









The Air Force has long operated several versions of the world-famous Bell UH-1 Iroquois "Huey" helicopter, but if you thought the Huey's days were numbered, think again. A newly rebuilt, refurbished, and upgraded version, the TH-1H Huey II, recently joined the Air Force with the 23rd Flying Training Squadron at Ft. Rucker, Ala.

The new chopper will be used to train USAF's incoming helicopter pilots. At left, the 23rd FTS begins to break in the first Huey II. The Air Force received the aircraft in November.

The 23rd FTS is based at Lowe Army Heliport at Ft. Rucker. The TH-1, wearing a striking overall glossy gray paint scheme, represents a major advance over its predecessors

At left below are the Huey II's squadron marking and patch worn by crew members. By late November, the 23rd, commanded by Lt. Col. Robert Abernathy, had 30 flyable UH-1Hs on hand. Another 10 are on hand, serving as backup inventory.

There are three different UH-1H paint schemes. Some, such as the one below, retain Army markings and have orange-painted cabin doors and a trio of large white characters on the tail boom. The Army began phasing out its active duty UH-1H Hueys in the 1990s, and the Air Force picked up some as trainers. These older Hueys will be given new paint jobs.





The Air Force's venerable UH-1N fleet is a twin-engined variant used primarily by Air Force Space Command security forces.

At left, an exterior panel on the Huey II shows its serial number, which betrays this aircraft's construction in 1973, and its deep blue paint scheme. At right is an older Huey showcasing a weatherworn gray finish. Below, the first TH-1H lifts off from a clearing on the grounds of Ft. Rucker.



USAF has trained pilots at Ft. Rucker since 1972. In the early days of the program, the Air Force flew Army-owned helicopters such as the TH-55 and UH-1H. The Air Force unit stood down in 1991 because USAF felt the need for helicopters would diminish. That philosophy was short-lived, and in January 1994, the 23rd Flying Training Flight was reactivated at Ft. Rucker. (It was redesignated the 23rd Flying Training Squadron in 1999.)







The TH-1H has a more-modern engine, one that is more fuel efficient, giving the TH-1H superior range. The Huey II also has a beefier transmission and a new main mast with stabilizer bar. The main rotor blades are wider, and the helicopter has a larger diameter driveshaft, plus a brandnew tail boom assembly.

Shown above is a line of Bell Helicopter Textron tail boom assemblies that will be mated to old UH-1H fuselages, as part of the TH-1H conversion process.



About all that's left from a UH-1H is the forward fuselage. The Huey II, undergoing a preflight inspection at left, has a longer, sleeker nose with space for avionics growth.

All TH-1Hs will have identical equipment. The Air Force's UH-1Hs lack many of these upgraded items, and their instrumentation varies from airframe to airframe. In the TH-1H, students will know what to expect and will get the same configuration on every flight.

The Huey II comes equipped with crashworthy seats and sports a contemporary "glass" cockpit equipped with a trio of multifunction displays, as seen below left. The aircraft has a full suite of navigation aids. Cockpit lighting is now night compatible with night vision goggles.



The 23rd FTS graduates about 60 students a year, with each one undergoing instruction for about six months. Before students arrive, they will have completed six months of primary fixed-wing training in the T-6A Texan II or T-37B Tweet. The 23rd FTS has 16 active duty instructor pilots training 18 students at any given time. The unit also has 11 civilian contract pilots serving as trainers.





Training sorties feature two students and one instructor pilot. The IP sits in the left seat, a student in the right seat, and the other student in the jump seat. The students get to observe and learn from each other's mistakes. All students use night vision goggles through eight rides and a final NVG check ride. All student night flights are aided by NVGs.

At left, an older-model Huey prepares for a sortie. Note its stubby nose. "While the UH-1H is a great trainer, it is tired, and some of our airframes are approaching 13,000 hours," said Maj. Lee Collins, an instructor pilot.

At right, a Huey II undergoes an inspection. "We train our students here with a global mission emphasis," said Collins. "A few months after students graduate, they could find themselves abroad, flying something like an HH-60G" on a combat search and rescue mission over Iraq or Afghanistan.





The Air Force plans to modify all UH-1Hs into TH-1Hs, at the rate of four aircraft per quarter. All Huey IIs should be delivered by the end of 2007.

Support personnel at left are about to move the TH-1H from the taxiway, after a test flight. The tow tug will bring the Huey II back to the hangar area.

At right, Air Force helicopter pilots (I-r) Capt. Carey Johnson, 1st Lt. James Mc-Cue, and Capt. Randy Voas return after a training sortie. Behind them is a Vietnamera UH-1H Huey. Eventually, this ramp will be filled with TH-1Hs as the 23rd FTS takes delivery of the rebuilt Huey IIs.

The Huey is "basic, easy to fly, rugged, reliable, and responds well to student inputs," said instructor pilot Collins. "It makes a great day/night [visual flight rules] trainer, and students are quick to grasp the Huey flying characteristics."



The rebuilt Hueys are expected to remain flying until at least 2025. From Ft. Rucker, students go to Kirtland AFB, N.M., for further training in their mission helicopters.