

ur AOPA Sweepstakes Waco UPF–7 was a dashing war hero. Well, we're not sure it was a hero, exactly, but it did serve almost from its birth in 1940 as a training aircraft for the Civilian Pilot Training Program

(CPTP). And Wacos often did the most glamorous training in that program, like aerobatics. The purpose of the program was to provide a pool of pilots in the event of war. So there it is: We've elevated our Waco's past to the level of *glamorous* and *dashing*.

The CPTP was glamorized by Hollywood in the 1939 movie 20,000 Men a Year. We'll borrow this link with Hollywood as further proof of our Waco's glamorous past. OK, the evidence is sketchy and the film was panned by critics as one of the worst

of that year, but it served to fire the imaginations of college students who were recruited for the program. Incidentally, the movie title is inaccurate: When the program began in 1939, 10 percent of all CPTP trainees were women. However, women were banned from participation starting in June 1941.



CPTP—an instructor's perspective

We haven't tracked down exactly what our Sweepstakes Waco did on a day-to-day basis, but we did find a former CPTP instructor, Holland L. "Dutch" Redfield, who included an account of his days teaching aerobatics in a similar Waco UPF-7 aircraft in his book, *Thirty Five Years at the Outer Marker*. Although the book is out of print, photocopies may be obtained through a Web site (www.geocities.com/vmken/BookRedfield.html).

Redfield, who at the end of his career was teaching Pan American pilots to fly the Boeing 747, loves the Waco UPF-7 to this day, saying that it is built like a brick structure of high utilitarian value—his description was shorter. To quote Redfield, he loves "the open cockpit, the magnificent radial engine, the large disk'd propeller, the control stick between



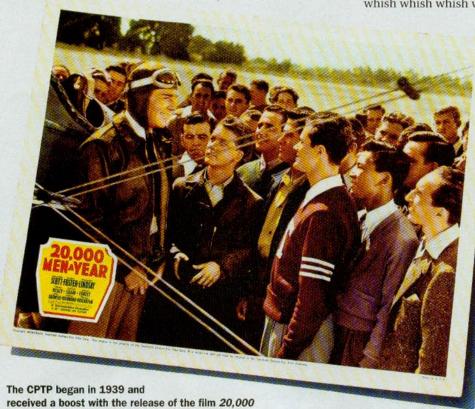
the knees—I am pleased." He describes the sound of the giant propeller with the engine at idle power. "A slow rhythmic whish whish whish whish—like the beat of a swan's

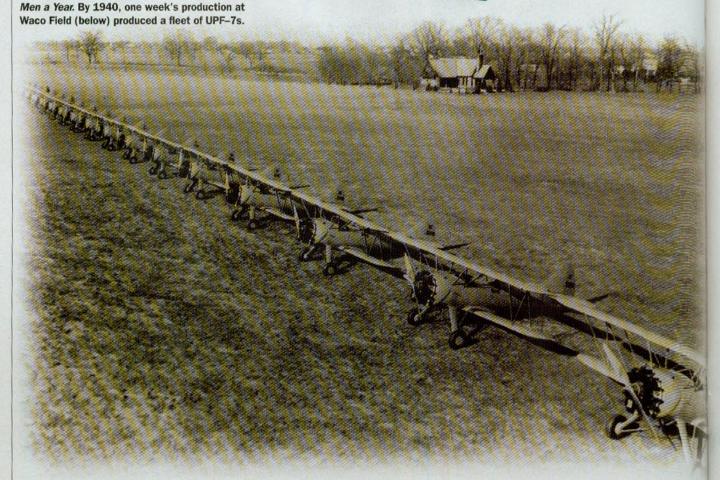
wings in flight...."

Redfield describes the UPF-7 as a tough, rugged airplane, built to rigid military trainer standards and therefore lacking the nimbleness of other Waco models. "But you didn't have to worry about the UPF-7 falling apart under the high stresses of the advanced aerobatic maneuvering that was called for in the course program."

Seven days a week

It's a good thing Redfield liked his airplane, because he spent seven days a week in it. "Working with my six students, I might spend the entire day Monday, hour after hour, doing exacting eights around pylons; Tuesday, beautiful chandelles; Wednesday—all day—snap rolls; Thursday, demanding slow rolls; Friday, punishing split S's; Saturday, half-rolls; Sunday, Immelmanns." His





"The airstream sounds of flight and the whistling wing-brace wire sounds rapidly diminished to absolute silence, and we hung there like a spent arrow."

-Holland Redfield

role as a CPTP instructor lasted through three years of the early 1940s and 1,900 hours of flight.

Not all of those hours were placid ones. Hearing from his boss about a "square loop," Redfield decided to try one. As he applied negative Gs, the engine quit while the UPF-7 was nearly vertical. "The airstream sounds of flight and the whistling wing-brace wire sounds rapidly diminished to absolute silence, and we hung there like a spent arrow. Cows mooing, dogs barking, train whistles, and auto horns beeping below could be clearly heard. Still we hung there, pointing straight up, despite everything I tried.

"It seemed forever before the Waco slowly started sliding backwards, and then, with a resounding, neck-bending crash, flipping violently end for end, in a split second it was pointed straight down. As we dove for the Earth the dead propeller ahead slowly began turning again, and the sounds of flight came alive. Clank, clank, clank, clank, clank, and the engine windmilled back to life. My student in the cockpit behind banged the coaming and yelled, 'That was fun. Let's do it again!'"

No chickens here

Then there was the day another instructor nearly dumped a student whose seat belt had become unfastened during a roll.

"With his belt unfastened, he actually had started to tumble out of the rear cockpit," Redfield writes in his book. "He had somehow been able to



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AOPASWEEPSTAKES



"The inverted spin was very, very violent. It wraps up very fast."

-Bill Brannen

stay with the airplane by jamming the big toe of his right foot under the stabilizer hand crank on the cockpit side wall, while at the same time catching and maintaining a tenuous grasp on the cockpit coaming with just the fingertips of the opposite hand. He then clung desperately, but listened patiently, as his instructor through the still-attached Gosport tube gave a lengthy dissertation on the finer points of flying a half-roll. Later on the ground, the student tried to explain to his instructor what had taken place up there. The wide-eyed instructor asked, 'My gosh, why didn't you holler?!' The student replied, 'I didn't want you to think I was chicken!""

After our AOPA Waco flies this fall, we'll try some of those tricks—not the ones where the pilot falls out of the airplane, but light aerobatics—and give you a full report on open-cockpit flying in aviation's Golden Age.



The location of this ground loop is unknown, but the aircraft above is our AOPA sweepstakes Waco.

CPTP—a student's perspective

Bill Brannen, a 79-year-old resident of Eatonton, Georgia, had just graduated from high school in 1942 when he volunteered to be a Navy pilot. Actually, he first tried unsuccessfully for the Army Air Corps. The Navy recruiter looked askance at his high school grades and commented that they weren't very good. Brannen agreed: "I know, but I'll be the best fighter pilot you ever saw."

"You're in," the recruiter answered. At that time, the military services were taking advantage of the Civilian Pilot Training Program, even though it was aimed primarily at civilians. Brannen found himself first at Howard University for CPTP primary flight training in a Piper J–3 Cub, and later in a class of 25 students at Auburn University for advanced training in a Waco UPF–7. Most of his classmates were college undergraduates and graduates.

The trainees were given a room in a boardinghouse, food, and transportation to and from the Auburn-Opelika Airport—the hangar they used is still there today. But no money. That had to come from home. The two-month

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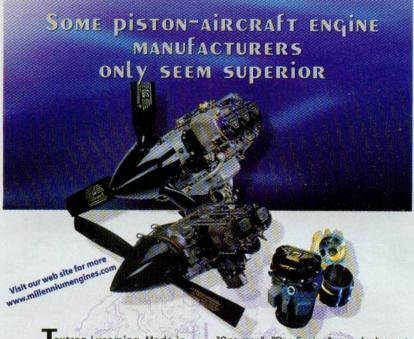
course ran six days a week, ground school in the morning and two 1.5-hour hops in the afternoon. The classwork was difficult for Brannen, so he sat on "Johnny" at night and read while the others slept, since the toilet was the only place where there was enough light, he recalls. Later in his career he proved his intellectual capabilities by getting admitted to medical school. Recalled to military service only a year later, he ended up as a test pilot at the

Patuxent River Naval Air Station in Maryland—a job that equates with a doctorate in flying.

work. For a man only 5 feet 7 inches tall, the UPF–7 seemed like a huge airplane with an enormous cockpit. There were

For a man only 5 feet 7 inches tall, the UPF-7 seemed like a huge airplane with an enormous cockpit.

Cadet Brannen passed ground school. In the air, he drilled on maneuvers during the 60 total hours of training; there was no navigation or cross-country several types of stalls to learn: those performed straight ahead, those in turns, and accelerated stalls. There were snap rolls to the left—where engine torque



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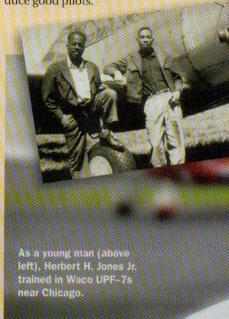
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A snap roll that ended upside down

Herbert H. Jones Jr., now 78, trained for six months in Waco UPF-7 aircraft with aviation pioneer Cornelius Coffey and his equally famous pilot wife, Willow Brown at the Coffey School of Aeronautics near Chicago. Although he had two years of college, it was one of the few CPTP programs not connected with a university. He flew for six months in the secondary program that was designed to produce commercial pilots and flight instructors. Aerobatics was part of the daily routine designed to produce good pilots.



helps the cross-controlled airplane through a violent roll—and more difficult snaps to the right, and there were spins and even inverted spins.

"The inverted spin was very, very violent. It wraps up very fast. In most airplanes, if you turn everything loose, the airplane will recover. With the Waco, you had to give it full opposite controls plus a blast of power briefly to get it to come out," Brannen recalls.

Keep it flying, stupid

Did he ever do anything wild—like a playful kid might do—while on solo

flights? Not until later during active Navy training when he rolled a Boeing Stearman (N2S) at night. It turned out OK. He's still here, despite later having a carrier sunk from under him after a grueling eight-hour day of combat and patrol flying.

He wanted to pass along some advice distilled from all those years of experience. It has to do with emergency landings: "Keep it flying, stupid!" Do that, and you'll live through the crash, Brannen advises.

His experience shows the depth of preparation provided by the Civil-

One Enterprise Drive, Old Lyme, CT 06371 Tel: 860-434-9190 Fax: 860-434-1759 Canada: Tel: 514-426-3013 Fax: 514-426-3953 ian Pilot Training Program, and the Waco UPF-7's im-

Waco UPF-7's important contribution to the nation's defense.

We're proud that AOPA's Waco, used for training in the Northeast, was part of that history.

E-mail the author at alton.marsh@ aopa.org Links to additional information about Holland Redfield's book, Thirty Five Years at the Outer Marker, may be found on AOPA Online (www. aopa.org/pilot/links.shtml).

"Most of us had flown Piper J-3
Cubs, and the Waco looked like a
huge machine," Jones recalls. The
Waco, he found, is a docile airplane,
but he remembers one day when he
recovered from a snap roll—basically
a horizontal spin—upside down. He
dove from that position, known as a
split S, and exceeded the redline airspeed before getting the airplane
level. "The Waco is a very strong airplane," Jones said, and it suffered no
damage from the high-speed dive.

He recalls there were 15 students in his barracks. Training did not start until 9 a.m. It was winter, and the school didn't want to start the airplanes in the cold temperatures.

Today, Jones owns Metropolitan Aviation with his wife at Washington Executive/Hyde Field in southern Washington, D.C.

—AKM

