ARMY AVIATION

OCTOBER, 1957

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BETWEEN-OVERHAUL"
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HILLER H-23D

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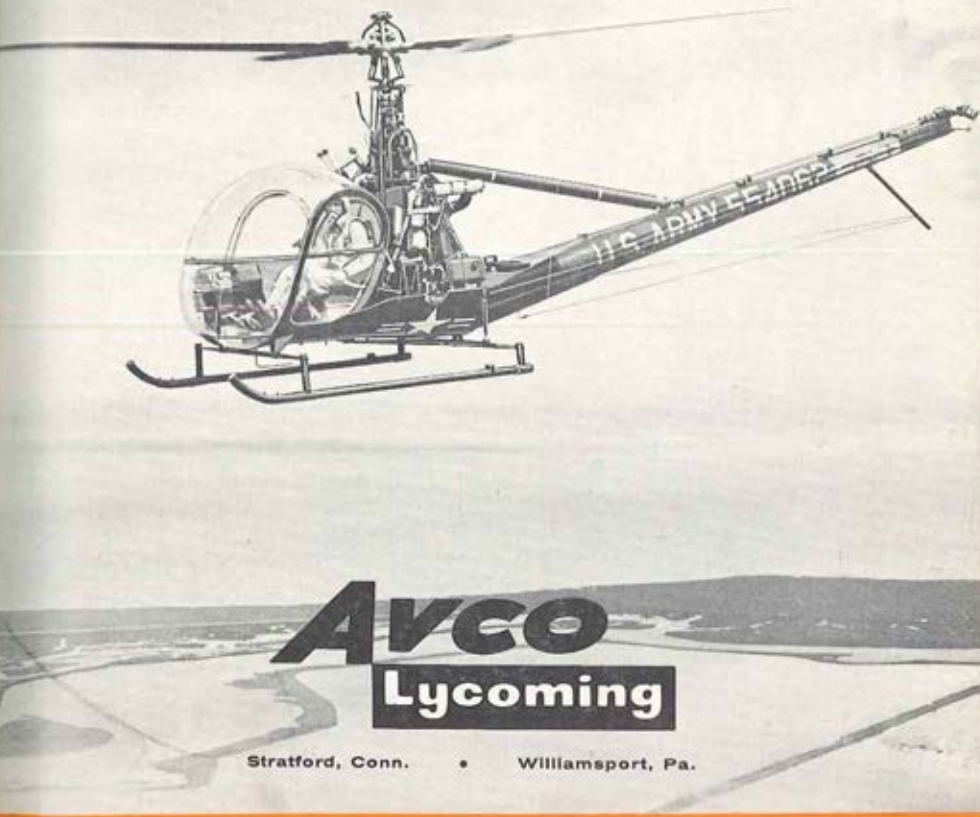

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ARE YOU ON THE AA TEAM?

Some 850 persons have joined the Army Aviation Association since its inception several months ago. Have you?

•

The AAAA is a strong attempt to solidify the many Army aviation components into a greatly needed social, fraternal, and educational organization.

•

We share common interests, common pursuits, common careers, whether full-time or part-time.

•

As a person closely affiliated with this profession, your personal support is earnestly sought.

•

You have much to gain by uniting with others in this endeavor.

•

The AAAA plans many future activities. Why not be a part of them?

Wash of 4 Helicopters Halts Fire

Special to The Chronicle

MONTEREY, Aug. 8—A "blanket" of wind, blown downward from the rotors of four helicopters, held a ranch brush fire in control today until State Forestry crews arrived to set up a fire line.

The unusual maneuver saved the ranch house and race horse barns of the Frank Enright ranch near here from what was decribed as "a very serious situation."

Lieutenant John W. Thomas of Fort Ord spotted the blaze on a routine flight between Ord and Hunter Liggett Military Reservation.

He was flight chief for four H-21 helicopters on a training mission.

"I saw all this smoke and could see that the fire was out of control," he said.

He landed to see if he could help and found no one in the vicinity. But he saw a woman taking a jeep across a field and assumed she was going to turn in the alarm.

The flames were spreading fast, riding a 20-mile-an-hour wind. They were fanning directly toward the Enright outbuildings, barns and ranch house.

Thomas ordered his helicopters into the air and maneuvered them along a 2000-yard semicircle in front of the advancing flames.

Hovering 20 feet above the ground, the helicopters sent a 250-mile-an-hour downblast upon the fire, driving it back upon itself.

They had practically blown it out at a point 400 yards from the nearest building when State forestry crews arrived.

Thomas estimated that the machines hovered about half an hour over the fire.

They Outwitted the Wind in H-21's

THE QUICK-THINKING PILOTS ON THIS MISSION:

WOW1
Richard E. Gray

WOW1
Marvin A. Farmer, Jr.

WOW1
Willie E. Baker
Captain John W. Thomas

WOW1
Michael L. Deegan

WOW1
Jack P. Andrews

WOW1
Mark W. Cornell

In the great tradition of Army Aviation, men and machines were ready and able when needed.

The H-21 is a product of:

VERTOL Aircraft Corporation

MORTON, PENNSYLVANIA

ARMY AVIATION

Volume 5 **October 20, 1957** **Number 10**

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1446 (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, 1957.

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.

4. Paragraph 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which 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, 1958.

Brig. Gen. Bogardus S. Cairns, Commanding General of the Army Aviation Center, pins the first Master Army Aviation Badge on Col. Robert R. Williams in a September ceremony held at the Alabama post. Additional details on Page 21.

FEATURES

UNIT REPORTS

DEPARTMENTS

ADVERTISERS IN THIS ISSUE

ARMY AVIATION is published monthly by Dorothy Kesten, Westport, Conn.; Editorial and Business Office, Elizabeth Drive, Westport, Conn.; Phone (Fairfield, Conn. exchange) Clearwater 9-4752. Subscription prices, Continental U.S., APO, and U.S. Possessions, $2.50 per year, all other countries add $.50 per year for postage. Please give title, position, and Army aviation affiliation for corporate subscriptions. Three weeks' notice required for address changes (give both old and new addresses). Manuscripts, photos, drawings, and other material must be accompanied by a stamped, return-addressed envelope if return is desired. The editors reserve the right to alter, edit or delete copy and/or specific names from all unsolicited material. Second Class Mail Privileges authorized at Westport, Conn. Display and Classified Advertising Rates furnished on request.

New Cessna YH-41
delivers top performance
plus big maintenance savings
to helicopter flying!

Cessna's all-new YH-41, recently purchased by the U. S. Army for its air arm, combines the latest in design and engineering advances to give operating and maintenance performance never before experienced in the helicopter field!

For example, the engine—mounted in the nose of the fuselage—makes installation and servicing easy—provides extra cargo or passenger space. Cessna has made the rotor assembly aerodynamically clean. Also, the drive system on the new YH-41 is a masterpiece of simplicity, has a minimum of parts—conveniently located for easy servicing.

Cessna

Offering multi-utility uses, the 4-place YH-41, at 3,000 lbs. gross weight, can climb higher, faster than any other helicopter in its class—sea level to 10,000 ft. in less than 12 minutes! Its speed is the fastest in the light helicopter field.

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The control station is portable and can be operated from the ground or in air to air operations. Mission equipment such as cameras, weapons, target markers and detonators can be actuated at the control station.

Kaman is proud of this forward step which has been taken in behalf of our National Defense effort.

KAMAN

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Bloomfield, Connecticut

GUIDELINES

by Maj. Gen. Hamilton H. Howze, Chief, Army Aviation Directorate

★ Gentlemen: The findings of the annual (1957) Flight Status Review Board, conducted under provisions of paragraph 15, AR 600-107, has produced a number of indignant yells from the field, sometimes to the effect that the officers recommended for removal from flying status were above-average pilots.

I am personally and genuinely sorry for any good and loyal pilot thus removed, and this board, like any board, is not immune from error. On the other hand I do know that the board tackled each case methodically and conscientiously, and that the board was guided by paragraph 12 of the regulation, which under "Purpose" states that "The objectives of this system are to perpetuate the highest standards in the performance of aviation duties and retain on flying status *only those individuals who provide the greatest potential and who are essential to the needs of the aviation program.*"

The bitter truth is that being a good throttle-jockey is not enough. Particularly in the higher grades we need first class *commanders* and staff officers—men with the stuff to produce fine Army aviation units and to develop the doctrine for their use. To quote myself, "Army Aviation vitally needs competent technicians, but we also need commanders and tacticians. An officer charged with the command of an Army Aviation unit is faced with a great challenge to his personal abilities, for he must meet fully the technical demands of his position, yet develop and nurture the tactical understanding necessary to support ground units to the limit of the great possibilities inherent in aviation. I know of no other category of job more demanding on the individual. Our commanders cannot be too smart, too brave, too ingenious, or too imaginative."*

Remember, we are not a flying club. Army aviation exists only to augment the overall combat capability of the Army, and it takes good all-around men to meet the requirements. Where a man's record—and there is nothing more substantial than that for a board to go on—indicates insufficient *overall potential as an officer*, he is not desirable for retention as an Army aviator.

★ Assuming that the best salesmen for aviation are those in the program, I urge your efforts in contacting and procuring well qualified lieutenants for entry into flight training. No weak sisters, please.

To assist in your procurement efforts, brochures and posters were distributed in July and August to the major commands and appropriate DA schools. AR's 611-110 and 600-105 provide the necessary guidance.

★ DCSPER has approved entry into flight training of 17 majors as a tentative measure until completion of current study of requirements.

Thirty-four captain spaces were also approved and implementing instructions *for* both grades wil be issued soon. These officers will be selected from all branches. None but top flight people will (I hope) be accepted. Don't recommend any of your friends for any but good military reasons—this is not an acceptable way of paying off poker debts. (See lead item of this letter.)

★ Aircraft Organizational and Field Maintenance shop sets are classified in Federal Stock Classification Class 4920. Currently the logistic responsibility for the complete sets is assigned to the Transportation Corps. During initial conversion of the sets now in the hands of troops, Chief of Ordinance will be responsible for furnishing the individual components in the sets.

The individual repairman sets, which are designed to meet the needs of the repairman based on his MOS, are classified in Federal Stock Classification Class 5180. This class is presently assigned to the Chief of Ordnance, and Ordnance has responsibility for the complete sets.

After conversion and issue of these sets has been completed, replacement for individuals items will be the responsibility of the Technical Service indicated in the supply manuals for each set.

★ The Radio Technical Commission for Aeronautics recently prepared a report dealing with "Aircraft Altimeter System Static Pressure Errors." The report is primarily applicable to aircraft that fly higher and faster than anything we have in the Army inventory, or on the drawing board, but nevertheless the principles involved bear consideration.

Present altimeter systems are subject to errors resulting from a variety of causes, some of which are caused by Static Pressure Error (also called Installation Error). The

(*Continued on the Next Page*)

*"*Future of Army Aviation*", June, 1957 issue, U. S. Army Aviation Digest.

GUIDELINES

engineers go to great lengths to locate pressure and keep them out of areas of positive or negative pressure during various flight conditions. This results in more accurate altimeter indications. However, in spite of the care that may be used in selecting the location of static pressure source, errors persist. Gross weight, altitude, and speed are some of the things that bring about these errors since they affect the flow of air over the static pressure orifices. As speed and altitude increase, the static pressure error increases. For example, the aforementioned report indicates that speeds of Mach Number 0.8 and up often result in static pressure errors in excess of 1,000 feet.

The above would tend to impart the suspicion that as speed and altitude increased, the standard IFR 1000 vertical separation criteria might become inadequate and unsafe. Due to the speed and altitude limitations of our present Army aircraft this error is not considered critical. However, I think this information should make a solid impression on each of us and that we should do everything we can do to maintain our assigned altitude when flying IFR. Let's not compound the "built in" errors and thereby increase the attendant possibility of mid-air collision. This would include, as a starter, making sure that the altimeter installed in the aircraft we were flying is accurate to within prescribed tolerances. (The allowable tolerance is 75 feet between the altimeter indication and the actual field elevation when the correct altimeter setting is applied. Remember this altitude or pressure difference between the two, and *apply it each time you re-set the altimeter.*) Once the altimeter is in proper adjustment and correctly set, fly your assigned altitude—to repeat an old saw, a mid-air collision can ruin your whole day.

★ An Army aviator (a colonel) landed at an Air Force Base and taxied to the civilian side of the field to refuel. He wanted to eat lunch, but there was no snack bar on the civilian side so after refueling he called tower for permission to taxi to base operations. There he was met by the operations officer, the aerodrome officer and a military sedan. The operations officer introduced himself, extended the compliments of the base commander and his regrets that he (the commander) could not personally meet the visitor. Recommendations were made for various dining places, both on the base and in the adjacent town, and the sedan with driver placed at the visitor's disposal.

Such considerate treatment leaves a very good impression. In the past few years the front door by which important people enter a military post has changed from a gate on the highway to the ramp at the airfield. *The impression made at the ramp is a lasting one. Alert and thoughtful airfield operations personnel are an asset to the post and a credit to the commander.*

LOWE ARMY AIR FIELD

FORT RUCKER, ALA.—New milestone in AA is the completion of Lowe Army Air Field, located two miles west of Ft. Rucker. Four 2,000-foot runways

★ I strongly urge all individual aviators, and especially commanders of aviation units, to consider the matter of life insurance one for immediate and continual action. In my letter of 4 May 1956 was recounted a true story about having to take up a collection to aid the family of an aviator who failed to provide insurance for his survivors. The estates of officers killed since that time bring out the fact that this neglect continues.

You should all familiarize yourselves with the contents of DA Circular 608-12, 1 August 1956. Note that paragraph 3d limits greatly the indemnity compensation for parents, and that paragraph 5b (2) practically eliminates the younger aviators from having government insurance.

Commanders should make a point of immediately interviewing personnel on flying status concerning the purchase of adequate insurance. As new personnel join the unit, they too should be interviewed and given adequate insurance advice.

★ An Army Flying Club program is being implemented by Special Services, TAG. Eighty L-17 and 72 L-21 aircraft have been allocated to flying clubs and shipping orders have been issued. Club list:

with 500-foot overruns on each end, 9,300 feet of taxiways, and a 17½-acre maintenance apron will meet the increasing fixed-wing training requirements at the Alabama facility. (U.S. Army photo).

First Army Area: U.S.M.A.; Fort Jay, New York; Fort Devens, Mass; Fort Dix, N. J. (combine w/Ft. Monmouth) and Seneca Ordnance Depot. *Second Army Area*: Fort Knox, Kentucky; Fort Eustis, Virginia; Fort Meade, Maryland; Fort Lee, Virginia; Tobyhanna Signal Depot, Pa.; and Edgewater Chemical Center Md. *Third Army Area*: Fort Campbell, Ky.; Fort Jackson, S. C.; Fort Benning, Ga.; Fort Rucker, Ala.; and Fort McPherson, Ga. *M D W*: Fort Belvoir, Va. and Fort Myer, Va. *Fourth Army Area*: Fort Sill, Okla.; Fort Bliss, Texas; Fort Hood, Texas; Camp Gary, Texas; Camp Wolters, Texas; Fort Polk, La.; Gulf Transportation Terminal Comamnd, La.; Pine Bluff Arsenal, Ark.; White Sands Proving Ground, N. M.; and Sandia Base, N. M. *Fifth Army Area*: Fort Carson, Colo.; Fort Leavenworth. Kans.; Fort Riley, Kans.; Fort Sheridan, Ill.; Fort Leonard Wood, Mo.; TSMC, St. Louis, Mo.; and Camp Lucas, Mich. *Sixth Army Area*: Presidio of San Francisco, Calif.; Fort Ord, Calif.; Sharpe General Depot, Calif.; Fort Lewis, Wash.; Fort Huachuca, Arizona; and Dugway Proving Ground, Utah.

★ A flight of four Shawnees, under command of 1st Lt. John W. Thomas, 33d Transportation Company, en route from Camp Roberts to Fort Ord, spotted a fast moving brush fire and landed, offering assistance. Lt. Thomas was informed that the fire had reached a critical stage and if not stopped immediately, would destroy vast areas of vegetation and possibly a school and other installations. Thomas ordered his four

by

Maj. Gen. Hamilton H. Howze

Shawnees to hover at the point of the fast spreading fire for over an hour, blowing the flames back into the burned areas and cooling it sufficiently that ground fire fighters could move in and bring the fire under control. The rotor blasts actually extinguished the fire at its fast moving point. It was a spectacular job.

It should be remembered, however, that the helicopter is not a fire engine, and any attempt to control fires with rotor downwash should only be attempted by skilled pilots who are thoroughly aware of the danger involved, and *only* in a *real emergency*.

★ Award of the Distinguished Flying Cross was made to First Lieutenant Arthur R. Van Horn, Army Aviator, for heroism while participating in aerial flight during Operation Darin in the jungles of Panama on 22 Sep 1956.

Lt. Van Horn, piloting a Sioux, delivered emergency supplies to troops who were cut off in uncharted jungles and in considerable peril. The mission required navigation through narrow canyons over a heavy blanket of ground fog and under heavy clouds and thunderstorms. Very pistol fire from the troops assisted Lt. Van Horn in locating them and effecting a landing under near zero visibility conditions.

★ Important Tid-Bits:

By General Order 37, 25 July 1957, the United States Army Aviation Safety Board was redesignated the United States Army Board for Aviation Accident Research. Thus USAASB becomes USABAAR, which anybody will acknowledge is a real sexy title, reminiscent of Dan'l Boone.

Final shipment of AN/ARC-44 radios for AFFE L-19's and the USAREUR retrofit requirements were made during the month of August.

The L-23 Distribution and Rebuild Program is on schedule. However, normal parts support for the L-23D aircraft in overseas theaters will not be available prior to 1 January 1958.

Some units that are overstrength in personnel having critical MO's are assigning such personnel to other duties rather than reporting them as available for reassignment. No good—this practice aggravates an already critical personnel management problem. Commanders are requested to report these expensively trained people for proper duty assignment.

GUIDELINES
by Maj. Gen. Hamilton H. Howze
(Continued from Page 9)

The regulation which outlines precedures used in obtaining service under the Standard Configuration and Modernization Program (SCAMP) is AR 757-13, published 13 June 1957. This program replaces and amplifies the IRAN program.

The Transportation Corps has requested that Sikorsky Aircraft Division investigate the loss of cockpit windows from the Choctaw during flight, and to provide a permanent fix through a design change; also, to modify the Choctaws now in production. A window in the main or tail rotor is not considered functional.

In accordance with guidelines provided by USCONARC, the Transportation Corps is preparing new TO & E's for aircraft maintenance units. These units will provide field maintenance to support the increased numbers of aircraft in the 1957 revised type Corps and Field Army and the reorganization Divisions (ROCID, ROCAD and ROTAD).

★ Army Aviation aircraft and personnel are based in 35 foreign countries. Your wife may be interested to know that you may soon wind up in Burma, Thailand, Cambodia, Vietnam, Formosa, Okinawa, Korea, Japan, Canada, Mexico, Guatemala, El Salvador, Nicaragua, Costa Rica, Cuba. Haiti, Dominican Republic, Venezuela, Colombia, Ecuador, Peru, Bolivia, Chile, Philippines, Brazil, Greenland, Great Britain, France, Netherlands, Germany, Italy, Libya, Greece, Turkey *or* Ethiopia.

★ I cite the following extract from an aircraft crash report as an outstanding example of concise descriptive writing.

"Student pilot on first supervised solo. Flew 4 patterns during attempted landing. Final approach, landing successful, swerve right corrected, situation under control. Pilot elected to make go-around (!), became airborne, stalled, striking left wing tip, then right wing tip. Plane struck ground in skid, tearing off right gear resulting in damage to right wing, propeller, and engine cowling." Portrayed without mention is the instructor, presumably knee-deep in anguish at the side of the runway.

HAMILTON H. HOWZE
Major General, GS
Director of the Army Aviation, ODCSOPS

Higher Performance OF-1 At Mock-Up Stage

BETHPAGE, N. Y.—Viewing a mockup of the Grumman OF-1 during his visit, Maj. Gen. Hamilton H. Howze, Director of Army Aviation, completed a familiarization tour of the Grumman facilities during September.

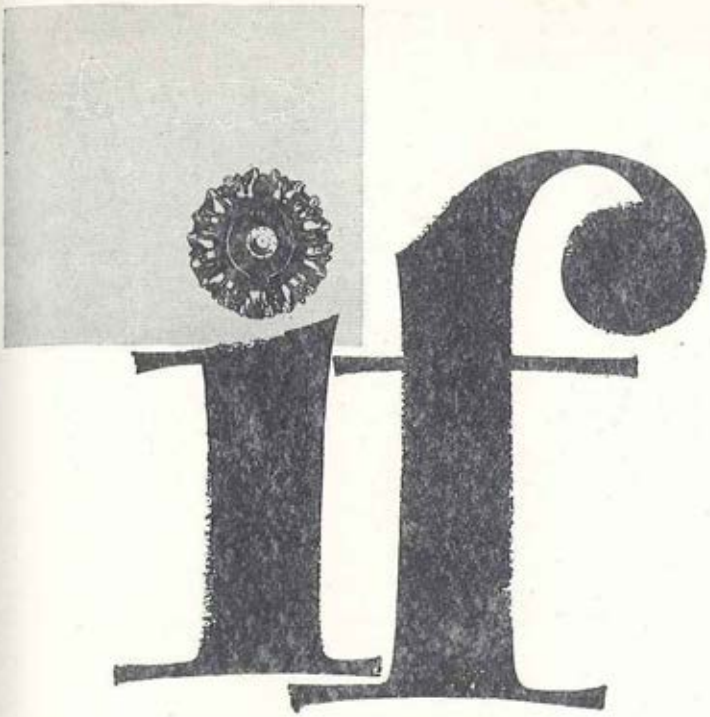
Grumman is developing for production for both the Army and the Marine Corps, a new higher performance observation aircraft to provide both services with greatly improved capabilities of air observation.

Development of the aircraft represents the first joint Army-Navy effort to develop an aircraft to meet common requirements. Taking part in a later joint mockup conference were Col. Robert R. Williams, USA Aviation Board; Lt. Col. Delbert L. Bristol, Office, Chief of R & D; Lt. Col. Richard L. Long, TSMC; Lt. Col. David M. Kyle, ODCSOPS; Lt. Col. Michael J. Strok, OCT; and Lt. Col. Charles E. Hollis, TATSA.

Two Lycoming T-53 turboprop engines power the new Grumman aircraft.

CLOSE LOOK

Shown at Grumman Aircraft's Long Island facility during their mock-up inspection are (left to right) W. Cochran, Grumman; Lt. Col. David Kyle; Lt. Col. Delbert L. Bristol; General Howze; and A. James Zusi, Grumman. (Grumman photo).



IF you have anything to do with airplanes or helicopters, then you probably have something to do with Engines . . . AND IF you have anything to do with Engines, you *SHOULD* have something to do with *DALLAS AIRMOTIVE.*

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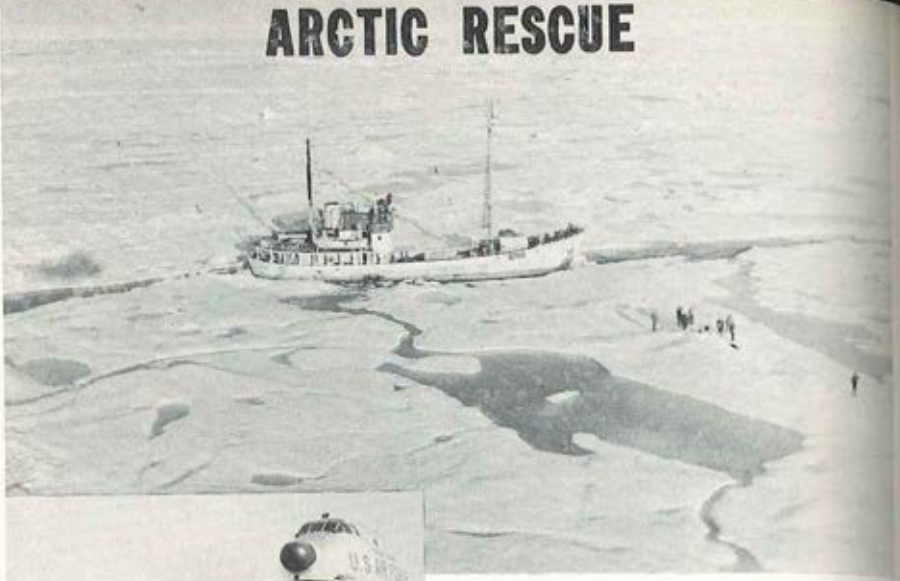
ARCTIC RESCUE



A giant AF C-124 rushes up an Army H-19 to Mestervig, Greenland.

Landing on the ice near the Polarbjoern, the air-lift begins on August 28th.

Danish Naval Cutter, the Teisten, anchored offshore as Army H-19 refuels

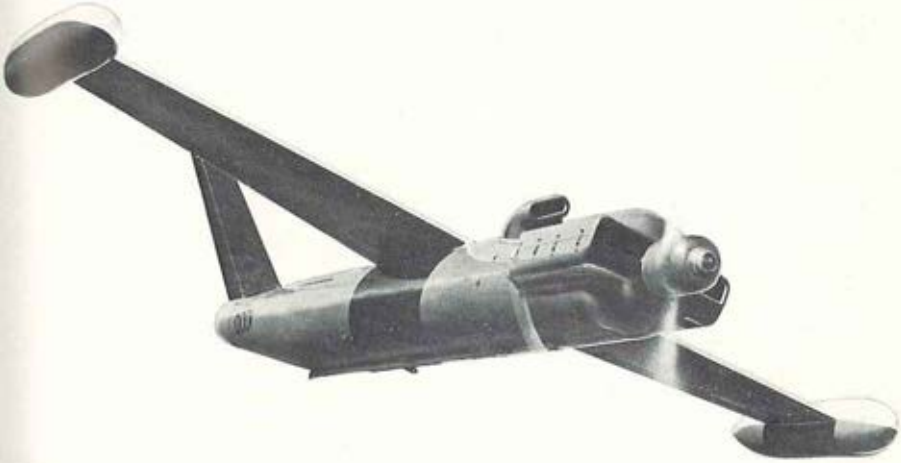
THULE, GREENLAND—Another page in the history of Army aviation was completed in late August with the rescue of the passengers and crew of the Norwegian freighter Polarbjoern (*Polar Bear*). The Polarbjoern had departed from the weather station at Cape Berghaus, Greenland, bound for its home port, Aalesund, Norway. While sailing southward through the ice-filled sea lanes off the coast of Greenland, excessive floes of pack ice were encountered in the area east of Jackson Island.

These floes closed in behind the ship and soon the Polarbjoern was held fast in the ice. Several attempts to break free of the ice failed and the ship drifted with the ice for the next seven days, waiting for an opening to get free. On the evening of 24 August 1957, the Polarbjoern suffered severe damage as the heavy ice-floes closed together, crushing the wooden hull.

The Captain declared an emergency and radioed to Mestersvig, a Danish village to the south, to report the position of his ship as opposite Cape Hold White Hope. He requested helicopter rescue of his twenty-three passengers and crew, who had evacuated the ship and were living on the ice. Mestersvig radio called Air Rescue at Keflavik, Iceland, who in turn radioed the 55th Air Rescue Squadron at Thule, Greenland, and requested that they undertake the mission. The 55th started rescue planning immediately.

As requested, the U.S. Army Transportation Arctic Group at Thule supplied an H-19 helicopter from its Aviation Section, along with a flight crew and necessary maintenance personnel. Military Air Transport Service supplied a C-124 transport to airlift the Army helicopter and the support personnel to Mestersvig. The 53rd Air Rescue Squadron from Keflavik sent an SC-54 to

CAPABILITIES . . . Manpower, Tools and Experience



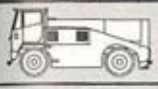
The Navy's XKDB-1 target plane, shown above, was Beech Aircraft's first major project in the missile field. Its evaluation has revealed high performance in stability, controllability, and launching and recovery.

Beechcraft engineers are currently developing a whole family of rocket and turbo-jet powered drones. One of these, the Model 1013, can be equipped with multiple camera installations for both day and night observation. It also has the alternate capability of delivering tactical supplies to isolated combat units.

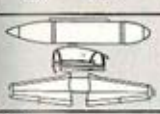
Other Beech projects include research and development work on launching and recovery systems for missiles, drones and manned aircraft; engineering test programs on aircraft emergency escape systems; and classified projects in the advanced fields of aerodynamics, cryogenics, thermodynamics, and aircraft range extension.

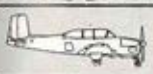
To put Beechcraft's capabilities to work to solve your research, development or production problems, telephone or write the Contract Administration Division today.

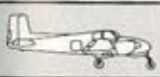
BEECH BUILDS


MA-3 MULTI-PURPOSE VEHICLES


C-26, MD-3 POWER UNITS


TANK-WING-MAJOR SUBASSEMBLY SUBCONTRACT PRODUCTION


BEECHCRAFT T-34 TRAINERS


BEECHCRAFT L-23 TRANSPORTS


4-PLACE BEECHCRAFT BONANZA


6-PLACE BEECHCRAFT TWIN-BONANZA


8-PLACE BEECHCRAFT SUPER 18

Beechcraft

BEECH AIRCRAFT CORPORATION, WICHITA, KANSAS, U. S. A.

provide rescue cover and to air-lift fuel and oil to the air strip at Mestersvig.

Adverse weather conditions prevented immediate start of the rescue operation so planning continued, and finally on 27 August all rescue units arrived at Mestersvig, the mission staging area. Necessary planning and coordination between the Danish, Norwegian, and United States personnel was controlled by Major Elroy M. Lewis, from the 55th Air Rescue Squadron.

Admiral A. H. Vedel, of the Danish Navy, and other Danish representatives were briefed with the mission crews regarding the rescue plan of action. An Army maintenance crew, consisting of SFC Edward C. Barr, Sp/3 Edmond P. Millet, and Sp/3 Herman Brown, and assisted by Mr. William Wycoff, a Sikorsky Tech Rep, prepared the Army H-19 helicopter for flight after it was unloaded from the C-124.

The Danish Navy cutter, Teisten, was loaded with barrels of aviation fuel and dispatched to Sofia Sound to establish an advanced refueling point for the helicopter, approximately 50 miles north of Mestersvig and 50 miles west of the stricken Polarbjoern.

On 28 August the Army helicopter, piloted by 1/Lt John A. Johnston and CWO Donald R. Joyce with PFC Robert G. Rogers as crew-chief, flew north to make contact with the Teisten and to refuel the helicopter for the first rescue flight. With its crew wearing arctic water survival suits, and the SC-54 circling overhead for top cover, the helicopter flew down the fiord and put over 32 miles of open water-ice-floes between shore and the Polarbjoern.

The chopper landed on the ice near the ship and the 23 men were instructed as to how the rescue woud be completed; they would be flown out four at a time; they would carry a small amount of personal

(*Continued on Page* 37)

PHOTO BELOW: Army mission personnel included (back row, L-R) M/Sgt Carl V. Byrd, Lt. John A. Johnston, Adm. A. H. Vedal (Danish Navy), CWO Donald R. Joyce, & William F. Wycoff (Sikorsky). Front: PFC Robert G. Rogers; Sp/3s Edwin J. Daugherty, Herman Browning, & Edmond P. Millet; & SFC Edward C. Barr. (US Army photo).

DC.....

The recent military manpower reductions will affect a proportionate number of Army aviation personnel, according to DCSPER authorities. Actual estimates vary considerably with 300 to 1,000 AA's quoted as the low and high figures. Hardest to be hit: those AA's with minimum branch proficiency.

★

Look for the sharp cutback in the input figures at Camp Wolters. Dual savings accrue by placing RW and FW trained AA's in warrant slots.

★

The economy measures have also affected unit operations. One example: H-21 crews assigned to Ft. Devens' 93rd Transportation Company are chairborne on reaching seven flight hours each month.

★

Caught in the backlash of another fuel problem are the D.C. area aviation personnel. A tight fuel situation has drastically curtailed operations at Davison AAF.

★

Mockup inspections were numerous throughout September and October. The Grumman OF-1 mockup conference (see page 10) was followed by similar conferences at de Havilland (*Caribou*) and Morton, Pa. (*Vertol* 107).

★

The crash of an Army-owned H-37 *Mojave* at Patuxent River will bring about many accounting headaches. The craft was out on the loan to the Navy for testing purposes.

★

The air delivery of Army L-23D aircraft to the Far East is now at a D/A planning level. Target date is Spring, '58. The Atlantic-India route, rather than the trans-Pacific route is being studied.

★

Army aviators are now being assigned to TAGO to monitor the assignments of AA's in the combat arms. The assignment of Maj. Charles Anders (Arty) was the initial step.

★

Testing at the U.S. Army Aviation Board has temporarily switched to projects of a non-material nature; writing MC's, studies, instrument program are examples. The Board officials anticipate an early return to hardware.

★

Seventy-five AA's were accepted in the first go-around of the Regular Army Augmentation Program, approximately 7% of the 1,032 total. Based on the first list, a DCPER authority states that 1 of each 2 AA's who have made application for integration have a choice at this point. Ratio in the remainder of the Army is 1 in 4.

Service and Then Some...

The biggest organization of its kind anywhere in the world, the *Air Service Division* of the Ontario Department of Lands and Forests has as its beat the 400,000 square miles of Ontario's Northland. For patrolling this vast area the Air Service Division is equipped with over 40 DHC-2 *Beaver* transports and five of the larger DHC-3 *Otters.*

In addition to duties ranging from the movement of men, equipment and supplies to forest fire locations; the evacuation of inhabitants from the danger area, and the water bombing of small conflagrations, the Division renders valuable aid to the other departments and the public generally.

Contributing greatly to the conservation of Ontario's hunting and fishing grounds, the division transports young fish in specially constructed tanks and air drops them from a few feet above the surface into many lakes and streams. Fur bearing animals are also transported to areas where scarcity may endanger the livelihood of the Indians and others who live by trapping and hunting.

Search and rescue work, aiding the Provincial Police in hunting down wanted criminals, and air-evacuating physically and mentally ill patients from remote areas are other vital missions.

THE DE HAVILLAND AIRCRAFT OF CANADA LIMITED

POSTAL STATION "L" TORONTO ONTARIO

WASHINGTON REPRESENTATIVE — D. J. GIVENS

MIRROR
Landing System

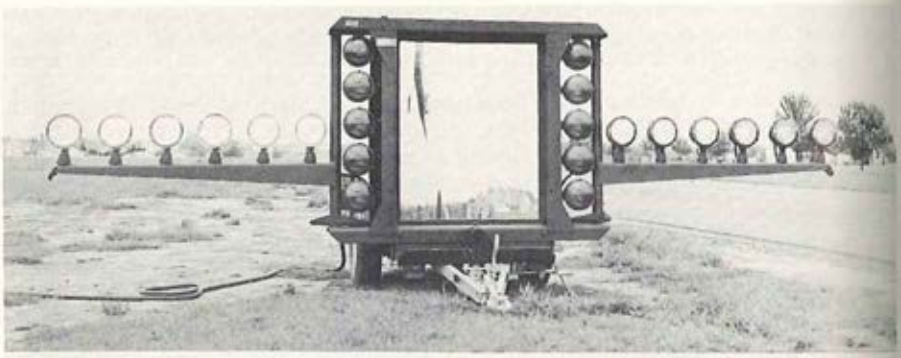
The mirror, or optical landing system, was originally developed by the British Navy and first used on the British carrier, *Bon Homme Richard*. It has been adopted by the U.S. Navy as standard for all carrier work and a trailer mounted portable system that has been devised is being installed at all land naval air stations for training.

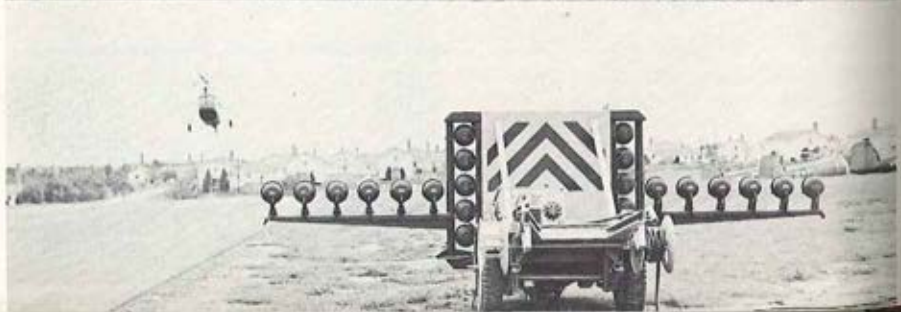
In September, 1957 the U.S. Army Aviation Board received one of the portable models for evaluation. The system consists of a concave mirror, approximately six feet high and four feet wide, with a row of six green lights (datum lights) extending outward from each side as a horizontal reference to the mid-point of the mirror. A row of amber lights placed 150 feet in front of the mirror are concentrated into a round amber ball. The mirror is then tilted to the desired angle of approach.

In operation the pilot sees the reflection (called "meat ball") while turning on final approach and by keeping the "meat ball" aligned with the datum lights, (as the ball appears high, the aircraft is high), the pilot will maintain a constant glide path and touchdown constantly at a preselected spot.

Note: Reference, April 1957, Approach Magazine, published by U.S. Navy.

ABOVE: The concave mirror of the landing system provides some close-up amusement to Lt. Cols. William S. Contole (left) and Alexander J. Rankin. Take one look and you'll be on light lunches for a week! Below (top photo): Approach view as seen from behind the mirror. (Bottom photo): Head-on view as seen by the pilot. (US Army photos.)





NEW H-23D

DESIGNED FOR 1000 HOUR OVERHAUL LIFE!

Achieving the Army's goal of reduced maintenance

GREATER AVAILABILITY is assured by the design concept of long-life components.

RELIABILITY is assured by exhaustive pre-production testing. 1000 hour ground endurance test successfully completed.

PERFORMANCE—The H-23D demonstrates higher hovering ceiling, higher rate of climb, more pay load, greater range.

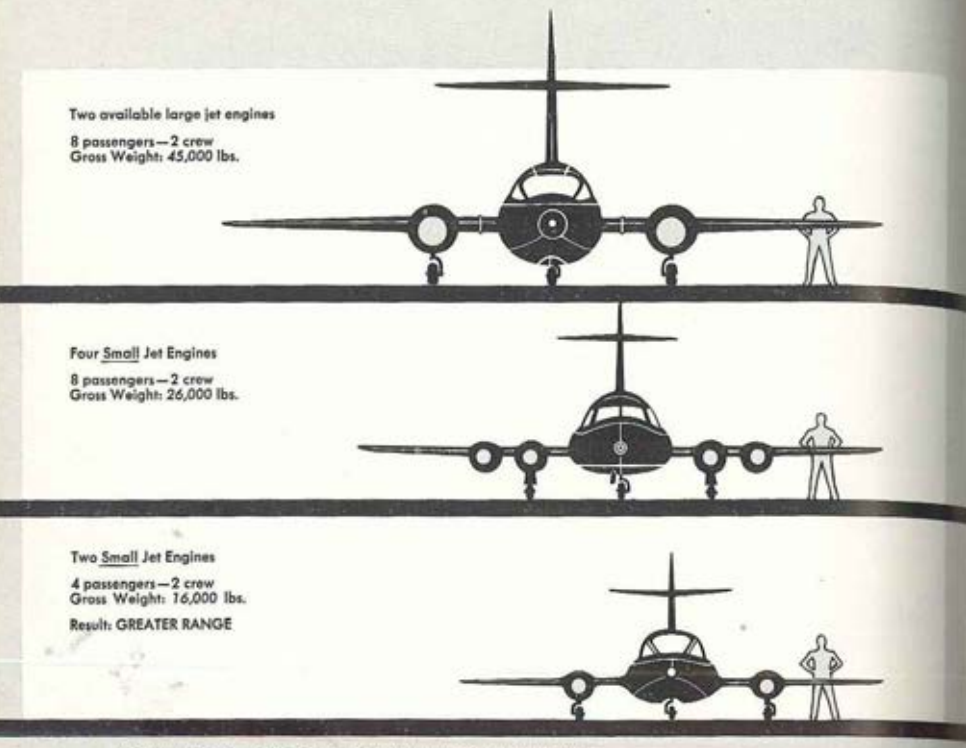
LOWER OPERATING COSTS are inherent in the completely new drive system, due to fewer overhaul periods, accessibility, ease of maintenance and overall mechanical reliability.

HILLER HELICOPTERS
PALO ALTO, CALIFORNIA

1000 HOUR TEST COMPLETED—Hiller crew standing beside Army H-23D after completion of 1000 hour accelerated ground endurance test.

CAMP WOLTERS — New H-23Ds will soon augment the daily training schedules of the Army's Helicopter Primary Flying School in Texas.

COMMAND LIAISON—The nation's capitol is one of a number of areas where the Army H-23 has proven its value.



EXAMPLES OF SMALL JET ENGINE WEIGHT LIFTING ADVANTAGES AND AIRFRAME SHRINKAGE... ON IDENTICAL MISSIONS.

SMALL JET ENGINES... CHAMPION WEIGHT REDUCERS

The new breed of high-performance, lightweight, small jet engines coming to life will broaden the horizons of jet aircraft design, performance, versatility and utility.

Best of all, the new small jets will make possible lighter, less costly aircraft with performance to match the big planes of today. With power/weight ratios as high as 8 to 1 and long range potentials of more than 10 to 1, the small jets may power lightweight fighters, basic and advanced jet trainers, transports of half the size with proportionate savings in weight and cost. As the new airframes shrink, their performance and especially their versatility and utility expand.

Performance and potential in a smaller package . . . this is the promise held out by the new family of small jet engines.

Fairchild Engine Division has long been a pioneer in aviation and a pioneer in power and is dedicated to the small jet engine concept. Watch for the new family of small, lightweight jet engines under development at the Fairchild Engine Division.

Test cell for the powerplants of tomorrow—a vital link in the chain of advanced research program at Fairchild Engine Division. Equipment, experience and design ingenuity—these are the elements in Fairchild's pioneering in small jet powerplants.

FAIRCHILD ENGINE DIVISION

DEER PARK, LONG ISLAND, N.Y.

A DIVISION OF FAIRCHILD ENGINE AND AIRPLANE CORPORATION

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

CURRENT AT TRECOM

by Capt. Harvey W. Huntzinger

VTOL AIRCRAFT—The Army is expending funds and effort with *Bell, Doak, Fairchild, Goodyear, Kellett, McDonnell, Ryan* and *Vertol* on research to develop a VTOL type aircraft. The Army is interested in developing an aircraft which combines FW and RW flight characteristics. Such an aircraft will be capable of hovering, vertical ascent and descent, and of flying at speeds ranging from 0 to 200 knots.

The objective of the VTOL test bed program is to overcome the stability and control problems encountered in aircraft which combine FW and RW flight characteristics and ultimately apply this knowledge to future aircraft design. The Army has funded research programs with the Navy and the Air Force to prosecute the largest portion of the VTOL research program; however, USA TRECOM has let contracts with *Doak* and *Fairchild* to design, construct, and fly test beds.

The *Doak* Model 16 (project engineer: Joe McDonald) is a two place, mid-wing aircraft with an empty weight of 1900 pounds and a gross of 2600 pounds. It is approximately 28 feet long, 10 feet high with a 25 foot wing span. The power plant is a T-53 gasoline turbine engine (located centrally in the fuselage) which drives two 4-foot diameter rotatable ducted fans located on the wing tips.

These ducts can be rotated 90° from a vertical to horizontal position. Conventional control surfaces are used during normal FW flight; however, during hovering and low speed flight stability and control is achieved by locating controllable vanes in the wing tip ducted fans and in the jet exhaust stream at the trailing edge of the engine tail pipe. These controllable vanes allow roll, pitch, and yaw control.

This test bed is scheduled for completion by October 1957. It is then scheduled for 50 hours of ground run tests and 50 hours of flight tests.

The *Fairchild* Model 2241 (project engineer: Hal Johnson) is a tandem two-place, high wing aircraft with an empty weight of 2880 pounds and a gross of 3400 pounds. It is approximately 33 feet long, 15 feet high with a 33 ft wing span. It is powered by a T-58, 1000 HP, turbine engine (located centrally in the fuselage) which drives four 7-3/4 foot diameter propellers.

VTOL flight is achieved through utilization of large sliding, slotted flaps. These large flaps turn the propeller slip stream downward through a large angle and the vertical resultant force obtained permits hovering and vertical flight. Two small fans mounted behind the conventional tail surfaces are utilized to provide pitch and yaw control in vertical and slow speed flights. Roll control is obtained through differential propeller pitch of the outboard propellers.

The Model 224I is scheduled to begin the 50 hr ground and the subsequent 50 hr flight test in Sep 58.

250 HP GAS TURBINE ENGINE—In June 1956, eight solicited proposals were received in response to bid invitations to accomplish a parametric design study for a 250 HP shaft gas turbine engine. The proposals were evaluated and resulted in USA TRECOM letting four contracts to accomplish the design studies (project engineer—Lt. Darling). The characterictics given to the contractors for the studies were a light weight economical engine which could be employed in FW and RW aircraft during the 5 year period subsequent to development. The

(*Continued on Page* 37)

BELOW — Electronic "detective," a unique precision instrument developed by the Lycoming Division of AVCO, is capable of anticipating bearing failures in rotating machinery such as helicopters transmissions and gear boxes. The temperature Acceleration Indicator has no counterpart on the market.

The Bell H-40

Newest Helicopter on the Line and the Army Has It!

MAJOR GENERAL
HAMILTON H. HOWZE
Director of Army
Aviation

First new helicopter designed around a turbine engine . . first ever built expressly for battle service, the Bell H-40 is the Army's own, designed and built to Army needs and specifications.

Low in silhouette, capable and rugged, the H-40 meets the Army's demand for easy maintenance in the field . . economical operation, on a wide range of fuels . . greater payload and exceptional handling ease.

This new super-powered helicopter is a tribute to the foresight of the men of Army Aviation . . and their desire to keep their service "Above the Best." Through their efforts and design supervision, utilizing previous knowledge of Army needs, the Army *got* the best . . the Bell H-40.

Watch "WHIRLYBIRDS" on TV . . . consult your local paper for time and station

BELL
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SUBSIDIARY OF BELL AIRCRAFT CORPORATION · FORT WORTH, TEXAS

Coagulant

Bob Williams

When the AAAA's Executive Vice President, Col. Robert R. Williams, is on the scene, the word is *gel.*

A natural leader, Bob has the capacity to get things done, obtaining the maximum performance from each command he has been given.

The first aviator in the active forces to earn the coveted Master Army Aviator badge, Col. Williams has run the full gamut of AA assignments, parlaying intense drive and keen interest in his work into fifteen fruitful years in Army aviation.

Not averse to putting his head on the block, whether it be for his men or an ideal in which he believes, he is known as a person who is accustomed to tepid to hot water.

As one of his contemporaries phrased it, "Being so intense about Army aviation, there's no status quo with Bob. His sincerity cools the hottest water."

Soloing in Baton Rouge in '35, the USMA graduate served in the '42 Department of Air Training at Fort Sill. During the same year, he received an Army Air Corps Instrument Rating, becoming the first ground force pilot to earn this certificate.

Serious when the occasion demands, he has a lighter side that has left a long trail of victims, all of whom have been delighted to take the brunt of his good-natured hoaxes, practical jokes, or "awards."

Brightening every gathering at which he is asked to say a "few words," his friendly manner is enhanced by his keen wit.

"Bob's the only person I know who can say the right thing at the right time—or the wrong thing, and still come up a winner," a friend confides. "You either laugh with him or you're amused by his efforts to extricate himself."

While serving as the first chief of the Army Aviation Branch of G-3, he staffed action papers at a time when AA underwent rapid expansion in both equipment and personnel. Being in the first identifiable AA agency on the General Staff he presided in what can now loosely be described as the diameter of the target's "five" circle.

Now the President of the U.S. Army Board at Fort Rucker he is concerned with the operational evaluation of all types of new AA equipment.

Although he does not claim to be a perfectionist, he surrounds himself with the best personnel available and has been known to handpick his cohorts in all ranks and grades. This round peg in the round hole approach bears fruit —a loyal, concientious command.

A constant traveller, he may be in Culver City one day and Hagerstown the next. His "home front" counterpart, Jean, parks his suitcase in the front foyer, keeps a close check on the clean shirts to insure smooth departures, and holds down the fort with sons Blair and Keith and daughter Kathleen.

Knowing that in his office he is prone to scat on a mere phone call, he invariably employs Army aircraft, utilizing his special instrument certificate when needed. You'll find an A.F. Green Card in his wallet, too, an instrument card he has held continuously since '50.

Master AA

As an steady traveler, there are very few military aircraft cockpits that are unfamiliar to him. He's been fully qualified in all Army aircraft and a host of AF-Navy craft to boot (C-47, B-25, F4U, F6F, T-33, among others.)

A strong exponent of the AAAA, the Colonel feels that the Ass'n can do much to weld esprit and a unity of purpose.

"If, on occasion, we happen to have an exceptionally good time while we're doing this, so much the better," he adds.

(The second in a series of informal profiles on the executive officers of the AAAA.)

FACTS about | THE ARMY AVIATION ASSOCIATION OF AMERICA, INC.

Purposes The Army Aviation Association of America is an independent, non-profit corporation without capital stock organized under the laws of the State of Connecticut; there are no stockholders or bondholders. Under the By-Laws of the organization, the Association has three main purposes:

To preserve and foster the spirit of good fellowship among former and present personnel of the U.S. Army, the U.S. Army National Guard, and the U.S. Army Reserve who were or currently are professionally affiliated with the field of U.S. Army aviation or its allied pursuits.

To advance the status, overall esprit, and the general knowledge and efficiency of individuals who are professionally affiliated with the field of U.S. Army aviation in the active Army or in one of the Army Civilian Component establishments.

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

Benefits All members of the AAAA, by acting in concert, secure those group benefits that are available to any group of individuals as a body, such as group purchasing, group insurance, group representation, etc.; receive a monthly issue of the authorized organ of the Association; may avail themselves of a loan program wherein small emergency RON loans may be secured by Members without interest charges; and have access to an Association locator service. Employment information; a public relations program designed to assist Members and lecturers in Army aviation matters; and an Association-paid travel and pedestrian accident insurance policy covering Members for accidents involving loss of life or dismemberment as pedestrians or while riding in vehicles such as a car, plane, train, bus, etc. are under consideration as possible future benefits.

Application for AAAA Membership

I wish to become a member of the Army Aviation Association. I am a U.S. citizen, qualified under classification checked below. Please start my annual ARMY AVIATION Magazine subscription and send my membership credentials.

☐ MEMBER: My past or current duties affiliate me with the field of U.S. Army aviation or its allied pursuits.

☐ STUDENT Member: I am currently engaged in student training at a recognized U.S. Army primary flight training facility or an Army Basic Aviation Maintenance Instruction facility. (Non voting).

☐ ASSOCIATE Member: I am neither of the above, but wish to further the aims and purposes of the Army Aviation Association. (Non-voting, non-office-holding).

Membership Year Terminates on March 31st

☐ $6.00 Enclosed: (Applications submitted from April 1st through June 30th).
☐ $4.50 Enclosed: (Applications submitted from July 1st through September 30th).
☐ $3.00 Enclosed: (Applications submitted from October 1st through December 31st).
☐ $1.50 Enclosed: (Applications submitted from January 1st through March 31st).

NAME.....
(Please Print) (Rank)

ADDRESS.....
(Post Box Number, Residence or Quarters Address is Desired)

CITY.....ZONE.....STATE.....

If applying for *Member* status, briefly list your affiliation with Army aviation:

.....

.....

☐ Army; ☐ NG; ☐ USAR; ☐ Friend SIGNATURE.....

Failure to indicate category of Membership or lack of signature will invalidate this application.

☐ I currently subscribe to "ARMY AVIATION MAGAZINE" and desire a pro-rated monetary refund on that part of my subscription that has not been filfilled.

☐ I currently subscribe to "ARMY AVIATION MAGAZINE" and desire that the remaining issues comprising the balance of my subscription be sent to:

NAME.....
(Please Print) (Parents, Brother, Uncle, Friend, etc.)

ADDRESS.....
(Post Box Number, Residence, or Quarter Address is Desired)

CITY.....ZONE.....STATE.....

Random Pattern Counter

"We have another device which I have been plugging. It is another one of those small problems which we are trying to solve. It is the problem of wheels-up landing, unintentionally pilot-induced. Anyone who flies an aircraft with retractable gear is faced with the probability or possibility of making a wheels-up landing.

The reason for most wheels-up landings is that the pilot is interrupted in his habit pattern as he comes around the traffic pattern. . . In the military, when a pilot reaches this point (downwind leg), he is reporting to the tower, "Turning base, gear down and locked." Each time the pilot makes a report he honestly believes in his own mind that the gear is down and locked.

He is not making an intentional fictitious report but, during the month of March, we (U. S. N.) had four wheels-up landings and we had twenty-four wheels-up passes. In each case, the pilot made the report: "Gear down and locked." In twenty-four cases the man down at the end of the runway alerted him and gave him a wave-off. In four cases he came in and made a wheels-up landing.

How serious is the problem? Last year, there were fifty-seven wheels-up landings in the Navy. That represents a tremendous loss of aircraft. They aren't all strikes but practically all of them go to overhaul. The problem then becomes, how can we get the pilot to assure himself that his gear is down at this point, when he makes his report.

We have gone to a *random pattern counter* which be believe will give the pilot the opportunity to check his landing gear. The (Naval Aviation) Safety Center is sponsoring this, I am happy to report.

This (pointing to exhibit) is a representation of an instrument panel in an F9F aircraft; the landing gear position indicator and various other instruments, and we have added this *random three-digit counter* which shows through this small window only when the gear is down and locked. At all other times, the window is closed and the digits can't be read.

Now, we would like to have the pilot do something which is non-habitual, something which he has to check each time when he makes that report, "turning base, gear down and locked." We would like for him, as he comes around, to look down at this counter which shows a completely random pattern each time, much like a slot machine.

Then, as he turns base, he will say, "turning base, gear down and locked, I read . . ." and give a three-digit reading. Now, he knows that he is not going to be able to predict what it is. He also knows that this is not a warning device. This is an instrument to help him, so the only way that he can get it is to look down and see it.

If he looks down and the windows are closed, it indicates only one thing to him: he hasn't put down his landing gear. If the window is open, his gear is down and locked and he gives the random reading to the tower to verify the fact. The tower doesn't care what he reads, just so long as he gives a reading. That is enough to let the tower know that he has checked his landing gear himself and that the responsibility is back in the cockpit where it belongs.

Should he fail to give a reading, then he is not given clearance to land. But he is still in position where he can take a wave-off successfully or perhaps, lower the gear and get in for his landing. . .

This is an instrument which we hope will do this (job) 100% of the time. Many other devices have been suggested, even to the extreme of barbed needles under spring tension beneath the pilot's seat to give him a pointed warning when he hasn't put his gear down.

This represents only one of the facets that we in the (Naval Aviation) Safety Center are sponsoring in trying to eliminate one specific type of accident, the wheels-up landing. It is the most senseless and useless type of accident.

—Extract from remarks by Commander James Scholes, U.S.N., before the Aviation Safety Panel held during the 1957 *AWA annual meeting in St. Louis.*

Photo Stories

Are you sitting on a good photo-story? Send it in!

No kin to "Red Dog" but an old-timer in AA himself, Lt. Col. Ernest L. Hamilton heads the California Regional Board of the AAAA. Long on interest and short on hesitation, he's honcho'd the California activity, uniting USAR-NG-and-Army interests. Assigned to the Combat Development Engineering Center at Ft. Ord, this low-scoring golfer has run out of "pigeons." Swell fellow—but merciless on a golf course.

FT. MONROE, VA.—Five members of Explorer Scout Troop 1, Brooklyn, N. Y., accompanied by their counselor, David R. Blossom, visited the Virginia Peninsula during early September to attend the Jamestown Festival and to garner points toward the achievement of their flight badges at Walker Army Airfield, Ft. Monroe. Pictured in front of the Army L-26 aircraft just before they took an orientation flight over the Peninsula are, left to right, Lt. Col. Harry T. Shiveley, CONARC, who briefed the Scouts on the Army Aviation mission; Scouts Dennis Rubin, Daniel Revalta, Charles Mumme, Arthur Pinna, and Richard Revier; D. R. Blossom, who holds the rank of Colonel in the USAR; and Capt. Robert C. Adams, CONARC Flt Det, pilot.

FORT RUCKER, ALA.—Having enjoyed his orientation ride in the Cessna T-37 jet trainer, Lt. Gen. Thomas F. Hickey, Third Army Commander, is shown expressing his thanks to Lt. Col. Jack W. Ruby (right), deputy director for the higher performance observation aircraft test unit at Ft. Rucker. Asked about the flight, the General remarked, "It's like sitting in the front row of the theater, rather than twenty rows back." (U.S. Army Photo.)

BETHPAGE, N. Y.—Shown above is a scale model of Grumman Aircraft's new higher performance observation aircraft, the OF-1. Powered by two Lycoming T-53 turbine engines, the OF-1 represents the Long Island firm's initial contact

If it has its "first run" here, we'll reimburse you for the consideration.

Photo Stories

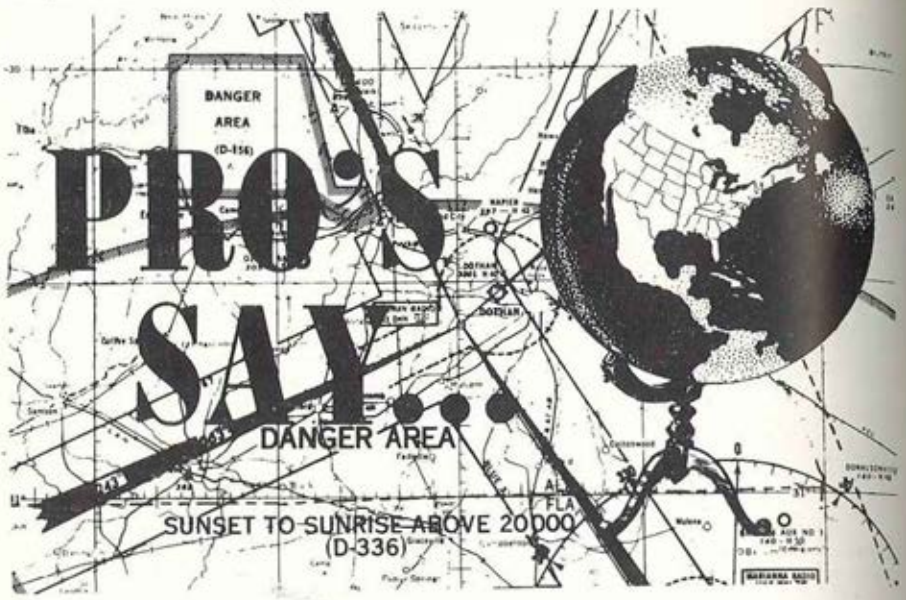
ECHTERDINGEN, GERMANY—Wives of the Seventh Army Aviation Section and the Army Aviation Training Center, in touring the aviation facilities where their husbands work, go through the "motor inspection" bit. From the absence of smudges and grease spots it would seem the hour was theoretical, not practical. Front row (L-R): Mrs. T. F. Schirmacher, Mrs. Charles Matheny; Mrs. R. N. Duffy; and Mrs. R. M. Cunningham. Rear: Mrs. P. J. Moyle; Mrs. J. W. Serig; Mrs. R. G. Culbertson; and Mrs. F. E. Frey (U.S. Army photo; see story on Page 28).

THULE, GREENLAND—Three tuckered "hunters" grasp an elusive Arctic hare after a joint Army-Air Force maneuver undertaken to capture friend, Bugs. The speed merchant had wandered through the open doors of Hangar No. 2, shared by the USA Trans Gp Avn Section and the 55th Air Rescue Sqd. Daring trappers, left-right, are William Hladtke, Vertol Tech Rep; A/2c Alex Chernowsky, H-21 crewchief w/55th; and M/Sgt Carl V. Byrd Trans Arctic Avn Line Chief. Latter has a "stew" in mind, no doubt. (Photo, Bob Joyce).

with Army aviation. The winner of a recent Army-Navy design competition, the OF-1 is expected to provide the Army and the USMC with greatly improved capabilities of air observation. (See Mock-up story, page 10.)

FORT RILEY, KAN.—Maj. Walter S. Makuch, (left) acting CO of the Army Aviation Unit Training Command, congratulates two mechanics from the 98th Helicopter Field Maintenance Detachment upon their successful completion of the 80-hour Raven (H-23) Maintenance Course. Sp/2 Louis H. Heberer (center) & PFC Billy D. Klaus (right) hold the Certificates proudly. The four weeks course was conducted at Marshall Field by the manufacturer of the craft. (U. S. Army Photo.)

Informal, voluntary articles on current Army aviation happenings as they occur in the line outfits scattered throughout the world . . .



Share a Seat!

HEIDELBERG, GERMANY—In late July, Army crews ferried three L-23D *Seminoles* from CONUS to Europe via Newfoundland and the Azores. Although a trans-Atlantic flight had been completed earlier by two USAREUR crews, not to mention many civilian flights by contract operators, the itinerary of this dog-leg flight makes interesting reading. The day will shortly come when AA's will consider this flight as "old hat," a *milk run*. The delivery of L-23D aircraft to USAFFE by way of the Middle East, India, and the East Indies is currently being studied at a D/A level. Read along and share a seat with the crew:

Personnel comprising the three crew flight included Maj. Norman W. Goodwin (Flt Comdr), pilot, and Capt. Robert W. Blakely, co-pilot; Capt. Guy R. Claybourn, pilot, and Lt. Richard H. Duckworth, co-pilot, all of the USAREUR Aviation Detachment; and Capt. Clifford E. Johnson, pilot, and Capt. Irwin T. Bruestle, co-pilot, both of Seventh Army Aviation Detachment.

By the 22nd of July all pilots and co-pilots had completed check outs in the L-23D in the States. A tour of the L-23D production line at Beech Aircraft was made by the crews to enable them to become thoroughly familiar with the systems and components of the aircraft they were to operate. Much valuable information was gleaned from conversations with Beech engineering, customer service, and flight personnel.

Beginning on the 24th of July a series of flights was undertaken by each crew in order to give the aircraft a thorough "shake down" and to compile accurate fuel consumption data. These flights, which put 25 to 30 hours on each plane, were accomplished without incident. The longest flight in this series took ten hours and fifteen minutes and was from Seattle to Oklahoma City.

From 26 July through 2 August, the three aircraft were given a thorough inspection by the Maintenance Section at Davison Army Air Field, Virginia. Under the supervision of Capt. James Kishi, Maintenance Officer, and Mr. Charles M. Wibirt, Technical Representative for Beech, all "write-ups" and discrepancies were corrected. During the time the inspection was in progress, the crews went to Dover Air Base, Delaware, to secure exposure suits, "Mae Wests", one-man life rafts and North Atlantic navigational kits.

Ft. Belvoir — Lajes

On 3 August the three aircraft departed Davidson AAF on an IFR flight plan for Harmon AB, Newfoundland, completing the flight in seven hours and forty minutes. The following morning the Army crews met with the commanding officer and other members of the 52nd Air Rescue Squadron to effect the planning and coordination for the first over-water leg to Lajes in the Azores Islands. That afternoon the L-23Ds were flown to Torbay, Newfoundland, putting them into a position 138 nautical miles nearer Lajes.

At 0808 local time on the 5th of August the first aircraft made an instrument take-off and reached "on top" within a very few seconds. This allowed the succeeding aircraft to be released for take-off at brief intervals. During the climb to 11,000 feet a radar-directed track was flown to the specified departure point, denoted as Tarpon. Before reaching Tarpon, communications were established with the escorting SC-54; and pre-arranged radio frequencies were checked. Failure to establish contact on the primary frequency necessitated the utilization of a secondary frequency.

The flight progressed eastward in smooth air, encountering weather conditions as forecast—high thin

FORT BENNING, GA.—Checking his flight plan at Lawson Army Air Field prior to soloing for the first time in a fixed-wing aircraft, Major General Herbert B. Powell, right, commanding general of the US Army Infantry Center, confers with his instructor, Maj. William A. Howell, Executive Officer, LAAFC. The general is a qualified Army helicopter pilot. (US Army photo).

cirrus above, excellant visibility at flight level and shallow stratus below. Using radio compasses the L-23Ds homed on Ocean Station Vessel "Delta"; and upon coming within VHF radio range, voice communications were made by the SC-54. Sea condition—height of swells, direction of motion and surface winds—and surface weather observation were radioed to the flight. A report from "Delta's" radar plotting room gave the flight position, true track being made good and a ground speed reading. Between "Delta" and Lajes the flight was afforded another fix from a USN WV (Radar Picket) aircraft on patrol in the area.

Lajes — Madrid

Two hundred miles from Flores Beacon the L-23Ds were receiving reliable indications from the ADFs and seven-thousand-foot Mount Pico was sighted at an estimated one hundred mile range. Ground controlled approaches were made at Lajes because of lower broken cloud coverage with intermittent rain showers. Time for this segment was eight hours and twenty minutes. At the 45% power setting used the fuel consumption was 24.9 gallons per hour; thus each aircraft landed with appromately 79 gallons (three hours and ten minutes' worth) of fuel.

On 7 August the flight taxied onto the runway at Lajes bound for Madrid. When Lajes Tower advised that there would be a delay securing an ATC clearance, the flight requested and received permission to stop engines with the aircraft still in position on the runway. After a fifteen-minue delay the first L-23D was off at 0612 local time to be followed by the two other aircraft with ten-second intervals between take off. Inbound traffic precluded a climb above 4500 feet and at this altitude instrument conditions were encountered. The L-23Ds effected their own separation by 10° left and 10° right course alterations by two of the aircraft.

When the climb to 11,000 feet was completed, the flight was in the clear and visual separation was maintained to destination. Using Consol the L-23D crews made a series of fixes. The accuracy of these fixes was substantiated by the SC-54 navigator who was using Loran and celestial methods of navigation. The initial Consol fix was made approximately five hundred miles offshore. The beacon at Lisbon was homed in on at three-hundred mile range. From Lisbon to Madrid airways were flown, and a VFR descent was made for landings at Getafe AB. Time for this leg was seven hours and thirty-five minutes.

Madrid — Heidelberg

On 8 August the flight departed Madrid on a VFR flight plan for Chaumont AB, France, since the forecaster at Getafe predicted a front with a solid line of thunderstorms between Chaumont and Heidelberg. As maximum range was no longer a consideration, 65% power settings were employed. Across France this yielded ground speeds on the order of 215 knots. To clear the clouds building up, a gradual climb to 16,000 feet was made. (One position report made at this altitude to an Air Force tower resulted in a doubtful-sounding acknowledgment followed in a few minutes by a request for verification of altitude.)

Reports disclosed that the previously forecast line of thunderstorms had become scattered, so a change of destination was filed for Heidelberg. Arriving over Heidelberg AAF, a low pass echelon was made. Beginning at 1500 hours local time, landings were made at one-minute intervals. On hand to greet the crews were their wives, families and friends with the official welcome being tendered by Colonel W. W. Harris, Deputy Chief of Staff, USAREUR. (Davison to Heidelberg AAF: Twenty-nine hours and forty minutes flying time.)

Whirly-Girl No. 22

WASHINGTON, D.C.—A former Army nurse and the widow of an Army helicopter pilot, Mrs. Robert M. Gronwold of Hollywood, California, has now become the 22nd *Whirly-Girl*. This exclusive group represents the 22 women in the free world who are licensed helicopter pilots.

"Wini" Gronwold first became interested in the helicopter during its performance in Korea, where she served as an Army nurse.

It was in 1955, while stationed in Germany, that she met and married the late CWO Robert M. Gronwold, U.S. Army. After he was killed in a 'copter crash in California last year, she remembered his promise to teach her to fly. Wini was determined to overcome her fear and continue with the flying "my husband loved so well."

With the aid of the G.I. Bill, this vivacious, auburn-haired nurse began her flight training in October, 1956. After receiving her private pilot license, she enrolled with Aetna Helicopters, Inc. of Etna, California and became a rated helicopter pilot on August 21, 1957.

As a civilian, Wini is now a night nurse at the Central Receiving Hospital in Los Angeles; by day, she serves in her capacity as vice president of the K. Rodgers

Rotating the receivers, the ladies listen to some male chatter at the Link department. Left to right: Mrs. R. G. Culbertson, Mrs. P. J. Moyle, Maj. R. G. Culbertson, Mrs Charles W. Matheny; Herr Shakals; Mrs. R. M. Cunningham, Mrs. J. W. Serig, Mrs. R. N. Duffy, Mrs. T. F. Schirmacher, and Mrs. F. E. Frey. (U.S. Army photo.)

Aircraft Corporation in Lakewood, California, were a new type helicopter is being developed. She holds the rank of Captain in the Army Nurse Corps Reserves.

Jean Ross Howard

Fully Informed!

ECHTERDINGEN, GERMANY—Officers of the Seventh US Army Aviation Section and of the Army Aviation Training Center believe that their wives should be fully informed of their activities, particularly their official work. It's just possible, too, that they wouldn't mind impressing these fair ladies with their technical proficiencies.

At any rate, the wives were officially-invited guests on a conducted tour of the Training Center and were given a *student's eye* view of the special school that orients newly-arrived fliers; trains instrument flying techniques peculiar to the theater; and conducts maintenance course for both mechanics and crewmen.

The wives were enthusiastic over the opportunity to look the school over and left—apparently impressed—after a thorough tour of the School's facilities.

Viewing the Link trainer equipment, listening in on radio transmissions, inspecting Army aircraft on the apron, and listening to lectures on engines, transmissions, and missions assigned to the various aircraft, the ladies enjoyed the full treatment.

Only social angle of the short course was a conventional 'coffee break."

Frank E. Frey

Tribute

FORT RUCKER, ALA.—A tribute in the form of a negative report was paid to the American Electronics Industry recently by Lt. Col. Charles A. Merritt, who commands the U.S. Army Signal Aviation Test and Support Detachment here.

The report, (Final Report SIGAV Proj 5-57 "Support of USAAB Desert & High Altitude Tests), a summation of unusual maintenance problems encountered with airborne electronic equipment during recent desert and high altitude tests of aircraft and helicopters by the U. S. Army Aviation Board, said that *"all airborne electronic equipment functioned normally under desert and high altitude conditions."*

"The tests results certainly indicate high standards of design and manufacture of the equipment." Col. Merritt said.

"We frankly expected more trouble, particularly with the more complex equipment. We sent three highly skilled technicians to support the Army Aviation Board and wondered at the time if they would be enough. They encountered no more difficulty in the desert or at Fort Carson than we encountered here in normal day-to-day operations." Col. Merritt concluded.

Smoky

FORT BENNING, GA.—Giant transport helicopters, the modern version of the Army mule, played a feature role in the nuclear warfare excercises that took place in late August at Yucca Flats, Nevada.

The helicopters delivered specially trained troops behind the lines of a mythical enemy moments after the detonation of a nuclear device named *Smoky*.

Participating in this infantry troop test were soldiers of the First Battle Group, 12th Infantry, supported by a crack unit of Canadians from the Queens Own Rifles from Alberta.

At Desert Rock to prove that the helicopter could aid in exploiting an atomic attack were the officers and men of the 85th Army

FORT BENNING, GA.—AA crews who flew the first H-37 Mojaves from Connecticut to Lawson AAF include (left to right) CWOs Thomas L. Endfinger and Robert F. Dalker; 1st Lt Kenneth L. Wenn; Maj William A Howell (now Exec Off of Lawson AAF Command); Capt Joseph E. Pflugler; CWO Nathan Schultz; 1st Lt Robert S. Swinney; and CWO James P. Ervin. (U. S. Army photo)

Aviation Battalion, commanded by Lt. Col. Charles Ernest.

Composed of two helicopters companies —the 31st from Ft. Benning flying H-34 *Choctaws* and the 8th from Ft. Bragg flying H-21 *Shawnees*—the helicopters moved swiftly when *Smoky*, a device of above-normal yield, was detonated from atop its 700-foot tower.

Moving forward to the attack position to pick up the waiting troops, the helicopters then roared to the objective area, close to ground level, and attacked the objective some 4,500 yards from "ground zero." Following up the attack, the helicopters continued to play an active role in the atomic maneuver as they returned for equipment and supplies for the assault force.

Maj. Amore V. Juliano, a former artillery officer, commands the 31st while Maj. John F. Sullivan, a World War II Air Force officer, heads up the 8th.

Carl A. Brandenburg

Long Haul

FORT BENNING, GEORGIA—A 31st Helicopter Company *Choctaw* delivered an externally-slung, damaged L-19 Bird Dog at the Lawson Army Air Field Command Field Maintenance hangar in Mid-September, probably completing the longest air evacuation of a damaged aircraft to date.

Picked up at Fort Stewart, Georgia, the L-19 was air-evacuated 230 miles to Fort Benning, the nearest maintenance source.

Piloting the H-34 was CWO Lee R. O'Berry with CWO Raymond C. Bowers as I.P. and SFC Glen C. Coonfield as Crew Engineer.

An initial attempt was turned back because of dense fog to the west of Fort Stewart. The second attempt was successful and the flight took 2 hours and forty minutes. It must be presumed that many eyebrows were arched along the ground of the entire flight path.

1/Lt. C. MacRae Hullett

Big Switch

FORT BENNING, GA.—Fort Benning's Fourth Transportation Company is receiving sixteen H-37 *Mojave* helicopters, making it the first operational organization to incorporate the aircraft into its equipment tables.

Replacing the H-34 *Choctaws*, the Mojaves will be employed by the crack Benning "chopper" unit.

Maintenance of the huge Sikorsky helicopter will be the responsibility of the 152nd Maintenance Detachment. Members of that organization have attended a Fort Rucker training course to study maintenance data methods connected with the new aircraft. (Photo above).

Award

HANAU, GERMANY—The 26th Helicopter Company recently moved from Illesheim, Germany, to this area and we would like the readers to know that henceforth our mail should be directed to APO 165.

In behalf of the company, Major Isidro S. Valdez, Jr., CO of the 26th, received the Seventh Army Flying Safety Award. The award was presented by Lieutenant General Francis W. Farrell, Commanding General of V Corps, upon our completion of 2,000 accident-free flying hours during the period 1 August '56 through 31 March '57.

The presentation was made at an informal ceremony at Fligerhorst Kaserne in Hanau. Incidently, this unit boasts a total of 6,000 accident-free flying hours, all of which were flown in the Sikorsky *Choctaw* (H-34).

During the same ceremony General Farrell presented Sikorsky Winged "S" awards to

CAMP DRUM, N. Y.—Wheeler-Sack Army Air Field during the fall and winter months consists of an empty tower and unused runways. When the spring rolls around, however, "Sack Tower" is back on the air and operations is crowded. The reason for this burst of activity at Wheeler-Sack AAF is that NG-USAR units from the First Army area come here for their two weeks summer field training. Taking good advantage of the good weather this past summer, the NG-USAR aviators averaged more than 40 hours per man for 2 weeks' flying. The airfield is home for fifty aircraft each two weeks, including Bird Dogs, Beavers, L-17's, H-13's and Shawnees. Commanded by Capt. Alvin M. Quint, the 5 officer, 22 enlisted man section comprising the Post Aviation Section handled the various training periods. PFC Francis Abernathy directs the heavy traffic from well-equipped tower (left). Capt. Quint (center, right) is shown checking the daily training map with Lt. Dave Johnson, OpnsO. At right, Lt. Raymond Daikeler is shown instructing USAR AA's in the use of the E-6B.

Lt. Rae C. Trimble; CWOs Gene S. Turbeville, Jerry D. Branon, and Robert M. Lorett; and Sp/2s Frederic J. Burdan and Joseph O. Morrell. The Winged "S" was awarded to the above personnel by the Sikorsky organization for their participation in successful air medical evacuations and their contributions to saving lives.

CWO Chic W. Baars

Record Breaking

FORT BENNING, GA.—The 1st Army Aviation Company (FW-TT) broke all performance records during the month of July. The 16 *Otters* of the 1st were in the air for 836 hours during a recent busy month. During this same period 410 passengers were carried and 21,935 lbs of cargo were hauled in all directions from Fort Benning.

Along with supporting problems of the Infantry School, the Ranger School, and the Air-Mobility Department of Fort Benning, *Otters* from the First were seen hauling chopper blades from Wright Patterson AFB, Ohio; crash helmets from Shelby, Ohio; rotor heads and tools to Shreveport, La.; an F-86 simulator from Lexington, Ky., to Grand Rapids, Mich.; and rotor blades to Winter Haven, Fla.

Passengers were carried to such places as El Paso, Yuma, Ft. Carson, Ft. Stewart, Ft. Jackson, Eglin, Dallas, Ft. Worth, Mobile, Ft. Gordon, and Houston.

During the same month the First carried on its usual training and transition training program. Two U-1As were furnished to the Instrument Training Section daily to help the pilots of the First secure their I-tickets.

An unusual type of support mission was also flown during the month. The First supported the active duty training of the 300th Army Aviation Co (FW-TT), a Texas-USAR unit. Six *Otters* ferried 29 officers and EM from their home station (Ft. Worth) to Fort Benning for their 2-week encampment.

Check-outs were given to three of the 300th pilots, Lt Don Melton participating, while other pilots of the First gave the Reservists familiarization rides.

After 2 weeks of classroom work and practical instruction in the operation of a FW-TT, the 300th was air-lifted back to Fort Worth in the U-1A.

The maintenance crew under Lt. Ray Moran were kept hopping to keep the *Otters* flying. Of the 16 acrft assigned to the unit, 12 planes were available for flights on the average.

Lt. Jimmy N. Moore

OBITUARIES

Lt. Robert E. Wright, 2nd Field Artillery Battalion, Fort Sill, Okla., was killed in an aircraft crash on September 18th. Lt. Wright took off on an official flight from Fort Polk, La., about 2:30 a.m. for Fort Sill and crashed about an hour later near Jacksonville, Texas.

He is survived by his wife, Rose, of 1523 Smith Street, Lawton, Oklahoma.

First Lieutenant Olaf C. Anderson, Jr., assigned to the U.S. Army Aviation School at Fort Rucker, Alabama, was killed in an aircraft crash on September 25th. The crash occurred on a helicopter training mission.

He is survived by his wife, Wanda Marie, of Ionia, Kansas.

Mike Button

MAINTENANCE TIPS FROM TSMC

FT. SAM HOUSTON, TEX.—Brooke Army Medical Center mechanics are shown receiving "pointers" from two Sikorsky Aircraft representatives, Desmond Brown (left photo) and Gordon Hunt (right) who have toured installations in California, Arizona, and Missouri under a TSMC plan to teach Army personnel more advanced maintenance techniques. (U.S. Army photo).

Last week, ole Mike took a trip through the shop whose sole responsibility is filling in the gaps which somebody forgot to include on a requisition. Also, right next to "them thar people" are the Technical Data "knowhowers" who have, without a doubt, the most difficult job in Army aviation—that of mind reading.

Ya know, there are really a bunch of "smart cookies" writing regulations up in the front office and they have written regulations to cover everything from how to make your bed to how to fly a twin rotor helicopter when the engine fails.

Don't laugh, it's true, and they are doing it only for one reason, to help you get your job done with the least amount of effort in the shortest possible time without endangering yourself or public property. Let's not kid ourselves—it's been proven and tested and without any reservation, it is the best way. However, some guys wouldn't agree to anything except when *they* are benefited by whatever is done and they think that they know how to do a job better and use their own ideas and are "snafuing" the whole system.

The Army is an organization, the biggest single one in the world and it must be operated with this in mind at all times.

Paragraph 11, AR 700-150 and paragraph 15 and 109, AR 711-16 were written so that when requisitions are submitted regardless of from where, they will be filled out the same. This not only help us at U. S. Army TSMC but help all requisitioners to get better service, the item they want and at the proper time.

Mike saw requisitions "out-of-the-kazoo" which had to be returned to the requisitioner without supply action because they did not contain *all* the information necessary or when it was filled out it contained information known only to the requisitioner. To help out this growing situation, we of U. S. Army TSMC have issued a Supply Letter 34-57, 10 May 57, which tells the complete story and Mike suggests everybody concerned with requisition preparation read it through several times and comply so that all of us can get our job done on time.

Remember:

You got your job and I got mine,
If we both do ours it will sure be fine,
But if you do yours and try to do mine too,
What in the world will the Army Supply System do?

There are enough mistakes and errors which are unintentional and we try to catch them all but sometimes they slip through, for example:

T. O. 1H-21 (Y)-2, page 160, para 5-51b, calls for the torque of engine mount bolt to be 950-1050 pound inches (79-87.5 pound feet). This is incorrect and the -2 handbook will be changed to reflect the values published by the manufacturer. Mike found the right "poop." Here tis: should be 852-960 pound inches (71-80 pound feet).

★

Save the floor and your shop towels, too. Just a thought, try it, it really works. In the interest of cleanliness try taking a 1 inch ID hose about 20 inches long and slip it over the drain valve outlet port when you got to drain the rotor transmission sumps of the H-21. This lets you drain the oil into a container without spillage, saves lots of time in cleaning up after a job.

Had any squawks on the 781-2 by pilots experiencing difficulty with right foot and/or right rudder pedal interference while flying the L-19 from the back seat? If so, the write-up was probably, as we got it, caused by the *?! long handle of the fire extinguisher. It seems that the handles on Fire Extinguishers (A20-0-51 and 13X1467) are too long causing contact with pedals and pilot's size 10's, (right foot, I don't know what size left one is). Replace all "long-handles" with Fire Extinguisher, Stock Nr 4506-13X13261. Simple, that one, eh? No more squawks.

★

Checked the tire pressure on the main gear lately? Whoops, TM 1-1L-19A-2 got printed wrong, don't seem to be able to find out just what happened but here's the correct pressure—30 psi. Start using this pressure for main gear tires on L-19's immediately. We are putting out a supplement to TM 1-1L-19A-2 shortly, and it will reflect the right pressure. In any event, it's a good policy to keep this in mind, over or under inflated tires are not only a possible hazard to flying personnel but also shorten the life expectancy of them. Proper tire inflation means good maintenance. By the way, ever wonder why the tires of an aircraft from Texas sitting on the ramp in Montana early in the morning look like somebody let some of the air out? Think about it between now and the next issue and see if you got the right answer. Well, I'm off for Montana with 30 psi in the L-19 tires.

★

We have all heard about "losing" an engine in flight, (if you don't know this expression, write to me and I'll be glad to answer it) but here's a new one—actually losing the vertical fin on a H-21C while in the air.

Yeah, we found it. It was due to fatigue of the fittings or bolts of both, and fittings (42T3068-3 and -4) are to be installed at the next scheduled SCAMP in place of fittings (22T3052-1 and -2). All new aircraft will be taken care of by the manufacturer before you get them. But, until this H-21C is taken care of in SCAMP don't overlook your continuing preflight and postflight inspections in accordance with the Inspection Manual AF T. O. 1H-21-6. This will prevent future air losses of H-21 fins.

★

One you haven't overlooked, I hope, is what to do if cracking occurs in the transmission deck asembly on the H-34A helicopter. You can find additional authorization to repair limitations for holes and cracks in the transmission deck by taking a "look-see" at the revised TM 1-1H-34A-3, Handbook, Structural Repair Instructions, 29 Nov 56. What do you do? Oh, almost forgot, AF T. O. 1-H-34-557 should be complied with as soon as possible.

★

What maintenance problem is on your mind right now that you can't solve or get the answer to? Write to old Mike and tell me about it. I am not very smart myself but I sure have a bunch of smart people working with me. See you next time; until then,

Yours for better maintenance,

Mike Button

Field Expedient

HUK SONG NI, KOREA—The 13th Trans Co came out well during a recent mishap, thanks to promptly applied G.I. ingenuity.

Capt Edward Sumek (pilot) and CWO William Everhart (IP) fell through on the final of an autorotation, striking the main gear below the edge of the runway. The impact tore both main gear from the bottom attaching points, leaving them hanging from the sides of the ship. The fuel cell was also rupture at the same time, letting a sizable stream of fuel drain from the bottom.

Gaining control before the ship rolled over on them, the crew kept the ship flying while emergency landing facilities were made. With the fuel draining rapidly staying aloft was questionable and with the gear damaged they were in no position to let down.

A pad of empty barrels turned on end and cushioned with hastly commandeered mattresses was improvised and the craft came to rest safely.

The fuel spilling from the fuel cell gave the men some anxious moments while they were securing the chopper with sand bags and ropes, but luckily there was no fire. Ingenuity! *WO Robert S. DeShazo*

INDUSTRY BRIEFS

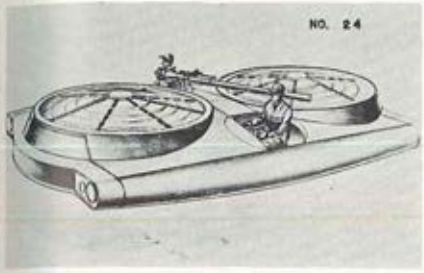
First Cessna YH-41 delivered to Edwards AFB for engineering evaluation tests

WICHITA, KAN.—The first unit of an evaluation quantity of YH-41 helicopters for the U.S. Army was delivered by Cessna Aircraft Company. An AF crew took delivery of the first unit and delivered it to Edwards AFB in Muroc, Calif., where the Air Force will conduct an engineering evaluation of the machine for the Army.

A second unit will also go to Edwards at a later date with the remaining helicopters of the contract being sent to Fort Rucker.

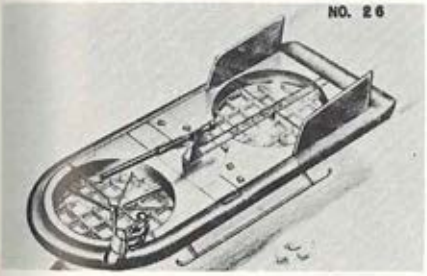
Nicknamed the *Seneca* by the Army, the YH-41 will be the Army's highest performance small helicopter, according to Cessna officials.

Prior to the first delivery, the Army and AF Contract Technical Compliance Inspection Board met at the Cessna factory to study the helicopter's design. Army members participating on the Board included Col. R. R. Williams, USA Aviation Board; Col. J. L. Marinelli, DCS, Logistics; and Maj. R. E. Brannan, OCT.



Artist's conception of Chrysler Corporation's prototype "Aerial Jeep" employing two ducted propellers

Four ducted propeller flying test bed version submitted by Aerophysics Development Corporation.



Two ducted propeller concept submitted by the Piasecki Aircraft Corporation. U.S. Army photos.

STRATFORD, CONN.—Claiming a new helicopter engine endurance record, the Lycoming Division, AVCO Manufacturing Corp., reported that a 250 hp engine, manufactured in its Williamsport, Pa., plant, had operated 750 continuous hours during a helicopter tie-down test at Hiller Helicopters, Palo Alto, California.

The test was conducted by the Hiller firm as part of their development program for the Army on their new H-23D 'copter, powered by a Lycoming O-435-23A engine.

The test was conducted under the most severe conditions which can be imposed on an engine, including the use of full power in over-speed condition for ten per cent of the time. Vibration encountered in such an operation is particularly severe with the helicopter tied to a stand and the rotor operating continuously within ground effect.

Lycoming said, that to the best of their knowledge, no other engine has ever approached the 750-hour mark in such a test.

Shown above are 6 new Beechcraft Bonanzas destined for use by Central American Airways Flying Service. The Kentucky firm has operated Army instrument training schools at Seymour, Ind., and Clarksville, Tenn. Right: Aerial view of Cessna's proposed $10,000,000 Wallace Plant in Wichita shows the location of the new facility in close proximity to the present Prospect Plant. New construction in the foreground (left to right) shows operations building, production flight hangar, experimental flight hangar, and engineering building.

LOUISVILLE, KY.—Six additional Beechcraft H35 Bonanzas have been delivered to Central American Flying Service, Inc., of Louisville, Kentucky, for use in the U.S. Army instrument flight training program.

The new planes will join a fleet of 16 Bonanzas already in service as instrument trainers at two flying schools operated by Central American under contract.

One of the schools is located at Freeman Field, Seymour, Indiana; the other at Clarksville, Tenn. Central American will soon transfer its Clarksville operation to Bush Field, August, Ga., where it is establishing a new base.

Pilots of the Third Army will train at Augusta, while Fifth Army aviators will continue to receive their instrument instruction at Seymour.

Contract instrument flight training is part of a long range program designed to achieve 100 per cent instrument qualification or all Army aviators by 1961, according to Colonel W. G. Van Allen, of the U.S. Army Aviation Directorate in the Department of the Army.

FT. SAM HOUSTON, TEX.—Learning advanced maintenance techniques right from "the horse's mouth," helicopter mechanics and pilots from Brooke Army Medical Center attended recent classes at Brooke AFB given by two Sikorsky Aircraft field representatives.

Training some 60 men in 2 two-week sessions, the two men, Desmond Brown and Gordon Hunt, have given classes consisting of practical demonstrations, maintenance developments, and flight theory at military bases in California, Arizona, Missouri, and now Texas.

The plan to bring factory technicians to military installations was initiated last April by the Army Transportation Supply and Maintenance Command in St. Louis.

AMICK, John W., Sp/2, RFD #1, Hopewell, Pennsylvania.
ANDERSON, Mrs. Olaf C., Jr., Ionia, Kansas.
ASBURY, Harold D., Capt., Lot 207, Post Tlr Court #1, Ft Bragg, N. Carolina.
BALDWIN, Richard D., Capt., 707 Sherman Avenue, Coeur D'Alene, Idaho.
BARRON, Floyd T., Capt., Flt Det, US Army Garrison, Ft. Sill, Oklahoma.
BEACH, James R., Lt., 192½ North Main Street, St. Albans, Vermont.
BEASLEY, Thomas A., Capt., G-3 Avn, USARAL, APO 949, Seattle, Washington.
BENNETT, Willard M., 1/Lt, 400 Jackson Ave., Fort Collins, Colorado (Temp.).
GOODWIN, John W., Capt., 4500 SW 116th Avenue, Miami, Florida.
GOODWIN, Frederick C., Lt Col, 6 Merchant Street, Gloucester, Massachusetts.
GOSHEN, Robert P., 406 Patrick, Wolters Village, Mineral Wells, Texas.
GRAHAM, James L., Lt., P. O. Box 1845, Birmingham 1, Alabama.
GRANDELLI, Charles M., Capt., Box 8, USA Elm MAAG, Navy 150, FPO, SF, Calif.
GRAY, James E., Jr., Capt., 209 Beebe Avenue, Fort Eustis, Virginia.
GRENTZENBERG, Fletcher D., Maj., OS Repl Sta, USA Pers Cen, Oakland, California.

The Month's Takeoffs!

BENTON, Lucien C., Capt., Avn Sect, Hq, 100th FA Rkt Bn (Reinf), APO 613, SF, Cal.
BONES, Merrill W., 1/Lt, Box 341, Gardner, Kansas.
BORGEN, Lloyd O., Ma., 224 North Atlantic Place, Boise, Idaho.
BOUAS, Raymond L., 2101 East 64th Street N., Kansas City 16, Missouri.
BOURNE, Harold O., 1/Lt, 24th Combat Avn Co, APO 24, San Francisco, California.
BROCK, Eldridge W., Lt, U. S. Army Aviation School (3461), Ft. Rucker, Alabama.
BRODEUR, Alfred F., 1/Lt, General Delivery, Fort Rucker, Alabama.
BRYANT, Harry G., CWO, 11th Avn Co, 11th Abn Div, APO 112, N. Y., N. Y.
CASTLE, Edward R., Jr., Lt., 4th Armored Division, Fort Hood, Texas. (Temp.)
CHILDERS, James E., Maj., Army Avn Sect, US Army Armor Cen, Ft Knox, Kentucky.
CLAYBOURN, H. Marshall, 110 Muldrow, Starkville, Mississippi.
COMINOS, Anthony M., 1/Lt, 54th Trans Co (Lt Hcptr), Ft. Sill, Oklahoma.
COOK, Harry J., Jr., 1/Lt, 54th Trans Co (Lt Hcptr), Ft. Sill, Oklahoma.
CUNNINGHAM, Robert M., Capt., 2d Missile Com (MED), Fort Hood, Texas.
DIBRELL, Jack H., Capt., Qtrs 663-A, Infantry Post, Ft Sam Houston, Texas.
DOTSON, Larry D., 1/Lt, USASASD (8060), APO 500, San Francisco, California.
DOWNES, Thomas W., Jr., Capt., 115 Kate Street, Enterprise, Alabama.
EBAUGH, Glenn, M., Capt., 9038 Bennett Avenue, Skokie (Evanston P. O.), Ill. (Tem.).
EYMAN, Robert F., 1/Lt, Quarters 2567-C, Fort Lewis, Washington.
FOREMAN, Richard G., Lt., 134 Carter Lane, Woodbridge, Virginia.
GARCIA, Anthony S., SFC, 11th Trans Co (Lt Hcptr), APO 46, New York, N. Y.
GAUSVIK, Donald E., 1/Lt, c/o ZS Krysiak, 92 Harral Ave, Bridgeport, Connecticut.
GUION, James L., Jr., Capt., 225 Velasco Street, Bay View, Monterey, California.
HACKETT, Everdus H., Capt., 10th Div Avn Co, APO 36, N. Y., N. Y.
HALL, Thomas E., Maj., TSMC, 12th and Spruce Streets, St. Louis, Missouri.
HAMILTON, Robert M., Col., Quarters 521-A, Maxwell AFB, Alabama.
HAMNER, Louis, Capt., 3061 Ormand Drive, Columbus, Georgia.
HAWKINS, Jeremiah B., 1/Lt, 39-B Battle Park, Fort Benning, Georgia.
HAWKINS, Williams S., Capt., 307-4 Third, Fort Leavenworth, Kansas.
HEAD, Robert L., Capt., 53 Turlington Road, Warwick, Virginia.
HEREDIA, D., CWO, 64th Trans Co (Lt Hcptr), Fort Hood, Texas.
HOUSE James H., Maj., Army Avn Safety Crs CI 6, USC, Los Angeles California.
HUNT, Lester R., CWO, 721 Regester Avenue, Baltimore 12, Md. (Temp.)
HUNTZINGER, Harvey, Capt., 103 Woodhaven Road, Denbigh, Virginia.
HUTCHINSON, B. W., CWO, 547 Westview Drive, Ozark, Alabama.
HYMAN, Robert D., Capt, Hq & Hq Det, 40th Trans Bn, Fort Eustis, Virginia.
JACQUOT, Robert H., Lt., 8th USA Avn Det, APO 301, San Francisco, California.
JOHNSON, James W., Jr., 3634 Weldon Drive, Chattanooga, Tennessee.
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JONES, Harry L., Capt., 108 Piper Lane, Alexandria, Virginia.
JORGENSEN, Quay, 921 North Pearl Street, Centralia, Washington.
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KECKLER, Ralph J., 1106 Stewart Drive, York Terrace, Williamsburg, Va.
KINNEY, Arthur K., Jr., Lt., 57th Trans Co (Lt Hcptr), Fort Riley, Kansas.

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McCORD, James A., III, Pfc, 4th Avn Co, 4th Inf Div, Ft. Lewis, Wash.
RHINEHART, Clarence G., WO, AMOC #22, Trans Sch, Ft Eustis, Va (PO Not;unconfirmed).
RITZ, Donald J., Capt., Third USA Avn Flt Det, Ft. McPherson, Georgia.
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SENNE, George L., CWO, 11th Avn Co, Abn Div, APO 112, New York, N. Y.
SHELDON, Thomas L., 1/Lt., 1537 Latham Ave, Lima, Ohio.

This monthly "Directory Service" serves two purposes. As a subscriber it enables you to place your change of address before some 4,300 other persons and secondly, it serves as a verification that this office acknowledges your PCS and will forward future issues accordingly.

McCOY, Harvey C., 1/Lt, Box 146, Inola, Oklahoma.
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McKEOWN, William, Capt., 3315 Duvawn Street, Ridgeview, Alexandria, Virginia.
MacLENNAN, Robert J., Lt., Army Med Avn Br, BAMC, Ft. Sam Houston, Texas.
MANGUM, Henry R., Jr., Capt., 1108 Village Drive, South Charleston, West Virginia.
MAPLES, Lee R., Sp/1, Apt 21-E, Buena Vista Estates, Columbus, Georgia.
MEEKER, Bruns, Lt. Col., 1301 Gore Blvd, Lawton, Oklahoma. (Temp.)
MIKLES, Lowell, Capt., Hq, 2d USA Support Element, Fort Meade, Maryland.
MILLER, Goerge P., J., SFC, 3013 Wise Street, Columbus, Georgia.
MONTGOMERY, Homer T., Maj., 521st Engr Co (Topo Avn), Sharpe General Depot, Lathrop, California.
MULLINIX, William F., 1/Lt, 1959 Prospect Street, Sarasota, Florida.
NEWPORT, Elswick, Capt., Hq, USACOMZ, BASEC, APO 44, N. Y., N. Y.
NICHOLAS, Robert W., Capt., 4040 SW 2nd Terrace, Miami 34, Florida.
NICHOLSON, Frederick C., CWO-2, 93rd Trans Co, (Lt Hcptr), Ft. Devens, Mass.
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PHILLIPS, Jack R., Capt., 65th Tran Co (Lt Hcptr), Fort Eustis, Virginia.
PHILLIPS, William G., Capt., TCOC #11, Stu Det, Fort Eustis, Virginia
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SHIELDS, Roger J., 1/Lt, Hq, 36th Engr Group, APO 358, S. F., California.
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STAPLES, James T., Capt., USAPHS, Crs 58-2, Camp Wolters, Texas.
STECKBAUER, Curtis J., 1/Lt, Army Avn Det, Camp Zama, APO 343, San Francisco, Calif.
SUTOR, Frank J., Capt., 3d Trans Co (Lt Hcptr), Ft. Belvoir, Virginia.
TAYLOR, James D., Capt., Casual Mail Directory, APO 135, S. F., California.
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TWACHTMANN, Dale H., 1/Lt, 232 Magruder St, Mineral Wells, Texas.
VANSICKLE, James A., Lt., 2d How Bn, 7th Arty (Avn Sect), APO 36, N. Y., N. Y.
WALKER, Mansell A., Lt. Col., AC & SC, CSS 58, Box 844, Maxwell AFB, Alabama.
WEAVER, Eugene E., Jr., Lt., 13th Trans Co (Lt Hcptr), APO 358, S. F., California.
WELLMAN, Hubert A., CWO, 65th Trans Co (Lt Hcptr), 40th (T) Bn, Ft. Eustis, Va.
WESTERFIELD, Paul L., 1/Lt, Box 628, Gruver, Texas.
WINSLOW, F. J., Capt., 79 Branford Circle, Eatontown, New Jersey.
WINTERS, William F., Capt., US Arty & GM School, Ft. Sill, Oklahoma.
WILLIAMS, Robert M., 1/Lt, 1921-C Patton Drive "C", Meade Hghts, Ft. Meade, Md.

A Many Sided Thing

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.

(Dear Editor:) I would appreciate your mentioning that my husband, Lt. Wendell K. Krontz, is recovering from severe injuries received during a crash landing at Etchterdingen Airport, Germany.

He has been evacuated to St. Albans Naval Hospital, W-1-315, St. Albans, L. I., N. Y. where we have been told he will recuperate for at least a year before he is released.

I am sure many of my husband's friends in AA are unaware of the accident and would like to write to him. Sincerely,

(Mrs.) Ruth Krontz

(Dear Editor:) Concerning Miss *Mealy Mouth* and her present condition, we of the 1st AA Company have only one thing to say, *"Our burro, Jack S., did not do it."* Although he is much more capable of the deed than his long lost cousin in the North, Jack did not subject the pride of Camp Wolters, *Miss Mealy Mouth,* to her present status.

Lt Brooks Homan's article in the Aug, '57 issue regarding his *Otter* flying at 20,000 feet with a 1,500 lb cargo has provoked quite a few comments from the pilots of the 1st. The big question is: *How much manifold pressure did he draw at* 20,000? Like the Editor, we would also like to see some photos. Not that we doubt him in the least for we know that an AA is not prone to exaggerate.

Lt. Jimmy N. Moore

CURRENT AT TRECOM
by Capt. Harvey W. Huntzinger
(Continued from Page 19)

study's primary objective was to establish and define basic design criteria for a 250 HP engine. The studies have been completed and evaluated and it is indicated that development is feasible and desirable. It is contemplated that contracts will be let during FY 58 for the construction of experimental engines.

The design studies indicate that the development engine will probably be in the 250 - 350 HP class, weight 100 to 175 pounds (including accessories) be approximately 16" in diameter and 36" in length with a specific fuel consumption of 0.7 (lb fuel/HP hr).

ARCTIC ICE CAP RESCUE
(Continued from Page 14)

belongings; and they would have to wear survival suits and life jackets for the return flight over the miles of freezing water. The survivors were all in excellent spirits and agreed to be ready each time the helicopter arrived.

The helicopter carried the first four men back to the shore to safety, where they were taken aboard the Teisten. At this time, due to dusk and reduced visibility, rescue operations were suspended and the helicopter and SC-54 started the flight back to Mestersvig for crew rest and to wait the early Greenland sunrise.

On 29 August, the helicopter, with Lt. Johnston, CWO Joyce and WO Jack S. Gibson to alternate the flying and M/Sgt Carl V. Byrd and Sp/3 Edwin J. Daugherty as crew-chiefs, started the rescue flights once again. Five more times that day the helicopter made the two hour round trip to the ill-fated Polarbjoern, the SC-54 circling overhead and carrying complete survival equipment and Para-Medics, in case the helicopter had to make an emergency landing in the water or on the ice.

The last helicopter flight air-evacuated the captain of the sinking ship but prior to leaving his ship, Captain Giaever raised the Norwegian flag on the stern and saluted it for the last time, then boarded the helicopter for the flight to the Teisten. The H-19, the SC-54 and the cutter then proceeded to Mestersvig . . . mission successfully completed.

Please be informed that I have changed my name from John L. Rodrigue to John L. Roderick. I'd appreciate publication of this fact so that my friends will still know me.

JLR

Purely a Personal Matter

FT. BENNING, GA.—Personnel-wise the 1st AA Co (FW-TT) has had a busy month. Capts James Blauert & Lyman Vassey and Lt Ben Collins are presently attending the Adv Inf Crs here at Benning. Capt. Blauert & Lt Collins will depart for Germany after the course while Capt. Vassey will return to the 1st. At Rucker Chopper trng are Lts Phil Comer and Mike Ellis and they're Germany-bound upon graduation, too. Lt. Dave Dillinger is at Knox attending the Adv Armor Course. Our CO, Maj Jerome B. Feldt, is not one to pass up a little education, and he's attending the Flying Safety Crs at USC in sunny California.

Lt. Jimmy N. Moore

HANAU, GERMANY—Inbounds from the US are CWOs Huey R. Nelson and William Roundy. The 26th Helicopter Company anticipates many more "New Faces" and we'll keep you posted.

CWO Chic W. Baars

AFFE Flt Det, Nippon—Though not necessarily in order, this report is most complete (and mighty late). . .Outbound: Capt John T. Berry (w/wife). Inbound: Lt. Carl Putnam (w/wife) from Sendai. Ditto Lt. Curtis Steckbauer (w/wife). General I. D. White left for Hawaii following a fly-over by every Army aircraft in Japan (almost). . .Some instrument tickets were renewed. . .We had some parties. . .It rained occasionally. . .The sun shone occasionally. . .We flew occasionally. . .Lts. Steckbauer, Koepp, and Shaefer are all expecting to become fathers again soon . . .Some people are sweating out "Dear Johns."

Bob Koepp

FORT BELVOIR, VA.—The 3rd Helicopter Company is currently preparing for its forthcoming ATT with the platoons engaged in small unit training. Having been *roughing* it in our temporary set-up here at Davison, the wilds of the Reservation should offer no great problem.

Work on the heliport and hangar here at Davison is progressing rapidly and we anxiously await the word to move in. It will be fully equipped in all respects and should be the last word in helicopters.

CWOs Buechter and Frye, in spending most of the summer in pistol shooting competitions, did themselves proud at the National Matches at Camp Perry, Ohio. We've no worry about internal security in this outfit.

The crew chiefs of the 3rd are enthusiastic about a contest to name a "Crew Chief of the Month." The first winner was Sp/3 Jackie L. Miller who did an outstanding job despite having to work under adverse conditions.

(Ed. We've publicized "Crew Chiefs of the Month" in the past and will be happy to pat your top hand on the back in these pages. With your cooperation, of course.)

Major Elmer V. Merritt, an old hand in the Transportation Company business, currently serves as C.O. of the 3rd.

CWO-3 Eugene P. Moser

BIRTHS

GUDE, Helene Marie, a daughter born to Lt. Col. Joseph L. and Helen Gude, at the Georgetown University Hospital, Washington, D. C., on August 20 (7 lbs, 10 oz.).

JOYCE, Wayne March, a second son born to CWO R. and Helen Joyce, in Englewood, New Jersey, on September 1.

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