

Persiste



RICHARD WHITE

“As a kid growing up next to a PT-19 Army airfield during World War II, I used to dream about going up into the wild blue with those young cadets. I would envision myself wearing a leather helmet and goggles as the wind swept across my face while I held that long control stick in my shaking hands. Although it took me over 68 years for my dream to come true, it was a journey of a lifetime, one I would never change and definitely one I will never forget.”

—Herbert “Herbie” Carper

nt Dreamer



The resurrection and restoration of a PT-19

BY JIM BUSHA

PT-19 Memories

Even though Herbert “Herbie” Carper was only 5 years old when the war broke out in late 1941, visions of dark blue and shiny yellow Fairchild PT-19 primary trainers with candy red-striped tails taking off and landing at Garner Army Airfield are forever embedded in his memory.

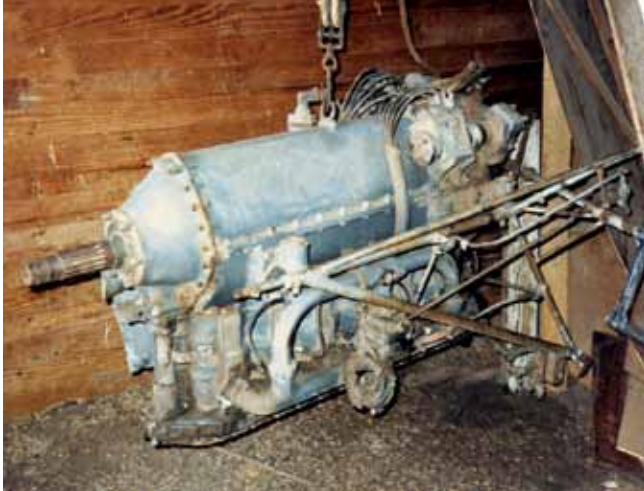
“My hometown of Uvalde, Texas, had the best aviation playground a young boy could have ever wished for,” remembers Herbie. “With so many PT-19s criss-crossing the wide-open Texas sky, along with a handful of PT-17 Stearmans thrown in as window dressing, it was impossible for me not to fall

in love with these primary trainers. What struck me the most, however, was when I finally got to meet a real pilot and learned how tough a job it was to teach these new cadets how to fly.

“I had been out with my mother and grandmother visiting my aunt’s ranch, and as we made our way home, I spotted a lone PT-19 sitting off to the side. My mother stopped and spoke to the pilot while I took a slow walk around the PT-19, examining every nook and cranny. It wasn’t until much later that I learned why the pilot had decided to land there. He was one of the primary instructors and had set the PT-19 down on an auxiliary field

trying to take a break from the war. Most of them knew that the kids they taught how to fly and fight may never come back. I think that’s what kind of inspired me to want to own and fly a warbird of my own someday, along with the idea of preserving our nation’s history.”

Although the images of PT-19s danced in Herbie’s head for a long time, he was sidetracked with life’s responsibilities: going to school, finding a job, and supporting a family. Herbie earned a doctorate in mechanical engineering and taught at Texas Tech University. He married his wife, Janet, in March of 1961. During all of this, fly-



PHOTOS COURTESY HERBIE CARPER





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ing took a back seat, and Herbie didn't earn his wings until the 1970s.

"I flew off and on while I was going to school, and had to stop every time I went broke. Needless to say I started and stopped a lot! I ended up earning a glider rating first and then my power ticket. Eventually I bought a Cessna 172 and a Stearman, and used to do a lot of hangar flying on Saturdays with a group of local pilots. Sometime in 1986 I was thinking out loud one day and said, 'Boy I wouldn't mind finding an old World War II airplane to restore.'

"The guy next to me piped up and said his father-in law had one in a barn not far from here. I asked what it was, and he said it was a PT-19. My eyes got as big as dollar pieces, and my mind was immediately overloaded with childhood visions of blue and yellow primary trainers; I was like a kid repeatedly asking him when we could go see it. Who hasn't dreamed of finding an old airplane in a barn, dusting it off and flying it? Unfortunately that 'dream' almost became a nightmare."

History of the Fairchild PT-19A

In 1939 the Fairchild Aircraft Company designed and built a two-place, open-cockpit, low-wing monoplane made primarily of wood, fabric, and tube and christened it the M-62. During the summer of 1939, the M-62 competed against 17 other designs, all of them battling to win a lucrative new

primary trainer contract with the U.S. Army Air Corps.

When the dust settled and the last airplane landed, the Fairchild M-62 was the hands-down winner. The Army Air Corps called it the PT-19A Cornell and ordered 270 of them right off the bat.

The Army liked the 175-hp Ranger inline engine because it not only gave greater visibility to both instructor and student, it also had ample power for the new cadets. The cadets loved the PT-19A because of the fighter-like feel and the wide landing gear arrangement, giving them greater directional control on landing.

Because of the need for more training aircraft, Fairchild turned to four other aircraft manufacturers—Aeronca, Howard Aircraft Corporation, Consolidated Aircraft Corporation, and St. Louis Aircraft—to push out as many PT-19s as they could. By war's end, more than 4,800 PT-19A Cornells were built, with some of them ending up in Chile, Canada, Norway, Brazil, and Ecuador.

One particular PT-19A, built in October of 1943 and given the military serial number of 42-83435, arrived at the 68th Flying Training Detachment, Army Air Force Flying Training Command, Jackson, Tennessee, on November 5, 1943. For the next seven months this PT-19A taught new recruits the finer points of flying before they progressed to basic trainers like

the Vultee BT-13 Vibrator.

Declared "excess" on June 30, 1944, the PT-19A was ferried to Laurel AAF, Missouri, where it sat out the remainder of the war. On September 18, 1944, it was declared surplus and removed from Army records.

The Reconstruction Finance Corporation sold the PT-19A to a civilian flying service on June 28, 1945. It flew in civilian hands for a while, was bought and sold by a dozen individuals, and then stopped flying altogether in 1958. Somewhere along the line it ended up in a Texas barn, and it remained in a state of long-term hibernation until it was given a second chance in 1986.

PT-19A Rescue

Jumping into his Cessna 172, Herbie and his newfound friend set out to find the lost treasure of a PT-19 stored inside of a barn. Perhaps, however, Herbie should have heeded the familiar saying, "Be careful what you wish for."

"We flew IFR [I follow roads] the whole way until we came upon his in-laws' farm. When I asked where the landing strip was, all I got for an answer was, 'There's no runway here, land on the cow pasture—but watch out for those cows, and for God's sake don't hit any of them!'

"That should have been my first clue to turn around! After we landed and we made our way to the barn, I was expecting to find a PT-19 suspended in



PHOTOS COURTESY HERBIE CARPER



time with just a fine coat of dust on it. But when that barn door creaked, clanked, and rattled open, it unfolded an airplane house of horrors. A bare tube fuselage hung from the rafters, while a rusty set of block-and-tackle held the remains of a Ranger engine, suspended in mid-air with a rat's nest adorning the intake duct.

"The wings were in a side room, and they looked as if some kids had used them for a game of 'let's run up and down the wing and see how many holes we can stomp into them.' There were parts scattered all over the place, but by far the worst major piece was the center section.

"Made primarily of wood, it was pushed outside for over 20 years where any usable parts rotted away in the elements. The nose ribs were gone, and all that was left were two wooden spars connected by metal compression ribs, the landing gear, and some old worn-out tires. Needless to say I was heartbroken.

"About the only positive thing that



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kept me going was my memories of what these proud warriors looked like back in the 1940s. My second shock came when I asked the farmer, an ex-World War II Navy pilot, how much he wanted for it."

"It's not for sale," he said. "My son and I are going to rebuild it someday."

"I should have left well enough alone, but I ended up pestering him for the next year, and it was only after he learned his son wanted no part in rebuilding the Fairchild that he agreed to sell it to me."

In March of 1987 the remains of the PT-19A were removed from the Texas



PHOTOS COURTESY HERBIE CARPER



barn, loaded in a rental truck, and transported to a nondescript hangar in Levelland, Texas. It was there the transformation of Herbie’s “bushel basket of parts” began—a transformation that lasted more than 20 years.

PT-19 Restoration

The hardest part for Herbie was trying to figure out what he had, what he could use, and what was junk. He admits that the junk part was easy.

“I wanted to start with the center section because I knew that would take the longest to restore. I didn’t have any drawings and didn’t know what the shape of the nose ribs or tail ribs should look like. I eventually went to the Texas Tech University library and found an old 1939 *Aero Digest* with an article about the PT-19 and its design specifications.

“The article gave the NACA profile numbers, each of them with an equation I programmed into a computer, and it spit out the perfect coordinates of the nose ribs and tail ribs. I plotted these full-size on drawing paper, made full size jigs, and then went to work on the ribs.

“The whole center section project took me 10 years. But my attitude was if you worry about getting it done in a certain time frame you will never enjoy the project. My advice to wannabe restorers is to get rid of your calendars and your stopwatches and enjoy the rebuilding process.”

PT-19A Specs	
Wingspan	36 feet
Length	28 feet
Height	7 feet 8 inches
Loaded weight	2,800 pounds
Crew	2 in tandem
Engine	Fairchild Ranger 6-440C-2, 175 hp, six-cylinder inverted, inline, 441 cubic inches
Fuel	49 gallons, 45 usable
Range	430 miles
Cruising speed	110 mph
Max speed	122 mph
Service ceiling	13,200 feet

Herbie’s No. 1 priority was to restore the PT-19A as close to as original as possible. That meant he had to scrounge for parts, and his best friend turned out to be the World Wide Web.

“I used the Internet a lot, and I also joined a couple of Fairchild Clubs that were a great help as well. I found a very rare D2 wobble pump at the Fly Market in Oshkosh back in the 1990s. I took it apart and couldn’t find anything wrong with it—that can be frustrating for an engineer!

“When I bought my project it had no windscreens. Somewhere along the line they were chopped out and replaced with a Plexiglas canopy. I was able to get an almost new pair of frames from a museum on the East Coast, and that’s just a couple of examples of the great camaraderie the aviation world has when it comes to

airplane restoration.”

Herbie retired in 1997 and eventually moved the entire project back to his hometown of Uvalde. He was welcomed with open arms by a local aircraft museum and was asked if he wanted to continue the restoration in one of the hangars that originally housed fellow PT-19s during the war.

“For me that was like stepping back in time, being able to work on the same airplanes that young mechanics did almost 60 years earlier. I think the pace of the project also picked up as well because of some volunteers who stepped forward and taught me some wonderful

skills. I found a local furniture maker who helped me put the mahogany plywood skins on the center section. Another fellow helped me with the wings and showed me some basic woodworking techniques.

“The wings were kind of tricky because they had a twist built into them. The airfoil changed from the root to the tip, and it was designed that way for good aileron control. To keep the twist true, I placed the wing on some sawhorses that were spaced a certain distance apart. I placed wedges under the wing at certain points and then went to work re-creating the original twist. I think it worked out quite well.”

Almost every major part on the PT-19A had to be rebuilt: the elevators, ailerons, rudders, fuselage, wings, cockpits, and so on. Herbie never batted an eye, and never looked at a calendar as he pro-



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gressed through each restoration stage. When he wasn't gluing some wood or covering a piece with fabric, Herbie had his hands full with "a little paper shuffle" problem that was bestowed upon him by some previous owners.

"I should have seen it coming; after all I was the 'lucky' 13th owner of the PT-19. When I originally bought the project I found that the farmer was not the registered owner, and there was no airworthiness certificate with all the paperwork. Finally, after a lot of dead-end leads, I got it all straightened out and was even able to obtain the original N number of NC50480."

With a majority of the pieces covered, it was time for the paint. Herbie stayed true to his vision and went with the blue and yellow scheme that the early PT-19s wore.

"I decided to let a local paint shop do the finish work, and I took every piece over to them that needed to be painted yellow and they sprayed it yellow. I did the same with the blue pieces and the whole airplane turned out superb. Then

all I had to do was assemble the project."

Herbie also farmed out the Ranger engine to a mechanic in Kentucky. The mechanic installed new main bearings, wiring harnesses, new magnetos, new camshaft, overhauled carburetor, and six new standard-diameter cylinders. The Ranger was put on a test stand, and when he fired it up for the first time since 1958, it purred like a homesick kitten. It was running as smoothly as the day it left the factory.

"Satisfied that there were no leaks, I loaded it in the truck and headed back to Texas. The assembly of the PT-19 began in 2009 with my focus of making EAA AirVenture later that summer."

The PT-19 Dream Comes True

By early July of 2009 the PT-19 was set to take to the skies once again. With the paperwork complete and the annual inspection signed off on July 7, it was time for Herbie to don his helmet and goggles and fly like a cadet.

"Although I had a lot of Stearman

time, I had never flown a PT-19 before. I talked to a bunch of people who all said if I can handle a Stearman, I can fly a PT-19 just fine.

"Just to be on the safe side, and to keep the insurance company happy, I enlisted the help of my brother-in-law, who is a CFI, and placed him in the back seat. Words cannot express that first flight, as my whole life seemed to explode like a flash flood awash with PT-19 memories. The PT-19 flew flawlessly, and when I turned to final I had the impression I was in a sailplane; it just felt so smooth and responsive. I was elated that after spending the last 22 years of my life working on this one airplane, an airplane that had been in my blood since childhood, I just couldn't get over the fact that this dream was now a reality."

For all of Herbie's hard work and dedication to his PT-19 project and for restoring it back to original condition, he was awarded the Best Primary Trainer Award along with a Silver Wrench Award at EAA AirVenture Oshkosh 2009.

