

# ARMY AVIATION

JULY 31 ★ 1966

When this Mohawk eats the dust  
it doesn't bite the dust.

SEE BACK COVER



LYCOMING DIVISION  
STRAFORD, CONN.

# Chinook

# PROGRESS



## ARMY AVIATION — THE BOEING COMPANY — PARTNERS IN PROGRESS

On the occasion of The Boeing Company's 50th Birthday... let's look back. In 1920, ten Army-designed GA-1 tri-wing, twin engine aircraft became Boeing's first contribution to Army Aviation. Many have followed... Remember the EA, GA-1, PW-9, DH-4, XCO-7, XP-4, XP-8, AT-3, XP-7, XP-9, P-12, XP-15, Y1B-9, YB-9, P12C, P12D, Y1B-9A, P-26, P-12F, YP-29, XB-15, B-17, B-29, B-50, C-97, L-15.

And now, in Vietnam, the Boeing-built CH-47A Chinook is carrying on this combat proven partnership.



PW-9C (1927)



B-17 (1935-1945)



## **BOEING Helicopters**

VERTOL DIVISION / MORTON, PENNSYLVANIA, U.S.A.

# SUMMARY

August, 1966



# SPEAKING OUT

## WHY NOT A COMBAT AVIATION BADGE?

Recognizing that in Army aviation's changing role now and in the future most wearers of the aviation badge will not be afforded the opportunity to perform ground duty in combat with their respective branches, some thought should be given to the adoption of a *Combat Aviation Badge*.

The aviation badge presently awarded to and worn by Army aviation personnel does not indicate whether the wearer has performed aviation duty in combat, the *only* combat duty a preponderance of our present-day Army Aviators will perform. This badge is awarded after an individual has attained a particular skill in the aviation field.

### Morale, esprit, service

There is no question but that an award recognizing combat aviation duty in the aviation field would serve as an inducement to better morale, esprit de corps, and a willingness to perform aviation duty in combat.

Such an award should be reflected on the "wings" worn by the individual and

could be similar in design to the *Combat Infantryman's Badge* now utilized.

Under such a proposal, consideration should be given to the authorization of the following badges:

*Combat Master Army Aviator Badge, Combat Senior Army Aviator Badge, Combat Army Aviator Badge, Combat Senior Flight Surgeon Badge, Combat Flight Surgeon Badge, Combat Army Aviator Medical Officer Badge, Combat Master Aircraft Crewman Badge, Combat Senior Aircraft Crewman Badge, and Combat Aircraft Crewman Badge.*

### Proposed eligibility

Basic eligibility criteria should not limit the award of the badge for Vietnam duty alone. Eligible would be any individual on flying status as an Army Aviator, Army aviation medical officer, crew member in the case of crew chiefs and flight engineers or as a noncrew member in the case of observers, medical airmen, gunners, aircraft maintenance supervisors, or technical inspectors, who subsequent to 6 December 1941 satisfactorily performed combat duty

(Continued on Page 26)

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**"... we have a tremendous obligation not only to ourselves and our families but also to the personnel whom we fly... to keep ourselves in the best possible shape physically."**

# YOUR OBLIGATION

**By**  
**By Brigadier General**  
**ROBERT R. WILLIAMS**  
**Director of Army Aviation,**  
**OACSFOR, D/A**

**I**N one of the past director's letters it was mentioned that Department of the Army was staffing a regulation which would establish a central examining facility to examine aviators who, through incapacitation requiring hospitalization, had been medically suspended.

The concept was to permit an acromedical consultation and in-flight evaluation by a flight surgeon to determine the degree of impediment resulting from incapacitation. Such a policy was announced in AR 600-108, dated 31 May 1966, and I am happy to report that during the first month after publication a total of 20 aviators had been returned to flight status.

Ten of these were returned to full flight status; seven were returned to flight status with waiver; three were returned with restrictions imposed on flight operations.

I think these actions on the part of the Surgeon General, DCSPER and OPO represent a distinct step forward in our modernization of medical regulations. It not only permits the retention and full utilization of highly skilled personnel, many whose incapacitation resulted from wounds received in Vietnam, but also in these days of aviator shortages, will con-



tribute toward helping to solve some of our immediate personnel problems.

While on the subject of physical qualification, I would like to bring to light one adverse situation which recently came to my attention. As aviators we have a tremendous obligation not only to ourselves and our families but also to the personnel whom we fly. It is essential that we keep ourselves in the best possible shape physically.

Recently, I discovered that in some instances, aviators were allowing as much as two years time between physicals. Much can happen in such a long period to lessen our physical capabilities. Our regulations require a physical annually and while circumstances may require this to be extended for an extra month or so, it doesn't seem logical to me by any stretch of the imagination that a twelve month delay can be attributed to circumstances.

I encourage unit commanders, flight surgeons, and aviators alike to *insist on* physical examinations when they are due. It is the only way that we can assure ourselves that we are in fact medically fit to shoulder this great responsibility.

#### Accident Rate Down

I'm happy to report that our major accident rate has shown a substantial decrease during the first three quarters of FY 1966. *Excluding* Vietnam operations,

the world-wide Army major accident rate was 14.7 for this period. This is a decrease of 4.3 accidents per 100,000 flying hours compared with the FY 1965 major accident rate of 19.0. This encouraging trend is prevalent in most commands.

I believe that the increased emphasis on aviation safety in our Vietnam operations will also result in a decreased accident rate despite their totally different environment. The reduced rate shows what can be accomplished through concerted prevention action.

I want to encourage continuing safety surveys of equipment, personnel, and facilities of all aviation activities, plus follow-up action to insure that potential accident cause factors are corrected. I am convinced this is the most effective prevention action we can take to insure a further reduction in the FY 1967 rate.

#### Awards

I am also pleased to see the trend in awarding ground type combat decorations to aviation personnel. Recently, we

Fifteen test pilots have been checked out in the Ryan-built U.S. Army XV-5A research aircraft (shown below) since the start of the Phase II test program in January 1965. The program is scheduled to continue through September 1966.



have had a considerable number of *Distinguished Service Crosses*, *Silver Stars* and *Bronze Stars w/“V”* being presented to aviation personnel. This is a healthy and long overdue action.

Since our birds are intimately involved as a part of the ground action, it seems only logical that many of our previous *DFC's* and *Air Medals* could and should have been written up as ground type awards. I recognize that this situation is applicable only to Vietnam; however, since the bulk of our operational aviation units are in that area, I felt that I should comment on this point.

### Aviator Promotion Selection

Two recent promotion board results again confirm the fact that, as a group, aviators are doing as well as any other groups. Since I have heard considerable apprehension from the younger officers concerning the long term career impacts of suspension of branch career courses and ground duty tours, I feel it is important that you see the results of these latest boards.

Accordingly, I asked OPO to provide a cursory analysis of the results of the boards. The results of their analysis appear in the opposite page tables:

These figures should be encouraging to those who are anticipating consideration by future boards. All persons considered will not be selected — this is the reason we have selection boards. In most cases there are pretty valid reasons why an officer (aviator or non-aviator) is not considered best qualified. The results of these two boards indicate the trend of past boards, i.e., the aviator is competing favorably with his contemporaries. More than this we cannot expect.

### Accelerated WO Promotions

Much is to be desired in our *Warrant Officer Career Programs*. The *Haines Board* in its study of the Army School System recognized this. At the present time DA is conducting an extensive study on this matter and it is expected that some good constructive recommendations

### TENTH ANNIVERSARY

The U.S. Army Primary Helicopter School will observe its Tenth Anniversary by sponsoring a National Aviation Press Day in conjunction with anniversary activities held on Saturday, September 17, 1966.

The USAPHC, which has graduated over 11,000 students since its activation in 1956, has a current in-resident student population of approximately 2,000.

Designated as the U.S. Army Primary Helicopter Center in March of this year, the activity is named after Brig. Gen. Jacob F. Wolters, Cavalry, Texas National Guard, being first activated as an infantry replacement center in 1951.

will be coming forward from this study.

In the meantime, for those who do not already know of it, a major improvement in the *Warrant Officer Career Program* for FY 67 was made in mid-June by the Department of the Army with the lowering of time-in-grade for promotion to W-3 and W-4. Early in July, a selection board was scheduled to convene to consider CWO W-3 and CWO W-2 for promotion to temporary grade of CWO W-4 and CWO W-3 AUS. The zones of consideration are:

- To CWO W-4: all CWO W-3 serving on active duty with dates of rank 30 June 1963 or earlier.

- To CWO W-3: all CWO W-2 serving on active duty with dates of rank 29 February 1964 or earlier.

The present promotion lists to CWO W-4 and CWO W-3 are expected to be exhausted in November and September 1966 respectively. It is expected that approximately 1,325 W-2's will be promoted to W-3 and 675 W-3's will be promoted to W-4 from the July 1966 selection boards results. Promotion criteria will remain on the *best qualified* basis.

This is a significant increase in promotions when compared to 636 promotions to W-3 and 235 promotions to W-4 for FY 66 and should bring warrant officer promotions more closely into line with commissioned officer promotion policy.

<b>Promotion from Captain to Major</b> (DA Circular 623-13)			
<b>Category</b>	<b>Considered</b>	<b>Selected</b>	<b>% Selected</b>
NON-AVIATORS	6,907	4,775	69.1
AVIATORS	1,074	743	69.2
ARMOR	145	104	72.0
ARTY	259	171	66.0
INF	292	208	71.2
CE	66	45	68.2
SIG C	88	54	61.4
TC	203	142	70.0
MSC	21	19	90.5
<b>Previously Considered:</b>			
NON-AVIATORS	1,896	865	45.6
AVIATORS	187	50	26.7
<b>Considered First Time:</b>			
NON-AVIATORS	5,011	3,910	78.0
AVIATORS	887	693	78.1
<b>Promotion from Major to Lt. Colonel</b> (DA Circular 624-14)			
<b>Category</b>	<b>Considered</b>	<b>Selected</b>	<b>% Selected</b>
NON-AVIATORS	3,812	2,840	74.5
AVIATORS	416	316	76.0
ARMOR	34	29	85.3
ARTY	106	83	78.3
INF	115	88	76.5
CE	32	22	68.8
SIG C	25	18	72.0
TC	93	66	71.0
MSC	11	10	90.9
<b>Previously Considered</b>			
NON-AVIATORS	597	148	24.8
AVIATORS	24	7	29.1
<b>Considered First Time:</b>			
NON-AVIATORS	3,215	2,692	83.7
AVIATORS	392	309	78.8

Time-in-grade for promotion to W-2 will remain at 18 months in grade.

### **Personalities**

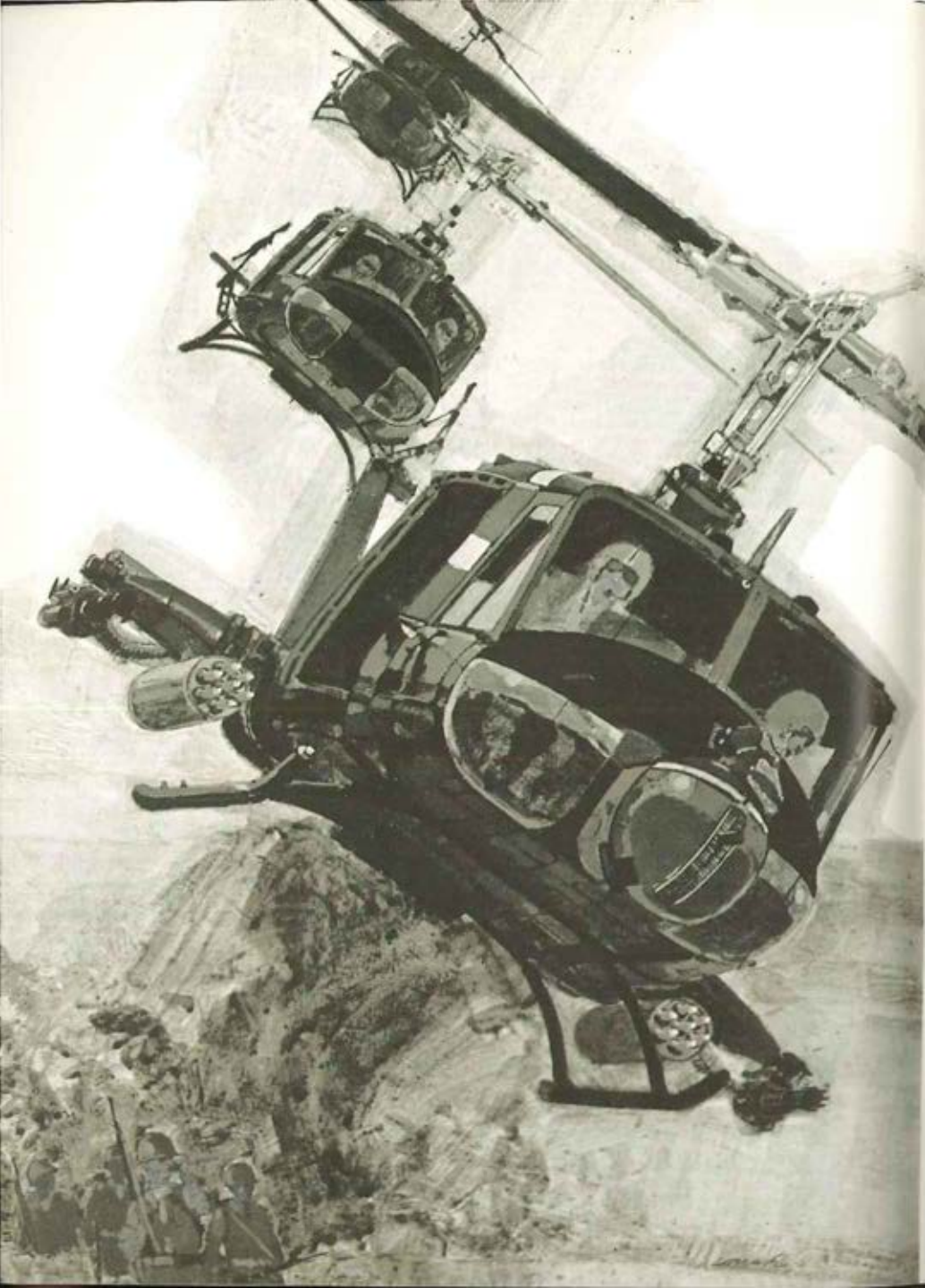
As a general rule I intend to abstain from reducing these letters to recaps of changes in aviator assignments, promotions, etc.; however, I feel that a recently announced change is of such importance as to bring it to your attention.

As most of you know, *Major General Harry Kinnard* is being assigned as the Deputy Assistant Chief of Staff for Force Development. Since the Army Aviation Directorate is a subordinate element of ACSFOR, he will in effect be intimately

involved in all future Army aviation actions.

I can think of no one who has more experience and expertise to assume this highly important position. His two years commanding the Air Assault Division, coupled with his one year commanding the 1st Air Cavalry Division in its successful exploits in Vietnam, provides him a rare qualification.

I welcome *General Kinnard* to ACSFOR and trust that the tempo of our Army aviation activities here, although quite different from his past three years, will nevertheless be stimulating and gratifying.



# "Above and Beyond..."

*Fighting Men*

*Flying Men*

*Medical Men*

*Maintenance Men*

*Heroic men giving their best ...*

*Fighting the battle for freedom in Vietnam ...*

*Living again the tradition that "Wars may be fought  
with weapons, but are won by men" ...*

*Saving more than 99% of their wounded ...*

*Keeping equipment operating "round the clock" ...*

*Developing new tactics for a new kind of war ...*

**BELL SALUTES THESE MEN!**



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# First Aerial Gunnery Competitions

ON June 30th the 10th Aviation Group held the final competition event of its *Combat Aerial Gunnery Training Tests* at Fort Benning, Georgia.

These tests were conceived by *Col. J. Elmore Swenson*, Commanding Officer of the 10th Aviation Group; sponsored by the Army Aviation Association of America (AAAA); and conducted by the 44th Aviation Battalion (Provisional), a unit of the 10th Aviation Group. The individual trophies presented to the winning crews were provided by the AAAA.

The tests are a derivative of the armed helicopter's emergence into prominence and "Second Generation" of Army aviation personnel who have flown or will fly in Vietnam. They were conceived and developed to measure the combat proficiency of armed helicopter crew members prior to their deployment to Vietnam, and, with keen competition, have proven to be an important factor in maintaining a high degree of crew and unit combat readiness.

## Much needed stimulus

The esprit and dedication attendant to the art of armed helicopter employment have provided a much needed stimulus in motivating the "new crop of Army Aviators, crew chiefs, and maintenance personnel. Therefore, the need to establish an annual competitive "Gunnery Shoot" for the purpose of sustaining the lineage and aggressive, competitive spirit of the younger generation was recognized.

The tests, devised by the 10th Aviation Groups are envisioned as the basis (or test vehicle) for an *All-Army Annual Aerial Gunnery Crew Championship* to be sponsored by AAAA.

Results of the first "shoot" were most encouraging. The tests conducted at Fort



Top to bottom: Maj. George F. Powers briefs the attendees on the Aerial Gunnery range and targets. Right: BG E. P. Smith (guest observer); MG Robert H. York, CG of The Infantry Center; and Col. J. Elmore Swenson, 10th Aviation Group CO, observing the aerial firing runs. Left: General York presents an individual trophy to CW2 Arthur F. Phillips. Right: General York and Col. Swenson during the 10th Aviation Group's "Pass in Review." Bottom right: General York, Col. Swenson (partially hidden), and LTC J. Y. Hammack, 10th Aviation Gp Executive Officer (vehicle front), troop the line on "Organization Day." Bottom left: AAAA members and their guests enjoy the "Steamboat Sandwich" informal held after "the shoot." (U.S. Army photos)



Benning were limited to the *M-3 Rocket System*, the *M-5 Cannon System* and the *M-16 MG/Rocket System* firing the rockets only. Expansion of the competition to include all of the aerial weapons systems in the Army inventory is envisioned in the future.

### Target Guidelines

The target used for the tests was an armored vehicle hull set in the center of concentric circles of 20, 40 and 60 meters in diameter. This was the only target used for the M-16 and M-3 systems, with rounds striking in the target area being scored at 100, 50 and 10 points respectively.

The helicopters were flown in a straight course at an altitude left to the pilot's discretion. The start-fire line was placed at 1,500 meters with the crew being required to fire three of seven pair of rockets prior to crossing the 1,000 meter line and the remaining four pair prior to crossing the 500 meter line. The crews were allowed six minutes to complete their firing making as many closed-circuit passes as desired within this time frame.

The *M-5 Cannon* crews were allowed four minutes to fire 50 rounds, engaging each of three targets as described above with bonus points given if all three targets were hit.

The final matches were witnessed by members of the Fort Benning Chapter of AAAA and their wives with the winners officially announced at a business-social meeting of the Chapter immediately following the "shoot."

Trophies were presented to the winning

**WINNING CREWS** — Left to right, CPT John L. Hill, Jr. (M3), CWO Everett D. Minor (M3), COL J. Elmore Swenson, MG Robert H. York, CWO Arthur F. Phillips (M5 & M16), CPT John A. Duff (M5 & M16), SP5 John Reagan (M5), SP5 Raymond F. O'Neill (M16), and SP4 William L. Haythorne (M3).

(U.S. Army photo)

crews by *Maj. Gen. Robert H. York*, Commanding General of the Infantry Center, at a *10th Aviation Group First Anniversary Review* held the following morning. The recipients were *Capt. John L. Hill*, *CW2 Everette D. Minor*, and *Sp5 John Reagan*, winners of the M-3 event; *CW2 Arthur F. Phillips*, *Capt. John Duff*, and *Sp5 Raymond F. O'Neil*, winners of the M-16 event; and again *CW2 Phillips* and *Capt. Duff* with *Sp4 William L. Haythorne*, winners of the M-5 event.

The gunnery events tested represent only a small part of the actual *Combat Aerial Gunnery Training Tests* and can be likened to a newborn baby. As with a baby, a great deal of care, attention, and nourishment will be required in order that this concept may grow into an annual national event.

We of the 10th Aviation Group sincerely hope that all who read this article will join with us in becoming the foster parents of this "baby" so that its chances of success will be enhanced. We invite your comments and suggestions for improving the tests and your suggestions for a name for the "baby". Please address them to Commanding Officer, 10th Aviation Group, Fort Benning, Georgia 31905. 15



V is for

**T**HE "Key-East" agreement, to differentiate between it and its predecessor signed at Key West\*, has a marked degree of interpretive content. That's a fog-bound way of saying that it leaves each Service a great deal of maneuver room.

That's good.

Military men have, and want, no options, alternatives or fall-back positions when the time comes to implement a de-

*\*Memorandum of Understanding between the USAF and U.S. Army, dated 2 October 1951, eliminating the aircraft-weight limitation on Army aircraft, previously imposed, and authorizing the use of organic Army aircraft by the Army "as an integral part of its components for the purpose of expediting and improving ground combat and logistical procedures within the Combat Zone." The detailed functions, under the exclusive control of the ground force commander, which were to be performed by organic Army aircraft, were spelled out in this Magna Carta of Army aviation.*

16

cision. The time for argument is past, and the *Caribou* is gone. Long live the *Caribou* in other hands! Colonel Delbert L. Bristol, considered by many to be the first casualty, and certainly the most open in his praise of the *Caribou* as an Army workhorse, did not and does not protest against the decision. He is much too good a soldier for that. His strikeout, like that of earlier and more highly publicized individuals, is due to faulty timing and not to an error in direction. He will continue to serve, and he will remember.

### Let's review the bidding . . .

A little history is in order. The concept which was instrumental in the purchase and use of the CV-2 was expressed by a developmental objective which asked for a V/STOL medium tactical transport capable of carrying troops, beans and bullets throughout the combat zone. Despite the more than fifty successful V/STOL test beds, none have ever been turned over to the Army for operational testing or use and none have met the needs expressed by the developmental ob-





by  
**S. G. NILWAR**

# VTOIL

jective. Consequently, the V/STOL requirement was filled by two machines; the CV-2 as the STOL and the CH-47 as the VTOL.

As long ago as the joint *Swift Strike* exercises, the Army requirement for a single machine having dual capabilities was understood by all concerned. More specifically, it was understood by the Air Force and USSTRICOM representatives present at the exercises that the concept was being forcibly restricted by reality. The concept was never an issue; the issue was simply the hardware being used. The *Caribou* as one-half of the V/STOL tactical transport concept was not attacked; the CV-2 as a piece of machinery with all capabilities greater than those of the obsolescent C-123, and with short-field capabilities greater than those of the rough-road C-130 — this machine had to go.

At the conclusion of *Swift Strike III*, and in the unrecorded quiet of objective discussion, the capabilities of the *Caribou* were happily related and an unannounced decision reached by all concerned.

(If the Air Force were immediately assigned the responsibility for the total intra-theater delivery of military resupply, it would use the C-130, the CV-2, and the CH-47.)

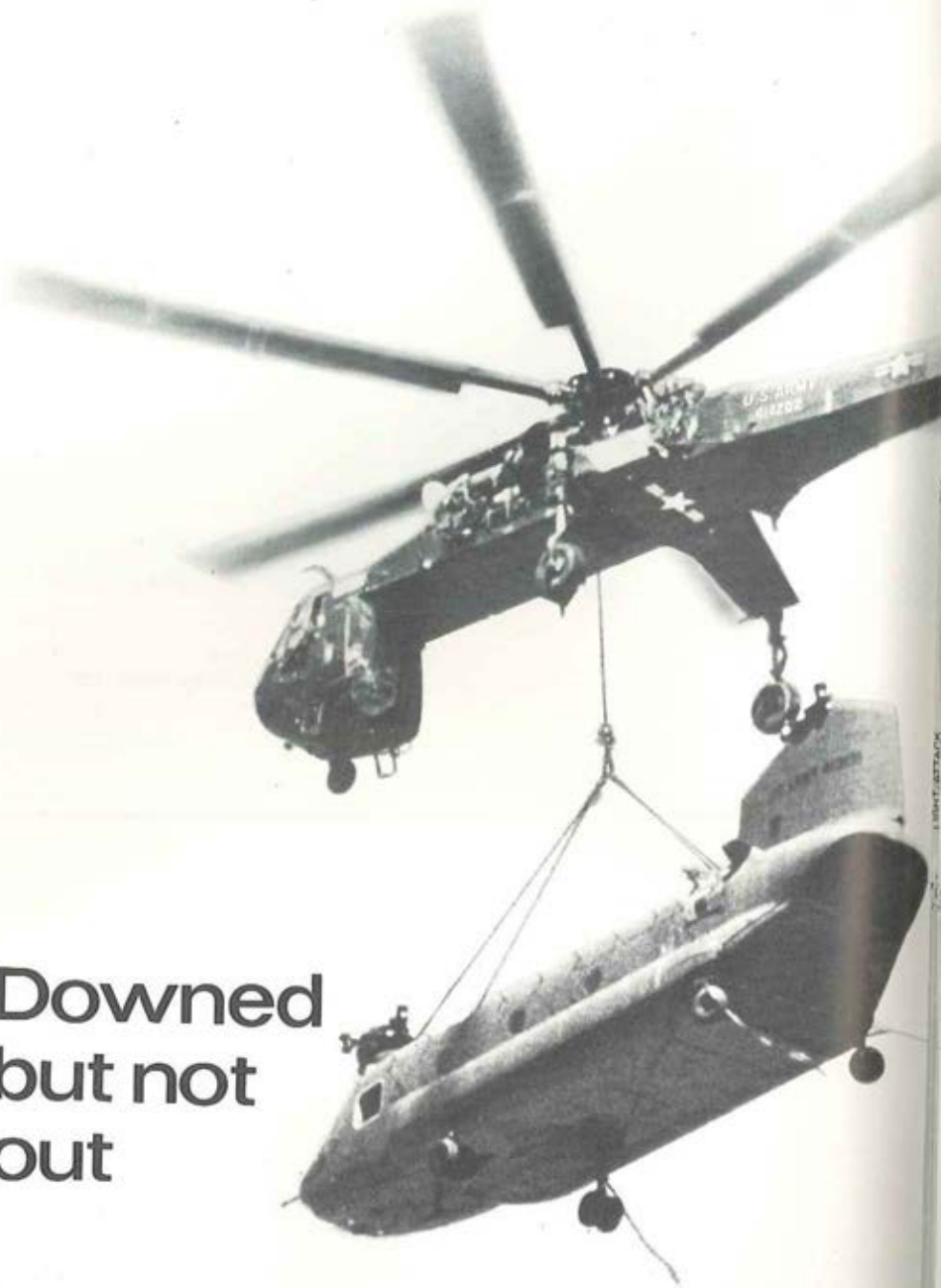
## Intra-theater resupply

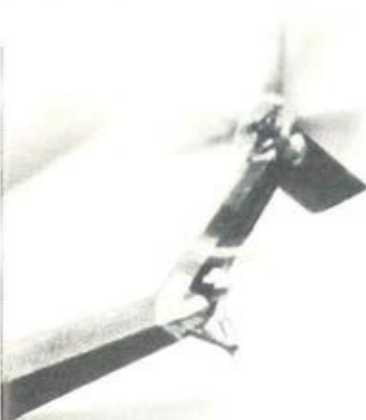
Does the transfer of the CV-2 and its successor, the CV-7, imply that the Air Force now has full responsibility for the intra-theater delivery of resupply? On the face of it, this is a foolish question.

The agreement is explicit in its statement that the Army will continue to develop helicopters for the supply and resupply of Army Forces and certain Air Force elements. Obviously, then, the Army expects to continue "retail delivery" — without the STOL portion of its original concept. The Air Force interpretation is explicit also: ". . . the Air Force will be responsible for all future intra-theater fixed-wing tactical airlift." (Air Force Policy Letter for Commanders, 1 May 1966).

The answer then, remains in the nega-

**Downed  
but not  
out**





## Aircraft already recovered by Sikorsky Skycranes in Vietnam are worth four times the Skycranes' cost.

Just since October, four Sikorsky-built Army CH-54A Skycranes have retrieved over 100 downed aircraft in Vietnam — both helicopters and fixed-wing, ranging in weight from 2,000 to 18,000 pounds.

Total value of these recovered aircraft is estimated at approximately \$40 million, or more than *four times* the cost of the four Skycranes. Almost

all have been repaired and are back in service.

What else are Skycranes doing in Vietnam?

Airlifting bulldozers, roadgraders, trucks and 17,000-pound signal vans. Deploying 155mm artillery pieces, along with men and equipment. Delivering clusters of up to five 500-gallon fuel bags, rations, and ammunition

to attacking ground forces. Airlifting supplies from offshore vessels directly to distribution centers. Carrying specially-equipped vans serving as hospitals, command posts, and communications centers.

Clearly, the Sikorsky Skycrane — developed in advance of the need — is proving its military value . . . and its cost effectiveness.

**Sikorsky Aircraft** DIVISION OF UNITED AIRCRAFT CORPORATION  
STRATFORD, CONNECTICUT

U  
A



tive — the Air Force has not been charged with the intra-theater delivery of all supply and resupply. The real question is, "Does the requirement for a V/STOL medium tactical transport still exist?"

### Some eloquent omissions

The "Key East" agreement contains two eloquent omissions — one of which is V/STOL developmental responsibilities. It is carefully enunciated that each Service will continue in the joint effort to improve the VTOL, and the consultations will be held regarding the design of follow-on STOL craft, but V/STOL as a single replacement for both is not mentioned. Does this mean that competitive rather than cooperative effort is tacitly recognized?

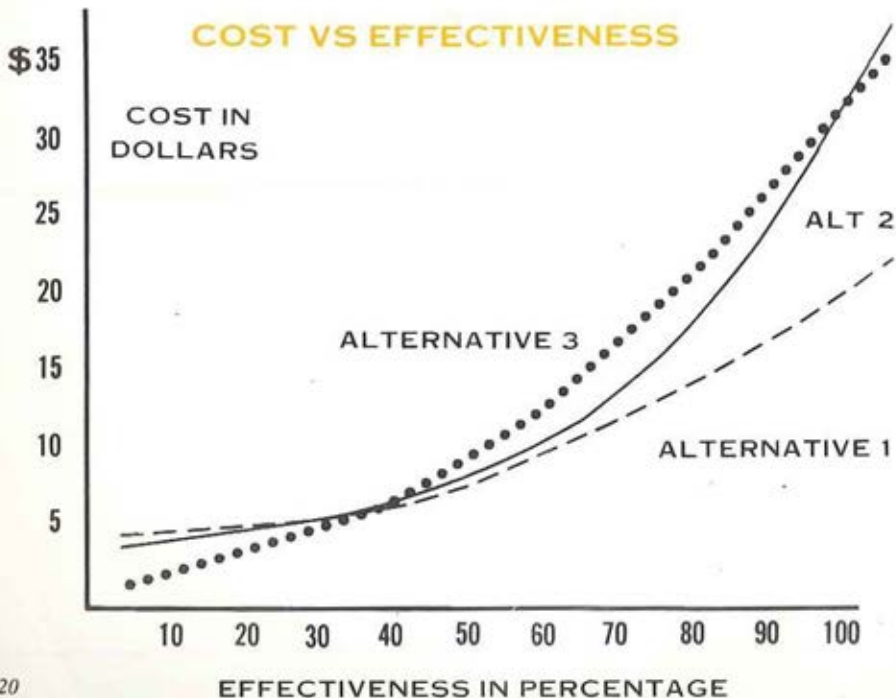
Pardon another reference to history — the DOD-sponsored V/STOL Symposium held in Albuquerque, New Mexico — at which all the military services, the aeronautical agencies of government, major

portions of industry, and the Department of Defense stated "requirements" for V/STOL. Since there have been successful V/STOL demonstrations, both here and in Europe, it must be assumed that the "requirements" carried with them only a slight sense of urgency for their satisfaction.

### Why no V/STOL's?

Why are there no operational V/STOL air vehicles in the inventory? There are many reasons of varying importance and validity. Most are highly controversial; some bluntly accuse other Services of "dog-in-the-manger" attitudes; some have international complications; and some have absolutely nothing to do with the national military establishment. The most often used reason is that of cost effectiveness. The argument is meaningless.

Hitch & McKean, "Economics of Defense in the Nuclear Age," point out that it is impossible to choose that alternative



which simultaneously maximizes gain (effectiveness) and minimizes cost, because there can be no such alternative. One can, however, fix cost and determine the effectiveness purchased, or fix effectiveness and see how much it costs.

The goal for any analyst is the preparation of a single graph (Fig. 1) from which the decision maker can make a selection. Obviously, this places the onus of judgment where it belongs: in the hands of those entrusted with the power to make judgments and render decisions.

### Dollar objectivity

The fact that there have been literally hundreds of decisions enroute to this single graph — all made by the graph maker — is often ignored. Every sum relating to costs is an estimate; each only as good as the assumptions which precede the computations, and the ability of the searcher to find and fix the elusive and hidden. It is difficult to over-estimate costs when in favor of a project; even more difficult to under-estimate them when not in favor. Complete dollar objectivity may exist in a tomb. It does not exist in quantity elsewhere.

The most judgmental enroute decisions, however, are in the effectiveness side of the equation rather than in the cost. Measurement criteria by which effectiveness may be established tend to become over-simplified; i.e. tons/miles, rounds/minute, exposure/losses etc., all of which tend to place a premium on the largest or the fastest and assume that the machine itself is the system.

The aircraft of Army aviation do not represent a closed-loop system in which the object is to match a single requirement with a capability at the lowest cost. The requirement is that of the ground forces for support; any and all support which can be rendered by a vehicle not restricted by terrain to well-defined routes.

The requirement is not fixed, but is instead, and often, a fluctuating variable caused by enemy action rather than friend-

ly desires. On any given day, the requirement for a medium tactical transport vehicle may include, but not be limited to:

- Transport of an artillery weapon; from ordnance repair to division artillery, a specific battalion, a designated battery, or all three in sequence.
- Transport of an artillery weapon; from a battery position area to a new location behind or beyond the existing FEBA; for a single registration and return, or for a drop-off followed by a resupply.
- Transport of bullets and beans from a ship to shore; from shore to FASCOM; COSCOM, Div. SUPCOM, Brigade Trains, Battalion, Battery/Company or Platoon.
- Transport a mobile CP and furnish its communications enroute, and from the new location.
- Transport reserves and evacuate wounded.
- Pick up and return downed aircraft, disabled vehicles, captured pieces of equipment, and evacuees.
- Support Special Forces by transport and resupply.
- Bolt on weapons and fire in support of ground or air-mobile operations.
- Adjust artillery, emplace church steeples, ferry troops across a river, blow snow off a runway, defoliate or plant seeds, blow dust as a decoy to cause enemy wonderment, serve as a communications relay, search for new installation sites, serve as a survey point, haul the commander and staff to and from a meeting, tow a stalled boat to shore, be a schoolroom for mechanics, be used to check out a new aviator, or search for a delayed patrol.
- None of the above.

Distances involved during this particular day's operations will vary from 50 yards to 90 miles; speeds, from the hover to all she's got; loads, from 50 pounds to as much as the commander can afford to lose at one time and still accomplish his

mission; landing areas, from a 4,000 foot runway to a dusty patch 75 yards long and 100 feet wide at the large end; planning time, from 48 hours to 48 minutes; and reaction time, from 24 hours to 15 minutes, during which time the old man wants to know, "What's the delay?"

Is ton/miles an adequate measurement criteria upon which to judge the effectiveness of an aircraft designed to meet such requirements? Of course not. Speed/distance is equally inappropriate. The analyst, stymied because he cannot bring the parameters of the varying requirements into proximity, usually decides the safest course is to assume a requirement for the machine to perform the most difficult of all the tasks, and to make all effectiveness measurements apply to that point.

### "Design task" is factor

Here, V/STOL falls flat on its extended landing gear. Unless a machine, designed for a particular task, is performing that task, it can seldom, if ever, prove cost effective. A space capsule makes a lousy ocean-going vessel; a B-52 is not the world's most appropriate close air-support aircraft. Both have been so used without counting the dollars.

V/STOL, designed to carry comparable loads, cannot successfully compete with helicopters over short ranges into unprepared landing areas. V/STOL, designed to carry comparable loads, cannot successfully compete with STOL aircraft over medium ranges into areas where airstrips are available. When the tasks to be performed involve both VTOL and STOL in equal amounts, or in amounts which cannot be determined because of the variables, then V/STOL appears most appropriate.

Cost/effectiveness arguments are meaningless when the measurements of effectiveness are undefined. State-of-the-art is always a compromise between concept and implementation; but state-of-the-art did not stop us from orbiting a satellite; from building a nuclear weapon; from harnessing the tide in France; or from relying upon a computer bank.

### NEW ABBREVIATIONS

RANK	NEW ABBREV.
General of the Army	GA
General	GEN
Lieutenant General	LTG
Major General	MG
Brigadier General	BG
Colonel	COL
Lieutenant Colonel	LTC
Major	MAJ
Captain	CPT
First Lieutenant	1LT
Second Lieutenant	2LT
Chief Warrant Officer, W-4	CW4
Chief Warrant Officer, W-3	CW3
Chief Warrant Officer, W-2	CW2
Warrant Officer, W-1	WO1
Sergeant Major	SGM
First Sergeant	1SG
Master Sergeant	MSG
Sergeant First Class	SFC
Platoon Sergeant	PSG
Staff Sergeant	SSG
Sergeant	SGT
Corporal	CPL
Private First Class	PFC
Private	PVT

In each case, the usefulness was assumed. The stopper on V/STOL development is, in major part, the issue of cost/effectiveness, and the stumbling blocks are the intermediate judgments which determine the ultimate equation and influence the decision-maker.

V/STOL under these conditions, cannot pass a cost/effectiveness test. Neither can a man; particularly, if his effectiveness is measured solely by his ability to reproduce. Chickens, frogs, mosquitos and troubles are all less expensive and far more capable as reproducers. The point is, man having been created, has rapidly found other uses. V/STOL will do the same.

The Army no longer has the STOL portion of its V/STOL medium tactical transport.

By agreement, it will not seek STOL hardware.

By direction, it will not argue with the decision.

By tradition, it will discharge its responsibilities.

By V/STOL, it will!



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U.S. ARMY**

10, 11, 12 Oct. 1966

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- Hear top military leaders on issues vital to the nation's security.
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or hotel of your choice **NOW**  
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## No more Lost Battalions...

or patrols either for that matter. With the new lightweight Sperry Phoenix Company locator beacon any ground unit can furnish its support aircraft with a continuous indication of its position, even when operating in dense jungles, at night, or under heavy cloud cover. A DME capability allows the aircraft to pinpoint the position of

the beacon at any time without the necessity of remaining directly overhead. In addition, the beacon provides a voice communications capability and a glidepath capability which turns almost any clearing into an all-weather airfield. For more information about the Sperry Phoenix Company tactical beacon, write or call

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**SPERRY PHOENIX COMPANY, Phoenix, Arizona**

## BADGE/Continued

while assigned or attached to any unit authorized Army aircraft.

In defining combat duty, the proposal is made that the recipient have been physically present and under probable exposure to enemy fire for a period of 30 consecutive days while assigned or attached to the unit authorized Army aircraft, or in the case of individuals authorized the aircraft crewman's badge, the recipient have participated in at least 15 combat missions under probable exposure to enemy fire while serving as a crew member.

A proposed design for the award would have the appropriate wings superimposed over an oak wreath or gold wreath depending upon the number of awards.

### Multiple awards

Multiple awards could utilize one or more gold stars centered on the wreath at the bottom of the badge directly beneath the shield. For example, those recipients who served in combat both Korea and Vietnam would wear a *Combat Aviation Badge* with one gold star centered on the wreath.

Army Aviators having served in combat in World War II, the Korean War, and the present war in Vietnam would wear a *Combat Aviation Badge* with two gold stars centered on the wreath.

It took almost ten years for those in Army aviation to "staff" an action providing for the award of the *Aircraft Crewman Badge* to our indispensable maintenance technicians, and I believe that this action was finally accelerated by the 15,000+ crewmen quitting the service annually.

Retention could be tied to the small things, those little service "plusses" that most people probably regard as insignificant . . . those small bits of ribbon and metal are good examples.

*Combat Aviation Badges* for our aviators, medical officers, and crewmen may not be the deciding factor in "re-up" situations, but they are a "plus" factor that the Army should not overlook.

## Chinook "Bombers" Keep VC Hitting The Deck

Two new and unique uses for the U.S. Army CH-47A *Chinook* helicopter have been developed in Vietnam. In both cases the *Chinook* was used as a "bomber" to drop mortars and tear gas against enemy concentrations.

The first use of the *Chinook* as an aerial platform to fire mortar rounds took place in War Zone D when two companies of the 173rd Airborne Brigade were pinned down by heavy Viet Cong fire. Artillery support was needed since jungle foliage was too thick for Company mortars to be used.

A wooden trough for firing mortars was placed in the doorways of the CH-47's. The aircraft made three passes over the area and dropped 83 mortar rounds on the enemy without endangering the American troops. An estimated 200 Viet Cong were killed or wounded in the first assault against the enemy by air-dropped mortars from a *Chinook*.

The platoon leader of the 173rd Aviation Platoon, the unit to which the aircraft were attached, said that by dropping 60 high explosive 81mm rounds, one at a time, an area 2,500 yards wide could be completely saturated.

### Psychological coup

The platoon leader also indicated that continued "bombing" tactics by the *Chinook* may cause the Viet Cong to hit the deck each time a helicopter flies over, causing a psychological coup. In addition, the ground forces would maintain mortar capability without the necessity of carrying it through the jungle.

The second use of the *Chinook* for a bomber mission occurred when it dropped tear gas on Viet Cong positions. Tear gas is normally dispersed by grenade or sprayed by helicopters. During a recent operation against the Viet Cong however, a CH-47 helicopter from the 147th Aviation Company, dropped 30 barrels of tear gas from an altitude of 3,000 feet. At 100 feet a small charge on a 30-second fuse exploded and ruptured the barrel.



# INNOVATIONS FROM VIETNAM

In this method the tear gas mixed immediately with the air while the remainder fell to the ground and saturated the area. Dropping the tear gas barrels at 3,000 feet altitude was developed after testing drops at various altitudes.

This unique "bombing" by the *Chinook* proved extremely effective, and a major access route was denied to the Viet Cong for over three days.

## A UNIQUE "DUSTOFF"

**T**HEY *want what?*", gasped Major Gilbert R. Hickenbottom, commander of a Da Nang-based 1st Aviation Brigade outfit called I Corps Airlift Company.

Marble Mountain's Navy hospital was on the phone. Their request was something the like of which the Army chopper contingent had never heard: a request to kick up one of those dust storms normally considered the scourge of rotary-wing machines.

The hospital representative said their 1800-sq. yd. helipad, used to land med-evac patients, had just received a new asphalt coat. He said that the heavy construction equipment used to do the job had left the pad less than tidy—buried, in fact, beneath at least two inches of Da Nang sand.

Hardly a broom-sized cleanup job, the task, he suggested, might best be done by having a hovering helicopter blow the sand away, before a med-evac chopper with an emergency patient came in.

It was a request for something that 'copter commanders normally try hard to avoid. Aircraft have been destroyed and pilots killed from hovering over loose earth, whipping up blinding dust clouds, losing sight of the ground, drifting and crashing. Besides, the helicopter's ability

to raise dust is probably its least attractive feature to the ground troops on whom the dust settles. No one had ever asked for a demonstration before.

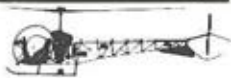
"But under the circumstances it seemed reasonable," Hickenbottom said. He selected one Huey conveniently due a maintenance hover check, and a veteran pilot, Chief Warrant Officer Kyle Spaulding, company maintenance chief, to tackle the tricky mission.

Spaulding, cautiously approached the sand-covered pad. A colossal sandstorm billowed before the Army ship, and within ten minutes the pad was clear. Several people watched from the ground, but this time none complained. In fact, the Navy Hospital Commander condensed his thoughts on the operation into one word, "Fabulous."

## NATURAL LAWS

1. Chisholm's First Law of Human Interaction: If anything can go wrong, it will.
2. Chisholm's Second Law of Human Interaction: When things are going well, something will go wrong.
3. Rusk's Law of Delegation: When exaggerated emphasis is placed upon delegation, responsibility, like sediment, sinks to the bottom.
4. Pinagle's Law: Once a job is fouled up, anything done to improve it only makes it worse.
5. Feibleman's Law of Secondratedness: To be second rate. (a) never be the first to do anything, and (b) never do anything as well as it can be done. These principles call for failure of originality and the absence of excellence.
6. Harvard Law of Animal Behavior: Under carefully controlled conditions, organisms behave as they jolly well please.

# KEEPING OUR HISTORY ALIVE!



**A**RE you a retired Army Aviator? Or about to be? Do you have a broad background in and knowledge of the traditions of Army aviation? Are you looking for a job that is closely connected with Army aviation? The U.S. Army Aviation School is now seeking qualified applicants for the position of *Museum Curator (Aeronautics)* GS-11.

In January, 1955, the museum was created by *Brigadier General Carl I. Hutton*, then Commanding General of Fort Rucker, who donated numerous personal items. In 1963, the Department of the Army designated the *Army Aviation Museum* at Fort Rucker, Alabama, as the official repository for all artifacts and memorabilia connected with Army aviation.

In January, 1966, *General Paul L. Freeman, Jr.*, Commanding General, U.S. Continental Army Command, assigned responsibility for the museum to the U.S. Army Aviation School. In addition to actual aircraft, this will include those maps, photographs, uniforms, weapons and similar items that are of historical and significant interest.

## CURATOR SOUGHT

A key role in operating the Museum program at the U.S. Army Aviation School will be held by the *Museum Curator*. The man selected will be responsible for developing the displays and making them and the setting as attractive as possible to the general public and the resident students. It is anticipated these displays will be designed to tell the story of Army aviation from the very inception and using the general theme "Army Aviation in

*Support of Army Combat Operations."*

The *Curator* will, in addition to being responsible for the physical plant, also be required to contact industry representatives and individuals across the country in an effort to secure items of significant historical importance and interest to Army aviation.

Steps are being taken now to expand the present museum facilities and displays. It has already outgrown the old site at Fort Rucker and will soon move into new quarters near the Fort Rucker Guthrie Field. At this location, the *Museum* will not only function more effectively, but it will also serve as a valuable training aid for aviator and mechanic students. Plans now call for this new area to be available by the fall of 1966.

## PROGRESS REPORT

Up to the present, the *Museum* has made progress, but slowly. The displays are not yet complete nor has industry or individuals been contacted for the additional items so necessary to reveal past roles of Army aviation. However, one day in the not too distant future, with these current assets and future plans, it will be possible for an individual to wend his way through the *Museum* and trace the history of Army aviation from start to finish without any stop gaps in the stations along the tour. Army aviation history is being made today and the *Army Aviation Museum* will keep it alive for tomorrow's aviators.

Those interested in applying for the position of *Curator* of the U.S. Army Aviation Museum may file applications with the Executive Secretary, Board of U.S. Civil Service Examiners, Fort Rucker, Alabama, 36360. The Secretary can also be contacted by telephone or mail for any further information the applicant may desire.



# LETTERS

BRIEF LETTERS ON ANY PERTINENT SUBJECT ARE WELCOMED. THE LETTER MUST BEAR THE NAME OF THE WRITER, ALTHOUGH THE WRITER MAY REQUEST THAT HIS NAME BE WITHHELD FROM PUBLICATION.

## REPRINTS

Dear Editor:

In your last issue of the magazine you had a note urging personnel to contribute articles. Under the current press of time and with the competition for articles you may find it a little difficult to fill the magazine with first-run material. I notice that in the June 30 issue you provided a reprint from *FORTUNE* by Charles Murphy. I think this is an excellent idea.

As you point out in your note in the front of the magazine there is much that concerns Army aviation being printed in many publications. A very small percentage of Army Aviators see *FORTUNE*; few probably read *AVIATION WEEK* or other technical journals. I urge that you continually review these other publications for material you can reprint. It will be a great service to your readers.

Robert R. Williams  
Brigadier General, GS  
Director of Army Aviation

## MEMORIAL FUNDS

Dear Editor:

My son, Warrant Officer Ross J. Pateron, a helicopter pilot with the 1st Cavalry, was killed in action on February 16. A memorial fund was set up in his name to aid the widows and orphans of his comrades.

Unfortunately, I have not been able to locate any organization in the Army that is set up to handle this money, and I wondered if you can help me in this direction. Is there any organization within Army aviation, or in fact, any branch of the Army that can handle this fund?

I would also like information on the Army Aviation Association Scholarship

Fund. Any information that you can give me will be appreciated.

Sincerely yours,  
Louis Paterson

*(Ed. Note: The Army Aviation Association Scholarship Foundation provides five to seven \$500 freshman-year scholarships to the deserving children of members or deceased members. Upon instructions from the custodian of a memorial fund donated to the Foundation, a scholarship of \$100 or more could be presented annually in memory of the deceased member with eligibility being limited to the children of deceased members. We do not know of any plan - military or civilian - which provides for the administration of memorial funds to aid the specific widows and orphans of comrades of the deceased. The AAAA Scholarship Foundation, in serving over 9,200 AAAA members, welcomes memorial contributions in any amount from any source.)*

## AHS CLAMBAKE

The Cliffside Country Club in Burlington, Vt., will be the '66 site for the Annual AHS Clambake held by New England Regional Members of the AHS and their guests. Host firm for the Saturday, August 27 affair is the General Electric Company with activities to run from 10 a.m. to midnight. A demonstration of all current helicopter armament (GE, Emerson, etc.) will be held at GE's Underhill Firing Range on Saturday afternoon. The 6 p.m. Bake starts at 6 p.m. and will be followed by an informal dance in the Clubhouse from 9 p.m. to midnight. A Sunday a.m. brunch will be held at the Clubhouse. Persons planning to attend should make their reservations prior to August 17 by contacting David Harper, GE Company, Lakeside Avenue, Burlington, Vt. A Burlington motel list will be provided on request.

# For any branch of military service





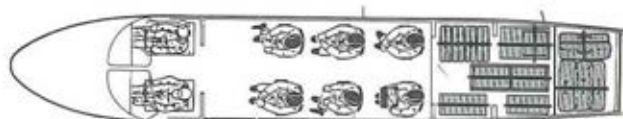
## Here's the mission-ready Turbo Commander

The American built Turbo Commander, a high performance 9000 lb. prop-jet originally designed for the corporate market and certified by the FAA, provides a vital dividend to the military. The expanded mission version of the aircraft cruises at 250 k and features a useful load of more than 4000 lbs. Fuel/payload trade-offs permit excellent flexibility in fulfilling tactical support, logistics and personnel carrier missions from paved depots to forward airstrips. With near STOL capability the Turbo Commander can clear a 50-ft. obstacle in 1740 feet from a standing start. It has fully

reversible propellers and can utilize virtually any landing strip, anywhere. Thus, the Turbo Commander is a natural for bridging the gap between single engine observation aircraft and 30,000-lb. transports. It's a versatile, practical and economical twin engine workhorse that's readily applicable to a multitude of missions. For complete details write *Aero Commander, Suite 810, Madison Bldg., Washington, D. C.*

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# AIRCREW

July 29, 1966

**24-AET** OPENINGS: June 17 AIRCRAFT ENGINE TECHNICIANS. Openings now in all phases of acrf engine mfg, includg machine shop, engine ass'y, test, & factory overhaul. Perm employmt w/ great future & tremendous opp for advncmnt.

**39-APT** OPENINGS: July 8 A & P TECHNICIANS needed by an aggressive East Coast orgn to fill openings caused by expansion. A & P license req'd. Paid vac, good salary, rapid advncmnt for ambitious persons.

**52-ALP** OPENING: July 15 AIRLINE CAPTAIN. Eastern state commuter airline seeks outstanding man. Min 4,000 hrs w/coml, MEL, & Instrument. Age not a factor but must have abil to manage & conduct flight scheds, paperw, maint follow-up, & all related duties w/min supervsn. Should have good IFR & operal history. Prefer man w/Beech 18, Dove, or Commander 680 experience.

**46-ATP** OPENING: July 8 AIR TAXI PILOT. For employmt w/ mid-AII fixed based opn. Sched air taxi ops, charter svcs, flt tng sch w/most wk as air taxi. Familrzn w/ hi density air traffic ops desirable but not neces. Work 6 days on, 2 off. Req'd: 1,000 hr min (FW); 100 hrs MEL; Coml, SMEL Instrument, Instructor ratings.

**14-AR** OPENINGS: July 8 AVIATION RESEARCH. Expanding research orgn has perm posns for former offs & wo's w/mgmt exper in supply, logis, maint, transp, opns, ADP, & computer sys analysis. US & Saigon posns w/incentive pay for latter svcs.

**38-AT** OPENING: July 8 AVIONICS TECHNICIAN. Growing & progressive med-sized opn needs good man who wants a secure, but ambt future. FCC 2d class/better for FAA-approved shop on E Coast.

**47-AT** OPENING: July 9 AVIONICS TECHNICIAN. Maj eastern states' corp needs tech'n for maint/repair of all phases of genl avn avionics, includg comm, navig, autopilots, and pulse equip. Exper neces in at least one phase avionics repair w/Second Class FCC RTO lic

req'ed. Requires full use of test equip & tech manuals w/repairs perf'd to FCC, FAA & mfg's specs.

**42-FI** OPENING: July 7 FLIGHT INSTRUCTORS. Growing mid-AII fixed base opn needs two flt instructors for ROTC program. Wk avail for 1-1/2 mo w/buildup to 2 expected. Some air taxi wk. Excell opp for tng & advncmnt to full IFR pilot in comd of acrf up to twin. Req: Coml, ASEL, Instructor ratings.

**34-HP** OPENING: July 1 HELICOPTER PILOT. Major hcptr oper specializg in constr wk along E Coast needs hi-time pilot w/exper in S-55 (H-19) w/Wright 1300; will accept hi-timer in stand S-55 or S-58 (H-34). Mtn flyg & slung cargo exper desirable. Year-round posn. \$9,800 to start + all field expenses w/\$900 mo after 60 days if satis.

**35-HP** OPENINGS: July 3 HELICOPTER TEST PILOTS. Major contractor has immed openings for RW testpilots (test after acrf maint) at fixed loc in South. Benefits: 9 pd holidays; 2 wks vac/6 days sick leave annually; med & life insur prems pd on employee + dependents.

**40-HP** OPENING: July 6 HELICOPTER PILOT. For ag flyg, instruction, charter. Bell exper desired, but will train on-the-job for ag work. Well established Eastern operator. Seek pleasant personality/double in sales capacity. Coml & hcptr lic req'd.

**43-HP** OPENINGS: July 7 HELICOPTER PILOTS. Large offshore oper needs Bell-exper pilots w/1,000 hr min. Perm job; home every night. Must be neat, personable, weigh 180 lbs or less. Pd vac, hospitlzn avail, life insur furnished. \$9,120/yr to start.

**53-HP** OPENING: July 15 HELICOPTER PILOT. Seasonal employment ending Oct 15 doing fire suppression wk in mountain states. 1,000 hr min w/at least 500 hcptrs. Bell 47Gs used. Pay averages \$200 wk w/base at \$725 mo+\$5 per flyg hr +\$250 bonus at end of season.

**18-HP** OPENINGS: Aug. 15 HELICOPTER PILOTS. Immed jobs

for career-minded RW pilots with sched pass svcs opn in eastern state. Min 1,000 hrs w/coml, hcptr ratgs, + abil to fly Bell 47J now & turbine equip later. Compet salary, pd vac, home every nite.

**36-HPM** OPENING: Sept. 1 HELICOPTER PILOT-MANAGER. Min 1,000 hrs Bell 47 essential, + personality & superior moral qual. Project mgr for large terr in eastn state w/contract flyg requiring area travl for 2 wks (home Tues+Fri nites + wkends) w/relief pilot supplied ea 3d wk. Admin abil neces w/compltn of expense/fit reports reqd. Modern Bell equipment & top maint assured. \$8,400 to start.

**48-HP** OPENING: Sept. 1 HELICOPTER PILOT. For Canadian bush ops on flight camp w/temps about 30-40 deg below zero. Min 1,000 flt hrs reqd w/abil to operate Bell 47G2. \$650 for trial mo-\$5 hr flyg time after 50 hrs; \$750 mo w/

## AIRCREW SERVICE

AIRCREW is not an employment agency, but a clearinghouse service that speeds employment communications between job applicants and potential employers.

AIRCREW listings are free, and are published over an 8-week period in the several AIRCREW media.

EMPLOYERS are forwarded copies of the industry-approved AIRCREW Resume Forms completed by applicants.

APPLICANTS are airmailed the standard AIRCREW Job Description Outlines completed by employers. Reproduction and transmittal of AIRCREW Resumes and Job Outlines are at no charge.

ALL AIRCREW communications to both applicant and employer are forwarded by airmail cover. The service will not accept listings for publication that do not provide guaranteed dates of "job openings" or "applicant availability."

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I wish to use the "no obligation" AIRCREW service. Please airmail me full particulars and several blank AIRCREW Resume Forms.

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

Date Available: \_\_\_\_\_

Job Interest: \_\_\_\_\_



2d mo. Ideal for candidate with a bent for fishing. Eastern province.

**21-HT** OPENING: July 17  
**HELICOPTER TECHNICIAN.** Background in coml Bell or Hiller equip or equiv + A&P ratg desired for job w/expert oper in eastn state. Outstanding opp. Will train anti/or send right man to factory maint schools.

**41-HT** OPENING: July 6  
**HELICOPTER TECHNICIAN.** Estab east coast oper needs techn expert in Bell maint. FAA-approved shop. A&P preferred.

**14-L&SM. LOGISTICS & SUPPLY MANAGEMENTN.** See AR-14 Listing.

**14-MM. MAINTENANCE MANAGEMENT.** See AR-14 Listing.

#### LATE LISTINGS

**54-ASE** OPENING: July 15  
**AVIONICS SALES ENGINEER.** Dir customer selling, bidding, cost estimating on maj lines avionics equip. Supervsn of installations to verify customer receives work as per contract. FCC First Class RTO Lic w/ Radar Endramnt needed. Midw loc. \$175-\$200 week to start.

**55-APT** OPENINGS: July 18  
**A&P TECHNICIANS.** Large West Coast airplane distributor has sev openings for A&P licensed. Offers diversified work from single engine acft to pressurized twin turbine. Perm emplmnt on qualification.

**58-HP** OPENING: July 22  
**HELICOPTER PILOT.** Major Canadian oper has perm & seasonal posns involving genl charter flyg thruout western province. 400 hrs min RW time w/Bell series exper preferred. Appl must hold or be willing to write for Canad pilot's lic. 6-8 wks accum vacation offd annually. \$150-\$175 to start. Oppy for advncmt exists.

**61-APT** OPENING: July 25  
**A&P TECHNICIAN.** Large midwestern fixed base oper needs A&P Technician. Permanent position w/many benefits. Excellent location for full life.

#### GEOGRAPHIC COVERAGE

Individual applicants provide AIRCREW Resume Forms for forwarding to employers on request. Each job applicant is encouraged to submit a 60-word gratis "ad" for publication in the AIRCREW Bulletin forwarded to some 1,300 aviation-oriented employers on a bi-weekly basis. These potential employers include all major rotary wing commercial operators and a majority of the U.S. fixed base operators.

#### WOLTERS CLASS JOINS AAAA EN MASSE



#### GREEN HATS! GO, GO, GO!

The Second Warrant Officer Candidate Company, shown above in a 66-21 formation denoting their class designation, has achieved one FIRST at Fort Wolters, Texas, and TWO world records in one day!

They are the FIRST 100 per cent AAAA Membership Class at Fort Wolters - the LARGEST CLASS to ever achieve a 100 per cent AAAA membership - and the LARGEST SINGLE GROUP to ever join AAAA at one time! - 272 brand new members and one renewal on the flight line they are recognizable by their green flight caps.

Warrant Officer Candidate Billy J. Alred, the class president, is one of the 70 members in 66-21 who have had prior service. He's a 10-year USAF-veteran and has served in the Army for four years. He has served with Strategic Air Command and in Korea with the 707th Maintenance Battalion.

Born in Gelax, Va., the 31-year-old WOC is married and has three children: Randall 7, Melanie 5, and Stacey 3. His family resides on post in Wolters Village.

Representative of the 194 members of Class 66-21, who enlisted in the U.S. Army to enter the Warrant Officer Candidate Program, is Can-

didate Kenneth M. Massey. A native of Fayetteville, Ark., Massey is 18 years old and attended high school in Arlington, Texas.

He is married and resides off post in Mineral Wells with his wife, Anita. Candidate Massey entered the Army in January 1966, completed basic training at Fort Polk, La., and entered the Warrant Officer Candidate Program on 16 April 1966.

The Company Commander of the Second Warrant Officer Candidate Company is Captain Donnie Courson. He is an Infantry Officer Candidate School graduate and flew with the 119th Aviation Company in Vietnam.

Spark plug of the drive for AAAA membership by Class 66-21 is CWO George I. Marcotte, one of the Platoon Leaders in Flight B-2. A 1964 graduate of the Warrant Officer Candidate Program, he also flew with the 119th Aviation Company in Vietnam.

The U.S. Army Primary Helicopter Center salutes the Second Warrant Officer Company, Class 66-21, for its 100 per cent membership in the Army Aviation Association! This is a fine example of the teamwork that is displayed every day everywhere in the world by our Warrant Officer Aviators!

#### ARMY ACCEPTS MODIFIED MOHAWK

The Grumman Aircraft and Engineering Corporation delivered the first in a series of Army OV-1C Mohawk aircraft to be modified in an extensive updating program now underway at the company's Stuart Field, Florida facility. The formal acceptance ceremony took place on July 29.

#### PERFORMANCE IMPROVED

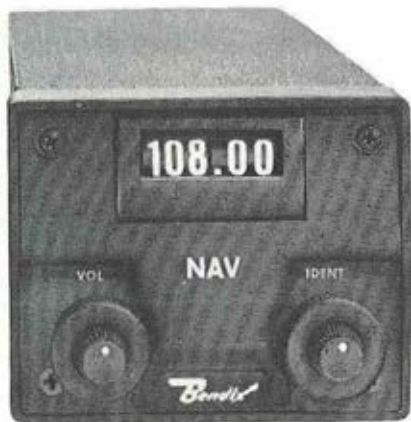
The modification program involves the installation of new avionic systems, the incorporation of current engineering data, and several major airframe changes, all of which will extend and improve the OV-1C's capabilities and performance.



The company's modification program contract with the Army covers aircraft for a cost of [redacted]. Representing the Army at the acceptance ceremony were LTG William B. Bunker and COL Edward Nielsen. The flight log for the first modified OV-1C Mohawk was presented to LTG Bunker by Grumman vice pres. William M. Zarkowsky.

# Bendix announces a new VHF COM/NAV System. You've never seen anything like it before.

(Our competition will wish they hadn't either.)



CNS-220 is two, separate, self-contained units. Completely self-contained COM and NAV units give you mounting flexibility never before possible. 360-channel COM transceiver, 100-channel NAV receiver, simulta-

neous COM/NAV operation. All with no extra power supply required.

CNS-220 has extra large in-line digital readouts. Two to three times as large as competitive units! The internally lighted numbers are lined up in a neat, straight row for quick, easy frequency selection.

CNS-220 is all solid state. No tubes—even its 10-watt transmitter output stage is completely solid state. You get high reliability, low power drain, light weight, small size and easier maintenance. Cooler operation, of course.

CNS-220 has a VOR/LOC indicator as standard equipment. The system includes the VOR/LOC indicator, yet the whole package costs under \$1,500. Optional indicators with autopilot adaptors and glide slope needles are yours at a small additional cost. All indicators are full-size 3 1/4" instruments.



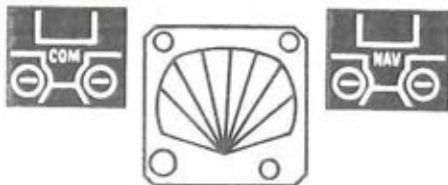
New all over—and priced under \$1,500. That's the Bendix® Trophy Line CNS-220 VHF COM/NAV System. It teams the best of both airline and general aviation avionics to surpass all other available systems. In performance. And in appearance. Just look how CNS-220 splits old 1½ COM/NAV units right up the middle. This means you can buy the system piece by piece to suit your budget.

Additional CNS-220 features read

like something out of the future. All that's needed for future 50 kc VOR spacing is another crystal. OMNI and localizer needle operate continuously, even during COM transmission. A 20-channel glide slope receiver that mounts inside the NAV receiver is available as an option. And the basic system weighs under ten pounds.

See your nearest Bendix dealer, or write to us. Radio Division, Avionics Products, Baltimore, Maryland.

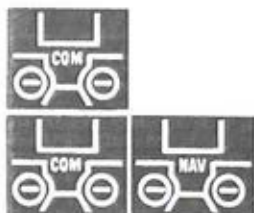
CNS-220 gives maximum installation flexibility. Because COM and NAV units are completely self-contained, you can stack them or separate them. You'll still have more room left than ever before for additional gear.



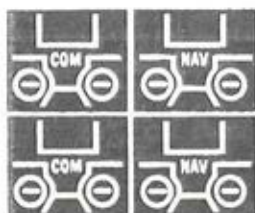
*Separate them*



*Stack them*



*Add them as your need increases*



**Bendix Radio Division**



# TAKE A QUICK QUIZ!

**JULY 1966**



1) VSTOL now undergoing tests:

- a) XV-4A
- b) XV-5A
- c) XV-6A
- d) F-1127

2) 1965 McClellan Award winner:

- a) Col. James F. Wells
- b) Col. John L. Inskeep
- c) Col. Spurgeon H. Noel
- d) Mr. Ralph N. Greenway

3) This operational aircraft is the:

- a) OH-19
- b) CH-34
- c) CH-21
- d) U-1A



4) Ground-to-air distress signal:

- a) "Need gas and oil"
- b) "Plane is flyable"
- c) "Land in this direction"
- d) "All is well"



5) The well known trademark of:

- a) Vertol Division, Boeing Company
- b) Bell Aerosystems
- c) Canadair, Ltd.
- d) North American Aviation, Inc.



6) The emergency visual signal for:

- a) "Land in this direction"
- b) "Do not attempt to land here"
- c) "Need mechanical help or parts"
- d) "Need medical aid"



7) Unit insignia worn by men of:

- a) 10th Aviation Group
- b) 11th Aviation Group
- c) 913th Bomber Group
- d) USA Primary Helicopter Center



8) New VSTOL aircraft called the:

- a) X-19
- b) X-22A
- c) XC-142
- d) XV-3A



9) AAAAA VP for National Functionary:

- a) Col. Robert H. Schultz
- b) Col. Joseph L. Gade
- c) Col. John L. Klingenshagen
- d) Col. John Dibble, Jr.



10) Early test VSTOL designated:

- a) VZ-1E Miller
- b) VZ-3PH Boeing Vertol
- c) VZ-3RY Ryan
- d) VZ-4DA Doak



11) AAAAA Nat'l Member-at-Large:

- a) Col. Hubert F. Cassidy, Ret.
- b) Col. Jack L. Marinelli, Ret.
- c) Mr. Anthony L. Hodges
- d) Col. Richard L. Long, Ret.



12) The meteorological symbol for:

- a) Blowing dust or smoke
- b) Thunder storm
- c) Hail
- d) Snow



13) Research VSTOL called the:

- a) VZ-3MF
- b) MPWC Platform
- c) KC-108 Flying Platform
- d) VZ-1E Panosee



14) The FLIP chart symbol for:

- a) TAGAN
- b) VORTAG
- c) VOR
- d) Holiport



15) How's your Morse? Shown as:

- a) Code letter for "N"
- b) Code letter for "U"
- c) Code letter for "Y"
- d) Code letter for "S"

ANSWERS: 1) XV-5A; 2) Col. James F. Wells; 3) CH-34; 4) "Land in this direction"; 5) Vertol Division, Boeing Company; 6) "Do not attempt to land here"; 7) 11th Aviation Group; 8) XV-3A; 9) Col. Joseph L. Gade; 10) VZ-3RY Ryan; 11) Mr. Anthony L. Hodges; 12) Thunder storm; 13) MPWC Platform; 14) VORTAG; 15) Code letter for "U".

ANSWERS: 1) XV-5A IS NOW UNDERGOING TESTS AT FORT CAMPBELL, KY; 2) COL. JAMES F. WELLS IS BOTH C AND D; 3) THE OH-19 IS BEING DEVELOPED BY BOEING; 4) THIS IS THE CORRECT ANSWER; 5) THE VERTOL DIVISION IS NOW PART OF BOEING; 6) THIS IS THE CORRECT ANSWER; 7) THE 11TH AVIATION GROUP IS THE CORRECT ANSWER; 8) THE XV-3A IS THE CORRECT ANSWER; 9) COL. JOSEPH L. GADE IS THE CORRECT ANSWER; 10) THE VZ-3RY IS THE CORRECT ANSWER; 11) MR. ANTHONY L. HODGES IS THE CORRECT ANSWER; 12) THIS IS THE CORRECT ANSWER; 13) THE MPWC PLATFORM IS THE CORRECT ANSWER; 14) VORTAG IS THE CORRECT ANSWER; 15) THIS IS THE CORRECT ANSWER.



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# CONTRACTS

- Lycoming Division, Avco Corporation, Stratford, Connecticut, for aircraft engine components \$151,370 on June 14, \$1,191,292 on June 17, \$527,325 on June 30; for production of T-53-L-7 engines for the CH-47 Chinook \$19,806,227 on June 21; for production of equipment and special tooling to fabricate repair parts for the T-53 engine \$1,752,630 on June 23; for production of T-53-L-11 and -13 engines for the UH-1 series \$22,107,483 on June 30.
- Bell Helicopter Company, Fort Worth, Texas, for production and delivery of an additional 54 helicopter basic instrument trainers under a supplemental contract of \$2,927,394 on June 17; for engine air screen modification kits for the UH-1 series \$1,600,550 on June 22; for production and delivery of 501 UH-1B helicopters and 1,614 UH-1D helicopters \$249,457,443 on June 30, the largest contract awarded by the Aviation Materiel Command, for installation of Decca navigation systems in 109 UH-1B aircraft \$1,011,200 on June 30; for improvement of engineering services and flight testing \$1,000,071 on June 30; for aircraft components \$4,108,895 on July 5.
- Chandler Evans, Inc., West Hartford, Conn., for production of fuel control modification kits for the T-53-L-11 and -13 engines \$260,780 on June 14.
- Fafnir Bearing Company, New Britain, Conn., for production and delivery of annular ball bearings \$424,385 on June 17.
- King's Point Industries, New York, N.Y., for production and delivery of cargo parachute slings \$197,541 on June 17.
- Page Aircraft Maintenance, Inc., Lawton, Oklahoma, for aircraft maintenance to be performed at Fort Huachuca, Ariz., and at Dugway Proving Ground, Utah, throughout FY67 \$850,000 on June 20.
- Superior Welding, Inc., Bartlesville, Oklahoma, for production and delivery of adjustable maintenance platforms \$262,773 on June 21.
- UMC Electronics Company, North Haven, Connecticut, for production and delivery of testers for aircraft pitot/static systems \$120,840 on June 22.
- Lear Siegler, Inc., Power Equipment Div., Cleveland, Ohio, for production and delivery of generators for the UH-1 series \$565,416 June 22.
- Mills Manufacturing Company, Asheville, N.C., for production of 22-foot cargo parachutes \$259,740, and for production of 35-foot personnel parachutes \$924,600 both contracts on June 22.
- L. S. Farmer & Company, New Kensington, Pennsylvania, for production of clevis assemblies \$209,534 on June 22.
- M. Steintal & Company, New York City, for production of cargo extraction parachutes \$220,743 on June 22.
- United States Rubber Company, Engineered Systems Dept., Mishawaka, Indiana, for production and delivery of UH-1 fuel cells \$119,016 on June 22.
- Handley Industries, Inc., Jackson, Michigan, for production and delivery of aircraft bomb racks \$278,094 on June 22.
- Nu-Pak Company, Parkersburg, Pennsylvania, for production of metal containers for shipment of UH-1 rotor blades \$580,863 on June 29.
- Boeing Vertol Division, Morton Pennsylvania, a letter contract of \$8 million for an extensive product improvement program to enhance the capability of the CH-47 Chinook on June 30.
- Solar Division, International Harvester Company, San Diego, California, for production of auxiliary power units for the CH-47 helicopter \$2,262,581 on June 30.
- Marvel Manufacturing Company, Washington, D.C., for production and delivery of propeller and rotor blade balancing kits \$1,511,260 on June 30.
- Sikorsky Aircraft Division, United Aircraft, Stratford, Connecticut, for production of six CH-54 Flying Crane helicopters \$17,500,000 on July 1, with deliveries to be completed Nov. '66 through April '67, a second contract on the same date for \$2,000,000 for production of ten training devices for CH-54 personnel.
- Allison Division, General Motors Corp., Indianapolis, Indiana, for production of additional units of the T63-A-5 turboshaft engine \$1,012,264 on July 1.
- Champion Spark Plug Co., Toledo, Ohio, for production and delivery of multiple purpose aircraft spark plugs \$249,920 on July 1.
- Pioneer Aerodynamics Systems, Inc., of Manchester, Connecticut, for production of cargo parachute slings \$609,266 on July 1.

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# AWARDS AND

# Decorations

## SILVER STAR

Bahnson, John C., Capt

## DISTINGUISHED FLYING CROSS

Balberde, Alexander, Capt  
Bearrie, John L., Lt  
Bone, Richard D., Sp4  
Bowen, Thomas E., WO  
Broman, Ralph W., Maj  
Cobb, Jerry L., WO  
De Geest, Gordon E., CWO  
de Plante, Lance E., Capt  
Filion, Joffre W., Lt  
Hughes, Jimmie T., Capt  
Jachens, Bruce W., WO  
Lail, Eugene, Maj  
Masterson, Joseph H., Maj  
Miller, Harold F., Lt  
Owens, George W., Maj  
Schramm, Walter J., CWO  
Svarrer, Norman H., Lt  
Telfair, William D., Capt  
Tindall, James E., Capt  
Tuttle, Jerry N., Capt  
Wilkinson, William M., WO

## SOLDIER'S MEDAL

Brooks, Jimmie D., PFC  
Hassinger, Woodrow, CWO  
Lovett, Ronnie R., PFC

## BRONZE STAR FOR VALOR

Barrett, Thomas P., Lt

## BRONZE STAR

Batley, William J., SFC  
Lee, Freddie N., Sp4  
May, Dennis A., Capt\*  
Mayer, Frank H., Lt  
Morrison, Charles H., SFC  
Ota, Albert K., Sp6

## AIR MEDAL FOR VALOR

Ball, Roy D., Sp5  
Bastos, Rogerio R., Sp4  
Bangs, Daniel R., Sp4  
Bliven, David M., Capt  
Bohl, David E., Sp5  
Boyer, John A., Sp4  
Brown, Edward J., Capt  
Burke, James L., Col  
Christie, Billy B., Sp5  
Colaneri, Michael E., PFC  
Combs, Robert C., PFC  
Deason, Emanuel, Sp5

\*Posthumous Award

## AIR MEDAL FOR VALOR

Doyle, Arthur S., Sp4  
Evans, Thomas S., Sp5  
Fidler, Donald F., Sp5  
Flow, Norman J., Cpl  
Harris, Thomas L., Sp4  
Kolvig, Robert W., WO  
Kreil, John C., PFC  
Long, Dewey A., PFC  
Pennington, Newton, CWO  
Schramm, Walter J., CWO  
Sickler, David K., WO  
Simmons, Bobby J., Lt  
Summers, John L., Capt  
Thomas, Daniel A., Lt  
Young, Earl R., WO

## COMMENDATION MEDAL FOR VALOR

Arnold, Robert D., Sp5  
Barrett, Patrick T., PFC  
Freeman, Ronald R., WO  
Gambel, Michael L., PFC  
Garza, David A., WO  
Hooks, Charles, Maj  
Huffman, William W., Sp5  
Magill, Frances, SFC  
Mueller, Richard M., PFC  
Snyder, Preston J., Sp4  
Stone, Charles R., WO  
Wilson, James M., WO  
Wolfe, Larry B., Sp5

## AIR MEDAL

(The number after the recipient's name indicates the number of Oak Leaf Cluster awards received.)

Adams, Herbert N., Sp5\*  
Armstrong, Rodney, Capt  
Blunck, Leo J., Capt, 1  
Browning, Wm E., WO, 16  
Carpenter, Billy R., WO, 4  
Christopher, Harry G., Capt  
Cline, Curtis, Lt  
Davis, Melvin L., Lt  
De Jong, Herman, Lt, 2  
Dillon, William E., CWO  
Elliot, Ronald H., WO, 2  
Everett, William E., Capt, 2  
Fenton, Bryan R., PFC, 4  
Fox, Joseph H., Maj, 2



## MASTER AVIATOR

Black, Charles S., LCol  
Fleming, E. Pearce, Jr., Col

## AIR MEDAL

Gillman, Jay E., WO, 4  
Giltrap, William A., CWO  
Glenn, Thomas J., Lt, 2  
Green, David L., WO, 9  
Hasart, Rex M., WO, 8  
Hattori, Masaki, Capt, 2  
Haviland, Douglas E., Capt  
Holland, Chester, CWO, 4  
Honour, Charles, LCol, 11\*  
Ivey, Charles E., Capt  
Jackson, Roy D., CWO, 4  
James, James N., Lt, 6  
Jones, Pat W., CWO, 4  
Kammerer, Larry, WO, 14  
Kinnard, H.W.O., MGen, 8  
Kistler, Russell, CWO, 2\*  
Koshar, William J., WO, 6  
Lather, David G., WO, 2  
Leonard, John G., Lt, 2  
McTaggart, Kenneth, Capt  
Maddox, Wm J., LCol, 33  
Marshall, Daniel H., Maj, 2  
Myers, Maurice, Capt, 19  
Newman, James T., Lt  
Orvito, Frank A., WO, 2  
Paquette, Roger, Capt, 4  
Paxton, Kent F., WO, 36  
Pittman, Thurman, Capt, 2  
Radsspinner, Frank, Capt, 6  
Rosenwasser, L., PFC, 5\*  
Royles, Wallace G., WO, 1  
Seneff, George P., BGen, 1  
Smith, Albert M., Capt, 6\*  
Stewart, Robert B., Lt, 1  
Tobias, John C., Maj  
Virtue, Norman N., WO  
Way, Robert E., WO, 2  
Williford, James L., Lt, 3  
Woodward, R.N., CWO, 21  
Wotkyns, Anthony, WO, 33  
Yeck, Matthew C., CWO  
York, Val D., Capt, 32  
Young, Roger A., WO, 7  
Zierdt, William H., Capt, 3



## COMMENDATION MEDAL

Adams, Herbert N., Sp5\*  
Barnes, Vernon W., CWO  
Branstuder, Phillip V., Lt  
Cagle, Daryl R., Lt  
Childree, William C., Capt  
Dillingham, John R., WO  
Eider, James S., Sp4  
Emery, Ronald H., Capt  
Freitas, Richard E., SSGt  
Fritts, Larry E., Sp6  
Gatza, Edward, WO  
Gehling, David E., CWO  
Hardy, Joel L., Capt  
Holmes, Ernest V., CWO  
Honeycutt, Charles, CWO  
Lollar, Luther S., Maj  
McAfee, Rex L., WO  
McVeigh, William, CWO  
Morgensen, Donald K., Capt  
Morgan, Glenn E., Capt  
Motes, John L., II, Sgt  
O'Donnell, James J., Lt  
Owens, George W., Maj  
Paninski, Jorge E., Sp6  
Reel, Roger L., Sp6  
Richter, Otto, Jr., Lt  
Sconyers, Lawrence, SSGt  
Skelton, Samuel E., Capt  
Smith, Graham A., Lt  
Stakum, Joseph P., Lt  
Strain, Kenneth C., WO  
Tidrick, Paul A., CWO  
Willeford, Hollis B., Sp4  
Williams, Charles J., CWO  
Wotkyns, Anthony L., CWO



## McGOWAN RECEIVES DISTINGUISHED FLYING CROSS

Major General Lloyd E. Fellenz, CG, U.S. Army Japan, is shown presenting Capt. John J. McGowan with the Distinguished Flying Cross for actions in the Republic of Vietnam. McGowan, a pilot with the 587th Med Det (HA), Camp Zama, was also awarded the Bronze Star and Air Medal with four OLCs.



## HONORARY AVIATOR

THE CHIEF OF STAFF OF THE UNITED STATES ARMY, GENERAL HAROLD K. JOHNSON, LEFT, IS SHOWN RECEIVING A PLAQUE DESIGNATING HIM AN HONORARY ARMY AVIATOR DURING A RECENT VISIT TO THE ARMY AVIATION CENTER AND AVIATION SCHOOL AT FORT RUCKER, ALA. MAJOR GENERAL JOHN J. TOLSON, JR., THE COMMANDING GENERAL OF THE AVIATION CENTER AND SCHOOL, MADE THE PRESENTATION. GENERAL JOHNSON WAS THE PRINCIPAL SPEAKER AT GRADUATION EXERCISES FOR 245 PILOTS COMPLETING THEIR NINE MONTHS OF INTENSIVE FLIGHT TRAINING AT THE ARMY AVIATION SCHOOL. (ARMY PHOTO)

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## **BOBBY N. ARNOLD**

Captain Bobby N. Arnold, 29, assigned to the U.S. Army Aviation School, Fort Rucker, Ala., sustained fatal injuries in the crash of his O-1A aircraft. The fatal accident took place at Fort Rucker on June 1, 1966. He is survived by his widow, Mrs. Wanda C. Arnold and two children of 17 Harris Drive, Fort Rucker, Alabama. Burial was at Louisville Memorial Gardens, Louisville, Kentucky.

## **DONALD G. BLANKENSHIP**

Chief Warrant Officer Donald G. Blankenship, an Army Aviator on assignment to the 10th Aviation Group, Fort Benning, Georgia, died as a result of injuries received in the crash of his UH-1D helicopter on June 8, 1966. He is survived by his widow, Mrs. Carrie A. Blankenship, 103 Ticknor Drive, Columbus, Georgia.

## **EUGENE W. CASWELL**

Warrant Officer Eugene W. Caswell, assigned to the 155th Aviation Company, Vietnam, sustained fatal injuries when his UH-1D helicopter crashed during the conduct of a combat mission on May 27, 1966. He is survived by his widow, Mrs. Carol Caswell, Rural Route One, Ray, Indiana.

## **EDWARD G. HALE, JR.**

Major Edward G. Hale, Jr., on assignment with the 10th Aviation Group, Fort Benning, Georgia, died as a result of injuries received in the crash of his UH-1D helicopter. The accident occurred at Fort Benning on June 8, 1966. He is survived by his widow, Mrs. Marilyn L. Hale 6342 Alcott Ave., Van Nuys, California.

## **PHILLIP H. HOLMES, JR.**

Major Phillip H. Holmes, Jr., an Army Aviator assigned to the 1st Infantry Division, Vietnam, died as the result of hostile action in the Republic of Vietnam on June 8, 1966. He is survived by his widow, Mrs. Barbara G. Holmes, 1520 Austin Avenue, Brownwood, Texas.

## **DOUGLAS M. MOODY**

Major Douglas M. Moody, USA Retired, a civilian test pilot assigned to the AVCOM Bell Plant Division, Fort Worth, Texas, died as a result of injuries received in the crash of his UH-1B helicopter during an acceptance test flight on June 16, 1966. He is survived by his widow, Mrs. Georgia Leona Moody and three children of 4105 Big Bend Trail, Fort Worth, Texas. Burial was at the National Cemetery, Fort Sill, Oklahoma, on June 18, 1966.

## **FARRIS G. McMICKEN**

Captain Farris G. McMicken, an Army Aviator assigned to the 1st Cavalry Division, Vietnam, on temporary duty with the 10th Aviation Group, sustained fatal injuries when his UH-1D helicopter crashed at Fort Benning, Georgia,

# OBITUARIES

during the conduct of a training mission on June 8, 1966. Captain McMicken was promoted posthumously to the grade of Major. He is survived by his widow, Mrs. Margaret A. McMicken, c/o Meader, 802 Washington Ave., S. Houston, Texas.

## **HUGH R. NELSON, JR.**

Captain Hugh R. Nelson, Jr., an Army Aviator on assignment with the 114th Aviation Company, Vietnam, died as a result of hostile action in the Republic of Vietnam, on June 5, 1966. He is survived by his widow, Mrs. Elizabeth D. Nelson of 231 Forestwood Drive, Durham, N. C.

## **MARTIN D. REILLY**

Captain Martin D. Reilly, an Army Aviator assigned to the 170th Aviation Company, Vietnam, sustained fatal injuries in the crash of his UH-1D helicopter. The fatal accident took place during the conduct of a combat mission on May 17, 1966. He is survived by his widow, Mrs. Arleen M. Reilly of 3209 Catnip, El Paso, Texas.

## **JOHNNIE P. SAWYER**

Captain Johnnie P. Sawyer, an Army Aviator on assignment to the 219th Aviation Company, Vietnam, died as a result of injuries received in the crash of his O-1A aircraft during the conduct of a combat mission on June 10, 1966. He is survived by his widow, Mrs. Sieglinde Sawyer, 182 Woodlawn Mobile Park, Fort Campbell, Ky.

## **RALPH R. SMITH**

Warrant Officer Ralph R. Smith, an Army Aviator, assigned to the 1st Cavalry Division, Vietnam, died as the result of hostile action in the Republic of Vietnam on June 13, 1966. He is survived by his mother, Mrs. Thelma R. Smith, Route 4, Box 467, Licolnton, North Carolina, and his father, Mr. Ralph B. Smith of 406 East Holmes Street, Benson, North Carolina.

## **WILLIAM F. WINTERS**

Major William F. Winters, on assignment with the 25th Infantry Division, Vietnam, died as a result of injuries received in the crash of his UH-1D helicopter. The accident occurred during the conduct of a combat mission on May 20, 1966. Major Winters was a former president of the AAAA Hawaiian Chapter. He is survived by his widow, Mrs. Edith M. Winters, Apartment 10, Lumar Village, Butler, Pennsylvania.



## MASTER WINGS

COLONEL E. PEARCE FLEMING, JR., CENTER, IS SHOWN RECEIVING THE WINGS OF A MASTER ARMY AVIATOR IN A LATE JUNE CEREMONY AT FORT WOLTERS, TEXAS. BRIGADIER GENERAL ROBERT R. WILLIAMS, RIGHT, DIRECTOR OF ARMY AVIATION, MAKES THE PRESENTATION AS MRS. FLEMING LOOKS ON PROUDLY. COL. FLEMING, THE COMMANDING OFFICER OF THE ARMY PRIMARY HELICOPTER CENTER, BEGAN HIS ARMY FLYING CAREER AS A LIAISON PILOT IN 1951. THE PRESENTATION BY GENERAL WILLIAMS HELD A SPECIAL SIGNIFICANCE AS HE WAS THE FIRST ARMY AVIATOR TO RECEIVE THE RATING OF MASTER ARMY AVIATOR. ■

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# AAAA NEWS



## VIETNAM REPORT

■ U.S. Senator John G. Tower (Rep., Tex), is shown addressing 323 U.S. Army Primary Helicopter School graduates and the audience at the June 10 AAAA "Birthday Barbecue" at Fort Wolters, Tex. The senator, who recently completed his second inspection tour in Vietnam, told the audience that the Army's airmobile concept was largely responsible for this nation's successes in Vietnam.



## AAAA AWARDS

■ General Hamilton H. Howze, USA (Ret.), vice president for product planning at the Bell Helicopter Company, speaks to the Fort Wolters AAAA Chapter barbecue audience on June 10 on their celebration of Army aviation's 24th anniversary. General Howze also presented the Chapter's AAAA Awards to the military "Aviator of the Year" and to the civilian "Aviator of the Year" at Southern Airways of Texas.

## "66 CONVENTION PLANS WELL UNDERWAY

Gathering on August 26-27 at the Shoreham Hotel in Washington, D.C., members of the AAAA National Executive Board will review planning for the Oct. 12-14 Eighth Annual Meeting of AAAA, and will "dry run" the Shoreham's convention facilities for the national gathering.

In separate meetings, members of AAAA's National Awards Committee will select the 1965-1966 winners of national awards, while members of the Association's National Nominations Committee will select four candidates for National Board office for the 1966-1969 term.

The meeting will also provide the Board with the opportunity to welcome CW2 Clinton E. Downing as its newest member. Assigned to the Department of Rotary Wing Training at USAAVNS, Downing was appointed June 30 as a National Member-at-Large and is the first of several warrant officer members to be appointed to national board office.

## LOCAL WINNERS

The first chapter to select local area winners for awards paralleling the several AAAA national awards, the Fort Wolters Chapter chose Maj. William H. Koehler, USAPHS scheduling officer, and Southern Airways standardization supervisor John J. MacFarlane, as respective military and civilian "Aviators of the Year."



## 1966 AAAA ANNUAL MEETING ADVANCE REGISTRATION COUPON

Enclosed please find \$ \_\_\_\_\_ in payment for my registration for the 12-14 October 1966 Annual Meeting of the AAAA and for the tickets that I have indicated below:

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