ARMY AVIATION

FEBRUARY ★ 1961

HILLER ANSWERS BOTH . . . WITH A LINE OF GROWTH-PLANNED HELICOPTERS

A peacetime military challenge: helicopters to meet the growing performance needs of today—tomorrow—the years ahead . . . within the restrictions of peacetime budget economy. Hiller accepted that challenge with a line of helicopters growth-planned to meet Army needs anytime, anywhere, at costs that are a dividend on initial investment in aircraft development.

Brains behind the economic Hiller growth plan are the shrewd military investors who put the Hiller H-23D Raven through its paces. They proved the basic drive system and chassis had growth built in . . . that power and more power could be added for new helicopters without new-helicopter development time and cost. That's why the Hiller line has been made to grow—made to keep on growing—increasing performance to pinpoint military needs—becoming the No. 1 buy in commercial fields, where business hinges on helicopter capabilities.

Military growth-planning of helicopters is a peacetime necessity—demanding the shrewdest investment of all: military-industry cooperation, professionalism . . . and experience.

H-23D Raven—250 hp: *First helicopter ever granted 1,000 flight hours by U. S. Army between major overhauls... highest in air availability with maintenance hours less than half the all-Army average... currently logging more than 7,000 hours monthly at Camp Wolters—with lowest-cost-per-flight hour of any copter.*

12 E—305 hp: *Next in the growing line with the same dynamic components as the Raven stepped up in hp and performance... No. 1 buy in the fiercely competitive commercial field, where the man who does the job fastest and safest gets the business, and the profits... powered the way for light helicopters in 5 major industries.*

E4—320 hp: *The next step forward in power—size—and Hiller's traditional long-range total economy... the lowest cost 4-place helicopter in the air today, in both original and operating cost... the only U. S. rotorcraft in its class with power to climb straight up fully loaded and at 820 feet per minute.*

Super E—340 hp: *Here's the next step in Hiller's growth-planned line... the power-packed new E increases hp to 340, lifts sea level performance to 3,400 ft. And... there's more up and coming—Hiller helicopters with growth built in—keeping pace with the military needs of the sixties!*

Designs are one thing. Deliveries another. Both come from

HILLER AIRCRAFT

SUBSIDIARY OF THE ELECTRIC AUTOLITE COMPANY
PALO ALTO, CALIFORNIA · WASHINGTON, D.C.

OPEN LINE

We all talk Modernization, but . . .

BEFORE I GET started on the text tonight I'd like to comment on an observation as a result of my visit today to the *Army Transportation Materiel Command,* of which many of you are members. No matter how simple or dumb you might be, if you spend 28 years at something you acquire a little perception and I perceive from my visit today that the *Transportation Materiel Command* is sitting on one of the biggest stories of the century.

It's a clean, efficient, prideful operation. You sense that everyone here has an important mission to perform and takes great pride in performing it—a sort of dedicated urgency. You feel these things. Nobody tells you they are here. I honestly believe this is a story for a mass publication like the *Saturday Evening Post.* SOMEBODY ought to tell the American people that somewhere there are people in the Armed Services doing a magnificent job of efficiency and saving them millions of dollars of tax money each year. May I take this opportunity to commend and compliment, in public, *General Bunker,* his dedicated staff, and all you good people of TMC.

(Today) the term *"crash program"* has a very specific and literal meaning . . . Army aviation is being hampered and hamstrung by the same kind of high level thinking, tight money, and myopic policy that crippled our air traffic system; the same elements must be blamed for the (New York air) crash. We are going down the well known road of "too little, too late," insofar as modernization of our Army is concerned, and especially in the field of Army aviation.

Artificial restrictions on the U.S. Army in the matter of getting the weapons and equipment it needs were conceived in dangerous, tragic interservice rivalry and born in sin. The restrictions on the size and weight of aircraft needed by the U.S. Army for modernization and mobility and the ridiculous requirement that the Army must go through the Navy or the Air Force to procure aircraft must be removed. Recent across-the-board cuts in the number of rated pilots, when added to the indignities of weight limitations and procurement policies, strongly indicate to me a very real

BY GEORGE E. HADDAWAY

CANADIAN PRATT & WHITNEY AIRCRAFT'S

Turboprop/Turboshaft

A remarkably versatile engine, the lightweight 500 horsepower PT6 has been designed to meet many needs . . . single and multi-engine fixed wing aircraft . . . helicopters and high speed marine installations. It offers a new concept in engine design . . . an axial-centrifugal flow, moderate pressure ratio turbine engine with a free turbine drive for either turboprop or turboshaft installations. This rugged 250-pound engine offers dependable performance, combined with low fuel consumption and ease of maintenance.

Available in 1961 from: *Canadian Pratt & Whitney Aircraft*
COMPANY, LIMITED, Longueuil, Montreal, P.Q.
A SUBSIDIARY OF UNITED AIRCRAFT CORPORATION, EAST HARTFORD, CONN.

conspiracy is on foot to relegate our Army into little more than a pistol-packing police force.

Aircraft are integral to the Army's vital missions. We know this; we learned this the hard way in Korea. The airplane and the helicopter are more than integral; they are now absolutely basic to victory in any kind of battle the Army is called upon to fight, brush-fire or all-out atomic.

For research, development, and procurement of Army equipment to be made a function of the Air Force or Navy is as ridiculous as *President Franklin Roosevelt's* order back in 1936, when land based bombers—and this was a presidential edict—were prohibited to fly more than 100 miles to sea. This was no more ridiculous than the present situation. These are the kind of silly things going on in the Pentagon that create climates for another Pearl Harbor and that destroy our ability to fight and win the battles.

Why do I think this? Well, I've lived with the troops along the Iron Curtain, and I came home sick a year ago. Sick in my stomach, ashamed of myself, and of the United States Congress, of the Pentagon, and of the President of the United States. I was sick and ashamed of the American people.

Maybe I'm a little more subject to bitter reaction than most people because I visited the Soviet Union last year before I visited our troops along the Iron Curtain, and

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ADDRESS BY MR. GEORGE E. HADDAWAY, PRESIDENT, NATIONAL PILOTS' ASSOCIATION AND EDITOR AND PUBLISHER OF FLIGHT MAGAZINE, DALLAS, TEX., TO THE LINDBERGH CHAPTER OF AAAA, ST. LOUIS, MO., DECEMBER 16, 1960.

while in the Soviet Union I became educated. Having been both busy and apathetic like most American businessmen, I was a bit concerned, but I was not too alarmed by the communist conspiracy. I read the papers, looked at TV every night, when I was home, and I was only moderately concerned about what was going on in the world. I figured that this country somehow always muddled through with victory.

But after my trip to Russia my whole life and outlook have changed. We're being beaten all over the world; we're on the way out; and we're facing the greatest crisis that any nation has ever faced in all history. The death march has begun. This is a conviction I have. It's the strongest conviction I ever had. Maybe I'm being transformed into a good American citizen from a lousy American citizen. Since that trip to Russia the people I once thought were cranks and fanatics, who saw a Communist behind every tree, who I looked down upon, sneered at, I now look upon as dedicated patriots who saw the handwriting on the wall sooner than I did. It is not easy to stand before a crowd and admit you're stupid. But I was!

There is a great fear among some people that the Army's demand for mobility, especially in the air, represents an abandonment of the battlefield. They fear the development of another tactical Air Corps. Nothing could be more ridiculous than this charge. As this audience well knows, Army aviation is not organized into a separate corps; *it never will be.*

Rather, it is distributed throughout the entire structure of the Army, according to

(*Continued on Page 117*)

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

Share Your Ideas

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

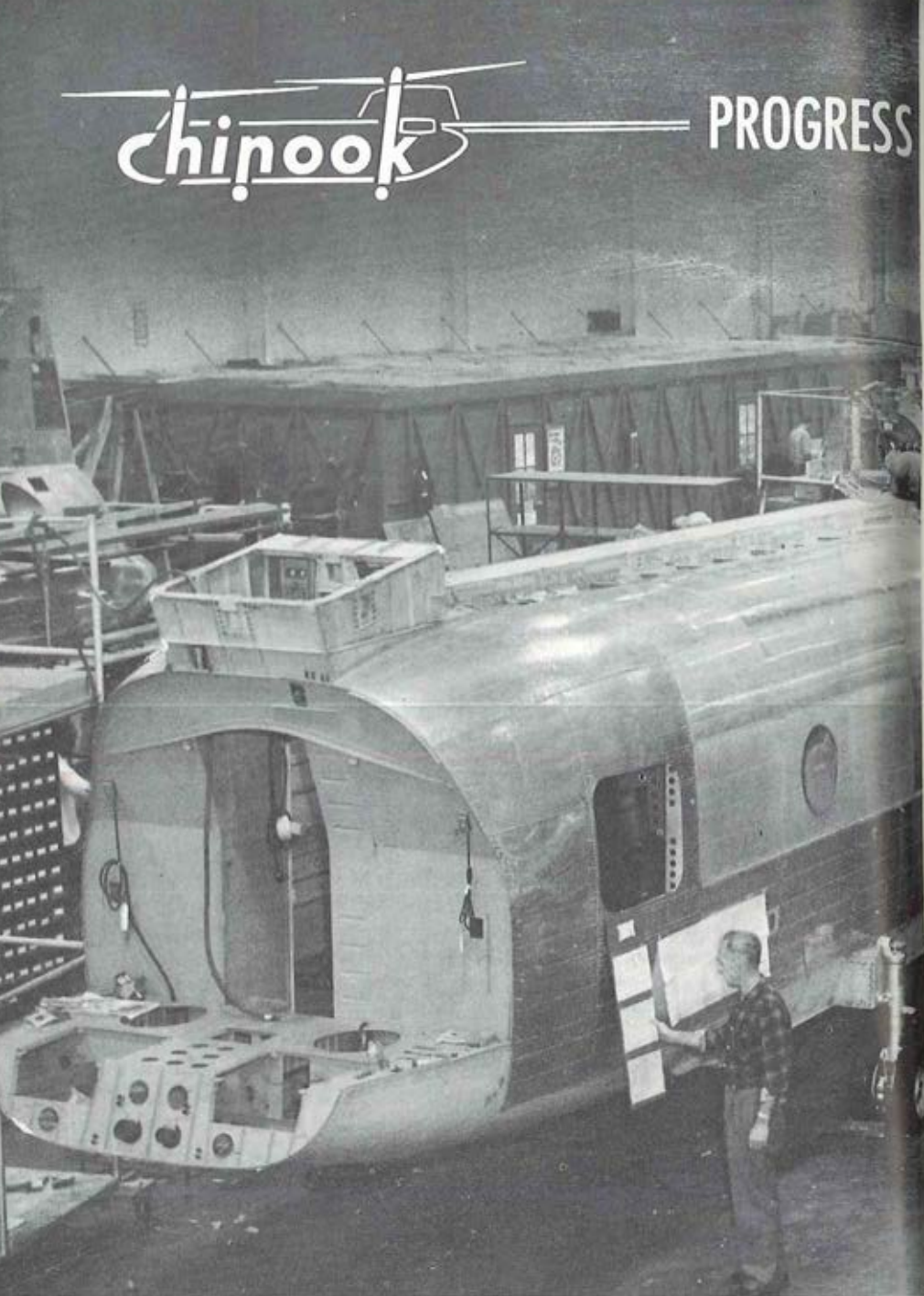
How many times have you, as an Army aviator, had an idea that you felt would help your particular unit or the entire program? Probably many times, but what did you do with these particular ideas? Maybe you presented it verbally to your cohorts or perhaps the "old man" and let it die. It is unfortunate that many good ideas are born but not reared. The hardest part of the process is always the proper follow-up of an idea after the first burst of enthusiasm.

Occasionally, one may verbally "sell" an idea but sooner or later someone requires the facts reduced to writing. To be read and appreciated they must be put down in a logical, concise, and well organized manner.

Therefore, I would like to urge, as I did in a previous newsletter, that Army aviators extend to each other the advantages of the many good ideas the individuals and units have generated over the period of the last few years. This is vital to our unity and growth because of the very nature of Army aviation. We have continually emphasized that our basic philosophy envisions no aviation branch and continued decentralization, but if this approach is to be successful it must be complemented by a flow of information both up and down at every echelon. Besides our formal documents, we have many informal means for this exchange, i.e., the *ARMY AVIATION DIGEST* published monthly by the Army Aviation School for this specific purpose and the *ARMY AVIATION MAGAZINE.*

The Technical Services have done very well in submitting material to the various media, but I believe our combat arms pilots have not measured up to these efforts. I know that we have many experienced and competent officers throughout the world who have much to contribute, if they would only take the time. Their experience should be available to all.

Some division aviation company commander on one side of the Globe is no doubt struggling with an important problem that has already been solved by *another* aviation company commander on the opposite side of the Globe. Some maintenance officer in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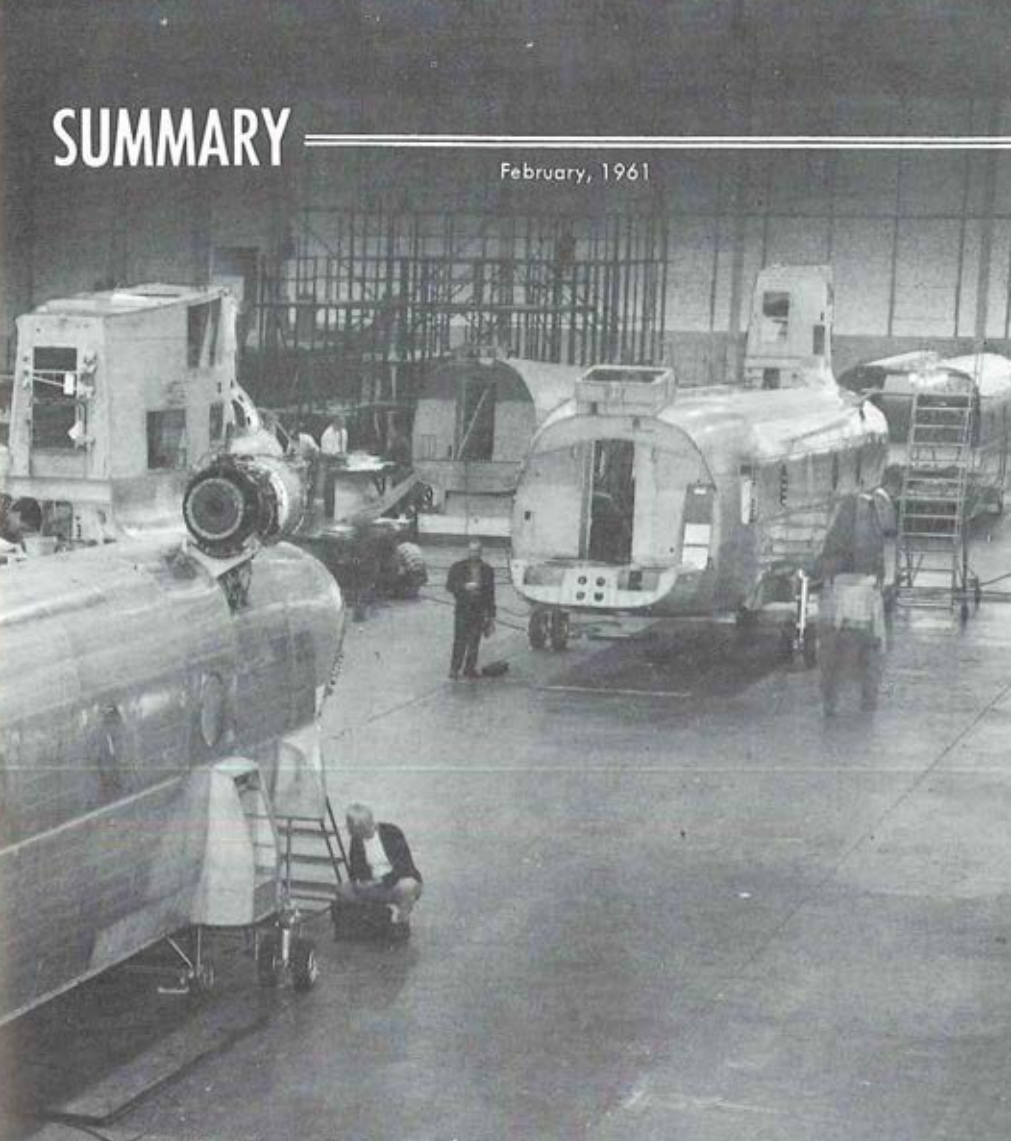
PROGRESS

SUMMARY

February, 1961



AIRCRAFT No's. 1, 2, and 3 ON FINAL ASSEMBLY LINE
(Photograph Taken February 8, 1961)

VERTOL DIVISION
BOEING
MORTON PENNSYLVANIA

SHARE/*Continued*

Germany has found a means to cut "down time" for a particular aircraft to a minimum, but this same type of aircraft in other units is not receiving the same utilization. Some pilot at Fort Rucker has found an improved method in the operation of helicopters at night, but some commander will cancel a night operation for lack of this information. Above all, we must give the widest circulation to *any* idea that will enhance aviation safety.

If Army aviation is to mature, as we all feel sure it must, and still retain the flavor of decentralization, we must *not* let an isolated pilot feel that he is the forgotten man in an uncoordinated and disjointed program. He should feel completely assured that he knows what is going on in the overall program, and has timely data on those particular items of direct interest to his unit. He must not ever believe that he is a permanent part of that 2% group that never get the "word".

Therefore, it is the responsibility of each one of us to contribute to this exchange and make a positive effort to solicit contributions from below and above. We have so often said that we are soldiers first and aviators second, that perhaps we have given the impression that the aviation aspect requires little effort. Such an impression couldn't be further from the truth, for every year the business of being a pilot demands more and more. With no disrepect intended for our L-4 Pioneers, there is no doubt that our present Army aviator has a much harder job in keeping ahead of our complex airplanes, helicopters, and the associated tactics and techniques. To do the

LEFT: A SIKORSKY S-60 SKYCRANE IS SHOWN WHILE COMPLETING THE FIRST AERIAL PICKUP OF CARGO FROM THE HOLD OF A SHIP. THE PERFORMANCE TOOK PLACE AT FORT STORY, VA., THE S-60 UTILIZING A WINCH, A CARGO HOOK, AND 100 FEET OF STEEL CABLE IN LIFTING AN ARMY CARGO CONTAINER FROM THE HOLD OF THE VICTORY KNOLL. CAPABLE OF LIFTING 5 TONS, THE SKYCRANE SPED THE CONTAINER ASHORE AND PLACED IT IN A TRUCK IN LESS THAN TWO MINUTES.

job he needs the "word". Some of us have answers; some have questions; let's see if we can get them on the same piece of paper—then circulate it.

Having not quite adjusted to the fact that 1960 has gone, I'm completely unprepared to rush into 1961 and its particular problems; but I fear it is here, hanging over the "IN BOX". To add to this uneasy feeling, several well worn documents tell me that fiscal '62 is sort of locked in concrete and plannnig must be projected well into '63. Good grief!

The point of this "my-doesn't-time-fly" lament (which I'm sure you can sing with your own lyrics) is to point up the problem that haunts many aspects of our program—unnecessary lag between problem and solution. We all are aware of the tremendous lead time on equipment, and efforts are being made to reduce this identified problem area; but let's take a look at our own particular organization and practices to see if there aren't many other areas where we can speed up our reaction time.

Are we holding on to papers, or bolts, or engines, or aircraft an extra, unncessary day? (Week? Month?) Are important items being backlogged by trivia? When someone asks me what time it is, am I telling him how to build a clock? Am I writing notes to myself in triplicate?

The sad fact is that we don't have enough personnel, materiel, or *time* in our aviation program to waste any of it. If you (like me) were surprised by 1961, then you can probably point to some area close at hand where we should examine our way of doing business with a hope that simplified procedures might lead to better management. We all know how important reaction time is to combat, but we tend to forget it is vitally important in the cold war.

If I were the type to suggest resolutions for the year that has crept upon us, it might be that we all withhold our complaints about bottlenecks until we have determined our position relative to the cork!

In CONUS, our new system of flight clearance and weather briefing places some added responsibilities on the Army aviator. Good judgment has always been the outstanding virtue of a good pilot. The new regulations merely emphasize the fact that there are many life or death decisions that can only be made by the pilot. We must not be stampeded into recklessness or overcaution.

Also, we must not assume that we have been granted a degree in meteorology automatically. (Heaven knows there is enough variability in this inexact science without adding self-appointed forecasters!) At times it will take heroic efforts to get a complete and satisfactory forecast before a flight. Make the effort and take the time. We certainly do not want to solve our pilot ceiling by attrition through accidents.

The design competition entries for the light observation helicopter have been closed, and now the technical and operational agencies will begin their evaluation. I have every confidence that industry has done an outstanding job—so outstanding that selection of a winner will be most difficult. The Army and the Nation owe a vote of heartfelt thanks to the many devoted people who have analyzed the Army's needs and made every effort to meet the challenge. Army aviation should be proud of the vote of confidence in its future, as symbolized by this vigorous interest.

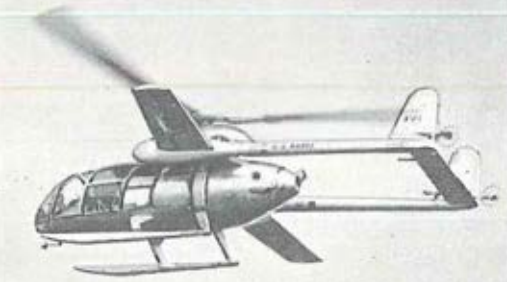
A very early reminder—mark down next Labor Day and the following days as tentative dates for the *Annual AAAA Meeting*. With this much notice, you should be able to shuffle your calendar to make sure you can attend—and besides it may take your mind off of the snow.

Sincerely,

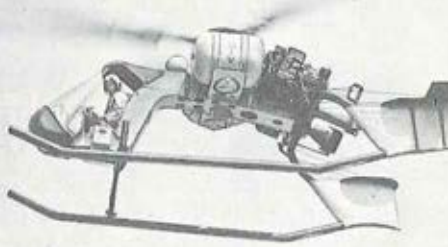
CLIFTON F. VON KANN
Brigadier General, GS
Director of Army Aviation, ODCSOPS

McDonnell XHJD-1 (Navy). The world's first twin-engine helicopter. This 5½-ton vehicle, with reciprocating engines driving the rotors through shafts, became a flying helicopter laboratory.

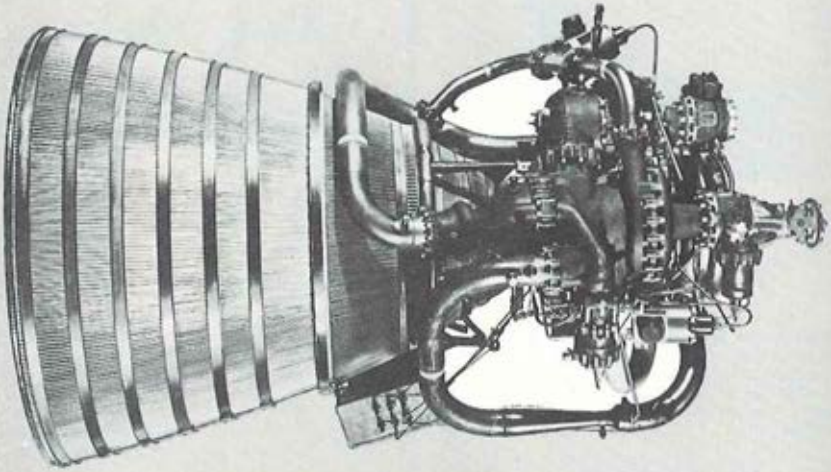
McDonnell XH-20 (Air Force). The world's first ramjet helicopter. A pioneering helicopter development, this flying test-stand had a McDonnell ramjet in each rotor tip. The tip-driven rotor eliminated the need for a torque-compensating tail rotor.



McDonnell XV-1 (Army). The world's first successful convertiplane. This research vehicle was an unloaded-rotor, compound helicopter combining hovering capability with a speed of 200 mph. The rotor was powered by McDonnell-designed blade-tip-mounted pressure jets.



McDonnell Model 120. A "flying crane" of diminutive size but unusual lift capabilities. Powered with McDonnell rotor-tip-mounted pressure-jets, it can carry a useful load exceeding its empty weight. Military evaluation has shown outstanding hover and dynamic longitudinal stability for this experimental craft.



YOU ARE LOOKING AT THE NATION'S FIRST LIQUID HYDROGEN ROCKET ENGINE, THE LR115, DESIGNED AND BUILT BY PRATT & WHITNEY AIRCRAFT. IT IS NOW BEING PRODUCED FOR THE CENTAUR SPACE VEHICLE, AS AN UPPER STAGE OF AN ATLAS BOOSTER. THIS SYSTEM WILL BE CAPABLE OF PUTTING A 7,500-POUND SATELLITE INTO ORBIT AROUND THE EARTH, OR OF SENDING A 2,000-POUND PAYLOAD ON A DEEP SPACE MISSION. A MORE POWERFUL DEVELOPMENT OF THIS SPACE ENGINE, THE LR119, WILL POWER THE UPPER STAGES OF SATURN, A MULTI-STAGE BOOSTER DESIGNED TO SEND A 35,000-POUND SATELLITE INTO ORBIT, OR A 12,000-POUND VEHICLE TO ANOTHER PLANET. PIONEERING WORK IN LIQUID HYDROGEN TECHNOLOGY REPRESENTS JUST ONE OF PRATT & WHITNEY AIRCRAFT'S MANY ADVANCES IN THE DEVELOPMENT OF NEW SOURCES AND APPLICATIONS OF PROPULSIVE POWER.

UNITED AIRCRAFT CORPORATION

PRATT & WHITNEY AIRCRAFT DIVISION

EAST HARTFORD, CONNECTICUT AND WEST PALM BEACH, FLORIDA

BY
Major General
Ernest F.
Easterbrook
COMMANDING GENERAL
U.S. ARMY AVIATION
CENTER

USAAC REPORT

We at the U.S. Army Aviation Center have an optimistic eye toward 1961 being one of the biggest years yet for our aviation program.

Our optimism has not been generated altogether by our own enthusiasm. On recent visits to the Center, three of the most respected men of the Army put their stamp of approval on our program.

Secretary of the Army Wilber M. Brucker—a staunch supporter of Army aviation—toured the post and spoke to about 1,000 men at the Center theater.

Secretary Brucker said the "masterful employment" of Army fixed-wing and rotary-wing aircraft in the combat zone is essential if the Army is to meet the rigorous demands of modern ground warfare.

"The increasing emphasis which is being laid down upon organic Army aviation as a fundamental and indispensable element of our nation's military capability underscores the transcendent importance of this great center of Army aviation activity," the Secretary said in his informal address.

Secretary Brucker was awarded Honorary Army Aviator's Wings during his visit here.

Another "boost of morale" for us at the Center came when *General George H. Decker,* Chief of Staff, paid us a very pleasant Holiday visit on 23 December.

Gen. Decker watched, with much interest, a full-scale Aerial Combat Reconnaissance Firepower Demonstration.

In fact, the General wanted to see "first hand" the firing of the SS-11 missile from the HU-1 Iroquois. He climbed aboard and was right with the pilot and co-pilot when they made a direct hit on a tank over a mile away.

Gen. Decker told newsmen who talked with him after the demonstration that he was "very much" impressed by the demonstration and the activity at Fort Rucker.

Third Army Commander *Lt. Gen. Paul D. Adams*—a man considered in the military ranks as the "Soldier's Soldier"—told personnel here *"Fort Rucker is one of the most important installations in the U.S. Army."*

Gen. Adams, who has had a personal interest in the growth of the Center, was G-3, DA, when the aviation program was moved here in 1954.

He had a direct hand in the formulative decision to establish the U.S. Army Aviation Center at Fort Rucker. With his forward look, he also fostered and promoted the "Sky Cav" concept as a means of reconnaissance for our present day Army.

"The growth and development of Army aviation cannot be a haphazard thing;" he said. *"Flying machines and flying techniques must serve a useful purpose to strengthen the Army."*

Gen. Adams predicted that *"we will see as many changes in the next* 10 *years as we did in the past* 10."

Men of medicine—aviation medicine—have been prominent in the news at Fort Rucker recently. *Lt. Col. Rollie M. Harrison,* the Army's first flight surgeon, retired here after 17 years of active duty in the Army. *Col. Harrison,* who was noted

AO1 MOHAWK FEATURES EASY MAINTENANCE

Grumman's AO1 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, engines, under-carriage.

2. **SERVICEABILITY**—Engines and many accessories on the Mohawk can be changed with a minimum of standard tools—no special tools are 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.

USAAC/*Continued*

for "watching his pilots' waistlines," did much to bring about our present Army aviation medical program.

His name is fast becoming legend in Army aviation. Wherever his pilots gather, *"Rollie"* usually breaks into the conversation. He was more to our pilots than a flight surgeon. He was a true friend.

Col. Harrison is now associated with the regional flight surgeon of the Federal Aviation Agency at Fort Worth, Tex. We're sure that *"Doc" Harrison* will distinguish himself there just as he did in Army aviation.

Replacing *Col. Harrison* as Flight Surgeon and Chief of the Aviation Flight Service Division of the U.S. Army Hospital here is another man of "firsts" in Army aviation—*Col. Spurgeon H. Neel, Jr.*

Col. Neel is the first and only certified Senior Flight Surgeon in the Army. He was the first Army officer selected to attend the Air Force Aerospace Medical Center. The Colonel established the first Army Aviation Medical Branch in the office of the Surgeon General, DA, and he started Eighth Army's first Army aviation medicine program in Korea.

One physician at the Center, *Maj. John D. Lawson,* chief of medical service at the Army Hospital, will be only a "heartbeat" away from this country's first man blasted into outerspace. *Maj. Lawson* is one of five physicians assigned to *Project Mercury* by the Army. When the rocket containing the astronaut leaves Cape Canaveral, *Maj. Lawson* will be at an undisclosed tracking station checking his heartbeat and respiratory system.

Maj. Lawson has done research in various fields of medicine and has had several articles published in medical journals. He believes *Project Mercury* is one of this country's most important scientific investigations.

BELOW: GEN. GEORGE H. DECKER, CHIEF OF STAFF, US ARMY, TAKES AN ARMED HELICOPTER RIDE AT MATTESON RANGE DURING A RECENT ACR DEMONSTRATION AT FORT RUCKER. BOTTOM: SHOWN USING A PHONOCARDIOGRAM, A DEVICE HE DEVELOPED TO CHECK AND RECORD HEART BEAT SOUNDS, MAJOR JOHN LAWSON "TAPS" S/SGT BOBBY STEELE. (US ARMY PHOTOS).

The new sister-ship of the Army's HU-1A *Iroquois*—world record setting helicopter—is now undergoing six-months testing here. The sister-ship, the *YHU-1B,* is a field-test version of the turbine-powered *Iroquois* series which set seven world records in speed, climb and distance categories.

Piloting the two ships being tested here are *CWO Clifford Turvey,* Army Aviator of the Year, and *Major Lee Wilhelm,* a rotary wing project officer for the Army Aviation Board.

CWO Turvey said the new ship has *"a lot of performance and potential."* He predicted that it would be a "good ship" for the Army.

The major differences in the YHU-1B are larger rotor blades, a larger and more powerful engine, and improvements in the instrument panel. The gross weight of the ship has also been changed.

PLANE POLICE

By
COLONEL JACK W. HEMINGWAY
Aviation Officer
Seventh U.S. Army

"*Sir, the Corps Commander just passed our MP check point down by the river,*" reported the Division G-3 as he replaced the Double "E" Eight hand set in its case. The Division Commander, knowing that this meant the arrival of the Corps Commander was imminent, climbed out of the wine cellar of the gast haus in which his forward CP was located and proceeded to the inn's courtyard.

The day was overcast though the ceiling was not low enough to impair the marksmanship of the German artillery FO's who

were sniping at crossing operations with 88's from their vantage points in the hills east of *Remagen*. Except for sporadic firing and the distant hum of equipment operating at bridge construction and ferry sites, there was an air of quietude not unlike the calm before a storm.

The Division Commander was gravely concerned about the impending storm. His command, as others, had been ordered to the east side of the *Rhine* over the *Ludendorf Bridge*. Like many of the fortunes of war, only time would tell if the unexpected seizure of a damaged railroad bridge was militarily a debit or a credit.

The problem of supporting the infantry units east of the river over a damaged one way bridge was more than had been bargained for. True, infantry support rafts and all available heavier capacity crossing equipment were being used to supplement the bridge. The breadth of the river, the current, and the uncannily accurate 88's paled the effectiveness of these efforts in light of requirements. It would be forty-eight or more hours before the special crossing equipment which had been positioned to the north to support planned crossing operations could be shifted and placed in position.

Determining priorities for use of the limited crossing means available was indeed

"Army aviation can provide the Seven League Boots . . . . ."

a tough task. Infantry forces and their combat support must be crossed in sufficient quantity to widen and secure the bridgehead against certain counter attacks; yet, adequate lift must be provided for logistical functions or the combat forces would be reduced to fighting with clubs and knives and living off of the land as had the Huns when they crossed the *Rhine Valley* (attacking toward the west) almost fifteen centuries before.

The dusty arrival of the lead MP escort vehicle signaled the approach of the Corps Commander. After the exchange of military and personal greetings the two commanders entered the wine cellar CP. After the Division Commander had completed a resume of the situation for his guest, the Corps Commander redirected the conversation.

"I've just come across the bridge. Traffic is bumper to bumper for miles on all roads leading from the west to our crossing. The need for an immediate response to the unexpected seizure of the bridge has resulted in the convergence on the bridge area of thousands of men in hundreds of vehicles. The forces available far exceed our ability to cross them.

The unexpectedness of the situation naturally found us without detailed plans for such a crossing. The absence of a plan has been quickly remedied but only time will provide the necessary reconnaissance to select holding areas and establish traffic patterns, the Military Police Units which must be brought in from other areas for traffic control, and the communications so necessary for effective traffic control operations.

The spectre of a bad decision as to the proper balance to be maintained between combat and support forces is as mild as WCTU punch compared with the problem of untangling and controlling that traffic tangle so that those units assigned crossing priorities can reach the crossing site as they are needed. The control and flow of traffic can determine the success of this mission."

Although the above dialogue is fictional, the background within which it is presented is *factual*. History, of course, has lifted the veil of suspense as to the outcome. American military flexibility, ingenuity, and heroism ensured success. That the Military Police Corps played a significant role in this operation is attested to by the fact that the MP Company of the 9th

Infantry Division was awarded the coveted *Presidential Unit Citation* for its part in the operation.

How much agony of uncertainty would have been saved the commanders at *Remagen* if the limitations of surface mobility had not existed and today's helicopter had been available. Not only could these winged slippers of Mercury been used for movement of combat and supporting forces and supplies but they would have been of incalculable value in controlling surface traffic. The much needed MP augmentation could have been airlifted into the Corps area and each man delivered by air to his post; the reconnoitering that was hampered by the congestion of vehicular traffic could have been rapidly and efficiently accomplished by helicopter; and the continuous supervision of the traffic control operation could have been most effectively accomplished by airmobile MPC officers.

At this point one may ask, *"Why concern ourselves with what might have been?"* Though the mirror of history reflects the image of the past, it can serve the military planner as a kaleidoscope of the future if he will "update" the circumstances and his thinking.

In viewing the present and future role of the Military Police Corps in support of combat operations, it is necessary to consider the present and future mobility of the Army in general and the type of tactics which may prevail. Tactical nuclear weapons have placed a premium on dispersion. Yet, forces cannot remain dispersed indefinitely. They must be capable of concentrating, though not to the degree witnessed at *Remagen*, in order to achieve certain objectives. This concentration must be achieved rapidly and with order and will be followed by an equally rapid dispersion of forces.

Such demand for mobility requires that all practical means for achieving it be employed. Initially, the relatively scarce and expensive air lift devices will be used to achieve surprise, to overcome obstacles, to gain precious time and, in other ways, to enhance the potential of lifted forces by providing them with greater mobility. Heavy reliance will continue to be placed on surface mobility. As advancing technology improves the performance, dependability, and flexibility of Army aircraft and places their acquisition and employment costs on a competitive level with other means of transport, the balance of dependence will gradually shift from surface to air vehicles.

It is against this projection if things to come that Military Police doctrinal development must be paced. The multitudinous tasks of the Corps demand that every means be exploited to facilitate the accomplishment of assigned missions. Army aviation can provide the Seven League Boots necessary for the Corps to control a vastly larger road network in the expanded corps sector, to control and evacuate countless numbers of refugees and prisoners of war, to screen battle areas for the stragglers who may be lost or bewildered after a nuclear exchange, and to perform countless other tasks, *all without significant personnel increases.* As advances in engineering make the zero ground pressure vehicles practical, they may well be controlled as part of surface traffic since it is visualized that they will operate only a few feet above the earth.

The requirement for imaginative military thought has never been greater. The Military Police Corps has been and will continue to be dependent in performing its role on mobility and communuications. Army aviation offers broad capabilities at the present and almost an unlimited potential. No stone must be left unturned, certainly not an obvious one, in ensuring that the Military Police Corps is and will be ready for all emergencies in the broad spectrum of conflict from a shot free Lebanon-type affair to a non-holds-barred nuclear holocaust.

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THE STOL CARIBOU

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SPLINTERS

A REPORT FROM THE U.S. ARMY AVIATION BOARD

FEBRUARY, 1961 REPORT

The "Man-Machine Environment Compatibilities Study," described in an earlier edition, has been successfully completed. The pilots for this project were specifically selected to give a representative cross section of Army aviators. Individual backgrounds varied from less than three years to over fifteen years flying experience. Out of the 13 pilots trained in T2V-1 aircraft at Pensacola, Florida, five received transition in the F9F at Kingsville, Texas. These five included the project officer, *Capt. James A. Barrett,* and project pilots *Capt. William P. Brake, Capt. David B. King, Lt. Donald P. Wray,* and *Mr. Donald L. A. Whittaker,* civilian test pilot.

In conjunction with our last article (December issue) on test of the Vertol *"Swing Hook"* on an H-21 helicopter. testing of this system on an H-34 helicopter has been initiated. *Major Gaddis,* Director of Test Division, and *Lt. Scanlan,* Project Officer for the *"Swing Hook,"* ferried a USAT-ATSA H-34, with *"Hook"* installed, from Morton, Pa., to Fort Rucker during the week of 12 December. Based on his experience with the H-21 installation, *Lt. Scanlan* anticipates completion of the *"Swing Hook"* evaluation in late January 1961. As with the H-21, testing will involve the external transport of dense, bulky, and oddly-shaped loads during the conduct of flight maneuvers within the speed range of the helicopter.

THE VERTOL "SWING HOOK," SHOWN INSTALLED ON A TATSA H-34, IS BEING TESTED TO DETERMINE ITS ABILITY TO HANDLE DENSE, BULKY, AND ODDLY-SHAPED EXTERNAL LOADS.

REPRESENTING A CROSS-SECTION OF ARMY AVIATORS, SELECTED TEST PILOTS ASSIGNED TO THE "MAN-MACHINE ENVIRONMENT COMPATABILITIES STUDY" ARE SHOWN ABOVE. FROM LEFT TO RIGHT ARE MR. DONALD L. A. WHITTAKER, CAPT. DAVID B. KING, LT. DONALD P. WRAY, AND CAPTS. JAMES A. BARRETT AND WILLIAM P. BRAKE. JUST PRIOR TO PUBLICATION, THE MAGAZINE RECEIVED THE REPORT THAT MR. WHITTAKER WAS KILLED IN AN AIRCRAFT ACCIDENT. (US ARMY PHOTO).

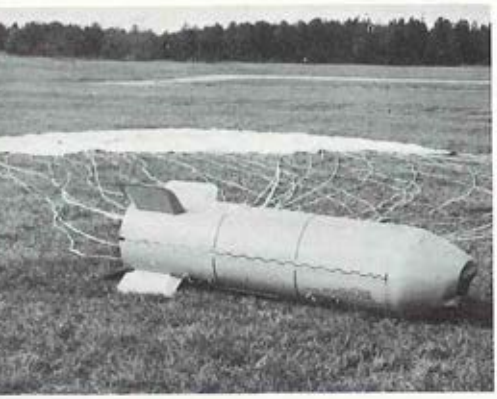
Service testing of the *YHU-1B* was initiated in December 1960. The wide chord blades and increased available horsepower have greatly increased the performance of the YHU-1B. Maximum cruising speed has been upped to 120 knots and the maximum gross operating weight has been increased to 8,500 pounds. The test item at the Aviation Board is a sister ship to the record-breaking helicopter which recently established seven world records in speed, distance, and time to climb. Handling qualities of the "B" have been improved; this is especially true during cruise flight above 90 knots.

Parachute drop tests of the M-4A *High Speed Air Delivery Container* from the Board's AO-1 airplanes were successfully accomplished in early December in conjunction with the US Army Quartermaster Research and Engineering Field Evaluation Agency Airborne System Test Activity, Yuma, Arizona. Primary objectives of the tests were to verify in-flight release and descent behavior of the containers and to obtain data for predicting their trajectory. A total of 12 paradrops was accomplished from an absolute altitude of 500 feet within the speed range of 200-249 knots IAS. The M4-A contents included medical supply kits and rations and the weight varied from 370 to 670 pounds.

Evaluation of the AN/APQ-86 *Surveillance System,* installed in an RL-23D airplane, is programmed for initiation in January 1961. The test will be conducted in

Hughes Model 269A Helicopter now in production!

Complete facilities and unique experience in research, engineering, manufacturing and testing. These have made the Hughes Tool Company, Aircraft Division, an important factor in advanced light helicopter development and production.
Hughes Tool Company • Aircraft Division • Culver City, California



conjunction with the US Army Airborne and Electronics Board and the 3d US Army Airborne and Electronics Board and the 3d US Army Missile Command at Fort Bragg, N. C. Purpose of the evaluation is to determine capabilities and limitations of the equipment as guidance for further developmental effort and for information to units which will be issued the equipment.

On 15 December, *Major Lowell K. Solt,* Chief, Equipment Branch, Test Division, attended a VTOL Downwash Impingement Symposium held at Fort Eustis, Virginia. He presented the problems of downwash impingement as seen by the tactical commanders and pilots of VTOL aircraft to scientists and engineers of industry and government.

During his tour of Fort Rucker on 23 December, *General George H. Decker* and his party paused with the Board long enough to witness an abbreviated AO-1 flight demonstration and to receive a resume of the AO-1 service test program. Other dignitaries to visit the Board during the month of December were: *Colonel John Norton,* Chief of the Aviation Section of USCONARC, *Lt Colonel M. J. Strok,* US Army Transportation Research Command, *Colonel Robert F. Cassidy,* Materiel Developments, USCONARC, *Major William C. Dysinger,* ODCSOPS, and *Colonel D. L. Bristol,* Aviation Officer, Third Army.

Roy H. Lawrence
Captain, Artillery
Board Liaison Officer

TOP: A NAVY F-9F JET AIRCRAFT SIMILAR TO THOSE IN WHICH USAAB PERSONNEL RECEIVED JET TRANSITION TRAINING AT KINGSVILLE, TEXAS.

CENTER: THIRTEEN USAAB PILOTS RECEIVED JET TRANSITION TRAINING IN THIS TYPE NAVY T2V-1 JET AIRCRAFT. THE TRAINING, PART OF THE "MAN-MACHINE ENVIRONMENT COMPATABILITIES STUDY," WAS CONDUCTED AT PENSACOLA, FLORIDA.

BOTTOM: THE M4A HIGH SPEED AERIAL DELIVERY CONTAINER (SHOWN AFTER PARADROP) TESTED IN EARLY DECEMBER BY BOARD PERSONNEL AT YUMA, ARIZONA.

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

with the NEW

ARC CD-4

COURSE DIRECTOR

Steering Data from Four Methods of Navigation, Presented on ONE Indicator

For the advantages and specifications of the complete CD-4 System, 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

RESEARCH, DESIGN, DEVELOPMENT AND PRODUCTION OF ELECTRONIC EQUIPMENT SINCE 1928

MEMO TO ROBERT:

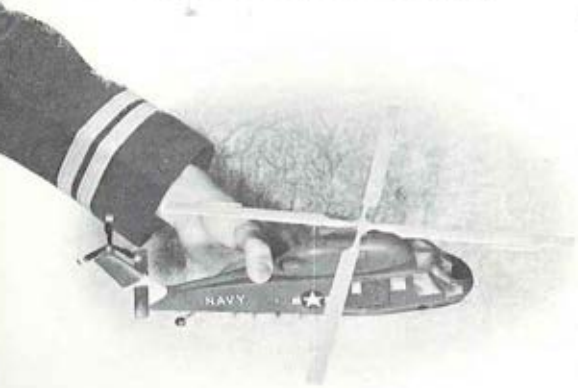
I am in receipt of your recent letter in which you say in part:

When I got the pictures that you sent me I was very happy and brought them to school with me and on my way home I had a fight with another kid I put books and the pictures on the ground and while I was fighting somebody took the pictures. I swear on the Bible that is the truth so could you please send me some more pictures of Kaman Helicopters.

Your new set of pictures is on the way. Robert, I hope that as you grow older and become a young man you will keep your interest in helicopters and aviation in general. When you and the boys of your generation take over the responsibility of running our great country, I hope you will find it strong and prosperous. Our National Defense effort right now is dedicated to that purpose, and with boys like you who are willing to fight for what is right, we know that our country will be in safe hands in the future.

Sincerely,

Charles H. Kaman



. . . IN NATIONAL DEFENSE

KAMAN IS PART OF THE PLAN

**Facsimile of actual letter received

"Top of the World" Aviation Duties Offer Unique Operational Problems

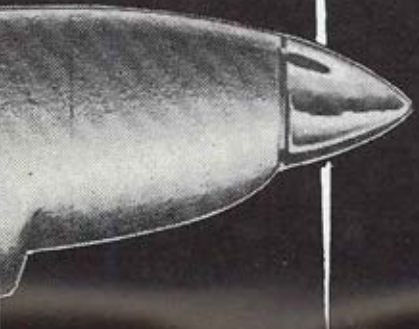
Mid-way between the Arctic circle and and the North Pole, 600 miles from the "Top of the World," the *U.S. Army Polar Research and Development Center's Aviation Section* has just completed its first season of operation in Greenland. Originated and activated last September, it had the mission to support the Center with air transportation in its polar operations.

The season began in early April with the arrival of two U-1A *Otters*, each equipped with a wheel-ski combination landing gear for conventional or icecap landings, and four H-34C helicopters in Greenland. During the season, in spite of the various and rapid movements of weather conditions, the aviation section transported more than

(*Continued on Page 98*)

BEECH "IMAGINUITY" IN *Air Mobility*

POTENTIAL FOR
FUTURE DEVELOPMENT
ALREADY DESIGNED IN



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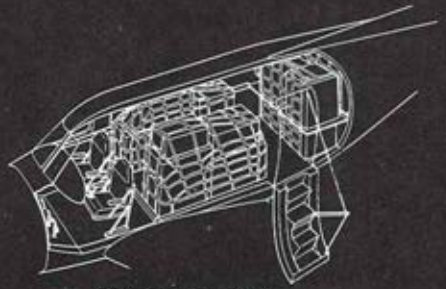

CONVERTS QUICKLY
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The new Beechcraft L-23F . . .

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.

TOP/*Continued*

1,300 passengers and hauled cargo in excess of 100 tons.

The personnel consisted of inspection parties, ranking dignitaries, research scientists, and troop replacements. Cargo could be described as "anything from soup to bolts." This included the resupply of foodstuffs, tools and equipment, sling loads of heavy construction materials, and radioactive elements for the USA PR&DC's first "portable" nuclear power plant located at Camp Century, Greenland.

The air section's headquarters was at the Camp Tuto Airfield (located 14 miles southeast of Thule), a 160 by 160 foot barrel vaulted hangar enclosed at one end while the south side remained open to the weather's best. The blacktop strip measured 70 feet in width, 2200 feet in length, and had a 200 foot turn-around located at each end. The strip is built on the knob of a moraine-type terrain with a 20 foot fill on one end, and a 35 foot foot fill for 1/3rd the length of the other. Steep embankments cover the sides. In addition, the fact that orentation is perpendicular to the icecap, which rises 1200 feet in the first three miles, keeps all *Otter* pilots alert on take-off and landing operations.

A major problem the air section faced was polar icecap navigation. Flying is normally accomplished by following a flag-market trail leading from the main base camp (Camp Tuto) out onto the icecap to Camp Century (138 miles out) and Camp Fistclench (220 miles out). Adding to navigation problems are dense arctic fogs or "whiteouts," caused by ice particles suspended in the air, which make flying difficult even at low altitudes.

With one season's experience under their belts, the USA PR&DC aviation section has returned to Fort Belvoir, Virginia from the Far North to prepare for the forthcoming 1961 operation and the challenge of their abilities to operate and maintain Army aircraft under the extreme conditions offered only at the "Top of the World."

The "Fabulous 4th" Runs Up Impressive Statistics In Providing USAREUR Support

Since its departure for USAREUR in July of 1959, the *4th Transportation Company (Med Hel)* has, in the performance of its normal unit operations, literally carried everything from 7,000-lb. bridges to the troop payroll. In bringing our CONUS homesteaders up-to-date on this very active H-37 outfit, we'd like to report on some of our 1960 accomplishments, not with the thought of starting a statistical war, but merely to give AA readers some indication of the operational performance of the unit.

During May, '60 the *"Fabulous 4th" flew* the 37s a total of 501:25 hours, later determined as the highest monthly total as of that date. In the same month two ships went over the 50 hour mark, the unit ending up with a 29:30 hour average per aircraft.

Our year end operational hours totaled 4,585 with over 50% daily operational availability, and this in spite of three major TOC's that required many maintenance man-hours by personnel of the *152d Trans Det.* Though not considered a record the unit hauled 11,754 tons of cargo a distance of 58,188 ton-miles, flying 7,738 passengers some 348,380 passenger-miles.

The unit is commanded by an old alumnus of the 4th, *Maj. Edward A. Stewart,* with *Capt. Robert G. Cox,* serving as CO of that all-important *152d Trans Det* back-up support.

—CWO William D. Austin

In the evaluation of helicopter development and production capability, contract performance is just as important as flight performance . . and Bell helicopter leads in both!

Bell has proved its leadership in turbine-powered flight performance with seven world records set by Army's HU-1 Iroquois. Bell has also proved its leadership in contract performance by delivering every Iroquois *on, or ahead of, schedule!* And, Bell has maintained this contract performance record from contract go-ahead on the HU-1 prototype, the XH-40, which beat development schedules by months!

Bell's capability of delivering this dual record-breaking performance is possible because only Bell is staffed with a turbine experienced team at every engineering, manufacturing, and management level . . and, because its physical plant is the world's first manufacturing facility built specifically for, and used exclusively in, the production of helicopters.

BELL TURBINE CONTRACT PERFORMANCE IS PROVED NOT PREDICTED!

For proven turbine-power leadership look to Bell!

BELL HELICOPTER COMPANY

Fort Worth, Texas • A Division of Bell Aerospace Corporation • A Textron Company

AERIAL HOT-RODDING

IT WAS A HAZY rather unpleasant day last fall when *Captain Joe Jones* strapped himself into the seat of an H-21. He revved up the engine. A quick check of the instruments showed them all in the green and he was shortly airborne and cruising at 85 knots toward Army headquarters, some 50 miles away.

Suddenly, without warning, engine RPM dropped from 2500 to 1000. But, this isn't the usual accident story, ending with a clobbered *Shawnee* and seriously injured pilot. For *Joe* reacted calmly. He spied a small clearing and went into immediate autorotation. The landing was without incident and both the pilot and the chopper were safe. The accident report showed "materiel" as a factor.

The real point to this story was revealed later when the engine was disassembled back at the field. Technicians reported the following: No. 5 articulating rod broken at the knuckle pin; No. 5 cylinder intake and exhaust valves warped and only part of the valves were seated; both push rods on No. 5 cylinder were bent; a crankcase bolt was broken and excessive metal particles were noted; all cylinder skirts were damaged and Nos. 4 and 6 articulating rods bent.

By

MAJ. GEN. RICHARD D. MEYER

Principal Assistant for Aviation

Office, Chief of Transportation

Yet, this was an engine which was almost new, had never been previously overhauled, and had racked up only 266 hours of its rated service life of 600 hours. *Poor maintenance? Quality control?* Perhaps, but I don't think so. Like the bulk of our reciprocating engines, this was a model design which has been tried and proven over a period of years.

A search of the records provided further clues. On record were notations of repeated engine overspeeds and overboosts, some for unknown duration. Further checking revealed that the aircraft had been utilized frequently in demonstrations requiring maximum power settings for take-offs and approaches. Since there seemed to be no evidence of neglect of routine maintenance, we can only conclude that this engine was literally torn up thru misuse or aerial hot rodding. Not one pilot but perhaps a dozen had played a part in its demise. *Scratch $25,000 from Army aviation assets and one aircraft from the unit's availability list.*

This is only one incident but unfortunately it is not an isolated one. For the truth is that we are finding far too many cases in which it has been necessary to remove engines at from ½ to 3/4ths of the established rated time between overhauls. When you consider that the dollar value of our engine inventory is approximately 89 million you can readily understand our concern in improving our TBO record.

great emphasis on reducing costs of our aviation support program without sacrificing efficiency. The price of our aircraft and engines remains pretty much fixed. Therefore, one of the few places where substantial dollar savings can be attained is in assuring that we get the full life out of all components. This is one of the most significant contributions individual aviators and unit commanders can make.

The TBO figures published in maintenance publications have been established after extensive logistical evaluation tests and engineering analysis. They are realistic and completely within the limits for safe and efficient operation.

Obviously, some engines will fail early in their operating life due to material failure (quality control) or due to some design deficiency. However, the proportion of these failures to those resulting from misuse is relatively small. Most of our helicopter engines were designed for fixed-wing use, which means designed for operating most of the time at fixed-wing cruise settings. They are operating normally at much higher settings on helicopters and if continuously at maximum performance the Even a slight improvement can add up to substantial dollar gains for support of the Army aviation program.

As General Von Kann has said: *"Army aviation doesn't have time to pass through the 'flyboy' phase; we have to come of age in a hurry."* I'm not suggesting that we must always pamper our aircraft. I think we have proved on many an occasion that they are rugged and can take plenty of punishment. But why punish the machine unnecessarily? Don't demand maximum performance on a routine day-to-day basis. Save it until you really need it to get you out of a tight spot. Pass the high performance assigned missions around to all your aircraft.

As most of you know, Department of Army and CONARC have been putting

First Chinook Now in Final Assembly
(See story next page)

chances are they just can't take it. The pilot who continues to push his luck might find this out the hard way. Unnessary airborne strains and stresses don't readily show in the course of regular ground checks despite the best efforts of maintenance personnel. And, unfortunately, they often do not show up until a later flight when another pilot is at the controls.

I'm appealing to commanders and pilots alike to join in curbing now, any tendency toward building an aura of legitimacy around maximum performance practices as a normal operation. Unnecessary stretching of an aircraft is a form of the hot rodding commented on by many leaders of Army aviation. You've heard this appeal time and again in safety notes, at the Aviation School and have read it in this magazine in *Gen. Von Kann's* column.

If a unit's TBO record is below par, daily flight practices should be a key element in conducting your command inspections. You will be doing yourself and the Army a favor. Casualties to personnel and equipment will be held to a minimum, more aircraft will be available for essential missions, and more dollars will be available to sustain a forward looking Army aviation program. This seems like a simple approach but in my judgment it is a vital part of your command responsibility.

FIRST ARMY TEST PILOTS GRADUATED BY U. S. AIR FORCE

The Army now has seven fully qualified test pilots courtesy of the *U.S. Air Force Experimental Flight Test Pilot School* at Edwards Air Force Base, Calif., and each of that select group is deserving of the congratulations of all readers.

Those recently completing the exhausting eight month course and thereby becoming the first Army aviators to be formally schooled as experimental test pilots are: *Major John C. Geary; Captains Paul A. Curry, John A. Johnston, Lavern R. Reisterer* and *Emil E. Kluever;* and *Warrant Officers Joseph C. Watts* and *Emery E. Nelson.*

All were specially selected for this training by the Chief of Transportation in order to qualify them to assume important assignments connected with the research and development of future Army aircraft. The Chief of Transportation has been recently assigned additional responsibilities in this area which have pointed up a need for technically trained aviator-engineers to work with Navy and Air Force agencies engaged in the research and development of aircraft for the Army.

For the present, *Johnston, Nelson,* and *Kluever* will remain at Edwards, assigned to the U.S. Army test office there. *Geary* will also be assigned to Edwards after he completes the Command and General Staff College. *Reisterer* and *Watts* have been assigned to Fort Rucker while *Curry* is assigned to Fort Eustis, Va.

Staffed by academic and flying instructors of the Air Force Flight Test Center, the school is one of only five of its kind. Equivalent to the last two years of an engineering degree, the curriculum includes some 230 hours of classroom instruction, 350 hours of data reduction, and report writing and 130 hours of flying.

The seven Army aviators received essentially the same highly technical course given to Air Force students, with the addition of special training in helicopter testing. Prior to graduation, the Army students were given jet training and a checkout in the T-33A and thus ended the course as qualified jet pilots.

Awards for best academic, flying, and all around achievements were made at the graduation ceremonies with the *Empire Award* (academic) going to *Capt. Paul Curry,* the *Ekeren Award* (flying proficiency) to *Capt. John "Al" Johnston,* and the *Honts Trophy* (combined flying and academic performance) to *Capt. Emil Kluever. CWO Joe Watts* was selected by his fellow students for the *Prop Wash Award* as the most popular member of the class.

The prerequisites for this caliber of training are high and all candidates are selected only after a thorough screening of individual personnel folders, academic records, etc. For this reason we have been unable to accept applications directly from individual pilots.

Initial flight tests aren't far off for the YHC-1B *Chinook* transport helicopter, now nearing completion at the Morton, Pennsylvania plant of the Vertol Division of Boeing Airplane Company.

This aircraft is a basic development to Army specifications. Vertol's twin turbine powered commercial *Model 107,* is, in fact, a scaled down prototype of our *Chinook,* and the engineering data gained from development of the *107* has been useful in the development of *Chinook.*

The *Chinook* is designed for compatibility with the Army's Pershing missile system and the major components of the system have been successfully loaded into the *Chinook*'s 1600 cubic foot cargo compartment in demonstrations with the full scale mock-up of the aircraft.

Generally, the development program is proceeding satisfactorily. All mock-up reviews have been held. The T-55-L-5 engine, which is to power the *Chinook,* has completed its 150 hour qualification test run

SHOWN IN FRONT OF A JET TRAINER AT THE USAF FLIGHT TEST CENTER, EDWARDS AFB, CALIF. ARE ARMY GRADUATE EXPERIMENTAL TEST PILOTS, L-R, CAPTS. JOHNSTON, CURRY, & REISTERER; CWO NELSON; CAPT. KLEUVER; CWO WATTS; AND MAJ. GEARY. SEE STORY ON OPPOSITE PAGE.

and the results are now being evaluated.

The seven "Y" model engines on order were delivered in December and the fabrication and assembly of other parts for the five YHC-1B aircraft is in progress at Vertol. Once the first of the "Y" models is rolled out of the factory (about mid-March) to begin its tie down and initial flight tests, the remaining four "Y's" are expected to follow in quick order, probably at the rate of approximately one per month.

The first three off the assembly line are slated for engineering tests at the contractor's facility while the remaining two are to be assigned for test respectively by the Aviation Board at Rucker and by the Air Force at Edwards AF Base, California. As additional aircraft become available, service and logistical testing will be underway, probably about December 1961.

A $28,163,097 contract for continued production of AO-1CF *Mohawk* aircraft has been awarded to the Grumman Aircraft for Engineering Corporation, Bethpage, Long Island, N.Y.

The contract was awarded by the Bureau of Naval Weapons as the Single Service contracting agency. It brings the total number of *Mohawks* being produced for the Army to 140.

The AO-1CF is the third model of the *Mohawk* observation aircraft and differs from its predecessors in its ability to carry infra-red battlefield surveillance equipment. Grumman is also producing the AO-1AF *Mohawk*, the basic aircraft which carries high resolution optical photographic equipment, and the AO-1BF *Mohawk*. The "BF" version carries a cigar-shaped housing underneath its fuselage, which contains SLAR (side looking airborne radar) gear.

The two-place turbo prop *Mohawk* is powered by two Lycoming T-53-L-3 engines delivering 1,005 ESHP (equivalent shaft horsepower) each. The aircraft cruises at 200 knots, has a service ceiling of 30,000 feet and a range in excess of 1,000 miles.

Keeping Up

Just in case you haven't had a chance to look at TCMAC-FN message Nr 01-0270, here's a few things that'll help straighten out a problem area you guys have been screaming about.

The gist of it is that we've taken a step forward with the inspection system and pending the revisions to the 5 part manuals, we'd like all users of Army aircraft to use the following as a guide:

When the inspection requirements in your handbooks call out "daily", "intermediate" or "weekly", and "periodic", block 11 of DD Form 781-2 should be changed to read:

a. Line out the "Pre-Flight" and make it "Daily"

b. Strike out "Post-Flight" and enter "Intermediate"

c. Leave the "Periodic Block" alone.

d. If your specific aircraft is inspected under the TM1 series manuals, line out "Post Flight" and enter on the 781-2, "Weekly".

As an added bit of information, if your handbooks call out inspection requirements as "Pre-Flight," "Post-Flight," and "Periodic" inspections you don't have to do a thing to the 781-2. Let it stay as it is, O.K.? OK!

TIPS fro

BY
WILLIAM D. BICKHAM
Hq, TMC, St. Louis, Mo.

Tips From Mike

The engine build-up stand (P/N 47-600-001-T212) originally designed for the 0-335 can be used for the 0-435 by making some minor changes to the stand. *Mr. James L. Stephens,* of the Post Transportation Aircraft Maintenance Shop, Ft. Bragg, got in touch with us here at TMC and told us that he has designed and fabricated attaching brackets for the 0-435 that have proven very satisfactory.

The modification consists basically of removing the two top attaching arms from the stand. Cut two pieces of 90° 2"x2", 5/16 angle iron about 37.5" long. Bolt these pieces vertically on the bottom angle iron at the back of the stand spacing them so that two attaching arms can be extended horizontally, from the top of these vertical pieces to the engine mounting bolts. Two pieces of similar angle iron about 6.5 inches long are bolted horizontally to the top horizontal angle iron on the stand and extend over to the vertically attached member stated above. One piece of flat iron about 9.75" long is used to bolt together the vertical angle irons. The bottom attaching arms of the original stand is used without modification.

Other methods of attachment are possible so each outfit can locally design and fabricate its own brackets; however, any change made to the stand will upset your W/B of the engine on the stand and should, therefore, be approved for stability by the safety officer. OK?

Aw Right!!!

Everyone who has a copy of TM1-1U-1A-4-20P, 28 September 1960, take a look at pages 252 and 253 and if these pages are marked TM1-1H-19A-4-34P you can jump on the printer. We at TMC have taken action to have those missing pages returned to the *Otter's* –20P and they are in print now. So by the time you read this you should have a revised *Otter's* -4-20P handbook without the *Chickasaw* -4-34P pages.

And while "Mike's" on publications—. Those holes which were drilled by the local printing contractor didn't come out so very. We told them to drill holes in the TM1's (specifically the *Beaver's* -4-34P) 7/16 inch in diameter, 3½ inches center to

MIKE BUTTON

center but they came out and you got them in the field drilled ¼ inch in diameter, 4¼ inches center to center. Don't work so good, eh?

So, from now on, and henceforth and all that rot, all publications, i.e., TM1's, TM55's, SM55's, MWO55's. and SB 55's will be drilled to fit the so-called Army Loose-leaf binder (FSN 7510-188-6955 QM).

That's about it for this month, so I leave you with this thought.—Watch that "Teflon" lined steel braided hose—

Don't exceed those minimum bend radii.

Don't exceed the twisting limits.

Don't straighten out a set hose which already has a permanent bend.

Don't bend it opposite to its set.

Don't support or hand objects from these hoses.

Enough Don'ts——*Do* get in touch with "Mike" if you got a problem. That's what I'm here for, if you think I can help.

Informationally yours,
MIKE BUTTON

QUESTIONS AND ANSWERS

Dear Mike:

Since you got the correct poop about this octane rating and performance numbers published for me, could you please give the same type of dope for aircraft engine oils?

Like what does SAE stand for, and what is the military grade, or rather what is the SAE number for, say military grade oil number 1120? Also, could you give me a run down on what S. U. S. is and its relationship to Commercial Aviation Oil numbers? Thanks "Mike for your help.

Adm. Ollie Oh.

(P.S. I have a pseudonym too.)

Dear Admiral Oh,

Well, I had to get out my Wilhelm Konrad Rontgen machine for this one, but here's the answer.

First off, SAE are the initials for "Society of Automotive Engineers."

Next, S.U.S. are the initials for "Saybolt Universal Seconds" sometimes referred to as "Saybolt Universal Viscosity" in some circles. This is further broken down into just what is S.U.S. . . .

It's the time in seconds that it takes about 2 ounces (60CM) of heated oil (210°F for heavies and between 100° to 130°F for light weights) to flow from one container through a metered orifice to another one. That's how the "Saybolt Universal Seconds" (SUS) comes in.

As far as the oil designations are concerned, old Mike has this to offer in the three columns below:

S.U.S. (Commercial Aviation Number)	*SAE* (Society of Automotive Engineers Commercial Number)	*MILITARY GRADE* (Army, AF, etc.)
65	30	1065
80	40	1080
100	50	1100
120	60	1120
140	70	——

MIKE BUTTON/*Continued*

Generally, SAE numbers corresponding to the numbers of aircraft engine oils, are determined by dividing the S.U.S. by 2 and taking that quotient to the nearest multiple of 10; e.g.:

S.U.S. = 120. 120 divided by 2 = 60 which is the SAE number; or

S.U.S. = 65

65 divided by 2 = 32.5, taken to the nearest multiple of 10 (in this case downward) gives you 30 for the SAE number.

Likewise, military grades follow the S.U.S. number, e.g., if the military grade is 1000 or below, knock off the first two digits and the last two denotes the S.U.S. number and using the formula above you can find the SAE number; however, if the military number is 1000 or above, just knock off the first digit and the last three tell you that the S.U.S. number is ————Solve the simple formula and you have the SAE number————OK?

MIKE BUTTON

Mike:

Have a slight problem concerning L-19A wing spar bolt fittings, both front and rear. This fitting takes bolt AN8-23A and AN7-24A, front and rear respectively. The front fitting is reamed ½" +.0015; the rear 7/16" +.001. The bolt, being an AN, non-close tolerance type, can be up to —.003 undersize. This means with a new wing fitting and a new bolt you can have up to .004 play in the end item. Naturally, after a few hundred hours of operation there is going to be some wear on the bolt and wear or elongation in the fittings. We have checked the —2, —6, and micro-film and cannot ascertain any wear limits on the fittings.

How about setting us straight on tolerances for these fittings?

Sincerely,

CAPT. JEROME S. SULLIVAN
922nd Transportation Company (AAM)
APO 957, San Francisco, California

Dear Captain Sullivan:

Captain, you don't have a problem as far as Mike can see. There are no tolerances as such because we feel that this bolt to fitting deal is on the non-critical list. You must use your own good judgment in this matter and I doubt if the hypothetical situation which you put to Mike will ever occur. Just because these fittings are allowed a +.001 (both the ½" front and the 7/16" rear) and the tolerance of the bolt could be .003 undersize, there is no reason why you should conclude that the total of .004 is on your airplane. These are manufacturer's tolerances as spelled out in MIL-S-105 and I seriously doubt if you'll ever encounter this situation because no manufacturer works his stock up to the maximum allowable limits on tolerances, as this is only a guide which he must not exceed to be acceptable.

These fittings and their bolts should last a good many hours, say about 30,000 roughly. Also nothing prohibits you from using a close tolerance bolt either, is there?

By the way, you'll never find tolerances of this kind on microfilm so don't waste your good valuable time and be sure you check with SB 1-15-13, 11 June 58 to be sure you have the correct bolts in that thar slot, ok? OK!

Further information: the AN 8-23A goes by FSN 5306-576-5636 and the AN 7-24A goes by 5306-282-4463.

Good reading is TM 1-1A-8, 1954 as revised page 58, paragraphs 3-5, 3-6 and 3-7.

If I can help you further don't hesitate—Get in touch with Mike.

Informationally yours,

MIKE BUTTON

CORRESPONDING ADDRESS

Although MIKE BUTTON is a pseudonym used by Bill Bickham, questions directed to the column should be forwarded to: MIKE BUTTON, Box 209, Main Office, St. Louis 66, Missouri.

LETTERS

BRIEF LETTERS FROM READERS ON ANY PERTINENT SUBJECT ARE WELCOMED BY THIS PUBLICATION. NO ANONYMOUS LETTERS WILL BE PUBLISHED.

Sirs:

In a recent visit to Camp Kaiser up in the forward areas, I ran into a situation here in Korea that I felt might be of interest to Army aviators to show the complexity of an aviator's duties and the tremendous responsibilities put on our young Lieutenants.

In the photo below, *1st Lt Gary R. Rast,* left, is shown explaining the duties of the various personnel in the Brigade Aviation Section to his Brigade Commander, *Brig. Gen. Harry L. Hillyard.*

As you will note, *Lt. Rast,* who is assigned to the 7th Avn Co-Inf Div and performs his duties with the Headquarters of the Brigade, has assigned one (1) officer—*himself*—the following duties:

Aviation Officer, Operations Officer, Drone Section Leader, Aircraft Maintenance Officer, Combat Support Flight Leader, Pilot, Supply Officer, Class A Agent Officer, Safety Officer, Ground Control Officer, and *Communications Officer.*

This certainly emphasizes the great competence of our personnel. Incidentally, I inspected the entire section and found all offices to be in top flight condition.

HALLETT D. EDSON
Brigadier General, USA
Hq, Det R (Prov), KMAG

OBITUARIES

First Lieutenant Donald G. Bales, assigned to Hqs, U.S. Army Air Defense Center, Ft. Bliss, Tex., sustained fatal injuries when his aircraft crashed in the vicinity of Bristol, Tenn., on December 27, 1960. He is survived by his wife, Mrs. Jamie Ruth Bales of 9229 Montgomery Drive, El Paso, Tex.

Chief Warrant Officer Robert F. Pohl, assigned to Hqs, 61st Artillery Group (AD), Milwaukee, Wisc., was killed in an H-23D accident which occurred at Milwaukee, Wisc., on January 4, 1961. He is survived by his wife, Mrs. Ursula L. Pohl, of 313 Sunset Drive, Sussex, Wisc.

First Lieutenant John H. Veidt, Jr., assigned to the 504th Aviation Company, Furth, Germany, sustained fatal injuries on January 16, 1961, when he bailed out of his aircraft during a night training mission. He is survived by his wife, Mrs. Mary Veidt of 853 Walnut Street, Milford, Ohio.

USAREUR REPORT

BY MAJOR KENNETH D. MERTEL

Compliments are in order to *Lt. Walter F. D. Allan,* COMZ Signal Avionics Retrofit Branch at Etain Army Air Field. He is responsible for the installation of the ARC 73 radio in USAREUR L-20, H-19, and H-34 type aircraft. If you want to see a real business-like operation and quite a manufacturing plant, drop in for a visit. *Lt. Allan* or his chief assistant, *Lt. Hubert G. Smith,* will be happy to show you around.

Using basic radio components received from the ZI, *Lt. Allan's* technicians manufacture a palatized installation system complete with all of the accessories, including the cables. The completed system is mounted in the aircraft along with the necessary wiring, antennas, and controls. The whole operation takes a surprisingly short time. The finished product is a radio capable of dialing almost any frequency needed on the continent.

In addition, all radio and navigation equipment on each aircraft is inspected to

ALTHOUGH TAKEN DURING EXERCISE WINTERSHIELD I IN 1960, A SCENE SUCH AS THIS TYPIFIED THE RECENT WINTERSHIELD II EXERCISE IN GERMANY. SHOWN ARE MEMBERS OF THE 4TH TRANS CO (MED HEL) AWAITING THE MOJAVE HOOK-UP OF A 7,000-LB. DRY SPAN BRIDGE.

insure that it is all in operating condition. The old model *Beavers* are refitted to bring them up to the 1958 configuration. A prototype ARC 73 assembly for the L-23 is currently under test and should be ready for installation in the final stage of the USAREUR retrofit program in the very near future.

By the way, *Lt. Allan* and his men also accomplish complete repair and rebuild of all types of aircraft radios and navigational equipment. If they can't fix it, it can't be fixed by anyone. Congratulations to you and your men, *Lt. Allan,* for a very outstanding and important job.

Also located nearby is the *582nd Aircraft Heavy Maintenance Company (TC),* commanded by *Capt. John R. Brown.* This unit has the mission of supporting all of the COMZ units as well as most MAAG's and missions. They are well equipped, have an excellent layout and are accomplishing their job in a superior manner.

My apologies to *CWO Michael V. Mayville,* Hq USATREOG, Ft Eustis, Virginia. Appears that USAREUR was not the first, world wide, to transport an *Otter* in an C-124 aircraft as described in the October issue of this magazine. The US Army Transportation Environmental Group beat us by a year.

A large scale winter exercise, *Wintershield II,* was completed this month by Seventh Army. This exercise, a two sided maneuver fought between the Hohenfels and Grafenwoehr reservations, included large scale use of helicopters for movement of combat troops and equipment on both sides. A new innovation was the use of drones flown simultaneously with piloted aircraft. In addition, *Sky Cav* type units were organized and used by both sides along with the wide employment of armed helicopters.

Seventh Army deserves a big hand for the outstanding work accomplished to establish

a Flight Operations Center (FOC) for control of air space and air traffic during *Exercise Wintershield II*. Two large semi-trailer type vans were equipped with necessary radios of the same type used in the aircraft (ARC 12 and ARC 73); all had direct dial type tuning. One of the vans was equipped like a small ATC Center to control IFR traffic. The other contained the necessary teletype machines connecting with the two Corps Flight Operations Centers (similar set up), the USAREUR Army Flight Operation Facility (AFOF), and civilian air traffic control agencies. In addition, a portion of this second van was fitted with necessary equipment to coordinate and follow VFR flights. A section of air space, laterally and vertically was assigned to the Army for control purposes. A system of navigation aids and airways was established in the maneuver area.

All IFR traffic, VFR flights entering or leaving the exercise area, and VFR flights from the Division Base Airfield rearward were controlled by the FOC. Front line division exercised control over all airspace in the division sector. Tactical air strikes, drone flights, and other USAF traffic was coordinated by the FOC. In addition, atomic, enemy air attack, air strike, and weather warnings were provided. A provisional unit was formed from the 16th AOD, assisted by additional officers and men from non-participating units, in order to provide necessary personnel and equipment. As a result of experience gained in this exercise, recommendations are currently being prepared pertaining to requirements for the equipment, procedures, and type unit needed for control of Army aircraft during training and combat operations. A more detailed article on this entire subject will appear in a later issue of ARMY AVIATION MAGAZINE.

The Aviation Company, 11th Armored Cavalry Regiment, commanded by *Maj. Adrian A. Eichhorn,* is to be congratulated for the fine job they are performing. Particularly impressive is the excellent attitude demonstrated by all personnel of the unit, both commissioned and enlisted. They are eager to show the visitor around and "sell" what they have. One very good idea observed is placing the name of the crew chief on a little plastic plate on the side of the door of the L-19. Crew chief assignments are not changed about every few days as they are in so many units. This "identity" of aircraft with the man results in a feeling of pride on the part of the crew chief, an acceptance of responsibility, more willingness to do his part, and, of course, better maintenance. So often the crew chief is forgotten and only thought of as someone to hold the fire extinguisher. He is a very important part of the team and has been recognized, at least in this unit. *How about your unit?*

The proposed *USAREUR Aviation Competition* will *not* be conducted this year as announced previously in this report. Operational commitments and scheduled training exercises do not leave sufficient time for units to train and participate in the proposed competition. The *Annual Birthday Celebration* will be conducted as planned on Saturday night, 3 June '61 at the Heidelberg Officers Club. For the information of recent arrivals in USAREUR, this banquet has been staged four times previously, in connection with the celebration of the birthday of Army aviation. Last year, as in former years, the entire party was an outstanding success.

Division and Corps Commanders, the Army Commander, and the Commander-in-Chief, USAREUR, will be invited as well as other notables, both military and civilian. A guest speaker hasn't been finalized; however, *Brig. Gen. Clifton F. von Kann,* Director of Army Aviation, has been invited and is expected to fill that position. The celebration will include cocktails, dinner, short speeches and dancing. Dress is informal and your other half as well as girl friends are welcome. Military and civilian billets are available in the Heidelberg area. Further details will be announced soon with your "Jep" changes.

I recently overheard a Division G-3 tell his Aviation Officer what he expected from him and to quote, *"I want you to be like the commander of a direct support artillery battalion supporting a regiment or a battle group. Lean over the shoulder of the commander and be ever ready to tell him how you can help him fight his unit. Don't wait to be asked; that may never come! Sell your product and make certain that it is used! Recommend, advise, encourage, question, prod, cajole, and even demand that you be permitted to do your job."* This is excellent advice and can be applied at each level of aviation down to and including the combat support flight leader and individual aviators.

Plans are now under way for USAREUR participation in the Paris International Air Salon at Le Bourget Airfield in Paris beginning 28 May 1961. This exhibition is expected to bring *Mohawks, Caribous, Iroquois,* and the Sikorsky *Flying Crane* as well as other new equipment from the US for display. This equipment will probably be later demonstrated at airfields throughout USAREUR.

Aviators on ground duty assignments in USAREUR can rest assured that they are doing a fine job. To quote the Chief of Staff of the 4th Armored Division, *"Some of the best company and battery commanders in the Division are aviators on ground duty. They are doing a fine job." General Edwin A. Walker,* Commanding General of the 24th Infantry Division, made similar statements indicating that aviators on ground duty within the division were doing an excellent job. This proves that aviators can maintain both aviation and combat arms proficiency. You do have to work at it. Are you?

On a recent visit to the 504th Aviation Company, 4th Armored Division, commanded by *Maj. John W. Mordan,* I saw some excellent work in progress in converting an H-34 to a flying command post, complete with necessary communications and facilities. This project has been attempted previously by many units with little success. If you are interested in learning more about the details, drop in for a visit to the 504th Aviation Company or write *Maj. Mordan* or *Lt. Col. Thomas H. Evans, Jr.,* the Division Aviation Officer.

The Director of Army Aviation, *Brig. Gen. Clifton F. von Kann,* visited USAREUR this past month. We were very happy to have an opportunity to demonstrate what Army aviation is doing in this part of the world.

The annual written examination will soon be with us. Fifty questions this year and the same test for both instrument and non-instrument aviators. Examinations and work books have been received by USAREUR and are being distributed to the Instrument Flight Examining Boards at USAREUR Headquarters, COMZ, SETAF, and Seventh Army. Not too early to brush up on navigation, rules and regulations, weather, and principles of flight.

A change of command in the 8th Helicopter Battalion. *Lt. Col. Henry H. McKee,* formerly Aviation Officer, 24th Inf Div, recently assumed command. *Lt. Col. Rowan P. Alexander,* former commander, moved to an assignment with the US Army TC Depot. Congratulations to the new Seventh Army Aviation Officer, *Colonel Jack W. Hemingway,* on his recent promotion. *Lt. Col. James H. Lee,* former Aviation Officer, who will be rotating to the ZI soon, has performed his several jobs in a superior manner and can be given the majority of credit for the excellent status of Seventh Army Aviation units today. USAREUR aviators join me in wishing you the best of luck, *Col. Lee,* in your new assignment and shall look forward to serving with you again.

Kenneth D. Mertel
Major, GS
Opns Div, Hq USAREUR
APO 403, New York, New York

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OUTSTANDING CONTRIBUTION

DURING THE RECENT 29TH ANNUAL MEETING OF THE INSTITUTE OF AEROSPACE SCIENCES (IAS) IN NEW YORK, THE COVETED GROVER E. BELL AWARD WAS PRESENTED TO THE COMBAT DEVELOPMENTS OFFICE, USAAVNS, FOR OUTSTANDING WORK IN THE FIELD OF HELICOPTER DEVELOPMENT. MAJ. GEN. ERNEST F. EASTERBROOK, RIGHT, COMMANDING GENERAL OF THE ARMY AVIATION CENTER, IS SHOWN ACCEPTING THE AWARD ON BEHALF OF THE UNIT FROM BARTRAM KELLEY, VICE PRESIDENT-ENGINEERING, BELL HELICOPTER COMPANY. (US ARMY PHOTO).

MILESTONE REACHED

BELIEVED TO BE THE FIRST ARMY AVIATOR TO FLY 1,000 FIRST PILOT HOURS IN THE ARMY'S H-37 MOJAVE, CWO RALPH M. FITCH, JR., OF THE 1ST AVIATION COMPANY, FORT BENNING, GA., IS SHOWN ABOVE FOLLOWING A RECENT FLIGHT. THE 13-YEAR VETERAN'S CHOPPER DUTIES HAVE INCLUDED ISLAND HOPPING ON ENIWETOK ATOLL AND EXTENSIVE MISSILE RECOVERY AT WHITE SANDS PROVING GROUNDS. NO SLOUCH IN OTHER AIRCRAFT, HE'S LOGGED 4,500 FLYING HOURS IN ALL. (US ARMY PHOTO).

OFFICIAL VISIT

KOREAN OFFICERS WHO RECENTLY VISITED THE USA TRANSPORTATION SCHOOL CHAT INFORMALLY WITH BRIG. GEN. ROBERT B. NEELY, CENTER, COMMANDANT, USATSCH. INCLUDED IN THE GROUP ARE COL. YONGUL SON, CHIEF OF AVIATION; LT. COLS. DONGJOON LEE, CHIEF, PLANS DIV, OCA; CHIJIK KO, DEP COMDT, AVIATION SCHOOL; SUNCHUL PAK, AVIATION OFFICER, FROKA; AND DUCKJOON PAK, CHIEF, AVIATION OFFICE, SROKA. (US ARMY PHOTO).

"PASS IN REVIEW"

LT. COL. ROWAN P. ALEXANDER, LEFT, HANDS THE COLORS OF THE 8TH TRANSPORTATION BATTALION (LT HEL) TO LT. COL. HENRY H. McKEE UPON THE LATTER'S ASSUMING COMMAND OF THE UNIT. COL. ALEXANDER, NEW EXECUTIVE OFFICER OF USATDS, SANDOFEN, AND COL. McKEE THEN TROOPED THE LINE IN THEIR H-13 HELICOPTER DURING UNIQUE CHANGE OF COMMAND CEREMONIES HELD AT SCHLEISSHEIM AAF, GERMANY. (US ARMY PHOTO).

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MODERNIZATION/*Continued*

(Continued from Page 70)

battle requirements. This, apparently, the Congress of the United States does not know. These are amazing things. We are so busy and so confused by the complexities of American life today, and the Congress of the U.S. has so many jobs to attend to, from agriculture and oversupply of wheat, butter, and of crime and all of these things, they do not know much about Army aviation. I have already interviewed a few of them and found out that they never heard these problems. They take other peoples' word for it.

The airplane and helicopter are looked upon by the Army as just another useful tool to speed victory. We know that the battlefield of tomorrow is going to be the toughest in history. We know this; most people know it; and to hurdle the unprecedented obstacles of this new battlefield the ground commander must have air vehicles to move men and material. He's got to move them speedily and efficiently about the battlefield. He's got to locate the enemy to direct his fire. He's got to provide faultless communications and liaison between his dispersed elements. And brother, they'll be dispersed!

I learned this at battle maneuvers in Southern Germany last year. You've got to put weapons in position. The ground machines can't bridge the tundra, the rivers, the swamps, the jungles, and the mountains. Take the Congo where they are even shooting bows and arrows today. Here is a classic example where we've got to hold the airfields at any cost. All the Army aircraft hug the ground, the low and slow boys. No other service is in the market for such craft, except for certain helicopters that the other services are buying after the Army proved their versatility and usefulness.

Army aviation needs freedom! All of you in the *Army Aviation Association*, and the *Association of the United States Army*, must work on total modernization for the Army, and throw back the tide toward second class citizenship for it.

I feel that the priority item at this moment is to break the shackles on Army aviation. This can be done. It can be a swift and sure victory. The time is right, and the time is now, because the stage is set. We're at a change in administrations; we're going to go through a lot of bold new horizons. Army leaders are often gagged by the Pentagon. The main effort will have to come from people like myself who are nonsectarian, who don't owe a cent or favor to anybody, and who don't have any commitments anywhere. But we're going to have the help of your Association.

General von Kann has been helping to tell the story in speeches over the land and it's vitally necessary for Army aviation to tell its story, but it is going to take individual and collective efforts by individuals in the *Army Aviation Association* and the *AUSA*. What we've got to do is to take each chapter, not just the *Army Aviation Association*, but the *AUSA* as well, and get a downtown lawyer or banker or some dedicated civic leader, who has the ability to talk, and who feels, and knows, and sees this thing and send him to Washington. He's got to visit his two Senators and he's got to sell this "party line"; then go see his representatives.

If every chapter of the *Army Aviation Association* and the *AUSA* does that, we've got it licked. The man can go up there and get the briefing at National Headquarters of the *AUSA*. We are past the letter writing stage, despite the fact that a recent survey showed to me that very few supporters had even taken the time to write a letter.

So let's become a vociferous minority group because those are the ones that are running this country. It isn't the majority; it's a vociferous minority group that get their oar in and get the job done. The last Congress made it crystal clear that the Army was to be modernized at once. It

MODERNIZATION/*Continued*

gave everybody in the Army a psychological lift. It gave me one.

Funds voted have not been spent; the drive has been stymied. I repeat, I believe it is a conspiracy by the money-hungry wild-blue-yonder boys. How in the name of heaven can Congress provide funds for new Army aircraft, and then sit idly by and permit the cut in our pilots which happened just lately? We hardly have one active, available pilot for each active Army airplane today. Can you imagine what would happen to an airline, or any other air operation, trying to function on this formula? You can't do it! It's silly; it's indefensible. But who will change all of this?

Now the action I propose to you as a chapter in the *Army Aviation Association* is to work through the *AUSA*. My home-town chapter is composed of a variety of folks. We've got bankers, lawyers, and other professional and business men, besides Army (personnel) and the people who do business with the Army. The people who do business with the Army are a little bit compromised and they had better not do this job. They have a profit motive, which isn't fashionable today.

If each AUSA chapter with the help of the national Headquarters could just get up enough expense money for one individual, eminently qualified for a visit to Washington, to visit the Senators of his state and his particular Congressman, I think we can jar these restrictions loose, and get on with our air-mobility program. I think this is the only way we're going to do it under the strain and stress of today's world.

The tragic pilot cutback is symptomatic of the old disease that infects us. We must call in the doctors, and I for one cannot find much solace in the chipping-away action inside the Pentagon. It's not fast enough. Army aviation has been gaining friends in all branches of civil aviation. These civil aviation and industry people are legion; they are everywhere; they're in every nook and cranny in the country; and they're in every line of business endeavor.

These are your friends; they are beginning to learn that Army aviation is kinsfolk; that your developments are of tremendous value to civil aviation; that we fly in the same air space and what benefits you benefits them. They also know that the missile age in the Air Force and the Navy points to the day when most of the manned military aircraft will be Army machines. Let's utilize these people; let's develop a real party line; and tell the story relentlessly every day, every hour, every night, and at every opportunity.

Back to these causes we mentioned—they are worth fighting for. I have a lot of other places that I should be tonight and a lot of other things that I could do other than waving a flag. But you fly along that Iron Curtain, and you see those boys that you are backing up so well here in TMC.

PHOTO AT RIGHT

MEMBERS OF AMOC 3-61 CURRENTLY IN SESSION AT THE US ARMY TRANSPORTATION SCHOOL, FT. EUSTIS, VA., ARE, AS FOLLOWS:

Front row, left to right: Capts. Ronald D. L. Connell, William G. Svab, and Norbert E. Laviolette of the Canadian Army; Lt. Col. Gustave A. Peyer, class commander; Capts. Herbert H. Schaaf and James W. Jones. Second row, left to right: Lt. Blaine P. Jensen; CWO Ronald R. Van Regenmorter, Louis Powell, Thomas P. Lundgren; Capts. Richard A. Hartert and James S. Cronen; CWO Robert B. Harr; Lt. Robert A. Below; Capts. Robert E. Allen and Andrew J. Doser, Jr. Last row, left to right: CWOS Boyd R. Edging, Alfred E. Smith, Louis T. Constantini, Dewey C. Little, Richard W. Cline; Lt. George G. Taylor; CWO Carl E. Anderson; Capt. Robert P. Orr; CWOS William G. Box and Clarence E. Gleaton, Jr. (US ARMY PHOTO).

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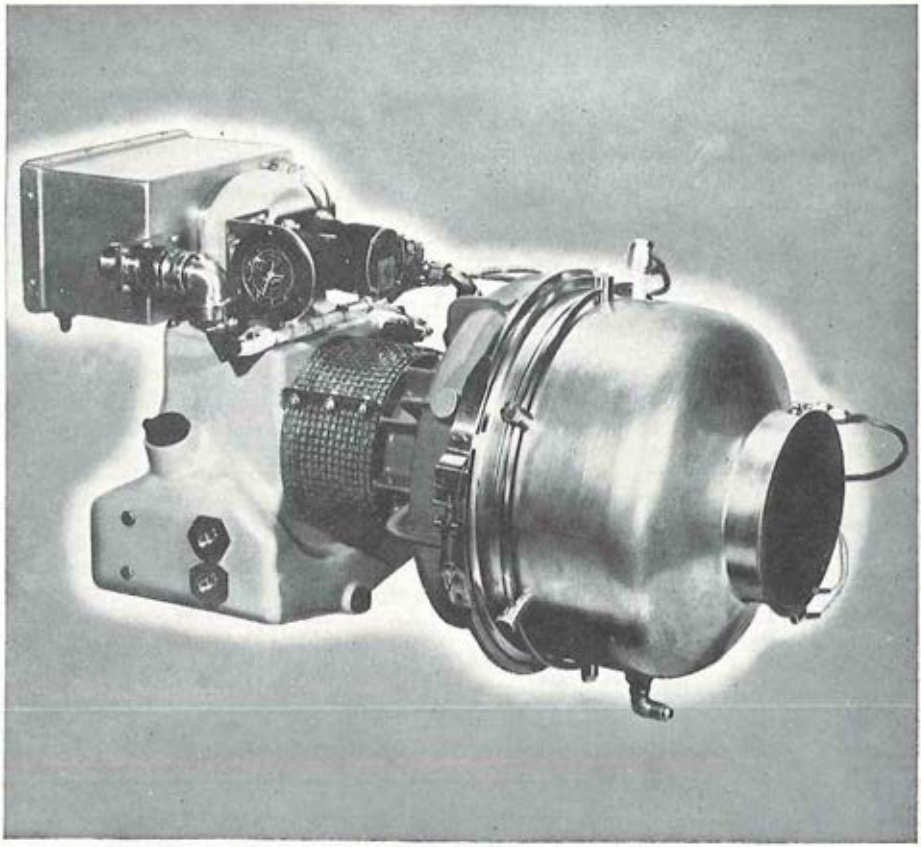
and it does something to you. These causes of the Army appeal to me as being worthy of action.

The chances are 99 to 1 for infiltration and brush-type wars, like the Suez Canal and the Laotian thing, as against all-out nuclear warhead exchanges. I talked to *General Claire Chennault* before he died. I knew him well. He told me we'd never get into a major war over Formosa because the Sino-Soviet block wouldn't start one. They want Southeast Asia. So North Vietnam is gone; the struggle for Laos is going on today.

If the pattern since the end of World War II means anything, and if you were betting the odds, you'd have to bet on the Communists. They are doing quite well with their world revolution. If Korea was victory, God help defeat! And if Cuba and the infiltration of Latin America, the Near East, and Africa can be shrugged off through the apathy of the American people, we're through! There is no other way to figure it.

Well, I didn't intend to preach a sermon tonight, but they brought this podium up here and I couldn't resist the opportunity to preach. What I'm trying to get over to you is that we have one of the most vital jobs to do, and we must do it. The reason that I brought all of this up is so you can get it in the proper perspective because that is what is so wrong in our country today, we lack perspective—focus.

There are too many words, too many printed words and spoken words, and too many TV pictures. There is too much drivel and commentary—a veritable flood thrown at us day and night. We can't see the woods for the trees. This country was not brought up, our generation wasn't, to rule the world or to have the responsibilities we have today. So what I'm trying to do is to put these little jobs, that are so big when they're accomplished, in the proper perspective. We must start in those seemingly little areas and on those jobs that we know something about. It will take relatively few marchers to accelerate the modernization of our Army. There is not much time left.



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REPORT ON JANUARY 27TH-28TH MEETING OF NATIONAL BOARD

PRESENT: *B Wilson* (Pres), *Col OG Goodhand* (XVP), *LCol KE French* (Sec), *AH Kesten* (XSec), *Col AJ Rankin* (VPA), *HE Haugerud* (VPG), *LCol S Freeman* (VPR), *JE McDonald, Jr.* (VPI), *IB Washburn* (VPP), *LCol RK Moore* (VPP, as represented by *Maj WP Craddock*, proxy), *Col RM Leich* (Member-at-Large), *Col RR Williams* (Member-at-Large), *BGen WB Bunker*, (Pres, Midwestern Region, as represented by *CD Stephenson*, proxy). Observer: *Col F Meszar* (Pres, Washington, D.C. Chapter, as represented by *LCol RJ Low*.)

ACTIONS TAKEN:

RESERVE AFFAIRS: Approved the request of the VPR (*LCol S Freeman*) to coordinate with appropriate Reserve Component authorities at Hqs, USCONARC on current policies and funding applicable to the USAR Army Aviation Program.

NATIONAL AWARDS: Approved the report of the Chairman of the National Awards Committee (*Col RM Leich*) with respect to AAAA Awards to be presented at the 1961 Annual Meeting. Authorized the sponsorship of an *AAAA Award to the Army Aviation Soldier of the Year* by the *Hiller Aircraft Corporation*. Directed the Awards Committee to decide upon a suitable award and, as per the request of the sponsor, to inform the sponsor, through the President, of the nature and cost of the Award. Authorized the solicitation of nominations for all 1961 Awards by means of:

a) an open magazine solicitation for nominations by the general membership.
b) a written solicitation to each Chapter President for Chapter nominations.
c) a written solicitation to each Army Hqs Aviation Officer for Army Area nominations.
d) publicity and promotion through official channels as encouraged by the Director of Army Aviation.

THE ARMY AVIATION CENTER CHAPTER'S RECENT DINNER AND MEETING INCLUDED A GROUP SING WHICH ENDED ON A HIGH NOTE PROVIDED BY (L-R) COL. ALLEN M. BURDETT, JR., COL. JACK L. MARINELLI, AND LT. COL. JOHN W. OSWALT. THE DINNER, HELD AT THE OFFICERS CLUB, WAS ATTENDED BY OVER 400 PERSONS AND WAS THE LARGEST AAAA GATHERING HELD AT USAAVNS. COL. BURDETT SERVES AS CHAPTER PRESIDENT, COL. MRINELLI AS REGIONALPRESIDENT REPRESENTS THE OVERALL ALABAMA MEMBERSHIP ON THE NATIONAL BOARD. (US ARMY PHOTO).

AAAA NEWS

MEDALS: Reviewed the report of the Executive Secretary with regard to the design of appropriate Association medals. Directed the Executive Secretary to forward the design proposals to the Chairman of the National Awards Committee upon receipt.

ANNUAL MEETING: Accepted the report of the Board liaison representative (*Col AJ Rankin*) on the planning initiated by the Annual Meeting Committee.

INDUSTRY AFFAIRS: Initiated planning to increase Industry Membership participation in the Association by means of direct correspondence with firms having an interest in Army aviation. Approved of the appointment of *Col RR Williams* and *CD Stephenson* to assist the National Office in this Program. Directed the Executive Secretary to publicize the current list of Industry Members in the next immediate issue of the magazine.

PLACEMENT SERVICE: Accepted the proposal of the XVP (*Col OG Goodhand*) to place current stress on the Ass'n *Placement Service* in the light of increased retirements, beginning in 1962. Authorized a direct Presidential letter to all current Industry Members emphasizing the increased availability of highly-trained, experienced personnel, as of 1962. Directed the Executive Secretary to stimulate interest among non-participating firms by means of a program outline in a subsequent issue of the magazine.

FLIGHT PAY PROTECTION PLAN: Authorized a transfer of underwriters, effective April 1, 1961, and the cancellation of the present AAAA Master Contract with the *Credit Life Insurance Company*, the present underwriters, as of the same date. Authorized *Ladd Agency*, Westport, Conn., to enter into a contract with the *Insurance City Life Company*, Hartford, Conn., in lieu of a contract between the Association and the underwriters, said step to:

a) offer the flight pay coverage with the full endorsement of the AAAA, and

b) remove all fiscal, recording, and legal responsibilities from the Association while limiting such coverage to AAAA members in good standing.

Directed the Executive Secretary to inform the membership of this change by direct letter to each Chapter president and by direct letter to each insured member to be included in the member's FPPP renewal correspondence.

Authorized the appointment of Regional Insurance Officers to assist in the validation of claims, such Regional officers to be appointed by the Regional Presidents in active Regions and to be appointed by the President of AAAA in those Regional areas (defined in the By-Laws) not represented by an active Regional activity. Instructed the National Office that each claimant is to be informed of the name and address of his Regional Insurance Officer in his initial claims correspondence, and that each Regional Insurance Officer is to be informed of the name and address of each claimant within his area. Instructed the National Office that upon receipt of all claims documentation as submitted by the claimant, the National Office is to expedite this material to the appropriate Regional Insurance Officer for review and validation.

Approved, subject to the approval of the legal department of the underwriters as to phraseology, the addition of the following exclusions and conditions:

a) Mental and nervous disorders; dizzy spells, loss of consciousness, and anxiety neuroses when not accompanied by any other organic symptoms.

b) Limitation of the coverage to rated officers, warrant officers, and enlisted personnel in the active Army and its Reserve Components.

c) Cessation of indemnity payments as of the date that the insured elects to receive retirement pay under a mandatory career retirement from the service (20-30 year administrative career retirement).

Took under advisement the report of the Executive Secretary that such a transfer would, under existing application procedure:

a) require new application forms and the issuance of new policies to all current and new insureds,

b) apply to all new applications for coverage dated during March, viz, the application condition that coverage is effective on the 1st day of the month after the postmark month of application, and would

c) not apply to all renewal policies expiring in March, 1961.

Directed the National Office to submit copies

NEW MEMBERS

COLONELS

Theodore L. Poole, Jr.

LT COLONELS

William F. Enos
William C. Boehm
Raymond L. Orton
Robert H. Calahan
Frank W. Gorham
Clarence E. Jeffress

MAJORS

John F. Roberts
Oscar W. Traber, Jr.
Paul E. Thornton
James M. Kelly, Ret.
Harry J. Dodd
Paul R. Kaster, Jr.
Charles A. Slott
N. I. Anderson
R. M. Shoemaker

CAPTAINS

Eugene N. Jones
Roderick W. Magsam
William T. Kaser
Thomas M. Rustin
Thomas W. Coley
Robert L. Hunter
Richard D. Kavanaugh
Donald J. Haid
James Scudder
Richard J. Hurley
Harold R. Sherman
J. R. Smith
B. G. Williams
D. F. Scharf
F. S. Klein
Robert J. Hetrick

LIEUTENANTS

Stephen K. Chipman
Trent G. Farill
Gerald R. Hackett
Bobby G. Hanna
Thomas G. Hines
Harold L. Huff, Jr.
William E. Oakes
Charles W. Sloan
John W. White
Tary D. Wilkinson
John B. Clayton
Gene C. Mesch
Ronald C. Schutz
Wilford C. Isner
Gerald W. Dudley
Bruce H. Gibbons

of the new underwriter policy to *Col OG Goodhand* (XVP) and *Col RR Williams* (MAL) for review of phraseology employed in the new conditions.

ORGANIZATIONAL: Approved of the *Washington, D.C. Chapter* proposal that the term of office of Chapter officers be extended from one year to two years under a two-year staggered election system, the purpose of said system to provide for alternate year replacement of one half of the Chapter Boards.

Disapproved of the *Washington, D.C. Chapter* proposal that the Regional activity structure be eliminated, citing the beneficial Regional activities (Fly-Ins, get-togethers, etc.) where Regional organizations exist, and the provision of membership representation at the National Executive Board level through the seating of Regional presidents.

Disapproved of the *Washington, D.C. Chapter* proposal that the National Office by transferred to Washington, D.C., citing the fiscal difficulties involved, the administering of the major Washington, D.C. activity of the Ass'n—the Annual Meeting—without the necessity of a Washington office, and the past and present ability of all Ass'n members and potential members to secure AAAA assistance and information through the present office.

Approved of the proposal of the *Midwestern Region* to establish an Initiation Fee, to apply to all new memberships starting in the April 1, 1961-March 31, 1962 membership year, said Initiation fee to be $3.00 and to underwrite the provision of a distinctive lapel insignia and a decal to each new member. Directed the National Office to procure new application forms reflecting such a fee, to notify all Chapter activities that present application forms should be destroyed, and to secure sufficient lapel insignia and decals to administer the program. Directed the National Office to continue the existing offer of lapel insignia to old members by direct purchase, and to consider, in the event of tardy renewal, the applications of old members as new applications, if renewals are not received prior to March 31, 1962.

Approved of a complete review of the Association by-laws by the President and the Exe-

JOINING AAAA

David T. Stoddard
Donald R. Ancelin
Don C. Chunn, Jr.
Herbert H. Hertner
Freeman I Howard
Richard B. Stephens
Charles H. Miller
Willard E. Golding
Charles P. Niven
Robert C. Kaercher
Herbert R. Metoyer, Jr.
Neal R. Christensen
William P. Hurley, Jr.
Harold E. Bertrand
Raymond E. Murphrey

CWOS
Kenneth F. Anderson
Dale A. Crull
Rex C. Flohr
Jesse W. Leonard
George E. Valentine

SFCS
James B. Butler

SP-6S
Yuro Tomisato

PFCS
Richard R. Smith

FRIENDS
Mr. D. E. Busse
Mr. D. E. Brewer
Mr. Victor J. Schulte, Jr.
Miss Elsie L. Richter
Miss Sarita C. Rodgers
Mr. Larry C. Franzoi
Mr. Samuel DeStefano
Mr. George W. Harrison
Mr. Daniel Taber
Mr. Richard J. Baldwin
Mr. Leland Springer
Mr. Leonard E. Bartley
Mr. Basil L. Boatright
Mr. Norfleet W. Rives
Mr. Joseph A. Hartman
Mr. Wayne R. Smith
Mr. Harry D. Murphy
Mr. George A. Buckner
Mr. Earl Harmon
Mr. William A. Schultz
Mr. Rogers A. Fiedler
Mr. William T. Dunlap
Mr. Maurice R. Conway
Mr. Kenneth R. Lloyd
Mr. Louis Mirani
Mr. Warren R. Necker
Mr. John Kulie
Mr. Edwin D. Judd
Mr. Bert W. Thompson
Mr. George T. Weigel
Mr. Edward T. Hackett
Mr. Paul I. Black
Mr. Thomas L. Caffrey
Mr. Lyman E. Marsh
Mr. Paul W. Leible
Dolores C. McDaniel
Virginia C. Peters
Catherine E. Ockermann
Irene E. Willett
Loisjean B. Payne
Rita M. Hartz
Mary E. Kelso
Jane M. Ziemba
Mary I. James
Vera M. Bagby
Mary H. Gorman
Celeste Strieder
Emily A. Marinovic
Betty J. Beavers
Betty H. Young
Clodene C. Grant
Robert B. Short
Thomas E. Ness
Gustav F. Goetsch
Raymond B. Woodward
V. M. Bennett
C. B. Smith
Thomas E. Kavitski
Arthur B. Steinbecker
William J. Hassell
Daniel M. McEneany
Laurel G. Schroers
William A. Basinger
Edward J. Hollman
John W. George
Stephen M. Truex
Joseph C. Offutt
Joseph F. Thomas
Lloyd M. Bornstein
James B. Vaughn
Edson P. Burch
Carol E. Hopper
James M. Morton
Robert E. Head
Clarence H. Perisho
Willis H. Kunz
Earl T. Hyde, Jr.
J. Leslie Neuroth
James R. Gallagher
Ralph C. Cropp
Raymond P. January
Edwin L. Kackley
Millard J. Tomlin
John W. Sanders

cutive Secretary, to reflect such amendments as have been adopted since the organization of the Association and to reflect the deletion of those sections of the by-laws that are currently not implemented as written. Requested that the revised by-laws be presented, with appropriate membership petitioning, to the National Board for adoption at its April 14-15 meeting. (Note: During a 2-day visit to the National Office following the adjournment of the Board meeting, the President and the Executive Secretary completed the by-law review.)

FISCAL: The AAAA balance sheet, as at December 31, 1960, prepared from the books without audit, was approved by the NEB. (Condensation: Assets, $9,628.73, of which $8,503.36 represents cash deposited in the bank in the AAAA account; liabilities, zero; total General Fund, $9,628.33.) (Note: The annual audit of the Association books by the appointed firm of *Bergen & Willvonseder* is performed upon the conclusion of each fiscal operating year, ending March 31st. The next balance sheet will afford audited totals.)

MEMBERSHIP: The National Office placed at the Board's disposal a compilation of the overall Association membership, as at January 1, 1961, to reflect breakdowns of membership by category (member, honorary member, industry member) and by component (active Army, Reserve Component). (Condensed: the AAAA totals 5,682 members, of which 4,848 are military and 4,599 are active Army personnel.)

TIME AND PLACE: The Board established April 14-15 as the dates for its next meeting in Washington, D.C.

Arthur H. Kesten
Executive Secretary
AAAA

AAAA CALENDAR

FORT MEADE CHAPTER. MEMBERSHIP DINNER MEETING AND SOCIAL. INSTALLATION OF OFFICERS. CAVALIER ROOM, FORT MEADE OFFICERS MESS, MARCH 4, 1961.

AAAA INDUSTRY MEMBERS FEBRUARY, 1961

AERO COMMANDER, INC.
AIRCRAFT RADIO CORPORATION
AIR LOGISTICS COPORATION
BEECH AIRCRAFT CORPORATION
BELL HELICOPTER COMPANY
BENDIX RADIO DIVISION
CESSNA AIRPLANE COMPANY
CHANCE-VOUGHT, INC.
COLLINS RADIO COMPANY
CONTINENTAL MOTORS CORPORATION
DE HAVILLAND AIRCRAFT OF CANADA, LTD
DOUGLAS AIRCRAFT COMPANY, INC.
FAIRCHILD ENGINE AND AIRPLANE CO.
GENERAL DYNAMICS CORPORATION
GENERAL ELECTRIC COMPANY
GRUMMAN AIRCRAFT ENGINEERING CORP.
HAWTHORNE SCHOOL OF AERONAUTICS
HAYES AIRCRAFT CORPORATION
HILLER AIRCRAFT CORPORATION
HUGHES TOOL COMPANY-AIRCRAFT DIV.
INTL TELEPHONE AND TELEGRAPH CORP.
JEPPESEN AND COMPANY
KAMAN AIRCRAFT CORPORATION
LABORATORY FOR ELECTRONICS, INC.
LEAR, INC.
LOCKHEED AIRCRAFT CORPORATION
LYCOMING DIVISION, AVCO MFG. CORP.
THE MARTIN COMPANY
MCDONNELL AIRCRAFT CORPORATION
NORAIR, DIVISION, NORTHROP CORP.
NORTH AMERICAN AVIATION, INC.
PAGE AIRCRAFT AND MAINTENANCE, INC.
RADIOPLANE DIVISION, NORTHROP CORP.
REPUBLIC AVIATION CORPORATION
RYAN AERONAUTICAL CORPORATION
SOUTHERN AIRWAYS COMPANY
SPERRY GYROSCOPE COMPANY
UNITED AIRCRAFT CORPORATION
VERTOL DIVISION, BOEING AIRPLANE CO.
WICHITA DIVISION, BOEING AIRPLANE CO.

THE AAAA WELCOMES YOUR NOMINATIONS FOR NATIONAL

AAAA AWARDS

DEADLINE: MAY 1, 1961

DESCRIPTION

The JAMES H. McCLELLAN SAFETY AWARD is a annual award sponsored by the many friends of James H. McClellan, a former Army Aviator who was killed in a civilian aircraft accident in 1958. This Award will be presented under the auspices of the AAAA to a person who has made an outstanding individual contribution to Army aviation safety for the 1960 calendar year.

Because of the wishes of the donors, this Award will continue to be based on "an individual contribution to Army aviation safety, such as a broad technical achievement, an operating procedure, an aircraft or equipment modification with broad safety implications."

This Award is not intended to be given for competitions between units for safe flying, etc.

It is recognized by both the donors and the National Awards Committee that some safety achievement may result from the development, planning, and implementation activities undertaken by several individuals, or by several agencies. Every effort should be made —in documenting a nomination—to pin-point the single individual primarily responsble for such an improvement, since only one award will be given to one individual, in accordance with the original intent of the donors who have established this Award.

The HUGHES AWARD, sponsored by the *Hughes Tool Company—Aircraft Division*, is a unit award to be presented to the unit "for a 1960 outstanding contribution to or *innovation in the employment of Army aviation* OVER AND BEYOND THE NORMAL MISSION ASSIGNED TO THE UNIT."

The National Awards Committee will place considerable weight on those nominations that exemplify innovation and unit initiative.

Sponsored by the AAAA, the AWARD TO THE ARMY AVIATOR FOR 1960 will be presented to the Army Aviator who has made an outstanding contribution to U.S. Army Aviation during the 1960 calendar year. It has not been considered necessary to establish criteria for this Award, aside from the following eligibility requirements. The National Awards Committee, after reviewing all nominations received, may recommend that no award be made n a given calendar year if it appears that an outstanding contribution has not been made.

The AWARD TO THE ARMY AVIATION SOLDIER OF 1960, sponsored by the *Hiller Aircraft Corporation*, is a new award given to the enlisted man serving in an Army aviation assignment, who has made an outstanding contribution to Army aviation during the calendar year 1960.

Since this is a new award, an outline of the required documentation follows for your guidance:

Documentation should include the soldier's duty assignment in the unit; a description of the outstanding contribution or contributions he has made to Army aviation; his years of service; his number of years in the aviation program; his attendance at service schools; and his character, disciplinary, and proficiency ratings.

ELIGIBILITY

All individuals—military and civilian —are eligible as nominees for the JAMES H. McCLELLAN SAFETY AWARD. Candidates for the AWARD TO THE ARMY AVIATOR FOR 1960 and the HILLER AWARD TO THE ARMY AVIATION SOLDIER FOR 1960 must serve in the active U.S. Army or one of the Army Reserve Components.

Any organized aviation unit is eligible as a nominee for the HUGHES AWARD.

DOCUMENTATION

The Association welcomes nominations from all sources, to include individual members, AAAA Chapters, military units, Army areas, and industry and civilian persons. Nominations submitted for consideration should include the name and current address of the nominee, his unit, where applicable; a detailed description of his qualifications for the particular award and such other supportng data as is necessary; and the name (of the person or unit) making the nomination. Nominations for the *unit* award should also be documented by detailed, conclusive data that will serve to assist the Awards Committee in their decision.

Nominations and documentation should be typed, tabbed where necessary, and forwarded promptly to:

Colonel Robert M. Leich
Chairman, National Awards Committee
P.O. Box 869
Evansville, Indiana

SUSPENSE DATE

Nominations should be submitted so as to reach the Chairman on or before MAY 1ST, 1961.

PRESENTATION

The four Awards will be presented at the *AAAA Awards Luncheon* to be held during the *AAAA Annual Meeting* in Washington, D.C. on September 4-6, 1961. Every effort will be made to insure the personal attendance of the Awardees and unit representatives at the award ceremonies.

SIGNIFICANCE

The four Awards have broad significance to Army aviation in particular, and to the U.S. Army in general. Every effort should be made at local levels to publicize these Awards among persons directly concerned with Army aviation.

***TRIPHIBIOUS SUPPLY LINE*—sea, air and land. For the Army Transportation Corps, Sikorsky's S-60 *Skycrane* recently lifted a Conex container from the hold of a ship at sea; minutes later placed it in a truck ashore. The S-60 can carry five tons. The next *Skycrane*, the turbine-powered S-64, will lift up to ten tons. Future designs will carry up to 40 tons. Loads can be carried by cargo hook, or in pods for transporting complete units such as field hospitals, communications centers or personnel.**

UNITED AIRCRAFT CORPORATION

SIKORSKY AIRCRAFT DIVISION

STRATFORD, CONNECTICUT

Hiller

Haugerud

BRIEFS

■ **Howard E. Haugerud, a Natonal Vice President of AAAA, was recently appointed Deputy Under Secretary of the Army. The Minnesota ARNG aviator has been active in the Army Aviation Program since 1947.**

■ Fort Bragg's 82nd Airborne Division Provisional Aviation Battalion "headed for" and remained in the hills during their two-week mountain flying exercise. Four training groups from the Battalion's two flying companies rotated four-day training periods in western North Carolina's Blue Ridge Mountains.

■ **Stanley Hiller, Jr., President of the Hiller Aircraft Corporation, was elected 1961 Chairman of the Helicopter Council of AIS, succeeding Jack E. Leonard of the Cessna Aircraft Company.**

■ Installing special equipment to contend with anticipated 30-70 knot en route winds and sub-zero temperatures, four H-21 Shawnees from the 65th Trans Co (LH) at Fort Eustis left Virginia, on a 4,600-mile trip to augment the 80th Trans Co (LH) at Ft. Richardson, Alaska. The newly repainted red and white choppers were expected to make the flight in seven days.

■ **Increasing their STRAC capabilities, seventeen AAs of Ft. Devens' 2d Infantry Brigade Aviation Platoon received January checkouts in ski-equipped L-19s.**

ARMY AVIATION MAGAZINE
Westport, Connecticut