25th ANNIVERSARY OF THE HELICOPTER TRAINING SCHOOL

INFORMATION COURTESY OF DON CANNON

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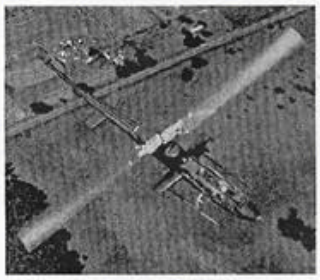


Bell's HueyCobra (AH-1G) gun ship has over two years combat time with the U. S. Army. It provides fire support with nose mounted cannon and wing mounted rockets.

Bell's new twin-engine 212 helicopter will soon be serving industry as a 15-place personnel or cargo hauler. A military version has been ordered by U. S. and Canadian services.

Bell's commercial version of the combat competent UH-1 "Huey" series is the 205A, a ship that carries up to 15 people—or can do duty as a heavy duty hauler or lifter.

Now in the U. S. Army inventory as its LOH armed scout/recon helicopter is the OH-58A, military version of Bell's famous JetRanger turbine powered five passenger commercial helicopter. This ship is in the U. S. Navy inventory (TH-57A) as a trainer and is known as the SEARANGER.

We at Sheppard Air Force Base are proud to host the celebration of the Silver Anniversary of the USAF Helicopter School. The personnel of the School and its parent organization, the 3630th Flying Training Wing, can take great pride in knowing that they have contributed to the training of the airmen who have since 1964 saved more than 3,600 lives in Southeast Asia.

Beyond today's many uses of the helicopter lies an unlimited future. New applications of rotary wing flight will demand new methods of training the men who use them. The next twenty-five years of helicopter training will be more demanding than the past twenty-five. I know those responsible for this will be equal to the challenge.

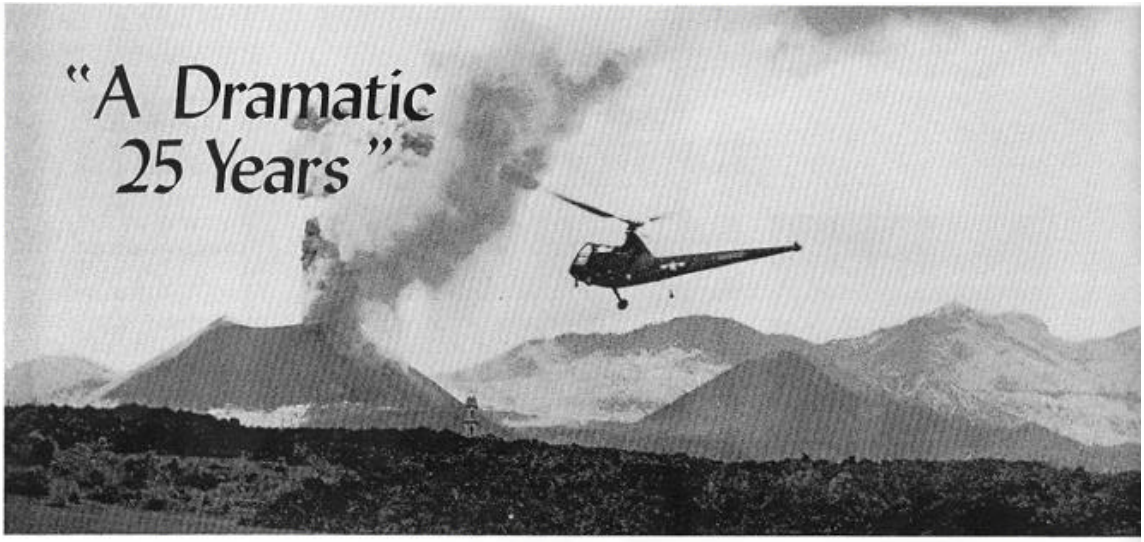
I want to take this opportunity to add my personal tribute to the men and women of the School and wish them every success in the future.

John M. McNabb

JOHN M. McNABB, Major General, USAF
Commander

Cover: A Sikorsky H-5 takes off from the USAF Helicopter School then located in San Marcos, Texas. (Sikorsky photo. All other photos Official USAF unless otherwise noted.)

"A Dramatic 25 Years"



An R-6 helicopter flies volcanologists over Paracutin in Mexico to study the effects of volcanic eruption.

It was a bright, airy Indian Summer afternoon in late October. Fixed wing aircraft were carrying out routine missions about 15 miles from their base. Suddenly, word was flashed to Base Operations: two planes had collided in mid-air. One of the planes, though severly damaged, managed to make a safe emergency landing. The other crashed into a wooded area and burst into flames.

A helicopter on a training mission, alerted by the call, proceeded toward the accident scene. Guided only by smoke and flames, the crew landed in a nearby clearing and made their way to the crash, where they picked up the only survivor and flew him back to the base hospital.

The year was 1944. The helicopter pilot was Major John J. Sanduski, who organized and commanded the first Army Air Force (AAF) helicopter school in the United States. The rescue was the first local base rescue in history performed by helicopter. It demonstrated a full 25 years ago what some 8,000 helicopter school graduates have since learned, refined, and put into practice, "That Others May Live."

Here's how it all began:

On January 29, 1944, only four years after the first successful American helicopter was flown, Maj. John J. Sanduski and five instructors came to Freeman Field, Seymour, Indiana. They were to design and establish a helicopter school. The 2-fold mission of the school was to train officers to fly helicopters and to teach enlisted men to maintain the aircraft.

From the beginning the program was beset with difficulties. No training manuals, flying regulations, spare parts, instructors, students, or aircraft! Though an order for nearly 1500 helicopters had been made in 1943, the school waited impatiently for its first YR-4 until June 8, 1944.

Entries in the school's diary read like episodes from "Calamity Jane."

"June 9, the day after the arrival: The first accident occurred today. Lt. Otto, while trying to make a backward takeoff, cracked up one of the rotor blades.

"June 12: 540 has clutch trouble and it will not be in condition to fly for several days.

"June 17: One helicopter flew in the morning. In the afternoon both planes were out of commission.

"June 22: Both helicopters were grounded.

"June 28: Lt. Otto and F/O Crawford cracked up '505' today near the Helicopter Headquarters . . . Both were slightly shaken up. The ship was 'washed out'."

In spite of these problems the school forged ahead and the first class, six Army Air Force officers, graduated August 11, 1944. All became instructors.

In a series of gypsy-like migrations the school was transferred three times between 1944 and 1946: first to Chanute Field, Illinois, in December '44; then to Sheppard Field, Texas, in May, '45; and finally to San Marcos Sub Field, Texas, in April, '46.

V-J Day ended World War II and very nearly signified the end of the helicopter school, too!

Clockwise from top left, a Piasecki H-21 Work Horse hovers over a temporary camp site on the Greenland Ice Cap near Thule Air Base. A Sikorsky R-4 helicopter attracts a great deal of attention after its arrival in Bhemo, Burma in 1945. Igor Sikorsky posed proudly with the crew of the first helicopter to fly non-stop across the Atlantic. The HH-3E's were air refueled during their flight to the Paris Air Show in June, 1967. (Sikorsky Photo) A Hiller H-23 Raven sits on the ramp in a flying ambulance configuration. This helicopter was used in the school prior to 1956 to train Army liaison pilots. A Bell H-13J Sioux sits on the White House lawn. This machine was used to transport President Eisenhower during his administration. December 1947 saw H-5 Helicopters delivering Christmas parcels to isolated outposts in Alaska.


RESCUE
346632
RESCUE

Vietnamese villagers load captured Viet Cong rice into a waiting CH-3C about 55 miles north of Nha Trang.

Helicopters were grounded, training was suspended, students were transferred, the helicopter mechanics school was moved to Keesler AFB, Mississippi, and those few faithful who remained held their breaths while the fate of the school was decided.

Finally, December '45, Headquarters AAF approved a plan to continue training of helicopter pilots. It was almost like starting from scratch. The small, canvas-covered, fragile R-4 was phased out in preference to the newer and more powerful R-6 and H-5. The length of the course was changed from four to six weeks and an operational phase was planned.

Operational training was a stumbling block. Once the program was authorized in early 1947, precision maneuvering, limited work in rope ladder training for rescue, and simulated shipboard landings were taught. Lack of proper aircraft equipment kept the school from giving any actual water or hoist training until several years later.

The Army Air Force separated from the Army in 1947. During the next ten years the school offered two separate courses, training men in five different types of helicopters. This posed a tremendous maintenance problem. Due to the limited number of helicopters in the Air Force inventory, spare parts were not readily available. Whole aircraft were borrowed from the Army to be cannibalized for parts and in some cases base shops fabricated parts themselves. A second problem, a shortage of instructors occurred because as many as 87% of the graduates were Army personnel. This meant that most of the Air Force graduates had to be retained as instructors for Army pilots in helicopters not in the Air Force inventory.

When the Army established its own school in 1956, the Air Force instructor requirements dropped 80%. The Air Force School moved to Randolph AFB where it stayed until 1958. The program stabilized at 90 hours of flight time: 30 hours in the H-13, 30 hours in the H-19, and 30 hours in the more powerful H-21.

The USAF, however, with a world-wide commitment, needed helicopter pilots with high altitude and confined area experience. A detachment was established at Stead AFB, Nevada, to give students in H-19s 30 hours advanced operational training. Landings were practiced in the rugged Sierra Neveda Mountains on 11,000 foot mountain tops, ridges and confined areas. Marginal power, shifting winds, and often severe turbulence combined to give the best training possible.

The success of this program caused the entire school to be moved to Stead AFB in July 1958. The H-13 was phased out, only the H-19 and H-21 were used.

The benefit of high altitude training was reflected in the drastic drop of the USAF helicopter accident rate from 31.8 accidents per 100,000 flying hours in 1957 to 4.6 in 1965.

In April, 1960 the arrival of the first HH-43B "Huskie" marked the beginning of helicopter crash-rescue training. This turbine-powered helicopter was also the first step in converting the school to an all jet fleet. Training included techniques of fire supression and crash-rescue.

The modernization of the school continued with the acquisition of the CH-3C "Big Charlie" in 1964. The "Big Charlie," or "Jolly Green Giant," replaced the H-21. The all-weather capability of this twin-turbine helicopter permittted the training of highly qualified instrument pilots.

The school's most recent migration was from Stead AFB back to Sheppard in 1966, 20 years after it had left. It is here that the turbine conversion was completed. The TH-1F "Huey" helicopter arrived in May, 1967. A small number of the reciprocating H-19s were retained for a time to train foreign students under the Military Assistance Program, but were finally phased out, leaving the all jet-powered helicopter program we have today.

On facing page, clockwise from top left, Sikorsky R-6 helicopters operate under field conditions in China in 1945 as air search and rescue vehicles. The "Gyro Gremlin" patch was designed for the school in 1945 by Walt Disney. A Bell TH-1F Huey makes a practice sling lift in the remote training area used by the school. A Piasecki H-21 Work Horse flys near Andrews AFB, Md. in October, 1957. The H-21 is still used at Andrews by the 1001st Helicopter Squadron. A Sikorsky H-19 Chicasaw hovers while a crewmember climbs a rope ladder into the aircraft. The "Help Stamp Out Fixed Wing" sign often appears at the USAF Helicopter School to remind pilots of their friendly rivalry with fixed wing pilots.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STAMP
OUT
FIXED
WING


233
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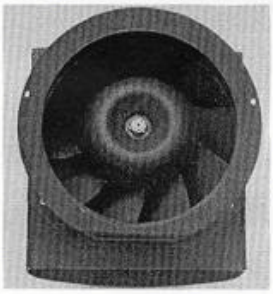

Built to Lockheed's precise specification, this Electro Dynamic fan meets stringent military requirements . . . insures that America's fighting forces will get the kind of helicopter performance they have a right to expect.

Electro Dynamic salutes the 25th anniversary of the helicopter training program.

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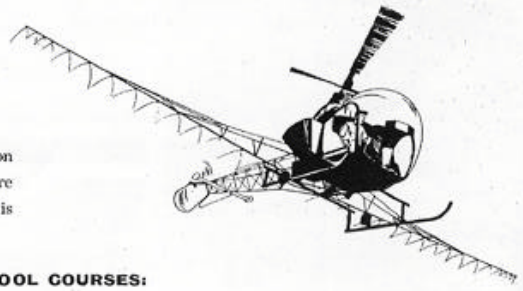

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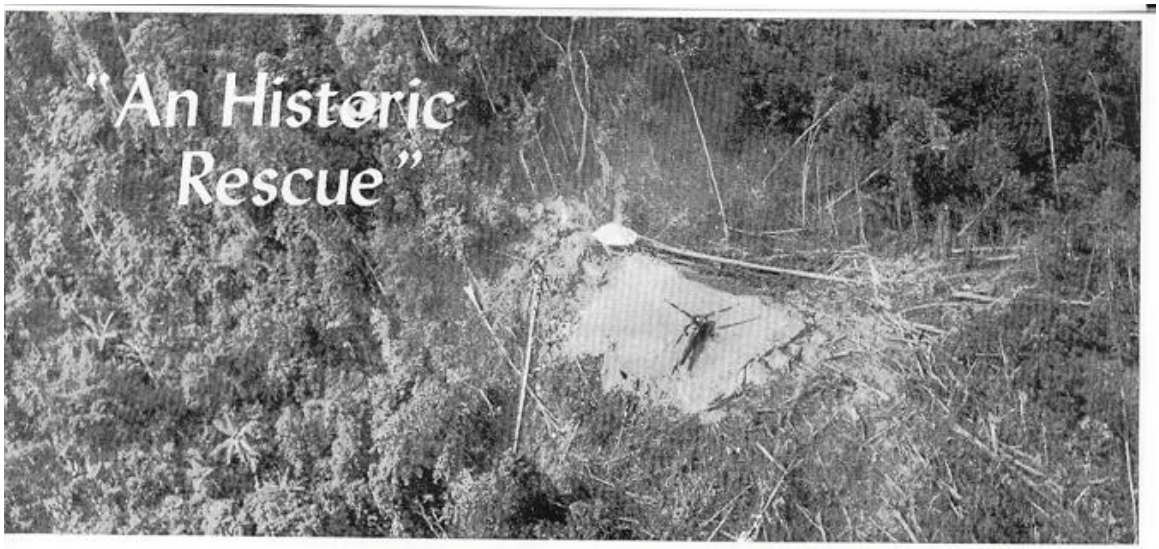


January 26, 1945 saw the helicopter used for its first jungle rescue in Burma.

A YR-4 had been disassembled and rushed to the Far East in response to a rescue plea. By the time the helicopter was ready the original survivors had been evacuated.

The Army Air Force personnel who had been brought to Burma from Wright Field, Ohio for the one rescue mission decided to assemble their machine in case another opportunity presented itself. The test pilots—now rescue pilots—were 1st. Lt. Irwin Steiner and Capt. Frank W. Peterson.

The opportunity came January 24th. A weatherman had accidently shot himself in the hand at a remote weather station 160 miles northwest of Myitkyina, Burma. There was no possibility of the man walking out or of parachuting a medic into the camp. The helicopter looked like the best possibility.

Since the helicopter pilots were unfamiliar with the terrain and the helicopter itself had no radio, it was decided to escort it with L-5 light observation planes.

At 0800 on January 25th the helicopter party received their final briefing. The plan was for the L-5s to lead the helicopter to Sinkaling Hkamti, a strip on the bank of the Chindwin river approximately 120 miles northwest of Myitkyina. At Sinkaling all aircraft were to refuel and proceed to the mountain that lay between two areas of unsurveyed territory about 60 miles northwest. All aircraft took off between 0900 and 0915.

The helicopter flew at tree-top level and was extremely difficult to see against the jungle background. The average airspeed of the rotorcraft was about 60 miles per hour while that of the L-5s was 30 to 40 mph faster. Consequently, the L-5 pilots were forced to circle continuously to keep the helicopter in sight.

Flying problems increased as the terrain grew more rugged.

The helicopter lost the escorting aircraft four times, but in each case Capt. Peterson and Lt. Steiner, who were alternating as pilots, were able to show their location by "hitting" the L-5s with the flash of a mirror.

The helicopter had considerable difficulty getting over one 5000-foot mountain, but was able to surmount it on the third attempt. After topping this mountain, the field at Sinkaling was in sight.

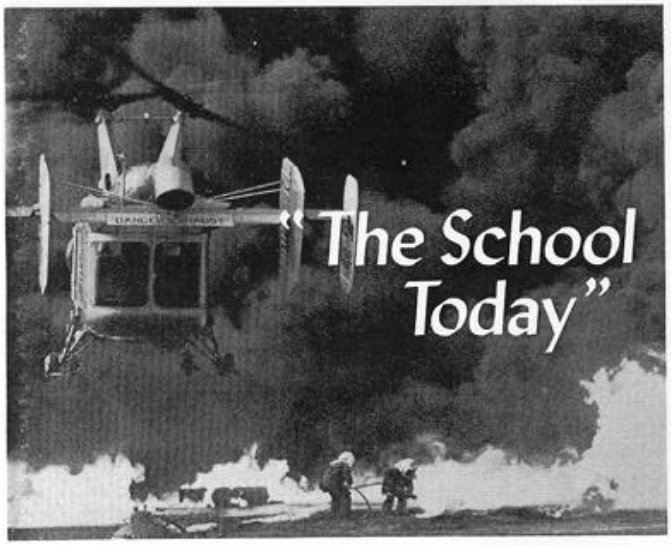
After refueling and having a lunch of K-rations at Sinkaling, Capt. Peterson took off for the mountain weather station.

The place where he landed was in the midst of a circle of high peaks and was located on a razorback mountain. It had a rough strip 250 feet long and bordered on narrow valleys 2500 feet deep. By the time the R-4 was safely on the strip it was low on fuel and the air was very turbulent. Capt. Peterson decided to stay the night. The L-5s returned to Sinkaling.

The next morning the two L-5s took off, flew to the mountain and circled it for an hour while they dropped fuel and messages to the helicopter pilot. There was obviously some difficulty since Capt. Peterson did not take off at once. Finally he spelled out "OIL" with some white cloth and the faithful liason aircraft flew to Sinkaling and brought back some of the lubricant which was dropped to the ground party.

Capt. Peterson took off and flew his injured passenger back to Sinkaling without difficulty. The wounded man was transferred to an L-5 and evacuated to Myitkyina.

Peterson and Steiner made repairs on the R-4 and flew back to the home base the next day and subsequently began to instruct the local jungle resuce unit in the operation and maintenance of the helicopter. It was used to locate aircraft that had been forced down in the area and evacuate personnel until the end of the war.



"The School Today"

As the sole source of helicopter pilots for the Air Force, the school offers 11 courses and produces its own training manuals, training aids, and instructor pilots.

The first days of training give the student an overview of the next 12 weeks. It may be a traumatic experience for an unsuspecting fixed wing pilot. Shocked at having too many control sticks, he finds that a movement of one control must be followed with movement of three more—a never-ending exercise in coordination!

The first flying hours are the most difficult while the student makes the transition from fixed wing aircraft and learns that the "bird" won't "fall out of the sky." From this point it's only a step to complete conversion, where the student trusts his aircraft, begins to wonder why he didn't come into helicopters sooner, and whole-heatredly adopts the school motto: "HELP STAMP OUT FIXED WING!"

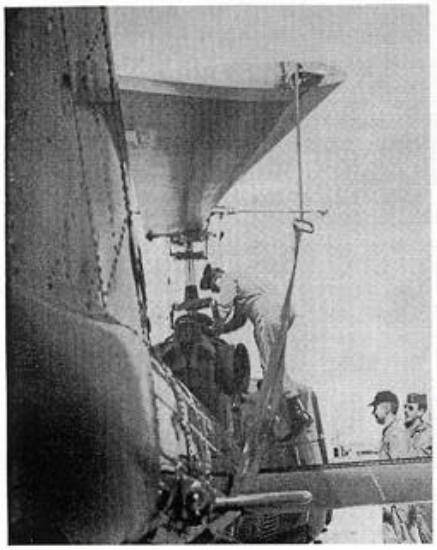
After absorbing the general principles of helicopter flying in the "Huey" and academic courses in engineering and operational training, the course really begins: rocky mountains, wooded clearings, narrow valleys, updrafts, downdrafts, turbulence, and instructor pilots. The intricies of rescue missions, search patterns, hoist and cargo sling operations, emergency procedures, night and weather flying, aircraft performance, navigation, and fuel management must be mastered.

Just when he thinks he can handle any situation into which this crazy machine and demented IP can lure him, they give him another aircraft! For the next 35 hours, he applies the general techniques he learned in the "Huey" to either the "Jolly Green Giant" or the "Huskie." (Students whose asignments are in "Hueys" spend all 70 hours training in the TH-1.) Also tossed into the melee at this time are pilots who are already helicopter qualified, and need only to upgrade in a new aircraft.

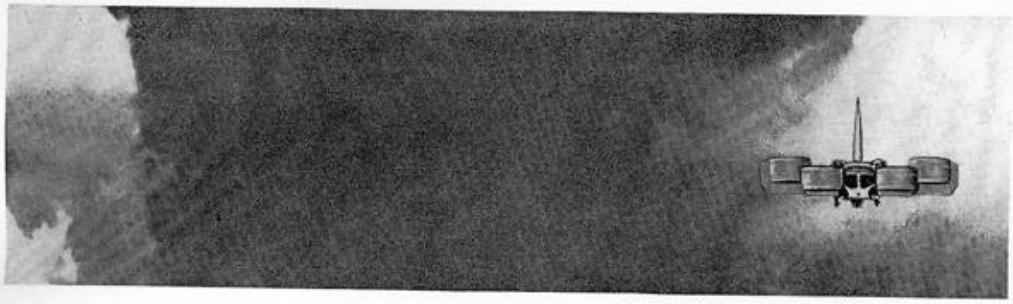
In the first few hours of advanced training the newly bewildered student warily flys the same maneuvers he did in the "Huey" in order to learn his new plane's (and instructor's) idiosyncrasies.

Instruction in the "Jolly Green Giant" turns the student into a proficient rescue pilot capable of flying on instruments in any weather, landing his aircraft in the ocean to pick up astronauts, or hovering 200 feet above the jungle in hostile territory under brutal enemy fire to rescue a wounded fighter pilot.

Thirty-five hours in the "Huskie" turns out a crash-rescue pilot who, upon notification, can be airborne with firefighting equipment in two minutes flat and on his way to a crash site. Once on the scene he will let his asbestos-clad crew off to establish an entry path with foam, hover over the blaze using rotor downwash to provide fresh, cool air for the rescuers and finally fly the survivors to the nearest medical aid.



Top, the rotor-wash from an HH-43B Huskie cuts a path for asbestos-clad fire fighters. Left, students and IP preflight their TH-1F Huey. Below, a student practice lands his CH-3E Charlie on Lake Lawtonka.



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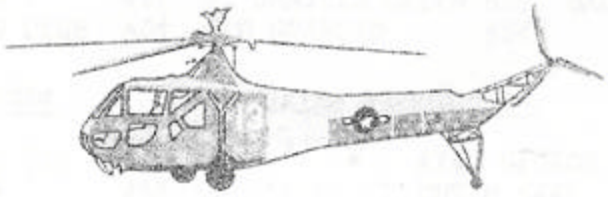

Silver Helicopter Anniversary

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