# the International

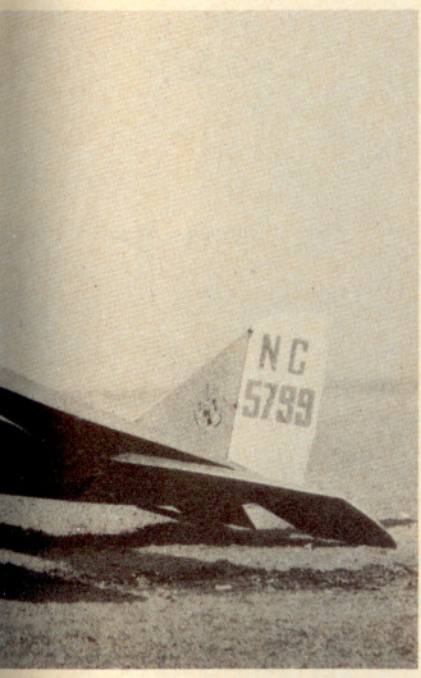
*Early International F-17 with Curtiss OX-5 engine. The pilot's small cockpit is invisible in this view because of the flat top of the octagonal fuselage. Note the no-brakes wire wheels and the radiator built into the upper wing. Photo by James C. Mathiesen*

## Specifications and Performance— The International F-17

| | F-17 (Three place) | F-17W (Four place) |
|---|---|---|
| Span (ft/in) | 35/0 | 35/0 |
| Length (ft/in) | 25/0 | 24/6 |
| Wing area (sq ft) | 325 | 325 |
| Powerplant | Curtiss OX-5 90 hp @ 1,400 rpm | Wright J-5 220 hp @ 1,800 rpm |
| Empty weight (lb) | 1,480 | 1,780 |
| Gross weight (lb) | 2,140 | 2,700 |
| High speed (mph) | 98 | 130 |
| Cruising speed (mph) | 82 | 110 |
| Landing speed (mph) | 35 | 42 |
| Service ceiling (ft) | — | 15,000 |
| Absolute ceiling (ft) | 10,500 | — |
| Range (miles) | 325 | 500 |
| Cost | $2,750 less engine (OX-5 approx. $250 in 1928) | $4,350 less engine (J-5 approx. $5000 in 1928) |

# F-17

by PETER M. BOWERS / AOPA 54408




■■Not until the 1920s were well along did significantly advanced civil airplane designs begin to find acceptance. This was 1924–1926, when the supply of cheap war-surplus types was beginning to wear out, opening up a market for much more costly replacements. Since this transitional era was before the introduction of strict airworthiness and licensing requirements, some of the new designs were not developed under any established standards. Consequently, not all of them were able to qualify for approved type certificates (ATCs) when the new rules went into effect in January 1927.

One 1924 design that managed to enter the "new era" successfully was the International F-17. The basic model that became the F-17 originated as the Catron & Fisk and was produced in the tiny C&F shop in Venice, Calif. The letter F identified the designer, Edwin M. Fisk, and the -17 was his 17th design. In February 1927, C&F was reorganized as the International Aircraft Corporation and moved to a new plant in Long Beach, Calif.

Outwardly, the F-17 was a representative three-seat biplane of the period, with two passengers side-by-side in the front cockpit and the pilot in a smaller pit behind them. The wings were a bit ahead of such contemporary models as the Travel Air and the Swallow in using the thicker and more modern USA-27 airfoil. Advanced design was also shown in the divided-axle landing gear.

There were some throwbacks, though. The structure was all wood at a time when steel tubing for fuselage and tail surfaces was coming on strong. However, the International's fuselage was entirely different from its stick-and-wire predecessors. Skinned with plywood to achieve stiffness without the wires, the fuselage was nearly octagonal in cross-section. Designer Fisk admits that he was inspired by the polygonal cross-section of the Zeppelin airships. Because of this unique shape, the pilot's small cockpit on the early F-17s did not have the traditional cut-down sides, but the full-width front cockpit did.

Initial powerplants were war-surplus V-8 models, the 90-hp Curtiss OX-5 and the 150-hp Wright-Hispano, or "Hisso." These weren't actually throwbacks, because many other manufacturers of the 1920s used these cheap and readily available engines in their lowest-priced models and continued to do so until the supply ran out in 1930. Like the others, International used surplus engines as a starting point and then brought out a higher-priced version of the basic model using a later and more powerful engine. Some early F-17s also used the 150-hp Curtiss C-6, an in-line six that appeared just after the war but which was forced out of production by the cheaper OX-5s and Hissos.

The certification process was slow, and the OX-powered version of the F-17 didn't receive ATC No. 35 until April 1928. A variant pepped up with the 100-hp Curtiss OXX-6 engine (essentially an OX-5 with twin ignition and ¼-inch greater bore) got the lesser Category Two certification of 2-100 in July 1929. The 150-hp Hisso version had previously gotten Certificate 2-57 in June of 1929.

Two more powerful versions, able to carry four people because of the added horses, received ATCs 154 and 155 in

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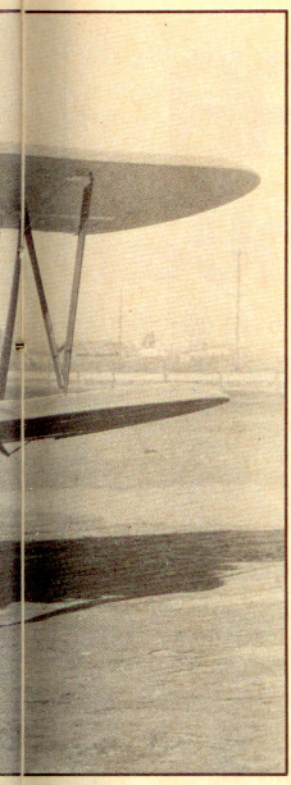

*A 1928-model International F-17W with air-cooled Wright J-5 engine. Note that the rear cockpit has been widened to accommodate another passenger alongside the pilot.*

*Photo courtesy John Underwood*

May 1929. These had the 220-hp Wright J-5 air-cooled radial engine and the 180-hp Hisso, in the F-17W and the F-17H, respectively. To get the fourth seat in, the rear cockpit was widened and the pilot was moved to the left side.

While the performance of the F-17 couldn't be faulted in comparison with equivalent models, it suffered from having originated too far in the past. The all-wood fuselage put it at a considerable weight and maintenance disadvantage among the steel-tube types. Furthermore, the firm itself seemed to have difficulty in achieving stability. It moved from Long Beach to Ancor, Ohio, and eventually to Jackson, Mich. In spite of trying to keep up with the times, International became one of the first aeronautical casualties of the great depression and closed down in 1930.

When the International airplanes vanished from the scene, they did so totally. The F-17 is one of the few recognized production models of the late 1920s of which no example can be found in the collections of the vintage airplane buffs. A few F-17 parts are displayed on a hangar wall at Santa Paula, Calif., but no complete airplanes are known to exist. □