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E. CLAXTON
Manager, Product and Marketing Support Operation

E. C. PARKER
Manager, Technical Publications

JOHN J. McKIERNAN
Editor

GENERAL ELECTRIC

COVER

CH-3C and UH-1F of the 4488th Helicopter Squadron over Tactical Air Warfare Center at Eglin. Powered by T58 turboshaft engines Sikorsky CH-3C's and Bell UH-1F's played significant roles in "Gold Fire I".

4488TH HELICOPTER SQUADRON LOADS CH-3C's FOR "GOLD FIRE I" AIRLIFT

Official USAF photos on pages 2 thru 6.

"GOLD FIRE I"

General Walter C. Sweeney Jr., Four Star TAC Commander, steps from CH-3C at West Plains, Missouri to greet Major General Charles R. Bond Jr., Air Commander of "Ozark" forces in Goldfire exercises. At left, Major General Jamie Gough, Director of Plans, US Strike Command, comes down ramp.

T58-powered US Air Force CH-3C and UH-1F helicopters saw plenty of action, demonstrated impressive capabilities in recent series of joint Army/Air Force test exercises conducted by US Strike Command.

The 15-day "Gold Fire I" exercise, under General Paul D. Adams, Commander, USSTRICOM, involved approximately 20,000 Army and Air Force troops and a 4,000 square mile "battleground" in the Ozarks of Central and Southern Missouri.

Combining ready combatant units of Continental Army Command and Tactical Air Command, the United States Strike Command has responsibility for test and evaluation of new Air Force proposals for increasing effectiveness of joint Army/Air Force combat operations. In exercise "Gold Fire I" test series, emphasis was directed to optimum use of Air Force support to provide improved mobility for ground forces.

"Gold Fire I" climaxed the first in a series of joint Army/Air Force training exercises which began with the 3-phase preparatory "Indian River" tests conducted at Tactical Air Warfare Center, Eglin AFB, Florida. The "Indian River" training program was aimed at most effectively meshing forces of Air Force tactical units from TAWC and its parent organization, Tactical Air Command, and elements of Army's 1st Infantry Division from Ft. Riley, Kansas.

In the recently completed "Gold Fire I" exercises, the CH-3C and UH-1F helicopters were put through their paces by the 4488th Test Squadron under command of Lt. Col. James L. Blackburn. As "go" orders were received at

Capt. B. Hollis, Maintenance Officer; Lt. Col. J. Blackburn, 4488th Helicopter Squadron Commander; Major B. Haynes, Operations Officer.

T58 POWERED CH-3C AND UH-1F GIVE

CH-3C lifts 6000 lb bulldozer during Indian River Tests.

TAWC for "Gold Fire I", the flight line in the area of the 4488th Helicopter Squadron, became a beehive of activity.
(more photos on page 2)

Eighteen helicopters of the 4488th were dismantled and loaded aboard huge transports at Eglin for immediate movement to the Memphis Municipal Airport. Twelve rear-loading twin-turbine CH-3C's and six UH-1F helicopters were air lifted. (The scenario for the exercise called for a simulated 2,200 mile overseas deployment, thus the need for moving the helicopters in the huge long-range transports). Meanwhile, on location in the Ozarks, MATS Commander, General H. M. Estes, observed as MATS C-133's C-130's and C-124's from six different states delivered Army and Air Force troops and cargo airlifted from eight widely separated air bases.

Upon arrival at Memphis, the 206 men of the 4488th worked around-the-clock to reassemble the aircraft, flying them to West Plains, Mo., as fast as the reassembly job was completed.

Once there, the fast pace never decreased, even through bad weather. The aircraft were immediately put to work. Some of the cargo delivered was fuel, rations, combat control teams, jeeps, communications equipment and a variety of other materials. Wherever the Army needed resupply throughout the entire maneuver area the helicopters of the 4488th were there.

For a period of 15 days during the exercise, the T58-powered helicopters exceeded all demands levied on them by both the Army and Air Force. For the 15 day period the CH-3C flights flew 592 hours and delivered in effective sorties over one million pounds of cargo and 3,230 passengers, while the UH-1F, a smaller chopper, flew 375 hours delivering 25,840 pounds of cargo and 781 pas-

IMPRESSIVE DEMONSTRATIONS IN "GOLD FIRE I"

UH-1F of 4485th Test Wing lifts 2750 lb. jeep. T58-powered Bell helicopter weighs 4750 lbs. can lift loads as heavy as 4000 lbs.

sengers. All this was done with combined "in commission rate" of approximately 96 per cent which is an unusually high rate.

When Army called for "alert maximum effort" on November 9, in the single day's effort, all 18 copters flew, accumulating a total of 94.2 aircraft hours, carrying 185,625 lbs of cargo and 407 troop/passengers.

"These outstanding figures", says Lt. Col. James L Blackburn, 4488th squadron commander, "proved conclusively that both large and small helicopters of the Air Force's Tactical Air Warfare Center could do the job laid on them to a greater degree than ever expected. In this one exercise alone, the helicopters have proved their excellent capability for troop and cargo carrying. With the experience gained from this exercise, it is expected that the 4488th Helicopter Squadron will even exceed these outstanding figures."

In Jet Engine Shop, A/1C W. Barnes gets pointer on T58 powerplant from SM/Sgt. J. Spangler, NCOIC, 4485th Propulsion Branch.

Because of professional planning, support and execution of "Gold Fire I", TAC completed the major exercise in its simulated combat environment without a single aircraft accident despite the obvious hazards involved.

With the 4488th throughout the operation, GE tech rep John Kishman provided T58 powerplant flight line support, backed up by tech rep Russ Stanley, with the 3211th JEFM at Eglin, and under E. D. Fagan, senior GE Service Rep.

After approximately 3 weeks, on November 13, the 206 men of 4488th Test Squadron returned to the Tactical Air Warfare Center at Eglin. On hand to meet the formation was Col. William B. Harris, Commander, 4485th Composite Test Wing which includes the 4488th Helicopter Squadron. The 4485th Composite Test Wing is equipped with all types of air vehicles normally engaged in joint tactical operations and possesses all aircraft assigned to the Center. The mission of the wing is to—1. Provide key elements for TAC forces participating in joint exercises: 2. Develop and refine tactics and techniques; and 3. Perform unilateral tests on a small scale trial basis to prove the validity of large scale test plans.

EGLIN . . . BIG, BIG AIR FORCE BASE

General Sweeney assumed command of Tactical Air Command in Sept. 1961. With headquarters at Langley AFB, Virginia, TAC comprises the Ninth, Twelfth and Nineteenth Air Forces, operates 14 TAC bases and also has several units located at bases of other major commands.

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In 1963, the U.S. Air Force activated the Tactical Air Warfare Center, under the Tactical Air Command, at Eglin Air Force Base, Florida. The Center, commanded by Major General Gilbert L. Meyers, is exploring all means of increasing mobility and combat effectiveness of joint forces through application of tactical air power.

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Eglin Air Force Base, between Panama City and Pensacola Florida, with its 800 square-mile reservation, is the largest Air Force base in the world, two-thirds the size of the state of Rhode Island.

Eglin hosts more than 200 tenant units, including the U.S. Army Rangers and their jungle training; Navy all-weather testing detachment under CMDR W. R. Matthews; explosive ordnance disposal schooling and Federal prison camp. Contrasts among units of the six major Air Force commands represented at Eglin are: 39th Bomb Wing (SAC) with B-52's; Special Air Warfare Center (TAC) with air commandos and current tactical aircraft; 4751st Air Defense Sq. (ADC) with Bomarc missiles and 48th Air Rescue Sq. (MAT); and scuba-equipped pararescue men.

Providing a world-wide range of weather conditions for environmental testing of new aircraft and equipment, the APGC Climatic Laboratory serves all agencies of DOD and NATO allies. The main chamber at the Lab is an insulated hangar big as a football field. Jungle to arctic conditions are duplicated, temperatures produced ranging from —65 to +165 degrees. A wide assortment of General Electric equipment is subjected to all-weather testing here. Recently completed tests involving aircraft and their SAED powerplants included J85-powered F-5A MAP aircraft; twin T58-powered CH-3C helicopter; T58 powered CH-46A, CH-113 and UH-2A; J85-powered (Cessna) YAT37; and the CF700 engine.

At Eglin AFB, the Air Proving Ground Center (APGC) conducts and supports weapons effectiveness tests, including testing and evaluation of non-nuclear munitions, armament systems, electronic command and control systems, and electromagnetic warfare devices, techniques and equipment, as assigned or approved by the Air Force Systems Command (AFSC). APGC is commanded by Major Gen. James E. Roberts.

APGC develops, operates, and maintains necessary ranges and facilities within the Eglin complex and on the Eglin Gulf Test Range (EGTR), which covers 45,000 square miles of Gulf of Mexico from Northwest Florida to Key West.

SAED Manager E. Woll got good report on T58's performance from Col. Harris in brief stop at Eglin last August.

GE tech rep R. G. Sarosi with Norair representative H. W. Kennedy (in cockpit) during F-5A/J85-GE-13 engine climatic test program. With a perfect test run at temperatures ranging from —65 to +125 degrees, the J85-GE-13 engine was reportedly the first engine ever to go through the climatic hangar without a single squawk.