Fairchild PT-23 M62C

FAIRCHILD PRIMARY TRAINERS

In 1938, while most military pilots were still receiving their initial training in biplanes, Fairchild Aircraft recognized the need for a new design more closely approximating the more advanced types of aircraft the trainees would soon be flying. The result was the development of one of the most innovative and effective primary training planes ever designed, the Fairchild Primary Trainer (PT). The Fairchild PT was given its factory model number M-62 and its official name, the Cornell. The first prototype flew on May 15, 1939, and later that year won a fly-off competition against 17 other designs for the new Army training airplane. Fairchild was awarded its first Army PT contract for an initial order of 270 airplanes on September 22, 1939.

When Japan bombed Pearl Harbor on December 7, 1941, demand for military pilots skyrocketed making it necessary for Fairchild Aircraft (FA) to look for subcontractors to assist in meeting the demand for the PTs. Soon, four North American subcontractors were signed up; one Canadian company, Fleet Aircraft (F), and three U.S. companies, Howard Aircraft (HO), St. Louis Aircraft (SL), and Aeronca (AE) as well as Fabrica do Galeao (FG) in Brazil.

Three basic variations of the Fairchild PT were produced, the PT-19, PT-23 and PT-26. All three versions used the same basic airframe. The first and most common, the PT-19, is an open cockpit design and features Fairchild's Ranger engine with its six inverted inline cylinders. The PT-26 is the Canadian version of the PT-19 and features a sliding canopy and cockpit heating system for protection against the Canadian winters along with a few other differentiating features.

The PT-23 version is identical to the PT-19 from the fire wall back. The difference between the two ships is the Continental 670 radial engine mounted on the front of the PT-23. Production of PT-23's began in 1942 when concerns mounted over a possible shortage of Ranger engines. Interestingly, while Fairchild built the first two prototype PT-23 aircraft, all subsequent production of this particular model was done by the licensed manufacturers.

Paint scheme differences also appeared as production progressed. Prior to June of 1942, all U.S. Army PTs were painted with the then-standard blue fuselage and chrome yellow wings and tail. The aircraft rudders featured a single vertical blue stripe and horizontal red and white stripes. From June 1942 on, all production Air Corps trainers left the factory with an all-silver finish. A common restoration error with PTs is the application of the blue and yellow paint schemes on aircraft manufactured after May 30, 1942. It fact, only one PT-23 was ever painted blue and yellow and that was the factory prototype. Another significant change was made in August of 1942. Then, the red center spot in the white star, a tradition since 1927, was removed as of August 18, 1942 due to the similarity with the Japanese national insignia; The red, white and blue rudder bars were also dropped at the same time.

Between 1940 and the end of production it is believed that 7,442 airplanes were produced. The breakdown between models being 4,527 PT-19's, 1,790 PT-26's and 1,126 PT-23's. The total number produced over the life of the design is believed to be in excess of 8,130 airplanes. By 1944, more World War 11 pilots had received their first introduction to military flight in Fairchild PTs than in any other aircraft. This number includes not only US and Canadian students, but pilots from Great Britain, France, Norway, Mexico, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay, Rhodesia, and India.

The PT-23, USAAF No: 42-49805, was delivered to the USAAF on August 27, 1943. It was assigned to the 69th Flying Training (Elementary) Detachment, 2154th Army Air Force Base Unit, operated by the Clarksdale School of Aviation at the newly constructed Fletcher Field eight miles north of Clarksdale, Mississippi. From its first day on July 5, 1942 until the last student left on October 14, 1944, several thousand Army pilots received their training there, most of them in Fairchild PTs.

Upon its arrival at Fletcher Field, this PT-23 was assigned line number 139 and the number was painted on its side. We know this line number because of a common but little known practice of base mechanics. To avoid mixing the removable metal skin panels of one airplane with those of another during routine maintenance, the mechanics would write the aircraft's line number on the inside of the panels. Despite many re-paintings over the years, no one had ever removed the original line number 139 from the inside of the panels.

During the restoration of this airplane, every effort has been made to make it as authentic as possible. The airplane is virtually identical to how the plane looked to the young cadets as they approached it on Fletcher Field 60 years ago. With few exceptions (such as modern radio equipment), everything on the airplane is as it was originally. For example, to secure various wires and cables we have even used the manufacturer’s original wraplocks rather than their plastic tie wrap counterparts of today.

The PT-23, N64097 is owned by Greg Herrick of Minneapolis, Minnesota. It was restored by Joe Denest and his son Mark, of West Chester, Pennsylvania. During the restoration a couple of ironies surfaced. Greg purchased the airplane from a Pennsylvania owner who had owned it for many years. Two years after he bought the plane, while researching the records, Greg found the airplane had actually spent most of its life in Minneapolis starting with its original purchase out of surplus in 1946 (for $510.00). The plane moved through a succession of Minnesota owners, then to Illinois, and finally to Pennsylvania. Not until the restoration was completed did he realize the plane was actually coming home.

The second irony was a very personal one for the airplane's restorer, Joe Denest. There are only a very few who can truly be called Fairchild PT experts and Joe is definitely one of them. For more than twenty years they are all he has flown. He has lovingly restored six Fairchild PTs and knows them inside and out. While assisting in the research of the history of No 139, he contacted the man who taught him to fly PTs, Joe Leonard, of Lakeland, Florida. Imagine Joe D's surprise to learn that his first instructor was actually based at Fletcher Field, Mississippi, in WW II. And when his old instructor dug out his log books ... you guessed it, the restorer's first flight instructor had logged over 100 hours in PT-23, Line Number 139 - this very airplane! The restoration took on a whole new meaning for Joe.

We like our plane. We hope you do, too. Owning and flying an old bird like this is definitely fun, but sharing it with others is really what it's all about. This and other airplanes like it, need to be saved. There is no substitute for standing in front of the real thing and dreaming about its great or small place in history. It's enjoyable to pause and reflect that hundreds received the gift of flight in this airplane, pilots who then went on to serve their country. Old airplanes are more than old airplanes, they are a part of many lives and many things.

Specifications:
Fairchild PT-23-SL Army SN: 42-49805 N64097

Mission:
WWII Primary Trainer (PT)

Designed by:
Fairchild Aircraft, Hagerstown, Maryland. Manufactured under contract by St. Louis Aircraft, St. Louis, Missouri, USAAF

Model: PT-23-SL **Civilian Model:** M62C
USAAF Identification Number: 42-49805
Manufacturer's Serial Number: 129
Engine: Continental R-670-11, 220 HP
Propeller: Sensenich, two-bladed, fixed pitch, wood
Delivered to US Army Air Force: August 27, 1943
Original Cost: $9,430
Delivered to: Clarksdale School of Aviation, Clarksdale Airport, Mississippi
Assigned to: 69th Flying Training (Elementary) Detachment, 2154th Army Air Force Base Unit.
Based at: Fletcher Field, Clarksdale, Mississippi
Line Number: 139
Total PT-23s manufactured: 1,126
Estimated Number Flying Today: 43

BASIC CONSTRUCTION

The basic construction includes a two-place, tandem seating, cantilever low-wing monoplane, with fabric-covered welded steel tube fuselage, fixed landing gear, plywood-covered wood center section, outer wing panels, and tail assembly.

Original USAAF Performance Specifications with R-670-4 Engine

Takeoff speed: 60-65 mph Best

Gliding Speed: 80 mph

Climb Speed: 80 mph Best

Rate of Climb: 870 fpm

Service Ceiling: 13,500 ft

Cruise Speed: (1815 RPM @ 3,000 ft)

Cruise RPM: 1800 (1890 max.)

Use at Cruise: 13-18 gal/hr (13.2 gph @1815 RPM and 3,000 ft.)

IAS/TAS: 103/108 mph Fuel

Fuel Capacity: 49 gals. total, 45 gals. usable

Minimum/Maximum Range with 40 gals.: 220/320 statute miles

Maximum Diving Speed: 191 mph (I wouldn't even get close)

Maximum Flaps Extend Speed: 95 mph true indicated

Stall Speed: 61 mph

Wing Span: 36'-0"

Gross Weight: 2,800 tbs.