

Army Aviation

AUGUST, 1973

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GENERAL RULES

Seven chances to win! Sign up **ONE** new AAAA member before Oct. 1, using the AAAA application form on the opposite page, and clip it to your '73 Sweepstakes Coupon. **Both** your coupon and the membership application of the new member will be included in the 1973 Sweepstakes' drawing. Enter as many coupons as you wish, but submit a new membership application with each entry. Separate prizes will be awarded to each of AAAA's Top Three Recruiters at the conclusion of the 1973 Sweepstakes with "Top Recruiter" standings being published in the July-October issues. Sign up one new member; **you might wind up enjoying Hawaii!**



BONUS!

Two Coupons (we'll make the duplicates) will be entered in the Sweepstakes for **BOTH** the recruiter and the enrollee in those cases wherein a two-year membership is initiated.



1973 AAAA SWEEPSTAKES

c/o AAAA, 1 Crestwood Road, Westport, Conn. 06880

As a member of AAAA and in accordance with the Sweepstakes' general rules, I wish to enter this Coupon in the AAAA 1973 Grand Sweepstakes. I've enclosed the membership application form and the first year annual dues of a new AAAA member to qualify this Coupon for Sweepstakes' entry. I understand I don't have to be present at the October 16 drawing in Washington, D.C. to be eligible to win.

Print Name _____ Rank _____

Address _____

City _____ State _____ ZIP _____

GENERAL RULES

No purchase is necessary. A member may submit as many entries as he wishes, but each entry must be accompanied by the application form of a new member. Entrants must be AAAA members at the time of entry. Renewals of Oct. 1972-Sept. 1973 memberships are not considered as "new" memberships. Additional Sweepstakes blanks will be provided on request, or a same-size facsimile may be used. Payment of taxes on prizes is the responsibility of the winner. All Federal, State, and local regulations apply. Selection of winners will be made on Oct. 16 at the AAAA National Convention. A list of all winners' names and addresses will be published in the November, 1973 issue of ARMY AVIATION MAGAZINE.



ARMY AVIATION ASSOCIATION

1 Crestwood Road, Westport, Conn. 06880

I wish to become a member of the Army Aviation Association of America (AAAA). My past or current duties affiliate me with Army Aviation and I wish to further the aims and purposes of AAAA. I certify that I am a citizen of the U.S., and understand that the annual membership fee of \$8 includes an annual subscription to ARMY AVIATION MAGAZINE. I've made my check payable to the "AAAA."

Print Name _____ Rank _____

Address _____

City _____ State _____ ZIP _____

CATEGORY OF AAAA MEMBERSHIP

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| <input type="checkbox"/> USA Active | <input type="checkbox"/> Administration |
| <input type="checkbox"/> Only | <input type="checkbox"/> Marketing |
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| <input type="checkbox"/> Army Reserve | <input type="checkbox"/> News Media |
| <input type="checkbox"/> Army Retired | |
| <input type="checkbox"/> Other Services | |
| <input type="checkbox"/> New Membership | <input type="checkbox"/> \$15 (2-Yr. Memb.) |
| <input type="checkbox"/> \$2 (Initiation Fee) | <input type="checkbox"/> \$8 (1-Yr. Memb.) |

The initiation fee applies to the applicant's first year membership only, and covers the one-time issue of a personal lapel pin and a membership decal. The individual membership will become effective on the first day of the month after the month of application.

1973 AAAA SWEEPSTAKES

NEW MEMBER PRIZES!

FIRST PRIZE*

Twin bedroom guest accommodations in Washington, D.C.'s posh Shoreham Hotel during the AAAA's 1973 National Convention . . . Four days and three nights! Complimentary guest tickets for two to all 1973 AAAA National Convention meeting functions, including Registration, three Receptions, and three Luncheons! . . . A guest dinner for two at one of Washington, D.C.'s finest restaurants, the Jockey Club, at any time during October 16-18!

SECOND PRIZE*

Complimentary guest tickets for two to all

'73 AAAA National Convention meeting functions, including Registration, three Receptions, and three Luncheons during October 16-19.

THIRD PRIZE

A personal library set of six bound volumes of ARMY AVIATION for the 1967-1972 years.

FOURTH, FIFTH, AND SIXTH PRIZES

A personal library set of three bound volumes of ARMY AVIATION for the 1970-1972 years.

*Non-transferable, no cash value. (Must be used in Washington, D.C., Oct. 16-19).

The T700... bred to be in the Army.

The T700 turboshaft engine was specifically designed for the Army aviation environment. That's one reason why it was chosen to power all the prototypes being evaluated for both UTTAS and AAH.

The T700 is designed for improved maintainability, reliability and reduced cost of ownership. It can be maintained in the field, when required, with only 10 standard Army tools.

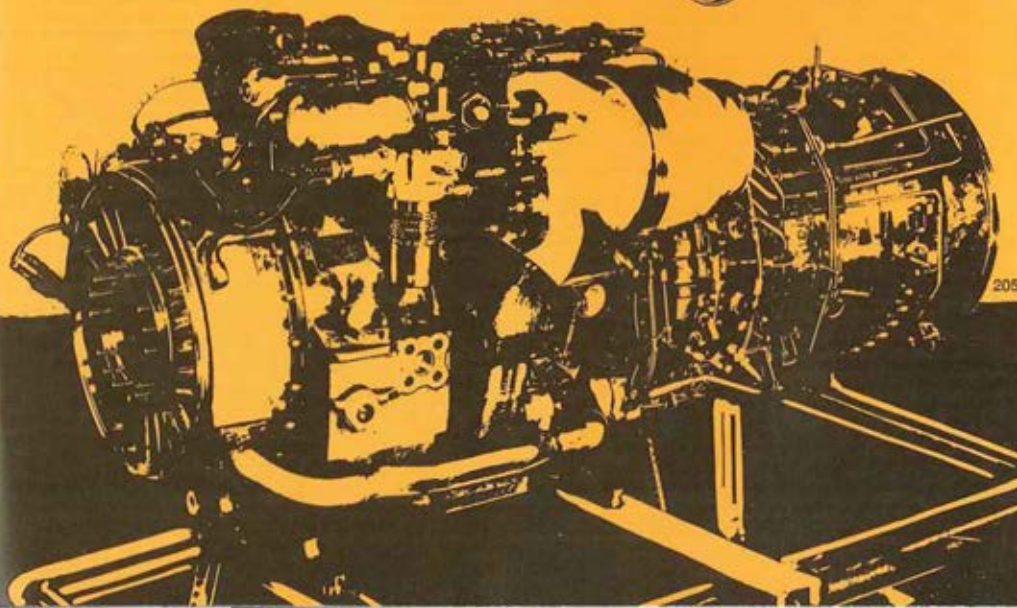
And proving it for UTTAS and AAH.

The first T700 went to test ahead of schedule last February. Since then, three more engines have joined the test fleet.

To prove the features designed into the T700, over 7,000 development test hours will be completed before the engine is qualified for production in 1976. First for UTTAS.

Now for AAH too.

GENERAL  ELECTRIC



ARMY AVIATION

VOL. 22 — AUGUST 1, 1973 — NO. 8

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* Highlights *

Major General William J. Maddox, Jr., will assume the duties of Commander of the U.S. Army Aviation Center and Commandant of the U.S. Army Aviation School. General Maddox is expected to report to his Fort Rucker assignment in late September, terminating a record three-year tour as Director of Army Aviation, OACSFOR.

Brigadier General (Designate) James H. Merryman, Office, Assistant Secretary of the Army (R&D), will become Army Aviation's seventeenth Director, replacing General Maddox.

The Sikorsky Aircraft Division's Advancing Blade Concept (ABC) was demonstrated in flight for the first time on 26 July. Two flights totaling 30 minutes successfully demonstrated the concept of using two coaxially-mounted, very stiff rotor blades without an anti-torque rotor system.

On 27 July, the Boeing Vertol Company's Model 347 Chinook successfully demonstrated for the first time its fly-by-wire flight control in a flight of 1:17 hrs. The fly-by-wire control system is designed for eventual employment in the Boeing Vertol XCH-62 Heavy Lift Helicopter.

New aircraft designations were recently announced by DOD and include the following:

YUH-60	Sikorsky Aircraft UTTAS
YUH-61	Boeing Vertol UTTAS
XCH-62	Boeing Vertol HLH
YAH-63	Bell Helicopter AAH
YAH-64	Hughes Helicopters YAH

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Major General Sidney B. Berry, to Commander, 101st Abn Div (Abn), Ft. Campbell KY 42223.

Major General Allen M. Burdett, to Commander, III US Army Corps and Deputy Director Project MASTER, Ft. Hood TX 76544.

Brigadier General Joseph B. Starker, to Commander, CDEC, Ft. Ord CA 93941.

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NEW DIRECTIONS



**By Major General
WILLIAM J. MADDOX, Jr.
Director of Army Aviation,
OACSFOR, D/A**

"NEW Directions" will be the theme of the 1973 AAAA National Convention to be held in Washington's Shoreham Hotel, 16-19 October. The subtitle for the meeting will be, "Army Aviation Moves Out", to support the fact that Army Aviation has turned the corner from Vietnam warfare to meet the new challenges of the 1970s.

We already are looking to the 1980s, its new family of aircraft, and its infinitely more complex problems of closing with and destroying the enemy. However, the approaches to the 1980s begin in this part of the 1970s.

Accordingly, we are adjusting our tactics, changing our proficiency flying requirements, revising our training programs and standardization apparatus, and updating our outlook on the part that aviation plays in the Army.

We find that Army Aviation in its 32d year is a mature part of the Army. Others see us in the same light — those in the Congress, OSD, the other Services and inside the Army itself. Vietnam took care of many of the old threats to our very existence. We now must contend with such normal postwar threats such as attacks on flight pay.

But these are diversions — there always is a thrust to break with old ways and to cut back on prerogatives after a war. The main tasks now are to continue to adjust force structure, particularly in the Reserve Components, to tailor our flight requirements to the constraints of the national fuel shortage, and to adjust the content and philosophy of the initial entry flight training course accentuating nap-of-the-earth, night flight, and instrument capability.

These same skills must be cultivated in our unit aviators. We must accent aerial gunnery and cavalry scouting and insist on tactical realism in preparation for operations in a high antiaircraft threat environment.

On the personnel side, our officer-aviator is customizing himself to a new personnel management system which makes aviation a skill but not a career pattern. This opens up many more career possibilities to him. It makes him eligible to command both ground and aviation units. And his dual track possibilities include a specialty in a major staff activity such as operations, R&D, or logistics. For his part, the warrant officer aviator not only remains a full time aviation specialist but has more clearly defined career options and broadened opportunities to be employed outside the cockpit.

All of these matters contribute to the ferment at work in the Army this year. All will be touched upon in October as we gather together to assess the "New Directions".

Reducing the hardcore

How well did we fly in fiscal year 1973? All of the returns are not in from the field on flying hours and aircraft utilization. But it appears that the safety record set only last year has been shattered decisively.

Rather than wait until the last statistic has been compiled, I feel that we should publicize our most recent accomplishments and set our sights on the new fiscal year before too much of it is gone.

Last year, that is, Fiscal 1972, we compiled a rate of 11.95 accidents per 100,000 flying hours. This was more than three points better than the previous year. In Fiscal 1973, our incomplete statistics show that our rate should be in the vicinity of eight accidents. This is a fine accomplishment and shows that many, many people flew professionally and had the good fortune to bring their aircraft back from the skies accident-free.

Back in the mid-1960s when our accident rate was around 50 per 100,000 hours, someone analyzed the record and determined that the acceptable rate would be about eight accidents. Like unemployment, there would be a hardcore of accidents which never could be eradicated. Eight appeared to be the level of the hardcore.

The validity of eight

Now that we are in the vicinity of the irreducible hardcore, we should examine very carefully the validity of the figure eight. However, it doesn't take much analysis to determine that eight is not the right number. Look at three recent accidents:

All three accidents have one characteristic in common . . . each aircraft commander flew a perfectly good machine into the ground!

#1: An AH-1G was making a "gun run" on an aggressor bunker during a training exercise. The ammunition was simulated, but the aggressor was scared nonetheless as the witness statement later revealed, "I thought the Cobra was coming in the

bunker with me!" The Cobra didn't fly into the bunker, but did impact the ground just past the bunker simply because the aircraft commander executed the pull-up too late.

#2: An AH-1G was making a simulated "gun run" to be followed by a high speed pass during a demonstration. The pull-out was late and the Cobra careened across the ramp into a Volkswagen, killing four spectators and seriously injuring one. Civilian spectators paid the penalty for this error, but the aircraft commander will have to live with the memory.

OV-1D blues

#3: An OV-1D was cruising at 600' AGL during a photo run which was terminated with a climbing right hand turn followed by a wing-over at about 1,200' AGL. Those of you who are *Mohawk* drivers can probably speculate on the odds of a successful recovery from this maneuver with a grossed out "D" model. In this instance, the odds were against the pilot and his observer.

These make pretty grim reading. They are especially grim because each is a completely needless loss of life and equipment. Not only is pilot error in judgment involved in each, the more serious sin of supervisory error was committed. Some commander failed to do the precautionary spadework which would have prevented an error in pilot judgment.

Should we at this time send out letters of congratulations to the world and beat ourselves on the chest for setting a new and remarkable safety record? Should we agree that the number eight is just about right? Should we decide to accept our current situation? Or should we resolve that the type of accidents just described cannot be lived with?

I opt for stamping out every accident we can. This means that we *cannot* live with our personal error accidents. *Eight* has no real validity as a stopping point. It is a number that is too high. It is a point through which we must pass and pass quickly.

Looked at in overall terms, our record for FY 1973 shows that we flew approximately 1.7 million hours. We had 124 accidents which resulted in 70 fatalities and 106 injuries. Obviously, we must strive harder.

Paris Air Show

The TU-144 Russian supersonic transport (SST) was impressive as it went through its paces before the June Sunday crowd at Le Bourget Airport. However, it would have created scant notice except for aviation specialists in Paris if it had not outperformed itself on its last pass down the runway.

Although the precise cause for its fatal plunge into a Paris suburb still is unknown except possibly to the Russians, it was competing against the British-French Concorde which had gone through the same paces a few moments before.

The SST accident bears little on Army Aviation except for the fact there is a stark lesson to be learned from it. In my view, the crew took the aircraft through maneuvers which it normally would not be expected to perform.

I saw the TU-144 crash and I also saw helicopters stunting at the same Paris Show in a manner which could cause immediate grounding of aviators in an Army unit. While such performance may demonstrate a measure of aircraft versatility, it is outside the flight regime of military helicopters. Therefore, it has no place in military aviation. Let no one feel called upon to ape the acrobatics of the airshows. Our payoff comes in precision and technique within the recognized military flight envelope.

Postscript: Paris, otherwise, was an expensive but professionally interesting gathering of aviation personalities and equipment. I saw representatives of Army Aviation from most of the Western European countries. This provided an excellent point of departure for my later visits to the aviation centers of Germany and Great Britain.

Hubschrauber Forum

Brigadier General Hans Drebing, the German Army Director of Army Aviation, produced a splendid two-day *Helicopter Forum* at Bueckeburg in the North German State of Niedersachsen. Aviation representatives from ten countries were present, plus delegations from several major helicopter manufacturers from this country and Europe.

Hans Weischel and Stan Martin represented Bell Helicopter. Chuck Ellis and Mark John attended from Boeing Vertol. Jack McKenna and Sergei Sikorsky headed the Sikorsky group.

My address to the gathering consisted of an exposition on the attack helicopter. I described how integral to the airmobility concept the attack helicopter is. We dance around the edges with our helicopters unless we tie the whole effort together with integrated firepower.

The primary weapon

As far as the advance attack helicopter is concerned, it is very popular to talk tankkilling with the TOW missile. This has resulted in the 30mm automatic cannon being described as the secondary weapon. However, the cannon should share equal billing with the antitank missile and may well turn out to be the primary weapon, at least in terms of the number of targets that it kills. Even in a tank attack, there are plenty of soft targets to be taken under fire.

While the 30mm cannon is not designed to kill tanks, it can destroy armored personnel carriers, trucks, and accompanying infantry. As the 30mm has the same range as the TOW, it can be used on many targets that do not require the accuracy of the deep penetration of a TOW. On this basis, the 30mm is a cost effectiveness weapon and one

that should get a lot of bread and butter work.

One highlight of the German visit was my trip to the *Hubschrauber Museum* in the town of Bueckeburg. It is the world's only museum dedicated solely to helicopters and vertical flight. Its custodian, Sergeant Werner Noltemeyer, has researched extensively the history of the helicopter which extends back well before Leonardo DaVinci.

He has assembled an impressive collection of photographs of early drawings and concepts of vertical flight together with a considerable amount of hardware. The collection is housed in a large antique townhouse furnished by the municipality of Bueckeburg. We must now get some cross fertilization between Bueckeburg and the Fort Rucker Museum.

Middle Wallop

The British Aviation Centre at Middle Wallop on the Salisbury Plain is only a moderate cross country flight distant from Bueckeburg. In fact, General Drebing promised to fly me there in a German Army CH-53 if local airline strikes delayed my scheduled commercial flight from Hannover to London.

I noted that *Brigadier Maurice Sutcliffe*, the commandant of the flight training center at Middle Wallop has flown to Paris for the airshow in a helicopter. He motored across the English Channel beneath a 200-foot overcast directly to Le Bourget.

I was the guest of *Major General "Tony" Richardson*, British Director of Army Aviation, at Middle



RARE SIGHT! — 100 availability in the air! A formation of 23 UH-1H Hueys and six AH-1G Cobras of Ft. Bragg's 129th Aviation Company approach runway 09 at Simmons AAF in an echelon left formation. If you think a 100 fly-by is a common sight, you're mistaken. Our hats are off to the 129th!

Wallop and had the opportunity to fly nap-of-the-earth past Stonehenge. While the British instruction differs somewhat from ours, the thrust is the same. The British, like we, also have confidence that aircraft operating in the regime of the ground soldier will be able to survive and fight effectively in a European combat environment.

A day prior to my visit, General Richardson had hosted a AAAA group composed of *Mr. and Mrs. Art Kesten* and family, *Mr. and Mrs. Carl Diehl* of Bell Helicopter, and *Mrs. Edith Todd*, better known as "Tuddy" of my office. The visiting traffic was particularly heavy in Middle Wallop because I had lunch with *Lieutenant General Sir David Fraser*, Vice Chief of the General Staff.

Personnel Permutation

The summer shift is underway. It comes at a time when the Army is reorganizing. On 1 July, CONARC and Combat Developments Command (CDC) ceased to exist and two new headquarters were formed. The Training and Doctrine Command (TRADOC) remains at Fort Monroe and assumes most of the functions of CDC and the school system, to include chief responsibility for Fort Rucker. *Colonel Clem Wyllie* also remains as aviation officer.

The Army Force Command (FORSCOM) was established at Fort McPherson, Georgia, to take over the troop responsibilities formerly performed by CONARC. *Colonel Bill Proctor*, formerly aviation officer of Third Army, is retiring and will be replaced at FORSCOM by *COL Arnold Pollard, F.A.*

LTG "Phip" Senell has been named to command Fifth Army in San Antonio and will relinquish his III Corps/MASSTER flag at Fort Hood to *MG "Al" Burdett* who has been nominated for his third star. No replacement for *General Burdett* has been named.

In a separate move, *BG Joe Starker* is shifting from Ft. Hood to command the Combat Developments Experimentation Command (CDEC) at Fort Ord. In this role, he will be in charge of the extensive survivability and effectiveness testing of attack and scout helicopters which has been in progress for three years.

MG Elvy Roberts, a wartime commander of the 1st Cavalry Division, also has been nominated for a third star and will command the Sixth Army in San Francisco.

MG-nominee George Patton, now assistant commandant of the Armor School at Fort Knox, soon will be assuming new duties at the U.S. European Command headquarters at Stuttgart, Germany.

Colonel John A. Todd, former Deputy Commander of the U.S. Army Aviation Center and Fort Rucker, has moved to the Pentagon to become the Executive and Special Assistant for Air Mobility in the Office, Assistant Secretary of the Army (R&D).

Colonel Crawford (Buck) Buchanan, former Commander of the 3d AIT Brigade at Fort Jackson, S.C., has replaced him as Deputy Commander at Fort Rucker.

We're at work on the Army's Advanced Attack Helicopter.



Our AAH is light in weight but it packs a heavy-weight punch — fast, highly maneuverable, hard to spot and harder to hit.

It will be armed with our lower-cost "chain gun," reducing the weight of the ordnance system 280 pounds and the drag by 70 percent (we're the only company in the world that manufactures both guns and helicopters).

It will give its crew even greater safety

than our OH-6A, which set new standards during more than two million combat hours in Vietnam.

It's a small, tough machine, designed for treetop combat, day and night.

We're confident it will perform the Army's attack helicopter mission better. We know it will cost the Army less.

**Hughes Helicopters
& Ordnance Systems**

NEW DIRECTIONS (Continued from Page 10)

As many of you are aware, new Readiness Regions are being established around the United States to supervise Reserve Component activities. Each is authorized a colonel as aviation officer. I'll carry a roster of these people in the next issue. Their performance will be highly important in improving the capabilities of National Guard and Reserve aviation units.

Flight Pay

While we are learning to live with the new senior officer flight pay rules, we are pointing toward a major revision in how we are compensated for regular and frequent participation in aerial flight.

The first hearings got underway in late July before a House Armed Services subcommittee headed by Congressman Samuel Stratton of New York. Mr. Stratton supports flight pay and was a leader in the attempt to get current rates extended through the end of the year for all active aviators. This attempt failed in the legislative rush at the end of the last fiscal year in June.

Building for the Future

On 20 July, the new brick building of the U.S. Army Agency for Aviation Safety (USAAVS) was dedicated at Fort Rucker. The building and its extensive computer-assisted operation reflect the maturity of the entire Army Aviation program.

In front of dignitaries from the post and the surrounding communities, I charged USAAVS to:

- Provide increasingly better analysis of the causes of accidents so that prevention can be more effective both in the design and operation of aircraft.
- Remain commander-oriented so that the agency

provides direct assistance to field units.

● Delve more deeply into the supervisory aspects of accidents which is where the real money is to be made in accident prevention. If supervisors are doing their jobs properly, there would be many less pilot error and maintenance failure accidents.

● Broaden in outlook so that the agency is not solely a data-keeping organization but works to get more out of our equipment and people SAFELY.

In addition to Colonel Max McCullar, present commander of the agency, five of the seven former commanders were present for the dedication. These were Major Ollie B. Richie (1957), Colonel James F. Wells (1958-62), Colonel Warren R. Williams (1965-1968), Colonel Russell P. Bonasso (1968-69), Colonel Eugene B. Conrad (1969-72).

The previous day I spoke at the graduation of the last class of the Infantry Officer Candidate School (IOCS) at Fort Benning. As a former graduate (1944), I was particularly honored to note that I was helping to close a chapter in American military history. During the 32 years it existed, the IOCS had graduated over 108,000 students.

Of the over 70 graduates in the last class, eight are applicants for flight training. Included in this group is 2d Lieutenant Mark Jones, son of Col. Harry L. Jones, now serving in the advisory group in Iran. Incidentally, the commandant of the IOCS is LTC Gordon "Mal" Hunt, an Army Aviator.

While IOCS phases into history, a basic OCS will take its place at Fort Benning. It will be a 14-week branch immaterial course from which graduates will proceed to branch basic courses prior to taking their first assignments.

Ridiculous Flight of the Month

You read about three at the start of this article. How unsafe can ridiculous be?

THERE IS A NEED FOR BOTH

Excerpt taken from the July 13, 1973 hearing of the Senate Armed Services Committee with testimony by General George J. Brown, Chief of Staff, USAF.

Senator Thurmond: General Brown, do you believe there is a place in the military force structure for an attack helicopter such as the Army is now developing?

General Brown: Senator Thurmond, my experience with the use of helicopters in armed combat is rather restricted. However, after two years in Vietnam with General Abrams, I am personally convinced that there is a need for both the helicopter in combat, and fixed wing aircraft. One can do certain things that the other cannot. They complement each other. They were not competitive. To be more specific, to dig out a heavily entrenched enemy you need the heavy ordnance that only a fixed

wing aircraft can carry. Anytime you have to overfly the target you want a fixed wing aircraft. You don't want to expose a helicopter. It wouldn't survive. But if you can stand back and lob ordnance in on a target it will do a fine job. And obviously the ordnance he carries is much lighter, it is finding the troops in the open, some of it against armor in the open. But against heavily dug in bunkered forces you need the heavy ordnance from fixed wing aircraft.

Senator Thurmond: I am very pleased to hear you make that statement, because there have been expressions by some who want one, and by others who want the other, and it is my firm conviction from the study I have given it that we need both. And you say that one complements the other, and that both are essential.



MODERN WINGS FOR THE BRITISH ARMY

BY MAJOR GENERAL T. A. RICHARDSON, MBE
Director of Army Aviation, British Army, Middle Wallop

In the course of this article, I should like briefly to cover first the present aviation organisation and equipment in direct support of the British Army, and our plans for re-organisation and re-equipment, and then to touch on some aspects of our philosophy and tactics.

The direct aviation support for the British Army is divided by roles in that the Army operates helicopters for *Observation, surveillance, and target acquisition; Armed Action; Command and Control; Casualty Collection; and Light Liaison and Light Utility purposes.*

In other words, the Army operates and provides the immediately available, and immediately responsive, battlefield cross-country vehicles. The Royal Air Force is tasked to provide aircraft for logistic and transport support, casualty evacuation, and offensive air support with air-to-surface weapon systems.

I'll now outline the whole of this organisation so

that you get a picture of the support available to the British Army, in roles covered by your own Army Aviation. You'll find this covered pictorially in Chart on page 18.

Organisation

Firstly, I will deal with Army Aviation. Our present organisation consists of:

- Squadrons of ten aircraft supporting each Brigade; largely reconnaissance but some light utility aircraft.
- A further squadron at Divisional level which has both anti-tank and reconnaissance flights. These two types of squadron make up the *Divisional Aviation Regiment*. The aircraft in turn, can easily be re-grouped between the squadrons to meet battle requirements.
- At Corps level there is a rather larger squadron containing fixed wing liaison aircraft, anti-tank



Gazelle



Lynx



Scout



Sioux

weapon equipped helicopters, and a reconnaissance flight.

● In addition, the Armoured Car Regiments (Recce Bns) have their own air reconnaissance units.

● All the regiments and squadrons in a Corps or Theatre are co-ordinated under a Wing HQ.

In the future we expect to simplify and standardise the organisation (this will be based on flight of 6) and increase the proportion of anti-tank helicopters. The anti-tank helicopters will be included in all Brigade Squadrons. This will not prevent them being concentrated at Divisional or Corps level when required.

The Royal Air Force provide squadrons of support helicopters for logistic and air mobility tasks, as well as squadrons of V/STOL fighter ground attack aircraft for close offensive air support. These squadrons are organised together in groups, and they can be allotted in direct support of Army formations down to Brigade level, when necessary.

Equipment

The aircraft which carry out the various roles are:

Reconnaissance or LOH. We have the *Sioux*. This is the 3-seat supercharged version made by Agusta-Bell in Italy and Westlands in UK under licence. They normally operate in daylight with observers using stabilised binoculars. They can be armed with machine guns or fitted with loud hailer or Nitesun illumination searchlights for internal security situations.

Light Utility and Anti-Armour. We use the *Scout* for these roles. This helicopter was designed in England to meet a military specification similar to that of the *Huey*, except that we insisted on a size constraint to keep it compact and agile. It was produced by Westlands. The Naval version is called the *Wasp*.

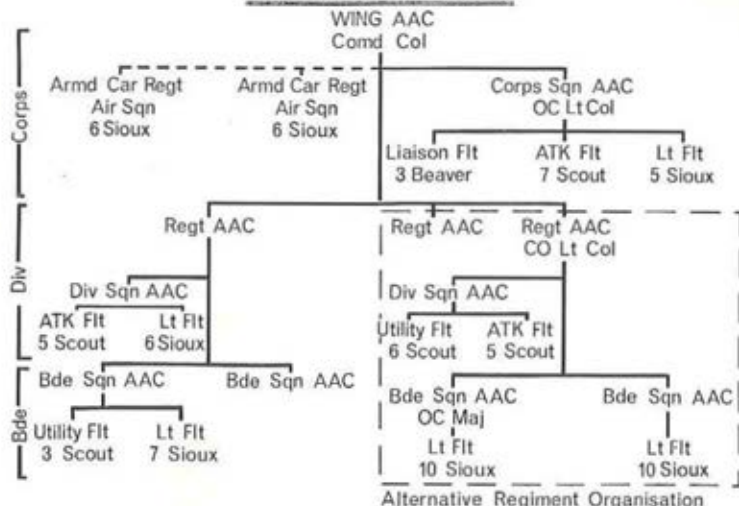
It can carry 1,000 lbs of payload or four soldiers in addition to a two-man crew, even under hot/high conditions but its main attributes are that it is small (40 ft. overall, rotors turning) and manoeuvrable. It has turned out to be a very satisfactory anti-tank GW platform.

We use the SS-11 missile system in conjunction with the Avimo-Ferranti 120 stabilised sight. This sight, which is stabilised in pitch and yaw, is on top of the cockpit. This, we believe, is tactically important, as only the rotors and sight head need to be exposed to enemy view.

Liaison. We still have a few "Old Faithful" Beavers giving excellent service. We intend to re-equip completely during the 1970's.

Observation Helicopters. The *Sioux* will be replaced starting this year with the *Gazelle*, a small, agile five-seat helicopter, which can do 140 knots, with an AUW about 3,700 lbs. and a disposable load of some 1,500 lbs. It can be used to a limited extent for liaison as well as Command and Control roles. It can mount up to four ATGW missiles and

PRESENT ORGANISATION



other armament. It has limited avionics to enable it to move at night and in poor visibility.

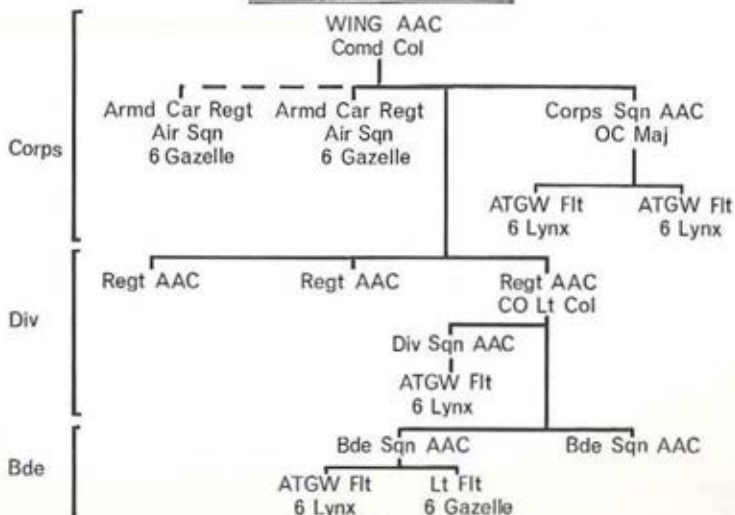
Light Utility, Liaison and ATK. All these last three roles will, in the future, be undertaken by the *Lynx* helicopter; this again is an agile and fast aircraft (up to 180 kts). It should be able to mount eight ATGW missiles or carry eight fully armed troops in addition to the two men crew. The *Lynx* is twin-engine and at 50 ft. overall, rotors turning, is

rather smaller than the *Huey*. It carries enough avionics and aids to enable it to carry out its role at night in poor visibility. There is also a Naval anti-submarine version for both our own and the French Navy.

The aircraft types operated by the Royal Air Force as Support Helicopters include:

The *Wessex*. A twin-turbine engined development
(Continued on Page 18)

FUTURE ORGANISATION



Attend the 1973 AAAA Convention!

SHOREHAM HOTEL, WASHINGTON, D.C.

TUESDAY, OCTOBER 16

Early Birds' Reception

WEDNESDAY, OCTOBER 17

General Membership Business Meeting
National Elections — Committee Workshops
AAAA Industry Member Luncheon
Viewing AUSA Aerospace Exhibits
Committee Reports
Cub Club Reunion; Unit Reunions

THURSDAY, OCTOBER 18

Professional Programming
"NEW DIRECTIONS"
"The Army Moves Out!"

General Membership Luncheon
(Open to all attendees)
President's Reception

FRIDAY, OCTOBER 19

Industry Member Presentations
Career Guidance and Counseling
AAAA Honors Luncheon Reception
1973 AAAA Honors Luncheon
Dischards' Reception

"That's why we must have, and we
have to have...always, Army Aviation."
—General Creighton W. Abrams, Jr.



1973 AAAA National Convention Advance Registration Form*

☐ I plan to attend the functions of the 1973 AAAA National Convention indicated below and have enclosed a check made payable to AAAA to cover the cost of my attendance. I understand that the Registration Fee covers my AAAA Registration and my attendance at all Oct. 16-19 AAAA professional presentations.

Function	Quantity Desired	Military Member	Civilian Member	Non- Member	Amount
1. Registration (a)		\$6.00	\$10.00	\$15.00	\$.....
2. AAAA-Industry Members Luncheon Noon-1:30 p.m., Oct. 17		\$5.00	\$ 5.00	\$15.00	\$.....
3. Ladies' Brunch 10:30 a.m.-Noon, Oct. 18		\$4.50	\$ 4.50	\$ 4.50	\$.....
4. General Membership Luncheon Noon-1:30 p.m., Oct. 18		\$8.00	\$11.50	\$15.00	\$.....
5. The President's Reception 7 p.m., Thursday, Oct. 18		\$5.00	\$ 6.50	\$15.00	\$.....
6. Honors Luncheon and Reception 11 a.m.-2 p.m., Oct. 19		\$9.00	\$12.50	\$15.00	\$.....
7. Honors Luncheon Table Reservation (Per 10-seat table with 4 company seats)		N/A	\$25.00	N/A	\$.....
8. Advance Registration Discount*					
AAAA members. Items 1, 2, 4, 5, 6		\$31.00	\$46.00	N/A	\$.....
AAAA wives. Items 1, 2, 3, 5, 6		\$21.50	\$21.50	N/A	\$.....
*Not valid after Oct. 1. "Military" includes active Army, Retired, Reserve Component, and DAC personnel.					
Total —					\$.....

Name Rank

Unit or Firm

Street

City State Zip

* Advance Registrants receive preferential seating at all reserved seating functions. Return prior to Oct. 1 with check made payable to AAAA to: AAAA, 1 Crestwood Road, Westport CT 06880.



PINNED AND TIED! In the photo above, Major General T. A. Richardson, MBE (left), receives his AAAA lapel pin from GB Eugene M. "Mike" Lynch during the course of the General Membership Luncheon at the Oct. 1972 AAAA National Convention and, below, accepts a distinctive AAAA tie denoting his Honorary Membership from Art Kesten, Quad-A Executive Vice President, during the latter's visit to the Army Air Corps Centre at Middle Wallop in June.



MODERN WINGS

(Continued from Page 15)

of the H-34, which carries some 14 armed troops or 4,000 lbs. underslung.

The *Puma*. An Anglo-French helicopter which carries as a normal load 16 troops or 5,000 lbs. underslung. It can cruise at 150 kts. It has recently come into service. Both *Puma* and *Wessex* Squadrons will exist together in service for the next few years.

There are no medium lift or heavy lift cargo helicopters. Their provision is still under review.

The V/STOL ground attack tasks are met by *Harrier*. I am sure that you know the capabilities of this machine, since its purchase by the U.S. Marine Corps has given it wide publicity in this country. We hope that these attack aircraft can be deployed in closer touch with the Army and the land battle than has previously been the case when high performance aircraft were tied to vulnerable stretches of concrete.

In summary, we have the *Gazelle* for reconnaissance and target acquisition, capable of directing Artillery or FGA fire-power from *Jaguar* or *Harrier*. We also have the *Lynx* as a general purpose battle wagon. All of these can be armed to defeat heavy armour, and the *Puma* and *Wessex* Squadrons used to transport men and material.

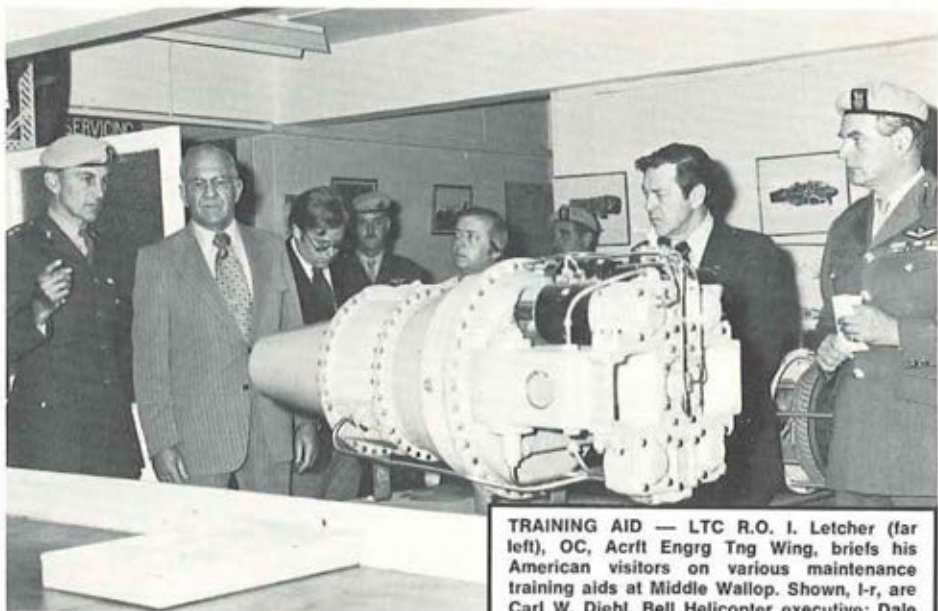
All of us will admit that this divided support organisation is not ideal, but by training together closely and by understanding each other's capabilities, the difficulties can be overcome. The helicopter support in Northern Ireland is totally integrated and is working very efficiently. So much for organisation and equipment.

Basic philosophy

I should now like to explain a few points about our basic philosophy. You may wonder why our inventory does not include an attack helicopter. It's not merely because we cannot afford it. The British Army has assessed that one of its major threats in Europe is the mass of conventional main battle tanks that can be deployed against it. When deciding on the need to arm helicopters this was the target which we had to destroy, and this in the face of sophisticated Air Defence weapons as well as concealed automatic weapons.

Our instinct for survival is strong, and indeed if you are outnumbered, survival is essential to win. The emphasis must be on concealment. You talk of Nap of the earth flying. I talk of using 'fieldcraft' and of 'seeing without being seen'.

In the days when the United States was struggling for its independence against the Redcoats, you taught us the value of stalking your enemy. These methods can be used by helicopters today. They have the cross-country mobility and the speed range to outmanoeuvre any other vehicle directly involved in the land battle. Speed is useful, but



TRAINING AID — LTC R.O. I. Letcher (far left), OC, Acrlt Engrg Tng Wing, briefs his American visitors on various maintenance training aids at Middle Wallop. Shown, l-r, are Carl W. Diehl, Bell Helicopter executive; Dale Kesten; MAJ I. E. Bell, GS02 Co-ord; Donal Botway, Roytran Int'l Corp.; COL J.N. W. Moss, Dep Comdt; Art Kesten, Editor, ARMY AVIATION; and Brigadier M. W. Sutcliffe, Army Air Corps Centre.

agility and controllability in the lower speed ranges, we believe, are even more important.

Consequently, we are developing compact helicopters, and we require anti-tank guided missiles which have a good range (better than 3,000 miles). We intend to engage from near maximum range as far as possible concealed by ground cover. We can meet these requirements by arming standard light utility helicopters.

If we do this the commander in the field will still have an option on the use of his limited helicopter resources and can vary the roles to suit the needs of the battle. He can carry men or material or use them for command and control, or to lay mines or to attack tanks. Custom-built gun ships or attack helicopters are probably more effective fighting vehicles but do not give a commander these alternative uses for his cross-country vehicle fleet.

Shortcomings

We're not unaware that concentrating our armament resources on the anti-armour role has left us with some shortcomings, the most significant of which, is, that we have negligible suppressive fire weapons. This is, at least, partly due to the view that the primary task is reconnaissance and observation and that immediate evasion is better than stopping around to shoot it out.

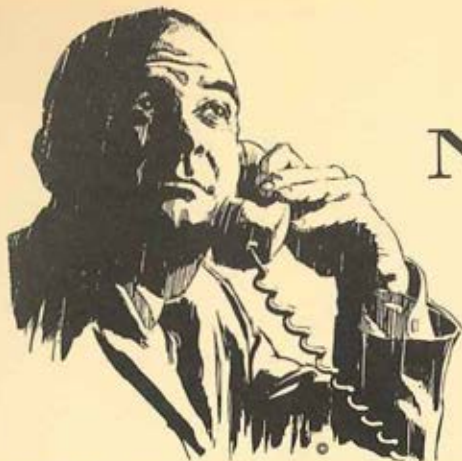
My personal view is that the observation helicopter requires a combination of agility, armour, and armament for maximum survivability. By increasing the ammunition load over the minimum

required for a protective capability, these machines might, when the circumstances are right, be used offensively against soft and light armour targets.

There are many avenues which need exploring and developing for the future. But primarily we believe that we must develop our night-fighting capability. We are encouraged by the success of some recent trials. One showed that using illumination from ordinary artillery flare shells helicopters could acquire groups of armoured vehicles consistently at ranges between 3,000 and 5,000 miles. The other trial demonstrated that good clear resolution Low Light TV pictures can be obtained which can tolerate local bright light sources such as car headlights without flooding the picture.

Support is the game!

We hope that after some further trials we can progress to the point where anti-armour helicopters can manoeuvre amongst the ground cover at night and engage tanks. We are convinced anti-tank helicopters are difficult to counter by day, by night they will be even more so. Always our main aim will be to continue to make helicopters immediately available to commanders at all levels at all times.



Not Me!

NOT ME! I don't need Flight Pay Insurance. I am the healthiest person in the world!

With the exception of minor childhood communicable diseases, I went all the way through grammar school, high school, college, and 31 years of active military service without losing a single day of duty for health purposes.

I was thoroughly convinced that my health was nearly perfect, and that Aviation Flight Pay Insurance was unnecessary. I did not even consider the few pennies it cost - I just plain did not think I needed it.

Some eighteen months ago, in the middle of a meal, I felt desperately ill and after several operations, I found myself permanently incapacitated to fly. At my age and rank, flight pay is not essential, however.

I would hope that my experience will serve as a reminder to the young Army Aviators with family responsibilities, and that this article may help them realize that everyone is human, therefore vulnerable, and that a mature, responsible person should hedge against all reasonable doubts. Look at your insurance portfolio carefully and realize that your responsibility extends over a long period of time.

ELLIS W. WILLIAMSON
Major General, USA

On Guard!

THE Los Alamitos Aviation Reserve Forces Training Center moved closer to full enactment when a Van Nuys aviation unit relocated to the Center. California-ARNG has indicated phasing responsibility beginning with 1 August 1973.

California has also indicated ARNG technician jobs are open and will be announced soon for operation of the flight line positions!

Airfield Commander, Operations Officer, Safety Officer, Control Tower, and Flight Operations.

While job grade and equivalent military positions have not been established, these will be provided with the job announcements. Full operational responsibility for the Center is estimated for October 1973.

Gunship qualification firing

Most ARNG attack helicopter gunship units are firing at Annual Training as they work to meet CONARC established goals. NGB Aviation Branch representatives plan to visit as many firings as is possible.

So far, CW4 Cox has observed Idaho and Montana firing at Boise as well as Missouri firing at Ft. Sill; LTC Kaiser has observed Michigan firing at Camp Grayling and plans to observe Illinois firing at Camp Atterbury.

All is going well with the program with the Active Army Area commands furnishing excellent assistance in IPs, Assistant Range Officers, and experienced armors. Some units have indicated they will fire later in training year.

Thank you!

Mrs. Cottrell, known to most as Irene, has retired. Long the sweetheart of ARNG Aviation — and a devoted "Girl Friday" for so many years — it was only in the last year that she was able to specialize in Officer Flight Status.

Even so, she personally processed action to place thousands of ARNG aviators on flight status. To Irene we say a big "THANK YOU!" To partially show our appreciation, we recently "pinned" Irene with Master Aviator Sweetheart wings.

Active duty tour open

NGB has a four-year AD slot open for assignment at FORSCOM, Atlanta, Georgia. Any interested ARNG Captain through Lieutenant Colonel, who qualifies, should contact the Aviation Branch, NGB.

Background experience should include a minimum of three years recent assignment with ARNG aviation, at least battalion level staff experience or equivalent or better, dual qualification, and pre-

ON THE JOB!

Diverted from AT at Camp A.P. Hill, Va., a 28th Avn Bn "Huey" rescued a 290 pound construction worker from death by drowning in a recent James River incident. The VA-ARNG aircraft was called in after Richmond personnel made six unsuccessful attempts to rescue the worker who sat in a "beached" flat bottom boat in a heavy current for more than three and one-half hours. With SP5 Michael Tobias' help, the worker was lifted to safety in a few minutes.

ferably experience as an ARNG Aviation Technician. There are two positions at FORSCOM; one was recently filled by Major Jim Joyner, Minnesota ARNG.

Safety report

Aviation Safety is getting attention at all levels of ARNG activities. So intensified has been the effort that no major accidents occurred in ARNG from mid-December 1972 to May 1973.

Two major mishaps occurred in May: an OH-58 wire strike in Oklahoma and an OV-1 accident in Georgia. All units and individuals are commended for their efforts to reduce accidents, in fact many States will receive the NGB accident-free award for FY 73.

The AT period is our most vulnerable, and to assist during this period two actions have been taken. Major Strickland, NGB Aviation Safety Officer, will be assisted during the summer months by two ARNG FTTD personnel. In addition, USA-AVS is visiting selected AT sites with teams to observe and assist during the AT periods.

New Reserve Forces Center to open at Los Alamitos, Calif.

By LTC CHARLES R. JONES
Chief, Army Aviation Branch
National Guard Bureau

"Das Flieger Fluzzle"

A flagrant flood of flawed fluff flounced to flip the flying flock!
A flabbergasting fillip of flippant fakery flouted to flap florid flagwavers!
A flowing flit of flimsy flashed to flaunt the fluent!
A flamboyant flood of flaky flotsam fixed to flagellate flustered flyers!

The nicknames of more than 202 aircraft and missiles are buried in the adjoining "Flieger Fluzzle" . . . a partial list appears below. How many can you find horizontally, vertically, or diagonally, descending or ascending?

Our "Crowded Skies" represented a challenge to some 42-odd contestants, and Ms. Judith E. Hurt, an AAAA member in the Lindbergh (St. Louis) Chapter, won our library set of six bound volumes

of ARMY AVIATION in identifying 157 of the 202 hidden aircraft and missiles.

Somewhat behind Ms. Hurt and all bunched at 118 "confirmed" were CPT Benny C. Rogers, CW3 James P. Fazekas, MAJ Leroy Z. Page, II, and CW2 John H. Farmer.

By actual count, there are 199 correctly-spelled listings. Caribou, TOW, and Iroquois are misspelled ever so slightly, but do appear in the Fluzzle.

AAH (Two), (Bell, Hughes, US)
Ace (Three), (Ace, US)
AgCat (Two), (Grumman, US)
Aircobra (Bell, US)*
Alon (Alon, US)
Apache (Piper, US)
Apollo (McDonnell-Douglas)*
Asro (Siemens, Germany)
ASH (Sikorsky, US)
ASROC (Missile, US)*
Atlas (Convair, US)*
Avenger (Grumman, US)
Avion (Alpavia, France)
AX (Ten), (Fairchild, US)
Aztec (Piper, US)
Baron (Beech, US)
Bat (Antonov, USSR)
Bear (Two), (Tupolev, USSR)
Bearcat (Grumman, US)
Beaver (DeHavilland, Canada)
Bird Dog (Cessna, US)
Bonanza (Beech, US)
Bronco (N. American, US)
Buckeye (North American, US)
Buffalo (DeHavilland, Canada)
Camel (Tupolev, USSR)
Caribou (DeHavilland, Canada)*
Cat (Four), (Antonov, USSR)
Cart (Tupolev, USSR)
Cayuse (Hughes, US)
Cherokee (Piper, US)
Cheyenne (Lockheed, US)
Chickasaw (Sikorsky, US)
Chinook (Boeing Vertol, US)
Chinow (Sikorsky, US)
Claw (USSR fighter)
Cobra (Two), (Bell, US)
Coke (P4S1, USSR)
Colt (Two), (Piper, US; Antonov, USSR)
Comanche (Piper, US)
Convair (Convair, US)

Coot (Ilyushin, USSR)
Corsair (Chance Vought, US)
Cougar (Grumman, US)
Crane (Sikorsky, US)
Crusader (LTV, US)
Cub (Two), (Piper, US; Antonov, USSR)
Dart (Handley-page, U.K.; Convair, US)
Djinn (Sud-Aviation, France)
Doak (Doak, US)
Dove (DeHavilland, U.K.)
Fleap (Ryan, US)
Fury (Douglas, US)
Galaxy (Lockheed, US)
GEM (Princeton U., US)
Genie (Douglas, US)*
Gnat (Two), (Hawker Siddeley, U.K.)
Goose (Grumman, US)
Hare (Mil, USSR)
Harrier (Bristol Siddeley, U.K.)
Hawk (Three), (Raytheon, US)*
Hawkeye (Grumman, US)
Hello (Hello, US)
Hen (Three), (Kamov, USSR)
Heron (Hawker Siddeley, U.K.)
Hook (Mil, USSR)
Hornet (Hiller, US)
Huey (Two), (Bell, US)
Hueytug (Bell, US)
HUK (Kaman, US)
HUS (Sikorsky, US)
Iroquois (Bell, US)*
Jetstar (Lockheed, US)
Jupiter (Chrysler, US)*
Kingair (Beech, US)
Kiowa (Bell, US)
Kos (PZL102B, Poland)
Lance (LTV, US)*
LAW (US)*
LEM (Grumman, US)

LM (Four), (Grumman, US; Fuji, Japan)
Lobber (Convair, US)*
LOH (Hughes, Bell, Hiller, US)
Marauder (Martin, US)
Max (Yakovlev, USSR)
May (Two), (Ilyushin, USSR)
Mentor (Beech, US)
Mig (USSR fighter)
Mohawk (Grumman, US)
Mojae (Sikorsky, US)
MU (Five), (Mitsubishi, Japan; Mooney, US)
Mule (Piasecki, US)
Musketeer (Beech, US)
Mustang (N. American, US; Canada)
Navaho (N. America, US)*
Navion (Ryan-N. American, US)
Nike (Two), (Douglas-Western Electric, US)*
Orion (Lockheed, US)
Otter (DeHavilland, Canada)
Paul (Nakajima, Japan)
PBV (Convair, US)
Pee (Jura, France)
Phantom (McDonnell-Douglas, US)
Plato (Sylvania, US)*
Puma (Sud Aviation, France; Vought Helicopters, US)
Quail (McDonnell, US)*
Queenair (Beech, US)
Racer (Jura, France)
Rail (Aerosport, US)
RAM (US)*
Rat (Six), (Librascope, Alleghany Ballistics, US)*
Rata (Polikarpov, USSR)
Raven (Hiller, US)
Rook (Poland)
Sabre (N. American, US)
SAM (US, USSR)*

Saturn (US)*
Seayee (US)*
Seasprite (Kaman, US)
Scout (Westland, U.K.)
Seminole (Beech, US)
Seneca (Cessna, US)
Shawnee (Vertol, US)
Shoux (Bell, US)
Skycrane (Sikorsky, US)
Skyhawk (Douglas, US)
Snark (Northrop, US)
Spad (France)
Sprite (Gyroflite, U.K.)
SSM (US, USSR)*
SST (Boeing, US; U.K.-France)
Star (Two), (Rausch, US)
Strela (USSR)*
Styx (USSR)*
Talon (Two), (Northrop, US)
Tales (Bendix, US)*
Tarhe (Sikorsky, US)
T-Craft (Taylorcraft, US)
Texan (N. American, US)
Thor (Douglas, US)*
Titan (Martin, US)*
Tony (Kowasaki, Japan)
TOW (Hughes Aircraft, US)*
Tracer (Grumman, US)
Trader (Grumman, US)
Travelair (Beech, US)
UX (Two), (AVSCOM devel, US)
Vela (Waco, US)
Vertifan (Ryan, US)
Viper (U.K.)*
Voodoo (McDonnell, US)
Vulcan (Hawker-Siddeley, U.K.)
Wasp (Westland, U.K.)
YAK (Yakovlev, USSR)
YAT (Cessna, US)
Zel (Rocktetyne, US)*
Zero (Two), (Mitsubishi, Japan)
Zuni (Bridgeport Brass, US)*

The Crowded Skies!

Try your hand at this kingsize mindbender! The names of more than 202 U.S. and foreign aircraft and missiles are hidden in the "24 Square." We've uncovered the name of the "Cayuse" for you in Squares L6-G1!

-	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A	V	O	W	A	S	A	K	C	I	H	C	T	A	L	O	S	E	C	N	A	L	G	R	B
B	L	I	A	U	Q	H	A	R	R	I	E	R	E	T	I	R	P	S	A	E	S	E	S	A
C	O	L	A	F	F	U	B	G	A	A	H	N	A	F	I	T	R	E	V	C	E	N	S	L
D	T	R	E	D	A	S	U	R	C	E	R	D	J	I	N	N	A	P	H	T	A	I	M	E
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F	E	G	S	C	H	I	N	O	O	K	T	I	F	P	Z	I	R	K	L	E	L	U	R	T
G	E	K	I	N	A	E	N	C	E	S	W	A	L	C	L	O	S	U	L	O	P	A	K	S
H	L	S	O	M	S	R	O	S	T	A	R	A	B	E	K	U	V	O	B	I	B	O	T	B
I	F	E	U	A	E	O	I	A	R	C	T	S	H	E	M	Q	N	B	T	O	O	A	E	W
J	A	L	X	Y	T	S	R	B	T	O	H	C	E	O	S	I	E	E	N	H	C	O	X	A
K	E	U	C	E	A	I	O	R	P	A	O	O	R	P	M	R	R	A	N	R	U	T	A	S
L	N	C	T	U	O	C	S	E	W	U	R	R	C	E	K	I	N	G	A	I	R	E	N	P
M	O	R	A	H	B	R	O	N	C	O	B	A	S	T	A	Z	R	E	D	U	A	R	A	M
N	R	E	T	T	O	E	E	M	A	E	O	G	F	S	A	R	B	O	C	O	R	I	A	R
O	A	H	A	E	C	E	T	Z	A	S	G	U	R	K	O	W	A	M	U	P	A	X	E	I
P	B	N	R	C	N	O	I	V	A	N	R	O	E	Y	E	K	W	A	H	S	A	L	T	A
Q	O	I	O	I	L	R	E	M	A	Y	C	C	G	H	E	R	I	A	N	E	E	U	Q	L
R	K	K	R	L	A	R	O	T	N	E	M	H	N	A	R	A	N	A	K	Z	H	A	L	E
S	E	I	O	D	A	V	I	H	T	L	O	C	E	W	L	T	V	R	G	U	E	E	N	V
T	C	P	O	E	D	T	N	G	M	R	J	Y	V	K	O	A	A	I	E	C	H	R	N	A
U	A	A	N	W	O	O	D	O	O	V	A	M	A	M	H	N	X	Y	P	D	A	H	O	R
V	M	U	S	T	A	N	G	O	C	K	V	C	R	O	S	Y	T	Y	T	E	A	T	L	T
W	E	N	A	R	C	Y	K	S	E	A	E	Y	E	K	C	U	B	I	B	R	R	R	A	M
X	L	E	A	P	A	C	H	E	Y	E	N	N	E	R	G	E	M	P	E	V	O	D	T	E

Even if you can't top the 157 aircraft and missiles found by our "Flieger Fluzzle" contest winner, have a try! The Fluzzle's a morale-builder!

Takeoffs

GENERALS

BOLZ, Henry H., Jr., BG
7217 Saupal Place
Springfield VA 22153

COLONELS

BELL, John E.
584 Dana Circle
Newport News VA 23602
CROUCH, William E., Jr.
615 Beverley Drive
Alexandria VA 22305
ECKERT, Edward N.
48 Ingalls Road
Ft Monroe VA 23651
LEWIS, Mose E., III
2133 No. Monroe, Apt 302
Arlington VA 22207
MAHONEY, Worthington M.
General Delivery
Carmel Valley CA 93924
MAYSE, Harvey C.
Quarters 2394
Ft Lewis WA 98433
PHILLIPS, William G.
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SAFE FLYING — The first 100,000 accident-free flying hours for the Department of Graduate Flight Training, Ft Rucker, AL, are logged in the flight records by CW2 Charles Shank, right. From left are MAJ5 Tary D. Wilkinson, Jerry L. Burcham, and CPT Leroy W. Tuttle. The hours were accumulated by the Examiner Branch from Dec 1969 to June 1973.

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AAAA Activities

AAAA National and Chapter Meetings during July-August, 1973

MISSISSIPPI VALLEY CHAPTER. Annual AAAA Picnic for members, family, and guests. Static displays and family activities. Helicopter rides. Scott County Park. 1100 hours. 1 July.

FORT HOOD CHAPTER. Summer Formal. General Hamilton H. Howze guest speaker. Main Officers Open Mess. 1830 hours. 1 July.

EMBRY-RIDDLE CHAPTER. Dinner and Business meeting. COL Myles H. Mierswa, guest speaker. The "Battleship". 1830 hours. 6 July.

CONNECTICUT CHAPTER. Annual Summer Skirmish. 1500-2100 hours. 14 July. Members only.

GRAND CANYON CHAPTER — Professional and Safety meeting. Ft. Huachuca NCO Club. 1530 hours. 27 July.

MORNING CALM CHAPTER (Korea). Business and Professional meeting. LTG Richard T. Knowles, guest speaker. Eighth Army Officers Club. 1830-2130 hours. 27 July.

LINDBERGH CHAPTER (St. Louis). Professional dinner meeting. BG Jack V. Mackmull, guest speaker.



Shown during the Spring-Summer meeting of the Southern California Chapter of AAAA are, l-r, Paul Curry and John F. Stacy, VPs; BG Joe Starker (then of Ft. Hood, TX), the guest speaker; COL "Billy" Tuck, Chapter President, and COL "Dick" Kennedy, ExVP. Since addressing the Los Angeles members, General Starker has PCS'd to CDEC.

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er. Armed Forces Officer Club. 1800-2045 hours. 27 July.

WASHINGTON, D.C. CHAPTER. Potomac River Cruise. Dining, drinking, and dancing. The Wilson Lines Pier #4. 1900 hours. 11 August.

NATIONAL AWARDS COMMITTEE. Business meeting. Selection of 1972-1973 AAAA National Award winners. Shoreham Hotel. 17-18 August.

1973 AAAA NATIONAL CONVENTION. AAAA Workshops, followed by visit to AUSA Exhibits on 17 October; professional programming, membership luncheon, President's Reception, 18 October; professional programming, 1973 AAAA Honors Luncheon, 19 October. Shoreham Hotel, Washington, D.C.

Selection Meetings

AAAA's National Awards Committee will meet at the Shoreham Hotel, Washington, D.C., 18 August, during the course of the National Executive Board's business session to select the '72-'73 AAAA National Award winners. In a separate meeting, the 11-member "Army Aviation Hall of Fame" Nominations Committee will meet at Stratford, Conn., on 10 August to select 17 nominees for late '73 balloting for the Fort Rucker-based "Army Aviation Hall of Fame."



COBRAS ARRIVE—The pilots who flew one of the first two AH-1G helicopters that are to become a phase of training at USAFVNS, are greeted at Fort Army Airfield by COL Earl W. Fletcher, right, Assistant Commandant of the School. Accepting the log book is CW2 Charles W. Boodle, in the aircraft is CW2 William Long.



WINNING SCIENTIST — Cindy Dyess accepts a AAAA certificate from MG Allen M. Burdett, Jr. COL, Ft. Rucker, Ala. An engraved medalion also recognized her prize winning aviation-related entry in the Mobile, AL Regional Science Fair. Her display was entitled "Aerodynamics of an Airfoil" and demonstrated basic principles of airflow upon which aerial flight is based.

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Lawton OK 73501
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New Shrewsbury NJ 07724

The Personal Side

BIRTHS

BALKENHOL — Julie Ann was born 23 May to CPT and Mrs. John D. Balkenhol at Ft. Rucker.

BROWN — Janet Elizabeth, was born 1 June to CW2 and Mrs. Dana L. Brown at Ft. Rucker.

CABELL — Jeffrey Paul was born 23 June to CW2 and Mrs. Robert B. Cabell at Ft. Rucker.

CASTRO — Luis Damian was born 7 June to 1LT and Mrs. Luis D. Castro at Ft. Rucker.

FLOYD — Jason Cecil was born 26 June to CW3 and Mrs. Wamon D. Floyd at Ft. Rucker.

FRAZIER — Jason was born 18 June to WOC and Mrs. Bobby L. Frazier at Ft. Rucker.

HAMILTON — Angele Kay was born 30 May to WO1 and Mrs. Edwin C. Hamilton, Jr. at Ft. Rucker.

HARRISON — Craig Alan was born 14 June to CPT and Mrs. Patrick E. Harrison at Ft. Rucker.

HOLLAND — Christina Michelle was born 14 June to CW2 and Mrs. John C. Holland at Ft. Rucker.

HOLLAND — Ryan Martin was born 25 June to 1LT and Mrs. Ronald M. Martin at Ft. Rucker.

KAZMIERSKI — Jeffrey James was born 19 June to MAJ and Mrs. James W. Kazmierski at Ft. Rucker.

KEMPER — Paul Christopher was born 29 June to 2LT and Mrs. Thomas W. Kemper at Ft. Rucker.

KRAMER — Alissa X. was born 23 June to MAJ and Mrs. Howard X. Kramer at Ft. Rucker.

MARTIN — Gordon Eugene was born 1 June to CPT and Mrs. Richard G. Martin at Ft. Rucker.

MATYJASIK — Todd Anthony was born 1 June to CW2 and Mrs. Theodore A. Matyjasik at Ft. Rucker.

MIHATA — Michael was born 17 May to CPT and Mrs. Kevin K. Mihata at Ft. Eustis.

NICHOLS — Jennifer Michelle was born 5 June to 1LT and Mrs. Joe R. Nichols at Ft. Rucker.

PARR — Cheri Anne was born 29 June to CPT and Mrs. Robert A. Parr at Ft. Rucker.

PROPER — Suzanne Elizabeth was born 15 June to CW3 and Mrs. Lawrence R. Proper at Ft. Rucker.

PYEATT — Michael Andrew was born 31 May to CPT and Mrs. Robert J. Pyeatt at Ft. Rucker.

REYNOLDS — Dee Ann was born 9 June to CW2 and Mrs. Marvin L. Reynolds at Ft. Rucker.

SANDER — Jennifer Dyan was born 1 June to CPT and Mrs. Robert D. Sander at Ft. Rucker.

SHEETZ — Dena Marie was born 1 June to CPT and Mrs. Jerry L. Sheetz at Ft. Rucker.

SHIVERS — Brian Joseph was born 29 June to CPT and Mrs. Joe W. Shivers at Ft. Rucker.

WEHNER — Martha Craig was born 12 June to 2LT and Mrs. Randolph Wehner at Ft. Wolters.

HONOR GRADUATES

ABEJON — WOC Alvin A. Abejon, outstanding military graduate, WORWAC class 73-37 USAPHS, 3 July.

BACH — 2LT George L. Bach, DG of ORWAC class, USAAVNC, 3 July.

BOCK — WOC Larry A. Bock, DG of WORWAC class 73-37, USAPHS, 3 July.

CLARK — WOC Jeffrey A. Clark, DG of WORWAC class 73-33, AAAA military achievement award, USAPHS, 15 June.

COOPER — WO1 Robert J. Cooper, DG of WORWAC class, USAAVNC, 19 June.

CROWE — WOC Ronald H. Crowe, DG of WORWAC class 73-35, academic and outstanding military graduate awards, 22 June.

DINGELS — 2LT Eugene K. Dingels, DG of ORWAC class, USAAVNC, 3 July.

DITTY — WO1 Donnie R. Ditty, DG of WORWAC class, USAAVNC, 3 July.

DOWNING — 1LT Benjamin H. Downing, ORWAC class 73-35, flight achievement award, USAPHS, 22 June.

GRAYDON — 1LT David D. Graydon, DG of ORWAC class, USAAVNC, 19 June.

HILL — CW2 Robert D. Hill, DG of Air Traffic Control Course, class 73-5, USAAVNC, 10 June.

JACOBS — WOC Harold J. Jacobs, WORWAC class 73-35, military achievement award, USAPHS, 22 June.

KING — 1LT Jeffrey K. King, DG of ORWAC class 73-36, USAPHS, 22 June.

LANIER — WOC Glenn R. Lanier, DG of WORWAC class 73-37, academic achievement award, USAPHS, 3 July.

LAWSON — CW4 Julius L. Lawson, DG of Warrant Officer Advanced Course, USAAVNC, 29 June.

MAYES — 2LT Tommy W. Mayes, ORWAC class 73-34, academic award, USAPHS, 15 June.

McGEE — WOC Timothy A. McGee, WORWAC Class 73-33, outstanding military graduate, USAPHS, 15 June.

METCALF — CPT Stephen R. Metcalf, DG of ORWAC class 73-34, flight award, USAPHS, 15 June.

MIMS — WOC Larry D. Mims, WORWAC class 73-35, flight achievement award, USAPHS, 22 June.

RICE — 2LT William E. Rice, DG of ORWAC class, USAAVNC, 19 June.

SMITH — 1LT Gregory F. Smith, DG of ORWAC class 73-38, flight and academic achievement awards, USAPHS, 3 July.

STARBUCK — CW2 Lawrence W. Starbuck, DG of Warrant Officer Intermediate Course, USAAVNC, 29 June.



STARKS — WOC Charles C. Starks, WORWAC class 73-33, AAAA (Ft. Wolters Chapter) academic award, USAPHS, 15 June.

MEDALS

DANDRIDGE — CPT Wayne L. Dandridge, Army Commendation Medal.

JONES — CPT Melvin B. Jones, Army Commendation Medal.

KING — MAJ Raymond D. King, Meritorious Service Medal, 22 June.

RAY — CPT Jackie E. Ray, Army Commendation Medal.

SCHWINN — CW4 Murrow D. Schwinn, Jr. Legion of Merit, 22 June.

OBITUARIES

BEECHER — CWO Quentin R. Beecher, formerly reported as MIA, Republic of Vietnam.

CLINTON — CWO Dean E. Clinton, formerly reported as MIA, Republic of Vietnam.

CRAMER — CWO Donald M. Cramer, formerly reported as MIA, Republic of Vietnam.

RIGGS — CWO Thomas F. Riggs, formerly reported as MIA, Republic of Vietnam.

RATINGS

CRAIG — CPT William R. Craig, Embry-Riddle, Senior Army Aviator.

HELMKE — MAJ Lester C. Helmke, USAPHS, Senior Army Aviator.

MCCULLOUGH — MAJ Johnny L. McCullough, USAAVNC, Senior Army Aviator.

MESSICK — CW3 Lawrence C. Messick, Embry-Riddle, Senior Army Aviator.

HONORED! — Col. John H. Spears, Ret., Dean of Men at Embry-Riddle Aeronautical University, presented June awards to six Army Aviators. L to r., CPT Wayne L. Dandridge, CPT Melvin B. Jones, and CW2 Jackie E. Ray, Army Commendation Medal; CPT William R. Craig and CW3 Lawrence C. Messick, Senior Aviator wings; and CW4 Norbert G. Violette, promotion to CW4.

MILLER — LTC Edward J. Miller, USAAVNC, Master Army Aviator.

COMMAND & STAFF

Colonel Charles A. Dawdy, as Readiness Coordinator, US Army Readiness Region I, Fort Devens MA 01433.

Colonel Edward N. Eckert, as Chief, Special Forces Program Division, ADCSPER, HQ, TRADOC, Ft. Monroe VA 23651.

Colonel Eugene F. Crooks, as Chief, Operations & Training Division, G3 Hq 8th US Army, APO SF 96301.

Colonel Arne H. Eliasson, as Defense and Army Attache, US Embassy, Kabul, Afghanistan.

Colonel Harrell N. Gillis, to USATC School, Ft. Eustis, VA 23604.

Colonel Lawrence H. Johnson, as Aviation Coordinator Readiness Region #3, Ft. Meade, MD 20755.

Colonel Frank W. Kiel, to Health Services Command, Ft. Sam Houston, TX 78234.

Colonel James H. Nix, as Assistant Chief of Staff, USA MAAG, APO SF 96263.

Colonel Frank R. Wilson, to Hq, US Army Engineer Command, APO, NY 09757.

Colonel John J. Walsh, as Director Leadership Dept., USA Infantry School, Ft. Benning, GA 31905.

Word to the Warrant

USAWOA Holds First National Convention

JOINING forces at their 1st Annual Convention, members of the U.S. Army Warrant Officer Association (USAWOA) met for a two and one-half day period at the Holiday Inn in Alexandria, Va., during July 9-11.

Some 100 members and their wives attended the professional-social meeting that coincided with the birthday of the Warrant Officer Corps on July 9, 1918. Workshop sessions marked the first day of the gathering; professional presentations by various branch chiefs highlighted the second.

Major General Sidney B. Berry, Commander of the U.S. Army Military Personnel Center, was the guest speaker at the USAWOA Banquet that closed out the initial convention. Newly-elected officers include CW4 Don Hess, President; CW4 Robert L. Hamilton, Vice-President; CW4 Dale Swafford, Secretary; and CW3 Paul Lieber, Treasurer.



CW3 Albert J. Ladesic, a USAVNS check pilot, shows the style he used on attaining his goal of running 2,000 miles during the past two years. Under his personal "Run for your life" program of physical conditioning, Ladesic now runs five miles a day, six days a week.



USAAVNC CW4 Receives Master Wings

An Army Aviation veteran and a 13-year member of AAAA, CW4 Delfo J. Ferranti, Jr., of Maynard, Mass., recently received his Master Army Aviator wings at Ft. Rucker, Ala. Ferranti is an academic instructor and counselor with the 15th Company, 1st Battalion, Army Aviation School Brigade.

One of the Resolutions adopted at the USAWOA Convention regarded flight pay:

"The U.S. Army Warrant Officer Association encourages the Department of the Army to coordinate the equalization of flight pay with the other services, and take such action as may be required to correct the existing disparity."

Arthur H. Kesten, Executive Vice President of AAAA, attended the AWO Flight Pay Equalization Workshop sessions in representing AAAA's National Executive Board.

The In Box

Dear Editor:

Along with several thousand WO-CWO members of AAAA, I read with interest your May 29 letter-packet and included correspondence pertaining to the Flight Pay Equalization controversy. Bravo for rising to the overall defense of AAAA!

In an otherwise dreary routine of narrowly selective articles, "pie-in-the-sky" anticipations for future Army Aviation programs, social bric-a-brac, advertisements by manufacturers vying for multi-million dollar contracts, a down to earth sore spot has been uncovered. Criticism and controversy may well prove to be a palatable cure for our apparently ailing society.

Prior to the receipt of the aforementioned correspondence, I had planned to cancel my membership-subscription. However, I now sense a fresh breeze a-blowin'. I enclose my check for another year's membership and eagerly await future editorial comments on pertinent controversial aviation matters.

CW2 Orrin R. Smith
Ft. Bragg, N.C.

ARMY AVIATION

EDITORIAL AND BUSINESS OFFICES: 1 CRESTWOOD ROAD, WESTPORT, CONN. 06880



The 600 shp LTS 101 Record Breaker

First bench test: June 1972

Hover flight: May 1973

We don't know of a "speed record" like this one. Only 11 months after the first running of the new LTS 101 turboshaft engine by Avco Lycoming, it has lifted a Bell 206 "Jet-Ranger" helicopter into routine hover flight.

The development speed from test bench to first flight vouches for the basic soundness of the design, the remarkable simplicity of the power plant, which in turn accounts for its unusually low cost for 600 hp turboshaft engine.

The first LTS 101 flight took place on the 22nd day of May at the Bell Helicopter Company's flight test facilities in Arlington, Texas. It will be a date to be remembered in the annals of flight.

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