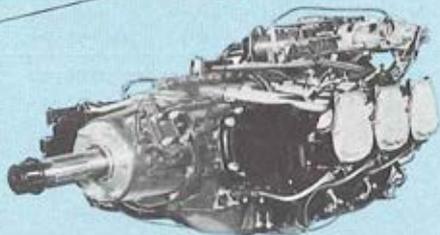


ARMY AVIATION

OCTOBER ★ 1960

Lycoming powers ARMY'S BEECHCRAFT L-23F



Lycoming IG50-480,
fuel injection, rated 340 hp each.

Lycoming

A Division of **Arco** Corporation
Stratford, Conn. • Williamsport, Pa.

ARMY AVIATION MAGAZINE
VOLUME 8 — NUMBER 10
OCTOBER 15, 1960

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY ACTS OF MARCH 3, 1933, JULY 2, 1946 AND JUNE 11, 1960 (74 STAT. 208) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF ARMY AVIATION, published monthly at Westport, Conn., for October 1, 1960.

1. The names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, Dorothy Kesten, 1 Crestwood Road, Westport, Conn.; Editor: Arthur H. Kesten, 1 Crestwood Road, Westport, Conn.

2. The owners are: Dorothy Kesten, 1 Crestwood Road, Westport, Conn.; Arthur H. Kesten, 1 Crestwood Road, 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. Paragraphs 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 who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: 6,400.

(Signed): DOROTHY KESTEN, Publisher Sworn to and subscribed before me this 1st day of October, 1960. — Paul Zadoff, Notary Public in the State of Connecticut. Commission expires April 1, 1962.

SLAR

● Termed by Lt. Gen. Arthur G. Trudeau, Chief of Research and Development, as a "very significant increase in capability," side-looking airborne radar (SLAR) systems are now being installed on eleven L-23D Seminole aircraft. Expected to enhance battlefield surveillance capabilities, the all-weather systems developed by the Texas Instrument Co. will be installed under a \$1,245,000 modification contract awarded to the Beech Aircraft Corp.

ARTICLES

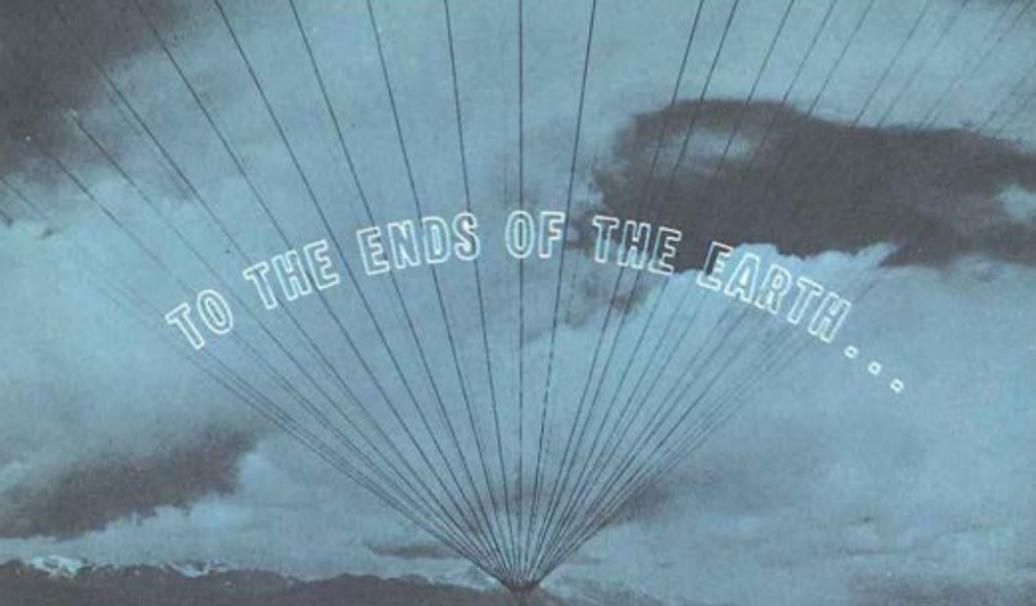
● We welcome *exclusive* articles (so-marked) dealing with general Army aviation subjects. Articles of 1,000-1,200 words as written by subscriber-correspondents receive preference. *Payoff*: ten cents per published line up to 250 lines. If possible, send along a photo and a brief 40-word bio-perse with the article.

WHO'S WHO

● A "Who's Who in Army Aviation" (last published in '56) is on tap if the readers express a desire for such an issue. A current "Who's Who" would list some 6,600 persons affiliated with Army aviation. Where the '54 and '56 editions were separate issues and were sold as such, the planned "WW" would be an extra issue of a reader's subscription. Translated: no charge. Let us know your feelings by a short postcard NOTAM or jot your views on any letter or PCS notice you may remit to "ARMY AVIATION."

ARMY AVIATION MAGAZINE

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TO THE ENDS OF THE EARTH...

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from ground to aircraft is achieved
with Wilcox single sideband equipment.

The North American Air Defense Command
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Field, Colorado Springs, Colorado. It also provides a vital
world-wide communications link for ADC, MATS, SAC and others
engaged in the defense of our country.

The majority of the equipment of this
station is supplied by Wilcox. It is
indicative of Wilcox's ability to de-
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advanced electronic systems.

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BIRD DOG:

PLANE WITH A HISTORY IN A DOZEN LANGUAGES

It's Cessna's scrappy little L-19, and what a history it has.

It began in Korea, where the all-metal mite first came to be called "Bird Dog." So well—so reliably and economically—did it perform its work (artillery spotting, supply dropping, wire laying, aerial photography, liaison, flare dropping, insect spraying), it soon became known and wanted throughout the free world. Since, it has flown under the flags of France, Pakistan, Spain, Iraq, Taiwan, Thailand, Norway, Canada, Italy, Japan, Alaska, Germany, Lebanon, Indo

China and throughout Central and South America.

The L-19's history points up well its versatile utility. Pilots of more than 20 countries testify to its outstanding performance under every conceivable type of conditions. When it comes to designing and delivering planes that pay their own way—Cessna's know-how is evident.

**Military
Division,
Wichita,
Kansas**

CESSNA

By BRIG. GEN. CLIFTON F. VON KANN
Director of Army Aviation, ODCSOPS



PERSONNEL PICTURE: SOMEWHAT GRIM

Dear Army Aviator, I believe that efforts over the past year have focused our future hardware program into a readable and logical picture. The new light observation aircraft will soon be in the design competition stage; the *HU-1* program has been firmed through to the "D" model; the *Mohawk* (contrary to some uninformed and completely misleading rumors) has come through its Navy engineering tests with an excellent record and is now in user test; the *Chinook* is on schedule; and the *Caribou* has passed its tests with flying colors.

In addition, two areas have been identified for further study—a deep penetration surveillance aircraft and a V/STOL transport aircraft. As a result, our requirements are well known in industry and throughout the military establishment.

Therefore, I am confident that the hardware portion of our program is on the track, even though there are some who would like to see a faster schedule.

On the personnel side of the picture, things are a bit more grim. We still have a serious shortage of field grade officers and it appears that there will be no immediate solution to this problem.

Our warrant officer aviator program has been stalled by a WO ceiling, but it now

appears that in about one year we will be able to move ahead again in this area.

There is one aspect of the personnel problem that deserves the immediate attention of every aviation commander and every aviation staff officer at every level. During the past six months we have had many examples of faulty requisitioning which indicate a need for closer monitoring. I'll cite three typical examples:

First, the growing critical shortage of key aviators was *not* reflected in requisitions until five months past the time required to initiate DCSPER action;

Second, one area experienced an acute shortage of instrument examiners because replacements were requisitioned in another MOS;

And *finally*, this month (from one area alone) twenty officers were requisitioned with the note "Transportation Corps recommended" to fill combat arms TO&E or branch immaterial positions ranging from lieutenant to lieutenant colonel.

These three errors were caught by chance —no telling how many others got through the machine process undetected. Now the volume of requisitions at DA level just does not permit a detailed fool-proof screening. Our personnel people need your help all down the line if they are to serve you best. This is one personnel problem we can lick, *now*. Some of the others will require a long range, up-hill struggle before solution.

While on the subject of requisitions we are particularly pleased with the results of two of ours! Major Bill Dysinger and Major George Rogers have recently joined this office. Their reaction to the Pentagon was perhaps not quite as enthusiastic as the welcoming committee, but we are happy to have such experienced and capable officers on our staff.

There have been a few queries on the interpretation of *par 3 c*, AR 95-63, pertaining to action required when an aviator fails to maintain his instrument quali-



fication. This regulation was distributed on 18 February 1960 but we have not run into this problem until now.

The regulation reads "Effective 1 July 1960 . . ." therefore placing an individual before a flying evaluation board was not required if his ticket lapsed prior to 1 July 1960. As with all cut-off dates, some people got caught, others escaped. I feel that those who are not affected are obligated from a standpoint of personal pride and professional competency to renew their tickets promptly.

Likewise, commanders are morally obligated to those having tickets that lapsed after 1 July to see that the incentive and opportunity is supplied for reinstatement. Considering the exemptions allowed by *par 3 b* of the regulation and the five-month period during which a ticket can be renewed, our rules are certainly not overly stringent.

There are four new Army Regulations you should be sure to read and retain. AR 95-1, 95-2, 95-3, and 95-4. These supersede AR 95-5, 95-18, 95-8, and 95-31 together with changes and bits and pieces of information previously scattered elsewhere. It is our



fond hope that this effort will simplify and clarify some of the basic provisions of Army aviation. The new regulations are all dated 19 August 1960. *They are required reading.*

Speaking of regulations, this may seem picayune, but I've noticed more than one aviator sporting a pair of wings that has been ground down to an unrecognizable smooth blob of metal. Paradoxically, these same individuals are usually the sharpest and neatest of soldiers. Nevertheless, defacing the Aviator's Badge is inexcusable and against regulations. Polish? Yes! *Mutilation? No!* This sort of thing went out with the crushed caps.

In case you haven't heard, we owe a debt of gratitude to a Navy Captain who acted as a sort of "pathfinder" for an Army helicopter that got in trouble over Washington.

It seems that *CWO David Harris* was piloting an H-21 with 8 passengers on board when he noticed a loss of power and a red warning light indicated engine trouble. At the same time, Navy *Captain John W. Crowe*, a former helicopter pilot, was

ABOVE: 110TH TRANS CO CHOCTAWS GO "BEHIND THE LINES" TO DELIVER A COMPANY OF INFANTRY DURING USAREUR'S EXERCISE SUMMER SHIELD. (SEE PAGES 468 & 496).

driving along the George Washington Memorial Highway occasionally glancing up at the helicopter with a bit of envy considering the rush hour traffic. He suddenly realized that the H-21 was in trouble and quickly stopped about thirty cars to allow Harris to have enough room to land.

Harris and his co-pilot, *CWO Miesse Manger*, made an excellent landing on the highway (the only clear spot for miles). No injuries—no damage—just a monumental traffic jam!

To round out his good deed, *Captain Crowe* took three of the passengers back to the Pentagon. The H-21 was evacuated in a couple of hours after a thorough check—traffic started to move—and Washington resumed its normal hectic pace. *Thanks, Captain!*

As a postscript to this incident, it is interesting to note that the magnetic chip

detector cockpit warning light was activated as a result of normal engine wear, i.e., sufficient metal fuzz collected on the magnetic detector to cause activation. The total engine time was 592 hours—just eight hours before change!

I hope all of you will take a look at the current issue of *ARMY* magazine which reviews the *AUSA Annual Meeting*. I think you will be pleasantly surprised at the emphasis on air mobility, which is so important to our future. It is in the forum of non-aviators that our strongest efforts must be made. As aviators, we are already convinced of the merits of organic aviation, but there is a large group within the Army who have yet to be impressed. We must continue to demonstrate by every means possible that aviation offers the Army unrealized capabilities for the future, given the chance.

I'm sure it's no news to you that there is a discouraging amount of paper work in the Army. Some of it is necessary. Some we manufacture by our own negligence. For example:

The *Federal Aviation Act of 1958*, which is the basis for all air traffic rules issued by the Administrator of the FAA, applies to all aircraft flying within the United States. Army aviators, except when deviating because of an inflight emergency, must operate in conformity with these rules. Commanding officers are responsible for insuring that their pilots comply.

The *Air Traffic Rules* are set forth in Part 60 of the *Civil Air Regulations* and

AR 95-2 requires adherence to these rules. *FAA* is required to investigate and report violations of air traffic rules and has the responsibility for taking enforcement action for violations by pilots, except military pilots while in the performance of official duties, in which case the law specifies that the appropriate military service is responsible to take corrective and/or disciplinary action. A report of each action must be forwarded to *FAA*.

Since January 1959, over 40 complaints have been filed against active Army, National Guard, and Reserve aviators by *FAA* and other agencies. The majority fall into three categories:

Entry into control zones without proper Air Traffic Control clearance when the ceiling is less than 1,000 feet and/or visibility is less than three miles; careless or reckless operation of aircraft, such as unnecessarily low flight over congested areas; and flight over prohibited areas without prior approval from appropriate authorities.

In addition to the safety implications involved in flying violations, the immediate disciplinary aspects are normally quite severe with the additional probability of serious career damage.

The solution is simple—*know and comply with air traffic rules*. Some of you may have the impression that an ATC Controller is an individual subsidized by the railroads and consecrated to the task of discouraging travel by air, but that is hardly an objective outlook.

Sincerely,

CLIFTON F. VON KANN

Brigadier General, GS

Director of Army Aviation, ODCSOPS

NEW SHELTER

A portable aircraft maintenance hangar supported by air-pressure and a lightweight steel frame has been developed by the Quartermaster Corps for servicing aircraft in the field. Half oval in shape, the 80-foot long, 36-foot high experimental structure weighs 7,400 pounds and requires minimum assembly time.



Hiller 12 E sets aviation record, lands and picks up payload at 18,000 ft.



12 E, first light copter to erect entire powerline; 40' poles, el. 5,000 ft.



34,500 lbs. of machinery to exploration mine in 8 hrs, mountain flying.



Microwave station on 4,000' ridge; all 8 tons material; 2 days flying.

You are invited to write for full details.



2½ mile powerline built in 6 hrs., 50 mins. with E's 305 hp at work.



El. 10,000 ft. Two 12 E's fly 80 gal. sprayloads; 60 flights in 4 hrs.

THE ARMY GROWS 'EM TOUGH

How the Hiller 12 E Became First Choice of Commercial Operators

From the day it went into commercial service, the Hiller 12 E had a head start. It had an Army-proved H-23D airframe and an Army-proved H-23D drive system that hadn't begun to exploit its full strength.

The next step rewrote the specs on that light utility helicopters can do. Capitalizing on the H-23D Raven's dynamic components with a 305 hp Lycoming engine's power, light helicopter "firsts" of the kind above were bound to happen. Similar profitable operations are flown every day, wherever there's an E.

That's why the 12 E has become first choice—it's the most economical helicopter purchase today.

Designs are one thing. Deliveries another. Both come from

HILLER
AIRCRAFT
CORPORATION

PALO ALTO, CALIFORNIA · WASHINGTON, D. C.
Adhesive Engineering Division · San Carlos, Calif.



H-23D 250 hp



12 E 305 hp



E4 320 hp



Super E 340 hp

The heart of any helicopter:

Power plants can be purchased, structures can be fabricated with relative ease, but rotor design and development call for years of experience in dynamics, aerodynamics, mechanical design, structures and flight testing.

At McDonnell such working knowledge, combined with scientific imagination and ingenuity, has created a unique rotor system. McDonnell rotors have been built in diameters from 31 to 75 feet and have been proved in flight speeds as high as 200 mph. They incorporate the results of the most advanced creative engineering:

Freedom from ground resonance

Elimination of blade tracking requirements

Low vibration level

Inherent lateral and longitudinal dynamic stability

Ability to start and stop in winds up to 80 knots

Autorotation at high collective pitch settings

Reduction of gust sensitivity by a 2:1 ratio

No lubrication requirements

Seventeen years of McDonnell research and development have brought bold farsighted answers to many other problems of vertical flight. In all areas of helicopter design—dynamics, propulsion, control, structures and lift mechanisms—McDonnell has pioneered. Personnel experienced in production and production tooling enable a swift transition from design concepts to full scale production.

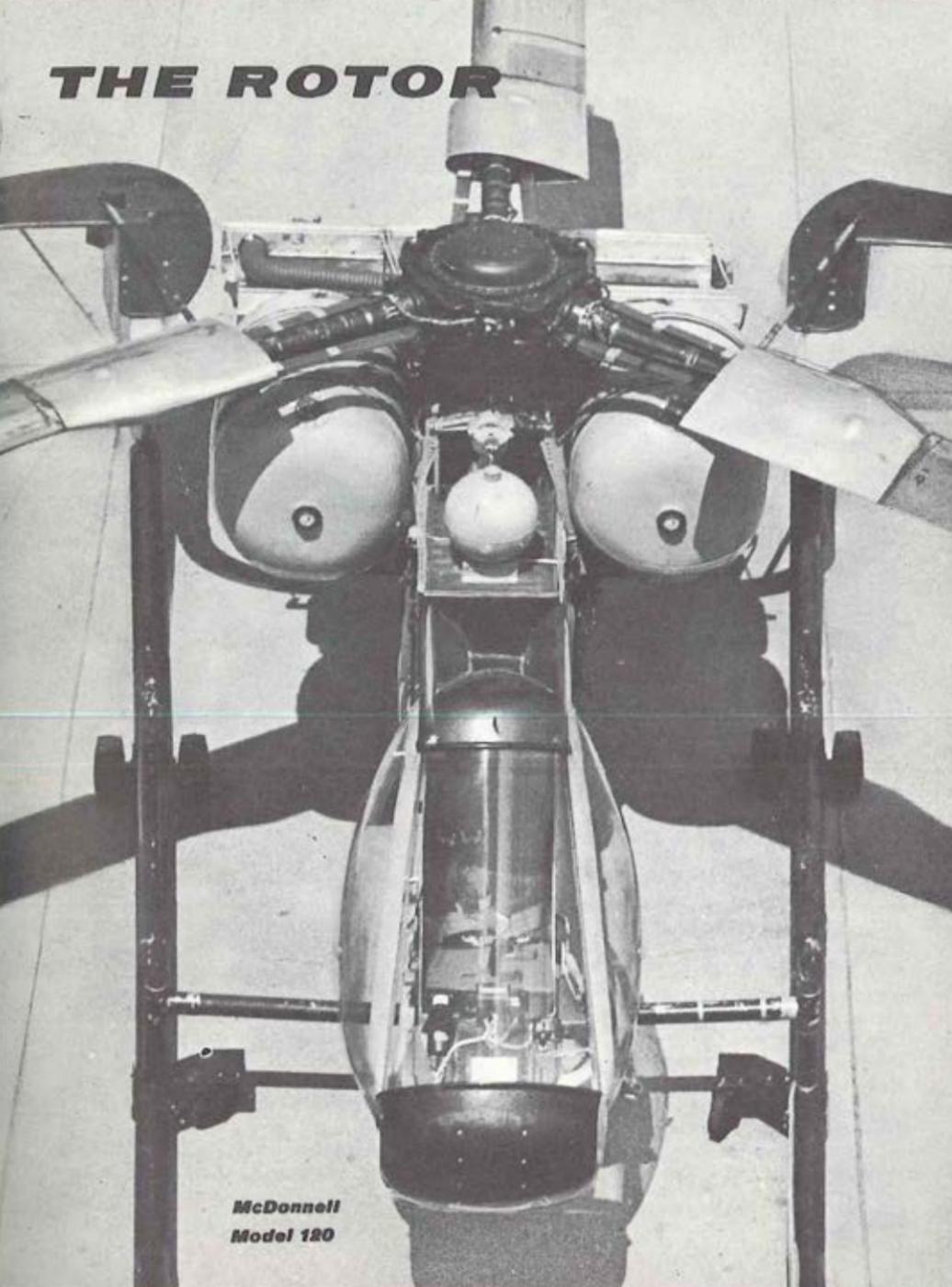
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Phantom II • Project Mercury Space Capsules • Talos Airframes and Propulsion Systems • Quail Decoy Missiles • Rotorcraft • Electronic Systems

MCDONNELL AIRCRAFT ST. LOUIS, MO.

THE ROTOR



**McDonnell
Model 120**

USAREUR REPORT



Congratulations to Seventh Army for the excellent performance of *Task Force Feldt* in the Congo Operation. This portion of the Congo Operation was very well described in *Capt. Colin D. Ciley's* fine article in the July issue "Mission to the Congo."

The early phase of the Congo Operation included disassembly and movement of three H-19 helicopters to the area of operation by C-124 aircraft. Among this initial group were *Capt. James R. Sanders, 2d Lt. George B. Crawford, Sp-6 Teddy Kessler, Sp-4 Ralph E. Ward, and Sp-4 Joseph L. Hamrich*, from the 8th Inf Div Cbt Avn Co, commanded by *Maj. Robert B. McGhee*. The 503d Cbt Avn Co, commanded by *Maj. Deverne R. Yost*, was represented by *Capt. Robert C. Ayers, 1st Lt. Glenn E. Miller, Sp-5 William W. Watters* and *PFC Harold J. Swift*. Assisting in a maintenance capacity were *Sp-5 James E. Newman, Sp-4 Richard A. Rosser*, and *Sp-4 Donald G. Sherman*

from the 30th TAAM Army Avn Maint Company, commanded by *Maj. James V. Lowe*.

The US Army Transportation Depot at Sandhofen, Germany assisted in the disassembly and loading of the helicopters as well as the L-20 and U-1A's for *Task Force Feldt*.

USAREUR has another aviation first, the loading and transport of U-1A's into a C-124 aircraft. Wings, gear, empennage, and vertical and horizontal stabilizers had to be removed, but this can be and was accomplished.

Another group of Seventh Army aviators moved six H-13 aircraft to the Congo via C-124. Part of their interesting assignment was to transition UN pilots in the H-13. The majority of this was accomplished without use of the English language, *no small task*.

Among this group were *1st Lt. Curtiss J. Crouch, Capt. Francis J. Kirsch, Sp-4 Man-*

THE Beaver

JOINS THE BRITISH ARMY



Following a lengthy period of thorough evaluation, the Beaver was adopted by the British Army Air Corps in 1960.

Designated the A.L.Mk.1, the Beaver was chosen primarily for light liaison, communication, casualty evacuation and re-supply missions.

Because of its rugged dependability, generous load capacity and outstanding STOL performance the Beaver was the logical choice of the British Army for its exacting duties in many parts of the World.

THE BEAVER - DESIGNED AND BUILT BY

DE HAVILLAND AIRCRAFT OF CANADA

DOWNSVIEW, ONTARIO

MEMBER COMPANY of the HAWKER SIDDELEY GROUP

Washington Office: 319 Tower Bldg., 14th & K Sts., N. W.



uel E. DaSilva, and Sp-4 Charles Kaluai, of the 24th Cbt Avn Co; Capt. Ralph H. Hamner, 1st Lt. John G. Harris, Jr., 1st Lt. William Kuykendall, and Sp-5 Kenneth E. Wood, Sp-5 James V. Scanlon, and Pvt George E. Armond, of the 3d Cbt Avn Co, and 1st Lt. Richard A. Lilly and PFC Arthur J. Lachberg of the 504 Cbt Avn Co.

By the way, what kind of a reception does your unit accord transients? The other day I dropped in on a unit for a short stop and was not very impressed with their system. No one assisted in parking my aircraft, asked if fuel was required, or offered to hold a fire extinguisher for starting the engines.

The Air Force has a team patterned after Duncan Hines who travel around the country visiting various bases as transients to see how effective their treatment is. A Duncan Hines rating is awarded if service has been good. Better take a look at your own procedures.

Treat a transient as you would wish to be treated when you are on a trip. Just as well have some good advertising for your unit and this with only a little extra effort.

USAREUR aviators are to be congratulated on the amount and quality of recent instrument training. Almost all instrument tickets were recaptured prior to 31 Aug. '60.

A reminder that, at this writing, only about 60 days remain in which to obtain your annual minimums. Don't let it sneak up on you. Holidays combined with bad weather can get you in trouble.

The 8th Trans Light Helicopter Bn, commanded by Lt. Col. Rowan P. Alexander, and 24th Inf Div Cbt Avn Co, commanded by Maj Charles Ruple, teamed up to provide tactical aircraft support for the 24th Inf Div on Exercise Summer Shield, a field exercise conducted in the Hohenfels area. The two units working together per-

formed battle group size helicopter lifts with a superb display of finesse and professionalism.

The Heidelberg Chapter of the AAAA with members from Heidelberg, Karlsruhe, Mannheim, and Hanau combined a night of business and pleasure with a meeting at the Heidelberg Officers' Club on 17 Aug. '60. Mr. T. R. Pierpoint, Director, European Operations, Vertol Division, Boeing Airplane Company, was guest speaker. Mr. Pierpoint presented a short discussion and film on the Chinook helicopter. Business activities were concluded by the Chapter President, Maj. Gen. Thomas F. Van Natta and Executive Vice President, Col. Arthur W. Ries.

The US Army Flight Information Detachment, commanded by Capt. Egon J. Arndt, is conducting a test of a new navigational map conceived by the Army Map Service. With the assistance of USAREUR aviators acting as guinea pigs, the new map will be checked for accuracy, ease of use, and completeness of essential data. Most important feature is its similarity to a regular tactical battle map with additional aviation requirements added. This will enable both the aviator and ground unit commander to talk the same language in determining locations of units and targets as well as adjustment of fire.

SETAF is in the news with a change in company commanders for the 110th Aviation Company (Surveillance). Maj. James Nix arrived recently form the ZI to assume command. Maj. Dennis A. Hovland, former commander, departed for the US for reassignment.

KENNETH D. MERTEL

Major, GS

Aviation Section, Operations
Branch, Hq, USAREUR

*Now, Fly Your Plane Anywhere . . .
Face Any Navigating Problem with Confidence*



Low Frequency Navigation



Pinpoint Instrument Approaches



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Precise Track Interception

with the NEW

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*Steering Data
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see your ARC Dealer,
or write for free brochure.*

The ease with which ARC's CD-4 Course Director adapts itself to every area of operation adds a new dimension to your flying technique.

SELECT MODE, SET TRACK, CENTER NEEDLE

With the CD-4, you simply select the mode of operation . . . VOR, ILS, ADF, or Magnetic Heading . . . set in the desired track information, and steer the plane to center the vertical needle. Instantaneous steering information is then computed and continuously displayed on one indicator. All enroute flying, holding, and terminal approach procedures are identical.

NO MENTAL GYMNASTICS

Exacting mental calculations are no longer required. The CD-4 does it for you! It tells you how to intercept and maintain the desired course. Recalculation of headings to compensate for wind is not necessary. Your only requirement is to keep the needle on the cross pointer indicator centered.

And . . . the total added weight to the aircraft is only 8.5 pounds.

Engineered to the highest standards, ARC's CD-4 Course Director assures typical ARC reliability.

Aircraft Radio Corporation
BOONTON, NEW JERSEY

LOST

AND FOUND

There is a period of awareness—a time during which you know something is wrong but are not yet certain as to what. Your cockpit reactions become more positive, as though strong, certain movements were the antidote for nagging doubts. The terrain below you is unfriendly—no roads, rivers, nor railroad tracks.

The short hairs on the back of your neck begin to rise and your collar is noticeably tight. Your heart begins to pump more rapidly and your lungs feel crowded by

your ribs. Your eyes roam the cockpit and your hands begin dozens of abortive movements not dictated by your conscious mind.

You recheck the clock, the compass, and the map. Nothing is as it should be—or is it?

What time should it be?

What was that computed course?

Is this the right map?

You fight down the sense of panic and return, in your mind, to your last known position.

By **LT. COL. MORRIS G. RAWLINGS**
Headquarters, V Corps, Seventh Army



JND

You may hide it from your passengers and disguise it to yourself. You may deny it forever afterward, but, brother, the fact remains—

You're lost!

Only two Army aviators, during the past seventeen years, have insisted to me that they have never been lost. One is a pathological liar. The other has more time in the top of a loop than most of us have in the air. I bow to their superior abil-

ities, but wish to make three assumptions:

- *Everyone who files will, sooner or later, become disoriented.*
- *The longer the period of disorientation, the less capable he will be of re-orienting himself.*
- *When disorientation is total, assistance must come from outside the cockpit.*

The first two may well be accepted as facts; the last may require some exposition.

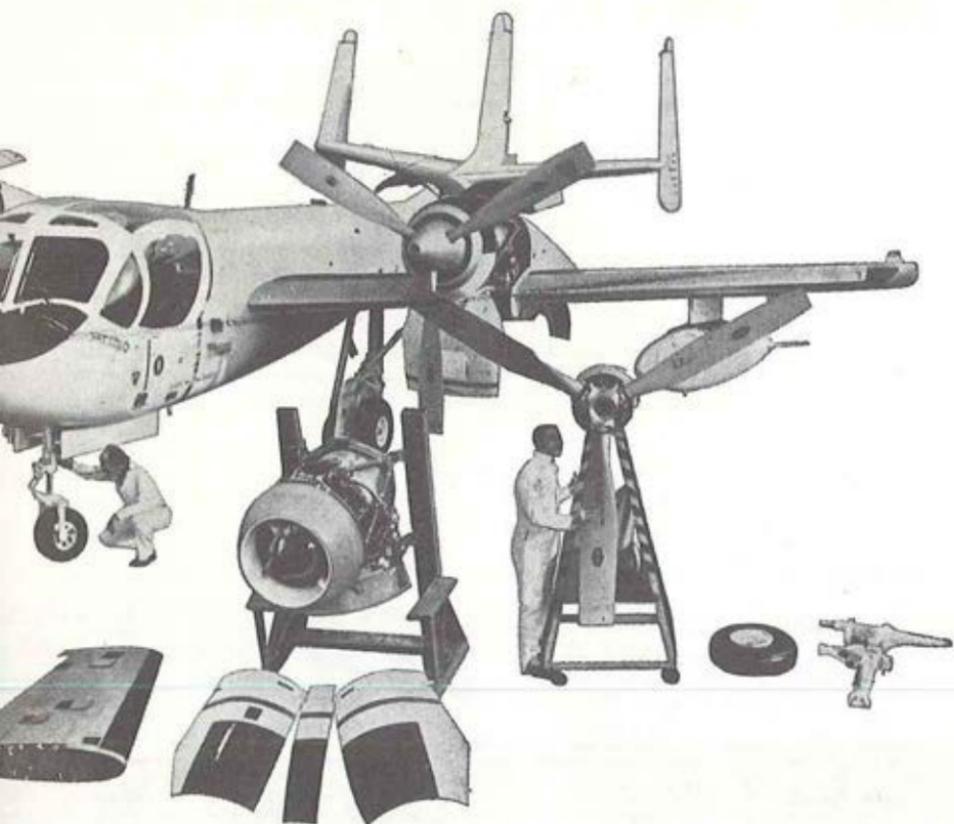
AO-1 MOHAWK FEATURES EASY MAINTENANCE

Grumman's AO-1 Mohawk, new Army observation plane, was designed for short take-off and landing, operation from rough fields, high maneuverability, and maximum visibility for the two-man crew. Since it will live in the field with today's pentomic Army, ease of maintenance is essential . . . and here's how the Mohawk meets maintenance requirements:



- 1 INTERCHANGEABILITY**—Left- and right-hand components on the Mohawk are interchangeable, including tail surfaces, engine power plant packages, landing gear.
- 2 SERVICEABILITY**—Engines on the Mohawk, including accessories, can be changed with standard tools—a minimum of special tools is required. That's what you call easy serviceability!
- 3 ACCESSIBILITY**—75% of the Mohawk opens up for maintenance in a matter of seconds, and this is done entirely by hand. And this is accomplished at ground level, thus eliminating aircraft stands, ladders, and other paraphernalia often unavailable in the field. That's what you call easy maintenance!





GRUMMAN MOHAWK



Grumman Aircraft Engineering Corporation, Bethpage, L. I., N. Y.

LOST AND FOUND/Cont.

All flying is conducted under one of two weather conditions; those which permit reference to terrain features, or those which utilize aircraft instruments and electronic devices to chart a course. An aviator may become lost in either case, but the odds are heavily stacked against total disorientation on an instrument flight. For this there are three major reasons: (1) fewer flights, (2) more preparation, and (3) more aids.

Actual instrument flight represents but a small fraction of the flight hours performed by Army aviators. Simulated instrument flight, by regulation, accounts for less than one quarter of total training time. A healthy over-estimate would determine that not more than 25% of all flying is accomplished without reference to the terrain. Such flights demand, and receive, the type of pre-planning which all flying deserves. They are performed in aircraft well-equipped with receiving devices to catch and

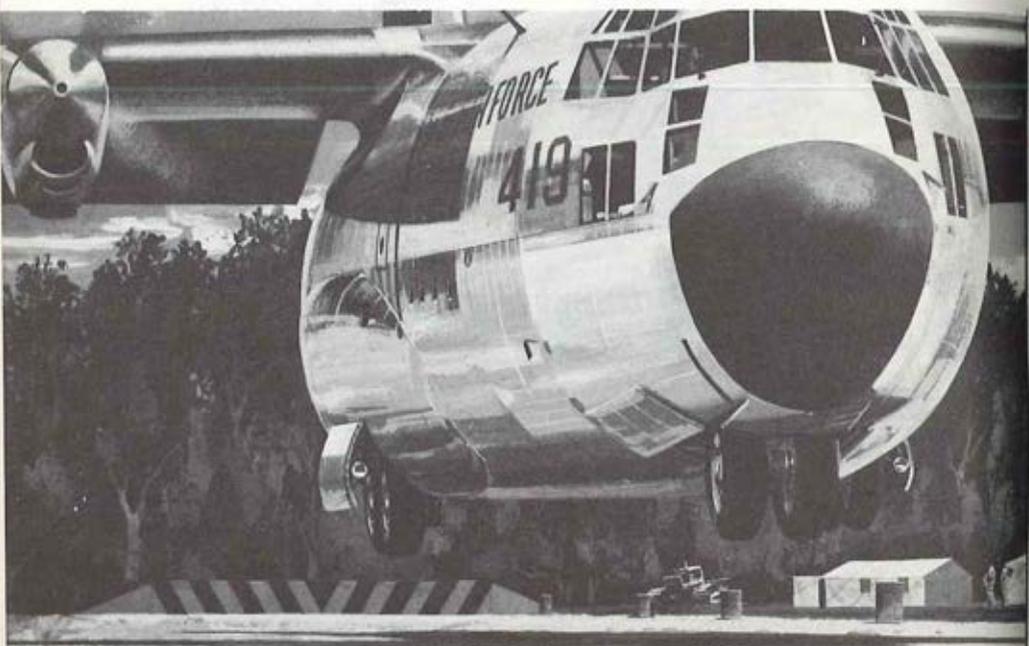
interpret the various navigational aids from low-frequency homers to a competent copilot.

The other 75% is done in the H-13/L-19 type equipment by pilots who use an aeronautical chart or tactical map for plotting their course and an FM radio to announce their arrival. This VFR aviator, by far the most airborne, is generally the poorest equipped to navigate.

That statement is *not* intended as an indictment of an individual, his training, or his equipment. *All are the best available.* The individual lacks only experience and judgment; the training seeks only standardization; and the equipment awaits further modification or replacement.

Consider . . .

The aviator who has gained both experience and judgment is now the one who assigns flights. He assigns routine VFR work to the young man on his way up. By the time an aviator has learned the simple rules of navigation, he is not only instru-



ment-rated and dual-qualified, but is probably married, a devoted father, and is too important to be gone from the office!

Again, look at our proponent. His assignment, this moonlit night, is to transport a passenger from Grafenwohr to Hanau and remain overnight. His chariot, an L-19, is equipped with an ARC-44 radio, all components of which are in working order.

Just prior to takeoff, he is reminded by *Operations* that he must fly several miles out of his way to avoid range firing. *Operations* also suggests a route other than direct in order to take advantage of the Würzburg homer and definitely avoid the border. Airborne at last, he flies due south for a period and then heads west. A large city under his left wing should be Nurnburg, *might be Erlangen*, but, either one is all right since they're close together.

This mistake will lead to others and the flight will not go according to plan. Since

he has no alternate plan, one must be formed from that available to him in the cockpit.

He will remember that 121.5 is an emergency frequency, but whether to use "Pan," "Security," or "Mayday" will never cross his mind. That a lost aircraft can get help by flying triangles will stick in his memory, but whether he should turn right or left will be a mystery. Besides, he is by no means ready to declare an emergency and have everyone laugh at him so long as he has fuel in a flyable aircraft.

Ever try to fly a manual loop to a 30 second beacon?

It is difficult when on course and in full control. It is next to impossible when disoriented and apprehensive. The ARC-44 has a homing device which is very accurate, but it certainly requires a signal upon which to home. It also requires concentration to determine the signals being heard.

Unless Lady Luck enters the picture by

BOUNDARY LAYER BREAKTHROUGH

50-ton BLC*130 lands on 500-foot lightplane strips

At the turn-around point of a 2,000-mile round trip mission, Lockheed's new Boundary Layer Control C-130 will roll to a stop in 520 feet after touchdown. Takeoff is just as remarkable: lift-off in 500 feet—from an unprepared field. Stall speed: less than 50 knots.

The BLC-130 is built on a proved and paid-for airframe design. It adds true STOL capability to the other C-130 superiorities established in more than three years of Air Force service: fast loading and unloading; rough-field takeoff and landing; performance of diverse airfreight/airdrop missions at low cost; and direct-to-trouble-spot airlift, such as the recent Congo airlift in which C-130s played the major role.

A test bed BLC-130 has completed flight tests, clearly demonstrating the feasibility of boundary layer control on large airplanes.

GEORGIA DIVISION • MARIETTA, GEORGIA

*BOUNDARY LAYER CONTROL—High-speed air from pylon-mounted turbojet compressors is blown over flaps, ailerons, elevator, and rudder—causing airstream to hug the surfaces instead of being separated. The energization of surface air gives the BLC-130 its extraordinarily high lift.



showing a river or the autobahn, our friend is lost. When he finally admits it and gets on 121.5, he will call "Mayday" so loudly and so often as to make it almost impossible to answer him.

Now is the time for all good parties to come to the aid of men!

He must be answered and quickly. He must *not* be advised to home on any given frequency, or contact a surveillance radar. He should *not* be asked to do anything other than fly his aircraft in a direction which you have assured him will bring he and his aircraft to a safe landing. You can do so even though you do not have D/F equipment, radars, omni equipment, or the other exotic items which will some day become available to all.

D/F Procedure

1. *Ground equipment:* One L-19 with ARC-44 installation.
2. *Personnel:* One pilot familiar with

procedure. (With proper training, an EM could do the job.)

3. Steps prior to starting D/F procedure:

a. Aircraft desiring steer to station contacts airfield by any available method of communication, requesting steer. He will be instructed to standby, and monitor a specific FM frequency.

b. Control plane (L-19 with ARC-44) taxis out onto airfield area, clear of obstructions.

c. Control plane turns VHF and FM sets on. Tunes to preselected frequency.

d. Control plane sets directional gyro to RECIPROCAL of compass heading of aircraft.

4. D/F procedure:

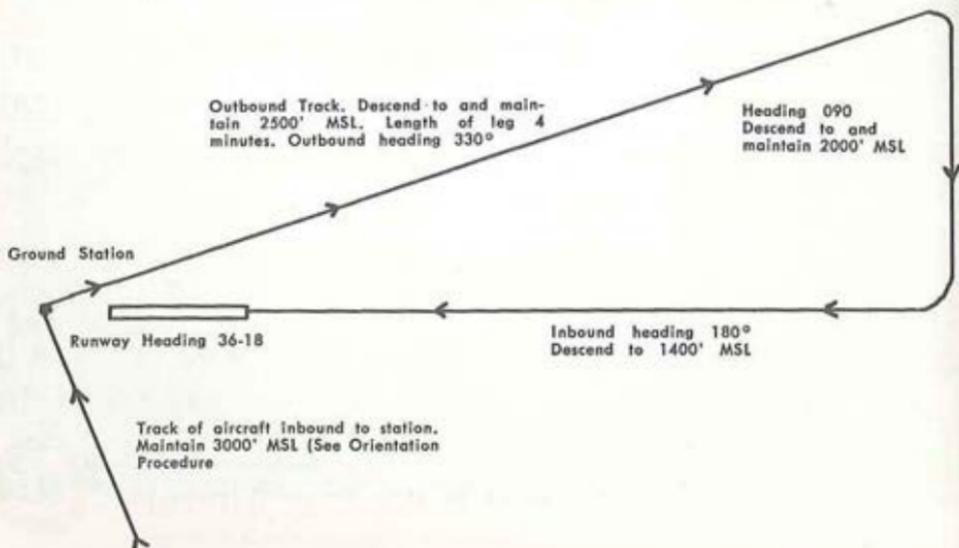
a. Control plane contacts aircraft in flight on preselected FM frequency or on VHF.

b. Control plane advises aircraft in flight to transmit on FM for 30 seconds for steer.

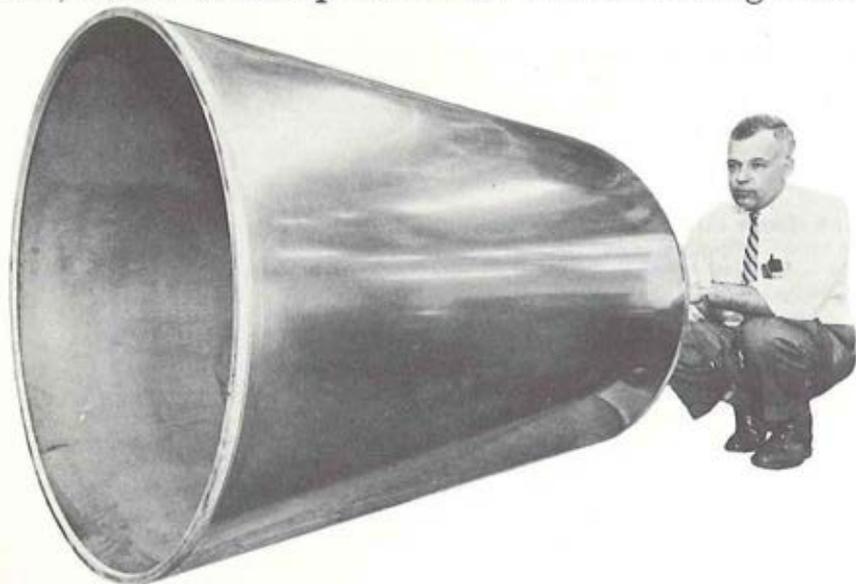
c. Control plane activates homing device and turns right or left as required until homing on aircraft in flight.

d. Upon completion of transmission for

EXAMPLE OF PATTERN FOR D/F LOW APPROACH



Now, rocket cases up to 20 feet without a single seam



Pratt & Whitney Aircraft now has a metalworking technique for producing rocket cases up to 20 feet long and 80 inches in diameter—without a single weld. The process is called flow-turning. It spreads and forms even the hardest metals into precise shapes and sizes.

Seamless, flow-turned rocket cases and jet engine parts are stronger, lighter and more economical to produce than welded parts. Moreover, the process of flow-turning itself increases the metal's tensile strength.

Flow-turning is among the many advanced precision manufacturing skills that Pratt & Whitney Aircraft engineers have pioneered and refined. It plays an important role in the design and development of dependable power for flight.

Pratt & Whitney Aircraft

EAST HARTFORD, CONNECTICUT/A DIVISION OF UNITED AIRCRAFT CORPORATION



steer, the control plane gives the aircraft the heading shown on the *directional gyro* as a steer to the station. (DG is on reciprocal of control plane's compass heading).

e. Continue step (d) periodically until aircraft is in visual contact.

Let-down and Low-approach Procedures

1. *Preliminary preparation*: the same as D/F procedures.

2. *Orientation procedure*:

a. Control Plane contacts aircraft in flight on preselected FM frequency or on VHF.

b. Control plane advises aircraft in flight to set transmitter to FM and monitor VHF receiver.

c. Control plane transmits on VHF and monitors FM. Two way communication check made. Repeat until communications are solid. Advise aircraft in flight to maintain specific altitude (minimum altitude for area).

d. Control plane advises aircraft in flight to depress his mike button until further notice.

e. Control plane activates homing device and turns right or left until homing on aircraft in flight. Transmits on VHF to aircraft in flight, giving heading shown on directional gyro, as a steer to station (D/G is set on reciprocal of control plane's compass heading).

f. Control plane repeats step (e), giving continuous heading corrections until aircraft is "over the station." Aircraft in flight performs continuous FM transmission during all times. If aircraft in flight desires to communicate to ground station, he can momentarily discontinue his transmission for homing by releasing his mike button. This interrupts the signal received by the control plane, notifying the control plane that the aircraft desires to communicate.

He then switches his control from "homing" to "communications" to receive voice communications. Upon completion, he re-

activates homing device and continues as indicated in step (e). "Over the station" indication is a rapid and radical shift of tearing thru 180° of arc. Direct passage over the station (an unlikely event) is indicated by a momentary loss of signal by the receiving control plane.

3. *Let down procedure*.

a. When "over the station" indication is received, control plane instructs aircraft in flight to turn to desired out bound heading.

b. Control plane continues to "home" on aircraft in flight throughout turn to out-bound heading. Rapid changes of bearing toward desired outbound heading "prove" the over station position. After this proof is obtained, descent to outbound minimum altitude, if applicable, is given to aircraft in flight by aircraft on ground.

c. Control plane turns to desired outbound compass heading. If a "right of station" or "turn left" signal (D-.) is heard, the aircraft in flight is to the left of desired outbound track, and corrections to the right (increase in compass heading) will bring the aircraft back to desired track.

Conversely, if a "left of course" or "turn right" signal (U.-) is heard, the aircraft in flight is to the right of desired outbound track. Corrections to the left (decrease in compass heading) will bring the aircraft back to desired outbound track.

d. Upon completion of desired outbound time (depending upon local pattern), control aircraft gives instructions to turn to new desired heading and desired changes of altitude. (Local experience indicates that this leg should be a "base" leg, 90° to desired inbound heading.)

e. Control aircraft turns to heading 10° from the reciprocal of the inbound track (left or right, depending on the side of the inbound track the preceding turn was made. Object is to lead the turn). Upon receiving on-course signal, control plane directs turn to desired inbound heading, and any desired changes in altitude.

f. Control plane turns until GYRO reads

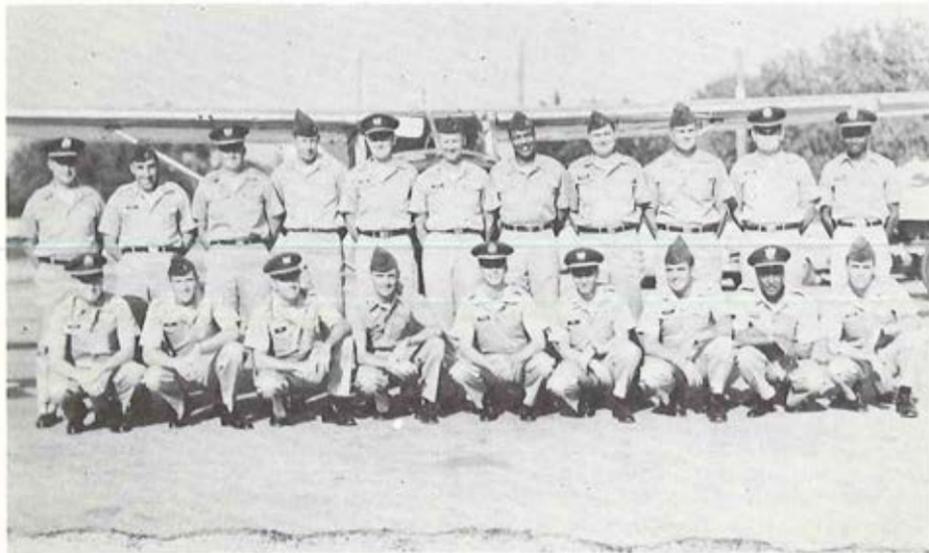
desired inbound heading. Upon completion of turn, aircraft in flight should be approximately on course. If a "right of course" or "turn left" signal (D--.) is heard, the aircraft in flight is to the right of its desired inbound track. A correction to the left (decrease of compass heading) will return the aircraft to track.

Conversely, if a "left of course" or "turn right" signal (U --) is heard, the aircraft is to the left of its desired inbound track and a correction to the right (increase of compass heading) will return the aircraft to the desired track. Initial corrections should be fairly large (20°) and subsequent corrections correspondingly smaller.

g. Continue giving corrections to aircraft in flight until he is contact or over the station at minimum altitude, at which time, missed approach procedure will be performed.

This system is not presented as something new. It was successfully demonstrated by the 10th Aviation Company in 1957. Such a system is not intended as a supplement to nor a replacement for radar equipment.

It's this way. . . . *An ARC-44 in an aircraft is worth more than a radar in production.*



BACK ROW: L-R: LT. ROY E. LINDSTEDT (RILEY); CAPT. EDWARD J. DAVIS (RILEY); CWO CLIFTON A. PUFFAFF (RILEY); CAPT. WILLIAM L. MURDOCH (HOLLOMAN); CWO HAROLD S. LANIER (SILL); CAPT. ROWLAND J. NICHOLSON (SILL); CAPT. EUGENE H. EDMONDS (SHERIDAN); LT. WILLIAM P. STEWART (FT. SAM); LT. ALLAN R. FETTERS (RILEY); LT. RONALD D. KENNEDY (HOOD); LT. MELVIN G. BURLESON (TEX.-USAR). FRONT ROW: L-R: LT. PAUL J. DONAHUE (HOOD); LT. RONALD C. DAVID (HOOD); CWO PAUL G. SMITH (SILL); CWO CLARENCE D. CORSON (CARSON); LT. RONALD D. RENFRO (HOOD); CWO LESTER R. HUNT (RILEY); LT. MAX K. MCHANEY, JR. (HOOD); LT. WILLIAM W. STEPHENSON (MICH.-USAR); LT. MARVIN E. MORRIS (HOOD).

SEPTEMBER

Numerous personnel changes have occurred within the US Army Aviation Board since this column last appeared. Col. O. G. Goodhand, Deputy President, departed in June for an assignment in the Washington, D. C., area and Lt. Col. William H. Byrd PCS to Hq, USCONARC; Captains Anthony Carroll and William K. Gearan comprise more recent losses. Lt. Col. John L. Rowan is now Deputy President, and Majors Hubert D. Gaddis and Leland F. Wilhelm have arrived to fill the vacant slots for Director and Deputy Director, respectively, of Test Division.

Other new arrivals include Majors Edward C. Jellison, Robert W. Reisacher, and Marvin C. Fabert; Captains Claude E. Hargett, Harry P. Frizzell, Jerry E. Holstad, Billy L. Odneal, William P. Crouch; and, most recently, 1st Lt. Donald H. Olsen. Lt. Col. Maurice W. Sutcliffe has replaced Lt. Col. R. I. Walton as the British Liaison Officer. Maj. Garrison J. Boyle and Capt. Robert J. Greenwell are acquiring higher learning at the US Army Command and General Staff College and the Engineer School, respectively.

Distinguished military visitors to the Board during the months of August and September were the Deputy Secretary of the Army, Mr. P. K. Robinson; Maj. Gen. Louis T. Heath, DCoS for Materiel Developments, Hq, USCONARC (our new boss); and Brig. Gen. Robert B. Neely, Commandant, USA Transportation School. Gen. Heath received an orientation on the Board's operations, facilities and current projects, in addition to viewing a demonstration of the *Caribou* and *Mohawk*. Other

distinguished visitors included: Mr. Stanley Hiller—Hiller Aircraft, Mr. R. H. Davies—Electric Autolite, Mr. Bartram Kelley—Bell Helicopter Corp., Mr. James A. Carmack—Lockheed Aircraft Corp., Mr. Sylvester W. McClain—Vertol Division of Boeing Aircraft Co., and Mr. R. H. Suggs—Petroleum Helicopters, Inc.

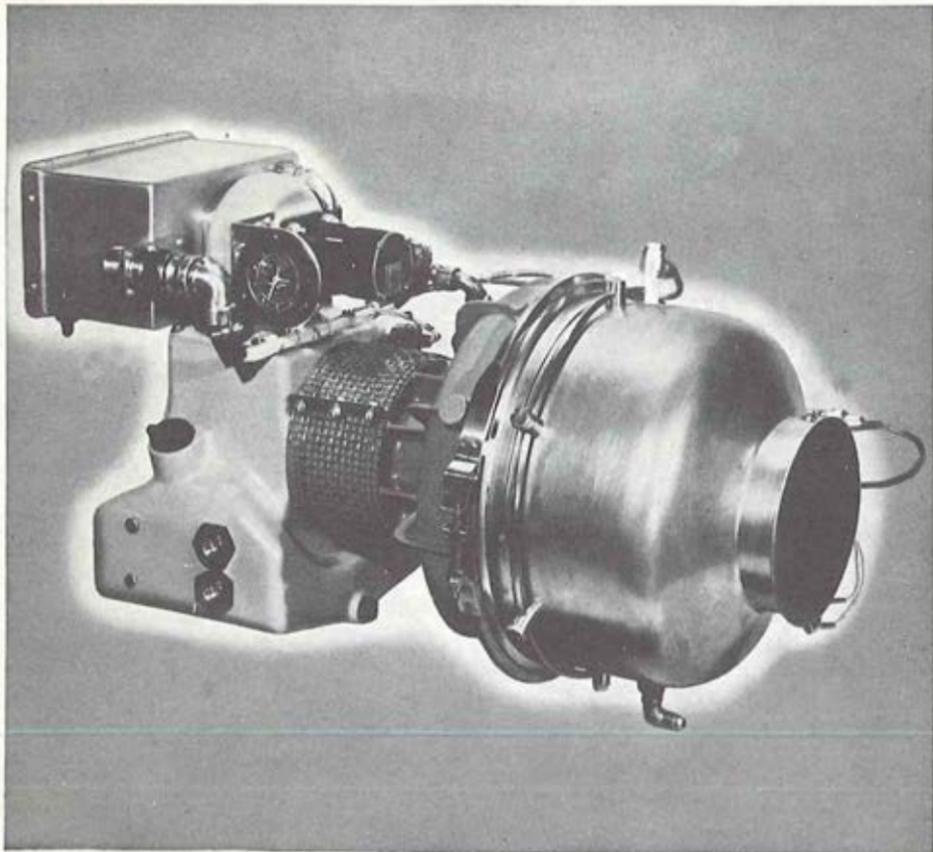
Perhaps the most challenging and unique project ever to be undertaken by the Board is the DA Research and Development sponsored "Man-Machine Environment Compatibility Studies and Tests in Support of Surveillance Aircraft Development."

The objective of the study and tests is to determine the technical and operating characteristics for low altitude operations by deep penetration manned surveillance aircraft and to investigate the human factors aspects of such operations. Implementation consists of a comprehensive literature survey to include a correlation of results of studies and tests already conducted in the high speed, low altitude flight regime; and a flight test program to measure in flight the effects of a high speed, low altitude environment on the airplane and pilot.

The flight test program will utilize the US Navy's high performance *T-28B*, *T2V-1*, and *F9F-8B* airplanes. Ten Board pilots have received their checkouts in the *T2V-1* and five of these pilots are now qualified in the single-place *F9F-8B* swept-wing fighter. On completion of low altitude training flights, actual testing to record the effects of low altitude, high speed flights over varied terrain will be conducted in Florida, Tennessee, and Arizona. Observers will ride in the *T-28B* and *T2V-1* airplanes for the

SPLINTERS

A REPORT FROM THE U.S. ARMY AVIATION BOARD



Multipurpose APU

*New Solar gas turbine 80 hp APU is only 12½ in.
in diameter x 25 in.—weighs 59 lb*

SOLAR'S NEW gas turbine powered multipurpose APU is ideally suited for airborne and ground power applications—to drive hydraulic, electric or pneumatic outputs for aircraft starters, fuel pumps and portable generator sets. The Titan engine has the highest power-to-weight ratio of any powerplant in its class. It is ideal for single or multiple outputs from 25 hp to 80 hp.

The lightweight unit is simple in design, easy to maintain and can be started instantly—without warmup—in temperatures from -65F to 130F and under wide atmospheric extremes. It operates efficiently on a variety of fuels.

Titan gas turbines are setting new standards of performance and reliability as propulsion units for one-man helicopters, in portable electric gener-

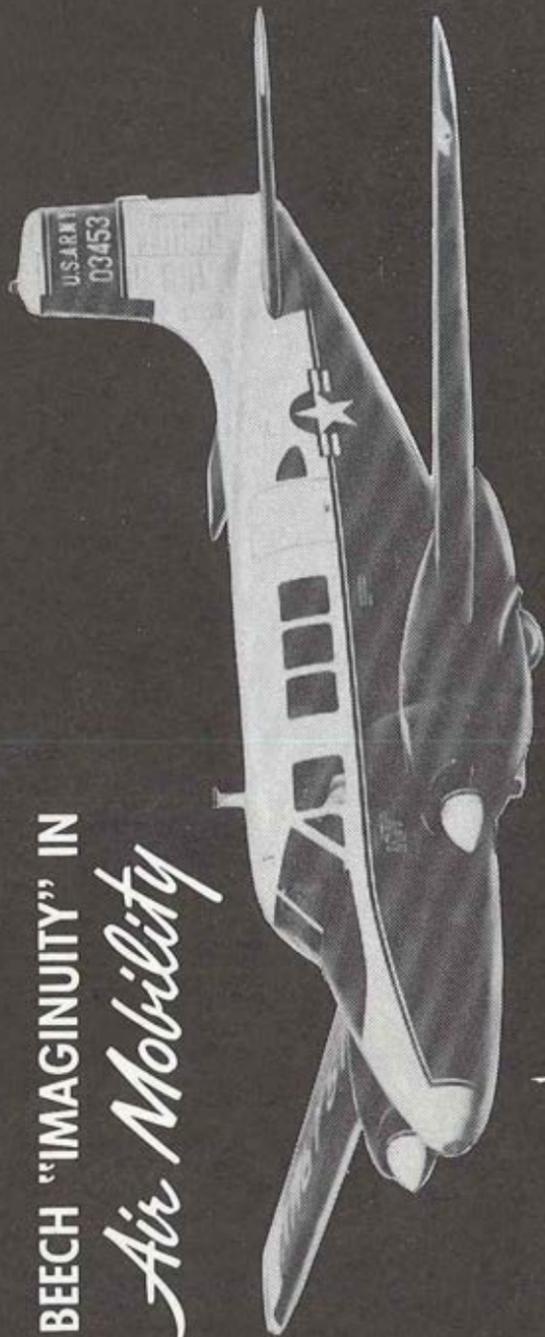
ators and in other applications. For details, write to Dept. H-180, Solar Aircraft Company, San Diego 12, Calif.

SOLAR
AIRCRAFT COMPANY

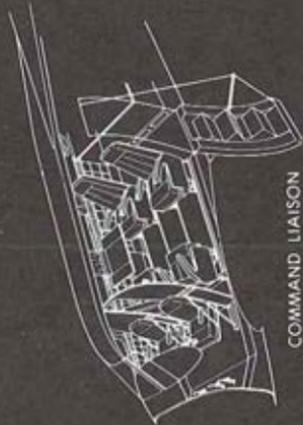
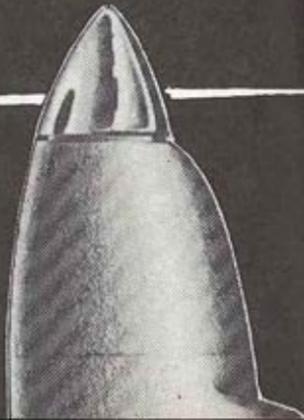


A subsidiary of International Harvester Company

BEECH "IMAGINITY" IN
Air Mobility



POTENTIAL FOR
FUTURE DEVELOPMENT
ALREADY DESIGNED IN



COMMAND LIAISON
TRANSPORT



CONVERTS QUICKLY
FOR HIGH-PRIORITY
CARGO

ULTIMATE PLANNED GROWTH CONFIGURATION
INCLUDES TURBO-PROP ENGINES AND PRESSURIZATION

OR AERIAL
AMBULANCE



The new Beechcraft L-23F . . .

Meeting the U. S. Army's requirement for a modern high-performance, low-cost transportation system

Already serving the U. S. Army, the versatile new Beechcraft L-23F is the latest in a long line of high-performance training and utility aircraft which Beech Aircraft Corporation has designed, developed and produced for the military services since 1932.

With supercharged fuel injection engines, the L-23F combines high altitude cruise power with exceptional

short field performance, rugged durability and low operating costs to meet a wide range of needs . . . as a command liaison or personnel transport, a carrier of high-priority cargo, an aerial ambulance, or a multi-engine instrument trainer with a "big plane" feel. Designed and engineered for future pressurization and turbo-prop modification.

Beech Aerospace Division

BEECH AIRCRAFT CORPORATION • WICHITA 1, KANSAS.

Beech Aerospace Division projects include R&D on manned aircraft; missile target and reconnaissance systems; complete missile systems; electronic guidance systems; programs pertaining to liquid hydrogen propellants and cryogenic tankage systems; environmental testing of missile systems and components; and GSE. May we help you? Write, wire, or phone Contract Administrator, Beech Aircraft Corp., Wichita 1, Kansas—or nearest Area Office.



purpose of obtaining human factors data. Chase planes will accompany each flight to insure the validity of the test data.

The annual pilgrimage to the Army's Desert Test Center at Yuma, Arizona, was completed successfully during this reporting period. Major items tested in the desert included the *YAC-1* airplane and the *AN/TPN-8*, a lightweight GCA system.

After its desert sojourn, the *Caribou* detoured to Colorado Springs for a week of high altitude operations. Enroute home, the crew stopped at Fort Sill, Okla., and staged a *Caribou* demonstration for the Artillery and Guided Missile Center. The airplane is now at the de Havilland factory for installation of an aerial delivery kit and the Aviation Board will participate in tests of this intallation to be conducted by the Airborne and Electronics Board at Fort Bragg, North Carolina, this fall. After that, it's off to Alaska to spend the winter with the Arctic Test Board.

By the time this appears in print we will have received the first two AO-1 *Mohawk* airplanes to be delivered to the Army, and of these more anon.

PHOTOS

TOP: BELL'S 10-PLACE COMMERCIAL VERSION OF THE HU-1. THE MODEL 240B, TURBINE-POWERED, WILL MARKET AT ABOUT \$285,000 AND HAVE A LATE '61 FIRST DELIVERY. CENTER: AERO DESIGN'S COMMANDER 500B POWERED BY TWO 290 HP LYCOMING FUEL INJECTION ENGINES IS NOW ON A "DELIVERY BASIS." REDUCED ENGINE AND NACELLE SIZE GIVE THE 500B BETTER PERFORMANCE AND GREATER SPEED (218 MPH CRUISING). BOTTOM: MECHANICS AT VERTOL'S MORTON, PA. PLANT INSTALL A NEW SET OF TRANSMISSIONS ON A PRODUCTION VERTOL 107 MODEL II PRIOR TO FAA CERTIFICATION. THE VERTOL DIVISION HAS A '61 DELIVERY DATE TO NEW YORK AIRWAYS FOR TEN TWIN-TURBINE 107'S.

We held a systems management group meeting this month on the Grumman AO-1 *Mohawk* in an effort to pinpoint some of our problem areas and to get a good general picture of the current status of the aircraft.

Representatives attended from DCSLOG, DCSOPS, OCRD, ACSI, OCSIGO, CONARC, TRECOM, U.S. Army Combat Surveillance Agency, Navy BUWEPS, OQMG, TMC, USATTC, and Aviation Maintenance Board, Ft. Knox.

Production of the prototype *Mohawk* began in 1958 and the aircraft made its first flight on April 14, 1959. A total of 77 pro-

duction models are now on order. This is in addition to the nine prototype *YAO-1* models. Five of these are now undergoing engineering tests at Grumman and the other four at the Patuxent River Naval Air Station.

The first four production models, which are to be delivered to the Army about 15 September, are slated for Phase E (user) and Phase F (logistical) testing at Fort Rucker, Alabama. Two go to the CONARC Board there and two to TATSAs. These tests will require approximately 6 months.

Mohawk is currently being produced in three configurations—the *AO-1A* with visual photo equipment, *AO-1B* with Side



SYSTEMS MANAGEMENT MEETING HELD ON "MOHAWK"

By MAJOR GENERAL RICHARD D. MEYER
DEPUTY CHIEF OF TRANSPORTATION FOR AVIATION, OCT

Looking Radar (SLAR) and the *AO-1C* with Infra-red surveillance equipment.

According to present planning the first nine *AO-1A's* for delivery to units are to go to U.S. Army, Europe about April 1961.

Page 587 shows one of the first pictures of the *AO-1B* showing the SLAR gear. This gear provides the Army with radar photographic maps on either 4x5 inch cut film or 70 millimeter strip film. An in-

flight processor enables the observer to see a developed photograph seconds after the film is exposed. In addition to the SLAR equipment, this model, as well as all other *Mohawks*, contains a complete high resolution optical photographic system as standard equipment.

The photo opposite shows the first production *AO-1A* model with external fuel tanks carried beneath the wing.

ARMY HELICOPTERS REACH WORLD'S NORTHERNMOST TIP OF LAND

Two Army light helicopters carrying a 12-man scientific exploration party over the Greenland Ice Cap recently reached the world's northernmost tip of land, Cape Morris Jessup in Peary Land.

The aerial expedition was part of *Project Lead Dog*, a research program to develop military transportation techniques in the Arctic and other difficult environments. Moving both by air and on the surface, the expedition covered close to 1,800 miles before returning to its base at Camp Tuto, near Thule.

The aerial party that reached Cape Morris Jessup consisted of nine U.S. Army personnel, two U.S. civilians, and one Danish national. This group included the four pilots and three crew members of the H-34 *Choctaw* helicopters which had joined the expedition at Crown Prince Christian Land after an historic 663-mile flight across the ice cap from Camp Tuto.

After engaging in aerial reconnaissance of the ice free areas of the northeast coast, the aerial expedition proceeded north to Peary Land and from a base camp there, again carried out aerial reconnaissance, and transported scientific parties to various locations

to conduct meteorological, glacial, and other scientific observations. The landing at Cape Morris Jessup culminated these northernmost explorations.

The combined expedition completed its task and returned to Camp Tuto in July, concluding one of the longest overland polar treks in history.

In addition to the two H-34C helicopters for air reconnaissance, *Project Lead Dog* utilized six D-8 Caterpillar tractors, eighteen sleds, two 10-ton off-road trailers, six wanigans, three weasels with one-ton sleds, and seven Rolling Liquid Transporters for carrying fuel.

The remainder of this column is devoted to a special article on the Technical Assistance Program by *Brig. General William B. Bunker*, Commanding General, the Transportation Materiel Command, St. Louis. All readers should find it both interesting and educational.

RICHARD D. MEYER
Major General, GS
Deputy Chief of Staff
for Aviation, OCT



THESE H-34 CHOCTAW CREW MEMBERS WERE AMONG THOSE MAKING ARMY AVIATION HISTORY THIS SUMMER BY LANDING ON THE WORLD'S NORTHERNMOST TIP OF LAND, CAPE MORRIS JESSUP IN PEARY LAND. THEY ALSO MADE THE HISTORIC WEST TO EAST CROSSING OF THE GREENLAND ICE CAP. THE CREW MEMBERS ARE: CWO MICHAEL J. MADDEN, FLIGHT LEADER; CWO'S DAVID H. LINDSEY, ULYSSES MORTON, AND MICHAEL M. MAYVILLE, PILOTS; SP6 JOHNSON E. AGNEW, SP6 JOHN W. GALLAGHER; SP4 WILMER E. LARSEN.





General William B. Bunker comments on:

THE TECHNICAL ASSISTANCE PROGRAM

So you got troubles? Well, you are no longer left to a hit and miss or a trial and error method looking for a solution.

Problems and troubles are *not* solved by keeping them to yourself. When you have troubles *don't* be an introvert. Tell them to someone, particularly when you are involved in Army aviation.

In this case, the particular people to tell them to are called *National Maintenance Representatives* and they are located in the Office of Technical Assistance, Headquarters, U.S. Army Transportation Materiel Command, St. Louis, Missouri.

Here is an office comprising some 22 military and civilian specialists whose sole purpose in life is to keep you happy.

We in aviation are in a very technical, ever changing business. There are numerous problems and quite often they can grow beyond the resources of a military post or installation to solve. That is where our friends in the Office of Tech Assistance enter the picture.

Regardless of where you are located, these specialists are as near as your telephone, TWX machine, or mail room. Your installation aviation officer or post transportation officer can obtain the services of whatever you need—one man or an entire team.

Normally, this office with the global as-

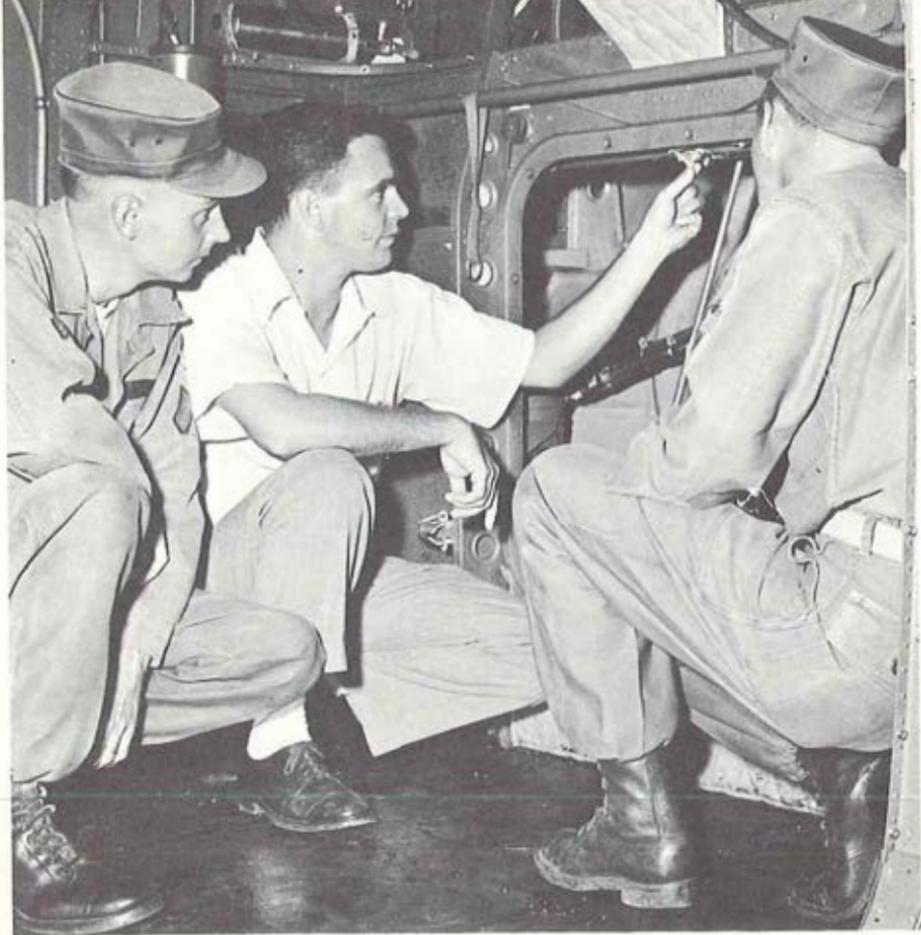
sistance mission of helping users of TC equipment, operates under a team concept. There are six teams, four of which cover specific geographical areas and two of which have no geographical restriction. An average team has a military chairman and four team members—two maintenance men (aircraft equipment specialists) and two supply specialists (supply liaison representatives).

Members of the teams may be switched from one team to another as circumstances dictate. However, the teams are essentially assigned the following areas of responsibility:

- Team 1—First and Second Army, MDW, Europe*
- Team 2—Third Army, USARCARIB*
- Team 3—Fourth and Fifth Army*
- Team 4—Sixth Army, Alaska, Pacific*
- Team 5—Army Field Stock Control and Repair Parts*
- Team 6—Surface Equipment (World Wide)*

We believe that using the same team for a given area will result in a closer relationship between field users and team members and a smoother operation.

Normally, a team will visit installations in its area on a semi-annual basis. I should like to stress that this does not mean they will not make other trips. They exist to



serve TC equipment users and they will go whenever and wherever they are needed.

I think it important at this point to emphasize that personnel from the Office of Technical Assistance are not "inspectors." When you have a problem beyond your resources to solve, it is *their* responsibility to find a workable, acceptable solution for you. Once they have given you their recommendations, it is up to you to follow

through. In any event, they will not gig you, nor act as inspectors, but merely as your technical advisors.

Over a two-year period, we have discovered that some 90-percent of problems can be solved on the spot. The remainder are brought back to TMC, St. Louis, for research and study until a solution is reached.

Here is how a typical team prepares to visit installations within its area of respon-

ASSISTANCE/Cont.

sibility. Approximately a month prior to the proposed visit, TMC sends letters to CONARC OCOFT, and the CO of the fourth echelon facility located in each depot (through the QMG), listing the schedule of visits and requesting concurrence.

If an ARADCOM unit is on the schedule, a similar letter goes to the Army Air Defense Command.

The letter to CONARC includes a form to be forwarded to each installation to be visited. The form requests information on the EDP (equipment deadlined for parts) rate and any particular supply and maintenance problems. The forms must be returned by a given date to assure that team members will have time to research specific problems prior to their departure.

A typical trip includes an entrance interview on arrival at a post, with the Transportation Officer and other interested staff officers present. The team outlines what it expects to accomplish and offers solutions of problems submitted in advance. They also ask for any specific problems on hand.

A get-together with the Post Aviation Officer follows, with his maintenance and supply officer present. The team then splits into its various areas of responsibility for the remainder of the visit.

Upon completing their visit, the team has an exit interview with the Transportation Officer, giving solutions of problems found, and an idea of when solutions for the more difficult problems will be forwarded.

I reiterate, that regardless of the fact this may sound like a typical IG inspection, it is not. These specialists are on hand to help you and they can do this only if you will tell them your problems.

The military chairman of the team will present the team's findings in an exit interview at the Army area headquarters, while



SUPPLY SPECIALISTS IN THE OFFICE OF TECHNICAL ASSISTANCE, USATMC, HEAR EDWARD H. BROOKS (STANDING) TALK ON ARMY FIELD STOCK CONTROL. L-R: LEO B. GEISZELMANN, WALTER F. SEWELL, WILLIAM K. BLOOMER, AND CHARLES W. GLASER. (USA PHOTO)

team members return to TMC, St. Louis to research any problems which could not be solved on the spot.

National Maintenance Representatives can also assist commanders in other ways, including:

- *Assisting units preparing for overseas movement.*
- *Attending National Guard conferences to assist in resolving logistical problems.*
- *Attending Army area conferences to advise and assist as required.*
- *Visiting activities using newly introduced TC equipment to familiarize them with peculiarities, techniques, and capabilities of the equipment.*
- *Advising and assisting maneuver directors, as requested, prior to, during, and after maneuvers.*
- *Presenting briefings and lectures at service schools and other activities as requested.*



SHOWN RECEIVING TRAVEL ORDERS FROM CAPT. EDWARD L. LANDRY PRIOR TO DEPARTING ON A FIELD TRIP TO ASSIST IN ARMY AVIATION PROBLEMS ARE, L-R, WILLIAM D. TRACY, CAPT. LANDRY, WILLIS A. MEIER, AND WILLIAM J. NOLAN. (USA PHOTO)



AIRCRAFT EQUIPMENT SPECIALISTS WITH THE OFFICE OF TECHNICAL ASSISTANCE, USATMC, ST. LOUIS, INCLUDE, L-R, ROBERT J. CURLEY, RAMOND J. CANTU, FRANK J. THOMAS, AND LAWRENCE J. GEPPERT. (USA PHOTO)

The basic regulation governing the Tech Assistance Program is AR 750-5. However, there is presently a proposed replacement, AR 750-707, being staffed at Department of the Army level. For the first time, we will have all phases of Technical Assistance under one regulation. It will explain the principles of the various media we use to accomplish this program.

The National Maintenance Representatives with the mission I have briefly covered, are just one phase of our program for providing global technical assistance. There are four other methods which I should mention briefly. The first of these is the use of *Transportation Corps Regional Maintenance Representatives* located at fourth echelon maintenance shops established at the following general depots:

Sharpe General Depot, Lathrop, Calif.

Fort Worth General Depot, Fort Worth, Texas

Atlanta General Depot, Atlanta, Georgia

New Cumberland General Depot, New Cumberland, Pa.

Another aid to field aviation personnel is the *TC Maintenance Technician* located at each of the depots. *Contract Field Technicians* are also used to advise commanders in maintenance and operation of TC equipment, when specialized skills are needed.

The final method is the *Army Aircraft Mobile Technical Assistance Program*, or AAMTAP, consisting of mobile instruction teams.

Each of the methods I have cited fills a definite need or slot in the Army's vital aviation program.

Regardless of the many steps we take to help you, however, we can accomplish our purpose only if you keep one thing always in mind and act upon it.

"So you got troubles—then tell 'em to your Tech Assistance Team!"

Mike Button

Box 209, Main Office, St. Louis 66, Missouri

Hold Your Fire!

Old Mike's getting squawks from every angle about the "Cherchez les Chiffres" article in the May column. So, to all the TC Property Officers who took a firm dim view of the word "furnish," Mike did not intend to infer that publications destined for unit use were received through TC Property Officers. Sorry!

It was, however, Mike's intention to advise field personnel to contact TC Property Officers in the event assistance is needed to complete *DA Form 12-5* or if any difficulty should be encountered in procuring needed technical publications, which had been requisitioned, the TC Property Officer at the location would be very happy to intercede for them to get the job done. OK? No more squawks?

When in Doubt, Don't

This is the answer to *fatigue life and time replacement items* which have doubtful or unknown total time. What would you do if you were shopping for a good used aircraft for yourself and you asked the guy, "What's the total time on the engine?" or "How many hours are on the airframe?" You got an answer to that question something like this, "I don't rightly know, could be 100 or 500 hours on the engine." Would you stick out your neck and buy the crate? I think not. Likewise, Uncle Sugar doesn't buy it either.

The guys up in the Engineering Dept,

TMC gotta couple of 1275s the other day, one *Urgent*, the other *Routine*, and both making reference to fatigue life items.

One was written up because of *tail rotor yoke failure* and under paragraph 6, *Usage*, it was noted that "150:00 estimate" appeared in the block, "Since New."

The other one was a *main rotor yoke* and under the same paragraph, "Usage" of the 1275, it had this choice bit of information: "Unknown. serial number could not be found on the yoke."

Further, other reports from activities tell us that they have *time replacement and fatigue life items* that have serial numbers on them which don't jive with the serial numbers entered on the DD-829 or 781-5. So, here's a question old Mike would like somebody to answer: "How in tarnation do you guys in the field compute the total operating time on these items if the serial numbers on them don't correspond with the records; Guess?"

Everybody should get with TB AVN 23-10, because the total time of a fatigue life item is *very important*. If by chance the three Ts (true total time) are unknown, remove and condemn those *fatigue life items* at the NEXT periodic inspection as it says in TB AVN 23-10. However, TB AVN 23-10 does give out with, under what circumstances an extension of the total time of a replacement item may be granted.

Also, TB AVN 23-10 gives the information pertaining to total operating time of *fatigue life and time replacement of items*

with unknown true total time. And another point; regardless of where work is accomplished, whether it be SCAMP, IROAN, or Depot activities, *fatigue life items* with unknown or doubtful three Ts *should not be installed on Army aircraft.*

All activities are reminded again, that if they have aircraft with F/L and/or T/R items (check the present -6, Inspection Requirements Handbook) having serial numbers that do not line up with entries in that aircraft's DD 829 or 781-5, they must report this discrepancy as it says in *AR 700-41 (DD Form 1275)* and those instructions contained in *TB AVN 23-10*. So, when in doubt, *don't!* Be safe, the life you save is somebody else's.

Thought For the Month

Otter (U-1A) Maintaineers are warned that the ship's battery should be disconnected before doing anything to the instrument panel, especially when you think you have cause to remove it.

Have you ever seen the anti-collision

light rotating with the battery master switch off? Old Mike has and here's the answer:

Your *Otter* has about 7 items alive from the battery bus bar whenever the battery is connected regardless of the master battery switch position. All you gotta do is turn it on and it operates. Then when the battery switch is put into the "ON" position 28 additional items become alive and all you have to do is turn that particular switch to the "On" position and the gadget goes into operation.

So, to be sure, when you "shut down" an *Otter* on the line you have not completed your job just by "cutting" the Master Battery Switch because some (and as I said 7) are alive still, all you gotta do is flip them.

Also, be sure, *positive*, that when you're foolin' around with the instrument panel or taking it off for any reason whatsoever, that the ship's battery is disconnected, but good! Don't want a \$100,000 airplane going up in smoke now, do we?

Yours, for this month
Mike Button

Qs and As

Dear Mike,

I don't want to appear stupid but I just got to open my mouth and remove all the doubt.

There's been a question in my mind for as long as I can remember, as to just what gives with this 80/87; 91/96; 100/130; and 115/145 octane rating jazz. Just what do the two numbers stand for? Could you tell me without letting the rest of the gang know who I am? Please, too, what color goes with what fuel?

Sincerely,
Ollie Oh, Adm.,
Swiss Navy

Dear Admiral Oh,

I don't see why you call yourself stupid, because you are only "ignorant," as the saying goes. Ignorant people ask questions so they can learn something they don't know; however, a stupid person doesn't ask questions,

either because he knows it all or he doesn't want to learn.

Here's the information you asked for:

80/87 is colored red; 91/96 is colored blue; 100/130 is colored green; 115/145 is colored purple.

Now for the first answer last. Let's take 100/100 as an example.

Both numbers mean anti-knock quality of gas (commonly referred to as octane rating). The 100 part of the dual number means that the anti-knock quality (or octane rating) is scaled with a lean mixture (minimum) while the 130 part means it's anti-knock quality with a rich mixture (minimum). Below 100 they are called octane ratings and above 100 the numbers are referred to as performance numbers.

That's all there is to it.

Informationally yours,
Mike Button



In the Field

U.S. BORDER PATROL INSPECTORS THOMAS E. FOUTCH (LEFT) AND CHARLES W. HENDERSON LOOK OVER THE CAMP WOLTERS H-23 "STEED" IN WHICH THEY WILL RECEIVE FLIGHT INSTRUCTION AT THE U.S. ARMY PRIMARY HELICOPTER SCHOOL. THIS FORM OF "AUTOMATION" DOESN'T SEEM TO IMPRESS EITHER HORSE.



BRIG. GEN. GEORGE W. POWER, OCRD, (CENTER) IS SHOWN A TRAINING DEVICE BY MAJ. JAMES H. HOUSE (RIGHT), DURING A RECENT VISIT TO THE US ARMY TRANSPORTATION SCHOOL. LT. COL. EDWIN L. HARLOFF, CHIEF, TECHNICAL TRAINING DIVISION, USATSCH, LOOKS ON FROM THE LEFT. (US ARMY PHOTO)

HOHENFELS, GERMANY Summer Shield

The 8th Trans Bn (*Trans Acft*) and its attached companies, the 11th Trans Co, 91st Trans Co, and 110th Trans Co, recently scored another "first" in Army aviation history by redeploying two entire Battle Groups in one maneuver day during USAREUR's "Exercise Summer Shield."

The maneuvers involving the 24th Infantry Division were designed to test a division-size unit under atomic war conditions. During the two week maneuver period the 8th Trans Bn moved many company-size tactical units short distances to bridge gaps, and transported many tons of supplies. One of the supply lifts involved the one-day resupply of all combat units of the division with Class I supply. This mission was accomplished within two and a half hours utilizing five *Choctaws*.

The redeployment of the two Battle Groups—the largest tactical move of helicopter forces to date—required detailed planning, to include leading and drop zones, flight routes, type loads, coordination with supporting tactical air and artillery, intelligence briefings, and refueling for sixty *Choctaws*. Plans were never more than three hours old from conception to execution. All within the Battalion felt the same as

the commander, Lt. Col. Rowan P. Alexander, who stated, "This is another first in our profession and a job well done."

Capt. John W. McKinney

FT. CAMPBELL, KY. All Weather

Two aviators from the 101st Aviation Company's Tactical Transport Platoon recently became the first helicopter pilots to enter the 101st Airborne Division and Fort Campbell's Helicopter Instrument Program.

Lt. Alejandro F. Martinez, director and rotary-wing instrument examiner for the program, stated that the new students, Lt. David J. Chase and CWO Paul D'Angelo, will, at the completion of the course, be two of the relatively few instrument-qualified helicopter pilots in the Army today.

Assisting Lt. Martinez with the conduct of the course are CWO Buell T. Springer, a helicopter instrument qualified helicopter pilot and ground school instructor; and SP-5 Franklin Floyd, a qualified synthetic instrument trainer operator and also a ground school instructor. Capt. Richard D. Baldwin, Chief Instrument Examiner for Fort Campbell, is overall supervisor of the new program.

FT. BELVOIR, VA. Three-Timer

Sp-5 Gordon W. Jones was selected as the 3d Trans Co (LH) "Crew Chief of the Month" for July, 1960, setting a new company record in receiving the award for the third time. Sp-5 Jones, assigned as crewchief on one of the 3d's special configuration aircraft used primarily for VIP transport, accomplished the "triple" within a thirteen month period.

CWO Carlos E. Sheets



IN ANOTHER "RE-UP GO-UP" M/SGT ROBERT C. LOWREY (LEFT) REENLISTS FOR THREE YEARS WHILE FLYING 500 FEET OVER FT. EUSTIS, VA., IN AN H-21 SHAWNEE HELICOPTER. M/SGT LOWREY, AN INSTRUCTOR IN ARMY AVIATION AT THE TRANSPORTATION SCHOOL, IS SWORN IN BY HIS SUPERVISOR, CAPT. WILLIAM R. FONSHELL, AS SFC T. HORNSBY (CENTER), T-SCHOOL RE-UP CAREER COUNSELOR, LOOKS ON. (US ARMY PHOTO).



CWO JOHN P. D'ANGELO (CENTER) GETS READY TO DROP THE LID OF THE LINK AS LTS ALEJANDRO F. MARTINEZ (LEFT), COURSE DIRECTOR, AND LT. DAVID J. CHASE, A FELLOW STUDENT OF THE 101ST AVIATION COMPANY, WATCH THE KICK OFF OF FORT CAMPBELL'S HELICOPTER INSTRUMENT COURSE.

months takeoffs

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LT. GEN. GARRISON H. DAVIDSON (CENTER), SEVENTH ARMY COMMANDER, POSES WITH REPRESENTATIVES OF THE FOUR UNITS WINNING THE SEMI-ANNUAL SEVENTH ARMY AVIATION SAFETY AWARDS. THEY ARE, L-R: CAPT. HENDRI SUMRALL, 547TH ENGR BN; LT. COL. LEWIS N. SHAFFER, SEVENTH ARMY AVN CO (PROV); GEN. DAVIDSON; MAJ. WALTER S. MAKUCH, 11TH TRANS CO (LH); AND CAPT. ELMER GEIGES, 24TH AVN CO (INF DIV). (US ARMY PHOTO).

STUTTGART, GERMANY Top Units Honored

At award ceremonies held recently in Stuttgart, Germany, Lt. Gen. Garrison H. Davidson, Seventh Army Commander, presented semi-annual Seventh Army Aviation Safety Awards to the Seventh Army Aviation Co (Prov), the 547th Engineer Battalion, the 24th Aviation Company (Inf Div), and the 11th Transportation Company (LH).

For the Seventh Army Aviation Company the presentation was the fourth consecutive semi-annual safety award received by this "8

or more aircraft" unit. The Company includes the Seventh Army Fixed Wing Instrument School, the Helicopter School, and Seventh Army Headquarters support, making its record all the more remarkable, considering its air operations during the comparatively new projects of instrument flight training in both fixed and rotary wing aircraft.

The 24th Aviation Company (Inf Div) received an award as winner of the division aviation class; the 11th Trans Co (LH) in the transport helicopter class; and the 547th Engineer Battalion in "units with less than eight aircraft" class.

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FT. ORD, CALIF.

Three Alarm

Operating frequently at 8,000' levels due to geographic conditions, two H-21 *Shawnees* of the 33rd Trans Co (LH) provided rapid transportation for more than 300 professional firefighters engaged in fighting a large blaze in the northwestern section of Yosemite National Park.

Use of the *Shawnees* permitted the veteran Zuni Indian firefighters and their necessary equipment to move from their base camp over 20 miles southwest of the fireline to the fire site, where they remained for 12-hour firefighting shifts without having to back-pack 5 miles for water or mule-pack 12 miles for rations.

NURNBERG, GERMANY

With Thanks

A recent "short notice" mission received by USAREUR's 504th Aviation Co involved the airlift of Dr. Heinrich Lubke, the President of West Germany. With normal air transport grounded by weather, Lt. Harry D. Painton and David Norling, and crew-chief, Sp-5 Jack Ingram, heeded the call and in the 504th's VIP Choctaw flew Dr. Lubke from Coburg, Germany, to Nurnberg, where the German president fulfilled his official commitments on schedule. The proficiency and dispatch rendered by the Army crew were such that the very impressed dignitary thanked the crew with a Presidential memento—a case of wine.

Lt. George Jordan

OBITUARIES

First Lieutenant Robert J. Holloway, assigned to USA-ADGRU, Korea (5700), Youngsan, Korea, was killed on August 26, 1960, when his L-19 crashed one mile east of A-5 Airstrip shortly after takeoff. He is survived by his wife, Mrs. Hildegund Holloway, of 12411 Naomilawn Drive, Tacoma 99, Wash.



MAJ. JOSEF STANGL, CO OF THE 1ST HELICOPTER SQUADRON, AUSTRIAN ARMY AIR CORPS, CHATS WITH H. A. ZIEGLER (LEFT), SOUTHERN AIRWAYS FLIGHT INSTRUCTOR, AND CAPT. WILLIAM S. PERRIN, DURING HIS TOUR OF USAPHS, CAMP WOLTERS, TEX. THE AUSTRIAN OFFICER WHOSE UNIT IS EQUIPPED WITH SEVENTEEN H-13 TYPE AIRCRAFT TOURED VARIOUS ARMY AND AF INSTALLATIONS IN THE U.S.



DR. HEINRICH LUBKE, PRESIDENT OF WEST GERMANY (CENTER) IS SHOWN DEBARKING FROM A 504TH AVN CO CHOCTAW AT NURNBERG AS LT. HARRY D. PAINTON, PILOT ON THE OFFICIAL MISSION (RIGHT), BIDS FAREWELL TO THE PRESIDENT'S AIDE.

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LT. COL. JOHN W. OSWALT, DIRECTOR OF ADVANCED FIXED WING (RIGHT) IS SHOWN PRESENTING A DIPLOMA TO CAPT. JOSEPH HOLDEN, HONOR GRADUATE OF THE FIRST CARIBOU TRANSITION CLASS 61-1 AT USAAVNS. PRESENT WERE, L-R, ORAN S. LANHAM, CAPT. RAYMOND FRANKLIN, LT GEORGE McNUTT, CAPTS HARRY ZELLNER, CHARLES HONOUR, PETER WITHERS, AND JOHN SMITH; LT JAMES BRIDGES (PARTIALLY HIDDEN); CAPT THOMAS HURST, CARIBOU FLIGHT COMMANDER; AND INSTRUCTORS REX BIVINS AND THOMAS MAXWELL (US ARMY PHOTO).

A 16-YEAR VETERAN, CAPT. DALE LIGGETT OF THE DEPARTMENT OF PRIMARY FIXED WING TRAINING AT FORT RUCKER (LEFT), RECEIVES KING-SIZE WINGS SYMBOLIC OF HIS NEW MASTER ARMY AVIATOR RATING. MAKING THE PRESENTATION AND TENDING HIS CONGRATULATIONS TO CAPT. LIGGETT IS LT COL G. W. JAUBERT, DEPARTMENT DIRECTOR. (US ARMY PH.).



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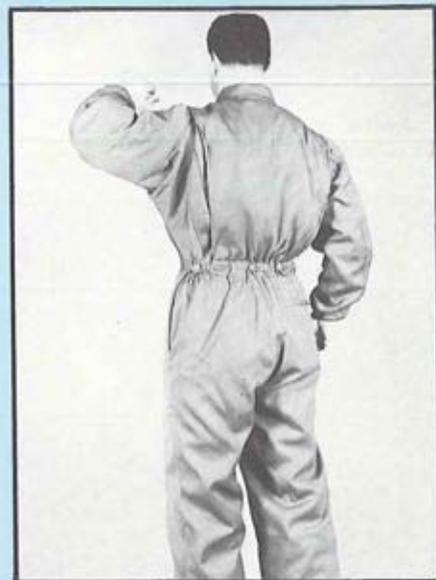
QM Develops New Coveralls

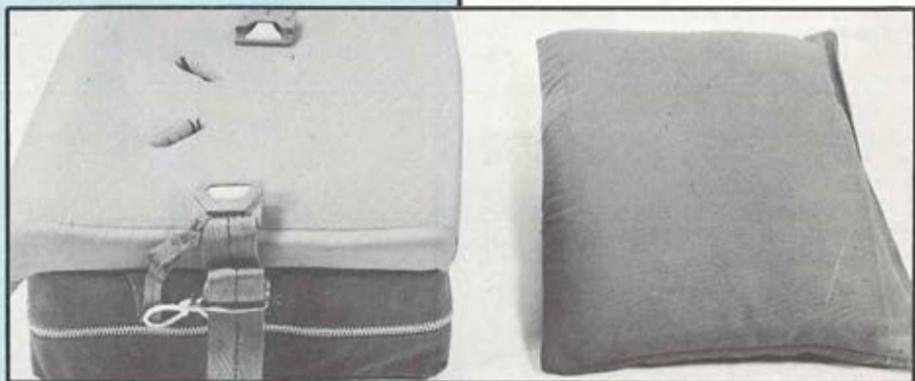
A new type of mechanics coveralls developed by the Quartermaster Corps has been recommended for standardization by CONARC. The coveralls are designed to provide the soldier with an overgarment that will resist acids and oils encountered during maintenance operations in cold-dry areas and can be worn over various items of cold weather clothing such as the field jacket with liner.

The coveralls are fabricated of Cloth, Dacron/Rayon Gabardine, 8-oz., OG 106, and treated to be both crease-resistant and anti-static. The lining material in the jacket portion of the coverall is Cloth, Nylon, 3-oz. Oxford, OG 106. The nylon serves as a "lubricating" surface in providing a non-frictional area for ease of both donning and doffing.

The coverall is a one-piece garment with a slide-fastener front closure running diagonally from the neck slightly to the right of the collar edge, to the cuff of the left leg. It has a shirt-type collar and one set-in hip pocket. Slits are located at the sides just below the waist to permit access to inner clothing.

The biswing back, elastic waist, and panelled undersleeve have been included in the design to provide adjustability and ease of movement. The coverall has a "clean surface" (no belts, loops, or buckles to catch on equipment during maintenance), making it especially suitable also for use by tank crewmen and vehicle operators.





On Survival Kits

TOP: EXPERIMENTAL AVIATOR'S OVERWATER SURVIVAL KIT DEVELOPED BY THE QUARTERMASTER CORPS. AMONG THE 30 COMPONENTS ARE A LIFE RAFT, DRINKING WATER, SIGNALING MIRROR, GOGGLES, FISHING KIT, RATIONS, COMPASS, JACK KNIFE, SUNBURN OINTMENT, LIGHTWEIGHT PONCHO WITH HOOD, HAT, INSECT REPELLENT, MOSQUITO NET AND SURVIVAL MANUAL.

CENTER: EXPERIMENTAL SURVIVAL KIT FOR ARMY AVIATORS DEVELOPED BY THE QUARTERMASTER CORPS FOR HOT WEATHER USE. ONE OF THREE NEW KITS, THE UNIT CONTAINS 32 ITEMS WHICH INCLUDE RATIONS, DRINKING WATER, INSECT REPELLENT, SNAKE-BITE KIT, PROTECTIVE CLOTHING, MACHETE, FISHING KIT, AND MATCHES.

BOTTOM: LEFT SIDE OF AVIATOR'S EXPERIMENTAL SURVIVAL KIT SHOWING DROP-LINE. WITH USE OF THE LINE, THE KIT IS DROPPED SOME 20 FEET BELOW AIRMAN, AND LANDS FIRST, THEREBY MINIMIZING POSSIBLE INJURY. AVIATOR FORMERLY LANDED WITH AN EARLIER KIT AS A SEAT UNIT. BACK PAD IS SHOWN AT RIGHT.

Three new survival kits developed by the Quartermaster Corps for Army aviators are being user tested by the Army Aviation Board, Forst Rucker, Ala.; the Airborne and Electronic Board, Fort Bragg, N. C.; and the Arctic Test Board, Fort Greely, Alaska. Made to provide a downed air crew with the means for survival until rescued, the lightweight kits are designed for hot climate, cold climate or overwater flights.

The new kits are a modified version of a previously tested item. These changes include a flat instead of the former slightly contoured aluminum package, and added components. Another change embodies a dropline with which the kit is dropped some 20 feet below the man and lands first. The earlier kit was part of the seat and landing with it sometimes caused injury to the back of the user.

The new kit weighs between 30 and 35 pounds and occupies the place formerly used for the aircraft seat cushion and parachute back pad. Certain items are common to all three kits. These items include a first aid kit, a poncho with hood, goggles, distress signals (flares), a drinking water container, jack knife, fishing kit, sunburn ointment, subsistence items, signalling mirror, and a booklet on survival. Insect protection is provided by a repellent, gloves, and mosquito headnet. These are supplemented by items considered necessary in the particular locale where the aircraft is operating—in cold, hot, or overwater areas. Examples of such items are Arctic sleeping bags, snake-bite kits, and life rafts.

Emergency water is included in all but the cold climate kit; in this kit provision is made for making drinking water by melting snow and ice in the metal seat-type container which can also be used as a cooking utensil.

The overwater kit enables instantaneous activation of a one-man life raft with all kit components contained in three water-proof bags attached to the raft.

AAAA



News

LINDBERGH CHAPTER: "Off and Running!"

Abetted by an August pre-activation meeting at which Charter Members *Lt. Col. Theodore F. Schirmacher*, *Mr. Carl Stephenson*, and *Maj. Thomas E. Hall* outlined the general benefits of AAAA, the *LINDBERGH CHAPTER* of AAAA has been activated at St. Louis, Mo., and through the coordinated efforts of a hard-working slate of officers, the new Chapter is well on its way towards becoming "the Association's largest Chapter."

Headed by *Brig. Gen. William B. Bunker*, activity president, the *LINDBERGH CHAPTER* has received its primary membership support from the civilian technicians and specialists who comprise the "logistical backbone" of Army aviation. The Chapter, in soliciting membership support, recognizes the vital interest of these technicians

in all AA activities and stresses that the AAAA is "your ticket to a more complete share in your Army's Aviation Program." The membership growth enjoyed by the Chapter was immediate and in response to this support the Chapter promptly scheduled its first general membership meeting—a September social-educational meeting at which *Col. Robert R. Williams*, Chief of the Air Mobility Division, OADR, addressed the members on Army aviation history "From Cub to Caribou."

Officers of the new Chapter for the term ending March 31, 1961 include:

Pres: Brig. Gen. William B. Bunker
Exec VP: Mr. Carl D. Stephenson
VP, Army Aff: Lt. Col. David Bisset, Jr.
VP, Indus Aff: Mr. Marvin D. Marks
VP, Public Aff: Col. Harry D. Kamy
Treas: Capt. William A. Rathbone
Sec: Mr. J. Ross Hunter

OFFICERS OF THE LINDBERGH CHAPTER, ARMY AVIATION ASSN. OF AMERICA. SEATED L TO R: J. ROSS HUNTER, SECRETARY, BRIG. GEN. WM. B. BUNKER, PRESIDENT; CARL D. STEPHENSON, EX. VP; MARVIN D. MARKS, VPI; STANDING, L TO R: CAPT. WM. A. RATHBONE, TREAS., COL. H. D. KAMY, VPP; AND LT. COL. DAVID BISSETT, JR., VPA. (U.S. ARMY PHOTO.)

PHOTO BY: B. T. RAMSPOTT
USAC PHOTO LAB

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FT. MEADE CHAPTER: "Objectives" Panel

Scheduling their Fall meeting as a social-educational meeting, members of the *FORT MEADE CHAPTER* of AAAA planned to meet in late September at what Chapter officers hoped to be "the largest Chapter turnout to date."

Brig. Gen. Clifton F. von Kann, Director of Army Aviation, ODCSOPS, D/A, accepted the Chapter invitation and was expected to address the membership. Preliminary plans of the Programming Committee called for a panel discussion entitled "*The Development and Objectives of Army Aviation.*" *Mr. Norman Taylor*, Chief Engineer, Vertol Division, Boeing Airplane Co., and *Mr. Charles H. Hurkamp*, Manager of Design, Fairchild Engine & Airplane Corp. were expected to attend as Industry Representatives.

HEIDELBERG CHAPTER: Chinook Presentation

"Meeting in early August at the Patrick Henry Village Officers Club, members of the *HEIDELBERG CHAPTER* of AAAA joined in one of the largest turnouts ever recorded by the Chapter. Some 53 members and guests participated in a social-educational meeting preceded by a cocktail party and dinner.

Very senior Army members included *Maj. Gen. Thomas F. Van Natta*, Chapter president; *Col. Arthur W. Ries*, Chapter Exec VP; and *Lt. Col. Richard L. Long*, VP, Indus Aff of the newly-organized *HANAU CHAPTER*. Distinguished guests attending the meeting included *Mr. William P. Lear*, Chairman of the Board, Lear, Inc.; *Col. O. F. Lassiter*, CO, 99th Bomber Wing, Westover AFB (Mass.); and *Mr. T. R. "Ren" Pierpoint*, Director, European Operations, Vertol Division of the Boeing Airplane



SHOWN DURING THE HEIDELBERG CHAPTER'S RECENT SOCIAL-EDUCATIONAL MEETING ARE, L-R, COL. ARTHUR W. RIES, MR. WILLIAM P. LEAR, MAJ. GEN. THOMAS F. VAN NATTA, AND MR. T. R. PIERPOINT, GUEST SPEAKER FOR THE MEETING.

Company, who was the evening's guest speaker.

Mr. Pierpoint addressed the members on the performance and capabilities of the Vertol *YHC-1* helicopter and the *HC-1B Chinook* of which the Army has purchased ten. Highlight of the evening was a 30 minute film presentation showing the two Vertol helicopters in various flight configurations and capability demonstrations. Of particular interest to most aviators was the apparent ease of maintenance demonstrated in the *Chinook* film."

Capt. Charles W. Sills
VP, Industrial Affairs

HANAU CHAPTER: USAREUR's Fourth

Activated at a mid-August organizational meeting, the new *HANAU CHAPTER* of AAAA embraces one of the largest "membership areas" in USAREUR. Joining with the three other active Chapters within the *USAREUR REGION*, the *HANAU CHAP-*

TER absorbed one of the Association's long standing Chapters, the 4TH TRANS CO CHAPTER. Members within the Hanau area can anticipate increased AAAA activity as led by the following slate of Chapter officers:

Pres: Capt. Walter W. Jackson
Exec VP: Capt. Robert G. Cox
VP, Army Aff: Capt. Kendall L. Stewart
VP, Indus Aff: Lt. Col. Richard L. Long
VP, Public Aff: Lt. Lt. John Melbye
Treas: Capt. Francis C. Bennett
Sec: Capt. Charles M. Priem

ALASKA CHAPTER: 'New '60 Slate'

Participating in a mail ballot, members of the ALASKA CHAPTER of AAAA elected a new slate of Chapter officers during a recent Chapter action. Elected to serve for the period ending March 31, 1961, were:

Pres: Capt. J. W. Reser
Exec VP: Capt. Homer O. Robbins
VP, Army Aff: Lt. Jay D. Rossman
VP, ARNG Aff: To be elected.
VP, Res Aff: Capt. Walter D. Yenne
VP, Indus Aff: Maj. William F. Usher
VP, Public Aff: To be elected.
Treas: Lt. Leslie A. Drake
Sec: CWO Kenneth G. Donley

217TH TRANS BN CHAPTER: 1st NG "Unit Chapter"

Establishing an Association "first," National Guard members in the general Fresno, California area activated the first AAAA Chapter to represent a specific Army National Guard unit—the 217TH TRANS BN (ACRFT REPAIR) CHAPTER.

Sparked by Capt. Donald R. Jordan, the new Chapter followed up its organization meeting with an early September social-educational get-together at which Mr. John Zetner, FAA representative, was the guest

CORRECTION

THE NAMES OF TWO INDUSTRY MEMBER FIRMS WERE UNINTENTIONALLY OMITTED FROM THE "INDUSTRY REPRESENTATIVE LIST" APPEARING ON PAGES 424 AND 425 OF THE AUGUST ISSUE. THE LIST SHOULD BE AMENDED TO INCLUDE:

CARL L. CAHILL
GENERAL SALES MANAGER
AIRCRAFT RADIO CORPORATION
BOONTON, NEW JERSEY

H. S. HARDY
CHIEF OF ARMY REQUIREMENTS
CHANCE VOUGHT AIRCRAFT, INC.
1000 CONNECTICUT AVENUE, N.W.
WASHINGTON, D. C.

speaker. The address was preceded by a Chapter cocktail party and dinner.

Newly-elected officers of the Chapter include:

Pres: Maj. Billie Asher
Exec VP: Capt. Samuel L. Workman
VP, Army Aff: M/Sgt John J. Sumka
VP, ARNG Aff: Lt. Eugene R. Eaton
VP, Res Aff: Lt. G W. Eckert
VP, Indus Aff: Lt. Col. E. N. Moblely
VP, Public Aff: M/Sgt F. L. Stanton
Treas: M/Sgt Wilburn Seymour
Sec: Capt. Donald R. Jordan

FORT BRAGG, N.C. Membership Drive Underway

Plans are underway to activate a unit Chapter at Fort Bragg, N.C. to represent Bragg's 82nd Airborne Division. Sparked by Lt. Col. Robert R. Corey, the proposed Chapter is currently pursuing an intensive membership drive prior to the formal activation of the unit Chapter. Maj. Foy Rice, Capt. Walter E. Parker, and Lt. Eric Ingram are assisting Col. Corey in pre-activation details.

WASHINGTON, DC CHAPTER: New Officers Elected

"The WASHINGTON, D.C. CHAPTER of AAAA completed its election of a new slate of officers early September following an August mail ballot of all members within the general Chapter area. Elected to serve in office for the term ending March 31, 1961 are the following:

Pres: Col. Frank Meszar

Exec VP: Col. Daniel Heyne

VP, Army Aff: Lt. Col. Lyle H. Wright

VP, ARNG Aff: Capt. Thomas M. Dunn, Jr.

VP, Res Aff: Maj. Jack M. Tumlinson

VP, Indus Aff: Mr. Howard B. Larew

VP, Public Aff: Lt. Col. Horace Beaman

Treas: Maj. Jack W. Duffy

Sec: Capt. Joseph J. Muter

The Chapter Board plans to meet at an early date to develop programming for the October-November-December membership quarter."

*Maj. Paul E. Killpack
Past Secretary*

FT. EUSTIS CHAPTER: Sets Attendance Record

Just prior to setting a new "Chapter Attendance" record at the recent Annual Meeting, members of the FORT RUSTIS CHAPTER of AAAA returned a new slate of members to Chapter office.

Elected to serve on the Chapter Executive Board for the term ending March 31, 1961 were:

Pres: Lt. Col. David E. Condon

Exec VP: Maj. James H. House

VP, Army Aff: CWO Melvin H. Caldwell

VP, Res Aff: Capt. Gordon H. House

VP, Indus Aff: Capt. Leonard F. McLaughlin

VP, Public Aff: To be elected.

Treas: Capt. Richard A. Hartert

Sec: Capt. James H. Patterson

In establishing a new attendance record, twenty-eight members of the Chapter at-

AUG-SEPT CHAPTER MEETINGS

● ALAMO CHAPTER. SOCIAL-EDUCATIONAL MEETING. AUG. 10.

● CAMP WOLTERS CHAPTER. GENERAL BUSINESS MEETING. ANNUAL MEETING DELEGATES' REPORT. AUG. 12.

● FT. McCLELLAN CHAPTER. SOCIAL-EDUCATIONAL MEETING. COL. DELBERT L. BRISTOL, HQ, THIRD U.S. ARMY, GUEST SPEAKER. AUG: 27.

● ALAMO CHAPTER. BUSINESS MEETING. SEPT. 14.

tended the Annual Meeting, many accompanied by their wives.

*Capt. James H. Patterson
Secretary*

STUTTGART CHAPTER: Subdivision Discussed

Meeting at the Hohenfels (Germany) Officers Open Mess in mid-August, members of the STUTTGART CHAPTER of AAAA discussed the advisability of establishing unit Chapters representing the 24th Inf Div, the 11th Armd Cav Regt, and the 8th Trans Bn, and then having these Chapters form the nucleus of a BAVARIAN REGION of AAAA.

It was decided that these steps would be in the best interests of the membership and the Association since meetings and goals of each Chapter within the Region would receive more attention, and there would be greater ease in gathering for meetings on a unit Chapter basis. Plans are underway to have the units concerned poll their members on separate Chapter activations.

Capt. John W. McKinney



CONVERSION

Although we cannot guarantee any consistency in its being "level" from month to month, you will find your NEW address sticker affixed to the top of this page.

Check it once for accuracy with regard to your name.

Don't sweat if you discover that your street (or unit) address has been noticeably compressed. If you receive this issue, *the above address is satisfactory.*

A word about the "compression." We've converted to a modest IBM Document Writer System for addressing purposes. This system is based upon the use of standard IBM punch cards, the 80 columns of each not permitting much verbosity in view of

the code line, and the name, street (or unit), and city-state lines, as above.

This System permits high speed, automatic preparation of address labels, invoice preparation, and more accurate file data through the use of a high speed sorter.

From your standpoint it will provide "last-minute" address changes without any delay in the forwarding of your issues. (Heretofore, we had to wait approximately ten days for the contract preparation of address stencils.)

Once again, we ask your cooperation in the forwarding of residence or quarters addresses, whenever possible. Aside from the fact that we would like to have you receive your magazine at home, military or corporate addresses often defy compression.