

The original Laird Commercial of 1925, powered with a 160-hp Curtiss C-6 engine that originated in 1918. Note the straight-axle landing gear and the old-fashioned side-mounted radiator.



## Yesterday's Wings

# The Laird LC

by PETER M. BOWERS / AOPA 54408

■ ■ The Laird Commercial biplane is a good example of several mid-1920s civil airplane designs that managed to survive the transition from the unregulated period of U.S. civil aviation that ended in 1926 to the new era of government regulation that began in 1927.

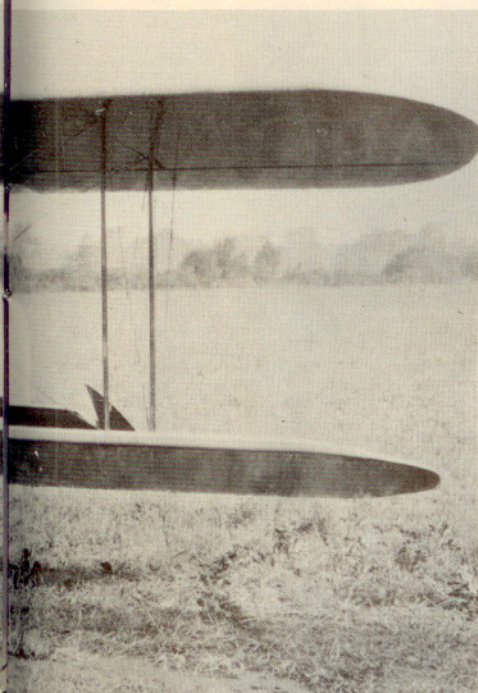
In addition to controlling the operation of airplanes and the licensing of pilots, the new regulations also established strict performance and structural requirements for airplanes that now had to qualify for an Approved Type Certificate (ATC) in order to participate in commercial operations.

An early benefit of the new regula-

The 1928 Laird LC-B, which became the LC-B200 after the 300-hp model appeared in 1929. This photo was taken in 1940. While the airplane has been updated by adding an engine cowling, it still uses the old spring leaf tail skid even though operating on pavement.







## LAIRD LC

LC-B200  
1928

LC-B300  
1929

### Specifications

Powerplant	Wright J-5	Wright J-6-9
	Whirlwind 220 hp @ 2,000 rpm	Whirlwind 300 hp @ 2,000 rpm
Span	34 ft (upper)	28 ft (upper)
	30 ft 6 in (lower)	24 ft (lower)
Length	23 ft 9 in	22 ft 7 in
Wing area	295 sq ft	202 sq ft
Empty weight	1,800 lb	1,922 lb
Gross weight	2,850 lb	3,010 lb

### Performance

High speed	130 mph	155 mph
Cruising speed	110 mph	128 mph
Initial climb	1,000 fpm	1,200 fpm
Service ceiling	19,000 ft	17,000 ft
Range	650 sm (76 gal)	575 sm (76 gal)



The 1926-27 Laird LC, with 200-hp Wright J-4 Whirlwind engine, wide-track landing gear, and such refinements as lights and parachute flares for night flying. This was an early use of a steel spring leaf as a tailskid.

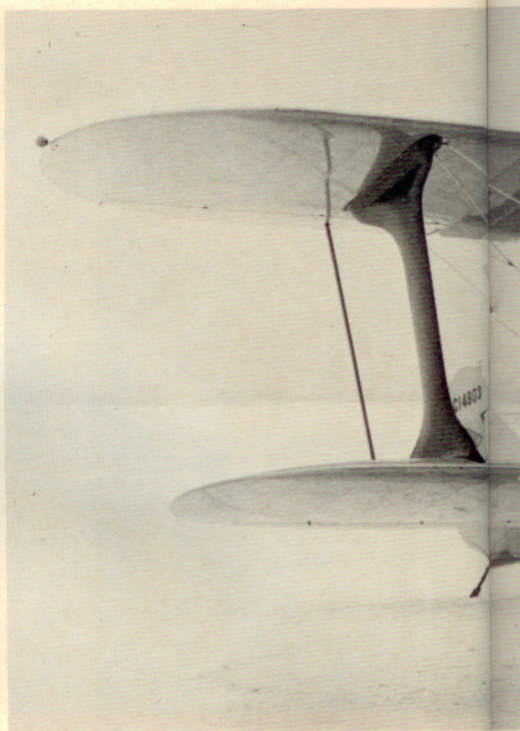
tions was that they effectively killed off the remainder of the cheap war-surplus fleet that had so effectively stifled the production of new designs in the early postwar years and cleared the field for new, modern designs. While some of the newer models that had begun to appear by 1925 were able to gain a significant share of the market at the time, none were able to qualify directly for the new ATCs. Some, including the Laird, found it relatively easy to adapt to the new requirements and stayed in production until the Great Depression virtually shut the industry down in 1930.

In 1925, when the Commercial appeared, designer E. M. "Matty" Laird was no newcomer to aviation. He had

designed and built his own airplane in 1916 and was one of the first to enter the market with a new design for the postwar boom in civil flying that was supposed to begin in 1919. He did manage the minor miracle of building and selling small numbers of his 1919 Swallow design in competition with the war surplus for a few years before selling his E. M. Laird Co. of Wichita, Kan., to his former employees. With the old firm's name now changed to Swallow, Laird again used his own name when he established a new firm, the E. M. Laird Airplane Co. of Chicago, Ill.

Business was very slow at first—and Laird managed to turn out prototypes of interesting new designs that the





#### YESTERDAY'S WINGS *continued*

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market simply wasn't ready for as yet. By 1926, however, the surplus models were wearing out so the market could now support significant production of new designs.

Laird's 1926 offering was a refinement of the original Commercial, now marketed as the Model LC. It was a thoroughly conservative three-seat, open-cockpit biplane with the pilot in the rear cockpit and the passengers side by side in the front. The wings and horizontal tail were of wood-frame construction, the vertical tail was welded steel tubing, but the fuselage was unique in using duralumin tubing joined by steel fittings and braced by steel tie rods.

War-surplus powerplants were still widely used in new-model airplanes at that time, primarily as an economy measure, and early Commercials were available with the 90-hp Curtiss OX-5, the 160-hp Curtiss C-6, or the new 200-hp Wright J-4 Whirlwind air-cooled radial, which had just come on the civil market.

A boost for civil airplanes in the LC's weight/power range resulted from the government transfer of most of the airmail routes from Post Office operations to private contractors in mid-1926. It was easy for Laird to convert the front cockpit of a Wright-powered LC to a mail compartment, and he quickly sold several to Charles Dickenson, holder of Contract Air Mail



Route (CAM) 9 from Chicago to Minneapolis/St. Paul. This route was soon taken over by Northwest Airways (now Northwest Airlines), and the airplanes continued their original runs under new ownership.

By 1928, the LC had taken on enough state-of-the-art refinements—things like divided-axle landing gear and wheel brakes—to justify the revised designation of LC-B. This model, powered with the 220-hp Wright J-5 Whirlwind, was awarded ATC-86 in November 1928. The earlier LCs that were still in service couldn't quite qualify for full ATCs under the new rules; they had been given the lesser

*Developed as a high-performance sport plane, the LC-R300 Speedwing had racy lines and wings six feet shorter than the workhorse LC-B models. The I-struts were to be notable features of later custom-built Laird racers.*



Category 2, or Memo, Approval 2-17 in August.

While the LC-B was never a major production item by industry standards, it was still Laird's bread-and-butter model while he produced other designs in small quantities on a custom basis. The most notable was the LC-R model, a true sportster derived from the LC-B. This used the same J-5 engine but shorter wings for more speed, which were characterized by a single I-strut between the wings instead of the two parallel struts with wire bracing. The LC-R received ATC-152 in May 1929.

The LC-B remained in production with the J-5 until Wright phased that 1926 engine out in favor of the new 300 hp J-6-9 Whirlwind in mid-1929. It was easy for Laird to replace the J-5 with the J-6, which he did, but the government required a whole new certification program because of the heavier and more powerful engine. Some structural changes proved necessary. Since these weren't accomplished on the first three J-6 models, they were given Memo Approval 2-189 in March 1930. The rest got ATC-353 in August.

Because of the higher power, the LC-Bs with the J-6 engine were officially designated LC-B300. Unofficially, then, the lower-powered models became LC-B200. The same thing happened when the J-6 was installed in the LC-R; the 300-hp model, which received ATC-176 in July 1929, became the LC-R300 while the J-5 model became the LC-R200.

By mid-1930, when the LC-B300 was certificated, the depression was in full swing and the market for big civil biplanes practically disappeared. Laird managed to hang on, however, and continued to turn out occasional custom products, including an LC-RW300 with a 300-hp Pratt & Whitney Wasp Jr. engine, which received ATC-377 in October 1930, and an LC-RW450 with a 450-hp Wasp, which received Memo Approval 2-346 in May 1931.

Matty Laird was never a big producer like Travel Air, Waco, and American Eagle; he kept his organization and plant small and preferred turning out beautifully crafted airplanes on virtually a custom basis. The fact that the LC-B200's price tag of \$9,850 was from several hundred to more than \$2,000 above its contemporaries powered with the same engine bears out this fact. Compared to hundreds of J-5-powered Travel Airs and Wacos, there were only 45 LC-Bs and Rs. Their reputation was tops, however, and their superior performance is affirmed by the many wins that they scored in the popular stock-plane races of the late 1920s and early 1930s.

A few Lairds survived the end of the biplane era and World War II in that last resort of old working biplanes, the duster business. The current boom in antique airplanes has rescued them from this dead end, and there are still four on hand. □