

# ARMY AVIATION

OCTOBER

## New Army utility helicopter the BELL H-13H

Powered by Avco Lycoming's VO-435 engine (260 h.p. derated to 220 h.p.), this 'copter is shown as it set a new endurance flight record at the National Aircraft Show in Oklahoma City. (See cover story inside.)



**L**avco  
Lycoming

defense and industrial products  
Stratford, Conn. • Williamsport, Pa.

Dependable Avco Lycoming engines power more different types of fixed and rotary-wing aircraft than any other engines in the world.

# Partners!



The maximum range of the H-21 light cargo helicopter is approximately 300 miles. Yet, on August 25th, an H-21 touched down at the Pentagon heliport, Washington, D.C. to complete a nearly 2700 mile non-stop flight from San Diego, California.

Army aviation officers were quick to say that the 32-hour flight proved the practicability of ferrying helicopters as much as 3000 miles to increase the striking power and mobility of ground forces.

A major assist was given to the Army's whirlybird on its trans-continental hop by a U.S. Army U-1A *Otter* aircraft. The *Otter*, converted into a flying fuel tank, refueled the H-21 in flight over Wink, Tex.; between Big Springs and Abilene, Tex.; at Maxwell AFB, Ala.; and at Ft. Benning, Ga.

For the Canadian designed and built *Otter*, the job of wet nursing a cross continental helicopter was just another routine chore. A considerable number of 1½-ton payload *Otters* and several hundred ¾-ton *Beavers* function as prime utility support for the U.S. Army.

The *Otter* was a logical choice to provide in-flight re-fueling of the H-21. Its exceptional control qualities at slow flying speed and the high position of the tail plane combine to facilitate efficient coordination of the re-fueling maneuver. Additionally, the generous cabin space facilitates the cargoing of a maximum fuel payload.

Designed and built by

THE DE HAVILLAND AIRCRAFT OF CANADA LIMITED

POSTAL STATION "L" TORONTO ONTARIO

WESTERN SALES AND SERVICE: MUNICIPAL AIRPORT, EDMONTON, ALBERTA.



# BUILDING MOBILITY

Some of the new projects and developments at Hiller Helicopters made possible through the cooperation and guidance of the U. S. Army include:

- Tilt Wing Propelloplanes
- Ducted Fan Aircraft
- Tip Jet Powered Helicopters
- 1000-Hour Overhaul Cycle Helicopter Drive System



Flying Platform, under development with Army funds.



The Army H-32, powered with ram jet engines.



Tilt wing transport design produced under contract for the Army.



The H-23D, incorporating new sturdy transmission and drive system.

These and other projects represent vital steps in the Army's continuing effort to build mobility which matches our air age.



## HILLER HELICOPTERS

PALO ALTO, CALIFORNIA

# ARMY AVIATION

OCTOBER 15, 1956

VOLUME 4 — NUMBER 10

Paid Circulation — September, 1956



Courtesy of Kollsman Instrument Corp.

## ADVERTISERS IN THIS ISSUE

AVCO Lycoming Defense and Industrial Products  
Hiller Helicopters  
Beech Aircraft Corporation  
Cessna Aircraft Company  
Vertol Aircraft Corporation  
Bell Aircraft Corporation  
de Havilland Aircraft of Canada, Ltd.  
Fairchild Aircraft Division  
Haydock, Schreiber, Mitchel & Watts

"ARMY AVIATION MAGAZINE," Westport, Connecticut. Issued monthly. Subscription price, \$2.00 a year to Z. I. Addresses; \$2.40 a year to APO, U.S. Territory, and Canada addresses; \$2.65 a year to foreign addresses. Single issue, 25¢. Publisher, Dorothy Kesten. Second Class Mail Privileges authorized at Westport, Conn. Copyright, 1956 by Dorothy Kesten. Display and Classified Advertising Rates furnished on request. Westport phone, Clearwater 9-4752.

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, Section 233) SHOWING THE OWNERSHIP, MANAGEMENT AND CIRCULATION OF "Army Aviation Magazine" published monthly at Westport, Conn for October 1, 1956.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Dorothy Kesten, Elizabeth Drive, Westport, Conn. Editor, Arthur H. Kesten, Elizabeth Drive, Westport, Conn. Managing editor, None; Business manager, None.

2. The owner is: Dorothy Kesten, Elizabeth Drive, Westport, Conn.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: NONE.

## Air Show

Handling its portion of the National Air craft show with considerable finesse and excellent timing, the Army vividly demonstrated the combat capabilities of its air arm before an estimated 225,000 people during the 3-day program at Will Rogers Field, Oklahoma City.

Considerable lineage has already been devoted to the Army participation in other military and trade publications. You may be interested in the individual participants and the role they played in bringing the "Army Story" to the general public.

Col. William R. Tuck, the D/A designated project officer; Lt. Col. B. A. Bache, the CONARC project officer; and their staff of twelve are to be complimented for their efforts in creating a highly interesting, fast-paced 45-minute show.

Roaring in from widely separated points, a three-deck, V formation of rotary wing craft opened the Army show. With four hovering H-13s doing the *billboard toting* (Army Aviation—Above—The—Best) the crowd had a close look at both the H-34 and H-21 cargo craft hovering in formation to the right and left. CWOs A. R. Tucker, F. O. Bell, H. E. Gilliland, Jr., and C. J. Emery (the *Square Dance* unit) flew the *billboards* while Capt. K. W. Holzer; Lt. W. C. Hampton; and CWOs J. W. Birchfield and A. R. Hayter provided the H-34 echelon. Capts. W. E. Black and L. E. Dungey and CWOs B. J. Fulbright and J. A. Bell piloted the Vertol H-21s.

As the curtain-raisers flew off, the assemblage witnessed an individual fly-by of current operational aircraft. An L-19 piloted by Lt. R. B. Shafer was followed in trail by an L-20 (Capt. J. S. Aufill), a U-1A (Capt. Donald P. Baugh), an L-23 (Capt. L. J. Reid), an H-13 (CWO H. L. Conyers), an

(Continued on Page 29)

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee of in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

DOROTHY KESTEN  
Publisher

Sworn and subscribed to me this 19th day of September, 1956.

RAYMOND H. FITCH  
Notary Public, State of Conn.  
Commission expires April 1, 1957.

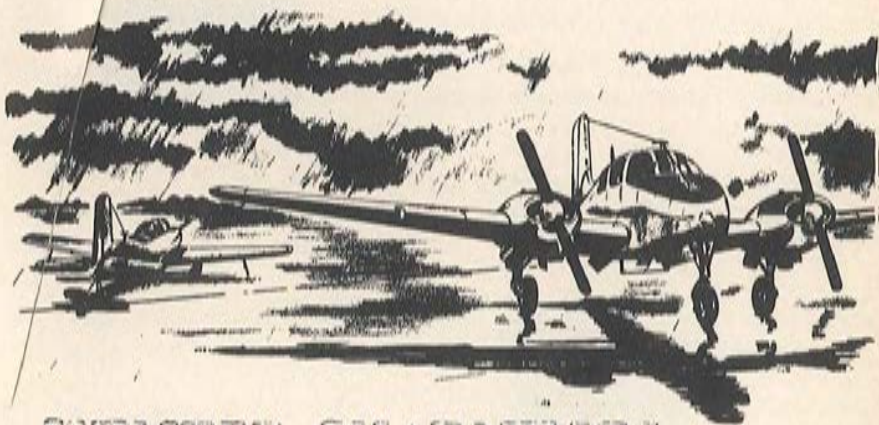


# Beechcraft

## SAFETY SUGGESTIONS



PUBLISHED AS A SERVICE TO PILOTS



## WINTER WARNINGS

*Note: This safety article is the twelfth in a series to be published in Army Aviation. They are short recaps from Beechcraft Safety Suggestions which have been published as a service to pilots since 1939. A Beechcraft Customer Service Program.*

**WATCH THAT SNOW BUILD-UP ON DIRTY, HALF CLOGGED AIR SCREENS.** Use your alternate air source when in doubt.

**DON'T ATTEMPT A TAKE-OFF WITH A COLD ENGINE . . .** We have record of several injury accidents due to attempted take-off with a cold engine.

**WATCH OUT FOR FROZEN FUEL TANK SUMP DRAIN VALVES!**

**BEWARE OF ICING FOG.** At the BEECHCRAFT factory, cases of icing fog have been encountered which would ice up a propeller in a mile of taxiing plus ordinary warm-up procedure, so that the airplane would not take off until the ice was removed from the leading edges of the propeller. Stopping the engine and inspecting the propeller and removing the ice does not take long, and this precaution should not be slighted in order to save a minute or so.

**SNOW OR HOAR FROST ON THE TOP OF A WING CAN DESTROY ITS LIFT . . . YES, AND SO WILL FROZEN SLUSH OR MUD!** Many pilots do not know that ice on the leading edge of a wing is NOT the only way that a foreign deposit can destroy the lift.

**ALWAYS BE WEATHER WISE**

**BEECH AIRCRAFT CORPORATION**

**Wichita 1, Kansas**

# Cessna L-19's Help Army "Spread the Word"

Helping Army units maintain radio communications is another of the many vital jobs performed by versatile Cessna L-19's. Other jobs: control of military highway traffic, fast transportation for field commanders, evacuating wounded, pilot training, courier work, flare dropping, airborne radio relay. During civil emergencies, L-19's are used by Army National Guard units.

The rugged, all-metal L-19's can do all these jobs because they're designed to be versatile. They offer



*Cessna Aircraft Company, Wichita, Kansas*



high-wing visibility, short take-offs and landings, outstanding load-carrying and slow-flight characteristics. Also, L-19's are easy to service, require less maintenance than any other Army airplane!

Cessna has delivered every L-19 to U.S. Armed Forces on schedule since 1951!





(U.S. Army photo)

# VERTOL Aircraft Corporation

Gentlemen:

On 23-24 August 1956, Army aviation accomplished another significant achievement when CONARC Board Nr. 6's H-21C flew, without landing, from San Diego, California to Washington, D. C., via Savannah, Georgia. This 2610-mile flight, which took 31 hours and 40 minutes, demonstrated the practicability of long range ferrying for helicopters using in-flight refueling, thereby increasing the mobility of tactical Army units.

We are gratified that the Army selected the VERTOL H-21C for this operation.

The H-21C which was utilized for this flight provides convincing proof of advances made in improving helicopter reliability. During a twenty-eight day period, about 120 hours of flying time was accomplished by this helicopter. Its flight on 11 August 1956 established a new distance record. After the coast-to-coast flight, the aircraft participated in the Army's demonstration of in-flight refueling at the National Aircraft Show at Oklahoma City.

Congratulations are certainly due Captain Jim Bowman, Major Hugh Gaddis and Mr. Joe Givens of CONARC Board Nr. 6, who piloted the H-21C on its epic transcontinental flight, as well as to the crews of the U1-A refueling airplane and the two L-23 escorts.

Very truly yours,

VERTOL AIRCRAFT CORPORATION

H. S. Trempel  
Manager, Military Liaison



*Fly "Above the Best"*

**Apply for ARMY AVIATION CAREER TRAINING**

# Outlook



Gen. Gavin



Gen. Howze

(Excerpted from "Survival in the Air Age," a Mutual Broadcasting System series of programs sponsored by the American Legion and featuring prominent Department of Defense personnel. Participants were Lt. Gen. James M. Gavin, Army Chief of Research & Development; Maj. Gen. Hamilton H. Howze, Chief, Army Aviation Directorate, OD-C50P5. Col. Roscoe Turner (Ret.) interviewed the general officers.)

## Lt. Gen. James M. Gavin

"I think people are facing up to the [close support and interdiction role] quite realistically now. I was interested in Gen. Lindsay's statement to the AF Association Convention in New Orleans to the effect that about one third of Tactical Air Command will probably be replaced by missiles in time. I believe that the very able Secretary of the Air Force, Secretary Quarles, likewise made a statement about the Army being able to take over with its missiles the Tactical Air Command air support role to a degree, and he, as a consequence, hoped to be able to effect some reduction in the tactical air support wings. Our own Chief of Staff [General Taylor] has expressed a somewhat similar view.

As we see it now, for the AF to carry out its mission and deal with an enemy AF of very high performance, they need highly sophisticated, high performance aircraft—operated at great speeds and at great heights.

At this time, while they're having to do this, we are moving into the very close to the ground missile business to an increasing extent. The family of missiles we now have in development appears to offer us real prospects of accurate effective all-weather support. It is not entirely here but we're well on our way into that.

So the fighter-bomber—as we see it now—is certainly going to be a different sort of a bird in the future. He's going to have a different job to do and the missile will replace him in what we consider to be really the close support role and that is immediate close support, interdiction of the enemy forces, isolation of the battlefield, and those jobs which were done so well by Generals Vandenberg, Quesada, and Weyland in World War II."

## Maj. Gen. Hamilton H. Howze

"I should say that [Army air transport for moving troops and personnel] is one of the two greatest functions of Army aviation. The first one is that of observation which was touched on briefly by Gen. Gavin when he spoke of the greater—or the rising—importance of guided missiles in the land battle. For these guided missiles we need intelligence or observation to determine where they shall be laid and Army aviation plays a great role in that respect.

As respects the movement of troops and supplies . . . it is of the greatest importance in order that we might in future wars avoid the necessity of massing troops for long periods of time and in any one spot, because such massing obviously would render those troops very vulnerable to destruction by atomic weapons . . . We have in the helicopter a device which will give us great variation in the selection of the point of thrust of an effort against an enemy. This flexibility previously mentioned will be of tremendous assistance to the Army in another war . . .

[Speaking of a comparison between fixed and rotary wing craft] there are a number of new approaches being made by the aircraft industry and by NACA, a good deal of which is supported by the government in research towards developing new convertiplanes and new very short takeoff and landing aircraft, and various devices which when applied to fixed wing aircraft tend to make them achieve the greater flexibility that I spoke of a little earlier.

Of course, we support all of these—not only in spirit but also we support them to a very considerable degree with Army funds. We think there are great prospects for that line of endeavor. Also, however, it is unquestionably true that it is a matter of years before these very advanced designs will come into operational production and therefore, we recognize them still in their present role as a complement to the helicopter.

The Army, in spite of the fact that it must look ahead to the future years to prepare itself for a war which may take place in a number of years, nevertheless also has a continuing day-to-day responsibility for maintaining its readiness to fight a war which may start tomorrow or next week."



*A recent address by Brig. Gen. William B. Bunker to chapters of the American Helicopter Society discusses the individual lift device in relation to . . .*

## Individual Air Mobility

In addressing various meeting of the Institute of the Aeronautical Sciences, Mr. Robert Gross, the President, has listed the individual lift device as one of the more important aeronautical problems to be solved in the current era. I would like to take a few moments to make a sort of thumbnail operational analysis of the individual lift device applied to the problem of mobility of the soldier. At the outset, of course, I must emphasize that I am giving only my opinion. There are many well qualified people in the Army who will strongly disagree with me and the official position of the Department of the Army has not been announced. The purpose of this discussion is to give you something to think about, not necessarily an approved answer . . .

Let us examine what application could be made of an individual lift device within the Army. First, it must be remembered that the primary mission of an army is to hold a piece of ground and prevent the enemy from occupying it or, more positively, to take a piece of ground away from the enemy and remove him from it. Under these generalized conditions, it seems obvious to me that the soldier can perform his mission only while standing on the ground. The Army, of course, consists of many other elements besides the infantryman with his rifle; there are armored and artillery units to lend him firepower support as well as quartermasters to feed him, medicos to heal him and transporters to move him, but still the primary mission of the Army is to seize and hold ground. Here I must disagree with the suggestion advanced by some of the aviation enthusiasts of the Army that the combat mobility of the soldier must be commensurate with the increase in his firepower offered by atomic weapons. We frequently state that mobility is one of the most important features of an army, but this mobility refers to the velocity of the soldier to and from the battle and at various places on the battlefield as the occasion warrants and seldom entails movement of more than a few feet while actually performing his basic mission. While it is true that Newtonian physics tells us that force varies as the square of the velocity, this velocity must be

One of the foremost exponents of rotary-wing aircraft in the military forces, Gen. Bunker serves as Commanding General of the Transportation Supply and Maintenance Command at St. Louis, Mo. A past president of the American Helicopter Society, he is a prolific writer and a regular contributor to many service publications.



**Brig. Gen. William B. Bunker**

applied to the mass which is exerting the force. In battle it is the projectile fired by the soldier which exerts the force, not the body of the soldier except in the rare instances when he is charging with a bayonet.

If the soldier could fight at 300 miles an hour, as has been suggested, then perhaps we should accept the theses of Douhet, Mitchell, and all of their proponents that we don't need people on the ground at all but that everybody should fight from airplanes. Actually, of course, some of the Army's artillery support, as supplied by fighter-bomber planes and some of our logistic support, as supplied by transport aircraft, do move at these high speeds but the basic infantryman still plods along at a mile an hour or so.

Some of the armor enthusiasts of the Army used to argue in the thirties that all troops could fight in tanks and there was no need for infantrymen to be exposed to enemy rifle fire, but this thesis was rapidly disproved in World War II where it was discovered that when tanks were stopped to hold a piece of ground, they immediately became vulnerable to the infantryman's weapons and his artillery support. Moving vehicles like tanks and airplanes and even, under some conditions, horses, can add the element of shock to a military attack but they still leave an essential job of ground holding to a man on the ground. It is therefore apparent to me that the individual lift device, while facilitating the soldier's arrival on the battlefield or his removal from an untenable position, would not materially assist him while actually waging combat.

I cannot visualize a company of soldiers mounted on individual lift devices moving

*(Continued on Page 31)*



**The C-123 can't land on a postage stamp...**  
but almost any clearing is its landing field!

On almost any clearing—almost any field—you can safely land the Fairchild C-123 assault transport.

Actual short-field tests have demonstrated that the rugged C-123 is able to take off and land from *deeply eroded, sandy fields*; that it can work from unprepared clearings *under downwind conditions*; that it is capable of mass-

landings into ungraded "combat zones" . . . at *8-second intervals*. And literally thousands of flights have proven that the C-123 requires *no more than 700 ft. for takeoffs and landings*. During these strenuous tests, no C-123 was lost, none was damaged.

What better proof of the C-123's near-universal assault and logistics capability?

  
**FAIRCHILD**  
AIRCRAFT DIVISION • RALENSTOWN 10, MARYLAND  
*A Division of Fairchild Engine and Airplane Corporation*

...WHERE THE FUTURE IS MEASURED IN LIGHT-YEARS!



# Run For the Record

Round-The-Clock Army Crew Sets  
A New 57:50 Hour Mark

An Army H-13H Bell helicopter, powered by a Lycoming VO-435 engine, set a new endurance flight record of 57 hours and 50 minutes at the National Aircraft Show in Oklahoma City.

Officers in charge of the project said that the Army helicopter could have flown for another 50 hours without landing but explained that the flight operation was scheduled to finish at 4 P.M., Sept. 3, when the three-day air show ended.

Beginning at 6:10 A.M. on Sept. 1, the H-13H helicopter took off from a roped-off area in front of the Will Rogers Field grandstand. At intervals varying from one to six hours, six Army pilots took turns flying the helicopter which never touched the ground. All pilot changes and refueling operations were carried out while the helicopter hovered just above the ground.

Pilot changes were made by one pilot hovering the Army H-13H while his relief climbed into the helicopter cabin from the opposite side. Once the fresh pilot had taken over the dual control equipped helicopter, the other pilot stepped out of the helicopter.

Refueling was easily accomplished by ground crewmen who pumped gasoline into one of the two auxiliary fuel tanks mounted on the sides of the craft. The Lycoming VO-435 is a 260 hp engine derated to 220 hp for the Bell helicopter.

Participating in the record flight were: Capt. Charles A. Walts; CWOs Alva Anderson, Joseph A. Pfluger who made the six-hour long flight, Bert E. Ratliff, and Walter S. Catlow; and WO George W. Cox, Jr.

In setting the new helicopter endurance mark the Army broke its own record of 30 hours, set last June at Fort Rucker, Alabama, by Capt. James E. Bowman and Joseph E. Givens, a civilian test pilot, in an Army H-23C.

Fifty-seven thirty  
and still going strong!



Airshow crowd watches as a crewman refuels the record-breaking YH-13H.



A fresh pilot prepares to take over during the run for the record at the National Aircraft Show.



# From Hats... to Helicopters

From the haberdashery business to the helicopter business in 60 days was the transition made by Capt. Kenneth W. Holzer of Russell, Kan., in the early months of the Korean conflict.

So thorough and efficient is the U. S. Army's pilot training, that Capt. Holzer, who began a rotary wing course in March 1952, graduated May 1 and in August of the same year was flying helicopter missions in Korea as an artillery spotter.

On one of his reconnaissance missions in a Bell H-13 helicopter, he helped restore critical lines of communications by dropping ropes from the air and hauling a torn-away temporary bridge back to shore.

Capt. Holzer is now an Army career pilot, helping to maintain the high standards of rotary wing indoctrination for aviation cadets at Fort Rucker, Ala., the Army's Aviation Training Center.



CAPT. KENNETH W. HOLZER  
"...teaches 'Copter Cadets'"



A combination of the best pilots, equipment and maintenance gives the Army a new serial dimension of mobility and flexibility. Capt. Holzer demonstrates in photo how critically needed supplies can be transported in the shortest possible time by helicopter.

**Helicopters need pilots and mechanics!**

**Apply to Army Aviation for career training!**

**BELL**  
*Aircraft Corp.*

TEXAS DIVISION  
P. O. Box 482  
FT. WORTH TEXAS



*The Chopper is failing, because it's ailing  
All because of you.  
Exceed the "G" and you will see  
How soon the Chopper is thru.*

During the development of a new helicopter—through pre-production, engineering and prototype testing—the helicopter and its components are thoroughly evaluated by Air Force and Army aeronautical and flight test engineers. By the time the helicopter is issued for actual field operations, the engineers have a pretty good idea of just how many flying hours they should be able to get out of each helicopter manufactured. In fact, they agree on various specifications to which it is designed and built. One of the limiting factors of any aircraft is its ability to withstand the effects of acceleration and different multiples of gravitational force. To you and me—as pilots—it can be simply stated as "G" loads.

Each aircraft has a limit maneuver load factor of so many "G's" based upon its de-

number of times this excessive "G" load can be imposed before failure is possible.

Let's take a typical Chopper, for instance, and say that the limit maneuver load factor as stated in the Pilot's Handbook is 2.67 G for a certain gross weight. Theoretically, we could fly around in a 2.67 G turn for the entire life of the *Chopper* and nothing would happen—we'd grow old gracefully. This is true for two very important reasons—(1) The limit maneuver load factor is considerably less than the ultimate or destructive "G" force, and (2) The *Chopper* would wear out thru normal use before this "G" load could cause any damage.


Let's also state that we have a safety factor of 1.5 "Gs". Applying this to the limit maneuver load factor, and the same gross weight, we have an ultimate factor of 4.17G. When an 8 ball happily applies this load, the *airframe* fails and this character's ephemeral existence in this vale of tears abruptly ceases. Now, we have established two limits; one, the limit maneuver factor of 2.67G

that we may pull as often as we like and, two, the ultimate force of 4.17G that we may pull only once. *But, how about the area in between?*

We can safely assume that the limit maneuver load factor is being continually exceeded, seemingly with impunity. Who ever heard of an Army pilot getting into this kind of trouble? It is the pilots that we do not hear about that cause the doubt and concern. It should be noted that there is a definite number of times that we can get away with exceeding the limit maneuver load and the number of times we can *decrease* progressively and drastically as the loads *increase*.

Considerable study and research have been conducted on this problem and although it has not been reduced to an exact figure for tech order mention, we can assume that an airframe with the aforementioned limitations may be overloaded about seven or eight times. After that it possibly may fall.

Each load imposed beyond the maximum allowable limits reduces the life expectancy of that airframe. The objective in expressing and stressing this is to acquaint you with the inherent danger of exceeding the "G" limitation and to point out the very obvious danger in disregarding these overload conditions if they do occur. The insidious aspect of the whole situation is the complete lack of visual evidence after an *overload* condition. Usually it is impossible to determine if an aircraft has been subjected to excessive "G" loads despite thorough routine inspections and it is normal to reschedule it for further flights.



# THE CASE OF THE ERRANT "G"

by Capt. George D. Shonerd

sign gross weight which is stated in the Pilot's Handbook; and if we keep the aircraft within this limitation, we can expect it to last through normal life expectancy. *Incidentally, this is a darn good way to insure reaching retirement age ourselves!* But, if through eagerness, error, accident, or just plain stupidity we exceed these "G" loads, we reduce the life expectancy of the aircraft and perhaps put it and ourselves into immediate, permanent retirement. This last condition is no cause to worry because the lad who is foolish enough to exceed the ultimate strength of the airframe usually winds up a harp-plucking individual, anyway. It is the area between the maximum allowable "G" forces and the ultimate breaking point of the airframe that gives us the greatest concern because if we exceed the allowable limit often enough, we cause an insidious condition which will eventually destroy the aircraft and possibly the warm, unsuspecting souls therein. It is surprising to know the limited



However, the pilot who pulls an overload on our hypothetical *Chopper* after several other lads have done it is in for a rude shock. Whether he intended to exceed the limits or not, the carefully produced mass of stringers, bulkheads, rotor heads, rotor blades, etc., is going to come apart because he has used up the last bit of available life in that airframe and/or components. We can toy with these allowable limits and ultimate limits—it's up to us—and perhaps we can get away with it for awhile, but each time we do, the life of the aircraft is reduced by an unknown amount. Sooner or later the life is used up. Only by using our heads and never exceeding the limit maneuver loads can an aircraft reach its retirement age usefully and gracefully.

This, then, is the story of the "Errant G". It is true of all aircraft, but the one that is most likely to find itself in overloaded conditions is the one with a powered flight control system. With the advent of powered flight controls in Army helicopters it is understandable how limits can be exceeded without really trying or even intending to do so. The pilot does not realize the tremendous potential he has at his command through the use of powered controls.

We, as pilots, must educate ourselves in the use of Handbook Limitations and the ease with which we may overstress the air-



**Capt. George D. Shoner**  
TC Army Avn. Coordinating Off.  
Wright-Patterson AFB, Ohio

craft. We must make an entry in the Form 781 each time the load is exceeded. Write it up; give the other guy a break, that guy may be you!

*As you can guess, it's a hellava mess  
And mighty gory too,  
When a Chopper crashes and burns to ashes  
All because of you.*

## LET'S TALK ABOUT:

# SAFETY

By Lt. Col. James A McCord

The success of any flying mission, regardless of the type of operation being conducted, depends primarily upon the pilot.

An aircraft commander, the pilot has a myriad of heavy responsibilities which comprise a most lengthy and formidable list in their entirety. Such is the extent of these responsibilities that only methodical, deliberate planning and good, sound judgment can insure their thorough and complete discharge.

There are certain *basic* pilot responsibilities, however, that are inherent in the safe performance of *any* flight operation and it is mandatory that *they* be accomplished with systematic thoroughness.

The following, then, represent the minimum in the guarantee of flight safety:

Plan the flight as completely as possible, checking terrain features on the line and/or in the area of flight. Note the facilities for emergency landings, radio facilities and check points. Obtain the fullest weather briefing—do not be satisfied with anything less than the best possible. Secure the latest pertinent maps and check them against the chart in the operations office for changes. Obtain

the latest information from pertinent NOTAMS.

Inspect your qualifications as a pilot with regard to the mission to be flown and the information obtained in your weather briefing. Inspect your aircraft as thoroughly as time and circumstances will permit. Determine that both you and the aircraft are fully qualified and equipped to successfully complete the intended mission. *Know* your own and the aircraft's limitations.

Make the decision as to whether or not you can complete the mission. In the event of any doubt, do *not* be pressed into entering upon the mission solely by virtue of its urgency and/or by the rank and position of those requesting it. Regulations *clearly* and *exactly* define the conditions when you may and may not operate aircraft in consonance with your qualifications as a pilot and the extent of the equipment aboard the aircraft.

Use approved procedures during all phases of the flight. Follow your flight plan exactly as filed *except* in an emergency warranting deviation from the plan. If it becomes necessary to change the flight plan, do so *as soon as possible* by notifying the nearest radio facility. Do not enter IFR conditions without an IFR clearance. In the event you are on a VFR clearance and encounter IFR conditions, do not fly aimlessly about trying to "sneak through." Contact nearest radio

(Continued on Page 34)



Five new projects were undertaken recently by project officers of Fort Rucker's Board Nr 6. Now under evaluation at the CONARC facility are the Lear L-5 (Airliner) Autopilot, the Sun Air 5-RTR High Frequency Radio Set; the Magnavox AN/ARN-43 Radio; the AN/GRN-6 Low Frequency Radio Beacon; and the Sikorsky H-34A Helicopter.

In addition to these new projects, further testing was scheduled on many of the carry-over projects. Although the Bell YH-13H was found suitable for Army use pending recommended modifications, additional flight time will be accumulated on the craft to provide a spare parts requirement evaluation. A separate project on this craft indicated that the YH-13H would be service tested under Arctic conditions following the correction of the unsatisfactory conditions of the model equipped with the winterization kit.

During August, testing of the Hiller H-23C was concluded. The Board recommended that certain modifications be incorporated to make the H-23C a satisfactory reconnaissance helicopter. Cessna's OE-2 is expected to undergo additional testing following its return from the manufacturer. The OE-2 had completed 129 hours of flight testing when it was recalled to the factory on the request of the manufacturer.

The recent coast-to-coast refueling operation involving a de Havilland U-1A and a Vertol H-21C gave the Board the opportunity to test the U-1A's high altitude landing and takeoff capabilities. Maximum weights were in order and the U-1A operated with no apparent difficulties.

The National Aircraft Show at Oklahoma City provided the Board with its first opportunity to begin evaluations of the Hiller YH-32 helicopter. Two test aircraft were received and flown to Will Rogers Field where one took part in the Army portion of the show

The Prestwick Pioneer, a high-lift short field craft from Scotland, is now being informally evaluated at Board Nr 6. Significance: Board officers are interested in studying the various European approaches to the VTOL and STOL problem.



# proving ground!

## Project Reports Board Nr 6, CONARC Fort Rucker, Alabama

while the second was placed on static display. Transition training of Army aviators with varied experience continued on the two Vertol H-21C test craft. Eight pilots are currently receiving this training on the aircraft with total test time on the test vehicles standing at 491 and 574 hrs. respectively.

Several service tests remain "on paper" only, pending the arrival of test equipment from the manufacturers. The Doman HOK-1; the de Lackner "Aerocycle," and the production Bell H-13H helicopter will undergo evaluation upon receipt.

Testing of the Safe Flight Landing Speed Indicator is drawing to a close. Standardization pilots of the MOI School logged approximately 25 hours utilizing the device and it is expected that an additional 10 hours of flight time will complete the test.

Another look will be taken at the McCauley Met-L-Matic Constant Speed Propeller. Low temperature testing at the Climatic Laboratory provided inconclusive results and the Board has recommended that an L-19 equipped with the Met-L-Matic propeller be tested under Arctic conditions at the Arctic Test Branch.

All-American's Universal Ski Alighting Gear for the L-19 underwent testing while in operation from plowed fields. Repeated landings and takeoffs were accomplished successfully and additional testing is expected now that the Board project officer has completed checking out the Arctic Branch test officer on the use of the gear.

The month of September should see the resumption of tests on the De-Icer and Anti-Icing Equipment for L-23 aircraft. The Board now expects that the freezing level and the ice formation will be at an altitude where the L-23B aircraft can keep up with the "water-spraying" tanker aircraft.

In testing metal blades for the Bell H-13 Helicopter, the Board found that the metal main rotor blades have an advantage over the wooden main rotor blades with respect to performance, vibrations, and maintainability. Pending an extension of the blade grip life

(Continued on Page 34)



# Staff Study

## PROBLEM:

a. To determine action necessary to eliminate organizational maintenance without adversely affecting the overall Army Aviation Mission.

## ASSUMPTIONS:

- Most Army flying will continue to be done in daylight.
- Preventive maintenance cannot be performed in flight on present type Army aircraft.
- Development of future Army aircraft will be more complex.
- Current shortage of working stock aircraft will continue to exist.
- Non-MOS training, housekeeping, guard, KP, life guard, grass cutting, rifle practice, etc., will be increased.

## DISCUSSION:

- Increased administrative flight requirements will require Aviation Officers to require assigned aircraft to be flown during daytime and night-time hours.
- Recent development of a Navy aircraft will permit flight maintenance crews to perform 1st and 2nd echelon maintenance repairs while in flight.
- The Army does not contemplate development of a type aircraft that permits in-flight maintenance, due to current weight limitations imposed by mutual Army-Air Force (Key West) agreement.
- Establishment of the first nonstop transcontinental flight by an Army H-21 helicopter (3000 miles) will require Department of Army to re-evaluate present aircraft military characteristics and employment doctrine.
- Implementation of present Department of Defense policy to reduce Army personnel strength 350,000 by 1960 will require specialists to inherit and perform the duties of discharged non-essential personnel.

## CONCLUSION:

- Army aircraft will be flown all day and all night.
- Organizational maintenance cannot be performed in flight on current type Army aircraft.
- No working stock aircraft are currently available for issue.
- Performance of non-MOS duties by aircraft mechanics is considered necessary for the over-all operation and effectiveness of the Army.
- Requirement for aircraft mechanics no longer exists in using organizations.

## RECOMMENDATIONS:

- That an Army aircraft, which will require no maintenance, be developed as soon as possible and issued to Aviation Officers.
- That aircraft mechanics assigned to using organizations be re-trained and re-assigned to essential activities without delay.

## CONCURRENCES:

## THE BACKGROUND

(Dear Editor): Suffice it to say that my experience and assignment with Aircraft Maintenance vary widely—from Aerial Engineer on B-24 bombers to Senior Aircraft Mechanic (and later pilot) with the 26th Inf Div, Mass-NG and a host of active Army units. I'm currently Acft Maint Off, Fourth Army Hq, at Fort Sam.

I have performed, supervised, and conducted many aircraft technical inspections, reviewed hundreds of UER's and accident reports, and talked to many Acft Maint Officers, aircraft mechanics (God Bless 'em!), AOs, Tech Reps, Opns Officers, and sundry other "experts" concerning aircraft maintenance.

After all these years I've come to these conclusions: Aircraft Maintenance Personnel will continue to work unshamed after duty hours; wait for the day when current Tech Orders are rec'd thru "proper channels;" be resented by pilots eager to log 100,000 flying hours before their Category III expires; receive low efficiency ratings because it takes 'em more than 10 minutes to change an engine or an H-19 Main Transmission; and above all, stand ready with the "low-boy" to pickup that aircraft out on a mission with its "periodic" long overdue.

To aircraft maintenance personnel wherever you may be—I personally and humbly dedicate the following STAFF STUDY. To the Extension Course Div, QM School, Ft Lee, Va., where one may enroll in a fine course entitled "Staff Writing" (no kidding, either), I thank thee with all of my heart for without your great teachings, this inspired work would have not been possible.

Yours truly, (Capt.) William Tedesco (Known the Maintenance World-over as "Terrible Ted!")

P.S. Aviation Officers—"Keep 'em Flying!" Maintenance Officers and Mechanics—"Keep fixin' 'em!"

## INBOUND



HONCHO—Col. Frank G. Forrest has been appointed Chief of the Sixth Army Aviation Section. In his new assignment Col. Forrest will head all Army aviation activities of the Sixth Army in eight western states. Prior to reporting to his new assignment, he served as aviation officer, G-3 Section, Hq, CONARC, Ft. Monroe.



## Synopsis:

# Aviation Crossroads

FORT BENNING, GA.—From a small grassy clearing to the "Aviation Crossroads of the Army" is quite a jump in 25 years. Yet, it was just 25 years ago in August that the name "Lawson" was officially bestowed on the airstrip serving Fort Benning and the Infantry School. During its first 13 years of existence, the field had no official name.

It was on August 7, 1931 that the airstrip was designated "Lawson Field" in memory of Captain Walter R. Lawson, a native Georgian and WW I hero who was killed in an airplane crash in 1923 at McCook Field in Dayton, Ohio.

### Original Airfield

One of the original airfields in the South, the airstrip was initially used for observation balloons for the Infantry School in 1918. In 1931, with the assignment of Flight B, 16th Observation Squadron, the field finally had its own planes—three Douglas O-25's. During WW II the field was designated a Troop Carrier Command Base with thousands of TCC and paratroop personnel being trained for duty.

### Face-Lifting

A \$400,000 face-lifting was given to the field in 1950 to support heavier planes. The following year the field's runways were lengthened to accommodate jet aircraft.

With the assumption of operational control by the Army in February of '55, Lawson AAF welcomed a host of Army aviation units—the 4th Hcptr Co, the 152d Fld Maint Team, the Lawson Army Airfield Det, the 37th Med Det (Hcptr Amb), and the AF Det Nr 6, 25th Weather Sqdn. Last month the command was strengthened by the addition of the 1st Army Avn Co (FW-TT). The 3rd Div Combat Avn Co and the Abn School also use the facilities of the field along with many transient aircraft of all of the Armed Forces.

From its small beginning in 1918 as a grassy landing strip for Ft. Benning's lighter-than-air ships to its extensive up-to-date training set up of today, Lawson Army Air Field has and will continue to play a major role in the Army and Air Force training programs.



▲ 1933 — 1955 ▼



## Roundup

**PERSONALS**—Capt. Billy L. O'Neal, OIC of Lawson's Instrument Flying Course (the only independent I-School outside of ARMAV), graduated Class Nr 3 in August. New cloud busters include: Cpts Rowland Cox & James Guion and Lts Donald Phillips, Daniel Knotts, William Robinson, and John G. Harris (Don Phillips was the 1-man par excellence.) . . . Receiving "Winged S" awards from Sikorsky for May medical evacuation missions were Capt. Garmon Aure; WOs James Ervin, Paul Colon, Kurt Cannon, Milton James, & Raymond Kline; and Sp-3s Joseph Gaynor & Glenn Boykin . . . The 37th Med Det (Hcptr Amb) rec'd the first two of a group of H-19 choppers during August. CO Capt Glen W. Jones looks for unit effectiveness to improve with the assignment of the authorized aircraft. (Capt.) Jones and Lt. Dirck

Brendlinger (Unit MaintO) did the Bridgeport-Benning piloting . . . Intensive training, operational know-how, and determination paid off for two crews. Flying a night tactical mission for TIS, CWO Gordon E. Fishel & co-pilot CWO Walter J. Carroll successfully autorotated onto an inactive at Lawson after the throttle linkage on their H-34 broke. Two miles out, Fishel calmly radioed the control tower, declared an emergency, and then brought her down. A second near mishap was prevented by Lts Malcolm Holmes and his co-pilot, Junius Jones. Practicing touch and go's in a Beaver the pilots experienced engine failure on downwind. In-flight emergency procedures failing, the pilot declared an emergency and dead-sticked to an inactive. A "well done" to the four.



## IP's NOW

First course of Instructor Pilots for the H-34A to be conducted outside the continental U.S., (18th Transportation Company, Helicopter, APO 29, New York, New York). **FRONT ROW**, left to right, Capt. L. A. Hamner, WO-W1 F. D. Murray, CWO-W2 W. L. Ruf, WO-W1 F. Burk, CWO-W2 J. W. Bruce, Lt. D. O. Boyd, CWO-W2 Woodward. **BACK ROW**, left to right, Maj. R. W. Duffy, Capt R. F. Cornell, CWO-W2 E. O. Ferguson, WO-W1 R. W. Parsons, CWO-W2 J. M. Kemp, 1st Lt. J. R. Dunham, WO-W1 J. E. Koenne. The class boasts a second distinction—it graduated former German Luftwaffe fighter pilot, WO-W1 Friedrich Burk, now a helicopter pilot with the 18th.



departed Bisbee-Douglas International Airport in Arizona in mid-Sept. for Ft. Benning, its new permanent station.

## FREE RIDE

**FT. HUACHUCA (Delayed)**—A Mexican burro, the 1st Army Aviation Company's mascot, assisted by Lt. William D. Melton, is "tried for size" aboard one of the company's twenty-one Offers prior to its trip to Ft. Benning, Ga. The burro, adopted by the 1st in Arizona, will serve as a continual reminder of the unit's recent rescue efforts in the Grand Canyon disaster. As a pack animal, the mascot also symbolizes the capability of a fixed-wing Aviation Company. Maj. Jerome B. Feldt commands the first Offer Company designed to carry cargo and troops within the combat zone. The unit

## NEW COURSE

**SPEARHEADING**—First group of students to complete the 7th Army Avn Trng Center's Operations NCO Course are shown at Stuttgart, Germany. **BACK ROW**, (L. to R.) Sp-2 E. O. Grunther, Pfc W. D. Livingston, Sp-3 I. L. Miller, & Sfc L. E. Rains. **FRONT** (L. to R.); Pfc's L. L. L'Hyne & F. W. Frago; Sgt L. E. Adcock; Sfc W. A. Hood; Pvt R. C. Kelly; & Sfc J. T. Morrison. Under the direction of Maj. Robert G. Culbertson, the students pursued subjects vital to the operational requirements of small Army aviation sections and the operation of Army airfields. Flight regs, publications, records, weather obsn techniques, flight plans, and communication equipment procedures were stressed.



## CONVERTS

**THEY ARE H-21 PILOTS NOW**—Nine members of H-21 Helicopter Pilot Transition Training Class Six gather in front of the big helicopter before going on to graduation exercises in late August. During the course of their training the students learned to fly and use the largest "twin beater" chopper used by the Army today. In the front row are: Maj. Jack R. Forbes, 52nd Transportation Battalion, Ft. Riley; Chief Warrant Officer Clarence R. McVay, 8th Transportation Company, Fort Bragg, N.C.; CWO Charles J. Dye, 8th Co.; and CWO Harold R. Ritenour, 8th Co. In the rear are: 1st Lt. Raymond E. Moore, 8th Co.; CWO Bennie B. Potts, 33rd Helicopter Company, Ft Riley; Major Gerhard Granz, German Army; WOJG Donald R. Joyce, 8th Co.; and CWO Ian Irvine of the 8th Transportation Company.



mond E. Moore, 8th Co.; CWO Bennie B. Potts, 33rd Helicopter Company, Ft Riley; Major Gerhard Granz, German Army; WOJG Donald R. Joyce, 8th Co.; and CWO Ian Irvine of the 8th Transportation Company.



# Pro's Say

Informal voluntary reports  
giving you the "AA" picture  
in the line outfits

## Shorthanded

FT. RILEY, KAN.—The Second Army Avn Co now has a total of 19 *Otters*, at present. A number of these were damaged by winds on the nights of 11-12 July but we've since put them all back into service. The *Otters* are fine aircraft and maintenance problems have been kept at a minimum, except in those instances where we just do not have sufficient mechanics. For that reason, it's just as well we do not have more aircraft flying. We're looking keenly for re-enlistments to this outfit.

We sent 5 *Otters*, 10 pilots, and 5 crew chiefs to the recent National Aircraft Show in Oklahoma City. With a big bold ARMY painted on the side of each craft in compliance with a new requirement, we expect this show to bring Army aviation to the front and let the general public know about us.

*Otters* operated in the show as aerial resupply vehicles, and were also called upon to demonstrate shortfield techniques. We hope to make the L-19 lads perk up and practice their techniques. We were called upon by the Post to transport personnel on long trips, calling for valuable experience in gross loaded aircraft, 8,000 lbs. now being our maximum. By cutting down on the fuel load we hope to bring our gross weight capabilities up considerably.

Pilot transition has been proceeding in good order here and we are succeeding in getting a pilot checked out within a week after his arrival. With 35 pilots on the books now, we feel that we're getting the best pilots in the business.

The Third Aviation Company is beginning to perk up and no doubt they will be submitting separate reports shortly. With two *Otter* Companies on Post at the same time, the competition between the two units should be quite keen.

YC, (Capt.) Edward P. Valcer

PERSONALS—Since our last report, 14 more pilots reported for duty, including Capt. Charles A. Brixius, Jesse O. Giddens, Clifford P. Stewart, & Joseph

Kelly; and Lts. Paul I. Smith, Donald H. Greiner, Floyd C. Gover, Willis E. Smith, Donald M. Kinkle, Orlie J. Underwood, Richard P. Murphy, Jack Graham, Arnold Culp, and Donald A. Smith; the last named coming to us already Otter-qualified. Capt. Stan Blunck reported in and then continued on his leave.

## Sixteen Tons

FT. EUSTIS, VA.—(TRADCOM)—The Aeronautical Research Branch has let contracts with industry to design, construct and test Verical Take Off and Landing (VTOL) and Short Take Off and Landing (STOL) type aircraft to collect and evaluate engineering data relative to stability and phenomena peculiar to control of this type of aircraft. The types contracted for are vectored slipstream and ducted propeller designs. These contracts are being supervised by Joe McDonald and Hal Johnson and are scheduled for completion by FY 1958.

Design study contracts supervised by Bob Graham have also been let with 5 helicopter manufacturers for the design of a flying crane type aircraft. This aircraft to be capable of transporting 16 ton loads for relatively short distances, 10 to 100 miles.

As you know, Major John Denhart presented a paper entitled, "United States Army Experiences in Operations from Unprepared Fields" to the flight test panel and General Assembly of the Advisory Group for Aeronautical Research and Development (AGARD) in Brussels, Belgium. AGARD is a control and coordinating agency for the NATO nations. The assembly meeting was held from 25 August thru 1 Sept.

Major Denhart then traveled hither and yon for approximately 2 weeks visiting European aircraft manufacturers to ascertain developments of VTOL and STOL-type aircraft; he also visited military and civilian helicopter operating units to gather information on operational maintenance procedures, costs, and problem areas. Another stop on his itinerary was the Farnborough air show on 3 and 4 Sep 56.

YC, (Capt.) H. W. Huntzinger

PERSONALS—Maj. Thomas Hall and Capt. Paul Thornton departed on PCS-assignments to Hiller and Vertol, respectively . . . Maj. Sigmund Lenic visited EUCOM in August to brief Seventh Army personnel on the maintenance van user tests and to establish liaison with using orgns . . . Maj. & Mrs. Hammock have a fine new pair of aviators, Mark Dane (8 lb, 4 1/4 oz) and Michael Lane (7 lb, 9 1/2 oz) . . . That's right—same ATA.

## Don't Hibernete!

We do not have access to TAGO files to determine where and when you will PCS or go TDY, nor can your issues be forwarded under Second Class Postal Regulations without correct notification. We'll deliver *The Twelve* if you'll send us those Change of Address cards. Dunninger can do it without 'em; we can't.



## No Siesta

STOCKTON, CALIF.—The *WORD* has arrived. Within the month nine aviators and six aircraft will leave for Monterrey, Mexico, for a tour among the *serape set*. Commanding the detachment will be *Capt.* William F. Gurley. Also winging south will be 1st Lts. James Allen, Don Coggins, Chuck Sigler, Bobby Bogard, and Aaron Lilley.

The mission of the detachment will be to provide aviation support for the Inter American Geodetic Survey operations in northern Mexico. Control of the detachment will be assumed by the 937th Engr Avn Co sometime in the near future.

Aircraft selected for the mission will include two U-1s, two H-19s, two H-23s, and two L-19s, the latter already in Mexico. Heading the enlisted maintenance detachment will be SFC Lyman Barber, Sgt. Roy E. Brown, and Sgt. Jewel B. Williams.

Already operating in northern Mexico are 1st Lts. Jerry Wayt and Paul Todd. The two men are currently flying survey recon missions in two L-19s. Assisting them are Crew Engineers Andrew J. Bringuel and Pvt. Paul A. King.

### VIP Mission

One of the most enjoyable missions imaginable to any AA unit anywhere fell to the lot of the 521st a few weeks ago. The Air Force requested two H-19s to transport a group of high ranking VIPs on a tour of vital defense installations in the San Francisco Bay area. Needless to say, the 521st was delighted to oblige them!

**TOUCH DOWN**—Debarbing from a 521st Engineer Company H-19 are some of the top-level dignitaries who recently toured defense installations in the S.F. area: (l. to r.) Brig. Gen. Hollingsworth F. Gregory (USAF); Gen. James H. Doolittle (USAF, Ret.); Col. R. A. Bollweg (USAF); and Maj. Gen. James McCormack (USAF, Ret.). Pilot of the aircraft is Capt. Story C. Stevens (521st EAC).



**OBSERVERS**—Watching a 521st Engineer Company helicopter landing at the Hiller Helicopter plant in Palo Alto, Calif., are (l. to r.) Bryce Wilson, Vice President, Hiller Helicopters; and Lt. Gen. D. L. Putt, Dep C/S for R & D, USAF. Lt. Loial B. Haas (521st EAC) is at the controls of the H-19 while Capt. Dusty Rhodes may be seen filling out the Form 781-1 in the background.

Included in the group were some of the brightest luminaries in the AF firmament. They were: Mr. R. E. Horner, Acting Ass't. Sec'y of the Air Force; General James Doolittle, Chairman of the AF Scientific Advisory Board; Dr. C. D. Perkins, AF Chief Scientist; and Lt. Gen. D. L. Putt, (a member of the AF group that recently returned from a firsthand look at Soviet airpower in Russia) Dep C/S for R & D.

The other members of the delegation were Maj. Gen. James McCormack (Ret.), Special Assistant to the President, Massachusetts Institute of Technology; Brig. Gen. Hollingsworth F. Gregory, Commander, Office of Scientific Research; Col. R. A. Bollweg, Executive Officer to Ass't. Sec'y. AF; and Col. J. P. Taylor, Executive Officer to Chief Scientist, AF.

Piloting the H-19s were Capt. Carl E. "Dusty" Rhodes and Captain Story Stevens. Co-pilots for the trip were Capt. Frank R. Wilson and 1st Lt. Loial B. Haas.

### The New Look

With a weather eye cocked toward large scale survey operations in the future, a re-organization of the 521st was effected during August. Maj. John L. Briggs was designated Company Commander as well as Group Aviation Officer.

Other re-assignments were: Capt. Mike Lord, ExO and Ass't. Gp AO; Lt. John Weinhardt, AdminO; Capt. James E. Kennedy, Opns & Trng; Capt. Sam Boyer, MaintO; Lt. Ray Carson, CommO; and Lt. Chauncey Veatch, SuppO.

The lettered "Flights" were re-designated the First, Second, and Third Platoons. Commanding the platoons are Capt. William F.



Gurley, 1st Plat; Capt. Chris Erhardt, 2nd Plat; and Maj. Leo H. Bellieu, 3rd Plat. In charge of the medical detachment is Capt. Robert L. P. Edwards, Flight Surgeon.

YC, (Lt.) William F. Gabella  
**PERSONALS**—TDYers here are Lt Bill Geppert (Yakima Firing Range); Lt Bill Kelly & Sp-3 Dennis Tomjock (Teheran, Iran); Lt Gary Heffner (Torrance, Calif); and Capt. Mike Lord (Twin-Fan School, Rucker) . . . Felicitations are in order for Seamon Molkenbuhr for his promotion to Captain; to Frank R. Wilson (Captain); and to Robert Bishop (to 1st Lt.).

## We Got Traffic!

FT. RILEY, KAN.—Time does pass and quite a bit of time has flitted by since any report on this unit has been submitted to the readers. Along with the passing of time, changes in personnel and organization have occurred—must be an old Army custom.

The 71st Trans Bn (Hcptr) and the 0071st SU Aug Unit comprise the elements of the AAUTC Hq here at Riley. The mission of the Army Aviation Unit Training Command is to activate and conduct unit training of transport aviation units and to conduct pilot transition training of transportation personnel in both the H-21 and U-1A *Otter*. The 52nd Trans Bn (Hcptr) is under the AAUTC to supervise the training programs of units equipped with these aircraft.

At present one *Otter* company and one H-21 company are in training and orders have been published activating the 3rd Aviation Company (*Otter*).

A composite group of 37 personnel from AAUTC units rehearsed at Sill for their later part in the Army portion of the National Aircraft Show. They took six H-21s and five *Otters* as their equipment.

We here in AAUTC recently said goodbye to two of the pioneers of this unit: our C.O., Lt Col Gerald H. Shea (who PCS'd to the Pentagon in June) and Maj. Keith Bauer, another pioneer, who moved down the street to assume command of the 33rd Hcptr Co. while Lt Col Albert Newton reported in July and took command of the AAUTC.

## One of Our Simple Problems

This all-too-true ditty has made the rounds but in case you missed it, here's a repeat. The views presented in the article are those of the author and are not necessarily those of the Texas Division, Bell Aircraft Corporation, whose 6-cent stamp airmailed it our way and with whose compliments we bring it to you:

Design a craft say the Army today -  
 It must be built in such a way  
 That any new pilot can fly hands-off  
 Make the hardest landings still feel soft  
 Make up for the brains the mechanic lacks  
 So the boys can repair it with carpet tacks.



CLOSE LOOK—First official use of the new Miller heliport saw Maj. Gen. Paul F. Yount, Army Chief of Transportation, being flown in by helicopter. E. T. Bolton (center) greets Gen. Yount as Dick Peck (pilot) and Capt. Boyd Clearwaters (left) and Bryce Wilson, Customer Relations Manager, look on.

Will try to give a rundown on our transition section and its personnel in the next submission of copy from this sector.

YC, (Maj.) Pitts B. Dickens

## Pitch Pullers

FT. DEVENS, MASS.—After three and a half months TDY at Bisbee-Douglas International Airport the 93rd Trans Co (Lt Hcptr) pulled pitch in mid-September and completed its PCS-move to Ft. Devens, its new home. Capt. Morgan H. Mathews, CO, took the first flight and set up the company at its new station while Capt. Walter E. Spriggs, ExO, stayed behind, cleared the post, and brought the last flight to Devens in late September.

The 93rd arrived at Devens minus two of its key personnel, Lt. Henry B. Grudberg and CWO Harold L. Deal. Lt. Grudberg holds an aeronautical engineering degree and is exceptionally well qualified for his new assignment at TRADCOM, Ft. Eustis. CWO Deal, one of the old-timers in the company,

It must be safe in snow or rain  
 And able to stand a hurricane.  
 It must be fast; yet land on a spot;  
 Have a bunk for the pilot; for coffee, a pot.  
 Fast and light and comfortable too  
 With a cruising range to Timbuktu.  
 Yet this can be no common hack,  
 But must carry the load of a 10-ton Mack.  
 It must take off straight up from the Pentagon  
 Court,  
 And land straight down inside any fort  
 And one last word the Colonels say,  
 "It's gotta be finished by yesterday."  
 On second thought, there's one thing more,  
 "They'll have to sell at the ten-cent store."

—Anonymous





**GORDON GOES 100%**—The Aviation Branch of the Southeastern Signal School at Fort Gordon, Georgia airmails: "We are 100% in subscription participation. Here's the Mass Mug Shot." **FRONT ROW**, left to right, 2/Lts. Thomas Osif, Bernard Schramm, David Runkel, Joe Morgan, and Bernard Elliott. **REAR ROW**, standing 1/Lts Floyd Pattison and George Stumpf; Major Claud Short; 1/Lts Waniford Cantrell and Darwin Valz. On TDY and missing from the photo are Capts Clifford Shaffer and Louis Galambos and Lts. Raymond L. Bouas and Francis J. Kirsch who had TDY or other duties at the time of the photo.

will be joining his friends in AFPE. We wish both the best of luck and success in their new assignments.

The 93d acquired a unique addition while in Arizona—Duke, a small Mexican burro, 6 months old and the official mascot of the company. So far, Duke has logged 02:40 on his Form 759 prior to the East to West hop. Though he is off to a good start on his flying career, his records show one (1) day AWOL since his entry into service on 21 July 1956. Here's hoping he takes to good old New England. PIO, 93rd Trans Co.

*(Ed. Since he flies, goes AWOL, is carried on the books, and has made the PCS, we expect his paw print to adorn a future subscription list.)*

## Narrow Fairway

**FT. RILEY, KAN.**—A fast thinking Fort Riley helicopter landed his H-23 aircraft on the Ft. Riley golf course after an engine failure. The aviator, CWO Harold R. Bunnell, and his passenger, Lt. Joice Shartzter, were uninjured when the light helicopter skidded to a safe landing on the approach to the seventh tee.

The two aviators were on a routine training flight from Marshall Army Airfield when a complete engine failure occurred during a turn. Bunnell's fast action led to a safe landing in an area approximately 100 feet

wide with trees on both sides. The width of the rotor blades is 45 feet. There was no damage to the aircraft.

**PERSONALS**—The 1st Inf Div Avn Section was kept quite busy with "Operation Alert." Although no actual flights were performed, two special staffs were organized for the operation and carried out the planning phase. The Ft. Riley Staff was headed by the DAO, Capt. Barton F. Richards, while the second staff was directed by Capt. James R. Watson. All unit AOs were required to load the TO&E equipment of their sections on vehicles at various times during the alert in preparation for a move by the parent organization . . . The Div Avn Sect enjoyed a rare privilege when Maj. Henry Schroeder (Ret.) recently paid a visit to the Marshall Army Airfield mess hall. Maj. Schroeder is the oldest living Medal of Honor winner of the 16th Inf Regt of the 1st Inf. Following a tour of one of the hangars and an orientation of Army aviation, the Major attended a parade review in his honor. Schroeder presented his Medal of Honor to the 16th Inf Regt at this review . . . Lts. Jay D. Rossman and Garland S. Reese, July graduates of ARMAV, recently joined the 1st . . .

YC, (Lt.) James H. Burress

## In Dutch

**DEELEN, HOLLAND**—The address line throw you for a moment? It's a Dutch AFB in the town of Arnhem. I'm here as an IP on the H-23 and also to advise on just about everything we have in Army aviation. I know a great many people will get a yak out of both of these statements but the fact remains—here I am. I'm working under a MAAG Hq in the Hague for a period of 90 days (or so I was told).

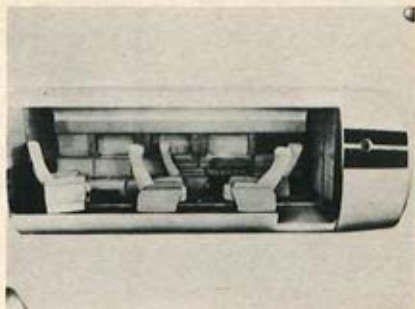
The Dutch have L-18s, L-21s, and H-23s and are soon to get *Beavers*. Their missions



**RE-OPENED**—First plane to touch ground at the newly reopened airstrip at the Signal Corps Tng Cen at Ft. Gordon, Ga. comes in for a landing. The field was closed for 6 mo. pending removal of high tension wires. The L-19 landing is with the Aviation Branch, TSESS.



**FULLY-EQUIPPED**—Shown at the right is the custom interior of Cessna's new 4-engine, pressurized Model 620. Cessna expects 620-production to start in early '58. Maximum speed of the 14,285-lb. gross weight craft is 282 mph at 15,000 feet, with cruising speed (2600 rpm at 12,500 feet) at 260 mph. An all-weather plane, the 620 has five sleeperette seats as standard equipment. The executive transport will cost approximately \$375,000.



are flown for the Army by Dutch Air Force pilots (this should create a wince or two), to say that it gets confusing sometimes is putting it mildly. Then too, our own MAAG Hqs has had difficulty determining who is to do what for whom . . . (This last utterance would do justice to one of "AA's" more fluent writers from the Canal Zone—one Paul Hopkins. Just a word about Paul; don't believe half of what he tells you. Greetings, Paul, how goes it?)

#### Few Drawbacks

Well—just a brief rundown on Holland. This is the worst summer they've experienced in over 150 years and I just happened to be here. The country's very beautiful; the people very friendly and courteous; prices are inexpensive (dollarwise); the food is good. In fact, the only drawback to a tour here is that they don't have an empty house in the whole country. This, of course, keeps my family in Stuttgart. Oh well—maybe next year.

The Dutch pilots are good. I don't mean good for the amount of time they have in choppers for some of them are better than our pilots who have more time. Practically all of them are jet-qualified but are too old to fly jets by Dutch standards so they now fly nothing but one of those safe, slow-moving helicopters. I've always thought jets would be easier to fly than helicopters. Many of them are graduates of Jackson, Miss., and Bryant, Texas, from the Big War days and now have four to eight thousand hours, fixed-wing, that is.

Most of their problems are the same ones we had back in 1942 (and some of which we still have.) Lack of trained personnel, equipment, and the like. We've just gained authorization to purchase TCP (after two years without it) but are still not permitted to land a chopper any place but at an airfield. That will be the next mission. Hope the gang at Stuttgart gets ambition and sends in a line. You have my concurrence to blue-pencil this one at will.

YC, (Capt.) H. Edward Ziegler

## Hard to Top

On August 20th, the Army Aviation Branch, Range Services Division, of the White Sands Proving Ground was awarded a Certificate of Merit for Safety by the Chief of Ordnance. The presentation—given for performing 5,000 flying hours without accident—was made by Maj. Gen. W. W. Laidlaw, Commanding General of the New Mexico installation.

Seldom is an Army Aviation unit based at an Air Force establishment. The only Army Aviation unit of its kind in existence, the primary mission of the White Sands unit is to afford aerial spotting and recovery for the entire missile program.

Let's look at a typical recovery flight undertaken by an AA at White Sands: Prior to takeoff, the pilot is briefed on weather and receives a *missile-shoot schedule* which lists all WSPG and HADC (Holloman Air



**UNDEWAY**—Ground area for the new Cessna production flight hangar and adjoining ops building is now being cleared . . . The \$10,000,000 expansion program undertaken by the Wichita, Kan., firm includes a 50,000 square foot flight hangar to be erected during the first phase of construction.



**TOP MAN**—Maj. James O. Townsend, ExecO of the Avn Sect., Hq. 7th Army, congratulates Pfc Lee L. Lyhne, honor graduate at the initial Operations NCO Course at Stuttgart, Germany. Maj. Robert G. Culbertson, Course Director, looks on.



**COMIN' OR GOIN'**—Interesting photo of an 8th Transportation Company H-21 shows the Vertol craft poised on its main landing gear prior to its landing roll at Simmons Army Airfield, Ft. Bragg.

### 100% CLUB

The following units currently support "AA" 100%

#### TRADCOM

Avn Branch, Fort Gordon  
 Trans Arctic Gp Avn Det  
 Ohio-NG, Avn Maintenance  
 Hq, 1st Army Avn Section  
 1st Inf Div Avn Section  
 2nd Army Avn Co (FW-TT)  
 3rd Stu Enl Co (T-School)  
 3rd Signal Bn (Corps)  
 Hq, 4th Army Avn Section  
 8th Trans Co (Lt Hcptr)  
 AMOC Nr 12  
 16th Signal Battalion  
 39th Signal Battalion  
 Hq Co, 41st Div, Wash-NG  
 52nd AAA Brig Avn Section  
 64th Trans Co (Lt Hcptr)  
 591st Trans Company

Devel Cen) shoot times,, the launching area, and the general impact area for the missile he is expected to recover.

After takeoff, the pilot flies to the general impact area, waiting well to one side of that area. With the message, "Missile away," by Missile Control, he watches the general impact area closely. If the AA or his observer spots the impact, contact is made by radio with a ground recovery party which he will then "talk" to the impact point. Should the point of impact not be spotted, the pilot requests a plot by radio and the plot is then used as a guide in continuing the search.

Often when the pilot finds the impact, he must land as close as possible to the impact to make identification. This, of course, means that he may have to land in the middle of the desert, on any type of road, or on any space large enough to assure a safe landing and takeoff. It also means that considerable low flying must be accomplished to facilitate identification.

A the time of the award, the unit had amassed an additional 3,500 hours of safe flying bringing its total to close to the 9,000 hour mark.

Officers and men of the unit were unanimous in giving much of the credit for their excellent to others, praising the "good flying safety" education program conducted by Lt. John J. Miller, the unit Flying Safety Officer, and Lt. Henry J. Dotzlaf, the unit's Operations Officer.

Good maintenance was regarded as a major factor in establishing the record. Under the direction of M/Sgt Leland J. Bennett, the maintenance tally showed a complete absence of engine failures since the organization of the unit.

**PERSONALS:** Outgoing chief of the branch, Lt Glenn Bradley, was presented with a Certificate of Achievement during the same ceremony; he's bound for EUCOM-duty. Looking forward to chopper-qualification at ARMAV are Lts Herman Orrell, III, Gale V. Smith, Henry Dotzlaf, and John J. Miller. An "Early-Bird" Warrant Officer—having graduated in Hcptr Class 3—CWO Ralph Fitch also reports to Rucker for an instructor tour . . . Present for duty at Holloman and always looking for letters from far-flung friends are: Lts A. D. Bell, J. B. Holden, A. G. Hyden, A. H. LaForce, D. H. McDonald, R. Moore, Jr., R. W. Siegert, Jr., J. C. Soupene, Jr., B. L. Story and R. H. Leavitt. Write 'em!

**SYRACUSE, N.Y.**—An Army-NG H-13E helicopter provided the unique "aerial-delivery" of news copy from the State Fair Grounds to the Univ. of Syracuse campus where the *Empire State Fair News* was published. The NG project officer in charge of NG exhibits at the Fair arranged for Lt. Lawrence Corser to provide the service. In appreciation, the widely-read *News* gave extensive editorial and pictorial coverage to the NG participation at the Fair.

★ Notam to Maintenance Officers: "Ulcers come as a result of mountain-climbing over molehills."



## D-DAY PARTICIPATION . . .

(Dear Editor:) Concerning D-Day L-4 participation, I'd suggest you contact some of the former 29th Div L-Pilots for they should be able to answer the question asked . . . When we (the 35th Div) moved in on the left flank of the 29th on D-30 the 29th people told us about adjusting Navy fire on the morning of D-Day and Artillery fire in the afternoon. Having lost 7 of their aircraft in the Channel crossing, they performed these missions with the three remaining L-4s they had been able to get ashore from an LST.

It was probably due to this heavy loss of aircraft that later L-4s were flown across the Channel. Our EM crossed on the 5th of July '44 and the pilots flew across the next day. We then got together with the men of the 29th. Sincerely,

Leo H. Free  
M/Sgt, USA  
Sgt Adv for AA, Iowa-NG

## . . . AND MORE

(Dear Editor:) In the July issue is a letter to the editor from "Palo Alto" asking about an artillery mission on D-Day in Normandy in 1944.

While I cannot give you a positive reply, perhaps I can give some observations and clues if someone is interested enough to pursue them further.

I was present for duty with the 29th Inf Div in Normandy on D-Day as C.O. of the 110th FA Bn in support of the 115th Inf Regt. Two preceding FA Bns of the Division, the 58th Armd (Atchd) & the 100th FA, had met disasters & the guns of the 110th hadn't landed. However, taking the 110th FA's fresh liaison & forward observer parties & the few guns left from the preceding battalions, we began to function as the 115th's artillery support near St. Laurent-sur-mer, about a mile inland. Late on the afternoon of D-Day, the 32d FA Bn of the 1st Div on our immediate left (east) moved into position near us, approximately 200 yds. To my amazement a short while later—unless my memory is playing tricks on me—an L-4 took off from a field next to their 105 mm howitzers.

Again, if my memory is correct, he went up several times & the Bn Cmdr of the 32d informed me by lateral telephone line that they were registering his battalion & firing missions. The L-4s had been brought in on 6 x 6 trucks (wings detached and loaded lengthwise). They had been brought in with the battalion, re-assembled in short order, and had started to work.

My own planes—also mounted on trucks—didn't land until D plus 1 (late June 7th) and fired their first missions on D plus 2.

A check of the histories of the 1st Inf Div., its artillery, or the history of the of-

# A Many Sided Thing

## Letters to the Editor

Letters from all sources are welcomed. All letters for publication must bear the signature of the writer. The writer's name will be withheld upon his personal request.

ficial "after action" report of the 32d FA Bn would throw light on all of this information.

Of course, it is possible that this flying may have taken place on the morning of June 7th (D plus 1) for I must admit that time gets jumbled in such situations. However, I believe the air missions took place on D-Day. Best wishes!

John P. Cooper, Jr.  
Brigadier General, Md-N.G.  
Cmdg, 29th Division Artillery

## OLD STUFF

(Dear Editor:) We hate to take the wind out of anybody's sails (such as the 7438th Avn Det at Fort Kobbe, Canal Zone) but we of the California National Guard have had a link trainer operating with both Omni and ADF since last January. However, I must admit that ours isn't painted for ready recognition in case we crash and burn.

Sincerely, (Lt.) J. Bruce Forster

## OVERSIGHT?

(Dear Editor:) Are we—the crewmen in Army aviation—a different breed? Why aren't we given distinctive wings as ground crew members? I have served amidst flight sections, both light and heavy, of six different nations and all—except U.S. Army aviation—have distinctive badges for the EM of their sections.

When we issued the Korean Army their first L-4s in July of '48 their EM crewmen were issued Mechanics Wings and this step was taken while the L-4s were still being assembled under the supervision of the 7th Div Air Section at Seoul Army Air Base.

Their line chief at that time was Pak Yong Soo. In '54 while in the U.S. X Corps Avn Office we assumed the job of organizing the First ROK Army Hq. I met Pak Yong Soo, then line chief of that section, and he asked me why the U.S. still didn't is-



# A Many-Sided Thing

## Letters to the Editor

sue crewmen's wings. Six years later I was still unable to give him an answer.

I am in my 14th year of Army Aircraft Maintenance. I've seen lots of changes, some good and some not so good. I think the top people in this field are not alleviating their maintenance problems when they by-pass distinctive insignia for EM Maintenance Personnel.

Leo H. Free  
M/Sgt, U.S. Army  
Sgt Adv for AA, Iowa-NG

## SHORT SNORTERS

(Dear Editor:) Just a word about a unique organization formed by the AAs here at Holloman AFB, N. Mex. We've undertaken the activation of an *Army Aviation Short Snorter Club*. The club is a novel one and shows a growing and active membership. We would like to enlist your aid in bringing *The Club* to the attention of Army aviators. Please invite the readers to send for their *starter bill* by writing the Army Aviation Branch, Det 3, 9393 TU, Holloman AFB, N. Mex. There is absolutely *no* fee for a starter bill.

Sincerely, (Lt.) John J. Miller  
(Ed. A copy of the By-Laws of *The Club* appears in the adjoining column. What have you got to lose?)

## INSIGNIA

(Dear Editor:) Enclosed is a copy of the recently approved insignia of the 8th Transportation Company (Lt. Hcptr). It is done in five colors and is made up in embroidered patches and decals. Please ask all former members of the 580th/8th Trans Co who desire this insignia to write to me for information. Thanx.

WO Don Joyce, 8th TC, Ft. Bragg  
(Ed. A replica of the new insignia appears below. Just the thing for that tear in your insignia quilt, Mama.)



## BY-LAWS

### Army Aviation Short Snorter Club

Let it be known that on this 20th day of August, in the year of our Lord 1956, that the Army Aviation Short Snorter Club was formed.

Membership in the AASSC will be limited to Army Aviators.

The parent organization of the AASSC will be located at the following address: Army Aviation Branch, Holloman Air Force Base, New Mexico.

Army Aviators desiring to join the AASSC will write to the parent organization at the above address and receive their Short Snorter Starter bill.

#### Starting of a Short Snorter

(1) To start his short snorter, a member will take his short snorter starter bill and attach a U.S. dollar bill. This will constitute a short snorter.

(2) A short snorter will be enlarged by addition of other bills from a foreign country that the member has visited.

(3) The member will have members of his unit sign his short snorter.

The Short Snorter must be carried on one's person at all times to be able to present the Short Snorter upon call from another member of the club. If a member is called upon to present his Short Snorter in a bar of any type and is unable to do so, he will be required to buy drinks for all members of the AASSC present at the bar at that time.

Members of the AASSC going to a new unit will let it be known that they are a member of the AASSC. If an AASSC is not organized in that unit, he will let it be known of the address of the parent organization.

SCHWAEBISCH HALL, GERMANY—A quickie to let the readers know that the Post Engineers are installing a Radio Beacon and a Light Beacon on our field. Our four Artillery AAs look forward to its completion.

YC, (Lt.) John M. Weaver

★ Heard at Merle's weekly bridge table: "She's on a banana and cocoanut diet, Libby. Hasn't lost a pound but can she climb trees!"

★ The cocktail party was going full blast, when the Aviation Officer's small son crept down the stairs and tugged at his father's sleeve: "Daddy," said the confused youngster, "haven't we had this party before?"



## A Fair Shake

(Dear Editor:) Did you know that if you are out on a flight plan and are lost that Air-Sea Rescue starts a search if you don't land at your destination an hour after your ETA? . . . We're sure you do.

But—do you know that the Air-Sea Rescue unit at Westover Field, Mass., a unit responsible for *twenty-seven* states, has but *two* flyable aircraft at the present time? One H-19 and one Grumman *Albatross*.

Granted that they can call out the CAP. But the civilians are not paid for this work and they have to take time out from their jobs to look for you . . . Hence, you can't count on a specific number of planes. So you see that the number of search aircraft that will look for you is probably small in number.

### Recent Example

We lost an L-19 as summer camp and luckily the pilot crawled 2 miles through the woods to a logging camp. I say *crawl* for he suffered a broken leg in the crash. At one spot he fell 14' in getting down the mountain and spent an overall 36 hours in the woods without food.

Due to the forestation, his aircraft was *never* seen from the air during the subsequent search. We had 30 aircraft, mostly Army-NG, at Wheeler-Sack Airfield that participated in the search, plus about 10 civilian A/C, one USAF *Albatross* and one chopper from Stewart AFB. That may sound impressive but it's not many aircraft to cover the Adirondack mountain area.

Someone in the higher echelons has never seen fit to inform the Air-Sea Rescue people of the number of Army aircraft available in each state that could be used in a search mission. I talked to the Rescue people at Westover and they were quite surprised to learn of the large number of Army aircraft, both Army and Army-NG, in the area. They did not know that there were available aircraft at Ft. Devens, Ft. Monmouth, Ft. Dix, etc. Why?

### The Best With What They Have

This confusion simply means that all of us—Army, AF, USMC, and CG—are not getting a *fair shake* when it comes to being rescued in the event we go down. It is not the fault of the Air-Sea Rescue people—they are doing the best with what equipment they have—and can get. I believe the fault lies with the people who control the military aviation purse strings. We may be *expendable* to the military, but we are not expendable to our families.

Assuming the monies are not going to be expended for an adequate number of rescue aircraft, I think it would at least help if each service would inform the Air-Sea Rescue people of the number of aircraft they have available for search work. Army aircraft are ideal for this purpose. It would help if each AO contacted his local Air-Sea Rescue unit and informed them just what he had available. National Guard advisors could do the same.

This has been covered in "*Army Aviation*" before, I know, but Army aircraft still do not have a basic survival kit. Brother, if you go down, you've got nothing but your Pall Malls. I've taken to carrying my own knife and matches in my flight suit. The Air Force has such kits—*why not us?*

Your chances of being rescued with the current setup and survival equipment available to you are something to think about. The next time you ponder just a tire-kicking preflight give it a thought.

(Capt.) Edward G. Polanski  
43d Inf Div, Conn-NG

# Be calm, Friend

A good friend and subscriber of ours penned a "*Wbernellizzabooz-boo*" note recently. He wrote that he'd been promoted, PCS'd and had two more pair of l'il buttocks to powder since his original transmission. He was disturbed (as a friend) by a rumor that "*WW*" money had gone into a new T-Bird. Nice rumor but quite untrue. Approximately 800 copies of the "*Hoozboo*" will be mailed in late November. Those of stout heart who risked the dollar are in for a pleasant surprise. The "*Hoozboo*," '56-type, will provide an estimated 2,800 address listings. Its purchasers will receive the plusher, more complete listings — and, of course, the printed edition . . .

Your editor,  
Art Kesten



STOCKTON, CALIF.—Having just finished our 2-week annual summer field training at Camp Roberts, Calif., this would be as good a time as any to give everybody the word on what's doing with one of California's two National Guard Divisions.

Our DAO, Lt. Col. Robert L. Stimson, runs this 39-pilot organization. Because of outside commitments only 30 of the NG pilots were able to attend summer camp together. In spite of this shortage of pilots, we racked up 1,121 aircraft hrs during the 2-week period, or approx. 38 hrs per pilot.

Our armada consists of two L-17s, twelve L-19s, and two H-23s of our own plus one Beaver (State Hqs) and three L-19s and one H-23 on loan to us from the 40th Armd Div (Calif-NG).

The only thing that made it possible for us to log those 1,121 hrs was the excellent maintenance work performed by our unit mechanics. They worked very long hours and were still at it long after everyone else had quit for the day.

Our normal base of operations is Stockton Field which we share with the 30th Topo unit, Sixth Army Transportation Activities, and an untold number of civilians. However, our pilot strength comes from all over northern California. You're certain to see many friendly faces on a visit to Stockton so we'd like to extend an invitation to you through "AA" to stop by and visit with us. YC, (Lt.) J. Bruce Forster

## Finally Happened!

A new song featuring the helicopter has been dedicated to the American Helicopter Society. Written by Raymond A. Sterling (ASCAP), the song is published by the Sterling Music Publishing Co., 1650 Broadway, New York. Many members of the AHC, including the "Chopsticks" contingent, probably gave it a fast whirl upon receipt of the sheet music. Here are the lyrics:

"Molly could never see Harry alone  
Once he bought his flying machine.  
She wired him, wrote him, and called him on the phone

But he was nowhere to be found on the scene.  
Finally putting her fears all to rout  
These brave words I soon heard her shout—

Oh take me up in your helicopter, Harry;  
Please take me up for a flight.  
Take me up in your helicopter, Harry;  
I promise I won't die of fright.

When you're way up in the blue  
With nobody else around,  
Tell me that you love me true;  
The sweetest girl you've found.

Oh take me up in your helicopter, Harry;  
Please take me up in the blue.  
Take me up in your helicopter, Harry,  
And whisper that I love you."

★ Psychiatrist: "Do you have any trouble making up your mind?" . . . Accident-prone: "Well—yes and no."

## Compilation

Here's an interesting compilation submitted by WO Don Joyce of Ft. Bragg's 8th Trans. Co. If you're initiating a new friend into your private elbow-bending society, have him memorize this dazzler. We guarantee he'll buy a round before he hits the twenties . . .

### USAF—ARMY ROTARY-WING AIRCRAFT DESIGNATIONS

MODEL	CONTRACTOR	REMARKS
	DeBothezat	Quadrotor Helicopter
YG-1	Kellett	Autogiro
YG-2	Pitcairn	Autogiro
YO-60	Kellett	Autogiro
YO-61	Pitcairn-Lorsen	Autogiro
XH-1	Platt-LePage	Side-by-side Rotors
XH-2	Kellett	Autogiro
XH-3	Sikorsky	Autogiro
XH-5	Sikorsky	Single Rotor
XH-6	Sikorsky	Single Rotor
XH-7	Sikorsky	Single Rotor
XH-8	Kellett	Redesignated H-6A
XH-9	G & A	Synchropter
XH-10	Kellett	Single Rotor
XH-11	Rotorcraft	Synchropter—Twin Engine
XH-12	Bell	Tandem Rotor
YH-13	Bell	Single Rotor
XH-14	Firestone (G & A)	Single Rotor
XH-15	Bell	Single Rotor
YH-16	Piosecki	Single Rotor
XH-17	Kellett & Hughes	Tandem Rotor—Twin Engine
		Single Rotor—Pressure Jet
YH-18A	Sikorsky	Single Rotor
YH-19	Sikorsky	Single Rotor
XH-20	McDonnell	Single Rotor—Ram Jet
YH-21	Piosecki	Tandem Rotor
YH-22	Kaman	None Procured—Synchropter
YH-23	Hiller	Single Rotor
YH-24	Seibel	Single Rotor
H-25A	Piosecki	Tandem Rotor
XH-26	American	Single Rotor—Pulse Jet
XH-27	Piosecki	Redesignated YH-16A
XH-28	Hughes	Single Rotor—Pressure Jet
XH-29	McDonnell	None procured—Two-Place XH-20
YH-30	McCulloch	Tandem Rotor
YH-31	Donon	Single Rotor
YH-32	Hiller	Single Rotor—Ram Jet
XH-33	Bell	Redesignated XV-3
H-34A	Sikorsky	Single Rotor
XH-35	McDonnell	Redesignated XV-1
XH-36		
H-37A	Sikorsky	Single Rotor—Twin Engine
XH-38		
XH-39	Sikorsky	Single Rotor—Turbine Powered
XH-40	Bell	Single Rotor—Turbine Powered
XH-41	Cessna	Single Rotor
XV-1	McDonnell	Unloaded Rotor Configuration
XV-2		
XV-3	Bell	Tilting Rotor Configuration

★ The students were surprised to see the ground school instructor set a jar of mayonnaise on his speaking stand. "Gentlemen," he began, "your aviation safety story is summed up on the cover of this jar."

The instructor left them with this thought provoker and then completed his forty-five minute period of instruction without further reference to the unique training aid.

At the end of the period no one bolted for the cigarette break. In twos and threes the students sidled up to the stand and read the bold print: "Keep cool but don't freeze."



## NATIONAL AIRCRAFT SHOW (Continued from Page 4)

H-23 (Lt. J. W. Robinson), an H-19 (Lt. L. C. Strange), an H-34 (CWO B. I. Wester), and an H-21 (CWO E. A. Spencer).

The fixed-wing pilots then executed individual barrier landings and takeoffs. Surprisingly, only the leadoff L-19 nipped the tape but in doing so increased the suspense as the larger, more cumbersome aircraft hung themselves on their props and cleared the barrier.

The rotary-wing pilots followed quickly with a series of individual autorotations and takeoffs with Lt. Robinson deftly landing his H-23 atop an unusual prop, an ambulance roof.

Overhead, the Army crews who recently established the record refueling hop in an H-21C duplicated their inflight refueling process with the aid of the *Otter* tanker. (This observer noted that the Army was the only one of three services on the initial day to complete the couple. *Thirsty AF and Marine "trailers" were sucking air.*) Maj. H. D. Gaddis, the H-21 pilot, was on the receiving end with Capt. L. F. Seitz and J. H. Stebbins doing the ticklish job of dispensing the octane.

### Bozo Takes Over

At this point, our old friend, *Bozo*, the clown, provided an amusing break in the all-military show. Bedecked in his usual topper, *Bozo* outdid his previous efforts, acknowledging each mass wave of the crowd's handkerchiefs with a grateful nod. Although hard to believe, CWO Eldred G. Bourne actually did better with his king-size *Yo-Yo* than most amateurs do with their miniature job.

If you've heard that they employed H-19s for the *Square Dance Act*, you have a good pipeline. Although some Army witnesses were dubious as to the use of the larger cargo craft, the four brightly-painted H-19s acquitted themselves nobly as CWO V. K. Schug did the calling. His arrival in a Hiller YH-32 *Hornet* created the biggest stir of the afternoon as Capt. J. E. Bowman executed a "falling rock" autorotation prior to depositing the caller in front of the audience. Leaving the scene in ascending, wildly gyrating circles, the *Hornet*—described as a "One in Your Garage" vehicle—captured the fancy of the assemblage.

### Blast Heralds Combat Phase

A *BIG BOOM*, the *L'il Peachy* atomic-concoction, heralded the combat operations phase of the Army show. Pathfinders were quickly brought in by H-19 pilots, Lts. E. E. Weaver and P. C. Hubbard. On their heels were the mobile infantry troops airlanded in H-21s. Combat equipment arrived in a matter of seconds, being deposited under the mushroom cloud by CWOs A. G. Cominos, J. E. Reimer, R. C. Bowers, and R. C. Pampel.



Bozo (CWO Eldred G. Bourne)  
and his Yo-Yo

The call went out for supplies and in rapid fashion L-19 pilots Lts. R. W. Turnbull, W. S. Norris, and S. E. Brown had para-bundles on the ground. A message drop L-19 buzzed the combat area dropping his message bag to the Infantry C.O.

As the mock battle heightened, *Beaver* and *Otter* flights low-leveled additional para-bundles. The U-1As flown by Capt. G. V. Jarrard and Lts. P. L. Stansel and E. W. Konrad were in the prop-wash of the Beavers flown by Lts. D. E. Finney, R. L. Lashbrook, and J. E. Dicks.

### Artillery Brought In

An H-13 medical evacuation was performed by CWO Conyers as the message pickup was made by the L-19. Artillery was called for and the H-34 crews rapidly un-slinged four 75 mm pack howitzers. Ammo came in on a flight on three H-19s. A wirelaying L-19 flown by Lt. R. E. Hewell quickly paid out the wire while Lt. J. W. Robinson in an H-23 brought in the phones and switchboard.

As the infantry started to expand their perimeter, jeeps were airlifted to the combat site by the H-34s. Concluding the combat phase, an H-34 evacuated the casualties.

These combat operations were sharply carried out in full view of the audience at the National Aircraft Show. The Army participants, in demonstrating an entire combat tableau in a matter of 15 or 20 minutes, amply proved the efficiency and skill with which Army aviation elements can augment ground forces under combat conditions.

## CLASSIFIED

GIFT PACKAGED Military insignia sets in sterling and gold filled qualities. Army Aviator and Senior Army Aviator wings in sterling silver. Write for free flyer. L.G. Balfour Company, Attleboro, Mass.





SP-2 Joseph M. Vidos

# Crew Chief of the Month



SP-3 Carlton M. Wilson

FT. BENNING, GA.—SP2 Joseph M. Vidos, Jr., and SP3 Carlton J. Wilson have been chosen Crew Chiefs of the Month for the 4th Helicopter Company and the 152nd Helicopter Field Maintenance Detachment respectively.

Vidos, a native of Morgan City, La., came to Lawson Field early in '54. Following a short period of duty in the company orderly room, he was transferred to the maintenance section and was made a Crew Chief in March, '55.

A diesel engine mechanic in civilian life, Vidos proved a natural as a helicopter mechanic. He has performed maintenance on the H-13, H-19, H-23, H-25 and the H-34

helicopters.

As a Crew Chief, Wilson supervises repairs on the H-34's when they develop major difficulties. He has been in the 152nd since June, '55, and was made a Crew Chief in June of this year.

A native of Columbia Cross Roads, Pa., he has performed maintenance on the H-19, H-23, H-25 and H-34.

In working on repairs, Wilson does not have a single ship. But this does not bother Wilson since he finds the difference in repairs interesting. *"It leads to more different kinds of work than if you just had your own ship,"* said Wilson. *"I get more experience this way."*

## Sold on H-34's

FT. SILL, OKLA.—A short note to recap the doings of the 64th Trans Co (Lt Hcptr)

... The 64th is an H-34 unit slated for ATP. Right now we're somewhat divided with one platoon at Fort Carson taking part overseas movement upon completion of its in *Exercise Cold Spot*. The left-behinds are still going on with the ATP and very eagerly awaiting the whistle to go.

Maj. Carl A. Pieper is the Leader of the Band with Capt. Ken Holzer holding down operations. Capt. David Emery has a firm hand on the Maint Section. Keeping a tight rein on the platoons consisting of one Lieutenant and eleven WOs each are Capts Jerry Norton, W. Dasch, and Edward Landry.

We recently completed an interesting assignment at the National Aircraft Show in Oklahoma City. Twenty-four of our pilots and co-pilots took part in the Army portion of the Show, ran a shuttle service from Downtown Airpark to the Show for the members of the press, and handled VIP transportation.

One last note: The members of this unit are pretty well sold on the idea of a Cargo Helicopter Company equipped with H-34s.

We're all anticipating the opportunity to put the many capabilities of the unit to a real test when we arrive at our overseas destination. We'll keep in close touch with "AA" so that the many readers round the horn will get an idea of what this Company can really do.

YC, (Lt.) William C. Hampton

## Winners

Winner of a \$25 U.S. Savings Bond in our 6-month subscription contest, Lt. Billy Nunnelee of ARMAV's Dept. of Fixed-Wing Training led the contestants with a total of 86 *clobbers*.

Another Ft. Rucker fixed-wing instructor, Capt. William F. Winters, won the second prize, a leather traveling kit. His total of 76 subscriptions nosed out WO-W1 C. M. Hulett. The Fort Eustis warrant officer coraled 75 during the contest period.

Jomalites were awarded to all contestants who submitted a minimum of twelve new subscriptions. If we've overlooked anyone in the Jomalite awards, straighten us up pronto with a quick postcard. Our sincere thanks to all of the contestants; they did their best to bring us to our January 1st goal, a 5,000 circulation figure.



## INDIVIDUAL AIR MOBILITY

by Brig. Gen. William B. Bunker  
(Continued from Page 9)

forward under even moderate enemy fire. Do not overlook the fact that all of these devices require that they be landed in fairly open and level ground—or in other words, in an ideal field of fire for an enemy's machine guns. Any vehicle is in a sense secondary to the infantryman's main mission of exercising firepower to keep the enemy away from his piece of ground or, in turn, to take some ground away from the enemy. The main reason that armies for so many centuries have relied on feet as a primary means of battlefield transportation is the fact that the feet are inconspicuous; they are no trouble when they are not being used; they require no special source of supply for their maintenance or operation; and, they are always there when required.

Let us look a little more closely at the use of these machines we have discussed in meeting the problems of the soldier in combat. If the soldier were introduced onto the battlefield with an individual helicopter or even the small flying platform, he would then have the problem of disposing of the vehicle so that he could fight. The infantryman is already so overloaded he cannot move; if he were required to keep even the gadgets we have discussed, he would be a porter, not a fighter. Even Hiller's small platform requires two men to carry it away! If the soldier is required to move forward to exploit his action, he must then get back together with his vehicle to move forward and then dispose of it again in order to be able to fight. Each time he operates the vehicle he obviously must be connected to a source of supply for fuel for the vehicle and, if these devices bear any relationship to our experience with today's helicopters, he must also be connected with some sort of maintenance support.

One of the major difficulties faced by the cavalry in keeping up with modern warfare

was the fact that they had to dismount and do their fighting on foot and used the horse primarily as a means of movement to get into a position to do the fighting. While their means of transportation offered a tremendous advantage over their ground-bound cousins in moving into new positions, we found that when the fight started they had to sacrifice 25% of their strength in order to take care of the horses which were then not required. This usually turned out to be too high a penalty to pay for mobility.

The same thing, it would appear to me, would happen to a regiment mounted in these small one-man lift devices. Several hundred men of the regiment would be engaged in toting the machinery out of the way in order that the fighters could fight or else we would certainly require a tremendous flow of replacement devices. While in wartime it is customary to say that matters of economy take the back seat and that devices of this type should be abandoned when they have accomplished their mission, it is interesting to note that in our current airborne operations we expend a considerable amount of effort to salvage the \$250 parachutes which have been used by the airborne troops. In other words, it seems to me that the use of an individual lift device by the infantryman would decrease his overall mobility and flexibility by anchoring him to a logistical chain that would hold him fast to the ground.

The military characteristics for these devices state that they must be easy to operate and, considering that they are flying machines, most of them can be so classed. Nevertheless, I think the problem of training millions of soldiers to operate any of these machines with safety would be an insurmount-

(LEFT) Lt. Col. Jack W. Ruby, Ch of the Army Avn Sec, Hq, Sixth Army, who will command the new Cessna T-37 equipped Jet Trainer Det at ARMAV. (CENTER) Maj. Gen. Hamilton H. Howze, Army Avn Directorate, ODCSOFS, D/A, examines the inlet guide vanes of a Lycoming gas turbine engine with Dr. Anselm Franz, Lycoming VP-Turbine Engineering at the AVCO Mfg plant in Stratford, Conn. The T-53, developed under Army sponsorship, recently completed its 50 hour preliminary flight rating test. (RIGHT) CWO Eugene W. Moser, a 3rd Trans Co officer at Ft. Belvoir, the first AA to hold the grade of Chief Warrant Officer, Fourth Grade.





## INDIVIDUAL AIR MOBILITY

by Brig. Gen. William B. Bunker

able task in wartime. Training about three per cent of our soldiers as paratroopers is a long and arduous task and a high percentage of them are eliminated in the process. If every soldier were to be trained to operate and care for one of these machines in addition to teaching him all the complexities of modern weapons, our training cycle would be almost doubled, always assuming we could design one that was safe in the hands of the ordinary drafted soldier. We sometimes overlook the fact that even in our highly mechanized society we have a serious problem finding and training enough truck drivers in wartime.

While a minor point, it might be well, also, to remember that so far as we rely on volunteers for this type of training and pay hazardous duty pay for any military flying—are we going to apply these principles to all our infantrymen for the next war?

If we have to train all our infantrymen to operate these devices, how often will they be able to use the skill and how often will this just be another piece of equipment which our already overburdened soldier must carry just in case?

On the other hand, if we only have special units with this capability, how can we plan to have them at the right place at the right time to exploit their capability? One of our major difficulties with highly trained Commando, Ranger, and even airborne units is to commit them at the right time and to still exploit their availability.

One other factor I think might be well to consider is that in the Army the individual soldier is seldom a significant part of the battle. Battles are waged between regiments, divisions, and even armies. If each individual soldier is required to keep 30 or 40 feet from his neighbors on all

sides in order to keep from making mincemeat of him, I think you will see that an attack by a regiment would be more like a guerrilla infiltration rather than a modern assault. In making airborne assaults by parachute, the individual soldiers are kept as close together as possible and often collide with each other during descent or on landing. I think we can all see what the result of collision with these devices would be.

We would all like to see the individual soldier have a capability of moving without exerting effort and it has been frequently said that there is no problem that American ingenuity cannot solve. However, it does not appear to me that an individual lift device of any type now considered practicable can be capable of application to the individual soldier on the battlefield. In spite of the advancements of science, I think the foot soldier of World War II, like his predecessors throughout history, will have to do his fighting on his own two feet. In order to be useful in this area, the individual lift device would have to be as compact as jet shoes; would have to require no fuel or maintenance support; and would have to be at least as easy to operate as a bicycle. Even after our engineering ingenuity has solved these problems, we still are faced with the difficulty of protecting the operator—are they all going to wear parachutes, crash helmets, and all the rest of the aeronautical safety gear—and if so, can they still have room for their guns and ammunition, their food and shelter, and their entrenching tools which soldiers have to carry with them?

Before we get too enthusiastic about taking all the physical labor out of soldiering, it might be well to consider the lessons of Korea and other wars in history which indicate that unless the infantryman is kept in good physical shape, he cannot stand the physical and mental strains of battle. If we try to remove all physical exertion from the soldier's life, we may find him unable to fight when the push buttons don't work.

I believe that we will still try to place the soldier in a protected area as near as possible to the point of contact in a transport type vehicle, be it helicopter, a truck, or an armored personnel carrier which the operator will thereupon remove from the field of fire. I think we will see an increasing use of aircraft, both helicopters and assault transports, for this mission and that within the area of active combat we will place increased reliance on our new armored personnel carriers to operate with our tanks but I think soldiers will continue to be moved in larger vehicles and not individually . . .

(Ed. Note: This article only attempts to cover the author's thoughts as they apply to the mobility potential of the individual lift device for the foot soldier. As such, it is an excerpt taken from a more detailed discussion of the several military applications for these devices.)

**I WANT IN**—A little Dennis, the Menace raps on the back door of an H-21 with his cast-encased left arm and gets prompt door service from two 8th Trans Co hosts at a recent Bragg Open House. The two sprinters (foreground) thereupon bowled over the doormen. No AOCF, however.





ACHEE, SIDNEY W., Capt., G-3 Army Avn Br, Hq, USARPAC, APO 959, SF, Calif.  
 AITON, WILLIAM S., Lt., Box 1142, Fort Eustis, Virginia.  
 ALDRIDGE, GEORGE W., JR., Capt., Box 106, Queens-town, Maryland.  
 ALLGOOD, CHARLES N., Capt., 1125 Interlaken Avenue, Wanamassa, New Jersey.  
 ALMQUIST, ALLEN F., Capt., 2nd Aviation Company (FW-TT), Ft. Riley, Kansas.  
 ALTWEIN, DONALD C., Lt., 3108B West Apache Village, Ft. Huachuca, Arizona.  
 ANDERS, CHARLES T., Maj., 8 Burnham Court, Fort Leavenworth, Kansas.

GILLIS, HARRELL N., Capt., TAOD, 40th Trans Bn Hcptr), Ft. Riley, Kansas.  
 FRAZIER, DONALD P., WO-W1, 33rd Trans Co (Lt AAM), Ft. Eustis, Va.  
 GIPSON, GERALD C., Pvt-2, Lawson Army Airfield Det. Ft. Benning, Ga.  
 GLOVER, JOE M., 150 E. Gramercy Place, San Antonio, Texas.  
 GOSHEN, ROBERT P., Mr., Ethiopian Airlines, Ad-dis Ababa, Ethiopia.  
 GRIFFIN, LEONARD L., Lt., 5932 Hendon Avenue, Dayton 3, Ohio.  
 GRIPP, JAMES P., WO-W1, 31st Trans Co (Lt Hcptr), Fort Sill, Oklahoma.

# The Month's Takeoffs!

BACON, EUGENE F., Maj., Hq, Basec, Com-Z Avn Section, APO 44, New York, NY.  
 BARBER, ALBERT J., Lt., 1st Army Avn Company (FW-TT), Ft. Benning, Ga.  
 BARTON, HAROLD J., Sp-2, Hq Btry, 37th AFA, APO 949, Seattle, Wash.  
 BAYLESS, HARRY K., Col., Ingall Road, Apt 41B, Fort Monroe, Virginia.  
 BLACK, WILLIAM E., Capt., 1202 West 12th Junction City, Kansas.  
 BOGGS, JOSEPH C., Lt., 82d Avn Co (Prov), 82d Abn Div, Ft. Bragg, N. C.  
 BOND, G. W., Mr., 443 S. Stone Avenue, Tucson, Arizona.  
 BOTTS, LUTHER B., Maj., Avn Sect, CMD, TAGO, The Pentagon, Wash. 25, D. C.  
 BOWLIN, FRANKIE A., Lt., 517 West Calhoun Street, Magnolia, Arkansas.  
 BOYDSTON, ARLAND D., Lt. Hq DivArty, 2nd Armd Div, APO 34, New York, N. Y.  
 BRADLEY, GLENN W., Lt., 48th Trans Company, APO 108, New York, N. Y.  
 BRAKE, WILLIAM P., Capt., 2d Armored Division, APO 42, New York, N. Y.  
 BROWN, ARCHIE J., Lt., 42 Dixie Drive, Ozark, Ala.  
 BROWN, JOHN P., Lt., Off Stud Co, Class 57-4, Fort Rucker, Alabama.  
 BURHOE, JOHN M., Capt., G-3 Avn Div AFPE Hq (Rear), APO 343, S.F., Calif.  
 CARGEN, ALFRED J., WO-W1, Hq & Hq Det, 45th Trans Bn, Ft. Sill, Oklahoma.  
 CARPENTER, PAUL E., Lt., 1031 Grierson Avenue, Ft. Huachuca, Ariz.  
 CARR, JOHN H., JR., Lt., 26th Trans Co (Lt Hcptr), APO 177, N. Y., N. Y., N. Y.  
 CHAMBERS, WILLIAM H., CWO-2, 33rd Trans Co (Lt Hcptr), Ft. Riley, Kan.  
 COGGINS, DONALD W., Lt., 521st Engr Co (Teno Avn), Sharpe General Depot, Lathrop, California.  
 COLEMAN, CHARLES W., Capt., 106-E Rodman Rd, Chesapeake Gardens, Aberdeen, Md.  
 COOK, CARROLL M., Capt., 1st Tank Bn, 1st Armd Div, Ft. Polk, Louisiana.  
 COOK, JAMES R., Lt., Off Stu Co, Class 57-4 ARMAV Reat, Ft Rucker, Ala.  
 COOPER, ROBERT G., Lt., 205 Morgan Avenue, El Paso, Texas.  
 CROSS, FRANK W., WO-W1, 26th Trans Co (Lt Hcptr), APO 177, New York, N. Y.  
 DeLOACH, JIMMY, Lt., 3rd Army Avn Co (FW-TT), Fort Riley, Kansas.  
 DELP, CHARLES O., Lt., 710 East Baldwin, Spokane, Washington.  
 DILLINGER, DAVID R., Lt., 1st Army Avn Co (FW-TT), Ft Benning, Ga.  
 DOWNS, THOMAS, W., JR., Capt., 3rd Co, 1st Stu Bn, Sch Brig, Ft Benning, Ga.  
 DUNN, HARRIS B., Pvt, Hq Co, Transportation School, Ft. Eustis, Virginia.  
 DWYER, DALE, Sfc, 4325 W. Cleveland, West Allis, Wisc. (PO; unconfirmed).  
 ELIASSON, ARNE H., Maj., 7th Army Avn Tng Ctr (7737th), APO 46, N. Y., N. Y.  
 EVERHART, WILLIAM G., CWO-2, P.O. Box 294, Norwood, North Carolina.  
 FLANAGAN, LAWRENCE M., Capt., Army Aviation Center, Fort Rucker, Alabama.  
 FRANZNICK, JOHN R., Lt., 2nd Army Avn Co (FW-TT), Fort Riley, Kansas.

GROSSMAN, WILLIAM, Lt., 1295 West 6th Street, Pomona, California.  
 HAFERS, ERNEST R., Lt., P.O. Box 220, Aiken, South Carolina.  
 HARE, LEROY, Capt., 2291 Ventura Blvd, Camarillo, Cal. (P.O. unconfirmed).  
 HOLLAND, ROBERT G., Lt., Hq Co, 11th Avn Div Air Sect, APO 112, N. Y., N. Y.  
 HOLLIDAY, ROBERT O., Capt., Det 3 (6000), Presidio of San Francisco, Calif.  
 HOLTON, GEORGE J., CWO, 113 Kate Street, Enterprise, Alabama.  
 JAUBERT, G. WILFRED, Maj., Hq, 4th Army Avn Det, Gary AFB, San Marcos, Tex.  
 JERSEY, D. H., Capt., 1062 Warwick Road, Route Nr 60, Warwick, Virginia.  
 JOHNSON, JAMES A., Capt. 1406 Seminole Street, Dathan, Alabama.  
 JOHNSON, RAYMOND E., Lt Col, 104 Shoemaker, Leavenworth, Kansas.  
 JOHNSTON, JAMES R., Capt., TAASC, Sandhofen, APO 28, N. Y., N. Y.  
 JORDAN, DONALD R., Lt., Stu Det, TCOC Nr 13, Trans Sch, Ft. Eustis, Va.  
 KELLEY, EVERETT L., CWO-3, 3rd Trans Co (Lt Hcptr), Ft. Belvoir, Va.  
 KELLOGG, KENNETH E., Lt., 2111 Oak Street, Law-ton, Oklahoma.  
 KELLEY, RALPH G., Lt., 512 Dearborn Avenue, Mis-soula, Montana.  
 KENDALL, FRANK L., WO-W1, 33rd Trans Co (Lt Hcptr), Ft. Riley, Kansas.  
 KETTINGER, CHARLES W., Pvt, Hq Co, Transporta-tion School, Ft. Eustis, Va.  
 KINLEY, GORDON L., Maj., Hq, 3rd Armored Division, APO 39, New York, N. Y.  
 KOMRO, JAMES E., Plc, Hq & Svc Co, 9203 TU, TC, TRACDOM, Ft. Eustis, Va.  
 LEACH, HERMAN E., Maj., 215 Ridgehaven, San An-tonio, Texas.  
 LEACH, WILLIAM A., Sp-2, 591st Trans Co (AAM), APO 46, New York, N. Y.  
 LUCHNER, HENRY S., WO-W1, 1128C-4 E.C. Knight St., Lewis Hgts, Ft. Belvoir, Va.  
 LUND, SIGURD A., JR., Capt., Lawson Army Air-field Command, Ft Benning, Ga.  
 McCOLLUM, EDWARD E., Maj., Trans Tng Comd, ACofS, G-3, Avn, Ft. Eustis, Va.  
 McCORD, THOMAS B., Lt., Hq Co (Avn Sect), V Corps, APO 79, N. Y., N. Y.  
 McCOY, DONALD B., Lt., Route Nr 1, Lockhart, Texas.  
 McKINNEY, JOHN W., Lt., 411 East College Street, Ozark, Alabama.  
 McLEAN, NEIL N., WO-W1, 1200 Monroe, Beards-town, Illinois.  
 McNEESE, LUNA V., JR., Lt., Box 10165, Stu Det, AAA & GM Sch, Ft. Bliss, Tex.  
 MacDONALD, JOHN D., WO-W1, Heliport Operations Detachment, Ft Eustis, Va.  
 MACKELL, BERNARD B., Maj., Box Nr 174, Limestone AFB, Limestone, Maine.  
 MENGEL, GEORGE E., Capt., 502 "B" Dogwood Street, College Station, Texas.  
 MERRYMAN, JAMES H., Lt., 512 Magnolia St., Ozark, Ala. (PO; unconfirmed).  
 MILLER, MARTHA P., Lt., Stu Det, Fitzsimmons Army Hospital, Denver, Colo.  
 MILLER, SAMUEL A., Capt., Army Aviation School, Fort Rucker, Alabama.



# The Month's Takeoffs!

MORGAN, WILLIAM J., Lt, TSESS, Aviation Branch, Fort Gordon, Georgia.  
MOSLEY, DOUGLAS, Capt., 7th Army, Hq Co Avn Sect, APO 46, New York, N. Y.  
NELSON, STANLEY O., Capt., Board Nr 6, CONARC, (7106), Ft. Rucker, Alabama.  
O'DONNELL, WILLIAM J., WO-W1, 3rd Trans Co (Lt Hcptr), Ft. Belvoir, Va.  
OGLETREE, CLARENCE, Sgt., 210 Yuma Street, Manhattan, Kansas.  
PARKER, EDGAR L., JR., Maj., 1055 N. Chanbliss St., Lincolnia Hills, Alexandria, Va.  
PODWORNY, EDWARD C., Lt Col, 2433 N. Sycamore Street, Arlington, Va.  
PRATER, ROBERT M., Capt., 3rd Light Avn Sect, APO 358, San Francisco, Calif.  
QUINLAN, JAMES A., JR., Lt., 314 D Avenue, Lawton, Oklahoma.  
RACE, CHARLES W., Lt., 5560 Pershing Avenue, St. Louis, Missouri.  
Santa Clara, California.  
REARDON, JOHN E., Capt., 1238 Las Palmas Drive  
REYNOLDS, JOSEPH M., CWO, 6th Trans Co (Lt Hcptr), APO 43, S. F., California.  
RICHARDSON, THOMAS B., Maj., 2918 Bell Avenue, Lawton, Oklahoma.  
RIFE, ELBERT E., Sfc., 139 4th Division Avenue, Monterey, California.  
RINNE, ORVILLE H., Lt., RR Nr 2, Chester, Ill.  
SAMUT-TAGLIAFERRO, J., Sp-2, Hq Btry, 13th Bn, USATC, Ft. Bliss, Texas.  
SCHEER, LAWRENCE B., Capt., Box 2758, Fort Huachuca, Arizona.  
SEGURA, HUEY F., Lt., 630 Ashton Street, New Iberia, Louisiana.  
SHAW, AMBROSE C., Capt., 102 Kingwood Drive, Swansea Manor, Warwick, Va.  
SMITH, MARVIN, P., Sfc., N. 3931 Magnolia, Spokane 27, Washington.

## BOARD NR 6

(Continued from Page 15)

from its present unsatisfactory 50 hour limit, the Board recommended that the metal main rotor blades be considered suitable for Army use on this model.

The QL-17 Drone Aircraft project ran in'o difficulty from two directions. The smoke-dispensing equipment utilized by the F-100 aircraft was considered unsatisfactory upon observation of a test run and another demonstration with improved smoke has been scheduled. At the same time, the Board has tabled plans to train pilots in drone operation pending an answer to a request for negotiation of a contract with TEMCO to modify the drones and train the drone pilots. The scheduled date for this project testing has been advanced to October 15.

Do not look for a single, central collective pitch control in U.S. helicopters. Board evaluation of the British-designed CCPC found the control unsuitable for use in Army rotary-wing aircraft.

Further testing of the Vertol Tow Kit for the H-21C has been postponed. Design changes are expected to be made by Vertol to correct deficiencies noted in towing tests performed by other services.

In failing to increase the pilot's visibility through the windshield during extended periods of rain testing, the Board recommended that the Snell Rain Repellent Kit not be procured for use on Army aircraft.

SMITH, SHERMAN W., Capt., 11th Trans Co (Lt Hcptr), APO 46, N. Y., N. Y.  
SNOW, CLIFFORD N., Lt., Hq Co, 2d Inf Div, APO 949, Seattle, Wash.  
SPARKS, RICHARD A., Candidate, AATPC 57-2, Cargo Hcptr Stu Co, ARMAV Regt, Ft Rucker, Ala.  
STANFORD, HAROLD L., M/Sgt, 2413 East 9th Street, Stockton, California.  
STEELE, THOMAS B., 507 Venice Way, Venice, Cal.  
STEVENS, GEORGE C., Mr., 5714 Hawthorne Road, Little Rock, Arkansas.  
STEWART, HARVEY E., Lt., Army Sec, MAAG, Box 810, APO 80, N. Y., N. Y.  
STOKES, ROBERT V., Capt., 504 North Rawls, Enterprise, Alabama.  
STRANGE, LOREN C., Lt., Army Aviation School (3461), Ft. Rucker, Ala.  
THAYER, GEORGE E., JR., Capt. 3d Co, 1st Stu Bn, The Sch Brig, Ft Benning, Ga.  
THOMAS, WILLIAM G., Lt., 3142A W. Apache Village, Ft. Huachuca, Arizona.  
THOMPSON, ROBERT G., Pfc, 42nd Trans Co (AAM), APO 177, N. Y., N. Y.  
TRAPNELL, JOE A., Lt., 101 Carroll Dr., Killeen, Tex (PO; unconfirmed).  
USHER, WILLIAM F., Maj., Trans Acft Test & Spt Activ (9247), Ft. Rucker, Ala.  
VETTER, JOHN R., Mr., (Bell Rep), 30th Trans Co, APO 165, N. Y., N. Y.  
VOYLES, BILL E., Sfc, 30th Trans Co (AAM), APO 165, New York, N. Y.  
WALCH, JAMES, Capt., 211 Southland Drive, Dothan, Alabama.  
WALKER, SAMUEL S., Capt., Off of Army Attache, American Embassy, Box 1, Navy 150, FPO, San Francisco, California.  
WATSON, VELVIN R., Lt., Hq, 30th Engr Gp, Presidio of S. F., California.  
WEBER, HARRY W., Capt., 309 Main Street, N. Tonawanda, New York.  
WELCH, RAYMOND, Sgt., 32nd Trans Co (MTRR) Fort Eustis, Virginia.  
WHITMAN, PAUL R., Lt., Trailer Space 894, Ft. Sheridan, Illinois.  
WILHELM, LELAND F., Maj., Wright Air Devel Ctr, Area B, Box 7186, Wright Patterson AFB, Ohio.

## SAFETY

(Continued from Page 14)

facility, advise of your situation, and request assistance. Having a flight violation filed against you is far better than a DA Form 285 summarizing the manner in which you died.

Report your position frequently over radio check points and know your position at all times. Do not rely solely upon radio navigational aids; check your position frequently by time, speed, and distance.

On every mission, it is *your* responsibility to get there and back. Be absolutely sure that you have discharged each and every responsibility to the best of your knowledge and ability.

A large majority of Army aircraft accidents are caused, not by structural failure or lack of ability to fly on the part of the Aviator, but by failure of the Aviator to exercise good judgment in planning and executing the mission.

Remember, safety of flight depends upon YOU, the Army Aviator.

### THE AUTHOR



Lt. Col. James A. McCord, a Senior AA, has served as Aviation Officer of many divisional units. He recently rotated to the ZI from his V Corps AO assignment in Europe.



## A Library Addition For You!

Your 1957 issues in a  
hard cover edition.



We'll set aside twelve clean issues for you — clean, fresh issues — and at year's end bind them in a handsome hard cover book for you.

**A functional index** will be printed as a supplement giving you quick access to any desired information published in the 1957 issues. The index will catalog individual articles and features, photos, and specific references to particular units.

**The 1957 Yearbook** — which will be published in place of the November, '57 regular issue — will embrace approximately 3,000 to 3,500 *gratis* listings of individual subscribers. Having this Yearbook hardcover-bound should be worth the added binding costs alone.

**Having detailed information** on Army aviation progress through 1957, the hard cover, gold-lettered volume will make an attractive on-the-shelf addition to your personal library.

**To secure** the twelve-issue volume we must start the overprint with the January, '57 issue of "Army Aviation." We cannot accept orders for hard cover volumes after December 15th when the January, '57 issue goes to press. *Order your copy now!*

### ----- MAIL THIS COUPON TODAY -----

**ARMY AVIATION**, Westport, Conn. Please send me postpaid the hard cover volume containing the 1957 issues of Army Aviation Magazine.  Bill me;  I enclose \$3.95 to cover the costs of this volume. I am a current subscriber to the magazine.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



## AWARD

Maj. Gen. Hamilton H. Howze, Chief of the Army Aviation Directorate, D/A, was honored by the National Aviation Club in late September.

Selected as "The-Man-of-the-Month," Gen. Howze attended a Cocktail Party given in his honor by the NAC at the Sheraton-Carlton Hotel in Washington, D.C.

During the program Gen. Howze was awarded a gold engraved Honorary Membership card in the National Aviation Club and his name was engraved on the wall plaque in the Club Rooms.

★ A Texan with a sense of humor is Sid Richardson. Tower operators recognize Sid when he enters their control. The call sign on his DC-3: "Two Two Tango." The operators probably duck when they hear the call "N-1-M." It belongs to a very famous red-head.

## The Nomads

Our biggest problem is trying to deliver the steady twelve to subscribers who depart their file addresses unannounced. This broadens the AA knowledge of many PO clerks but has us swallowing *Pepto-Bismol* by the gallon. *Please* use the insert we sent you.

## TALK TO "Your Personal Broker"

... and obtain skilled  
help on investing

Get professional advice on how to invest your extra money so that it may *grow* instead of *go*!

Let "your personal broker" plan with you a program aimed at satisfying your immediate and future financial needs.

Why not start *now* to participate in the benefits of America's growth?

POSTMASTER: AFFIX FORM 3579  
IF COPY IS UNDELIVERABLE.



**Haydock, Schreiber, Mitchel & Watts**  
120 Broadway, New York 5, New York

I am interested in obtaining information on planning  
an investment program (no obligation, of course)

Name .....

Army Address .....

Rank .....