by PETER M. BOWERS
AOPA 54408

These Planes Scored

This Aeronca K, a side-by-side two-seater, was developed from the famous C-3 series of 1931-36. While it was originally fitted with the two-cylinder Aeronca E-113 36 h.p. engine, later models had Continental A 40's and Menasco 50's. The "K" then evolved into the Chief, starting at 50 h.p. and working up to 65 h.p. before World War II. The same model was back in production after the war in deluxe 85/90 h.p. versions

Aeronca K: Aeronca E-113 36 h.p.; span 36 ft.; length 20 ft. 7 in.; area, 146.35 sq. ft.; gross weight 1,040 lbs.; high speed 93 m.p.h.



The Monocoupe 90-A, in production since 1927, was still being advertised in 1952, a record in longevity. The company had undergone reorganizations and name changes but the airplane was basically the same—its 65 h.p. increased to 145 h.p. and lines gradually refined. In 1941, the radial engine was replaced by a Franklin flat-four. Postwar models used Lycomings.

Monocoupe 90-A: Lambert R-266 90 h.p.; span 32 ft.; length 20 ft. 534 in.; area 134.5 sq. ft.; gross weight 1,610 lbs.; high speed 130 m.p.h. (2-place)



The Piper Cub J-2 of 1937-38, a refinement of the earlier Taylor E-2 Cub of 1932-36, was the first American lightplane to enter what could be called large scale production. The later J-3 appeared in 1938 with the same 40 h.p. Continental, advanced to 50 h.p. Continental, Lycoming and Franklin flatfours and even the three-cylinder Lanape radial before standardizing on the Continental 65. Redesigned models with heavier structure to take 150 h.p. Lycomings are still in production.

Piper J-2: Continental A.40 37/40 h.p.; span 35 ft. 2½ in.; length 22 ft. 5 in.; area 178.5 sq. ft.; gross weight 1,000 lbs.; high speed 84 m.p.h.



The Waco S was developed from the original Waco C cabin model of 1931. The S series was in production from 1936 until World War II under a variety of designations depending on power plant and minor structural variations. While the Waco biplanes, both open and closed, were a bit heavy and high-priced for the average owner, they were widely used as advanced trainers at schools and as corporation aircraft. Many of the open models are still in use as dusters.

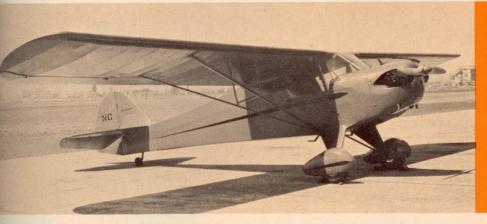
Waco VKS-7: Continental W-670M 240 h.p.; span 33 ft. 3 in.; length 25 ft. 4 in.; area 244 sq. ft.; gross weight 3,250 lbs.; high speed 145 m.p.h. (5-place)



High In '39

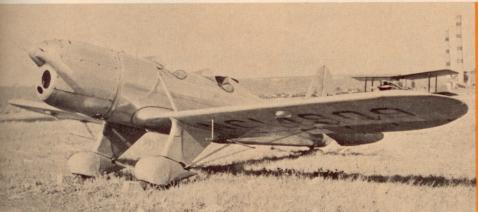
birthday year; here are a few-

familiar, well-loved and representative of the times



The Taylorcraft A was a side-by-side two-seater turned out in 1937 by C. G. Taylor who had sold his interest in Taylor Aircraft Company, producer of the ubiquitous Cub. The side-by-side model became known as the T-Craft despite different designations for succeeding models. A tandem version appeared just before World War II and was produced in modified form for the Army as L-2. Production of the side-by-side model was resumed after the war, first with 65 h.p. and eventually ending up with 85/90 h.p. power plants.

Taylorcraft A: Continental A.40 37/40 h.p.; span 36 ft.; length 22 ft.; area 155 sq. ft.; gross weight 1,050 lbs.; high speed 91 m.p.h.



The Ryan ST appeared in 1933 with a 90 h.p. Menasco engine and was soon followed by the STA with the more powerful 125 h.p. Menasco. Although widely used as a primary trainer, the ST's were a bit hot for beginning students but were fine aerobatic machines. STA's went into production for the Army in 1939 as PT-16's, but the Menascos were later replaced by Kinner radials. Later military trainers were built with Kinners as standard equipment—132 h.p. for the Army PT-21's and Navy NR-1's and 165 h.p. for the Army PT-22's, the most common model still in use today.

Ryan STA: Menasco 125 h.p.; span 29 ft. 11 in.; length 21 ft. 53% in.; area 124 sq. ft.; gross weight 1,600 lbs.; high speed 150 m.p.h. (2-place)



The original Beech Staggerwing of 1933 was the last "new" American biplane and the "17" series stayed in production almost to the end of World War II, long after the general run of biplanes had given way to the monoplane. The Beech was very distinctive—staggered wings, single "I" strut and retractablegear. Power ranged from an initial 225 h.p. to 700 h.p. in a special racing model, but most widely used power plant was the 450 h.p. Pratt & Whitney Wasp Jr. In an age of entirely new business aircraft, the Beech biplanes are almost alone among prewar models to still hold their own.

Beechcraft E-17: Jacobs L-5 285 h.p.; span 32 ft.; length 25 ft. 11¼ in.; area 296.5 sq. ft.; gross weight 3,350 lbs.; high speed 195 m.p.h. (4-5place)



The Fairchild 24J of 1938 was a considerably refined version of the original "24" of 1933, a two-seater powered with either the 95 h.p. Cirrus or 125 h.p. Warner engine. The "24" developed through a three-place model to a four-place and standardized on two engines, the Warner radial and the inverted in-line Ranger. Both versions were in production for the Army through World War II and for the civilian market for a short time afterward. Many are still in use today as private-owner types.

Fairchild 24-J: Warner 145 h.p.; span 36 ft. 4 in.; length 23 ft. 9 in.; area 174.3 sq. ft.; gross weight 2,550 lbs.; high speed 135 m.p.h. (4-place)