# Army Aviation

APRIL 30, 1967

SILVER ANNIVERSARY YEAR


## On the spot response: Boeing style.

This make-shift tent stands in a small, remote jungle clearing. But it's as effective an operation as you're likely to run in to. It's part of a Boeing commitment: we build superior helicopters and we provide the support to keep them that way—anywhere, any time.

Boeing builds helicopters to last, to reach a high level of efficiency and to stay at that level. Our reps in remote places see that the full resources of Boeing are used to maintain this efficiency. They study, evaluate, observe, recommend.

Unpredictable problems created by environmental conditions, for example, are handled on the spot by our field service reps. They report the problem back home, where a customer support team immediately swings into action to work on solutions.

In-the-field reps are just one part of Boeing's completely integrated support capability. Training, technical publications, ground support equipment, continuous maintenance engineering, field data analysis and spares is still another part of our response to customer requirements.

In short, Boeing means response—any time, anywhere.

The Boeing Company, Vertol Division, Morton, Pennsylvania 19070.

**BOEING**
**Helicopters**

# Army Aviation

MAR.-APR. PHOTOS

FT. WOLTERS — COL William T. Schmidt, Chapter president (l.) and COL E. Pearce Fleming, Jr. (2d from r.), USAPHS Commander, are shown at the March 31 AAAA meeting at which Marshall Hamilton of Mineral Wells was made an Honorary Member. LTC Garald L. Waldron, of OPO, guest speaker, is at right.

SAUGUS, CALIF. — The world's most powerful whirl test tower, Lockheed's 55-foot facility is capable of testing rotor blades up to 110 feet in diameter. A set of blades for the Army AH-56A helicopter is shown under test.

FT. SAM HOUSTON — MG Conn L. Milburn, Jr., CG at BAMC, and Mrs. Charles L. Kelly unveiled a memorial plaque April 7 dedicating the Charles L. Kelly Army Heliport. The Heliport is named in honor of Major Kelly, who was killed in a patient evacuation mission in Vietnam on July 1, 1964. Mrs. Kelly and three children Jane, 14, Barbara, 13, and Charles L., Jr., 6, and Maj. Kelly's mother, Mrs. Ruth M. Kelly, were honored guests at the dedication ceremonies.

FT. CAMPBELL — COL Claude L. Shepard, Jr., former commander of U S A C D C A A at Fort Rucker, has assumed duties as CO of Campbell Army Airfield, an installation he helped to create in 1958 while he served with DA.

FT. RUCKER, ALA. — Five medals, including the Legion of Merit and DFC, were presented posthumously on April 14 to LTC William R. Phillips who was killed February 3 in Vietnam. The aviator also received the Bronze Star Medal, Air Medal, and the first Oak Leaf Cluster to the AM. Receiving the medals from MG Delk M. Oden were his widow and children. In the back row, l-r, are Sarah, 16, MG Oden, Mrs. Phillips, and Ann, 13. In the front row are Lynda, 9, Mary, 6, and Rusty, 14. The Phillips family reside at 100 Leafmore Drive, Enterprise, Ala.

# "JUNCTION CITY" SUPPORT?

# MASSIVE!

WOULD you believe 249 Army helicopters assaulting on a single operation? . . . and backed up by two companies of *Bird Dogs*, one *Otter* Company, and a company of *Mohawks?*

That was the extent of the aviation support placed at the disposal of the CG, II FFV by the 12th Combat Aviation Group on February 22 when *Operation Junction City* kicked off!

Then, the necessity to seal off all enemy escape routes as quickly as possible after H-Hour brought in additional aviation support to supplement the assets of the 12th. Up from the late Colonel Jack Dempsey's *Delta Battalion* came the 175th and 336th Assault Helicopter Companies. Colonel John Marr's 17th Combat Aviation Group dispatched the *Vagabonds;* LTC Ben Harrison's 10th Combat Aviation Battalion committed the 48th, 117th, and 129th Assault Helicopter Companies, as well as the 180th *Chinook* Company and supporting maintenance detachments.

The III Corps Regulars – LTC Joe *(Red Dog)* Starker's 11th Combat Aviation Battalion (116th, 128th, 162nd, 173rd, 178th, and 213th Companies) and LTC Howard *(Olde Warrior)* Moore's 145th Combat Aviation Battalion (68th, 71st, 74th, 118th, 184th, 334th, and 335th Companies) formed the nucleus of the Group's "aviation punch."

Rounding out the total aviation effort that filled the skies around Tay Ninh were the organic aviation elements of the 1st and 25th Infantry Divisions, the 173rd and 196th Brigades, and the 11th Armored Cavalry Regiment.

LTC Garrison *(Straight Shooter)* Boyle not only geared his 765th Maintenance Battalion to provide close-in, immediate maintenance and parts support, but the unit moved right into Dau Tiane with its two evacuation *Chinooks*, and was Johnny-on-the-spot

By
LTC SAMUEL P. KALAGIAN

for the nine choppers that were hit or damaged during the initial assaults.

Planning for this timely and effective cooperation began last December when Colonel Raymond P. Campbell, 12th Gp Commander, and Colonel Luther G. Jones, Jr., CO of the 34th General Support Group (Aircraft Maintenance & Supply) laid the groundwork in a series of planning conferences.

Critical parts were identified, requisitioned on the basis of anticipated losses due to combat and attrition, and stockpiled solely for *Operation Junction City* under the code name, *Operation Seiko*. The input included armament packages as well as rotor heads, blades, engines, transmissions, and tail gear components.

## Full availability rate

The payoff came during the first four days of *Junction City* when the key maneuvering of troops by air set the trap against the enemy. The availability of all aircraft remained at the H-Hour level throughout this critical time phase. For the most part, the initial *Junction City* air landings were unopposed. Thorough planning and timing by all commanders and staffs paid off. After the fourth day, the attached units returned to their respective areas in the Delta and to II Corps to participate in local operations.

At this writing, *Junction City* is not over yet. As time goes by, the determined enemy will begin to emerge from his hiding places and challenge the individual friendly units. Army aviation stands by to move in quickly with "reaction forces" to repel these attacks, and to disrupt enemy movements with gunship firepower.

One basic truth that learned from *Junction City:* the scattered aviation battalions and companies that comprise General Phip Seneff's 1st Aviation Brigade are standardized closely in flight and operational techniques. The continued attachment (and detachment) of these battalions and companies offers a "battle flexibility" that will become more commonplace as the action shifts from corps area to corps area in South Vietnam.

**COL Kalagian departed USARV March 3 and is now assigned in J-1, Hqs, CINCPAC, Hawaii.**

**Hueys of the 145th Combat Aviation Battalion are shown loading troops of the 173rd Airborne Brigade from Quan Loi. The mission took place on D-Day (February 22) of Operation Junction City. Some forty-six aircraft are shown in this partial view of the entire troop-loading panorama.**


**Standing beside the sign that expresses both the motto and the mission of the 12th Combat Aviation Group are LTG Jonathan O. Seaman, CG of II FFV and COL Raymond P. Campbell, 12th Avn Gp Commander. The 12th's mission encompasses the III Corps Tactical Zone in Vietnam.**

**A technical representative is shown instructing the maintenance personnel of the 1st Cavalry Division's 1st Squadron, 9th Cavalry, in the workings of the new OH-6A Cayuse observation helicopter. The aircraft has just arrived in the Cav Division for service with the reconnaissance unit.**

making the best better...

# MORE COMBAT POWER PER FLYING HOUR-THE TWIN D

In the world's most demanding vertical lift mission, the heroic Huey Delta is acclaimed the best. To make the best better, Bell has combined this battle-proven helicopter with the Continental T67 twin-turbine powerplant to assure all of the twin engine safety and reliability advantages plus:

- Fifty percent increase in troop payload on typical Vietnam troop lifts
- Thirty-five percent increase in sustained troop delivery capability

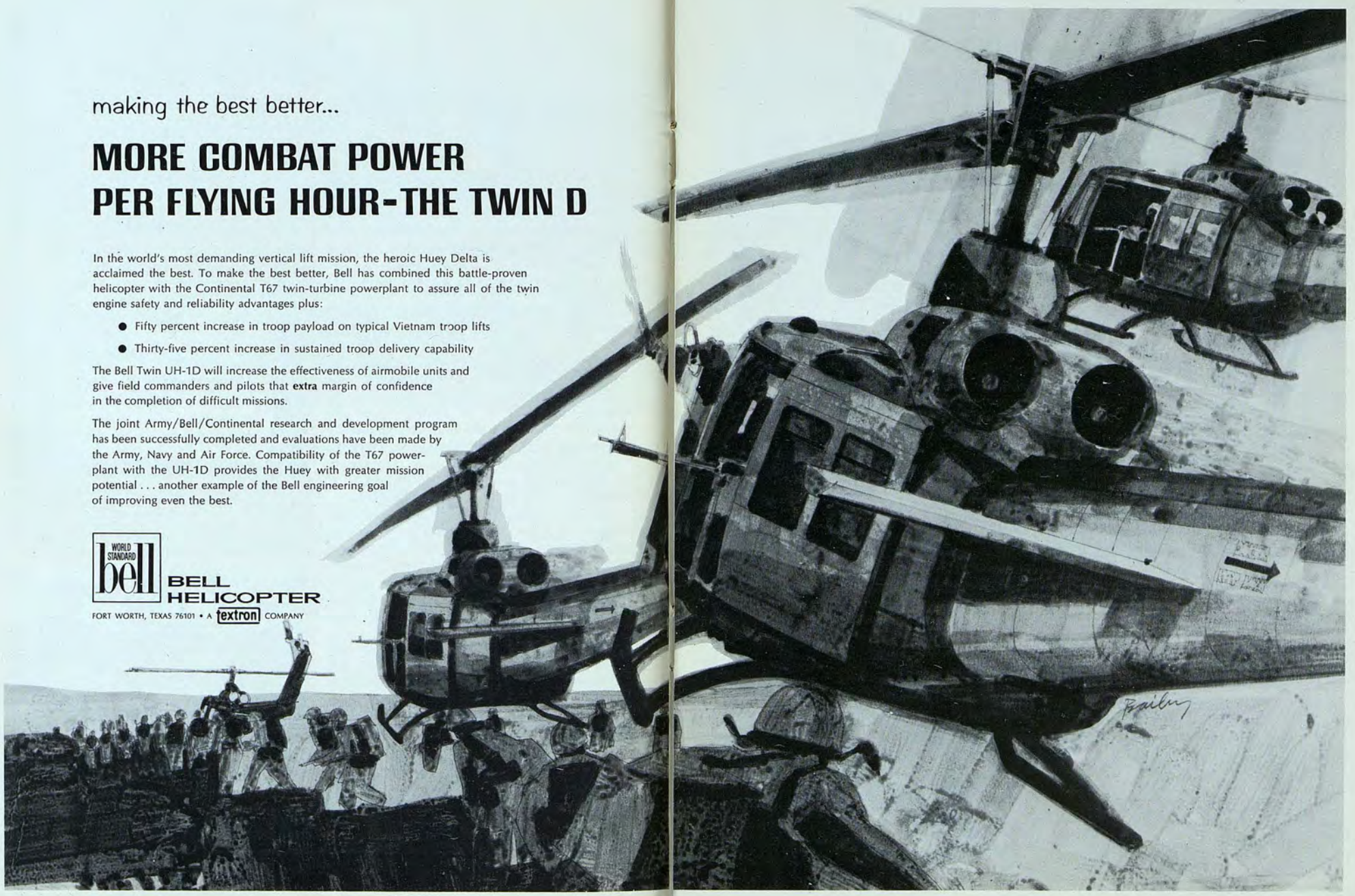
The Bell Twin UH-1D will increase the effectiveness of airmobile units and give field commanders and pilots that **extra** margin of confidence in the completion of difficult missions.

The joint Army/Bell/Continental research and development program has been successfully completed and evaluations have been made by the Army, Navy and Air Force. Compatibility of the T67 powerplant with the UH-1D provides the Huey with greater mission potential . . . another example of the Bell engineering goal of improving even the best.

WORLD STANDARD bell

BELL HELICOPTER

FORT WORTH, TEXAS 76101 • A textron COMPANY



VOLUME 16, NUMBER 4

# ARMY AVIATION

APRIL 30, 1967

Endorsed by the Army Aviation Ass'n of America

CONTENTS



ADVERTISERS



**ARMY AVIATION is published monthly by Army Aviation Publications, Inc., with Editorial and Business Offices at 1 Crestwood Road, Westport, Conn. 06880. Phone (203) 227-8266. Subscription rates for non-AAAA members: 1 year $3.50, 2 years $6.00 to CONUS and APO addresses only; add $7.00 per year for all other addresses. The views and opinions expressed in the publication are not necessarily those of the Department of the Army. Publisher, Arthur H. Kesten; Managing Editor, Dorothy Kesten; Associate Editor, Jessie Borck; Subscription Fulfillment: Beryl Beaumont. Exclusive articles pertinent to any Army aviation subject, except industry, AAAA, unit, or major command articles, are reimbursible at the rate of three cents to five cents per word for the first 2,000 words published. Second class postage paid at Westport, Conn.**

# 10,000TH MEMBER JOINS AAAA

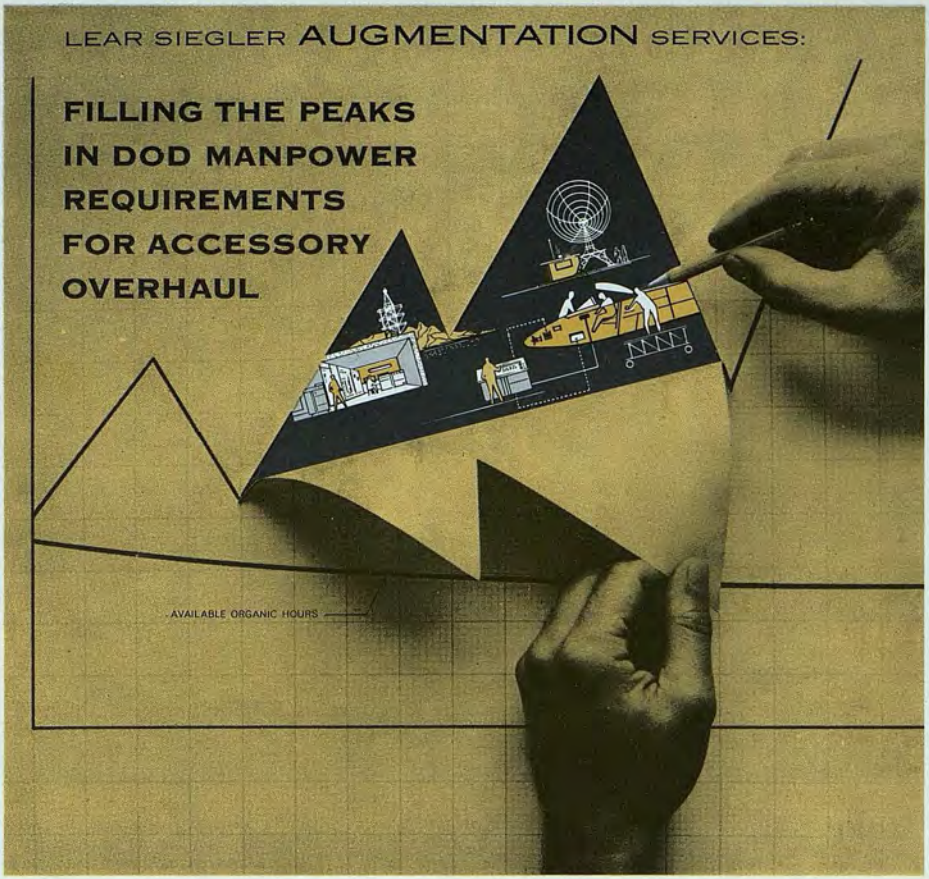
THE Army Aviation Association passed a major milestone enrolling its 10,000th member just four days short of its tenth anniversary on April 18, 1967.

Warrant Officer Candidate Jack H. Campbell of Warrant Officer Rotary Wing Aviator Class 67-7 received a gold plated membership card, signifying his status as AAAA's 10,000th member.

The presentation ceremony took place in the office of Colonel Conrad L. Stansberry (2d from left in the photo below), Chief of Staff at USAAVNC, Fort Rucker, Ala., and president of the Army Aviation Center Chapter. Looking on are Lieutenant Colonel Raymond E. Dickens (left), commander of the Warrant Officer Candidate Battalion, and Captain Edmund E. Dyroff, Jr. (right), commander of the 4th Warrant Officer Candidate Company to which WOC Campbell is assigned.

Member No. 1? . . . The five past presidents of the AAAA share the number!

For those who dote on statistics, AAAA membership has followed this growth pattern: March 31, 1958 — 1,426 members; 1959 — 3,685; 1960 — 5,301; 1961 — 5,857; 1962 — 5,585 members; 1963 — 6,757; 1964 — 7,940; 1965 — 8,-798; 1966 — 8,872; and 1967 — 9,918.




LSI Service Corporation is part of the Army Aviation Team. In depot oriented shops at Santa Monica, California; Oklahoma City, Oklahoma and Harrisburg, Pennsylvania, we are providing vital maintenance services.

□ □ LSI Service capabilities include repair, overhaul and updating of major aircraft, helicopters, engines, electro mechanical components and precision instrument products. A complete knowledge of maintenance engineering plus many years of experience as a leading maintenance contractor for DOD, provide the U.S. Army with a contracted extension of depot capabilities in our shops or "on site."

□ □ Accessory augmentation services provided by LSI Service Corporation can eliminate the peaks and valleys in staffing required for overhaul and repair work. We spend our full time in servicing equipment, most of it not of our manufacture.

LSI SERVICE CORPORATION LSi

*A Subsidiary of Lear-Siegler, Inc.*

3171 SOUTH BUNDY DRIVE, SANTA MONICA, CALIFORNIA


BEECH "IMAGINUITY" IN MANNED AIRCRAFT...
This pressurized TURBOPROP member of the Beechcraft U-8 family of mission support aircraft offers high performance at low cost. High altitude over-the-weather capability means on-time operations in support of vital Vietnam assignments.

# Off-the-shelf answer for today's urgent mission support needs! Here's why:

**No delays in delivery.** In steady daily production now, the pressurized Beechcraft TURBOPROP U-8 offers a combination of features that match the broad range of growing mission support requirements:

**1. Specifically designed** to fit the mission profile of 80% of today's mission support trips. (1000 miles or less with 5 or 6 passengers.)

**2. Turboprop speed, efficiency, versatility, quietness.**

**3. Can operate from shortest, roughest strips**—new reversible propellers for even better short field capability.

**4. Conference-room seating** for 5 or 6, plus separate flight deck. Quickly convertible to high-density seating for as many as 10, or for cargo or aerial ambulance use.

**5. Nonstop ranges to 1,565 miles.**

**6. Pressurized for "over-the-weather" comfort.**

**7. Easily operated by one pilot**—even under the most difficult trip conditions. Big plane "positive feel."

**8. Built for rugged duty** and tested far in excess of required load factors.

**9. Most thoroughly proven** airplane of its class in the world.

**10. Saves its cost over and over again** when used instead of a larger aircraft.

**11. Same type instrumentation** and similar power controls as a pure jet, it can help jet-rated pilots maintain jet proficiency—at low cost.

**12. Worldwide Beechcraft service organization** assures you of parts and expert service—eliminates need for expensive logistic support program.

For "off-the-shelf" mission support...

***Look to Beech capabilities!***

**Write now for complete facts** on the Beechcraft TURBOPROP U-8, or the other two "off-the-shelf" Beechcraft U-8s. Address Beech Aerospace Division, Beech Aircraft Corporation, Wichita, Kansas 67201, U. S. A.

Beech Aerospace Division

BEECH AIRCRAFT CORPORATION • WICHITA, KANSAS 67201


*From an original painting for Chandler Evans by Keith Ferris*

# AFTERBURNER FUEL CONTROLS by CECO

Republic's F-105 is the workhorse of the USAF in carrying out strike missions to the north in Vietnam. This sleek, Mach 2, fighter-bomber, weighing nearly 53,000 lbs. gross at takeoff, is powered by a Pratt & Whitney Aircraft J-75 gas turbine engine. This turbojet is equipped with an afterburner fuel control (boosts takeoff power to 26,500 lbs. thrust) engineered and precision-produced by Chandler Evans.

This CECO product on the Thunderchief joins a distinguished line of pumps, main fuel controls, afterburner controls and other aerospace components in an array of important military aircraft and missiles as well as many of the latest and finest commercial aircraft.

Chandler Evans is pleased to be "known by the company its products keep" and by the records those products establish.

**Colt Industries** **Chandler Evans Control Systems Division**

**WEST HARTFORD, CONNECTICUT 06101**

GAS TURBINE CONTROLS/PUMPS • MISSILE CONTROL SYSTEMS/SERVOS • PNEUMATIC/HYDRAULIC SYSTEMS AND COMPONENTS

# AIRMOBILE COMMAND AND CONTROL!

By
**KENNETH D. MERTEL**
**LTC, Infantry**

FOUR flights of UH-1D transport helicopters – 24 birds in each – wing noisily at low level on the tree tops, carrying an Infantry battalion to the landing zone.

As the Battalion Commander you are in one of the helicopters in the second flight and stare searchingly at the fast-moving terrain, trying to identify something that corresponds with your maps and photos, as anxiety and apprehension tear at your insides.

Something is wrong! You are only three minutes out, yet nothing looks familiar. You should be able to see the landing zone by now, or at least the artillery fire falling. If you could only talk to the flight commander, but there weren't enough helmets and ear phones to go around, and the aviation battalion commander said the crew chief and gunner had to have them. *It is his job to get you there.*

## A feeling of uncertainty . . .

Don't worry! Forget about it! Still you have a deadly feeling of uncertainty. The artillery should be stopped by now and the ARA (aerial rocket artillery) pounding the landing zone, but you don't see a thing.

Better not bother the pilot or co-pilot. They are busy, getting ready to land. Seconds out now – still no fire support and nothing looks familiar. *Where* is your objective? There should be high ground to the north, but you don't even see a hill!

Both door gunners start firing. A solid thunk of slugs hits the *Huey*. As you glance to the bird to your left front, it bursts into flame. The flight is under fire! Now you are landing – on the ground – out of the bird, on the double! Troops milling around; high explosives are bursting all over the landing zone; several birds are on fire. Now there are machine guns firing from the woodline.

*Where* are your radio operators? You've *got* to find out what is going on and get control. This is NOT the correct landing zone – NOT the plan – NO supporting weapons. The last thing you see is a Viet Cong with an automatic rifle as he triggers a burst into your chest – then darkness . . .

## The airmobile way . . .

Now in contrast, visualize the same Infantry battalion, carried by the same helicopter unit. You are in *your own* command helicopter, a UH-1D, accompanying the *first* flight of 24 birds. With you on the rear seat of the bird is your S-3; next to him is the U.S. Air Force Liaison Officer (ALO); on the outside is your Artillery Liaison Officer (Arty LO). This is your airmobile control team.

In front of you and within easy reach are twin stacks of two VRC 46 FM radio trans-

## AIRMOBILE COMMAND

*(Continued from Page 13)*

mitter and receiver units, a total of four. The Arty LO is using one of the FM radios on the Artillery Fire Control Net; the ALO is talking to the airborne Forward Air Controller (FAC) on another.

Your S-3 is monitoring the helicopter lift frequency in contact with the aviation battalion commander. You are monitoring your own battalion command net, and are in touch with *each* of your rifle company commanders. You flick a switch on the panel in front of you which permits you to monitor any of the four FM radio nets individually, or all together. Another flick of the switch and you can transmit on any of the four nets.

You glance to your right rear where your two radio operators sit, one acts as a door gunner for that side of the helicopter, cradling his M-16 rifle and searching the terrain as it flits by. The other has his PRC 25 radio set on the brigade command net, ready to inform you if you receive a call. If you do, you can reply on that radio or you can momentarily switch frequencies on one of your command FM sets. You turn the switch to intercom to talk to your pilots. They can talk with you as well.

### A quiet "Roger."

You call your Arty LO on the intercom – "*Are the tubes ready to start their fire as soon as the close air support from the two A1-E's overhead is shifted to another nearby target?*" A quiet "*Roger*" from the Arty LO.

The aviation battalion commander calls to inform you the flight is at the last check point. Time to lift the tube artillery in one more minute so that the ARA's can come in. A nod from the Artilleryman means the ARA's are firing. Now they have lifted – you make a quiet call to the helicopter battalion commander – now his gun ships are sprinting ahead to take up suppressive fire.

The first flight is landing, door gunners in action – Company A is on the ground! You have had continuous contact with him, both in the air and on the ground. A shift of artillery, another strike by close air support on a nearby enemy position, or a change in the landing zone or landing plan, all of these are within your capability, easily and quickly!

The Infantry is on the ground; the landing zone is secure. The enemy machine guns waiting on the landing zone were knocked out by the ARA. Your battalion is ready to move on to the next objective, a search and destroy mission.

### Quick coordination

You direct your pilot to land at Co B command post for quick personal coordination with the company commander. A call from the S-3 to the Battalion Executive Officer assures you that needed helicopter resupply is on the way. Medical evacuation helicopters are departing with your few wounded and dead.

How different these combat situations are! Which battalion commander would you rather be? Which one can be expected to accomplish his mission with minimum losses? The difference between success and death on the battlefield can often be the command helicopter in Vietnam today.

**MASSIVE SUPPORT FOR II FFV**

**To grasp the true meaning of the word, "airmobile," consider the Army aviation effort in Vietnam's recent Operation Junction City. The exercise witnessed the airlift of three entire infantry brigades by units of the 12th Combat Aviation Group, augmented by elements of the 10th and 13th Aviation Battalions. In less than eight hours, 5,173 combat-loaded troops were flown into ten different landing zones by 249 helicopters. The sky over War Zone C saw two separate 70-helicopter flights flown into the embattled area simultaneously.**

**The statistics are both enviable and staggering. Units of the 12th flew 28,987 hours in February, logging 72,355 sorties and carrying 110,000 troops, the equivalent of more than seven full divisions. The 65,865 rotary wing sorties alone surpassed the efforts of all other services combined.**

**Additionally, CH-47 Chinooks sling-loaded three complete artillery battalions into forward areas. Ingenuity? 12th Group personnel have developed a means of airlifting the 155mm howitzer by Chinook, previously a "lift" limited to the CH-54 Crane.**

**— CPT John D. Sennett**

# Rapid Transit... Vietnam style

The long road north from Saigon is dotted with travel-folder names — Phan rang, Binh-dinh, Quang-tri, Thanh-hoa — all complete with leeches, mud, and booby traps. Inevitably, the Allied footsoldiers will cover every miserable step of the way. One of the few comforting sights on this weary journey is the constant nearness of search, rescue and evacuation helicopters. The trip back for our sick and wounded is as quick and comfortable as we can make it . . . and will stay that way.

Kaman Aircraft Corp., Bloomfield, Conn., suppliers of Search and Rescue Helicopters to the Armed Forces.

**MG George C. Power** (r.), SETAF CG, presents the AAAA's "Outstanding Aviation Unit" trophy to MAJ Chas. A. Klopp, CO of SETAF's Aviation Company.

**Attendees leave the theater** for a coffee break at the nearby International Grill. Nearly cloudless skies brightened the Regional Convention at Garmisch.

**CPT Ralph Riddle** (l.) of the 205th Trans Bn's School Support Platoon, accepts the "Outstanding Support Unit" trophy from LTC Edward W. Sargeant.

# USAREUR Region Eighth Annual Meeting

**GARMISCH, Germany** — Helicopter advocates sought to set the theme of the Eighth Annual Meeting of the USAREUR Region of the Army Aviation Association here March 9-11, but fixed wing proponents fought back and by the last presentation it was clear that both types of aircraft remain essential in today's Army.

Some 900 Army Aviators and aviation industry leaders from Europe and the U.S. attended the three-day session, hosted by the 504th Aviation Battalion and presided over by **Major General David B. Parker,** USAREUR Region President and Commanding General of Seventh Army Support Command.

## USAREUR Regional "Honors Night"

Chosen as the Region's "Outstanding Army Aviator of 1966" at the Honors Night concluding the convention was **Chief Warrant Officer Richard C. Keehn,** Burlingame, Calif., assigned to Company B, 504th Aviation Battalion. **Major General James W. Sutherland, Jr.,** CG, 4th Armored Division, presented **Keehn** with the AAAA Award Medallion at the Honors Banquet.

**Sergeant First Class Julius E. Stagner,** Clarksville, Tenn., a member of the 67th Aviation Company, 16th Aviation Battalion, received an AAAA Award Medallion denoting his selection as the "Outstanding Aviation Soldier" in USAREUR for 1966. **LTC Paul E. Griffin,** CO of the 16th, presented the award to **Stagner.**

## The Outstanding USAREUR Units

The **Southern European Task Force Aviation Company** was selected as USAREUR's "Outsanding Aviation Unit" for 1966, and **MAJ Charles A. Klopp,** CO, accepted the Association Trophy on behalf of his unit from **MG George J. Power,** CG of the Southern European Task Force.

Named the "Outstanding Aviation Support Unit" in USAREUR for 1966 was the **School Support Platoon** of the 205th Transportation Battalion. **CPT Ralph Riddle,** Platoon Commander, received the attractive AAAA Award Trophy from **LTC Edward W. Sargeant,** CO of the 205th.

## AAAA Scholarship Winner

A $500.00 AAAA college scholarship, one of eight awards bestowed by the Association this year to "deserving sons and daughters of members and deceased members" was presented to **Martin S. Tyson,** a high school senior at Heidelberg, and the son of **LTC** and **Mrs. Robert M. Tyson,** Butler, Ala.,

assigned to ODCSPER, Hqs, USAREUR. The award was made by **BG O. Glenn Goodhand, USA (Ret.),** AAAA national president.

## Industry Debates Rotary-Fixed Wing

Presentations by many of the twenty-two industries represented at "Industry Day" at Garmisch took those attending on a remarkable airborne journey. Films and speeches had attendees skimming treetops at 170 mph in an OH-6A **Cayuse,** bouncing in a Piper to an abrupt halt high in the snowswept Alps, rumbling along a test strip of asphalt chuck holes built to test the all-terrain landing gear of the North American OV-10A, and landing in New York City parks and waterfront piers in de Havilland Aircraft products. And so — despite Bell Helicopter's program, complete with stickers, to "Stamp Out Fixed Wing," many attendees remained unconvinced.

One of the unconvinced and keynote speakers for "Industry Day," **Herr Eduard Bodem,** a 50-year-old pilot with the Austrian Rescue Service, saved 26 persons this winter executing the most difficult Alpine landings in his 140 hp Piper aircraft in all kinds of weather. Covering his 10 years with the Rescue Service, **Bodem** has completed 1,040 high mountain landings while rescuing 336 ill and injured persons.

## "Army Day" Presentations

Taking a stand for rotary wing in an earlier "Army Day" presentation, **MG James W. Sutherland, Jr.,** 4th Armored Division Commanding General, told the 900 attendees, "The close integration of reconnaissance, heliborne infantry, ground-based firepower, heliborne fire support, and fire support provided by the USAF is our daily cup of tea in Vietnam."

Speaking of aviation's role in the Army in Europe, **Sutherland** said, "To me, the use of the helicopter for more effective command control is absolutely essential for Division and Brigade Commanders." He added later, "At this point in time, I do not feel that we should be too quick to rule out the possibility of airmobile units of brigade size being effectively employed in this theater sometime in the future."

EUCOM's Intelligence Director, **MG Stebbins W. Griffith,** USAF, directed the convention's attention to a dramatic adventure in the past when he told the story of an American Liberator bomber, the "Lady Be Good," which vanished in 1943 after a bombing mission over Naples and was found 16

**Beech Aircraft executives** Jack L. Marinelli (holding model) and James N. Lew (2d from right) view their exhibit in the lobby of the Alpine Theater.

**Chosen the "Outstanding Aviation Soldier"** in USAREUR in '66, SFC Julius E. Stagner (left) receives the AAAA Medallion from LTC Paul E. Griffin.

**Colonel Geert Holeisen,** Chief, Test & Evaluation Branch, German Aviation School, talks with COL James D. Bowen, Regional Exec VP, during break.

**Chief Warrant Officer** Richard C. Keehn (left), receives the AAAA Medallion from MG James W. Sutherland as USAREUR's "Outstanding Aviator."


**HEAVY-LIFT HELICOPTER:** The CH-54A flying crane, combat-proved in Vietnam, has lift capacity unmatched in the free world. It transports bulky external loads up to 10 tons. With a new artillery crew pod, a single CH-54A can deliver the 155mm howitzer, its 11-man gun crew and ammunition. A growth version, the CH-54B, will carry a payload of almost 18 tons.

## Only Sikorsky has combat-proved heavy-lift and high-speed transport capability


**HIGH-SPEED TRANSPORT:** The U.S. Marine Corps CH-53A transport moves heavy loads over long distances in Vietnam. The free world's largest and fastest transport helicopter, it flies up to 200 miles an hour, carries up to nine tons of cargo or 44 combat-equipped troops. It is a combat-proved aircraft. Its U.S. Air Force counterpart, the HH-53B, is scheduled for long-range, high-speed rescue missions in Vietnam.

For high-speed and heavy-lift V/STOLs, look to experience — look to Sikorsky.

**Sikorsky Aircraft**

STRATFORD, CONNECTICUT

U

DIVISION OF UNITED AIRCRAFT CORPORATION

A

**MG Stebbins W. Griffith,** USAF, EUCOM Intelligence Director (2d from right), and COL J. M. Vande Hey, USAF Air Division CO (l.), at the break.

**President Goodhand** presents a silver medallion to MG David B. Parker (r.) for his outstanding Ass'n contributions as '66 USAREUR Regional president.

**Herr Eduard Bodem** (l.), Austrian Air Rescue Service pilot, tells convention attendees of his many Alpine landings through an interpreter at the right.

**BG O. Glenn Goodhand** (left) presented an AAAA $500 scholarship to Martin S. Tyson (center), the son of LTC (right) and Mrs. Robert M. Tyson.

years later 400 miles deep in the Libyan desert. The commander of Wheelus Air Base in Libya when the plane's wreckage was found, **General Griffith** traced the investigation that followed the discovery of the aircraft and sketched the story of its ill-fated mission when a navigational error sent the nine-man crew to their deaths.

## German AA Chief Contrasts Roles

For the first time in the ten year history of the AAAA, a German aviation expert, **LTC Geert Holeisen,** made a presentation to convention attendees. One of the men responsible for the beginning of German Army aviation in 1956, **Colonel Holeisen** described the structure of the Bundeswehr aviation battalion. He compared and contrasted the problems of defending western Europe to the airmobile aspects of the U.S. Army tactics in Vietnam.

Fast-paced presentations throughout the convention covered recent and projected developments in Army aviation, and left the delegates with enough discussion material for a year.

**Colonel Edwin L. Powell, Jr.,** Deputy Director of Army Aviation, DA; **Colonel Warren R. Williams, Jr.,** Director of the U.S. Army Board for Aviation Accident Research, Ft. Rucker, Ala. (and the initial USAREUR Region president in 1959); and **LTC James H. Burress,** OPO, DA, were several of the CONUS officers providing briefings to the USAREUR assemblage.

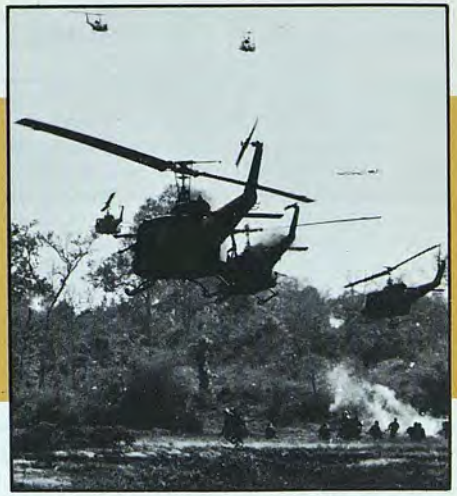
**Colonel Robert K. Moore,** Chief of the Air Mobility Branch, OCRD, DA, spoke of the "second generation of Army aircraft. More sophisticated helicopters are the backbone of the next generation of aircraft," he said.

With a barrage of information, industry then showed what he meant. Among the aircraft discussed were the Sikorsky **Flying Crane;** Boeing Vertol's CH-47A **Chinook,** CH-46 **Sea Knight,** and CH-47B, soon to come off Boeing production lines; Bell's new AH-1G **HueyCobra;** Lockheed's Advanced Aerial Fire Support System **(AAFSS);** and the Hughes OH-6A **Cayuse,** as maneuverable as a bumblebee.

Grumman Aircraft, with its three **Mohawk** models now in use in observation-surveillance missions in Vietnam, and de Havilland's noted STOL aircraft, proved to all that fixed wing was here to stay.

**Hans Weichsel, Jr.,** a Bell Helicopter Company vice president, indicated that nearly 60 per cent of all manned aircraft purchased by DOD today are helicopters and added, "during this meeting Bell will produce 21 **Hueys** and several commercial helicopters."

# TACTICS AND THE MACHINE



TACTICS, as the word is used here, refers to the manner and methods used when man and machine operate to accomplish a task in a combat environment. *Machine*, as the word is used here, refers to a hardware item, mass produced and designed to augment the capabilities of that faceless nonentity – the average man.

## Concepts versus hardware

A head-on collision between the concept developer and the hardware producer is implicit in their assigned roles. The concept developer begins his study by determining a desired tactical result; applies to it the known capabilities of the existing man/machine combination; computes the shortages; and calls on the hardware producer to fill them.

The hardware producer begins his effort by considering the shortages as a minimum requirement; applies the technological know-how of the entire industry; computes the overages and shortages; and calls on the concept developer to use the result.

Then, each returns to GO!

*The point to be made is, that the chances for machine development which exactly meets expressed requirement – no more and no less – is practically nil!*

By
MORRIS G. RAWLINGS
Lieutenant Colonel, USA (Ret.)

A case in point may well be in the area of V/STOL development. The concept – and therefore the proposed tactical usage – continues to envision use over relatively short ranges and will pay no premium for speed. The machine, having the power to lift a useful load vertically, has sufficient power, when efficiently transferred to the horizontal plane, to push the aircraft at a relatively high rate of speed. To the engineer, this is a gain without cost; to the military man, this so-called gain has little or no operational value, and it has an exceedingly high cost – a cost in dollars, and in unusable capabilities.

## Tradeoffs

There is, of course, the natural human reaction to being forced to take something unwanted and unusable simply to get something else which is desired. Many a man today remembers being forced to pay for two bottles of Old Vomitage in order to get one bottle of decent Scotch. The schism is deeper, however, and in the case of organic Army aircraft, quantum increases in speed of movement, *unless* accompanied by an equal increase in quantity of lift, will introduce totally unsatisfactory conditions for the military.

There are two ways (outside of combat) for a military man to prove a requirement

## TACTICS AND THE MACHINE

*(Continued from Page 21)*

and obtain the funds necessary for machine development. He can conduct a reasoned, detailed study of the problem, determine the proper solution, and press for its acceptance. This way seldom works outside of the military, for it negates the consideration of alternatives by the decision-maker – all alternatives having been judgmentally dropped during the course of the study.

The second way – operational analysis – contaminates the early data with judgment, but arrives at study end with all alternatives intact, thus permitting their consideration by the decision-maker.

Let us have a whack at both methods; let us determine the operational requirements for speed by quantitative methods (alternatives intact) and by qualitative (alternatives dropped) methods.

### Getting there first

*What are the operational requirements for speed in the use of Army aircraft intended for airmobile assault?* The desired result is arrival *earlier* than the enemy. The present capability of the man/machine combination is about 100 knots and the range somewhere in the neighborhood of 50 nautical miles. Thus, our quantitative analysis, begins with a graph known to historians, mathematicians, gamblers, and military analysts since MARATHON. It purports to show that when the defender has but half as far to go, the attacker must go twice as fast to have a fifty-fifty chance of being first. It also shows that increasing the speed ratio beyond 5 to 1 does little to improve the chances for being first.

The analyst knows that the present enemy travels at less than 20 knots; he assumes that a potential enemy can achieve our own speed. Applying the graph, he concludes the required movement speed is somewhere between 40 and 500 knots. To narrow the spread, he uses 100 (present capabilities) as the minimum and 400 (a present potential) as the maximum to construct Table 1.

### Speeds over short distances

Table 1 is a representation of the capability of the man/machine combination to use high speeds over a relatively short distance. It shows that, at high speeds, so much of the time and space is used in acceleration and deceleration that little time or space is left for high speed travel. *Expressed as a ratio, it states that aircraft speeds must be quadrupled in order to double the rate of movement.*

Because the prime value of speed in a tactical operation is in time saved, the analyst constructs a graph (Fig. 1) which, by using 100 knot aircraft speeds as the base, indicates that 24 minutes could be saved by traveling at 1,330 knots – with lesser gains at lesser speeds. If each knot of increased speed cost one dollar, we could compute the cost for each minute gained. Let's do it. Table 2.

That's what it costs to get the minute, and the speeds we must achieve. But what is the

TABLE 1 — 50 NAUTICAL MILE ASSAULT

| EVENT | AT 100 KNOTS | | AT 400 KNOTS | |
|---|---|---|---|---|
| | TIME (MIN) | DISTANCE (N.M.) | TIME (MIN) | DISTANCE (N.M.) |
| T/O & climb to 2500' | 2.5 | 3.7 | 2.0 | 5.0 |
| Accelerate to cruise | .5 | .7 | 3.2 | 10.8 |
| Cruise | 25.3 | 41.9 | 4.8 | 18.4 |
| Decelerate | .5 | .7 | 3.2 | 10.8 |
| Approach to Landing | 2.5 | 3.0 | 2.0 | 5.0 |
| Touchdown | .7 | — | .7 | — |
| TOTALS | 32 | 50 | 16 | 50 |

value of each minute? We all know there is no way to respond quantitatively to this question. Some minutes have value in excess of other hours. However, analysts are not allowed the luxury of refusing to quantify the non-quantifiable. There has to be a way.

There is.

## Three-phase performance

Each aircraft, regardless of speed, uses a finite period of time to do the task. During that performance, it engages in three phases; takeoff, enroute and landing. If we assign a value to each phase; a value which accrues only to those minutes, and if we then apply that value to those minutes used by each

## TACTICS AND THE MACHINE

*(Continued from Page 22)*

aircraft, we can confuse the issue and do so with proper mathematics. The primary value to the mission occurs during the landing; it has a value of 3. The enroute phase is the next most fraught with error; it has a value of 2. The least value occurs at takeoff when any aircraft can be replaced. Assign it a value of 1. Our earlier effort shows us that each aircraft, regardless of speed, uses 10% of its time in takeoff; 75% enroute and 15% in landing. Multiply value of phase by time in phase and we have the value for each minute for each aircraft. Add the value for

**Time Gains As The Result Of Increased Movement Rates Over A 50 Nautical Mile Mission**

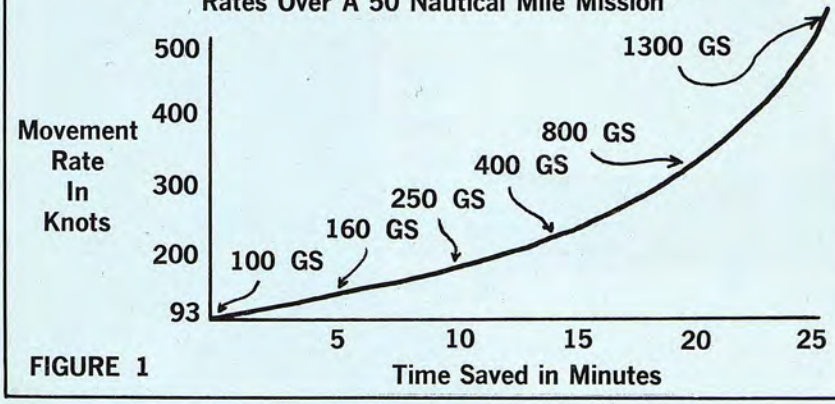



FIGURE 1

TABLE 2 — COST PER MINUTE GAINED AT $1.00 PER MINUTE (100 KNOT BASE)

| AT AN INCREASED GROUND SPEED OF: | THE TOTAL TIME GAINED | COSTS PER MINUTE |
|---|---|---|
| 60 Knots | 5 | $12 |
| 150 Knots | 10 | $15 |
| 300 Knots | 15 | $20 |
| 700 Knots | 20 | $35 |
| 1230 Knots | 24 | $51 |


## The Latest Improvement in Hunting Caps

The sight on this standard flight helmet makes the man who wears it a very formidable sharpshooter indeed. The sight is the key to Sperry Utah's VIPRE-FIRE, an automatic fire-control system that lets a pilot or gunner precisely aim his weapons at ground targets *merely by looking at them.*

Too good to be true? A few years off? Too complex? Too costly? Too impractical? Unproven?

Wrong. VIPRE-FIRE hardware is available *now.* It can easily be adapted to existing weapon systems and aircraft as well as to those of the future. VIPRE-FIRE is lightweight, rugged, and reliable. There is no interference with pilot or gunner activity or other aircraft systems.

VIPRE-FIRE is so simple to use that in recent demonstration firings from a helicopter, untrained observers using the system for the *first time* scored consistent hits on ground targets. VIPRE-FIRE accuracy is superior to any other mode of engaging ground targets.

If you have responsibility for bagging the limit in air-to-ground hunting, Sperry's VIPRE-FIRE will be a feather in your hunting cap.

SPERRY
DIVISION OF
SPERRY RAND
CORPORATION

**SPERRY UTAH COMPANY, 322 North 21st West, Salt Lake City, Utah 84116**

## TACTICS AND THE MACHINE

*(Continued from Page 23)*

each particular minute during a time block which does not exceed 32 minutes for the slowest aircraft and we have Figure 2.

Figure 2 says the most valuable minutes are the first seven; Figure 1 says we gain the first seven minues by flying at 196 knots. Table 2 says we can get these seven minutes for an average of $12.86 per minute. There are still plenty of alternatives for the decision-maker to ponder. He may or may not recognize that the choices presented for his decision have been weighted by the judgment of the analyst throughout; he is aware that he is left with choices other than the classic military "Approved" or "Disapproved".

### Results in three steps

Judgmentally, the same results are achieved in three steps; perhaps something like this:

(1) What is the real requirement? It is to arrive first with the *most*. Early arrival with an insufficient force is piecemeal commitment and is a prelude to almost-certain defeat. If the alternatives of early arrival with insufficient force or late arrival with an overwhelming force are offered, then no man would choose the former.

(2) What speeds are necessary to overcome the disadvantages of an insufficient force? They are, at a minimum, three times that of equipment having adequate lift. An aircraft which has insufficient lift must make a minimum of three trips; once for the first load, an empty return to the point of origin, and a second loaded trip to destination. Any speed increase of less than triple does little for the tactical movement which is seeking to establish and maintain a favorable force ratio. Doubled speed, for example, will merely return the aircraft to the point of origin – it will do nothing to bring in the second load. *To obtain equal effectiveness, doubling lift capabilities is as fruitful as is tripling flight speed.*

(3) Can the man/machine combination fully utilize tripled speeds? Double lift? Lift presents no problem. Speed cannot be fully utilized. It has no value during takeoff; it increases the difficulties of gathering together the force in a small area; and it has no worth during landing operations. Its only value is expressed as a decreased period of exposure during the enroute phase.

### Controlling the mission

This value is reduced by practical considerations; over short distances, the high speeds can seldom be achieved and if achieved, cannot be dissipated without overflying the destination; the decision time available to commanders is so shortened as to reduce his ability to properly control the course of tactical events; the pilot at terrain-following altitudes is so assisted by sophisticated devices as to lose his ability to control the flight; and no computable terrestrial speed

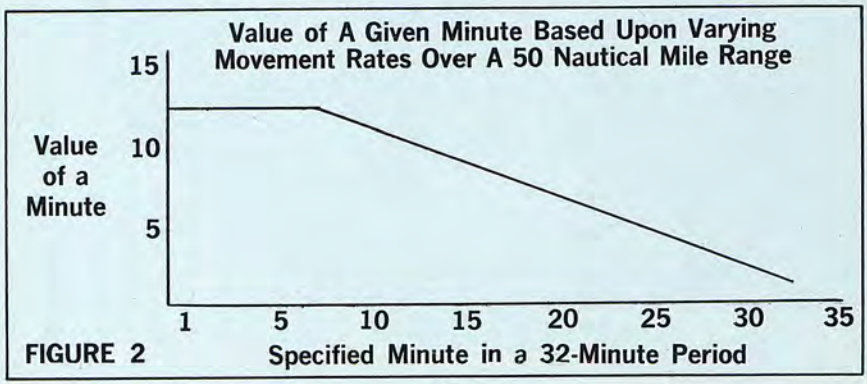



FIGURE 2

# They stake their lives on "Little Joe"

**that's what Army fliers in Vietnam call the tough, reliable Titan gas turbine APU that cranks up the big Chinooks without ground support**

Solar's *Titan*® gas turbine is a compact, light-weight APU which generates electric and hydraulic power aboard the Army's Boeing-Vertol CH-47A Chinook helicopter. The unit starts the Chinook's main engines and it provides auxiliary power for servicing anywhere in the world without ground support equipment.

More than 1,500 of the 80 to 150 hp *Titan* turbine APU's have been sold and are in use in every military cargo helicopter program. Their reliability has been proven by years of service in the field under the most rugged combat conditions, including temperatures ranging from −50°F to +121°F, and exposure to salt water, dust and sand.

*80 hp Solar Titan gas turbine*

The *Titan* gas turbine weighs 75 lbs and is 25 inches long and 12½ inches in diameter. *Titan* gas turbine APU's may be equipped with alternators, generators, hydraulic pumps, pneumatic compressors or any combination of these units.

For more information about the *Titan* gas turbine, write: Solar, Department P-140, San Diego, California 92112.

**SOLAR**

DIVISION OF INTERNATIONAL HARVESTER COMPANY

## TACTICS AND THE MACHINE

*(Continued from Page 26)*

presents a defense against those ground weapons which are controlled by a black box.

The concept developer, seeking to devise tactics for use by man, demands that the machine support the man, *not* supplant him. If the value of an aircraft is to be expressed as $P = LS$, ($P$ = *productivity;* $L$ = *lift;* $S$ = *speed*) then he asks the machine producer to hold $P$ constant, permitting the user to arrange $L$ and $S$ to suit the situation. Above all, he does not want a changing $P$ based upon an inflexible relationship between $L$ and $S$, nor a requirement to pay for an unrequested $S$.

### Improve the man!

The machine developer, obeying some laws not written by man, is rapidly approaching the point at which he will suggest that man needs a few improvements. He may even suggest that until man is improved sufficiently, it might be well to remove him from the loop.

This could start the wrong war in the wrong place at the wrong time!

As an interim solution, it would appear that tactics could best benefit from technological gains if machines were developed for the individual rather than for the average man. The object of mass production is to ensure similarity of machine performance; the object of training is to ensure similarity of man knowledge; the object of tactics is to obtain similar, and therefore, forecastable results from the performance of the man/machine combination. What better way to ensure similar performance than to build the machine around the man?

Men remain (thank you, parents!) different in their capabilities and in their potentialities. Some think faster, see more clearly, hear more acutely, and react more quickly to stimuli than do others. Placed in identical machines, their performance may not even be similar. Placed in machines which have been developed to fit their capabilities, their total performance can be accurately assessed.

Expensive? Certainly. However, if mission performance can be known in advance, then requirements can also be established. Those requirements will be less since there will be no necessity for including the K factor, the overage to be available "just in case". It may well prove no more expensive than the current method which consists of asking for more than you want in the hope of getting nearly as much as you need. Besides, no other method will permit use of a single descriptive word to cover the tools needed to do the tactical job.

### Tailor-made hardware

This solution uses "manchines" — hardware items developed for the use of individuals; Army Aviators, if you will, who remain too complex for definitive analysis by commanders, concept developers, machine producers, or operations analysts!

# Army Staff To Act Upon Aviation WO's Survey Data

SCIENTISTS at Fort Rucker's *HumRRO* Division No. 6 (Aviation) are in the process of completing a worldwide survey of aviation warrant officers, designed to help the Army define the role of this flying specialist in considerable detail.

Nearly 2,000 lengthy questionnaires have been returned by men in the field and analysis of the data they contain is now underway.

*HumRRO* – the *Human Resources Research Office* of George Washington University – is a contract R&D agency which specializes in Army training.

In June 1966, the 192-item questionnaire was mailed to every aviation warrant officer on the Army's rolls. The questionnaire, developed by *HumRRO*, was sent out by *BG Robert R. Williams*, the Director of Army Aviation.

Well over 80 percent of the questionnaires have been completed and returned. Researchers view this fine response, together with a large number of written comments, as indicating that the pilots consider the survey to be an important effort on the Army's part toward establishing the Aviation Warrant Officer Branch on a truly sound basis.

## Anonymity maintained

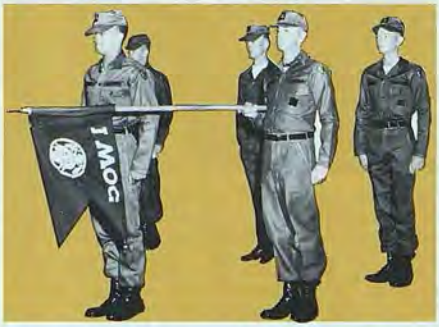
Information from the questionnaires is being assembled on a computer to speed analysis. Each warrant officer's response contains approximately 1,250 separate "pieces" of information, necessitating the use of 43 punched cards per respondent. Information collected will be presented to Army decision-makers in both briefings and technical reports, keeping the responses of individual warrant officers anonymous.

HumRRO researchers hope to obtain an indication of how well the warrant officers feel their pre-flight and flight training courses prepared them for their assignments. The responses should also provide their opinion as to the need for additional training, for special emphasis or de-emphasis, and for general orientation of the warrant officer pilot training program.

In particular, researchers are analyzing non-flying additional duties that warrant officers are asked to perform. Pre-survey interviewing indicated that many new WOs were unaware of the extent to which they would be called upon for additional duties; some reported they felt unqualified to undertake them. Survey results should provide definite information on the extent to which warrant officer pilots perform additional duties in the field.

Many of the survey's attitudinal questions should provide a look at how warrant officers and their wives feel about such facets of military life as assignment policy,TDY, PCS, housing conditions, on-post facilities, pay, promotion rates, and many others.

Briefings based on partial analyses of the data are being presented to key Army agencies as rapidly as possible so that Army planners can act quickly on any revisions or modifications of training which may be indicated, and can make the earliest possible use of survey results in warrant officer pilot recruitment, training, assignment, and career planning.




**(Ed. Note: The HumRRO survey is most timely. For one warrant officer's viewpoint on those areas that should receive "emphasis," turn to pages 41-44.)**

# Army Aviation

MAR.-APR. PHOTOS

FT. HUACHUCA, ARIZ. — Fired 14 feet into the air at approximately 4Gs, a student in the Enlisted Aerial Observer Course moves at 40 to 45 fps in a seat ejection exercise conducted at the Combat Surveillance School. Students attending the course are taught the detection of enemy movements through airborne sensor equipment operation in Mohawk aircraft. The new training aid is used in an 8-hour bloc of instruction devoted to ejection seat operations.


WICHITA, KANSAS — Shown at the time of the turnover of the last T-41B aircraft at Cessna Aircraft Company's delivery center are, left to right, V. G. Weddle, vice president and general manager of Cessna's Commercial Aircraft Division; Paul Hendrickson, AVCOM Trainer Aircraft commodity manager; COL Delbert L. Bristol, AVCOM deputy commander; MAJ Phillip S. Odom, chief DCASO at Wichita; Tom Griffin, contracting officer at AVCOM; and Derby Frye, the military relations manager at Cessna Aircraft.

QUONSET POINT, R.I. — MAJ Billy R. Hawkins, commanding officer of the Army Aviation Detachment for Antarctic Support, and SSG Daniel T. L. Cheu, accept a Navy Unit Commendation from CMDR Daniel Balish (l.), CO of Air Development Squadron Six. The Ft. Eustis-based Army unit served in Antarctica transporting scientists to sites in the South Polar Area during October, 1966, to February, 1967. A new 12-man unit headed by MAJ Bennie E. Luck, Jr., left Ft. Eustis April 5 for six-weeks duty at T-3, an ice island in the Arctic Ocean.

MANTECA, CALIF. — Congressman John J. McFall (D), 15th Congressional District, is shown being presented with an Honorary Membership in AAAA's Sharpe Army Depot Chapter for his outstanding support and contributions to Army aviation. LTC George E. Martin, Chapter president (r.), made the presentation in an informal ceremony held in McFall's office in Manteca. Following the award ceremony, COL Carl S. Leidy (l.), Depot Commander, paid tribute to McFall for his many AA efforts.

## COLONEL J. T. DEMPSEY SENIOR AA COMMANDER, KILLED IN VIETNAM

TAN SON NHUT, Vietnam – Colonel Jack T. Dempsey, 46, (Alexandria, Va.), a senior Army aviation commander in Vietnam, was killed March 26, 1967, during a battle in the Mekong Delta while he was attempting to rescue crew members of two downed helicopters.

Colonel Dempsey commanded the 13th Aviation Battalion, stationed in Vietnam's sprawling Mekong Delta. Until the arrival of the U.S. Army's 9th Infantry Division, the 13th Aviation Battalion with five aviation companies was the largest American force in the Delta. The 13th flies in support of the Army of Vietnam's (ARVN) IV Corps.

During a Vietnamese Army airmobile operation, a UH-1D helicopter was shot down. A medical evacuation helicopter trying to pick up the crew of the disabled helicopter was downed in the attempt. Colonel Dempsey was flying in the area of the battle and despite the danger decided to try to rescue the two crews. After landing within yards of the two downed aircraft, intense enemy small arms fire killed Colonel Dempsey, wounded the copilot, and set the helicopter on fire.

### "A fierce loyalty . . ."

Colonel Dempsey's commander, Brigadier General G. P. Seneff, Commanding General of the Army's 1st Aviation Brigade, said, "Colonel Dempsey's professionalism and enthusiasm inspired the men of his battalion to accomplishments and pride in their unit unequalled in Vietnam. That Colonel Dempsey gave his life while trying to save others is an indication of the fierce loyalty he had for his men. He was an outstanding commander, aviator, and friend. His loss is keenly felt by the brigade and by his many Vietnamese friends."

Colonel Dempsey was born on June 2, 1921, in Fort Smith, Ark. After graduation from Oklahoma A&M, he entered the Army as a private in 1943. On completion of Infantry Officer Candidate School at Fort Benning, Ga., he fought in Europe with the 331st Infantry.

Following a brief break in service after World War II, Colonel Dempsey returned to active duty and has since served in the Mediterranean Theater, Trieste, Korea, Vietnam and several stateside posts. Since graduating from the Army Aviation School in 1962, Colonel Dempsey served primarily in Army aviation assignments.

Colonel Dempsey attended the Armor School Advanced Course (1952), Command and General Staff College (1955). Armed Forces Staff College (1959), and the Air War College (1963). He received a masters degree in international relations from George Washington University in 1963.

Colonel Dempsey is survived by his wife, Juanita, and four children, Taylor, Rebecca, Dianna, and Jackson, of 2409 Childs Lane, Alexandria, Va.

# TOP OFFICIALS GATHER AT 1966 AVCOM-AAAA INDUSTRY BRIEFINGS


**TOP LEFT: The Honorable Willis M. Hawkins, Assistant Secretary of the Army (R&D), delivers the keynote speech at the May 4 Advanced Planning Briefings for Industry held in St. Louis. ABOVE: Side view of the military-industry audience attending the May 4-5 sessions. RIGHT: Shown at the May 4 AAAA "social" are, left to right, Maj. Gen. William W. Lapsley, CG, MOCOM; Brig. Gen. Howard F. Schiltz, CG, AVCOM, co-host activity; Brig. Gen. Thomas B. Simpson, CG, MEC; and Maj. Gen. (now Lt. Gen.) William B. Bunker, Deputy Commanding General, AMC.**



**LEFT: Gen. Schiltz addresses the May 5 luncheon audience as Gen. Frank S. Besson, Jr., AMC Commander (left), and Brig. Gen. O. Glenn Goodhand, USA (Ret.), AAAA national president, listen attentively. ABOVE: Part of the luncheon audience.**

# 1967 Briefings To Cover The '70's

**ST. LOUIS, MO., April 15** — The Army Aviation Materiel Command and the Army Aviation Association of America are co-hosting the **1967 Advanced Planning Briefings for Industry** at the Chase Park Plaza Hotel, St. Louis, Mo., June 19-21, 1967. The purpose of the briefings is to provide appropriate and interested elements of industry with information around which they can center their corporate planning to meet future Army aviation needs.

**This year's briefings** will have **"Army Aviation in the 70's"** as their theme. Presentations will be oriented towards the Army structure and its corollary aviation equipment needs during the decade of the 70's.

**The agenda** is enhanced by the presence of many of the Army's top experts in the areas of aviation requirements, airframe and engine design objectives, communications and avionics, and aircraft weaponization. These include **GEN Frank S. Besson, Jr.,** CG of the U.S. Army Materiel Command; **MG Robert R. Williams,** Director of Army Aviation; **MG William B. Latta,** CG of the Electronics Command; and **BG William J. Durrenberger,** CG of the Weapons Command.

**The briefings** are expected to provide the forum for interesting and provocative presentations on a wide variety of subjects. Aviation system requirements are to be covered fully — from aircraft design for human factors and personnel safety to aircraft and crew protection requirements.

## June 19 Registration

**The main registration** period for the **Advanced Planning Briefings** for Industry is scheduled for the period between 4 p.m. and 10 p.m. on June 19, with latecomers being registered on the mornings of the 20th and 21st. The sessions carry a **Secret** security classification, and attendees are requested to furnish their security clearances to AVCOM not later than May 31. The briefings will be conducted over a two-day period in order to provide complete coverage of the subject matter.

**A luncheon** and an evening reception are planned for the 20th. The individual registration fee is $40 and covers full attendance. Advance registration is encouraged; checks should be made payable to **"Treasurer, Lindbergh Chapter, AAAA."** A **Ladies Day program** similar to last year's activities is planned — a $15 Ladies Day fee covering a tour of St. Louis point of interest, luncheon, and cocktails.

**The Khorassan Room** of the Chase-Park Plaza Hotel was chosen as the '67 conference site in order to provide comfortable seating for the more than 700 industry-military persons who are expected to attend.

**Those interested in attending** the 1967 Briefings are to contact the Command and Project Management Office, Attn: Mrs. Rosa Lopez, USAAVCOM, 12th and Spruce Streets, St. Louis, Mo. 63103. Telephone: (314) MAin 2-2045 or MAin 2-2048.

# Should you take your light twin through it, around it or turn back?


The Bendix AN/APS-113 Weather Avoidance Radar is fundamentally superior because it's fundamentally different. Start with the fact that the AN/APS-113 is not a rehash of airline radar—it is specifically designed to make the most of the limitations posed by smaller aircraft.

That's why only the Bendix® AN/APS-113 gives you 40% greater range than competitive units with the same size antenna. Not only that, but the AN/APS-113 produces a stronger image of less-dense weather targets. While these smaller storms might not interest airliners, it's exactly what the pilot of a light aircraft must look for—information on marginal situations that show him how to skirt around a storm.

This ability to see "inside of storms" as far away as 80 miles is what sets the AN/APS-113 apart. That, plus its ability to see the storm behind the storm—and the storm behind that—even when close-in weather makes strong radar echoes.

And the complete system weighs just 16½ pounds, requires only 60VA of AC power and 1½ amps DC. All this adds up to greater flying safety for you and greater usefulness of your aircraft.

Helicopters? The AN/APS-113 is ideally suited for them because of its inherent high resolution coupled with the ability to modify it for short range (8 and 40 miles.) Installations have been made in the Sikorsky S-62 and Bell HU-1B. Their pilots report the AN/APS-113 has demonstrated outstanding detection and resolution in both weather and terrain-mapping modes.

Whatever the aircraft, you'll fly more often, to more places, and in greater safety with the AN/APS-113 aboard.

More information? Contact Radio Division, Avionics, Baltimore, Maryland 21204.

# Only a Bendix AN/APS-113 tells you at 80 miles.

Bendix

# CHANGES OF ADDRESS

# PCS

HANDLEY

NEWTON

GRANDELLI

## PCS - GENERALS

MESZAR, Frank, BG

TOLSON, John J., III MG

## COLONELS

HANDLEY, George E., Jr.

NEWTON, Albert

SMITH, Bill G.

TILLERY, George G.

ZORNIG, Karl H.

## LT COLONELS

BARRETT, Ernest F.

BOSAN, George S.

CARR, Edwin O.

COBB, Bernard R.

COX, Robert G.

CURD, Vernon F.

DAVIDSON, Kenneth E.

DAVIS, Harry O.

DAVIS, Lauren S.

ESTES, Ben E.

GRANDELLI, Charles M.

## PCS - LTCS

GROW, Robert M.

HILBERT, Marquis D.

HOEY, Edison V.

HYMAN, Robert D.

KALAGIAN, Samuel P.

KERFOOT, Lester R., Jr.

MERRYMAN, James H.

MONEY, David H.

MORRIS, James M., Jr.

PEARSON, Neville A.

REISACHER, Robert W.

RICE, Foy

RIKE, James C.

ROGERS, Avery M.

SMITHEY, Paul C.

STEWART, Harvey E.

TRAVER, Daniel G.

## MAJORS

ADDISS, Daniel A.

ANKNEY, Paul

## PCS - MAJORS

AYERS, Robert C.

BAIRD, John R., Jr.

BEASLEY, William A.

BELCHER, L. Fred

BELK, George M., Jr.

BETTINGER, Francis D.

BINDRUP, Lavere W.

BLISS, Donald E.

BOEHNKE, Roger H.

BOYLE, Willard F.

BRANSFORD, Thomas

BROCK, Eldridge W.

BUCK, William L.

CARON, Robert P.

CHRISTIE, Thomas C.

CLEMENTS, John K.

COSTINO, Michel

CUNHA, Fred R.

DAVIS, Warren C.

905

DeFRANCE, Rudolph B.

## PCS - MAJORS

DESCOTEAU, Rudolph D.

DROSS, David D.

DUKE, Walter, Jr.

EBAUGH, Glenn M.

EMMER, Eugene S.

FAULK, Emmett A.

FEASTER, Lewis L.

FREEZE, Richard S.

GARRETT, McLain G., Jr.

HASWELL, Edward A.

HAYS, James D.

HOELTZEL, Norman E.

HORNADAY, Robert W.

HUDSON, Charles F., Jr.

HULL, Michael H.

HUMES, Richard A.

ILLER, Alfred J., Jr.

INGRAM, Thomas A.

IVEY, George N.


# REGIONAL BOARD

THE MEMBERS OF AAAA'S 1966-1967 USAREUR REGION EXECUTIVE BOARD POSE FOR A PICTURE OUTSIDE THE GENERAL PATTON HOTEL, GARMISCH, DURING THE REGIONAL CONVENTION HELD 8-11 MARCH. IN THE BOTTOM ROW, L. TO R., ARE LTC IVAN M. STORER, MG DAVID B. PARKER, MAJ JOE UNDERWOOD, AND MAJ. RICHARD T. CLINE. SECOND ROW: LTC EDWARD W. SARGEANT AND MAJ DONALD E. HOLROYD. TOP ROW: COLONEL JOHN R. ADIE, COL MICHAEL J. KRISMAN, LTC HOWARD B. KESSINGER, JR., MAJ ROBERT G. ANDREE, COL JAMES W. SANDRIDGE, JR., AND MAJ CHARLES A. KLOPP. MISSING FROM THE PICTURE: COL JAMES D. BOWEN. A FULL REPORT ON THE 1967 REGIONAL CONVENTION APPEARS ON PAGES 16-20.

**PCS - MAJORS**

JAMES, John C.
JONES, Kenneth R.
JONES, Robert B.
KALINA, John M.
KASTNER, Joseph H.
KEEFER, Gary L.
KING, Dewey M.
KINNEY, Arthur K., Jr.
LARSON, Gerald W.
LEARY, Arthur J., Jr.
LUDLOW, Godfrey
MAGNESS, James L.
MANIERI, Americo A.
MARETT, James D.
MARSDEN, William L.
MARTIN, Jack
MATHISON, Theodore E.

**PCS - MAJORS**

McCALL, Leroy W.
McDONALD, Harold F.
McGEE, Bernard A., Jr.
McKENZIE, Colin W., Jr.
McNAMEE, Vernon D.
McNIDER, Henry B., III
MIELKE, Virgil E.
MILLER, Harvey F.
MILLER, Simon L., Jr.
MOORE, Jimmy N.
MORRIS, Arnold C.
MURDOCH, William L., Jr.
RAETZ, Paul E.
RAHN, William E.
RITZ, Karl C.
ROACH, Dick E.
SANTULLI, John F.
SARNECKI, Aloysius

**PCS - MAJORS**

SCHOBER, Henry W.
SEMMENS, Phillip D.
SIBERT, George W.
SMITH, Everett A.
SPENCE, William C.
SPOTTS, Rodney W.
STOKES, John H., III
STOWELL, James L.
STRUDEMAN, Richard C.
TAYLOR, William R.
THOMAS, Richard W., Jr.
TOURTILLOTT, Raymd J.
UTZMAN, Charles D.
VOSEL, Donald M.
WALTERS, Arthur L.
WALTON, Warren J.
WESTLAKE, Edgar A.
WHITE, Leroy

**PCS - MAJORS**

WILLIAMS, Billie G.
WINTERS, Donald L.
WOLFF, William H.

**CAPTAINS**

ALEXANDER, Walter D.
AMIDON, Bert C.
ANDREWS, Raymond G.
ARNOLD, James E., Jr.
BAEB, David E.
BAKER, Ronald B.
BANKE, John R.
BARKSDALE, Lewis B.
BASTA, James M.
BISSELL, Norman M.
BOSKING, William H.
BURCHAM, Jerry L.
CAPENER, Eugene J., Jr.
CARMACK, Douglas W.

# "I'M DELIGHTED!"

MAJOR GENERAL JOE S. LAWRIE (RIGHT), COMMANDING GENERAL OF THE 82ND AIRBORNE DIVISION AT FORT BRAGG, N.C., EXPRESSES OBVIOUS DELIGHT ON BEING ACCORDED THE CREDENTIALS OF CHAPTER HONORARY MEMBERSHIP IN FORT BRAGG'S NEWLY-REACTIVATED AAAA CHAPTER. MAKING THE PRESENTATION IN GENERAL LAWRIE'S OFFICE ON FEBRUARY 21 IS LIEUTENANT COLONEL RAYMOND FOREHAND, CHAPTER PRESIDENT. IN A LATER CEREMONY, THE MEMBERS ALSO WELCOMED LIEUTENANT GENERAL BRUCE PALMER, COMMANDING GENERAL OF THE XVIII AIRBORNE CORPS, AS A CHAPTER HONORARY MEMBER, PRIOR TO HIS DEPARTURE FOR DUTY AS CG OF FIELD FORCE II IN SOUTH VIETNAM.

**PCS - CAPTAINS**

CLARY, William T.

CUNNINGHAM, Donald E.

DANIELSON, James D.

DANTZLER, William D.

ELLIS, John R., Jr.

FARNHAM, Donald W.

FITZGERALD, Barry E.

FRANK, Laurence A., Jr.

FREEMAN, David N.

FREEMAN, Ed W.

GIBSON, Melville D.

HALL, William A., III

HAND, Eugene T.

HARRIS, Edwin H., Jr.

HEINMILLER, Arthur E.

HERNANDEZ, Victor M.

HIGHSMITH, Roy A., Jr.

HITE, Ollie R.

**PCS - CAPTAINS**

HORSLEY, Tip A., Jr.

HOSLEY, Morrison J., Jr.

IANNARINO, Thomas E.

JACOBY, Thomas G.

JAMES, Robert B.

JONES, John B.

JONES, John F.

KALER, William R.

KAMBROD, Matthew R.

KENNY, David L.

LADUE, Wade W.

LAW, Sherrill G.

LINDEN, Albert H., Jr.

LOUDERMILK, James R.

LOVGREN, Paul W.

LOWE, Stephen M.

MAGINESS, Latimer H.

MALLARDI, Robert N.

**PCS - CAPTAINS**

MARICELLI, Joseph M.

MARKLEY, Leighton O.

MAYFIELD, Ralph L.

McDEVITT, Coleman J.

McDOWELL, James I.

MICHELSON, Dale L.

MILLER, Christian J.

MILLER, Ronald A.

MORGAN, Lloyd H.

PALMERTREE, Tommy R.

PETERS, Joseph F.

RAVENNA, Harry M., III

REYNOLDS, C.R.

RIDDLE, Ralph E., Jr.

ROPP, Richard F.

SATTERWHITE, James J.

SHAW, William H.

SHUEY, Martin W.

**PCS - CAPTAINS**

SIEKMAN, Raymond D.

SIMS, Dan F.

SMITH, Kenneth S.

SNIPES, Grover E.

TERRY, Thomas J.

THOMAS, Daniel A.

THURMOND, James F.

WEYNAND, Anthony E.

WILKINS, Bruce G.

WOOD, Douglas J.

WROBLESKI, Dennis A.

**LIEUTENANTS**

ARNOLD, David B.

BANKSTON, Edward L.

BRESNIK, Albert R.

CARGILL, Bruce W.

COLLINS, Dennis C.

# TOP STUDENT

MISS MARION DELLAPA, 17-YEAR-OLD DAUGHTER OF GEORGE C. DELLAPA, SPECIAL ASSISTANT FOR AVIATION LOGISTICS, USAAVCOM, ST. LOUIS, MO., IS SHOWN RECEIVING AN AAAA SCHOLARSHIP FOUNDATION CHECK OF $500.00 FROM BG HOWARD F. SCHILTZ (LEFT), AVCOM COMMANDER. REPRESENTING THE AAAA IN THE PRESENTATION WAS PAUL HENDRICKSON, A MEMBER OF THE 8-MEMBER COMMITTEE THAT JUDGED THE MERITS OF LOCAL NOMINEES. MARION'S PARENTS LOOK ON PROUDLY FROM THE RIGHT. THE $500.00 SCHOLARSHIP WAS ONE OF EIGHT AWARDED NATIONALLY IN 1967 TO THE CHILDREN OF AAAA MEMBERS.

**PCS - LIEUTENANTS**

CREEK, James A.

DEPERRO, John F.

DISMUVES, William F.

GRANT, Robert N.

HARRELL, Gary W.

HARRISON, Robert C.

JOHNSON, William J.

KENNEDY, Roderick J.

LA ROUE, Francis W.

McAFEE, Cary F.

McKEE, James C.

MELLIN, Kenneth J.

NEARY, Patrick H.

POPE, Danny E.

ROBINSON, Jerry H.

SHY, Gary N.

TIERNEY, Gary J.

**PCS - LIEUTENANTS**

TORRENCE, Larry E.

WOOD, Rusling, IV

**CW2 - CW4**

ADKINS, Lat G.

AKERS, Robert E.

BANEY, Robert A.

BAYLOR, William A.

BIEDLINGMAIER, J.F., Jr

BLAD, Hjalmer R.

BROWN, Aldon E.

BROWN, Richard E.

BYARS, Donald R.

CAIN, James F.

CAUSSEAUX, Allen B.

CHAMBLISS, William C.

CHAPMAN, George E.

CHAPMAN, Raymond H.

CLARK, Harry M.

**PCS - CWOS**

COURTRIGHT, Marvin D.

DANEKER, John G.

DIXON, Robert E.

DONLEY, Kenneth G.

DOULKES, Vincent R.

FUREY, James, Jr.

FYOCK, James L.

GEER, Wayne F.

GIDNEY, Robert N.

HANNA, Lee A., Jr.

HARDWICK, Robert H.

HAYTER, Curtis R.

HERRON, William D.

HOUSLEY, Robert E.

LANIER, Harold S.

LEONARD, John F., Jr.

LEONARD, Perry D.

MARCOTTE, George I.

**PCS - CWOS**

MARTIN, Robert H.

McCULLOUGH, James L.

McVEY, Curtis A.

MOATS, Clode J.

MURRAY, Joseph H., Jr.

MUSIC, Marion R.

POWELL, Johnny L.

PULLEN, Dennis L.

QUEARRY, Bobby R.

RODRIQUEZ, Mike

SMITH, Alfred C.

STAUBACH, William S.

STEJBACK, William J.

STEVENS, Jacob H.

THOMAS, Homer L., Jr.

WAYMAN, John R.

WOOD, Robert L.

ZEIGLER, Robert M.

# AAAA RECORD!

RECEIVING A $939.00 "GRADUATION PARTY" REFUND CHECK FROM MG DELK M. ODEN (2D FROM RIGHT), CG OF FORT RUCKER, WARRANT OFFICER CANDIDATE OBERRY L. MERCER, STUDENT LEADER OF WORWAC 67-3, HEADS THE LARGEST CLASS TO EVER ATTAIN 100 PER CENT MEMBERSHIP IN THE AAAA. PARTICIPATING IN THE CEREMONY ARE COL CONRAD L. STANSBERRY (LEFT), NEWLY-ELECTED PRESIDENT OF THE AA CENTER CHAPTER; CPT EARNEST R. DOWNING (2d FROM LEFT), CO OF THE PACE-SETTING 1ST WOC COMPANY; AND COL EDWARD McMAKEN, OUTGOING PRESIDENT OF THE ASSOCIATION'S LARGEST CHAPTER.

**PCS - WOS**

ABSHIRE, William A.
ADAMS, James A.
ADAMS, Thomas E.
BAKER, Roger R.
BARTHELMESS, Robert F.
BARTLETT, Paul E.
BEARD, Larry L.
BEVERSLUIS, William C.
BLACK, John D.
BONHAM, Jerry W.
BORZEWSKI, Terrence L.
BROSELL, Edward L.
BUEHLER, Frank J., Jr.
BUMGARDNER, Sherrill W
BURKE, James E.
BURKE, William R.
CAMPBELL, John W., Jr.
CARBAUGH, William B.

**PCS - WOS**

CARTER, Chandler D.
CHENEY, William C.
CLARK, Theron O.
COE, Wayne R.
CULP, Russell D.
DAVIS, William W.
DOZIER, Marcellus C.
DUNN, Billy H.
ELLIS, James R.
ELLIS, Thomas C.
ELWELL, Thomas W.
FELAND, Donald R.
GENTRY, Cowan E., Jr.
GIBBS, James C., Jr.
GIBSON, Joel H.
GRAHAM, James E.
GREEN, Jerry L.
GREEN, Kenneth D.

**PCS - WOS**

GRICE, Johnny J.
HAINEY, James F.
HANDBERRY, Walter C.
HERGET, Craig N.
HULL, Alan T.
HUNTINGTON, Jeffery J.
JACKSON, Kenneth G.
JACKSON, Robert L.
JOHNSON, Thomas E.
JOST, Terry M.
JULIEN, Thomas C.
KANE, John L.
KAPPELE, Arthur J.
KELBAUGH, William E.
KELLEY, Harold M., Jr.
KINNARD, Jay N.
KIRBY, Arthur C.
KNAPP, Michael J.

**PCS - WOS**

KORDISH, William A.
KORTH, Ronald F.
LAIRD, Robert W.
LATINI, Gerald L.
MacKINNON, John N.
MAGDON, Dennis S.
MAGNO, Michael O.
MAIORANA, Joseph
MARCRANDER, William A
MARSHALL, Franklin T.
MARTIN, Arthur A.
MARTIN, Jimmie C.
MARTIN, Larry K.
MARTZ, Richard F.
MASON, William D.
McAULEY, Thomas H.
McCAMISH, John R.

**PCS - WOS**

McCLELLAN, H.D.

McGOVERN, Joseph D.

McKINNEY, Samuel A.

MILLER, Charles H., Jr.

MILLER, John R.

MOORE, William G.

MORGAN, Jack D.

MORRIS, Walter J.

MUDGE, Robert W.

NELSON, Charles M.

NIXON, Don R.

O'DONOHUE, Raymond V.

OLSEN, Alan V.

ORI, Eugene J., Jr.

OWENS, Stephen J.

PAPKE, Joseph A.

PEARCY, Thomas L., Sr.

PEMOLLER, Kenneth E.

PENNINGTON, Charles K.

POREA, Robert G.

POREE, Curtis J., Jr.

PORTER, George N.

REGALADO, Paul L.

**PCS - WOCS**

RICHARDSON, Thomas J.

RILEY, James S., Jr.

ROSEMARK, Ronald R.

SCHUSTER, Daniel C.

SCOTT, Kenneth C.

SMITH, Daniel F.

SMITH, George E.

STARK, Randolph C.

STODDARD, Paul P.

STRONG, Harry D.

SVEC, Edward J., Jr.

THOMPSON, Micheal L.

TIESING, Jack E.

WAJERSKI, Thomas

WATERMAN, Carl A.

WEBSTER, Lawrence S., Jr

WERNER, Donald J.

WESEMAN, Charles A.

WHITWELL, Jimmy L.

WILKES, John W.

WINNER, Noel J.

WOODSIDE, Robert A.

YOUNG, Edward G.

ZDROKOWSKI, Bernard

**PCS - WOCS**

ALVARADO, Michael J.

AVERY, Everett L.

DERINGER, Larry P.

GARDNER, Richard E.

GOLDSBERRY, Jay G.

GOUCHER, Gerald L.

GREEN, Millard L.

HARRINGTON, Robert W.

KATZ, David R.

KINSEY, Charles J., Jr.

LANDMESSER, Donald F.

MAYHEW, Raymond E.

MERINO, Steven D.

MITCHELL, Monroe J.

NORTH, Lowell F.

RAVER, Gerald L.

SCHAMP, Donald E.

SIMS, John W., Jr.

TIDBALL, John C.

**ENLISTED**

DOBBS, Bobby W., PSG

FIPPINGER, Nich., M. SGM

FRAZER, Richard L., SP6

KINGDON, John B., PFC

**PCS - ENLISTED**

KNEPPER, Guy G., SP6

MILTON, William C., SP5

WOLFE, Lester D., SFC

WOOD, Kenneth R., SSG

**CIVILIAN**

ALLEN, Mr. Paul E.

BAIER, Miss Marguerite M

CLARK, Mrs. Harlow G.

EASTERDAY, Mrs. Louis

GUSTAFSON, Mr. Fernon

HLAVINKA, Miss Lois A.

HUDSON, Mr. Earl C.

HUTCHESON, Mr. Wayne

KEMP, Mr. James M.

KIERNAN, Mr. Donald R.

LALUSH, Mr. B.W.

LOCKEY, Mr. Claude B.

PAOLUCCI, Mr. Ronald V.

REHM, Mr. John J.

ROBERTS, Mr. Forrest E.

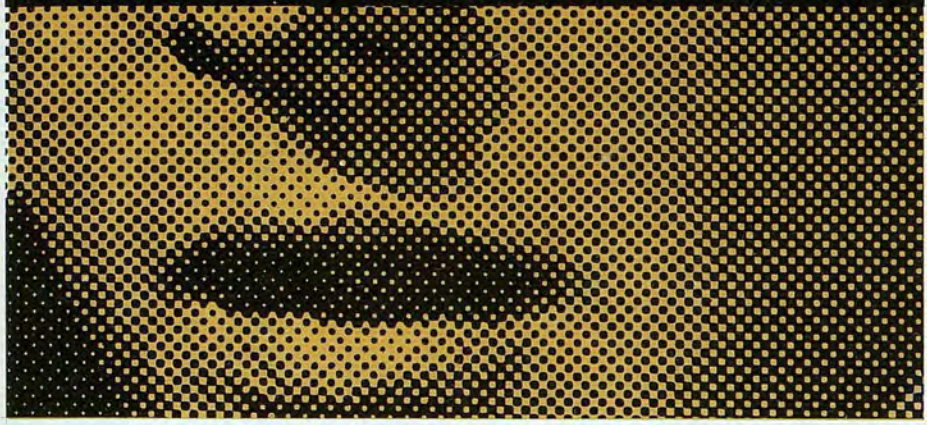
**RETIRED**

ALMQUIST, Allen F., LTC

MOCZYGEMBA, NW, CWO

PREMO, Howard L., Maj

# SPEAKING OUT



# IS RETENTION A PROBLEM? YOU'D BETTER BELIEVE IT!

MUCH has been said and written in the past few months about aviation warrant officers. It is clear that the rumblings of discontent are becoming louder and more strident.

"Problems?" you say. "I didn't know there was any problem. There are hundreds of them pouring out of Rucker every month and the '*Army Times*' says we're going to open another training center and double the output. It doesn't sound like a problem to me."

Well, the recent survey among warrant aviators should provide ample proof of a growing retention problem compounded by the effort in the Republic of Vietnam. The basic problem can be gathered into three broad areas: pay, advancement, and professional development.

By
CW2 CHARLES T. McNAIR
Dept. of Tactics, USAAVNS

The first and most glaring inequity is flight pay. A CW-2 with over four years' service draws a whopping $110.00 per month flight pay. Compare this with an O-2 with over four years' service (a rare thing these days) who draws $150.00 each month. At the other end of the scale we find that a CW-4 with over 18 years' service receives $165.00 flight pay, and this remains constant. A warrant officer cannot draw more than $165.00 flight pay per month, regardless of how professional he may be, or how many hours he may fly or years he may serve. An O-4 with over eighteen years draws $240.00 each month. This is hardly equal pay for equal risk, and I have not discussed the approximate $100.00 per month difference in base pay between warrants and commissioned officers.

Does it take *more* incentive to get commissioned officers airborne? Is the risk *greater*

*(Continued on Page 41)*

## A RETENTION PROBLEM?

*(Continued from Page 41)*

for them? The life insurance companies don't think so, or at least they didn't provide me with a lower rate when I told them I was only a warrant officer aviator.

"Well, Chief, that brings us to advancement. Let's suppose you and X entered the Army the same day. You took basic training together. Then he went to OCS and you elected the WOC program. Let's see now – two months' basic, six months' OCS, and he's a Second Lieutenant, and you still have three months to go for your warrant.

"Twelve months later he's now a first john and you're a W-1 with nine months in grade. You say you saw Captain X the other day – Captain, you say? – and that next month it will be three and a half years since you started basic together. Well, gee whiz, you're a CW-2 with thirteen months in grade, and in only two or three more years you'll make W-3. Sounds encouraging, doesn't it?

### Ground duty differential

"Yes, Chief, but you're forgetting that we warrants don't have all that ground duty those junior commissioned officers have. What's that you say? Captain X hasn't had any ground duty, either? He went through flight school direct from OCS and has had flying jobs ever since? Gee, that's too bad. I guess that will hurt his career.

"He said he didn't think so? That some General is putting a real nice letter in his file up at the Pentagon, that all commissioned officers are getting one in their files, and that they won't be penalized for this lack of ground duty and all that? Well, anyway that you slice it, we warrants aren't saddled with responsibility the way commissioned officers are.

"Speaking of responsibility, remember that night in Boo Song when Charlie hit the airfield and that W-1, I've forgotten his name, who was Officer of the Day had to organize the entire defense and he saved all the birds until we got the Major.

"I know the one you mean. He was mess officer for the company, wasn't he? Boy, all those extra jobs we had!

"Yeah, I was PX Officer, and remember the time I got stuck with Class A Agent and hauled $150,000 all over the country to pay the troops? That was just before I went down south to join that gun outfit. I ended up as Armament Officer there, and later they made me a fire team leader. Say what you want, Chief, but I'm still glad we don't have all those responsibilities the officers have."

### The professional aviator!

Who is a warrant? Where does he stand? How does he fit into Army aviation? The Army answers that he is our professional aviator, a man who devotes *all* of his time to aviation.

Is he really? Quickly now, name two warrant officers, rotary wing only, who have received fixed wing qualification in the last few years? How many graduates of the safety school at the University of Southern California are warrants? How many warrants have been to the Navy Test Pilot Course? List the number of courses designed to *increase* the professionalism of warrants.

It seems that if a warrant chooses any field but maintenance he is out of luck. True, we have our very own aviation branch. But as specialists, as the experts, the vast majority of the warrants have yet to receive any formal advanced schooling beyond flight training.

Another example: in the recent records attempts by the OH-6A *Cayuse* only one of the twenty-three records was established by a member of the corps of professionals we hear so much about.

At the present time, the majority of instructor pilots are warrant officers and as such they are charged with the responsibility of instilling this spirit of professionalism into their students, and for the most part they're successful. But it happens in spite of – not because of – our "*professional warrant aviator program.*" This is the only profession I'm aware of in which the teachers make *less* professional pay (flight pay) than their students (commissioned types).

How about rank? Yes, we can use the Officers' Club, wear gold on our hats, and

wear multi-colored bars, but warrant officers rank behind a brand new Second Lieutenant. How far behind? A WO-1 ranks behind a Cadet. There is some hope – a Chief Warrant Officer ranks before Cadets.

I begin to wonder about my professional status when the Colonel begins his little talks not with a greeting to his aviators, but rather to "*officers and warrant officers.*"

## Equalize flight pay!

Let's try for a few possible solutions . . . Flight pay should at least be equalized. Fine, you say, but the Army just can't do it. Righto, but it sure can push and prod, and so can this magazine, a large percentage of the readers of which are warrant officers. There's little doubt that an inequitable situation exists, and it is high time the entire Officer Corps supported an immediate change. In this area, the powers-to-be at the Aviation Center should show the way. I notice little or no budgetary concern over the announcement raising commissioned officers' combat tax exemption to its present level, and I think equal flight pay is entitled to comparable support.

## Create new WO grades!

Rank, advancement, and professional development constitute much tougher problems. One recent proposal suggests an additional warrant officer grade and increased opportunities for professional development. I don't believe that these are enough. No matter how far a warrant officer advances within his corps of professionals, he still doesn't have any official command responsibility, nor will he be paid for it. In such a situation the warrant cannot aspire to his commander's position. Putting the boss's job out of reach is almost un-American!

## Open an OCS-type program!

In order to eliminate this ceiling on our aspirations, I suggest the adoption of a shortened, OCS-type of program for warrant officers with one or more years of active duty as a rated warrant. This group would mainly be Vietnam returnees with combat experience. I believe that a study of this proposal would indicate that a maximum of three months' training would be sufficient to turn our warrant aviators into commissioned officers, and would appeal greatly to many warrants who now anxiously count the days until ETS.

## A RETENTION PROBLEM?

*(Continued from Page 42)*

First, let's consider the basic ingredients . . . A WOC (warrant officer candidate) must meet the same intellectual prerequisites as an OCS candidate. The physical standards he must meet are slightly tougher. By the time our WOC gets his warrant, he's a well-coordinated, highly trained Army Aviator with a 99% chance of being in combat within two months of graduation. No, he hasn't been taught squad tactics or how to use artillery tables, but the OCS graduate doesn't know how to fly, either. However, our new warrant aviator is extremely familiar with air-mobile operations, especially those geared to the Vietnam conflict.

In a year this picture changes . . . Our warrant has combat experience – 800 to 1,000 hours or more of combat flight time – and has probably flown in support of several brigade-size operations, and possibly a division operation, in addition to flying a wide variety of other support missions.

Under his wings are a chest covered with Air Medals, a Purple Heart, and a Distinguished Flying Cross. His file includes two excellent efficiency reports and a recommen-

**LTC DOW NAMED DCO AT AVLABS**

**Lieutenant Colonel Eugene W. Dow (above) has been named Deputy Commanding Officer of the U.S. Army Aviation Materiel Laboratories (AVLABS), the Army's aviation research center, at Fort Eustis, Va. The former Chief, Operations and Logistics Office at AVLABS, he's been with the facility since June, 1965.**

**67-3 GOES AAAA!**

**FORT RUCKER — 313 strong, the members of WORWAC 67-3 pose for a group photograph prior to their April 11 graduation from USAAVNS. Part of the 1st WOC Company, the class is the largest to ever join AAAA 100 per cent, receiving a $939.00 graduation party check for attaining this status. CPT Earnest R. Downing, Jr., CO of Fort Rucker's 1st WOC Company, indicates that 21 of the new warrants will be assigned to USAREUR with the remainder expected to receive USARV assignments.**

dation for a Commendation Medal. He's been Officer of the Day a dozen times, has spent four months as a fire team leader, and has handled many of the other odd jobs that usually seem to filter down to warrants. I am confident that the Army will be able to turn men such as these into "*real officers*" in a comparatively short time.

Upon the satisfactory completion of the course, I'd suggest that warrants with up to three years of past active service be commissioned as First Lieutenants in recognition of this service, or commissioned as Captains if they have more than four years of active service as a warrant. This should take care of those warrants who hanker for a command of their own, who have shown command potential, and who might otherwise be lost to Army aviation because of the artificially limited horizons we have now.

For those salty old warrants who want to fly and be the real professionals, and who do not want ground duty or troop assignments, let's make them pros! When is the last time you heard of a warrant being sent to safety school? Send them! Give them fixed wing qualification. Assign them to the Test Board. An additional grade or two wouldn't hurt the program, either. If they are going to be professionals, let's treat them as professionals and pay them that way.

## The need is now!

I think this article covers the major problem areas and suggests possible avenues for solutions. The most important aspect of any solution will be time. While several possible "solutions" have been published in various media, I have yet to see any reply by responsible officials. I did not write this merely as an exercise in rhetoric, but with the hope that action could be stimulated at the command level.

Gentlemen, the Warrant Officer Program needs immediate attention. I hope this will be accepted as an "Urgent Action MWO" for the Warrant Officer Program.

# ...and now the Army

It began with the Navy's COIN evaluation program. Then the Air Force. And now the Pratt & Whitney Aircraft T74 has joined the Army to power its new Tactical Utility Airplane. Small wonder.

The story of the T74 in a word is *reliability*. It has half a million flying hours under its belt in 17 applications. What's more, it has the fastest increase in TBO of any engine in its class.

Unique protection against foreign object ingestion permits successful operations in primitive environments . . . New Guinea, Sudan, and Alaska. Maintenance? The entire power section of the T74 can be removed in the field for easy service. The T74 is now doing the job—reliably—for three services.

United Aircraft
OF CANADA LIMITED

# AAAA CALENDAR

## MARCH-MAY, 1967

**Richard H. Bitter Chapter** (Corpus Christi, Texas). Completion of mail balloting for five Chapter elective offices. March 15.

**Lindbergh Chapter** (St. Louis). St. Patrick's Day Dinner Dance. Armed Forces Officers' Club, Lambert Field, St. Louis, March 17. Completion of mail balloting for four Chapter elective offices. March 29.

**Fort Monroe Chapter.** Combined business-social meeting with installation of eight Chapter officers, cocktail party, and dinner-dance. Fort Monroe Officers' Open Mess. March 17.

### NOMINATIONS WELCOME

Nominations for AAAA national awards are open for the awards period covering April 1, 1966, through March 31, 1967. Nomination forms outlining awards criteria serve as "cover sheets" and may be obtained by writing to AAAA, 1 Crestwood Road, Westport, Connecticut 06880. The nominations close August 1, 1967.

**Bluegrass Chapter** (Fort Knox, Ky.). General membership business meeting to complete balloting for eight Chapter elective offices. Fort Knox Country Club. March 23.

**Fort Benning Chapter.** Professional-social meeting with **COL Harold G. Moore,** former USARV brigade commander, as Guest Speaker. Installation of eight Chapter officers for '67-'69 terms. Fort Benning Country Club. March 28.

**Fort Hood Chapter.** General membership business meeting followed by a "social." Fort Hood Officers' Open Mess. March 29.

**Alamo Chapter** (Ft. Sam Houston, Tex.). General membership business meeting to complete balloting for six Chapter elective offices. Installation of new Chapter officers. Randolph AFB Officers' Club. 1630 hours, March 31.

**Monmouth Chapter** (Fort Monmouth, N.J.). General membership business meeting and stag dinner to complete balloting for four Chapter elective offices. Gibbs Hall, Ft. Monmouth, N.J. 1830 hours, March 31.

**Fort Wolters Chapter.** Professional dinner meeting with OPO representatives, **MAJ Wilbur L. Middleton** and **MAJ Billy E. Rutherford,** as Guest Speakers. Western Bar-B-Q. Refreshments, 1830. Dinner, 1930. Fort Wolters Officers' Club. March 31.

**Richard H. Bitter Chapter** (Corpus Christi, Texas). Combined business-social meeting. Installation of new Chapter officers; farewell to **LTC Don Luce,** departing Chapter president. Petroleum Club. April 14.

**Sharpe Army Depot Chapter** (Lathrop, Calif.). Professional-social dinner meeting. Farewell to **COL Carl S. Leidy,** Depot CO. CH-54 Flying Crane films and presentation by **Ralph Alex,** Sikorsky Aircraft Division. Sharpe Officers' Open Mess. April 22.

**Mt. Rainier Chapter** (Ft. Lewis). General membership business meeting and election for members only. Bingo for the ladies downstairs. Crown Room, Ft. Lewis Officers' Open Mess. April 27.

**Lindbergh Chapter** (St. Louis). Professional dinner meeting following tour of Parks College of Aeronautical Technology at Cahokia, Mo. Guest speaker: **Leon Z. Seltzer,** Dean at PCAT. Subject: "Jennies, Jumbo Jets and the SST." Kitty Hawk Lounge at PCAT, April 25.

**Washington, D.C. Chapter.** AAAA Annual Spring Picnic. Aircraft static display, prizes, gifts, etc. Davison Army Airfield Picnic Area (Anderson Park, Ft. Belvoir, Va.). 1300-1700 hours, May 6. For reservations, contact **Dick McCrady** in D.C. at 265-1616, or 765-3203 (Residence).


## Man is the heart of the system. Grumman never forgets it.

This plaque goes to each Army pilot who logs a thousand flying hours in the Army Mohawk surveillance system. That's a lot of flying, but then the Mohawk's a lot of airplane.

Major Henry L. Quisenberry started flying the Mohawk aircraft in December 1963. He is a Senior Army Aviator and is presently assigned as the OV-1 Branch Flight Commander, Department of Advanced Fixed Wing Training, Fort Rucker, Alabama. Prior to his assignment to Fort Rucker, Major Quisenberry was assigned to the 73rd Aviation Company (AS), (Mohawk) in Vietnam. Major Quisenberry was originally rated as an Army Aviator at Fort Sill, Oklahoma, in February 1954. He has had a varied aviation career since his graduation.

**GRUMMAN**
*Aircraft Engineering Corporation*
*Bethpage, L. I., New York*

*Join the 1,000-hour Mohawk Club.*

To qualify for one of the 1,000 MOHAWK Flying Hours Plaques, you must fulfill the following:

**A.** All Student Pilot, First Pilot and Instructor Pilot flying time will be considered, provided that the IP time was logged when the individual was on orders designating him as an Instructor Pilot.

**B.** Each Army Aviator qualifying for the 1,000 MOHAWK Flying Hours Plaque should notify the nearest Grumman representative or office, in writing. He should enclose a certified copy of the Army Aviator's individual Flight Record, indicating that he has logged 1,000 hours in the MOHAWK in accordance with A. above.

# ARMY AVIATION

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