THE ARMY AND AIR MOBILITY

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This article is an adaptation of a speech presented in Palo Alto, California.

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BY DEFINITION, Army aviation is aviation organic to the arms and services of the Army. Immediately responsive to the demands of the Army commanders, it is employed to enhance the mobility, flexibility, and battle efficiency of ground combat forces.

The mission of Army aviation, then, is to augment the capability of the Army to conduct effective combat operations. It is as simple as that. To the Army unit commander the aircraft is just one of the many tools with which he fights his battle.

In many instances, the aircraft is contained within the organizational structure of the commander's own battle unit. The integration of aircraft in this fashion is apparent in the ROAD organization which assigns organic aircraft to the brigades, division artillery, and cavalry units of the new infantry, airborne, armor, and mechanized divisions.

Aviation is a vital part of our Army team, the whole of which is oriented to the Army combat mission. This differs from the Air Force since that service is naturally oriented to its flying mission. To date, our aviation in no way compares with the

support we are hopeful of obtaining from a sister service. However, a simple point of fact is that Army aviation should—and can—provide the support normally expected of any integral vehicle-weapons system. It is a part of the combat organization of the Army. In that light, I would like to quote former Secretary of the Army Elvis J. Stahr, jr., in an address he gave before the Los Angeles Chapter of the Association of the United States Army:

At the outset, I want to express the fact that the Army flying is not an end to itself, nor is it competitive with the aviation of any other service. Even as we move into greater and greater activity in the first few feet above the surface of the earth, our mission remains—prompt and sustained combat incident to operations on land. The term 'flying soldier,' which encompasses not only our aviators but also the commanders and troops who fly with them, indicates the framework in which Army aviation is growing. It is expressive of the philosophy of an army which must move through the air to an ever-increasing degree if it is to accomplish its mission.

Materiel Objectives

At present, the Army has a total of 13 different types of fixed and rotary-wing aircraft. Our new aircraft family is geared to replacing obsolete equipment now in the hands of troops. We are also trying to reduce the number of different types of aircraft. In this we have succeeded to the extent that when the new second generation machines replace the old we will end up with only seven different types.

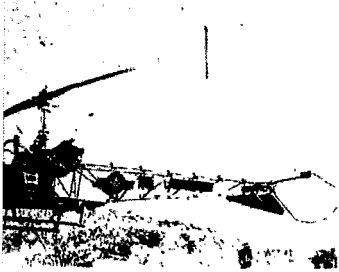
We will not achieve our objective this year—in fact, not for a few years. We have only one new aircraft coming into the Army inventory in 1962—the *HC-1 Chinook*. This is a three-ton, twin-turbine, tandem-rotor transport helicopter which carries 32 combat-loaded troops.

You can appreciate the problem better when I state that we really have a dual objective concerning our aviation. On the one hand, we must replace obsolete aircraft with modern aircraft, and, second, we must also step up our immediate procurement to overcome our over-all aircraft shortage.

Our current requirements, including the two new ROAD divisions, can be filled only by procuring an additional thousand plus aircraft in the near future. Each new division is authorized 103 aircraft—better than twice the total found in the present pentomic division.

Requirements for aircraft in the corps and field army are increasing also. A type field army will contain about 2,400 aircraft. Within the next five to seven years, we hope to achieve our objectives in hardware both quantitatively and qualitatively. These are: enough aerial vehicles to meet the Army's needs, and multipurpose aircraft which will reduce our types from 13 to seven.

We visualize considerable advantage in the use of a "standard" turbine powerplant for most of the aircraft in our new family. We all can see the advantage of using only one grade of fuel for all aircraft. The savings of time and labor, as well as bookkeeping costs, will be significant as will the savings in repair parts and tools stockage. Mechanics trained on this standard powerplant will provide us uniform maintenance criteria for the first time, generally applicable to all aircraft.



US Army

New Light Helicopter

The *L-19 Bird Dog* light observation plane, the *H-13 Sioux* helicopter (above), and the *H-23 Raven* helicopter (below) will be replaced in the Army inventory by a single light observation helicopter (LOH).

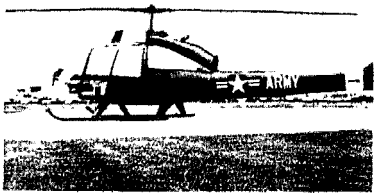
Three companies have been awarded contracts of approximately six million dollars each for the production of test quantities of their proposed designs for the new standard LOH. These companies were selected from 12 participants in a design competition last year. The contracts call for delivery of five prototypes from each manufacturer at the rate of one per month, starting in October 1963.

US Army designations for the test planes are *HO-4*, *HO-5*, and *HO-6*. The test models will be subjected to a six-month evaluation program and a single model may be selected for quantity production to meet the Army's requirements. The new aircraft is to be a four-place, lightweight, single-rotor helicopter which will be reliable, inexpensive, and easy to maintain. It will be readily air transportable in current transport aircraft.

Army News Service

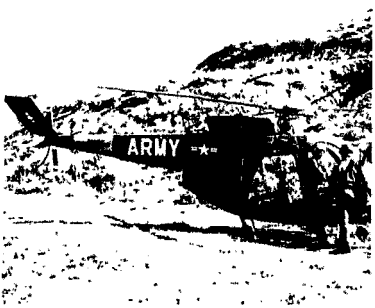
Bell Helicopter Company

Bell *D-250 (HO-4)*



Hiller Aircraft Company

Hiller *1100 (HO-5)*



Hughes Tool Company

Hughes *369 (HO-6)*

Our objectives, when reached, will provide a ratio of about eight rotary-wing aircraft to one fixed-wing airplane in our combat divisions. We hope, in Fiscal Year 1963, for a substantial increase in Army aircraft procurement and a significant step toward attainment of our objectives. It would be somewhat "Pollyannaish," however, to consider that we will ever attain the optimum of having no obsolete aircraft in the inventory. This is due to our continuing efforts in research and development and the nagging fact that new discoveries or breakthroughs in techniques as well as equipment generate obsolescence in current aircraft.

Personnel Objectives

Personnel shortages are in line with our aircraft shortage. We are short about 1,200 pilots. This is due, in part, to the increase in our programed aircraft inventory. We feel that increased inputs into our training program will offset this shortage. We need maintenance people for the same reasons.

Our aviation program is unique in that every commissioned officer pilot must also be branch qualified. The officer pilot competes with his contemporaries. He attends his branch schools and is periodically rotated to ground duty with his branch. During this period of troop duty, he maintains his pilot proficiency.

I am convinced that an aviator is better equipped and qualified to provide aviation support when he understands what is going on in the branch of which he is a member. His effectiveness is increased and worth the one year in every five he devotes to this duty. This aggravates existent aviator shortages but is, in my opinion, an investment which pays great dividends.

I repeat that we are oriented entirely to the mission of the Army. We have no room for a commissioned officer who is only a "flyer." He must be truly a "flying soldier," compatible with and understanding the environment in which he is operating. He and his aerial vehicle will live in this environment.

We are selective in choosing officers for training—a practice we intend to continue for two cogent reasons: We want the best obtainable, and we really have no alternative. Army aviation today demands top-notch officers, both physically and mentally.

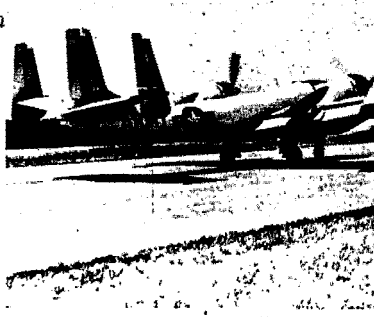
Officers must possess a desire for this type of flying. The money alone is not the incentive. Pilots who think so soon discover that the flight pay is just not enough for the nap of the earth (tree and brush crawling at zero altitude) operations they are called upon to perform. There is no compromise between the officer being a good soldier and a good flyer. He must excel at both to wear the name "flying soldier."

Armament for Aircraft

One of the most important questions today is: Should we arm our aircraft? Yes, we should. Our aircraft operate in the ground combat environment. They should have a capability of defense against enemy ground fires and enemy aircraft fires, as do other vehicles of the ground combat units. Even our 2½-ton truck has a ring-mounted machinegun. As part of this combat team, the aircraft should possess the capability of providing fire support to the troops they support in vertical assault operations. Armament is as essential to this ve-

Reconnaissance Aircraft

The *AO-1 Mohawk* will replace the *RL-23* and *RL-26* reconnaissance aircraft. The *AO-1* (below) is equipped with side-looking radar gear. The side view (right) shows the aircraft without this equipment. Current models are powered by two 1,100 shaft horsepower turbine engines.



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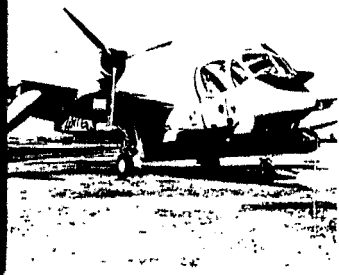

US Army

Tactical Transport

The *HU-1 Iroquois* (below) will replace the *L-20* fixed-wing aircraft and the *H-19* helicopter in their tactical transport and utility aircraft roles and will partially replace the *H-34* and *H-21* helicopters as they are phased out. This version can carry seven troops or 2,000 pounds of internal cargo. The *HU-1B* is powered by a 950-horsepower gas turbine engine.

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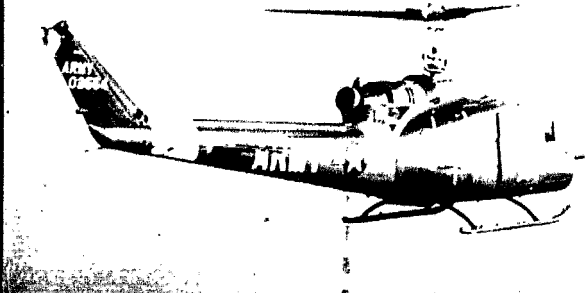
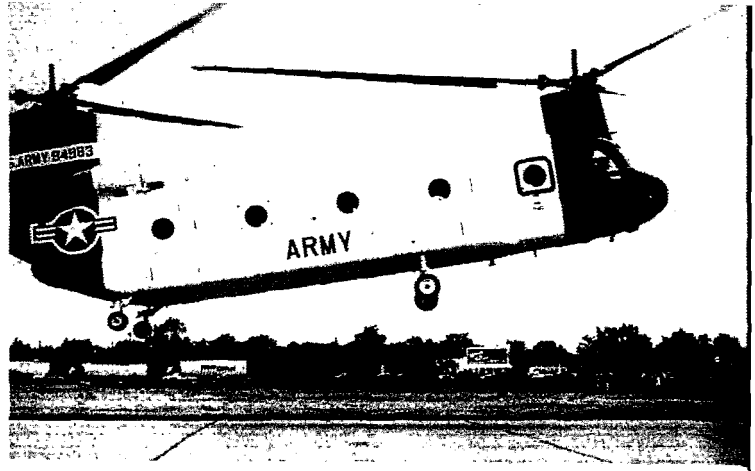




Army News Service

Transport Aircraft

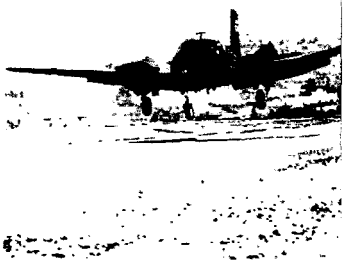
The *HC-1B Chinook* (above) will replace the *H-37* helicopter and will partially replace the *H-34* and *H-21* helicopters in the transport helicopter role. The new army transport airplane will be the *Caribou* (left). It will replace the present *U-1A Otter.*

Army News Service

Army News Service

Utility Airplane

The *L-23F Seminole* (right), a utility transport airplane, will replace the present *L-23's* and *L-26's* in this role.



hicle as it is to the soldier and any of our other combat vehicles.

It is just as unreasonable to consider employing the unarmed aircraft in combat operations as it is to take away the soldier's weapons and send him on an attack mission. I believe this is something which cannot be denied: Our aircraft will be armed.

The Commanding General, United States Continental Army Command, has been directed to study various armament systems with which our needs can be satisfied. This includes rotary-wing aircraft and research and development experimentation on certain of our fixed-wing aircraft. Our past experiments with rotary-wing aircraft armaments at Fort Rucker, Alabama, have proved the feasibility of arming Army aircraft. It is now a question of developing the best armament systems to do the job.

Current Roles

Today in southeast Asia we have both helicopter and fixed-wing company-size units. At present, the helicopters carry some defensive armament. I recently completed a tour of the Vietnam area and witnessed firsthand the operations being conducted with a great deal of effectiveness against the Communists.

Armament systems for our aircraft are coming. We have some in production. Our helicopter companies in Vietnam use light armament in the *H-21 Shawnee* to provide a degree of self-defense as Vietnamese soldiers are carried into combat.

We are also interested in supporting our special warfare units with aviation. In this field, a special warfare aviation detachment is stationed at Fort Bragg, North Carolina, and assigned to the US Army Special Warfare Center there. The special warfare aviation detachment's primary mission is developing and testing doctrine for employment of operational cellular teams for counterinsurgency and unconventional warfare and supporting psychological warfare operations.

Army aviation's role as a member of the Army combat team is growing in importance. Our flying equipment (and personnel) must keep pace with the organizational and doctrinal changes of our Army. Right now we are short both pilots and aircraft. The impact of these shortages is felt in varying degrees by the Army, worldwide. The deficit must be corrected as soon as possible.

To the Army unit commander I urge that he use his available aviation every possible day as a routine combat tool and not relegate it to a special 'limbo' reserved for unorthodox maneuver. He must realize the vital role of Army aviation in fire and movement on the battlefield of today and tomorrow.

General Clyde D. Eddleman