September, 1970

Army Aviation



Tree-Top Tracer

(see back cover . . .)



LYCOMING DIVISION STRATFORD, CONNECTICUT, 06497

OVERKILL AND INATTENTION!

THE HELICOPTER INDUSTRY IN AUTOROTATION!

THERE is a rare disease which strikes the young, causing them to age physically in advance of their chronological years. The ultimate result is inevitable—the young man dies with the infirmities of old age.

This disease, or something like it, seems to have struck the helicopter industry. In the short span of twenty-five years, helicopter builders have come from obscurity as a newborn industry to essentiality as quantity suppliers of a necessary military tool. Today, they find themselves facing a wavering future marred by customer indecision, industry self-doubt, and a large inventory of infirmities.

There is one major difference — this disease is man-inflicted and, therefore, can be man-cured.

The patient needs treatment

Army Aviation, having served the infant industry in lieu of parents, has a very real concern for the patient's condition and future. Unfortunately, the expressed concern has not yet been successful in implementing a cure. A major reason may well be that the disease has affected other industries as well — industries which, in the opinion of many, need earlier and more massive doses of medicine.

It is not the point here to argue priorities. Who gets first treatment is important, of course. That treatment be given is vital.

The symptoms . . .

The symptoms — the statistics of the illness as they affect the helicopter manufacturers have been publicized in many places. A selected sampling follows: • Production, which began with prototypes in the early '40's, climbed to more than 3,300 machines in FY 66 and is now scheduled to pass through 1,009 in FY 71 on the way back down. Peak deliveries, by manufacturer, as opposed to FY 70 deliveries, make interesting comparison:

Peak	Manufacturer	FY 70
90	Manufacturer "A"	6
398	Manufacturer "B"	24
2,485	Manufacturer "C"	985
1,129	Manufacturer "D"	0

 FY 71 deliveries present another interesting comparison; 98% of the machines come from a single manufacturer while the entire 100% comes from two.

Employment, which began with a handful of visionaries in the '40's, rose to a 1968 peak of over 40,000 men. It is now scheduled to pass through 22,000 in 1970 on the way down. One manufacturer expects his 1972 employment and his 1945 record to be identical.

 Dollars expended (without regard for inflation) have increased from the thousands which were ventured as risk capital during prototype development to the \$1.2 billions of FY 68. Forecast sales will slide through \$242 million in FY 71 on the way down.

Since 1965, there has been but one developmental program — and that by a manufacturer who had never before built a helicopter. The lone new program proposed for FY 71, the Heavy Lift Helicopter, will have approximately half the lifting capability of a

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Command and Staff

Lieutenant General Melvin Zias, as Director of Operations, J-3, Office, Joint Chiefs of Staff, Washington, D.C. 20301.

Major General John J. Hayes, as Commanding General, 2nd Logistical Command, APO S.F. 96248.

Major General Harold G. Moore, as Commanding General, 7th Infantry Division, APO S.F. 96207.

Major General Robert R. Williams, as Acting Assistant Chief of Staff for Force Development, DA, Washington, D.C. 20310.

Brigadier General Eugene M. Lynch, as Deputy Inspector General, DA, Washington, D.C. 20314.

Brigadier General William J. Maddox, Jr., as Special Assistant to the Director of Army Aviation, OACSFOR, DA, Washington, D.C. 20310.

Brigadier General Robert M. Shoemaker, Chief of Staff, III Corps, Fort Hood, Texas 76544.

Brigadier General Conrad L. Stansberry, as Military Assistant to the Deputy Director (Tactical Warfare Programs), ODDR&E, Washington, D.C. 20301.

Colonel Harold L. Baker, to U.S. Army Aeronautical Depot Maintenance Center, Corpus Christi, Texas 78419.

Colonel Crawford Buchanan, as Secretary of the General Staff, Hqs. U.S. Army, Vietnam, APO S.F. 96375.

Colonel Wallace R. Buelow, to Hqs, U.S. Army Aviation Systems Command, P.O. Box 209-Main Office, St. Louis, Missouri 63166.

Lieutenant Colonel (P) E.P. Davis, as Commanding Officer, 160th Aviation Group, USARV.

Colonel James Hamlet, as Commanding Officer, 11th Aviation Group, 1st Cavalry Division (Ambl), APO S.F. 96490.

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Colonel Christopher Sinclair, to USC&GSC, Fort Leavenworth, Kansas 66027.

Colonel John F. Sullivan, to Hqs, U.S. Army Vietnam, APO S.F. 96375.

Colonel Arington C. Thomson, as Commander of the Combat Developments Command Aviation Agency, Fort Rucker, Ala. 36360.

Colonel Jack M. Tumlinson, as Chief, Aviation Warrant Officer Branch, OPD, OPO, Washington, D.C. 20315.

Colonel Billy R. Wright, to Office, Joint Chiefs of Staff, Washington, D.C. 20301.

Remains of two metal ARADMAC buildings.



A metal storage building in foreground; a wooden frame building in rear on right.



T53 engine line back in production.



MG John L. Klingenhagen (right), CG of AVSCOM, and COL Luther G. Jones, Jr., ARADMAC commander, view an example of the dedication ARADMAC employees have for support of the Army Aviation mission. The production total sign appeared on Friday, 7 Aug., after one day of being back in production.

"CELIA" VS ARADMAC

S OME called Celia the worst hurricane in history to hit the Gulf Coast. We won't argue the point! All we know is that for about four hours on the afternoon of August third, all hell broke loose at ARADMAC!

There was some structural damage to our buildings and also some water damage, but no helicopters, engines, or components were lost. On Wednesday, the 5th of August, the clean up of the debris was started and by Thursday, production had resumed in aircraft and components areas. On Monday the 10th, we were operational in all areas.

By the time you read this article, our facility will be back in full production!

Celia reaffirmed one thing: ARADMAC has a group of employees who are completely committed to support Army Aviation. They came back to work, took one look, rolled up their sleeves, and really got with the program of getting the facility operational again. Because of lost production for a week, we are behind in our August schedule, but we feel that we'll be able to satisfy our customers' needs.

There is no doubt we came out second best against Celia, but she didn't stop us; she only slowed us down temporarily. As our suppliers continue to furnish the necessary supplies and our customers continue to return reparable items in a timely manner, we will continue our support of Army Aviation with very little interruption; in fact, you probably won't even notice any slowdown of support in most areas.

We are back in business at ARADMAC. It takes more than 160-knot winds to stop us!

> By Colonel LUTHER G. JONES, JR. C.O., ARADMAC



Ever have to give a workhorse a lift?

Sometimes getting a workhorse to work is a problem. That's where Boeing's CH-47C Chinook comes in. It can lift earthmoving equipment, trucks or graders externally. And the men who operate them can ride inside the helicopter cabin.

The CH-47C can provide this combined lift capability up to a payload of 12 tons.

A capability nowhere else available today in the free world.

The Chinook's size, power, maneuverability and reliability make it the most versatile helicopter now available for heavy-lift loads.

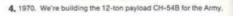
BOEING HELICOPTERS-VSTOL

Military heavy-lift helicopters? Our qualifications are heavier than anyone's.





 1962. We built the 10-ton payload S-64 (CH-54A). It has been in quantity production ever since, serving the U.S. Army in combat and U.S. industry in heavy-lift construction and transportation projects.





 We have the most powerful main rotor whirl test stand in the industry—It has run at over 10,000 horsepower.



 We have a heavy-lift turbine test bed that has been modified for the most powerful gear-box built in the western world— the 11,300 horsepower gear-box for the 18-ton payload S-64B.



 1953. We built the first production heavy-lift helicopter, the S-56 (CH-37). It had a payload of 3 tons—more than any other copter then flying.



 1959. We built the world's first heavy-lift crane-type helicopter, the 5-ton payload S-60.



 1970. We're testing the rotor, transmission and powerplant systems for the S-64B. This 18-ton payload crane has been proposed for the Navy, Marine Corps and Air Force.



For three years, we have had the most experienced HLH design team in the industry working on a 23-ton HLH. And we have the facilities to support such HLH development.



 We have the only heavy-lift hoist test facility that can test a 30-ton load at 2½ g.

Sikorsky Aircraft is the best qualified to fulfill military heavy-lift helicopter requirements. We have been for some time.

Sikorsky Aircraft

STRATFORD, CONFIGURATION



FROM AN ORIGINAL PARATING FOR CHARGE IN PRINT OF MOON O

MAIN FUEL PUMP by Chandler Evans



MFP 200 Main Fuel Pump

The McDonnell Douglas DC-10, a multi-range, high performance luxury jetliner, will carry as many as 345 passengers at speeds in excess of 600 mph. The wide-bodied tri-jet is powered by three General Electric CF-6 turbofans developing more than 120,000 lbs. of thrust. Each of these engines is equipped with a main fuel pump engineered and precision-produced by Chandler Evans.

This CECO product on the DC-10 joins a distinguished line of pumps, main fuel controls, afterburner controls and other aerospace components in an array of important military aircraft as well as many of the latest missiles and commercial aircraft.

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





Chandler Evans Control Systems Division

WEST HARTFORD, CONNECTICUT 06101

GAS TURBINE CONTROLS/PUMPS . AIRCRAFT/MISSILE CONTROLS, VALVES AND ACTUATORS

N 1 August three Army Aviators received promotions to Brigadier General: Bill Maddox, Jack Hemingway, and Conrad Stansberry.

There are others on the same promotion list but I mention these three for three reasons: first, it was a "first" to have three Colonel Army Aviators promoted to General on the same day; second (and in itself a distinct "first") two were promoted in the same ceremony (see photo on the next page); and finally, one is the new Director of Army Aviation.

Many of you know General Bill Maddox personally from having served with him; others know him only by reputation. For the benefit of those who do not know him well, I refer you to the bioperse appearing on page 11, We're most fortunate in having an aviator of General Maddox's experience in ground units as well as aviation units become the Director of Army Aviation. I'm certain that once he gets the pedals adjusted he'll find the Director's seat equally as familiar as that of the UH-1 which he knows so well.

P or the benefit of those of you who did not attend or were not otherwise exposed to the recent AUSA Symposium, I'll devote the next part of this newsletter to a brief after action report of the gathering.

First of all, let me explain that these symposia are held annually and the Chief of Staff has habitually authorized Army participation in the programs. This one was held at Fort Rucker and was hosted by the Aviation Center and by the local chapter of the AUSA. The last one on Army Aviation was conducted at Fort Rucker in 1961.

A better understanding

The objective of the symposium, which was titled "Air Mobility and Aviation Systems," was to present to representatives of industry the Army's present situation, forecast requirements, and anticipated problems, in order to promote better understanding and to solicit their continuing support.

The gathering was kicked off in fine style on the evening of 2 August with a superb fish fry buffet at the Lake Lodge, hosted by Mayor

THREE PROMOTIONS: TWO UNIQUE "FIRSTS"

By Major General Allen M. Burdett. Jr. Director of Army Aviation, OACSFOR



THREE PROMOTIONS

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Jug Brown of Enterprise as chairman of the area AUSA Chapter. Though the weather threatened the outdoor affair, it didn't rain enough to dampen food or spirits.

On the following morning (Monday, 3 August) the program began in earnest. After the opening and welcoming remarks, classified briefings were presented on the current and future threat, Army aircraft vulnerability and survivability, and airmobile operations and organizations to 1980. The particularly interesting and relatively unfamiliar areas of STANO (Surveillance, Target, Acquisition and Night Observation) and Project MASSTER (Mobile Army Sensor Systems Test Evaluation and Review) were covered in detail.

Outdoor demonstration

That afternoon the entire group (about 450 military and civilian) journeyed to Longstreet Range to view a demonstration of air mobility and aviation systems. Though weather again threatened, it produced only a cooling cloud cover and a little breeze. The attendees were



The first of three senior Army Aviators to be promoted to general officer in Pentagon ceremonies held on the 1st of August, BG Conrad L. Stansberry is shown accepting the congratulations of the Hon. Robert L. Johnson (left), Asst Secretary of the Army (R&D), while LTG George I. Forsythe, CG of Combat Developments Command (right), pins on the insignia. General Stansberry also received the 3rd Oak Leaf Cluster to the Legion of Merit at the award ceremony. The aviator's new assignment is with ODDR&E.

extremely impressed by the demonstration which covered aspects of current hardware capabilities as they might be applied in a mid-intensity warfare environment. The climax, a fly by of all the aircraft in formation, provided a very colorful conclusion.

Budget sets the pace

The speaker at the dinner that evening was the Honorable Robert L. Johnson, Assistant Secretary of the Army for R&D. I believe that Mr. Johnson's words most accurately described the tenor of the symposium. In effect he recognized and accepted the looming period of fiscal austerity, but at the same time he emphasized that the Army will modernize, will product improve, and will continue to capitalize on its breakthrough in air mobility. He said that the budget does not determine whether we produce and develop; it simply sets the pace, and he urged industry to adjust its thinking accordingly.

The morning of the final day, 4 August, was devoted to presentations on life support equipment, future navigation and weapons developments, forecast assets and requirements, and a question and answer period.

In my opinion the symposium was a com-



In a dual ceremony held 1 August, COL Jack W. Hemingway (left) and COL William J. Maddox, Jr. (right) receive the "stars" of brigadier general from their wives, Shirley and Jaye, as LTG William E. Dupuy (left), Assistant Vice Chief of Staff, U.S. Army, and LTG Frederick C. Weyand, ACSFOR (right), lend helping hands. BG Hemingway is en route to USARV to take command of the 1st Aviation Brigade; BG Maddox is Special Assistant to the Director of Army Aviation and Director-Designate. (USA photo)



THE 16TH DIRECTOR: AN AVIATOR'S AVIATOR

The diversified experience of the sixteenth Director of Army Aviation, Brigadier General William J. Maddox, Jr., is somewhat unbelievable. Truly an "aviator's aviator," he has more than 9,000 flying hours to his credit, with almost 4,000 hours of combat time.

The most highly decorated Army Aviator, his personal decorations attest to his accomplishments, ability, and leadership. He's earned four Silver Stars, five Legions of Merit, eight Distinguished Flying Crosses, the Soldiers Medal, four Bronze Stars (including V), 127 Air Medals (including V), three Army Commendation Medals (including V), four Purple Hearts, and numerous foreign decorations from Korea and Vietnam.

Born in Newburgh, N.Y., on May 22, 1921, General Maddox, as an advanced ROTC cadet, left Michigan State University in June, 1942, to enlist in the horse cavalry. Commissioned in the Cavalry in July, 1944, on graduation from Infantry OCS at Ft. Benning, Ga., he served in two Cavalry assignments prior to taking student liaison pilot training in December, 1945, with the 2nd Post War Class of ground force officers to receive pilot training.

Following service in the Philippines and Japan after earning his wings in 1946, he landed with the 1st Cavalry Division in Korea in July, 1950, logging more than 600 hours of combat flying time and earning the DFC with three oak leaf clusters prior to returning to the U.S. in June, 1951, where he joined the 1st Armored Division G-3 Section. Following attendance at the Associate Advanced Armor Course at Fort Knox, and instrument and helicopter schools, he returned to Korea in May,

1952, serving as an aide-de-camp to General Bruce C. Clarke in three headquarters: I Corps, X Corps, and Eighth Army. Later, he became detachment commander for MAAG-Japan.

In January, 1957, he earned his BA degree from MSU, and then served in successive USAREUR ground assignments through mid-1960. The Master Army Aviator then attended C&GSC in '60-'61, served three years on the Army General Staff as plans officer in OCRD, and attended the National War College where he completed work on a Master's degree in International Relations at George Washington University.

In July, 1965, he assumed command of the 13th Aviation Battalion (Delta), extending his tour to become Senior Advisor to the 21st ARVN Division at Bac Lieu. General Maddox served in Germany as Chief of Staff of the 3d Armored Division until April, 1969, when he volunteered to return to USARV to command the 3d Brigade of the 25th Infantry Division. In December, 1969, he assumed command of the 164th Aviation Group, serving in the Delta until his return to CONUS and OACSFOR duties in July, 1970.

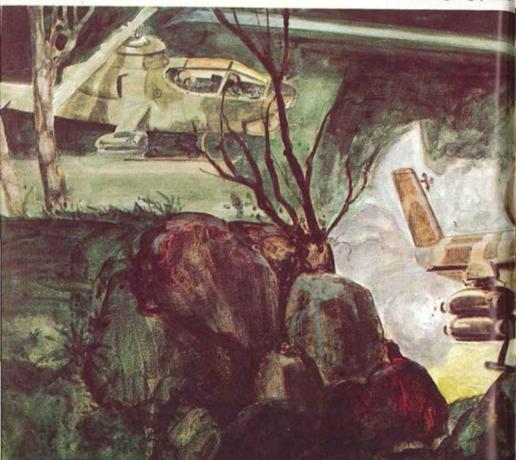
A Charter Member of AAAA, General Maddox was C.O. of the 13th Aviation Battalion, AAAA's "Outstanding Aviation Unit for 1965-1966," and serves as current Chairman of the Presentations Subcommittee for the 1970 AAAA Annual Meeting.

General Maddox resides with his wife, the former Jaye Kurusu, and his daughter, Charlotte, in Alexandria, Va. His son, William, entered the U.S. Military Academy at West Point in July, 1970.

The fanged HueyCobra... configured for Europe and mission-minded!

Take a Bell HueyCobra, fast at tough from the ground up . . . co figure it for European duty with the most advanced fire control as weapons and you have an anti-tasystem that deploys 120 miles 40 minutes - engages the enemy to 30 minutes-and returns to baseall in a day's work, many times a da

Build in a nose-mounted perison. sight: then the HueyCobra gunn delivers his ordnance with dead accuracy on targets over a mile awa Give it the sting of highly accura-



missiles to defeat any known armor.

Mount a 30mm gun turret system effectively neutralizing thin-skinned targets, add complete mobility, and use the tough-to-get-to, hard-to-detect attack positions other anti-tank systems can't reach.

Taking advantage of terrain and weather, the Cobra team maneuvers under radar and over obstacles deterring detection until the attack.

The HueyCobra moves fast, avoids detection and speeds in up to 190 knots for its kill.



BELL HELICOPTER

HueyCobra... from the combat know-how generation of Bells.



TAKEOVER

Shown at the change of command ceremony for the 11th Combat Aviation Group, 1st Cavalry Division (Airmobile) on August 21 are, left to right, COL Kenneth D. Mertel, outgoing Group Commander; GEN William B. Rosson, Deputy COMUSMACV; BG Jonathan R. Burton, Acting Division Commander; and COL James F. Hamlet, Incoming Group Commander.



NEW SLATE

Officers of AAAA's Monmouth Chapter are shown after a recent Executive Board meeting. From I-r are Kenneth Kelly, VP-Programs; LTC Jack G. Cozad, VP-Membership; J.F.X. Mannix, ExVP; Paul Brandt., VP, Public Aff; Vincent O'Donnell, Secr.; and Alfred F. Smith, Trea. Missing Board members included: LTC Everett D. Richards, Pres.; MAJ Edwin H. Turner, VP, Res Aff; and J.N. Montgomery, Past Pres.

THREE PROMOTIONS

(Continued from Page 10)

plete success and was extremely beneficial to all concerned.

The AAAA Convention

Although I won't be in the local area at the time of the AAAA Annual Meeting on October 14th, 15th and 16th, I intend to make every effort to attend. I can assure you the program will be one of the best, and I urge all of you to try to make it. See you there.

A great outfit!

Regretfully, my tenure as Director ends this month. Though very brief, the tour has been extremely interesting and gratifying. I



MASTER AA

MG Allen M. Burdett, Jr., Director of Army Aviation, OACSFOR, is shown congratulating LTC Delano E. DeGeneffe on the latter's receipt of Master Army Aviator wings at a recent Washington, D.C. ceremony. An 18-year veteran with over 15 years and 5,000 hours flight experience, DeGeneffe is assigned to the Defense Intelligence Agency, Washington, D.C.



am particularly happy to be able to pass the baton into the most capable hands of Brigadier General Bill Maddox.

I can say, in all sincerity, that he is taking over a great outfit. I recall saying when I first arrived, that everything I'd heard about the people in the Directorate and about the way they do their job was good. This was soon confirmed and has since been reinforced several times over.

Therefore, to the members of ACSFOR Aviation I extend my thanks for the outstanding support and loyalty you have given me and Army Aviation. To the many thousand aviators, crewmen, support personnel and just plain believers I extend my appreciation for the reputation you have earned for Army Aviation.

Good luck, God speed, and keep 'em flying!

14

THE Project Manager is a paradox in the field of management. He represents the embodiment of the specialist with his focus on one weapons system or a very limited category of weapons systems. To him the world is composed only of two elements, his system and those things that aren't his system.

The other side of the paradox is the fact that a PM, in order to perform his mission, must be the supreme generalist. He deals with research, development, procurement, maintenance, operations, budgets, personnel, testing, other military services, Defense staffs, the Congress, and a myriad of other areas.

An answer to a need

Modern Project Management, which began its real growth during the 1950's, is an answer to the need to draw together vast, diverse technologies and skills in order to field a modern weapons system. From the real efficiencies that are brought about by functional specialization the need developed for some management technique to integrate the various functional efforts to insure required performance at a reasonable cost and within the needed schedule. The integration of these efforts is the role of the Project Manager.

When a weapons system is sufficiently important, the Department of Defense identifies This is the ninth article of a thirteen article series entitled "AVSCOM in Transition."

it as a candidate for Project Management. The general Project Management criteria, as contained in *DOD Directive 5010.14*, are a production investment exceeding 100 million dollars, or RDT&E financing exceeding 25 million dollars. However, *any* system that is uniquely complex or critical to mission accomplishment may be placed under Project Management.

The individual selected to manage the project, the Project Manager, has a broad responsibility and is given the authority to match this responsibility. PM's for the Army are assigned to the Army Materiel Command which has responsibility for developing, fielding, and supporting the Army's weapons systems.

Requirements for a PM

The Army's general requirements to become a PM, as stated by the Commanding General of the Army Materiel Command, are very stringent. He is expected to be a Colonel, have a basic science or engineering degree, have an advanced business or scientific degree, be a graduate of a senior service college. have DA level staff experience, have command experience commensurate with grade, have

A MANAGEMENT PARADOX: THE AVSCOM PROJECT MANAGER!

BY COLONEL WILLIAM L. McKEOWN HLTAS Project Manager, USAVSCOM, St. Louis, Mo.

Vietnam experience, and possess an outstanding record of performance.

How does Project Management work at AVSCOM?

Taking a new and unique path, AVSCOM is pioneering in the next step in the development of Project Management. At AVSCOM we call the new system Project/Class Management. This system is based on the recognition of two significant facts: first, no single weapons system usually performs a total military function by itself; second, while one weapons system is performing a military function its replacement system is being developed and the new system introduction must be coordimated with the retiring system.

A working example . . .

Here is an example to illustrate AVSCOM's advanced management concept. The observation mission assigned to aircraft is performed by OH-13 Sioux, OH-23 Ravens, OH-6 Cayuses, OH-58 Kiowas, and O-1 Birddogs. The numbers and locations required for these systems are related to the number of each available, their support posture, and their operational capability. Without a single PM to manage the overall observation aircraft responsibility there could be wide opportunity for maldistribution and inefficient use of resources.

Using the same example, you can see immediately that some observation aircraft (the OH-13, OH-23, and O-1) are being phased out of the system while their replacements (OH-6, OH-58) are being developed and fielded. The schedule for phasing out an existing system is directly related to the status of

the new replacement system. These interactions are affected by problems with developing the new system, funds available to produce the new system, the logistic support available for both systems, and many other items that cause the management of both systems to be in reality the management of materiel support for a single military function.

Five PM/CM's in all

The aviation Project Managers/Class Managers currently organized at AVSCOM total five. They are: the Light Observation Helicopter (LOH), the Utility Tactical Transport Aviation Systems (UTTAS), the Heavy Lift Transport Aviation Systems (HLTAS), the Manned Aerial Surveillance Transport System (MASTS), and the Advanced Aerial Weapons Systems (AAWS).

These PM's have offices ranging in size from 4 persons for the MASTS to 131 persons for the AAWS. The areas of office organization and personnel staffing are expected to derive significant benefits from the Project/Class Management concept. Under the old system of Project Management, an office would be discontinued as a weapons system was fielded and moved out of project management. Then the project expertise would be splintered and dissipated through assignment to areas other than project management.

Also, when a new project office would be needed it would be necessary to start anew in building the new office.

Under Project/Class Management, the same office uses its personnel to bring in the new system that will replace the current system they are managing. This procedure has the





A SINGLE PROJECT MANAGER SUPERVISES OBSERVATION MISSION AIRCRAFT 0-1 . . . OH-58

Takeoffs

PCS — GENERALS

MADDOX, Wm. J., Jr., BG 921 N. Van Dorn Street Alexandria VA 22304

COLONELS

LUKENS, Howard I. 701 Devon Place Alexandria VA 22314 MAHONE, Nelson A., Jr. 1317 Parks Road APO San Francisco 96558 MERTEL, Kenneth D. Mil Ast Cmd (VN) Team 74 APO San Francisco 96314 PUMPHREY, A.T. 435 Graham Road Ft Sam Houston TX 78234 SOUCEK, Leo E. HHC, 164th Aviation Gp APO San Francisco 96215 WATSON, William R., Jr. 16 Adams Street Ft Bragg NC 28307

LT COLONELS

ALTON, Gary O. 14502 El Rio Court Woodbridge VA 22191 ANDERSON, Thomas E. 912 Gobin Street Carlisle PA 17013 AULT, William E. 101 Sheridan Court Leavenworth KS 66048 AUTH, Richard W. General Staff College Ft Leavenworth KS 66027 BAILEY, Paul O. 3267 W.Washington Rd.,#6 East Point GA 30344 BALINT, Barry T. 16 Benis Road Newark DE 19711 BAUGH, Russell E. OIG. Hq USAREUR, 7A APO New York 09403 BEAUMONT, Edgar S. Route 1, Box 1583 Meadow Vista CA 95722 BISSELL, Donald F. USABAAR Ft Rucker AL 36360 BLEWSTER, James C. CO, 68th Trans Bn Ft Carson CO 80913 BONNETT, William B. 1216 South Black Street Bozeman MT 59715 BOYLE, Dennis M. HHC, 18th Aviation Bn APO New York 09165 BRADLEY, William C. 135 Traynor Avenue Savannah GA 31405

PCS — LTCS BRANNON, William W., Jr.

SNW, Naval War College

Newport RI 02840 BRETZ, Robert D. Hq MACV (J3-06) APO San Francisco 96222 BRIER, James R. Hq USAMATCOM, Dir Acft APO New York 09052 BRIOT, William R. 40 Las Tardes Novato CA 94947 BROCK, Eldridge W. Hq, USEUCOM, MAD APO New York 09128 BRODEUR, Alfred F. CO, 3d Bn, TSBDE Ft Eustis VA 23604 BROWN, Sam E. Liaison Det (ASQ) Army Wrt-Ptrsn AFB OH 45433 BURTON, James 512 Goldeup Road Hampton VA 23366 CAMPBELL, Jos R., III 8506 Doyle Drive Alexandria VA 22308 CAPOZZI, Henry P. USMACTHAL, Box 789 APO San Francisco 96346 CARON, John E. 7 Buckner Ft Leavenworth KS 66027 CASPER, Donald T. 1431-A Btry Caulfield Rd. Pres San Fran CA 94129 CHIN, Bak Y. Hq,17 Air Force, Bx 9617 APO New York 09012 CHRITTON, William R. 8115 Ashtonbirch Drive Springfield VA 22152 COLE, David A. 508 Frank Lane Newport News VA 23606 CONSTANCE, Harbin A. 1627 Grand Leavenworth KS 66048 COURTNEY, Clemon G. 516 Santa Fe Leavenworth KS 66048 CRONEN, James S. 189 Breckenridge Square Louisville KY 40220 CROOKS, Eugene F. Box 315, USACDCIAS Carlisle Brks PA 17013 CROUCH, Curtis S., Jr. 10 Third Infantry Road Ft Leavenworth KS 66027 DUGAN, Daniel C. USA Aero Res Lab, 215-1 Moffett Field CA 94035 DUNCAN, William L. 1280-A Lendrum Road Pres San Fran CA 94129

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THE PROJECT MANAGER

(Continued from Page 16)

outstanding advantage from a morale standpoint of providing a longterm career assignment to the high caliber personnel required in project management offices. It also lets them join a project office at a lower skill level and advance to higher levels through experience over a period of many years.

P/CM lends continuity

An additional advantage is the continuity offered by management people who have previously brought a system into operational use and will use their experience on the next generation of the same type of materiel. This procedure avoids the current wasteful practice of forming a one-time team that will frequently be doing their task for the first time and would likely not do it again. The complexity of current weapons systems does not allow a margin for the errors inherent in such a procedure.

A criticism of the Project/Class Management concept being developed at AVSCOM is that it could cause the PM office to divert its focus from the in-development system to the currently operational system and thus jeopardize the introduction of the new system. If this were actually a problem, it would be vastly offset by the advantages of managing a current system that will help you forecast problems on the upcoming system. To insure



Larry Hayward (center), 16, a high school junior from Eureka, Ohio, explains his "Space Ferry," a science fair exhibit selected by an Army Aviation Ass'n judging team as one of the four \$100 winners at the International Science Fair in Baltimore. Members of the judging team viewing the variable winged lifting body are, 1-r, LTC Don Bausler, COL Robert McDaniel, LTC Clarence Patnode, and LTC Paul Curry. The AAAA judging team viewed hundreds of exhibits in making their 1970 selections.



COL. WILLIAM L. McKEOWN

ABOUT THE AUTHOR

COL William L. McKeown is a Master Army Aviator with extensive background in Project Management. He has served in Support, Technical, and Program Divisions of aviation projects. He was previously the Project Manager for Selected Aircraft Turbine Engines and has served on the DA staff. He is a graduate of the Industrial College of the Armed Forces and has a Masters Degree specializing in aircraft procurement and production. He has been the Heavy Lift Helicopter Project Manager since 1 April 1970.

that such a problem does not arise, the CG of AVSCOM requires the functional support staff to give close attention to the avoidance of support problems for existing systems.

Member of CG's staff

The PM offices are not staffed for performing the support functions. Their staffs are kept small to insure that they only manage these functions on their systems for the CG. The PM reports directly to the Commander and has his full authority for his systems. He is a member of the CG's staff at AVSCOM and enjoys full, direct access to the Commanding General. The PM's support requirements are passed directly to the functional elements and recourse to the Commander is used for matters of conflict. Because most conflicts involve aircraft within the project/ class of a single manager, it is noted that under this system fewer cases have to be raised to the Commander for decision.

Although this is necessarily a broad view of Project Management in AVSCOM, it is apparent that a new facet to management is being pioneered. The experience gained here should help determine the advantages of this innovation and lead to its application to other commodities.

Blow your horn!

KEEP 'EM COMING!

Your "record" is just an idle bar boast unless it has been published in this column and has run the gauntlet of our 20,000+ subscribers and peekers! To make your record stand up TALL, send it to ARMY AVIATION, 1 Crestwood Road, Westport, Conn. 06880.

- Youngest Chief Warrant Officer Third Grade in Army Aviation: CW3 Robert Olivero Lugo. Born August 6, 1944. Date of Rank to CW3: June 4, 1970 at age 25 years, 10 months.
- Most patients flown in one day: 513 by the 587th Med Det (Hel Amb), Camp Zama, Japan, on Feb. 15, 1969.
- Most patients flown in one month: 7,406 by the 587th Med Det (Hel Amb), Camp Zama, Japan, in May, '69.
- Most patients flown in one year: 61,400 by the 587th Med Det (Hel Amb), Camp Zama, Japan, during the period June 1, 1968 through May 31, 1969.
- Most Army Aviators graduating in one career course: AWOIC 70-2 with 91 aviators graduating on July 2, 1970.
- Most Air Medals for any group of Army Aviators enrolled in a career course: AWOIC 70-2, a 100man class with a July 2, 1970 graduation date, with 2,648 Air Medals,
- High flight time for single Cobra airframe during one month: 127 hours during May, 1970. Flown by Cobra of D Company, 227th AHB, 1st Cav Div (Ambl).
- High flight time for a Cobra Company during one month: 1,519 hours during May, 1970. Flown by D Company, 227th AHB, 1st Cav Div (Ambl), commanded by MAJ Alfred E. Matocha.
- High flight time for a Cobra Company during one day: 88.2 hours on May 1, 1970. Flown by D Company, 227th AHB, 1st Cav Div (Ambl), commanded by MAJ Alfred E. Matocha.
- High flight time for OV-1 Mohawk aircraft: 1,800 hours flown by MAJ Marion L. Davis, USA Signal School Ft. Monmouth, N.J.

HARD TO TOP

Receiving the last of his Air Medal awards for service while commander of the 164th Aviation Group (Combat), BG (then COL) William J. Maddox, Jr., the Special Assistant to the Director of Army Aviation, OACSFOR, DA, holds our new "high" for Air Medal awards . . . He has 1271

I DISAGREE!

With reference to the "Firsts!" listed in the July 1970 issue, I disagree with the "first use of a helicopter in fore abatement." This service was first performed in Fort Sill for grass fires as far back as 1951 with an OH-13 helicopter. The writer was a helicopter flight instructor during this period and on one occasion helped put out a grass fire near the edge of the Ft. Sill Reservation that was spreading from the Medicine Park town dump. The downwash from the OH-13 blades did, of course, knock out the flames and there were four or five G.L's with picks and shovels trampling on the hot coals as I moved along the edge of the grass fire.

Jack E. Werner Major, Retired

- Oldest enlisted option Warrant Officer to attend the Warrant Officer Candidate School without benefit of an age waiver: CW4 Robert H. Holt, (USAR-Ret.), who started WOC training in June, 1954, after having reached his 30th birthday on March 9, 1954. (2)
- Youngest Chief Warrant Officer Fourth Grade in Army Aviation: CW4 Albert G. Gay, U.S. Army Bell Plant Activity, Ft. Worth, Tex. Born January 15, 1937. Date of Rank to CW4: May 12, 1970 at age 33 years, 3 months, 27 days. (3)
- Most Trans-Pacific Flights by one Army Aviator as pilot of an Army aircraft: Five. Held by CW4 Keith Glasgow. CV-2 flight, Calif.-USARV, Dec. '65 with 135th Avn Co. Two round-trips in organic P2E Neptune of First Radio Research Company (Avn) in August and November, '69, from Cam Ranh Bay to Norfolk, Va., and return via S.F., Hawaii, Wake, Guam, and Philippines. (Roy A. Highsmith).
- Only Army Aviator now on active duty who has served in combat as an aviator in three wars: COL J. Elmore Swenson, Hqs, AMC, who served with the 29th Division in WW II (June '44-August '45); with 8th U.S. Army in the Korean War (October '51-June '53); and in the Vietnam War (June '67-December '68).
- High combat flight time flown by a CH-47 Assault Support Helicopter Battalion: 150,000 hours logged by the 228th ASHB, 11th Cbt Avn Gp, 1st Cav Div (Ambl) from November, 1965 to mid-June, 1970. (Submitted by CPT William A. Horton).
- Only Army Aviator who is dual rated and instrument qualified (both F/W and R/W, and current) who has NEVER been to Fort Rucker, Ala., or Fort Stewart, Ga.: CW4 Edward J. Weisenburger, 291st Avn Co (HLH), Ft. Sill, Okla.



Separation or discharge just ahead?

We are happy to announce that Ladd Agency, Inc., representing over 4,500 flight pay and life insurance policyholders within U.S. Army Aviation, has been appointed as an authorized agency to convert the Servicemen's Group Life Insurance (SGLI) of any veteran to any type of permanent life insurance policy with cash and loan values.

This conversion service may be accomplished without a medical examination if the Serviceman acts within 120 days after separation or discharge from military service.

Conversion, which would help the veteran to establish or build upon an existing base of permanent life insurance, may be in any amount up to \$10,000 of his Servicemen's Group Life Insurance. The permanent life insurance would be underwritten by the Seaboard Life Insurance Company with dual home offices in Miami, Fla., and Beverly Hills, Calif. Qualified by the VA as a converting company, Seaboard Life has over \$675 million dollars of life insurance in force and ranks in the top 15% of U.S. life insurance companies.

Ladd Agency has provided over 13 years of personalized policy and claims service in administering AAAA-endorsed flight pay and life insurance programs. During this same period Ladd Agency has returned over \$1 million in claims to some 638 policyholders and beneficiaries.

Tell us the type of permanent coverage you seek (Whole Life, Life Paid Up at Age 65, etc.) and your date of birth in writing to us for rates and a conversion form . . . That's all there is to it! Plan ahead . . . Complete your insurance conversion details well in advance of your separation or discharge!

On Guard!

WHILE training their fellow "weekend" mechanics as their primary mission, some 150 Army National Guard Technicians produce a most important "by product" in the process... these Guardsmen repair Army, Army Guard, and Army Reserve aircraft in their fulltime roles, with resultant savings in aircraft replacement dollars running into the millions.

Since 1961, when the Army Guard first established its three Transportation Aircraft Repair Shops (TARS), Guardsmen have been doing dual service in the field of aircraft repair and maintenance. Besides carrying out their primary purpose of training for eventual use by the active Army, should the need arise, these Guardsmen have been turning out an impressive workload in the repair of aircraft end 'items and components.

Unique within ARNG

Organizationally, the three TARS — General Support level aircraft repair facilities — are unique within the Army National Guard. Located at Groton, Conn.; Springfield, Mo.; and Fresno, Calif., the TARS come under the State Adjutant General for direct line control with their workloads being scheduled through the respective Army Aviation System Command (AVSCOM) General Support Maintenance Activities at New Cumberland Army Depot, Red River Army Depot, and Sharpe Army Depot.

Completed aircraft, which may include all makes and models of fixed and rotary wing aircraft, are either returned to the user or are returned to the National Inventory Control Point (NICP) for replenishment of the Army Supply System.

Offspring of TOE units

The TARS are offspring of Transportation Battalions (Aircraft Maintenance and Supply), which are TOE units in the force structure. However, instead of being separately recognizable TOE units, TARS are absorbed by elements of the Transportation Battalions (AM&S) when in military status. When in

INITIAL AWARD!

The Army Aviation Ass'n (AAAA) has selected the "Outstanding Reserve Component Aviation Unit" and will make the initial trophy presentation at the AAAA Annual Meeting at the Shoreham Hotel, Washington, D.C., 14-16 Oct. General William C. Westmoreland, Chief of Staff, will present the award to the winning Reserve Component unit.

drill status, annual training, or active duty status, TARS technicians are members of their respective Transportation Battalions (AM&S).

Intent: Increased training

Although these three Army Guard facilities were established with an eye towards improving the Guard's capability of taking care of its own aircraft, the major intent even then was for increased training of Army National Guard aircraft repairmen.

Aided by this strong infusion of TARS personnel in their parent Transportation Battalions, the training of aircraft repairmen for the Army National Guard continues on a full-year basis. These Guardsmen put their training into practice at every opportunity and that most important "by product" — aircraft maintenance — helps to keep the active Army, the Army National Guard, and the Army Reserve flying.

ARNG PERFORMING DUAL SERVICE IN TARS FACILITIES

by Lieutenant Colonel JOHN C. CARLISLE Army Aviation Branch National Guard Bureau



THE Department of Advanced Helicopter Training at Hunter Army Airfield, Ga., conducted recent ceremonies officially opening its newest Departmental Branch, the *Learning Center*.

Under the Directorship of Colonel George W. Aldridge, Jr., the *Learning Center* is designed to supplement the Department's training of Allied Military students in the UH-1 *Iroquois* helicopter.

New audio-visual approach

Utilizing the most advanced engineering and acoustical designs available, the *Learning Center* features an array of audio-visual aids far superior to any currently being used in either military or civilian education environments.

So far so good, but what's so different about a Learning Center?

The premise on which this Center operates: that students recognize their own weak areas as they arise during flight training, and voluntarily undertake self-instruction in those areas in off-duty hours on a private basis.

A study hall, yes . . . but a different kind of

study hall. Apparently the system works quite well for in its initial two months, the *Center* has already had over 2,000 student "visits" during its off duty, six night-a-week schedule.

Then too, the students utilizing its facilities during the evening hours can prepare themselves for the next day's work, as well as receive supportive training on any academic or flight subject taught within the Department of Advanced Helicopter Training or the Department of Tactics.

Choice of 3 systems

The student may select any one of the Center's three different systems of audio-visual aids:

- He may use a sound system, in which a taped narrative explains material, which by its nature does not require a visual presentation.
- (2) He may select a sound and slide system, and view 35mm slides through a Carousel projector while a taped narrative explains what he is viewing and automatically advances each slide.
 - (3) He may select a sound and motion

system, wherein he views an 8mm film or a television tape while the sound track explains the maneuver or procedure.

At present, the Center has over 180 sound tapes, more than 7,000 35mm slides, 33 educational TV tapes, and 16 8mm films covering the different subjects taught within the School. All of the material has been prepared specifically for use by Allied Military students.

In addition to these audio-visual aids, the Learning Center has two scale model UH-1D cockpit trainers which the students use to practice and polish the procedural aspects of their training. The Center also has a unique testing capability, featuring individual learning carrels for examination and study purposes, and a private counseling area.

Standards maintained

The Center, by its nature, also provides a valuable means of maintaining both the flight and academic standards established within the Aviation School. This is accomplished by utilizing a staff of highly selected instructors who have been chosen because of their outstanding records in either the flight or academic divisions within the Department of Advanced Helicopter Training or the Department of Tactics.

These instructors, in answering and asking questions each night on the various subjects taught within the School, are able to detect any deviation by individual instructors from the published syllabus of instruction. This eliminates to a great extent the possibility of any student confusion arising due to non-standardized techniques or procedures being presented within the training program.

As a result of the Learning Center's nightly counseling of a broad-cross-section of the inresident student classes, a complete daily analysis of all instruction presented at the
Training Center can be made. This, in turn, contributes to the compilation of statistical data which is used by the Learning Center
staff to point out instructionally weak areas or
recurring student problems which require immediate attention.

Due to the Learning Center's unique and modern approach to student difficulties in educational areas, it has attracted visitors from all branches of the Armed Services, as



MG George S. Beatty, Jr., right, CG at USAFTC, cuts May 8 ribbon officially opening the Learning Center as COL George W. Aldridge looks on.



VNAF students sign out for films.



Two VNAF aviators polish their flight procedures in UH-1D full scale mockup.

well as civilian educators from surrounding universities and colleges. Many of these visitors are looking into the feasibility of utilizing a similar center as a training aid for their own instructional programs, not only to eliminate difficulties encountered by slow learners but also to enhance the learning process for exceptionally talented students who desire to excel.

"Firsts!"

Have you personally — or your crew, unit, agency, or firm — ever participated in establishing a "first" in Army Aviation? . . . In '55? . . . Last year? Get it on the record! Submit it for publication to ARMY AVIATION MAGAZINE, 1 Crestwood Road, Westport, Conn. 06880. We'll publish them in the order they are received.

First unit to test the OV-1 Mohawk: U.S. Army Aerial Surveillance and Target Acquisition Platoon (Experimental), Ft. Rucker, Ala., commanded by COL (then CPT) George Thayer, December, 1960.

First Chief of Staff to fly in an AH-1G HueyCobra: GEN Harold K. Johnson in June, 1967, while on a tour of Germany. MAJ Richard Jarrett, AH-1G NETT, was pilot.

First use of a UH-1D (with -11 engine) to rescue a mountain climber suffering from altitude sickness above 15,000 feet: June 27-28, 1970, at Mt. McKinley, Alaska, by CW4 Ronald I. Smith, 90th Aviation Company (ASH), 19th Avn Bn. (Submitted by MA) Franklin N. Harris).

First aviation unit to receive an award in the Vietnam War: 73d Aviation Company, which received the Meritorious Unit Commendation for the period May, 1963, through December, 1963. GO #21, dated June 29, 1964. (Submitted by MA) Thomas O. Kuypers).

First aviation unit to win the Meritorious Unit Commendation in Vietnam War: 73d Aviation Company for period May, 1963, to December, 1963. GO #21, dated June 29, 1964. (Submited by MAJ Thomas O. Kuypers).

First Army Aviator assigned to Special Forces: MAJ (then 1LT) William T. Clarke, USAR, who reported for duty at the Psychological (now Special) Warfare Center, Ft. Bragg, N.C., on January 6, 1956.

First U.S. Army Helicopter Instrument Flight Examiner (Military): LTC (then 1LT) William A. Smith,

UMBRIAGE!

MAJ John M. Slattery, IO of the First Helicopter Sqdn, USAF, at Andrews AFB, Md., indicates that we had it all wrong in the June-July, 1970 issue in listing the "First President to fly in a helicopter." Ike did not fly first in an Army CH-34 Choctaw in September, 1957 at Newport, R.I.; he flew in a USAF Bell Model 47-J, designation H-13J, operated by the 1254th Air Transport Group (Special Missions), MATS, from the south lawn of the White House on July 13, 1957, with CPT Joseph E. Barrett, USAF, at the controls.



Shown on their arrival at Heidelberg AAF are MAJ Sid S. Reagan (center, with Mrs. Reagan), and 11T Brooke W. Myers (right) who completed the first trans-Atlantic flight in an Army U-21 aircraft on June 23, 1970. On hand to greet them were CPT Thomas E. Rolph (left), Asst OpnsO at Heidelberg, and MAJ Marvin W. Schwen (2d from left). Their 25-hour flight originated at Ft. Riley, Kan., and had stops at Newfoundland, the Azores, Spain, and finally, Heidelberg. (USA photo)

Jr., Ret., on his completion of Instrument Flight Examiners Course 57-1 on Aug. 4, 1956. Auth: BG C. I. Hutton, Commandant, Army Aviation School.

First U.S. Army Helicopter Instrument Flight Examiner (civilian): Donald L. Whitaker (deceased), who, as a Fixed Wing Instrument Flight Examiner, was considered qualified as a Helicopter Instrument Flight Examiner on being issued a Standard Helicopter Instrument Certificate on April 30, 1956.

First aviation unit to fly into Cambodia: D Troop, 3/5 Cavalry, commanded by MAJ Delmar Livengood, which flew into the Crow's Nest on April 29, 1970. (Submitted by LTC John W. Woodmansee, Jr.) . . . 334th Aviation Company (Attack Helicopter), commanded by MAJ John R. McQuestion, which flew into Cambodia on April 29, 1970. (Ed. Note: We'll need to know the time of the border crossing to resolve this joint claim.)

First class of VNAF students to complete Advanced Helicopter Training at the U.S. Army Flight Training Center: Class 70-1, composed of 56 warrant officers and air cadets of the Vietnamese Air Force, who completed their training on June 22, 1970, at Hunter Army Airfield, Georgia.

That's it for this month! . . . If you have a "First," or know of a "First," send it along!

OVERKILL AND INATTENTION

(Continued from Page 2)

presently-operational Russian counterpart. By the time the development is complete (nine years, according to plan), we can expect to be even further behind.

These few statistics are sufficient to express a condition and portray a trend unfavorable to the helicopter industry. Trends, of course, are reversible. They are reversible provided that there is adequate reason for doing so; that sufficient resources are applied to the task; and that there is time available for the applied resources to take effect before the patient dies.

If Mr. Secor Browne of the Civil Aeronautics Board is both accurately quoted and accurate in his belief, then the helicopter is passe and the manufacturers should proceed to more useful endeayors. One thing appears certain — the patient is neither mentally nor physically equipped to withstand a lengthy period without treatment.

Is the industry essential?

So — the key question — is there adequate reason for retaining a viable helicopter industry?

The Department of Defense apparently thinks so. In November of 1969, a memorandum was prepared for Deputy Sccretary Packard which reviewed the industry's condition and found it unwell. It was suggested that the Service Secretaries be directed to evaluate such industry incentives as the parallel undocumented approach to prototype UTTAS

In answer to a question concerning the importance of short-haul vehicles and the future of the helicopter or a vehicle of that type, CAB Chairman Secor D. Browne told a University of South Florida May 1 Symposium, "...1 don't see any future for the helicopter as I understand the helicopter. First of all, its direct operating costs are incredible; the cost of maintenance is incredible; the noise is incredible; and as a piece of machinery it's a living horror. But it does things that, particularly in a military sense, must be done. Now, certainly, the jet engine, by taking the complexities of the piston engine out of the problem, has helped a lot. But still, the gear box, the transmission problems of the helicopter are pretty awful. So I don't see much less some major breakthroughs occur."

and LAMPS, and the termination of contract overhaul work at locations outside CONUS.

The Department of the Army apparently thinks so. On 23 April 1970, a message from D/A included a request that an effort be made to "determine the need for the Army to stabilize each company's economic posture."

The commercial market

The commercial market apparently believes the industry has a future. Since 1967, the number of commercial machines in use has increased by 41% with a 35% increase in the number of owner/operators. Government agencies, other than the Department of Defense, have shown a 27% increase in helicopter use during the same period.

Foreign nations apparently believe the helicapter industry should and will remain in business — though not necessarily U.S. manufacturers. The 47 helicopters delivered to Israel have been matched by some 89 machines furnished by the USSR, French, and English to the UAR, Syria, and Jordan. During the past five years, some fifteen modern machines have been built, or started, in the USSR, England, France, Italy, and the Federal Republic of Germany.

Manufacturers' efforts

Though less definitive perhaps, we have reason to believe that even the Congress thinks helicopters have a future. The House left unscathed the Defense funding requests for helicopter procurement and RDT&E. The Senate Armed Services Committee, though less favorable to the Cheyenne (July 14 report), allowed the full procurement request with the comment that it was too small to maintain the inventory.

The manufacturers themselves appear to believe that, filling a need, they have a future. In their efforts to remain self-sustaining (and profit-making) they are implementing:

- A continuing search for new customers, commercial and foreign.
- An aggressive R & D program; both intra- and extra-mural.
 - · A product improvement program.
- A winning response to the hoped-for HLH program; the only game in town!

 A program to provide IROAN, Crashand Battle-Damage repair, and an ambitious PAR effort.

 A diversification program; into related fields if possible; tangential areas, if feasible;

and new areas if necessary.

 A final defensive plan, involving reductions in equipment, facilities, and personnel to those minima required to maintain a warm base sustaining rate.

What's being done?

If the reasons for maintaining a viable industry are valid — and it seems that those most concerned believe that they are — then it becomes appropriate to ask if sufficient resources are being applied to the job.

It, of course, depends upon whom you ask

as to the answer you receive!

The consensus of opinion seems to be that there is overkill in some areas and insufficient attention to others. Assuming that the job of applied resources is to ensure the building of today's helicopters tomorrow, then all concerned agree that the present plans, if implemented, are adequate.

In July of 1965, at the request of the then Secretary of Defense, manufacturers improved their production facilities so as to deliver machines at a rate 5 to 10 times that considered to be a normal growth rate. A return to a minimum sustaining rate at this stage will leave unused facilities, under-employed engineers, unhappy manufacturers, and a large inventory of operational helicopters.

Use of present inventory

The request that industry assist in determining a minimum sustaining production rate (which has been done); that the South Vietnamese and others be taught to operate and maintain machines of their own; that the National Guard receive more modern tools; that today's machines receive greater world-wide distribution — these are all attempts to effectively use the present inventory while keeping it stable in quantity. The effect of this is to equalize discontent, and adequate resources are being applied to achieve that result.

The cure, however, will come from what appears to be a lesser effort to identify that useful work for vertical lift machines which cannot be done with the present inventory. This theme is developed by Lt. Gen. George I. Forsythe, CG of Combat Development Command, who, in an address reported in the August, 1970 issue, spoke of our lack of numerical strength in Europe:

"With troop-carrying helicopters, larger logistic movers, better surveillance devices, and improved attack helicopters with anti-tank missiles, we think we can reduce the numerical odds and bring the scales into balance."

This theme is further carried on at Fort Hood, which, with its MASSTER and its ASTRO, may yet become as well known to Army Aviators as Fort Rucker. If so, its recognition will come from having caused new equipment to develop greater capabilities, and not because transplanted Texans found new uses for old equipment.

Again, given that there are valid reasons for retaining a viable helicopter industry, it is common belief that too many of the available resources are now devoted to the use and stabilization of today's helicopter inventory and too few are looking forward toward a future in which present types and quantities are both obsolete and insufficient.

The future production base

Our third factor, time, works against the retention of a competitive helicopter source. A comparison can be drawn with the ship-building industry. There it is forecast that only three of four builders of the fourteen now in existence will be around for the President's 300-ship, 10-year building 'program. For this condition to exist, the federal customer must have weighed the advantages of economic diversity and competition against the hazards of sole source procurement and decided in favor of the latter. Such decisions are very far-reaching, though by no means permanent.

How long the helicopter industry can autorotate is easily answered: Until it hits the ground!

How long it will be asked to autorotate is a more appropriate question with an equally simple answer: Until someone can find the throttle!

OCTOBER 14-OCTOBER 16

1970AAAA ANNUAL MEETING

SHOREHAM HOTEL

WASHINGTON, D.C.

ADVANCE REGISTRATION

Advance registrations will be accepted Aug. 1-Oct. 7 (see coupon below). All registrations will be confirmed by mail. Registration badges and social function tickets may be picked up at the AAAA Advance Registration Desk in the Shoreham Hotel, beginning 1 p.m., Tuesday, Oct. 13.

ROOM RESERVATIONS

Write Shoreham Hotel, Connecticut Avenue at Calvert Street, Washington, D.C. 20008, or hotel of your choice. In contacting the Shoreham Hotel, state that you will attend the AAAA Annual Meeting. AAAA cannot accept requests for room reservations. For on-post quarters for military per-

sonnel, write, Hq, Military District of Washington, Attn: G1, Washington, D.C. 20315 on or before Sept. 15.

GUESTS

Only registrants may attend business and professional sessions. Attendance at social functions is open to non-registrants and guests. Full remitance for registration and/or all tickets must accompany this Advance Registration Coupon.

CANCELLATIONS

Phone cancellations of tickets will be accepted through 1 p.m., Tuesday, Oct. 13. Letter cancellations should be postmarked not later than Tuesday, Oct. 6.

I plan to attend the functions of enclosed a check made payable to					w and have
Function (All at Shoreham Hotel)	Quantity Desired	Military Member*	Civilian Member	Non- Member	Amount
Registration	******	\$5.00	\$10.00	\$15.00	\$
President's Reception, 8 p.m., Thursday, Oct. 15		\$6.00	\$10.00	\$15.00	\$
Honors Luncheon and Reception, 11 a.m2:30 p.m., Oct. 16		\$8.00	\$10.00	\$15.00	\$
Ladies Breakfast, 10:30 a.m., Thurs., Oct. 15		\$2.00	\$ 2.00	\$ 2.00	s
*Active Army, DAC, ARNG, USAR, and Retired AAAA Members.					\$
Rank/Name					
Unit or Firm					
Street					

PROFESSIONAL-SOCIAL PROGRAM FOR THE 1970 AAAA ANNUAL MEETING

(Subject to minor change, All functions are held at the Shoreham Hotel, unless otherwise indicated)

III WEDNESDAY, 14 OCTOBER 1970

0900-1900 Registration, Club Rooms A&B, (MI)

1300-1630 National Executive Board Quarterly Business

Meeting, Executive Room. 1500-1800 The Very Early Birds' Reception, Marquee Lounge (MI)

1800-2200 The Not-So Early Birds' Reception, Forum Room, (MI)

III THURSDAY, 15 OCTOBER 1970

0800-2000 Registration, Club Rooms A&B. (MI)

0800-1700 OPO Career Guidance. Club Room Foyer. 0900-0905 Welcome by COL Richard L. Long, USA (Ret.),

National President. Ambassador Room. (MI) 0905-0915 Introduction of "The World I See," a presentation of the 1st Aviation Brigade, USARV, by BG William

J. Maddox, Jr., Director of Army Aviation. 0915-0930 "The World I See." Presentation by CW2 Michael S. Lopez of the Golden Hawks.

0930-1100

"Vietnamization and Army Aviation," a three-part presentation. (MI)

0930-0955

Vietnamization Role of the U.S. Army Primary Helicopter Center and School with introduction by BG Robert N. Mackinnon, CG, USAPHC/S, and presentation by LTC Albert L. Lamkin and MAJ James W. Johnston.

0955-1010 Coffee Break, Ambassador Room, (MI)

1010-1035

Vietnamization Role of the U.S. Army Flight Training Center & Fort Stewart with introduction by BG James C. Smith, CG, USAFTC&FS, and presentation to be made by a two-member feam.

1035-1100
Vietnamization Role of the U.S. Army Transportation Center and School with introduction by MG Howard F. Schiltz, CG, USATC&FE, and presentation by COL Selmer A. Sundby and MAI Vernon W. Woodward.

1030-1200 Ladies Continental Breakfast. The Heritage Room and East Veranda.

1100-1130 Refreshments and social break. Pay-as-you-go bar. Regency Ballroom. (MI)

1130-1215 Membership Brunch*, Admission by ticket. Regency Ballroom, (MI)

1215-1230 Membership Break. (Brunch tables cleared)

1230-1330 AAAA Membership Business Meeting. The President's Annual Report. Election of National Officers for 70-73. Chapter Awards. Discussion of Floor Items proposed by Delegates and Members. Members only. Regency Ballroom.

1400-1445 "Reserve Components — 1970." Presentations covering Army Aviation in the Army National Guard and U.S. Army Reserve, Forum Room. (M)

1445-1500 Membership Break, Forum Room, (M)

1500-1645 Aviation Personnel Seminar. OPO Panel Presentation on Personnel Subjects. COL John W. Marr, OPO, OPO; COL Jack M. Turnlinson, Chief, Aviation Warrant Officer Branch, OPO; CPT William J. Ely, Jr., USAFTC; and CW4 Robert L. Hamilton, AWOAC, USAAVNS, panelists. Forum Room. (M)

1645-1700 Membership Break, Forum Room, (M)

1700-1800 Open Question and Answer Period on Current Personnel Policies and Programs. COL John W. Marr, Moderator.

1230-1315 Industry members' busses depart from the Shoreham Hotel for classified Advance Planniag Briefing for Industry (APBI) to be held in the West Auditorium of the State Department (Virginia and 22d Street, N.W.) Industry attendees and those military members making presentations.

1400-1800 Advance Planning Briefing for Industry (APBI) co-sponsored by the U.S. Army Aviation Systems Command and the AAAA. West Auditorium, State Dept. Building, Virginia & 22nd Streets, N.W.

1400-1415

Call to Order, Welcome, and Administrative Announcements by MG John L. Klingenhagen, CG, U.S. Army Aviation Systems Command.

"Austerity of the Seventies," Keynote address by LTG Austin W. Betts, Chief of Research and Development, Department of the Army.

1445-1530

"The Family of Aircraft Desired for the 70's." LTC Virgil A. Henson (Ret.), Operations Research Analyst with the Combat Developments Command Combat Arms Group, Ft. Leavenworth, Kan., will present a picture of the lessons learned in Southeast Asia and the aviation materiel requirements to meet the threat of high, medium, and low intensity combat.

1530-1545 Coffee Break

1545-1600

"Advanced Materiel Concepts." COL George A. Nabors, Deputy Director, Advanced Materiel Concepts Agency (AMCA) will discuss the role of AMCA in air mobility planning with emphasis on the development of future materiel concepts to fulfill operational capability objectives of the Army.

"Aviation Safety." COL Eugene B. Conrad, Director of the U.S. Army Board for Aviation Accident Research (USABAAR). An assessment of the major problems of deployed equipment and their deficiencies in regard to decreased accidents and improved safety will be presented to outline the various approaches needed for the development of safer equipment in the 70's,

1615-1635

"Army Aircraft Reliability and Maintainability." COL Delbert L. Bristol, Deputy Commander for Research, Engineering & Data, AVSCOM, will discuss the increased emphasis on more reliable and lower maintenance requirements for Army aircraft. In addition, the AVSCOM RAMMIT program for detecting deficiencies in current equipment and connoting not only "quick" fixes but assuring through development that new equipment will not have the same deficiency.

"Army Aviation Research & Development Center and Program." Mr. Paul F. Yaggy, Director, will explain the Army plan to increase technical competence and utilize existing facilities for the R&D associated with new equipment. A quick coverage of the major barriers to meeting new requirements and the R&D program planned with industry will be presented.

(Continued on the Reverse Side)

PROGRAM FOR THE 1970 AAAA ANNUAL MEETING

1650-1730

"The Aviation Base and Logistics." Mr. Joseph P. Cribbins, Director of Aviation Logistics, ODCSLOG, DA, will discuss the Army's worldwide fleet status and the plan for supporting the field requirements for the next five years. In addition, his presentation will cover the Army's planning for production bases.

1730-1800

Panel Discussion with MG John L. Klingenhagen serving as Moderator. Due to the short period of time to cover the wide spectrum of topics, questions will be reserved to this portion of the program, General Klingenhagen will summarize the messages of the 1970 seminar — the austere budget — the high priority of air mobility — and where the 70's will lead the Army and Army Aviation. Adjournment at 1800 with busses to return to the Shoreham Hotel.

2000-2130 President's Reception. Ticket required. Regency Ballroom. (MI) (Business suits, cocktail dresses).

III FRIDAY, 16 OCTOBER 1970

0800-1230 Registration, Club Rooms A&B. (MI)

0800-0920 Breakfast Business Meeting. "AAAA Chapter Operations." For Chapter Presidents and Secretaries, President-Elect, Executive Vice President, and Secretary-Treasurer. 0830 Call to Order. The Palladian Room.

0920-0955 "The LOH," a two-part presentation by LTC Edward M. Browne LOH Project Manager at AVSCOM, LTC Emmett F. Knight, OH-58A Project Officer, AVSCOM, A look at the LOH as a whole — mission, aircraft, major subsystems, experience data. Diplomat Room. (Suggested for military members.)

1005-1045 "OSD Policy and the Future Outlook for Foreign Military Sales." Presentation by Mr. Leonard A. Alne, Deputy Director, International Sales Negotiations, Military Assistance and Sales, Office, Assistant Secretary of Defense (International Security Affairs). Diplomat Room. (Suggested for industry members).

1045-1100 Question and Answer Period. (I)

1100-1150

1970 AAAA Honors Luncheon Reception. Ambassador Room.

1150-1400

1970 AAAA Annual Honors Luncheon. Presentation of AAAA National Awards by the Secretary of the Army, the Chief of Staff, the Vice Chief of Staff, and a representative of the James H. McClellan Foundation. Regency Ballroom, (MI)

1430-1630 1970 Reunion of Cub Club. Heritage Room and East Veranda.

1445-1530 National Executive Board Business Meeting, President's Suite.

1800-2000 Diehards' Reception, Palladian Room, (MI)

(M) For military members; (I) For industry members; (MI) For military and industry members. "Membership Brunch tickets are included in the fee paid by the APBI attendees, and are provided to each Chapter Delegate.

Note: Security clearance and \$30 registration fee for Advance Planning Briefing for Industry (APBI) must be received by AAAA, 1 Crestwood Road, Westport, Conn. on or before 15 September 1970, if attendance is desired.

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V.A. - APPROVED - F.A.A.

Sacrifice, compassion, and service . . .

Major General George W. Casey, 48, Commanding General of the 1st Cavalry Division (Airmobile). was killed in action in Vietnam when the helicopter in which he was flying crashed on a mountainside on July 7. Casey was en route from his headquarters to visit wounded soldiers of his command in the Army Hospital at Cam Rahn Bay. He is survived by his widow, Elaine M.; two sons, George W., Ir. and Peter; and three daughters, Joan, Elizabeth, and Ann. Interment took place in Arlington National Cemetery on July 23, 1970.

The eulogy for General Casey was delivered by General L. L. Lemnitzer, USA (Ret.), at Holy Trinity Church, Washington, D.C. We publish it here in the belief that General Casey typifies the hundreds of of fine aviators and crewmen who have given their lives in Vietnam and to whom we here at home do

not give enough appreciation.

Eulogy

George William Casey - soldier, family man, friend - has made the eternal sacrifice of the profession of arms. Today we gather to mourn his passing and honor his memory, a memory of a life exemplified

by sacrifice, compassion, and service.

George William Casey - noble warrior - epitomized in himself the greatness of our Nation, the devotion of our Army, and the dedication of our Officer Corps, A quarter-century ago, his comrades in the Long Gray Line at West Point predicted his future with these simple words: "He will be the Army's best." - And he was, All who knew him were convinced that he was well on his way to reaching the very top of his profession,

From platoon leader to combat division commander, from battalion staff officer to student of international affairs, he aspired to greatness and attained it. Satisfied only with perfection, General George Casey applied his untiring determination, his dauntless courage, and his very special enthusiasm to every challenge. As a company commander he knew well the Infantryman's hell that was Heartbreak Ridge; as a brigade commander he mastered the techniques of battle in Vietnam; and as a division



MAJ. GEN. GEORGE W. CASEY

commander he brilliantly spearheaded the recent operation into Cambodia.

George William Casey - friend and confidant was no less magnificent in stature. It was Captain George Casey who, nearly twenty years ago, served so superbly as my aide in the 11th Airborne Division at Fort Campbell. To me - and to the division he symbolized the infantry and airborne spirit. He continued to be my aide in the 7th Infantry Division during the Korean War until, at his own request, he assumed command of an infantry company. He embodied the many positive attributes which marked him for success - unwavering determination, enthusiasm, and intelligence.

I recall so vividly George's desire to be intimately involved in the Korean action, to participate in decision-making, to avoid being left behind. I know that neither Captain George Casey nor General George Casey were ever left behind. His zest, his reasoned judgments, and his total devotion to the principles which he held so firmly never faltered -

even amidst the crises of battle.

But the demands of combat leadership never overshadowed the compassion for people which permeated George's entire being. His awareness of the needs of the individual soldier, his concern for his men's welfare, and his understanding of the rigors experienced by men in combat were never subordinated to lesser causes. Perhaps it is fitting, if this illustrious commander had to die on the field of battle, that his final mission was to visit the wounded and hospitalized soldiers of his division. Such was the man, General George Casey.

The well-known ABC television reporter, Frank Reynolds, went to Vietnam in May to cover the Cambodian operation. While there, he became acquainted with and was deeply impressed by General Casey. In a recent nation-wide telecast reporting General Casey's death, he said:

"General George Casey was one of those men who

had soldier written all over him,

"There was no trace of the martinet in him; he was a man for whom the responsibilities of high command were more important than its privileges.

"He accepted all of the first, and abused none of the second.

"General Casey knew war and hated it, perhaps

more than the rest of us. "He was a splendid example of a military man."

As a family man, George William Casey knew the ultimate depth of compassion, the totality of familial love, and the harmony of married life experienced by so few. His memory, a rich legacy for those who remain, will guide his loving wife and devoted family into a peaceful future. General George Casey would, above all, desire this,

Remembered not alone by his family and friends, George Casey is today honored by his loyal soldiers, the United States Army, and a grateful Nation. Faithful warrior, humble servant, dynamic leader, devoted husband and father - these words but superficially reveal the real character of General George Casey. Known but to few is the memory which transcends the words, the memory of George William Casey.

Obituaries

The following obituaries of AAAA members cover the March-May, 1970 period:

BARRY, George F., Jr., Warrant Officer, 158th Aviation Battalion (AMBL): due to hostile action in Vietnam on May 23, 1970.

BONNEAU, Dean L., Warrant Officer, Battery B., 4th Battalion, 77th Artillery: due to an aircraft accident in Vietnam on

May 4, 1970.

COLE, Robert K., Warrant Officer, 158th Aviation Battalion (AMBL): due to an aircraft accident in Vietnam on May 18, 1970.

CROUCH, Albert B., Warrant Officer, Troop B, 7th Squadron, 1st Cavalry: due to hostile action in Vietnam on May 18, 1970.

EVEREST, Robert K., III, Warrant Officer, Troop A, 1st Squadron, 9th Cavalry (AMBL): due to hostile action in Cambodia on May 14, 1970.

GREENLEE, Steven J., Warrant Officer, Air Cavalry Troop, 11th Armored Cavalry Regiment: due to hostile action in Cambodia on May 2, 1970.

HEDEMANN, Wayne H., Warrant Officer, 334th Aviation Company: due to hostile action in Cambodia on May 13, 1970.

- HERMAN, Lawrence J., III, Chief Warrant Officer (W2), 61st Aviation Company: due to hostile action in Vietnam on May 7, 1970.
- HUNTER, John R., Warrant Officer, Troop D, 1st Squadron, 1st Cavalry: due to hostile action in Vietnam on April 30, 1970.
- KELLOGG, Peter P. W., First Lieutenant, 184th Aviation Company: due to hostile action in Cambodia on May 15, 1970.

KIRK, Robert L., Warrant Officer, 158th Aviation Battalion (AMBL): due to hostile action in Vietnam on May 6, 1970.

KRUG, Raymond H., Jr., Warrant Officer, 187th Aviiation Company: due to an aircraft accident in Vietnam on May 14, 1970. LUKENS, Donald G., Warrant Officer, Troop B, 7th Squadron, 1st Cavalry: due to hostile action in Vietnam on May 25, 1970.

MILLER, Stanley J., Jr., Warrant Officer, 281st Aviation Company: due to hostile action in Vietnam on April 27, 1970.

MITTON, William J., Chief Warrant Officer (W2), 92d Aviation Company: died May 6, 1970 in Vietnam as a result of wounds received in action in Cambodia.

NOETZEL, William W., Warrant Officer, 176th Aviation Company: due to hostile action in Vietnam on April 25, 1970.

O'BRIEN, Edward T., Warrant Officer, 5504 N.W. 37, Oklahoma City, OK 73122: due to hostile action in Vietnam on May 26, 1970.

POE, Clifford E., Jr., Chief Warrant Officer (W2), Company C, 158th Aviation Battalion (AMBL): due to hostile action in

Vietnam on May 6, 1970.

PRINCE, Joseph S., Captain, Medical Holding Company, USAH, Camp Zama, Japan: died May 19, 1970 in Japan from injuries received in an aircraft accident in Vietnam.

RABB, Robert I., First Lieutenant, 195th Aviation Company: due to hostile action

in Vietnam on March 5, 1970.

RICHARDSON, Darek N., Warrant Officer, 155th Aviation Company: due to hostile action in Southeast Asia on April 20, 1970.

SEEMAN, Steven C., Warrant Officer, 336th Aviation Company: due to hostile action in Vietnam on May 12, 1970.

SMITH, Allan L., Major, Troop C, 7th Squadron, 1st Cavalry: due to an aircraft accident in Cambodia on May 10, 1970.

- STILLIONS, Ronald B., Warrant Officer, 135th Aviation Company: due to an aircraft accident in Vietnam on April 21, 1970.
- WHIDDON, Tommy L., Warrant Officer, Troop C, 1st Squadron, 9th Cavalry: due to hostile action in Cambodia on May 6, 1970.

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