fort Belvoir, Virginia
ARTHUR, Cecil D.
55 Kirby Street
Fort Rucker, Ala. 36362
BAUGH, Russell E.
USA Support Command
APO San Fran 96307
BAUGHMAN, Larry J.
110 Baker Street
Salina, Kansas

BINDRUP, Lavere W. Hq Co 2nd Brigade 4th AD APO New York 09066 BONIFACIO, Robert A. 908 North 49th Street

908 North 49th Street Omaha, Nebraska 68132 BOWMAN, James E. 18th Aviation Battalion APO New York 09046

BRADLEY, Glenn W. 3-A Holland Park Drive Ellenwood, Ga. 30049

BRADNER, William L. 60th Aviation Company APO New York 09046 BUCKNER, Boyce B.

USASCV APO San Fran 96243 BURNETT, Clark A. 300 Prospect Street

Leavenworth, Kansas-CAMPBELL, James E., Jr. JUSMAG Thailand APO San Fran 96346

APO San Fran 96346 CANTWELL, Franklin D. 1810 Mary Drive Euless, Texas

CASEY, John P., Jr. 5407 Rolling Road Springfield, Virginia CAYO, Alea B

CAYO, Alan B. Hq USA Spt Cmd Vietnam APO San Fran 96307 CLARK, Carl G.

HHD 19th Aviation Bn APO Seattle 98749 CLAYBOURN, Guy R., Jr.

3rd RRU APO San Fran 96307 CONNAWAY. Charles E

CONNAWAY, Charles E. 517 North Overlook Dr. Alexandria, Virginia COOPER, Robert G.

318 North 17th Street Leavenworth, Kansas COX, Robert C. 19th Transportation Co APO San Fran 96271

MAJORS

CROSMUN, Clifford A.
24 Volturno Street
Ft. Bragg, N.C. 28307
CROUCH, William E., Jr.
USA CDC Avn Agency
Fort Rucker, Ala. 36362

CURRY, Paul R, USARSG-UK Box 65 FPO New York 09510 DAVIS, Wallace R.

DAVIS, Wallace R. SAM Box 4515 Brooks AFB, Tex. 78235 DELOACH, William W. Co A, 1st Aviation Bn APO San Fran 96297

DESCOTEAU, Rudolph D, Headquarters USASCV AFO San Fran 96307 DETHLEFS, Henry J, 122nd Aviation Co-AS

APO New York 09165 DUKE, Walter, Jr. 1924 Wyandotte Owensboro, Kentucky

Owensboro, Kentucky EWING, Paul R. 2775 Tracy Place Ft. Eustis, Va. 23604

GAUSVIK, Donald E. P.O. Box 277 Ft. Monroe, Va. 23351 GLIDDEN, Barry R.

GLIDDEN, Harry R. P.O. Box 3689 Fort Sill, Okla. 73503

HAID, Donald J. 229 West Willingham Cleburne, Texas HAWK, Robert T.

Hq 93rd Signal Bn APO New York 09175 HENSON, Virgil A., Jr. 1723 Seneca

Leavenworth, Kansas HEUER, Martin Qtrs 1624-B James Rd. Ft. Belvoir, Va. 22060

HOEN, Warren K. Fitzsimons Gen Hospital Denver, Colorado HORWITZ, Milton

1011 Oakview Dr., Apt15 Columbus, Ga. 31906 HUMES, Richard A. Hq 47th Ordnance Group

APO New York 09154 INGRAM, Thomas A. Hq 24th Div Artillery

APO New York 09029

MAJORS

KELLY, James J. 109 Sigerfoos Road Fort Benning, Ga. 31905 KIRKLIGHTER, Gerald 90 Demarest Parkway

Elmirs, New York KNUDSEN, Joseph R. 303 Hickory Street Newllano, La. 71461

KRACHT, Peter M. ARMISH-MAAG G-3 Br APO New York 09205 LEEDHAM, D.W.

Combd Fld Maint Shop NAS Lakehurst, N.J.

LILLEY, Aaron L., Jr. Headquarters USAAMAC APO New York 09028 LUKERT, Edward P., Jr. UST Battalion, 4th Inf

APO New York 09162 LUST, Robert A. 219th Aviation Company Fort Hood, Texas

MATEER, Charles A. Route 2, Box 228 Mound, Minnesota

MAYHEW, John W. Avn Sect Seventh Army APO New York 09046 MAYSE, Harvey C. 1324 South Broadway

Leavenworth, Kansas McLAUGHLIN, Leonard F. USA Avn Maint Center APO New York 09028

MEARES, Jimmy G. 8621 East Appomattox St. Tucson, Arizona 85710 MOONEY, Charles W.

680 South Lake Avenue Pasadens, Calif. 91106 MORRIS, J.J.

USA Aviation Test Board Fort Rucker, Ala. 36362 MORRIS, Thomas L., Jr.

6911 Southern Avenue Shreveport, Louisiana MOSELEY, Robert L.

Hq USATC Inf 4A-4070 Fort Polk, Louisiana MUCK, James B.

5th Infantry Division Fort Carson, Colorado NICHOLS, Frank S.

1815 South 55th Avenue Omaha, Nebraska 68106 NOEL, Albert W.

Fit Det Spt Ele CONARC Ft. Monroe, Va. 23351 PEACHEY, William N.

USATCA 2A-2018 Fort Knox, Kentucky PERRY, Grady

3rd Pltn 377th Med Co APO San Fran 96224 POOLE, Joseph H.

Post Locator Fort Benning, Ga. 31905

BAGO

MAJORS

PRONCAVAGE, William F. Rock Glen Luzerne County, Pa. QUEDENS, Bernard B.

304-B Lumpkin Road Fort Benning, Ga. 31905 RIESER, John D.

RIESER, John D. 3rd RRU (Prov) APO San Fran 96307 RITZ, Donald J.

RITZ, Donald J. 2126 McArthur Colorado Springs, Colo. ROBINSON, Paul B.

Co A, 7th Aviation Bn APO San Fran 96358

SALIGA, Richard P. 210 Magruder Street Mineral Wells, Texas

SCHUMAKER, James K, Jr 827 Diamond Street San Diego, 9 California

San Diego 9, California SHARTZER, Joice USATSCH

Ft. Eustis, Va. 23604 STOUTAMIRE, David F. 503 Woodland Avenue

Quincy, Florida STRANGE, Loren C. 1402 Newman Street

Leavenworth, Kansas SWANSON, Robert L. USACDC Elect Division

Ft. Belvoir, Va. 22060 TEAGUE, Jerry L. ACTIV

APO San Fran 96243 TEDLOCK, Billy L. 233 Austin Loop Fort Benning, Ga. 31905

VINCENT, Samuel M. P.O. Box 621 Indianola, Mississippi

WHITMAN, Paul R. 223 West Taylor Street Taylor, Pennsylvania

WILLIAMS, William F. 306 Haven Ave., Apt. H-K Green Cove Springs, Fla.

WILSON, Franklin L. 35 North High Street Canal Winchester, Ohio

CAPTAINS

ALTON, Gary O. 1017-A Ray Court Fort Benning, Ga. 31905 AMIDON, Bert C. 5 Avn Bn 5 Inf Div-Mech

Fort Carson, Colorado ANDRESON, Ronald K. 2464 Tiffany Place

Decatur, Georgia ANTROSS, Richard C, 11090 W Forest Home Av

Hales Corner, Wisconsin AVEY, James F. 615 Gibson Court

Fort Benning, Ga. 31905 BAGOZZI, Donald F. Fulda FCC Avn Co 14 AC

Fulda FCC Avn Co 14 AC APO New York 09026

CAPTAINS

BARBER, Louie A. South Street Bernardston, Mass. BARKSDALE, Lewis B.

Headquarters USAAMAC APO New York 09028 BASS, Louis R.

1111 North Washington Junction City, Kansas BENSON, Frederick S.

Colgan, 225 Waiku Road Ridgewood, New Jersey BERRY, Franklin W.

P.O. Box 596 Fort Rucker, Ala. 36362

BERRY, Joe D. 2954 Avondale Road Columbus, Ga. 31903 BOSWORTH, Frank H. 2805 Morningside Drive

Lawton, Oklahoma BOWLING, Billy J. HHB Div Arty 3rd AD

APO New York 09165 BRIGHAM, Hugh W. B Btry 5th Bn 16th Arty Fort Lewis, Wash. 98433

BROFER, Duane R. 197th Aviation Company APO San Fran 96307

BROWN, Charles L., Jr. 721 Beechmont Drive Lexington, Ky. 40502

BROWN, George A. 672 Kandle Drive Fort Benning, Ga. 31905

BROWN, James H., Jr. 1st OSB AFAOCC 1-66 Fort Sill, Okla, 73504

BUTLER, Billy C. 4308-8 O'Donnell Hgts Fort Riley, Kansas 66442

CAMPBELL, Richard E. Post Signal Officer Fort Devens, Mass.

CARON, John E.
HHD 8th Aviation Bn
APO New York 09185
COLELLO, Joseph, Jr.

Hq Pusan District Comd APO San Fran 96259 CULLINS, Robert B.

937th Engr Co, Avn IAGS APO New York 09827 DAVID, Ronald C.

2403 Wise Columbus, Ga. 31903 DAVIS, G.B., Jr. 1200 Crestridge Killeen, Texas 76542

DOWNER, George R. 521 Spring Avenue Ellwood City, Pa.

DOYLE, John P. Seventh Army Off of CG APO New York 09046 DROSS, David D.

1st Training Regiment Ft. Leonard Wood, Mo. DUBOV, Bruce J. 2619 Pollard

2619 Pollard Lawton, Oklahoma 73505

CAPTAINS

DUGAN, John E. 1116 Sixth Avenue New Hyde Park, N.Y.

EADY, Doug 3126 W. Bolsa, Space 49 Santa Ana, Calif. 92703

EARLEY, Neal E.

42nd Transportation Co
APO New York 09165
EDMOND, Holman, Jr.

701 Squires Lane Fort Benning, Ga. 31905 FAIRWEATHER, Robert S. 8 Cockrell Street

Alexandria, Va. 22301 FAULK, Emmett A.

144-A Arrowhead Road Fort Benning, Ga. 31905 FEIT, John E. Co B, 504th Aviation Bn

APO New York 09326 FERRARO, Anthony 605 East Spruce Street

Sault Ste Marie, Mich. FIELDER, Keith M.

2101 Donald Dr., Apt. 5 Moraga, Calif. 94556 FLANDERS, John P. 3709 Woodley Drive

Alexandria, Virginia FLEMING, Thomas E. Trp D 3 Sqdn 12 Cav 3 AD APO New York 09039

FOLTA, Russell J. 30 Thunderbird PkwySW Tacoma, Washington GENTILE, Nicholas D.

2637 Old Hapeville, 14E Atlanta, Georgia 30315 GILMER, Charles T. A Co 1st Aviation Bn

APO San Fran 96297 GINTER, Duane L. Burke, 2017 Habersham

Brunswick, Ga. 31520 GOCHNAUR, Thomas L. 7051 Eluana Drive

7051 Eluana Drive Tucson, Arizona GOTO, Arthur K.

221st Aviation Company Fort Bragg, N.C. 28307 GREENE, John H. 408 Hughes Drive

Redstone Arsenal, Ala. GRIMINGER, Charles O. USA AD Comd.Ent AFB Colorado Springs, Colo.

Colorado Springs, Colo. HAAN, Philip J. 194 Admin Det Armd Bde

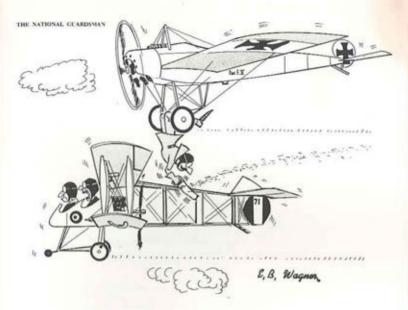
Fort Ord, California HART, Kyle E.

Co A, 102nd Signal Bn APO New York 09757 HENDERSON, John C.

1000 Eulalia Road, N.E. Atlanta, Georgia 30319 HOLLOWAY, Wm. W., III

Co B, 503rd Aviation Bn APO New York 09165 JACKSON, George F., Jr. 4404 San Carlos Drive

Fairfax, Virginia



"NOW KEEP ALERT, ROBINDER! THESE GERMANS ARE A SHIFTY LOT."



"HANDS OFF, MR. FINCHLEY! EVEN IF WE DID HAVE IN-FLIGHT ENTERTAINMENT, IT WOULD BE MOVIES OR TV."

HE G H E JACKSON, Leon D. 2308 Lake Avenue Fayetteville, N.C. JACKSON, Ralph R. 106 Dial Street

106 Dial Street Fort Benning, Ga. 31905 JOBE, Joe D.

1514 Forest Ave., Apt. 23 Columbus, Georgia JONES, Robert J.

Quarters 6264-B Fort Carson, Colorado JONES, William S. Stu Det USA Sig Cen Sch Fort Monmouth, N.J.

KELLEY, Robert H., Jr. 631 S. Jefferson Street Milledgeville, Ga. 31061 KIDWELL, Walter E.

KIDWELL, Walter E. 1st Bn 32nd Armor 3 AD APO New York 09039 KINBACK, George E., Jr. 102 Magnolia Circle

102 Magnolia Circle Enterprise, Alabama KOCKX, Duane F. Stu Bde USAIS 3A-3151

Fort Benning, Ga. 31905 HOLLHOFF, Ronald K, USASA Arlington Hall Sta Arlington, Va. 22212

LEADABRAND, Jerry A. HHC USATCA Fort Knox, Ky. 40122

LEIMBACH, Harold L. R.D. 1, Box 192 Wellington, Ohio

LEYVA, Ramon D. 310 Warren Street Vicksburg, Miss. 39180 LITTLEWOOD, Arthur R.

221st Aviation Company Fort Bragg, N.C. LOCKWOOD, Bill G.

LOCKWOOD, Bill G. Hq Co 145th Aviation Bn APO San Fran 96307

MAGNESS, James L. 8th USA Support Comd APO San Fran 96301

MALPASS, John J., Jr. Route 2, Malpass Corner Burgaw, N.C. 28425

MANN, Douglas J. Box 595 Avon Park, Florida MARK, James C.

110th Aviation Company APO New York 09168 MARSDEN, William L.

Hq 1st Infantry Div, Arty Fort Riley, Kansas 66442 MARTZ, Clarence

Hq 1st Battalion 2nd Arty APO New York 09034 McCOOLE, Delos A.

McCOOLE, Delos A. 1007 Gesell Street Glendale 2, California McMILLIN, Richard D.

Stu Det USATSCH Cl 66-1 Ft. Eustis, Va. 23604 METCALF, Ronald C. Quarters 2576-A Fort Lewis, Wash. 98433 MEULEMANS, Vincent J. Sch Bde Cl 2066-1 USAIS

Sch Bde Cl 2066-1 USAIS Fort Benning, Ga. 31905 MILLER, Carl S., Jr. 3 Continental Apts. Bte 6

3 Continental Apts., Rte 6 Springfield, Tenn. 37172 MILLER, Norman H. P.O. Box 107

La Grange, Calif. 95329 MILLER, Stuart A, 7490 Magnolia Avenue

Riverside, Calif. 92504 MOORE, James I, 1104 Nancy Lane

Ozark, Alabama MOSHER, Robert L. 16th Aviation Battalion

APO New York 09046 MURPHY, John A. Hq 504th Aviation Bn APO New York 09696

NAYLOR, Donald L. Med Sect Seventh Army APO New York 09046

OSBORN, Michael F. 550 Palmedin Lakeland, Florida 33803

OVERHOLSER, William H. 128 Grandview Drive Junction City, Kansas

PARKER, Charles E., Jr. 1035 No. McKinley Road Arlington, Va. 22205

PATNODE, Clarence A. Care of Postmaster Ft. Eustis, Va. 23604

PERSONS, John E. 498th Medical Co-AA Fort Sam Houston, Texas

PETERSEN, Gerald L. 1532 Pontiac Road Benton Harbor, Michigan PETERSON, Franklin G.

PETERSON, Franklin G. Quarters 8680 Fort Lewis, Wash. 98433

POLCENE, Elliott W., Jr. 3rd RRU APO San Fran 96307

POOL, Russell F. 400 Ridgecrest Road, NE Atlanta, Georgia 30307 RACKLEY, Robert L.

RACKLEY, Robert L. USATCA Fort Knox, Kentucky

RADSPINNER, Frank H. Office Project Mgr, AMC Washington, D.C. 20301 RICE, Bert L.

Box 613 Choteau, Montana CORERTS, John A.

ROBERTS, John A. 1509 Stephens Killeen, Texas

ROGERS, James R. B Btry 377 Arty 11 AAD Fort Benning, Ga. 31905

ST. LOUIS, Robert P. 41 Johnson Street Fort Rucker, Ala. 36362 SASS, Fred W. 23rd Artillery Group Fort Lewis, Washington

SCHULL, Dunell V. 117th Aviation Company APO San Fran 96238

SCOGGINS, Larry E. USACDC Aviation Fort Rucker, Ala. 36362 SEAWARD, Gordon W., Jr.

29 Danube Drive Cocoa Beach, Florida SEGUIN, Raymond J.

SEGUIN, Raymond J. 1200 Garland Street Mobile, Alabama SETZER, Howard L., Jr.

Avn Sec Hq Seventh Army APO New York 09046 SHAUTE, Joseph J.

B Co 8 Avn Bn 8 Inf Div APO New York 09111 SLYE, Kenneth M.

ATOCC 66-1 USATSCH Ft. Eustis, Va. 23604

SMITH, Billy V. Box 152 Ringsted, Iowa 50578

SPRAGUE, Billy E. 15 Ninnenger Street Fort Rucker, Ala. 36362 SQUIRE, Joseph W.

SQUIRE, Joseph W. 1605 Westlawn Avenue Fayetteville, N.C. STAMPER, James M.

STAMPER, James M. 182-B Arrowhead Road Fort Benning, Ga. 31905 STEPHENS, Richard B.

11th Transportation Co APO New York 09046 STUART, Clark D, 1642 Rimview Drive Caldwell, Idaho SULLEN BERGER, Louis E

SULLENBERGER, Louis E 197 Driftwood Parkway Ft. Walton Beach, Fla. TEAGUE, Gene A. USATCS Class 1-66 Ft. Eustis, Va. 23604

TOUCHET, James C. Co B, 1st Aviation Bn Fort Riley, Kansas 66442 TOWER, William E.

105-B Montleth Circle Fort Benning, Ga. 31905 TRIPP, Frederick G. ACTIV

APO San Fran 96243 ULZHEIMER, Robert 2127 Shelby Drive Columbus, Ga. 31903

VISSERS, Martin R. 944 Bunker Hill Road Columbus, Georgia WATKE, Frederic W.

2917 Avondale Road Columbus, Ga. 31903 WEBBER, Herbert M.

WEBBER, Herbert M. 2121 Mountain Road Copperas Cove, Texas

WEIGHT, J. Ormon 220th Aviation Company Fort Lewis, Wash. 98433 WESTLAKE, Edgar A. 200 S.W. 68th Boulevard West Hollywood, Florida WILKINSON, Tary D.

2312 Zephyr Road Killeen, Texas 76542 WILSON, Thomas M. 20th ASTA Detachment Fort Riley, Kansas 86442

WINGATE, Charles S. 60th Aviation Company APO New York 09049 WITTEKIND, Wilfred H. 5400 Belleview Road

Cincinnati, Ohio 45242 YODER, Carl C. 739 East Washington St. Washington, Iowa 52353

ZELTMAN, Ronald W. Student Det USAARMS Fort Knox, Ky. 40121

LIEUTENANTS

ADAMS, Charles R. 325 South Washington Dillon, Montana 59725 ADKINS, John F., Jr. 77-D Chatham City Apts. Garden City, Georgia

Garden City, Georgia ALLEN, Gregory S. 1465 West 37th Place Los Angeles, California

ALLEY, Norman L. 2875 Avondale Road Columbus, Ga. 31901 BELL, Carroll W.

421st Medical Company APO New York 09046 BLACK, Robert G.

114 Woodcrest Drive Rome, Georgia BOWER, Joe R,

B Co 15th Avn Ba 1st Cav APO San Fran 96224 BREWSTER, James E.

503rd Aviation Battalion APO New York 09035 BROUSSARD, Claude A. 119th Aviation Co Box 19

APO San Fran 96318 BURCHAM, Jerry L. Lot 75 Crestwood Mob Pk Severn, Maryland

CAMPOS, Francis M. 531 East 52nd Street Savannah, Georgia CANNELLA, Sam

USASCV APO San Fran 96307 CARLSON, John P.

A/501st Aviation Bn APO San Fran 96227 CAVANAUGH, Edward W. 618 North Rawls

618 North Hawis Enterprise, Alabama CHLADEK, Richard M. 10831 W Hampton, Ap

10831 W Hampton, Apt 7 Milwaukee, Wisc. 53225 CLINTON, Daniel R.

18922 S.E. McLaughlin Portland, Oregon



LEFT: Lt Gen William W. Quinn, Seventh Army Commander (left) and Col Joseph P. Gude, LOH Project Officer, Army Materiel Command, inspect the interior of an OH-6A helicopter. Three new helicopters were displayed recently at Seventh Army Headquarters as part of a demonstration tour. The aircraft are the OH-6A, the UH-1D, and the CH-47A. BELOW: Looking for a lift? A Lockheed XH-51A rigid-rotor helicopter shows off its ultra-steadiness and wide center of gravity range by suspending a 200-pound man at the end of its 12-foot nose boom. This would be enough to upset most conventional rotor system helicopters of the same size. Test pilot Don Segner demonstrated the aircraft's stability by taking his hands off the controls. The XH-51A performed as well in earlier tests in which a man was carried from a 16foot side-mounted boom. The XH-51A was built by the Lockheed-California Company under a joint Army-Navy contract.



ABOVE: Brigadier General Abass Ghandehari of Iran (center), the first general officer to undergo helicopter training at the U.S. Army Primary Helicopter School, Fort Wolters, began the eight week qualification course in late June. Shown with General Ghandehari are Lieutenant Colonel Daniel C. Prescott (left), USAPHS Assistant Commandant, and Colonel Wayne N. Phillips (right), Assistant Post Commander. An Air Force officer, General Ghandehari is director of all aviation in his country. Upon completion of the qualification course, he is scheduled to undergo transition training in the H-43 helicopter at Reno, Nevada, and then attend the Aviation Staff Officer's Course at Fort Rucker, Alabama.

RIGHT: Lieutenant Colonel W.W.J. Barrios of the U.S. Army Board for Aviation Accident Research, presents a commission in the U.S. Marine Corps to his son. Lieutenant James V. Barrios also received a B.B.A, degree from Tulane Univ. LIEUTENANTS COTTMAN, Robert Lee 165-10 115th Avenue Jamaica 34, New York DADANTE, Leonard J. 8555 Pleasant Valley Rd. Parma 30, Ohio DALTON, John W. 140 Sprague Avenue Plainfield, New Jersey DAVIS, Conrad W. 54th Aviation Company Fort Sill, Oklahoma DICK, William H. 555th Engineer Group APO New York 09164 FERRIS, Charles J. P.O. Box 31 Alamo, California FLETCHER, Lance, Jr. P.O. Box 965 Santa Paula, California FRESHOUR, Charles E. 1404 S.W. 26 Oklahoma City, Okla. FUGATE, Lewis B., Jr. Route 5 Paris, Kentucky FULTON, Charles F. 1220 East Elm Stillwater, Okla. 74074 GILLESPIE, Lawrence E. 148 Chestnut Street Hamilton, Ohio GNIAZDOWSKI, Francis **USATSCH AMOC 7-65** Pt. Eustis, Va. 23604 HALE, William C. Apt. 51, Chauncy Bldg. Weymouth, Mass. HOFFMAN, William J. 940 James Avenue Scranton, Pennsylvania HOLCOMB, Cornelius C. Hg Pusan District Comd APO San Fran 96259 HUDSON, Jim R. Headquarters Co EUSA APO San Fran 96301 HUGHES, Harold A. 55th Aviation Co (Army) APO San Fran 96301 IPOCK, William T. 505 Carol Street Hartford, Alabama JOHNSON, Larry E. 114th Aviation Company APO San Fran 96357 JONASSEN, Leif M., Jr. 21651 Edgecliff Drive **Euclid 23, Ohio** JONES, Warren B. P.O. Box 402 Manning, South Carolina LAIRD, Lee A. P.O. Box 1647

MARSHALL, Stanley B., Jr 201-B Enterprise Apts. Enterprise, Alabama MARTIN, James H. USA Engr Dist-Far East APO San Fran 96301 McANDREW, James M. 119th Aviation Company APO San Fran 96318 McBRIDE, Fitz R.B. 32307 Conqueror Drive Portuguese Bend, Calif. McMONEGAL, William P. 49 Finger Street Saugerties, New York MOAT, William R. R.F.D. #4 Newnan, Georgia MORROW, John K. 187th Trans Airplane Co Fort Benning, Ga. 31905 MOYER, Jerry M. 219 W. Harris Drive Fort Rucker, Ala. 36362 NICHOLS, Charles Lee 2209 North Washington Enid, Oklahoma OSSI, Peter S. 220th Aviation Company Fort Lewis, Wash. 98433 OWEN, Felix E. Co B, 7th Aviation Bn APO San Fran 96203 PATLA, Norbert I. 2249 W. Huron Street Chicago, Illinois 60612 SAWYER, Robert D. 38 Blanchard Avenue, W. Rutland, Vermont SCHINDLER, John C. 101 Grimes Fort Bragg, N.C. SERLETIC, Matthew M. 55th Aviation Company APO San Fran 96301 SHERWOOD, Wallace L. 4th Cavalry 2nd Squadron APO New York 09696 SHUEY, Martin W. USASCV APO San Fran 96307 SMITH, David R. Yeoho Road Sparks, Maryland 21152 SPRUIELL, Jerry B. P.O. Box 1 Pell City, Alabama STEELE, Homer E. 221st Aviation Company Fort Bragg, N.C. 28307 STUMP, Charles H. USA Support Command APO San Fran 96307 VAN LOON, Weston O. Co A, 101st Avn Bn, UPC APO San Fran 96296 WILLER, Edward H. 8 Concord Drive New Providence, Tenn. WOOD, Robert T. 78 Harris Drive Fort Rucker, Ala. 36362

BANKS, John A. 47th Artillery Brigade Ft. MacArthur, Calif. BAYLOR, William A.

MINER, James G.

D Trp, 3rd Sqdn, 8th Cav APO New York 09028 BRITTON, Irving E. 206 Sylvan Drive Enterprise, Alabama CARROLL, Walter J. 4th Transportation Co APO New York 09029 CATALANO, Basil B. 7203 Lotsdale Road Springfield, Va. 22150 COSLER, McKinney P. 82 Fort Benning Road Columbus, Ga. 31903 CUSTIS, Warren L. 79th Trans Company (DS) Fort Hood, Texas FISCHER, Helmut J. 118th Aviation Company APO San Fran 96227 GAY, Albert G. HHD 52nd Aviation Bn APO San Fran 96318 GOWAN, Paul E. Office CG, 8 USA Spt Cmd APO San Fran 96301 GRIPP, James P. USAAMAC APO New York 09028 HAYTER, Curtis R. Co A, Airmob 25 Avn Bn APO San Fran 96225 HEATH, Leonard P. 309 Knox Road Fort Sill, Oklahoma HERBST, Joseph A. 131 Magruder, WV Mineral Wells, Texas HERRON, William D. 189 Springfield Drive Columbus, Georgia HOWARD, Kenneth D. 5634 Antigua Corpus Christi, Texas HUESER, John L. 255th Transportation Det Fort Ord, Calif. 93941 KIPE, Omar K. 54th Trans Co (Med Hel) Fort Sill, Okla. 73503 KUSILKA, Anthony G. Co A, 24th Aviation Bn APO New York 09029 LONG, William L. 1427 William Street Cape Girardeau, Mo. MANTOOTH, Glen W. A Co, 1st Aviation Bn APO San Fran 96297 MARSH, James W. 4th Trans Co (Med Hel) APO New York 09108 MERZ, Martin P. Avn Det Hq USARBUR

MISNER, Phillip 119th Aviation Company APO San Fran 96318 PETERSEN, Dwayne L. 10911 47th Avenue, S.W. Tacoma, Wash. 98499 PROCTOR, Charlie M., Jr. USAMM Emperial Iran APO New York 09205 SCHUG, Verdell K. 231 Russell Street Storm Lake, Iowa SHERIDAN, Donald T. 613 Oak Street St. Simons Island, Ga. STALLARD, James B. A Co. 1st Aviation Bn APO San Fran 96297 WILLIAMS, William J. 4th Aviation Company APO New York 09029 WILLS, Walker T. 64th Signal Battalion Fort Hood, Texas WILSON, Willie D. 147 South Whitney Street Aransas Pass, Texas ZILLMAN, Berl G. 541 Crouch Street Oceanside, California WARRANT OFFICERS ALLEN, James R. Star Rte 54 Kawela Bayo Kahuku, Hawaii ANDERSON, James R., Jr. Hq Btry Div Arty 1st AD Fort Hood, Texas 76540 ANDREWS, Zalph H., Jr. 2310 Sprunt Avenue Durham, North Carolina ARNOLD, Loy L. Hq USA Support Comd APO San Fran 96307 AUTEN, Norman D. 937th Engineer Group Ft. Campbell, Ky. 42223 BAILEY, Arnold R. Morgan Trailer Park Oak Grove, Kentucky BERQUIST, John W., Jr. 357 West Avenue Darien, Connecticut BIERLEIN, James R. 816 North Chestnut St. Chaska, Minnesota BLADEL, John P. 1542 State Street San Diego 1, California BLAKESLEE, Charles D. 1085 Foster Avenue Mountain Home, Idaho BLANK, Richard 205 East 238th Street Bronx, New York BLOCH, Robert M. 2132 North Shore Drive APO New York 09403 Bellingham, Washington BOWLING, Tommy D. 188th Trans Co 37th Bn Route 1, Box 236 Fort Benning, Ga. 31905 Sunflower, Mississippi

Fort Benning, Ga. 31905

Co A. 15th Aviation Bn

APO San Fran 96220

LORD, Arthur J.

JULY, 1965

AWARDS AND **DECORATIONS**



SILVER STAR

Azbill, Roy G., CWO* Capelle, Gerald C., Capt* Simmons, Wayne C., Sp5*

DISTINGUISHED **FLYING CROSS**

Azbill, Roy G., CWO* Castle, Edward R., Capt Hall, Gary C., Captain McDonald, Marvin L., Capt Prescott, Daniel C., Lt Col

SOLDIER'S MEDAL

Roop, Frank, CWO

BRONZE STAR FOR VALOR

Averett, Kent G., Lt Patton, Rex B., SSgt Prescott, Daniel C., Lt Col Simmons, Wayne C., Sp5*

BRONZE STAR

Adler, John S., Lt Aguanno, Edwin M., Capt Capelle, Gerald C., Capt* Johnson, Flavil L., Major Phillips, William D., Major Prescott, Daniel C., Lt Col Quinlan, James A., Capt Selseth, Harold L., Capt

JOINT SERVICE COMMENDATION MEDAL

Kinley, Gordon L., Lt Col

* Posthumous Awards

FOREIGN DECORATIONS

Cross of Gallantry, RVN Bowen, Thomas E., WO Forres, Rapael, Sgt* Jones, Clarence, Sp5* Rupcic, Raymond, Lt* Tucker, Charles, Lt*

Nat'l Order-5th Class, RVN Forres, Rapael, Sgt* Jones, Clarence, Sp5* Rupcic, Raymond, Lt* Tucker, Charles, Lt*

COMMENDATION MEDAL FOR VALOR

Azbill, Roy G., CWO* Coyne, Edward J., CWO Hamlett, Larry D., Sp4 Patton, Rex B., SSgt



COMMENDATION MEDAL

Ahrens, Jack C., Major Braun, Darryl W., Sp5 Chambers, Robert M., CWO Grimsley, Turner E., Lt McDonald, Marvin L., Capt Mitchell, Billy D., SSgt Ruffin, William H., CWO Sheffler, Robert J., CWO Simmons, Wayne C., Sp5* Summers, Clyde H., Sp6 Ulbinsky, John R., Lt Whitmer, Dennis K., Lt Wingate, Charles S., Capt Winskey, Donald N., WO



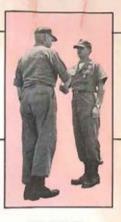
AIR MEDAL FOR VALOR

Averett, Kent G., Lt Azbill, Roy G., CWO* Bright, Jimmy D., WO Delozier, Kenneth F., WO Doyle, John, Sp5 Isbell, Ernest, Capt Kahklen, Llewlyn A., Sp4 Kramer, Bryce R., Capt List, Jack H., Sp4 Matlick, Robert R., Lt Rausch, James E., Jr., WO Sedam, John W., Lt Sweers, Peter C., III, WO Thomas, Erle W., Jr., Lt Wren, Charles, Lt Young, George J., Major

AIR MEDAL

(The number after the recipient's name indicates the number of Oak Leaf Cluster awards received.)

Ames, Faber A., WO, 5 Bailey, Gary G., Lt, Bedell, Clifton R., Sp5, 5 Benton, Hubert F., Captain Bishop, Daniel E., WO, 5 Black, Larry D., Sp4, 5 Boelter, Richard H., Capt, 5 Bounds, Marcellus, Maj, 1 Capelle, Gerald C., Capt* Chambers, Robt M., CWO, 5 Christie, Thomas C., Maj,5 Clark, David, Captain, 5 Dassonville, Curtis, Capt, 9 Davis, Johan B., Jr., Capt,7



AIR MEDAL

Davis, Richard W., Lt, 8 Degner, Herbert L., Capt.5 Ebert, William R., Lt Elliott, Tommie B., Lt, 5 Evers, Raymond R., Col, 5 Forces, Ronald W., Lt. 5 Frantz, William C., SSgt Frietag, Merle, Lt, 11 Gahm William D., Capt, 5 Garcia, Robert A., MSgt Gehler, Ken A., Capt, 18 Gorman, Charles, Sp4, 5 Hall, James A., Lt Hall, Raymond E., 1st Sgt Hand, Rodger P., Capt Ikerd, James M., WO Jachens, Bruce W., WO Jackson, Ray D., Capt, 5 Kauza, John J., Lt Kennedy, James M., Capt Kinzer, John M, Colonel Licha, Charles A., Maj, 12 Lightfoot, John R., WO McClendon, Jack W., Sgt, 2 McGivern, Mchael J., WO McGuire, Virgil P., Major McNulty, Edward S., Maj, 1 Madigan, John E., Captain Masters, Robert D., Capt, 1 Matlick, Robert R., Lt, 21 Miller, Raymond H., Capt Neal, Robert L., Capt Oliver, Robert T., Capt, 8 O'Neal, Edward C., CWO Packard, Linwood, CWO Parker, Charles L., Capt Parmeter, Glenn L., Maj. 5 Patton, James F., Jr., WO Patton, Rex B., SSgt, 1 Raley, Thomas S., Lt Rovetto, John L., CWO, 13 Runk, Adam E., Lt Salyers, Billy D., Sp5, 5 Sellers, Wm C., CWO, 11* Simmons, Wayne C., Sp5, 6* Taft, John M., Lt Walker, Laurence H., Lt, 5 Young, George J., Maj. 14

WARRANT OFFICERS WARRANT OFFICERS WARRANT OFFICERS WOC'S

BURKET, Carson L. USA Support Command APO San Fran 96307 BURKETT, Clarence P.

117 47th Street Columbus, Georgia CALLEN, James R.

Route One Fort Deposit, Alabama CAMPBELL, William J. USA Support Command

APO San Fran 96307 CARPENTER, Billy R. 1201 Burton Hill Rd., 118

Fort Worth, Texas CARTER, Lounoble 157 Varnedoe, Gdn City Savannah, Georgia

CARTER, Willard T. USA Support Command APO San Fran 96307

CASE, Conrad F., Jr. 2nd Infantry Division Fort Benning, Ga. 31905 CATES, Jerry L. 135 Johnson Street

Red Springs, N.C. CETRANO, Angelo S. 11 North 9th Street Paterson, New Jersey

CLAYSON, Harold E. 197th Aviation Company APO San Fran 96307

CLIFTON, Floyd M.
Co A, 504th Aviation Bn
APO New York 09177

CRIPPEN, James I., Sr. 4043 South Court Street Montgomery, Alabama

CROWLEY, Horsce M. 101st Airborne Division Ft. Campbell, Ky. 42223

DAVIS, Joseph M. 1259 Anchor Terrace SW Atlanta, Georgia

Atlanta, Georgia DILL, John R. 109 Cheyenne Boulevard

109 Cheyenne Boulevard Colorado Springs, Colo. EDSON, Charles F.

808 Park Avenue Copperas Cove, Texas EGGLESTON, Robert A. USA Support Command

APO San Fran 96307 ERAMO, Rocco A. 1238 Millerdale Road Columbus, Ohio

ETHERIDGE, Parry W. 2nd Infantry Division Fort Benning, Ga. 31905 POOTE Neil H

FOOTE, Nell H. USA Support Command APO San Fran 96307

FORTENBERRY, R.T. USA Support Command APO San Fran 96307 FRYE, Ronald B.

610 North Sprinker Blvd. St. Louis, Missouri GARNER, Roland E. 5840 N.W. Dearborn Lawton, Oklahoma

GEORGE, Warren D. USA Support Command APO San Fran 96307 GILL, Cecil O.

121st Aviation Company APO San Fran 96296 GILLMAN, Jay E.

117th Aviation Company APO San Fran 96238 GOFF, Barron L.

101st Airborne Division Ft. Campbell, Ky. 42223 GREAVES, Walter L., Jr. 746 Valley Village Drive

El Cajon, California GRIFFITH, David G. 883 James Place Pomona, California

HANSON, Bobby G. 119th Avn Co-AM. Bx 42 APO San Fran 96318

HANSON, William H. USA Support Command APO San Fran 96307

HART, John W. 1844 Oak Creek Road Corvallis, Oregon

HATFIELD, Ray W. Route 3, Box 645 Savannah, Georgia

HEAD, Jimmie M. 1st Armored Division Fort Hood, Texas 76540

HENRY, Michael D. USA Support Command APO San Fran 96307

HISEY, Tyrone W. 1st Armored Division Fort Hood, Texas 76540

HITT, Billy G. 176 Repl Co, 38 Repl Bu

176 Repl Co, 38 Repl Bn APO San Fran 96220 HUNTER, James L., Jr.

110 West Norris Street El Campo, Texas HUWYLER, Josef S.

223 Flower Avenue, East Watertown, New York INMAN, David J. R.R. #1

La Grange, Indiana JONES, Joe W. HHC 2nd Bde 1st Inf Div Fort Riley, Kansas

KATZ, Michel G. 3rd Radio Research Unit APO San Fran 96307

KOLVIG, Robert W.
USA Support Command
APO San Fran 96307
KRUEGER, Charles A.

1212 Ratone Street Manhattan, Kansas KUENIG, Thomas J.

2634 N. Maryland Avenue Milwaukee, Wisconsin

MacNEIL, Lloyd A. 59th Aviation Co (Corps) APO San Fran 96358 MARVICSIN, Dennis J. USA Support Command APO San Fran 96307 MASON, Reginald P.

2351 Ash Avenue Merced, California McGRAW, Arnold J.

USATSCH AMOC 6-65 Fort Eustis, Virginia McMULLAN, Robert W. 101st Airborne Division

Ft. Campbell, Ky. 42223 McNAIR, Charles T. 555 North 2nd Street

Emmaus, Pa. 18049 MINOR, Everett D. 3928 Appleblossom

Carmichael, Calif. 95608 MOONEY, Kenneth W. 1305 East 34th Street Brooklyn, N.Y. 11210

OLVEY, Michael O. USA Support Command APO San Fran 96307

PATTON, James C. 1817 Wayne Lane Fayetteville, N.C.

PEDEE, Richard D. 4733 Portland Road, N.E. Salem, Oregon

POWELL, Roger F. 300 East 4th Street Rock Falls, Illinois

PRIEBE, Rodney M. USARAL Aviation Bn Ft. Richardson, Alaska REICH, Daniel R.

USARAL Aviation Bn Ft. Richardson, Alaska ROBINSON, Larry M.

1st Armored Division Fort Hood, Texas 76540 ROLLISON, David L. 1st Armored Division

Fort Hood, Texas 76540 SIZEMORE, James W. 1st Armored Division

Fort Hood, Texas 76540 SMAAGAARD, Arthur G. B Co 15 Avn Bn 1 CD APO San Fran 96224

SPATZ, Harold S., Jr. R.D. #3, Box 224 Lititz, Pennsylvania SPRADLEY, Horace W.

607 6th Avenue, S.E. Childersburg, Alabama STEVENSON, William G. 831 Broadway, Apt. 9

Columbus, Georgia SUMRALL, John E., Jr. TDC Avn Detachment APO San Fran 96218

SZABO, John M. USA Support Command APO San Fran 96307

TAYLOR, Edward L. USA Support Command APO San Fran 96307

TAYLOR, Robert C. 430 N. Observatory Dr. Oriando, Florida AMMONS, David R, 1905 West Washington St, New Castle, Pa. ARSENAULT, Brian R.

ARSENAULT, Brian R. USAPHS C1 65-13, Box 5 Fort Wolters, Texas

SGT'S MAJOR

BOWLING, Buckner Second US Army, Avn Sec Fort Meade, Maryland

M/SGT'S

HESSE, Walter L. Avn Br. G-3, USARPAC APO San Fran 96558

SP/5'S

PALMA, Peter A. 478th Flying Crane Co Fort Benning, Ga. 31905

ASSOCIATES

BEEBE, Mrs. Doris J.L. 126 La Mesa Drive Salinas, California

BOWIE, Mr. Herbert H. Boeing, 1625 K St. (1200) Washington, D.C. 20006 CARRELL, Mr. Alfred C.

1008 East 24th Street Texarkana, Arkansas MACK, Mrs. Kathryn L.

3623 Sunlite Amarillo, Texas

MORANVILLE, Mrs. L.M. 7554 Hazelcrest Drive Hazelwood, Mo. 63042

MOU, Mrs. Berry Jean 3610 Heritage Valley Rd. Atlanta, Georgia

SEYFRIED, Mrs. Peggy A. Route 2 Chesterhill, Ohio 43728

TAYLOR, Mr. Charles E. 3610 Keith Street Knoxville, Tenn. 37921 TURNBULL, Mr. B.C.

6380 Wilshire Boulevard Los Angeles, Cal. 90048 WARDEN, Mr. R.V.

ITT-15151 Bledsoe St. San Fernando, California

RETIRED

BAXTER, Levon G., Major 542 Vista Del Gaviota Orange, California

CLAYMAN, Don C., BGen 805 Bay Colony Drive Virginia Beach, Virginia EDSON, Hallett D., BGen 3930 N. Upland Street Arlington, Va. 22207

McFEETERS, R.B., Major 12917 N.E. 10th Avenue N. Miami, Florida 33161

PADDY W. GRIFFIN

Chief Warrant Officer Paddy W. Griffin, assigned to the 1st TC Bn (Aircraft Maint Depot) (Seaborne), Corpus Christi, Texas sustained fatal injuries when his CH-21C helicopter crashed during the conduct of a service mission on June 10, 1965. He is survived by his widow, Mrs. Nelda V. Griffin, 4001 Lincoln Circle, Corpus Christi, Texas.

BILLY G. HAMMER

Chief Warrant Officer Billy G. Hammer, on duty assignment with the 82d Aviation Company, Republic of Vietnam, sustained fatal injuries when his UH-1B helicopter crashed during the conduct of a service mission on June 12, 1965. He is survived by his widow, Mrs. Sara N. Hammer, 3743 Robin Road, Columbus, Georgia.

ROBERT J. JEFFREY

Lieutenant Colonel Robert J. Jeffrey, U.S. Army, Ret, died of a coronary occlusion June 3, 1965, in Phoenix, Ariz. Colonel Jeffrey, a Senior Aviator, was a veteran of World War II and Korea. He received his original rating as an Army Liaison Pilot in 1950 at Fort Sill. Since his retirement in 1961, he served as the Assistant Manager of the Aviation Safety and Engineering Research Div., Flight Safety Foundation, Phoenix, Arizona. He is survived by his widow, Mrs. Dorothy A. Jeffrey, 4518 North 86th Place, Scottsdale, Ariz., a daughter Sue; and a daughter, Mrs. Sharon Ellis of Dallas, Texas.

DEWEY C. LITTLE

Chief Warrant Officer Dewey C. Little, assigned to the 227th Assault Helicopter Battalion, Fort Benning, Georgia, was killed in a mid-air collision of two UH-1B helicopters during the conduct of a training mission at Fort Benning on June 15, 1965. He is survived by his widow, Mrs. Patsy M. Little, 3214 Glen Street, Columbus, Georgia.

RONALD E. MEDLIN

Warrant Officer Ronald E. Medlin, on duty assignment with the 227th Assault Helicopter Battalion, Fort Benning, Ga., was killed in a mid-air collision between two UH-1B helicopters during the conduct

OBITUARIES

of a training mission at Fort Benning on June 15, 1965. He is survived by his widow, Mrs. Patricia C. Medlin, Shady Trailer Park, Fort Mitchell, Alabama.

JAMES L. MERSMAN

Warrant Officer James L. Mersman, assigned to the 227th Assault Helicopter Battalion, Fort Benning, Georgia, died from injuries received as a result of a mid-air collision between two UH-1B helicopters at Fort Benning on June 15, 1965. He is survived by his widow, Mrs. Vida L. Mersman, Shady Trailer Park, Fort Mitchell, Alabama.

DONALD E. SPENCER

First Lieutenant Donald E. Spencer, on duty assignment with the 227th Assault Helicopter Battalion, Fort Benning, Ga., was killed in a mid-air collision between two UH-1Bhelicopters during the conduct of a service mission at Fort Benning on June 15, 1965. He is survived by his widow, Mrs. Josette C. Spencer, 453 Florida Drive, Columbus, Georgia.

GEORGE W. STOCKS

Chief Warrant Officer George W. Stocks assigned to the 112th Aviation Company, Fort Wainwright, Alaska, sustained fatal injuries when his O-1E Birddog crashed during the conduct of a service mission on June 4, 1965. He is survived by his widow, Mrs. Dorothy P. Stocks, 2411 Hamilton Avenue, Columbus, Georgia.

MICHAEL L. WILDS

Warrant Officer Michael L. Wilds, on duty assignment with the 82d Aviation Company, Republic of Vietnam, died as a result of injuries received when the UH-1B Iroquois helicopter he was piloting, crashed during the conduct of a service mission on June 12, 1965. He is survived by his widow, Mrs. June Wilds, Box 612, Callahan, Florida.

ARMY AVIATION 39

NO WAR CLAUSE

It returns the face amount to the beneficiary AND all premiums paid, if the Insured's death occurs during the first 20 years of coverage!

HERE ARE A FEW REPRESENTATIVE COSTS FOR A POLICY WITH NO WAR CLAUSE . .

Age of Applicant at Policy Issue	Policy Face Amount Paid on Death	+	100% Premium Return on Death at End of 15th Year	100% Premium Return on Death at End of 10th Year	100% Premium Return on Death at End of 5th Year	100% Premium Return on Death at End of 1st Month
22	\$20,000.00	+	\$3,348.00	\$2,232.00	\$1,116.00	\$18.60
24	\$20,000.00	+	\$3,564.00	\$2,376.00	\$1,188.00	\$19.80
26	\$20,000.00	+	\$3,852.00	\$2,568.00	\$1,284.00	\$21.40
28	\$20,000.00	+	\$4,140.00	\$2,760.00	\$1,380.00	\$23.00

USING TABLE ABOVE:

- 1. To determine the premium benefit return for a \$10,000 policy, divide by 2.
- To determine the premium benefit return for a \$5,000 policy, divide by 4.
 Double indemnity and waiver of premium benefits available on basic policy.
- 4. Coverage limits: Minimum Policy, \$5,000.00. Maximum Policy, \$25,000.00.
- Premium rates for ages 0 through 45, double indemnity rates, and waiver of premium rates will be provided on request. Please furnish your date of birth.
- 6. The coverage is based upon AAAA-endorsed "Life Paid Up at Age 85" straight life insurance with its guaranteed cash values, no-cost paid-up insurance option, and no-cost extended term insurance conversion option.

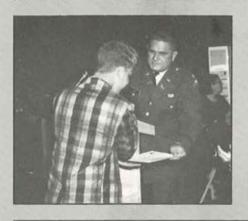
OF IMPORTANCE TO YOU:

The individual policy of insurance does not contain any geographic, occupational, or hazardous duty restrictions, and does not contain a "war clause." There is no change in premium or any reduction in face amount at any age. The company reserves the right to limit the issuance of policies during any given period.

WRITE
FOR
FACTS
TODAY!

LADD AGENCY, INC. 1 CRESTWOOD ROAD WESTPORT, CONN. Gentiemen: Please forward me the pertinent details of the "Full Value Permanent Life Insurance Plea" that features a full premium return if death occurs during the first 20 years of coverage. | I am on flying status with a U.S. Army unit. | I am an AAAA member. | | I am a student pilot undergoing Army flight training. NAME ADDRESS CITY STATE 21P

AAAA IN PHOTOS





TOP LEFT: Colonel Harold F. Via, Grand Canyon Chapter President, is shown presenting an AAAA Science Fair Award Certificate to Charles Trafford, IV, for his outstanding "aviation" exhibit at the Southern Arizona Regional Science Fair. TOP RIGHT: Lt. Col. John R. Adie (left) receives the AAAA Bronze Medallion for his outstanding service as President of the David E. Condon (Ft. Eustis, Va.) Chapter. Lt. Col. Joseph Henderson, the newly-elected President, makes the presentation at recent Chapter ceremonies. BOTTOM LEFT: New officers of the David E. Condon Chapter for '65-'67 are, left to right, Maj. Alfred Jarden (Trea), Capt. William W. Redman, Jr. (Sec), Lt. Col. Joseph Henderson (Pres); Lt. Col. Selmer Sundby (ExVP), Lt. Col. Adie (Past Pres), and Col. Michael J. Strok, National Executive Board, AAAA. BOTTOM RIGHT: New Atlanta Chapter officers for '65-'67 include, left to right, Capt John C. Carlisle (Sec), Maj. Gary R. Heffner (VPA), Col Austin J. McDermott, Jr. (Pres), and Capt. Robt. L White (ExVP).





AAAA IN PHOTOS





LINDBERGH CHAPTER ACTIVITIES

TOP LEFT: Brig. Gen. Howard F. Schiltz, serving as AAAA representative, is shown presenting a \$500 AAAA Scholarship Foundation check to Joseph Hely, Jr., the son of Lt. Colonel Joseph Hely (Ret.), one of seven national scholarship winners in 1965. Others in the picture are, left to right, Lt. Col. Hely, Gen. Schiltz, Joe, Jr., Mrs. Hely, and daughter Marylyn. TOP RIGHT: Shown addressing the April Chapter meeting in St. Louis is John Vanbergen, the Canadian Defense Administrator. BOTTOM LEFT: The Honorable A.J. Cervantes, Mayor of St. Louis, guest speaker at the Lindbergh Chapter's May meeting, is shown receiving a plaque and AAAA pin from General Schlitz as an Honorary Member of AAAA. BOTTOM RIGHT: Judges Walter Lorenz, Lt. Col. Carl A. Pieper, and Vernon A. Sturm are shown examining the display of James Oberlin, one of five AAAA Award winners at the 16th National Science Fair International held in St. Louis.





ARMY AVIATION ASSOCIATION 1965 ANNUAL MEETING

The Seventh Annual Meeting of the Army Aviation Association will be held on October 27-29, 1965 at the Shoreham Hotel, Washington, D.C., the site of the Association's first professional gathering in 1959.

The three-day program will be highlighted by the Seventh Annual AAAA Honors Luncheon at which national awards will be presented to the "Army Aviator of the Year," the "Aviation Soldier of the Year," the "Outstanding Aviation Unit of the Year," and the winner of the "James H. McClellan Safety Award."

All members who attend the 1965 AAAA Annual Meeting shall be expected to register. Members may register in advance during the period July 20-October 20 by completing the clip-out coupon that appears on the inside back cover and submitting it with their remittance to the AAAA National Office in Westport, Conn.

The single registration fee covers the member's attendance at all Annual Meeting functions, other than the Honors Luncheon. The single registration fee is intended to include the registration of the member's wife.

HONORS LUNCHEON

Tickets for the Seventh AAAA Annual Honors Luncheon to be held at noon, October 29, 1965, in the Shoreham Hotel Regency Ballroom, are \$4.00 for all military, retired, and DAC personnel, and \$8.00 for all others. Chapter groups may reserve ten-seat tables prior to the convention by forwarding a check in

the amount of \$40 for each ten-seat table purchased.

Single Honors Luncheon tickets may also be purchased at the AAAA Registration Desks in the Shoreham Hotel, starting at noon on Wednesday, October 27. Cancellation requests should be postmarked no later than October 20.

PRESIDENT'S RECEPTION

The President's Reception, a second highlight of each AAAA Annual Meeting, will be held on Thursday evening, October 28, in the Regency Room of the Shoreham. National President O. Glenn Goodhand and Mrs. Goodhand, and the President-Elect and his wife, will be hosts at this reception at which all registrants and their wives are welcome.

Each registrant is also invited to attend the Membership Reception preceding the Honors Luncheon on Friday, October 29, and the Annual Diehards' Reception to be held the same evening.

HOTEL RESERVATIONS

Members desiring accommodations at the Shoreham Hotel (\$12.00 single; \$16.00 twin) are urged to write directly to the Shoreham Hotel at 2500 Calvert Street, N.W., Washington, D.C. 20008 or to a hotel of their own choice.

Shoreham Hotel reservations cannot be assured after October 17, nor can the hotel hold reservations after 8 p.m. without a letter of guarantee or deposit.

44

A CONTRACTOR OF STREET	Dillion Book D. Cont. Book	J J
Ahlstedt, Herbert A., CWO \$324 Allen, Dwight O., CWO \$1,296 Armstrong, John E., Capt \$1,968 B	Dillinger, David R., Capt	Jarvis, James W., Capt. \$444 Jarvis, Ronald J., Capt. \$1,776 Jayne, David G., Lt. \$3,600 Jeffrey, Robert J., LCOl. \$365
Baker, Wallace I., Capt	Drake, Harley L., Lt	Jellison, Edward C., Maj
Barth, Todd M., Capt. \$1,968 Beale, Rudolph W., Capt. \$1,968 - Beaston, George P., CWO. \$336 - Beau, Henry R., CWO. \$1,296	Dunn, Jack A., Capt	Jones, James D., Capt
Beaumont, Harry C., Col \$2,352 Bender, Richard C., Lt \$600	Eder, Herbert, Maj	Juhl, Milford L., LCol,
SEMI-ANNUAL	REPORT TO AA	AA MEMBERS
ON FLIGHT PA	Y PROTECTION	PLAN CLAIMS
Bendl, Robert E., Capt\$1,968 Benson, Albert G., Capt\$1,760	Pinnin, Richard H., Capt \$3,456 *Fitts, William T., Maj \$1,376	Keen, Donald E., Capt \$1,968 Kelley, Edgar N., Capt \$1,920
+Bergman, Ronald A., Capt \$1,184 +Bergner, John, LCol \$576	*Pitzgeraid, Albert E., Maj \$2,304 Fowser, Mark F., Maj \$2,208 Francisen, Donald P., Capt \$994	Keltz, Richard E., Capt
Berry, Henry J., Capt	Prentz, Austin D., Capt\$1,732 Preytag, Robert J., Capt\$1,968	Killo, William S., Capt \$1,728 *Kilmer, William G., LCol \$2,208
Birkmeyer, Louis R., Capt \$1,824 Bivens, Robert D., CWO \$1,296 Bobo, Carl E., Jr., LCoi \$2,352	Gabardy, Robert L., LCol \$1,536 Gaffney, James J., Capt \$396	Kimak, Philip B., CWO
Bonifacio, Robert A., Capt \$1,585 Bower, Duane M., Lt \$1,200	+Gafner, Richard L., Capt \$296 Ganey, Jerome, CWO \$1,296	Kramer, Joseph A., Capt. (1) \$1,968 +Kramer, Joseph E., Maj. (2) \$2,112
Bowman, James, Maj	Gardner, William H., LCol, \$1,398 George, David M., Capt \$1,824 Gibson, Jack S., CWO \$1,125	Krause, William A., CWO
Brinkley, Edwin T., Capt\$1,184 Brooks, Frank B., Mal\$2,304	Gibson, Melville D., Capt \$1,723 Gile, Richard E., Maj \$950 Gilroy, John E., Maj. (1) \$1,644	Kunz, Joseph F., Capt
Brophy, Edward R., Jr., Capt \$794 +Brown, Charles E., Jr., CWO \$1,237 Browne, Edward M., Maj \$1,824	Gilroy, John E., Maj. (2) \$2,304 Givens, John W., LCol \$1,960	Lamb, William T., CWO\$832 Lapinskes, George S., Lt
Bush, Harry L., Col. \$2,352	*Golembieski, Frank E., Capt \$634 Graham, Jack C., Capt \$1,968 Gulledge, Kenton, Capt \$360	LaRosa, Peter A., CWO
Cantwell, Franklin D., Capt \$1,776 Carney, Charles V., Maj \$2,303	Hagler, Jon L., Lt	Licha, Charles A., Capt
*Cave, William R., Maj	Hamlet, James F., LCol	Logan, John R., CWO
Clark, Hobert H., Lt	Hamner, Louis, Maj	Lynch, John A., Capt
Colvin, Gordon W., SP/6 \$2,400 Conner, Joe P., Capt \$4,560	Harr, Robert B., CWO\$1,200 Harringan, Thomas Y., Capt \$4,920	Marks, Harold E., CWO\$1,248 Marshall, Thomas J., Lt\$1,440
Contole, William S., LCol \$2,352 Cooke, Horace G., Maj \$2,208 Cooper, Thomas E., CWO (1) \$1,000	Harris, Robert E., Lt	Martellini, Carmen R., Capt \$1,728 Maschmann, J.W., Capt. (1) \$615 Maschmann, J.W., Maj. (2) \$2,220
Cooper, Thomas E., CWO (2)\$1,296 Costino, Michel, Capt	Havens, Orin D., CWO (2) \$1,080 Hawkins, Edward S., Capt \$1,558 Hawthorne, James D., Capt \$492	Mason, Elijah F., Lt
Cranford, Jack, LCol\$2,304 Crawford, George W., CWO\$1,296	Heape, Artie A., CWO \$1,296 Heathcote, Carlyle J., Maj \$1,968	Maxey, James H., CWO \$1,152 Mays, Luama W., Lt \$1,536
Crumit, Ellis G., Capt	Hendershot, Donald L., Capt \$4,920 *Hendrix, John L., CWO \$1,169 +Henderson, Robert P., CWO \$448	McClure, Joseph W., Maj \$2,304 McConnell, Delmer M., Capt \$301 McCune, James P., CWO \$1,067
D Dale, John R., Col	Henley, Raymon D., Capt \$4,800 Hennington, Harold M., Maj \$1,968 Holt, Robert H., CWO \$450	McDermott, Francis P., Maj \$693 McIlwain, George W., Maj \$1,872 +McVay, Clarence H., CWO \$864
Dameron, Fred, Capt	*Hook, Bruce, Capt	Meehan, William J., Capt \$1,776 Melton, William D., Capt \$1,600
Davis, Edward J., Capt	Hoyt, William C., Jr., Capt \$1,232 +Hughes, Joseph M., S/Sgt \$400	Metzker, Jeff J., Maj
+Denning, Stanley P., CWO \$448 45	Irby, Chester R., Maj	+Midgett, Carl G., Capt

Mitchell, Erwin M., LCol
Murphy, Richard R., Capt \$803
Nadeau, Clement P., Cupt. \$1,728 Nash, Verna M. Capt. \$4,920 Noland, Clifton M., LCol. \$2,304 Nuttall, Richard W., Capt. \$1,624
Oberg, Robert, Capt
*Padgett, Bogus, SP/5 \$701 Pappas, Ted R., Capt \$668 Parkers, David B., Bélen \$2,352 Parkinson, Ralph W., Maj \$1,968 Parsons, Richard, CWO \$1,296 Passano, John D., Capt \$1,738 Peck, Michael, Capt \$1,920 Percz, Roberto D., Lt \$960 Pergerson, Benard S., Capt \$1,440 Peterson, Robert A., Lt \$1,700 Peyer, Gustave A., LCol \$2,085 Pfeiffer, Francis, Maj \$2,208 Pfeiffer, Francis, Maj \$888
Pierce, Wilbur R., Jr., Capt
*Rank, Richard H., Capt. \$1,342 Ratayczak, Robert P., Maj. \$3,960 Reese, Edgar J., CWO \$1,104 Richards, Leroy B., CWO \$1,200 Richardson, Rodney K., CWO \$1,236 Riviere, George, Capt. \$656 *Roberts, Carl P., CWO \$1,296 Roberts, William B., CWO \$1,296 Roller, Robert W., \$1/6 \$960

PLIGHT PAY PROTECTION PLAN SUMMARY AS AT 30 JUNE 1965

NUMBER OF INSUREDS HOLDING INDIVIDUAL POLICIES 4,257
AMOUNT OF ANNUAL FLIGHT PAY COVERED \$9,505,695.50
INDIVIDUAL CLAIM "ALERT" CORRESPONDENCE RECEIVED 447
INDIVIDUAL CLAIMS FOR WHICH INDEMNITIES HAVE BEEN PAID 308
INDIVIDUAL CLAIMS DISAPPROVED
INSUREDS RETURNED TO FLIGHT STATUS PRIOR TO LOSS
TOTAL INDEMNITIES PAID THROUGH 30 JUNE 1965 \$511,597.00

Rondeplerre, Jean R., Maj \$1,476	Thomas, Michael R., Ca Thrall, Dewell O., Maj.
Sanders, Brian C., Lt \$762	Thurmond, Wymond N.,
Scharite, Frank W., Capt \$1,920	Tidmore, Carl C., Capt.
+Scudder, James, Capt\$1,804	Townsend, James R., C.
+Sevigne, Edward J., CWO \$300	Traver, Wallace H., Car
Shaffer, Lewis N., LCol \$1,960	Tryjanowski, Florian E.
Shaw, Ambrose C., Maj \$2,304	Tucker, Jackie L., Capt
Sims, Claude E., Capt \$4,920	+Tugman, Robert F., L
Sisbarro, John R., Jr., Capt \$1,920	Tussey, William J., Car
Smith, Alfred R., Capt \$1,920	v
Smith, Clair B., Maj\$1,152	Valdez, Isidro, Jr., CW
Smith, Everett A., Capt \$978	Valentine, George, CWC
Smith, Louis B., SFC\$960	+Vandiver, Gilmer L., I
Smith, Louis G., CWO\$1,296	+Vaughn, John P., Capt.
Smithey, Paul C., Maj \$1,056	Vermace, Charles, PSg
+Stafford, Robert C., Capt \$1,584	W.
Stansberry, Conrad L., Col \$2,352	+Walczak, Sylvester, Co
Staples, James T., LCol \$192	*Walker, Robert L., Car
Stein, Albert E., Lt \$3,840	Ward, Charles E., Capt
Stevens, Merwin A., Lt \$2,400	+Warzecha, Edward, LC
*Stevenson, Joseph, Maj \$492	Wells, James F., Col
Stewart, Clifford R., Capt \$3,936	Wheeler, Harold L., Ma
Stover, Jacob R., LCol \$2,304	Whidden, Raleigh J., CV
Stump, Charles, Lt\$288	Whitney, Edwin F., LCo
+Stuart, Clark D., Capt \$403	Wilkinson, Jesse L., Ma
Sullenberger, Louis, Lt	+Williams, Robert H., L
Sumrall, Hendri A., Maj	Williams, William, Jr.,
	Wilson, Robert E., Capt
Sweeney, Alan F., Capt \$3,960	Woodbeck, Carol E., CW
Swilley, George R., Maj \$2,304	
W-1 WWIN W 11	Woodward, Herbert E.,
Tai, William K., Lt	Name Walter D. Coat
Taylor, Billy H., Capt \$1,728	Yenne, Walter D., Capt.
Theriault, Bernard R., Capt. (1) \$990	Minden William C.
Theriault, Bernard R., Capt. (2) \$1,920	Ziegler, William E., Lt

nran, Dewen O., scal \$1,824
burmond, Wymond N., CWO \$1,296
'idmore, Carl C., Capt \$1.776
ownsend, James R., CWO \$3,240
raver, Wallace H., Capt \$4,920
ryjanowski, Florian E., Capt \$1,480
ucker, Jackie L., Capt \$510
Tugman, Robert F., LCol \$588
ussey, William J., Capt \$792
v
aldez, Isidro, Jr., CWO \$1,296
alentine, George, CWO \$1,200
Vandiver, Gilmer L., Maj \$920
Vaughn, John P., Capt \$1,377
ermace, Charles, PSgt \$120
W
Walczak, Sylvester, Capt \$1,320
Walker, Robert L., Capt \$2,760
ard, Charles E., Capt \$571
Warzecha, Edward, LCol \$960
ells, James F., Col, \$2,352
/heeler, Harold L., Maj \$768
/hidden, Raleigh J., CWO \$3,240
hitney, Edwin F., LCol \$5,880
ilkinson, Jesse L., Maj \$1,968
Williams, Robert H., LCol \$2,156
illiams, William, Jr., CWO \$1,248
ilson, Robert E., Capt \$1,229
oodbeck, Carol E., CWO\$1,248
oodward, Herbert E., CWO \$3,240
Y
enne, Walter D., Capt \$1,968
2
iegler, William E., Lt \$288

Thomas, Michael R., Capt. \$1,958

MILITARY AVIATION PLACEMENT SERVICE

FIELD REPRESENTATIVE

Aircraft component manufacturer desires to have a U.S. citizen as field technical representative in the Republic of Vietnam to provide liaison with military technical offices. The company would prefer to utilize a portion of the time of an individual who is performing the same duties for other related but non-competitive companies. Purnish resume and references to AAAA, Attn: Box 6850, 1 Crestwood Road, Westport, Connecticut,

■ ROTARY WING FLIGHT

Seeking employment with commercial or military connected firm as a helicopter pilot. Presently a holder of an FAA Commercial License for rotorcraft with helicopter instrument rating. Over 1,200 hours in helicopters with 850 hours first pilot time in the CH-34 or S-58. Able to obtain FAA Medical Certificate without waivers. Previous experience as a radar repairman for surveillance systems. Age 25 and married. Will accept any location 46 ARMY AVIATION

for a desirable position. Available after November 1. For resume and photo, write AAAA, Box 7198.

m GEN'L, INDUSTRY/CONTRACTOR

Senior AA, age 47, seeks challanging position in aviation industry or with contractor utilizing fleet of aircraft, Twenty years experience in command and staff positions calling for initiative, enthusiasm, and long hours of hard work to meet stringent deadlines. Twelve years as AA. Commanded company size units. Held responsible staff positions in two major Army headquarters during the past five years. Commercial SMEL, instrument, rotorcraft, and S-58 ratings, Army special instrument rating, fixed wing. Over 2,500 hours. Available after Oct. 1, For resume, write AAAA, Box 726.

MILITARY SALES

Major southwestern electrosystems contractor desires a reserve aviator with an avionics background (preferably in the Signal Corps). Starting salary would be

about \$15,000 a year depending upon qualifications. If interested, write AAAA, Box 4360, Crestwood Rd, Westport, Cons.

INDUSTRIAL MANAGEMENT

Well qualified senior officer desires challanging position in industrial management; specifically as assistant and "trouble-shooter" for top management officials to resolve daily problems and to develop programs for the improvment of policies which affect management operations, Write AAAA, Box 562,

m MAINTENANCE DIRECTOR

Retired rated Army-officer with an extensive background in aviation maletenance and flight operations desires a responsible position in the aviation industry, Holds current FAA ratings as commercial pilot, airframe and powers plant mechanic, and instructor of maintenance course. Fully capable of planning, training, or directing shop, school, or flight line maintenance operations. For resume, write AAAA, Box 800.



AAAA ANNUAL MEETING ADVANCE REGISTRATION COUPON

Enclosed please find \$______ in payment for my registration for the 27-29 October 1965 Annual Meeting of the AAAA and for the tickets that I have indicated below:

FUNCTION	QUANTITY	PRICE	AMOUNT
Registration Fee*		\$3.00	
Ladies Luncheon, October 28		\$4.50	
AAAA Honors Luncheon, October 29			
Military, DAC Personnel		\$4.00	
All others		\$8.00	_
NAME			
ADDRESS			
CITY			
UNIT OR FIRM			

*Includes registration of wife and attendance at the President's Reception on Thursday evening, 28 October, and attendance at the Honors Luncheon Reception held on Friday, 29 October.

Payment in full must accompany this registration request. Make your check payable to AAAA and mail with this Advance Registration Coupon to AAAA, 1 Crestwood Road, Westport, Conn. 06882. Cancellations cannot be accepted after 20 October 1965. Registration Badges and Honors Luncheon Tickets may be picked up at the AAAA Registration Desks in the Shoreham Hotel starting at noon, 27 October.



IT'S TIME
TO POLL
ON AAAA
AWARDS
SUSPENSE DATE:
AUG. 15, 1965



ARMY AVIATION MAGAZINE

1 CRESTWOOD ROAD

WESTPORT, CONN. 06882

POSTMASTER: If this magazine is addressed to a member of the United States Military Service, whose address has been changed by official orders, it should be forwarded — except to overseas APO's — without additional postage.

See section 157.4 of the postal manual.

"RETURN REQUESTED" applies in those instances wherein forwarding is not permissible. The publisher requests the return of the entire issue under the "RETURN REQUEST" provisions of the postal manual.