

WW I PHOTO PAGE

by Peter M. Bowers

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While very few U.S.-built airplanes got into WWI service with U.S. forces, there were some interesting designs turned out. Some were intended as combat types while others plugged along in training roles. The only American-built plane used by the A.E.F. was the British-designed DeHavilland 4. Navy pilots got to France with a few single-engined Curtiss HS-1L's. This photo selection illustrates a few designs made for the U.S. Navy, not including the HS-1L.

- (1) Curtiss F-Boat, a 1914 design that became the standard boat-type primary trainer, continuing in use into 1919. Some versions had ailerons in the wing, but most had the original Curtiss between-the-wing ailerons. The two-man crew sat side by side in a laminated wood veneer hull. (U.S. Navy photo)
- (2) Curtiss N-9, a companion trainer to the F-Boat, and the standard pontoon-type Navy trainer. Essentially similar to the landplane "Jenny" with a wider center wing section for greater wing area. N-9C used 100 HP OXX engine, N-9H used 160 HP Wright-Hispano "A" engine. (U.S. Navy photo)
- (3) Curtiss F-5L, another standard type used until 1927. The original Curtiss "America" boat of 1914 became the Curtiss H-12 and H-16 series through refinement of design, and in turn became the British-used F.3 and F.5 Boats. The F-5L was the Liberty engine powered version, and was also built by the Naval Aircraft Factory and Canadian Aircraft Co. (U.S. Navy photo)
- (4) Curtiss N.C.-1, a joint Navy/Curtiss design. It originally had three Liberty engines but was converted to four by adding the pusher to the center nacelle. Other famous sister-ships were the N.C.-2, N.C.-3, and N.C.-4. Streaks in picture were made by gluelines of negative file envelope. (Curtiss photo)
- (5) Curtiss HA, a two-seat fighter that didn't make the grade. The first one crashed on takeoff due to tail-heaviness. Unique feature was dihedral in upper wing, cathedral in lower. Landplane versions, Liberty powered, were used to carry airmail in 1919. (U.S. Navy photo)
- (6) Naval Aircraft Factory N-1, the Navy's first original design. Not flown until 1918, it was obsolete before it was built. The twin floats with single tail float was common configuration in WWI. (Navy photo)
- (7) Loening "Kitten" was a tiny single seater designed to be stowed aboard a submarine. The original used a two-cylinder A.B.C. "Gnat" 28 HP engine but this one has the later 60 HP Lawrence radial engine. (U.S. Navy photo)
- (8) Aeromarine AS-2, a two-seat fighter with a 300 HP Wright-Hispano V-8 engine. The low position of wing and tail contributed to the gunner's field of fire, similar to German Brandenburg design. N-struts were one of the earliest applications on a U.S.-designed airplane. (U.S. Navy photo)

WW II PHOTO PAGE

by Gerald H. Balzer

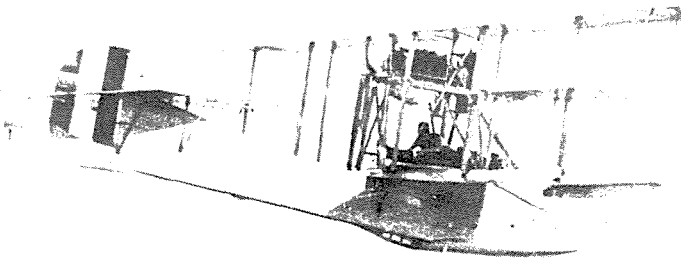
See photos on Page 70.

The "Corsair" Fighter series was born out of a U.S. Navy invitation (February 1938) to enter into a competition for a high performance fighter. The Chance Vought Aircraft Corp. submitted two proposals; V-166A built around the Pratt and Whitney 1200 HP R-1830 "Twin Wasp" engine, and V-166B, incorporating the 2000 HP XR-2800-2 engine with a 13'-4" diameter Hamilton Standard propeller. On 11 June 1938 the Navy awarded Chance Vought a contract to build the XF4U-1. It had the largest engine/propeller combination in fighter design history up to that time, and it also had the feature which was to stamp its identity on the services for many years - the inverted gull-wing. The "bent wing" had a four-fold advantage: minimum drag wing-to-fuselage junction, minimum landing gear length with the large propeller, minimum height and maximum forward visibility.

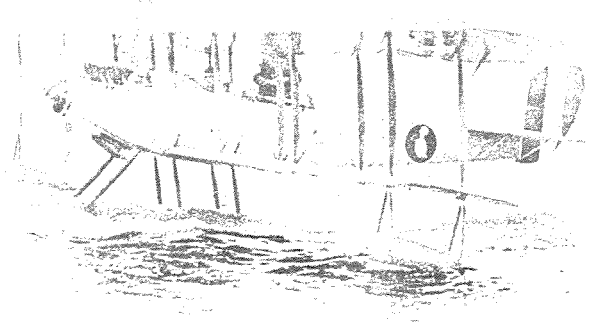
- (1) XF4U-1 first flew 29 May 1940 with L.A. Bullard. CVA's chief pilot at the controls. It had a top speed of 405 MPH, synchronized .30 and .50 cal. guns in the nose cowl, single .50 cal. guns in each wing, and bomb receptacles for 10 anti-aircraft bombs. (Chance Vought photo No. 1410)
- (2) F4U-1C. Highly refined from the XF4U-1, using the P & W R-2800-8 engine, four 20 mm. cannon in wings, armor plate, jettisonable canopy, etc. First flew 25 June 1942, speed 415 MPH. Other versions were F4U-1B, -1D, -1F, (Brewster) F3A-1, F3A-1D, (Goodyear FG-1, FG-1D, FG-1E. (Chance Vought photo No. 11706)
- (3) XF4U-3, a high altitude adaptation of the F4U-1. It incorporated a two-stage supercharger for 40,000 ft. air density. Three prototypes built by CV, and of 27 F4U-1's scheduled for conversion by Goodyear to FG-3's, 13 were completed and used for high altitude test work 'til 1946. (United Aircraft photo CV16733)
- (4) F4U-4C. The F4U-4 series was improved by the P&W R-2800-18W engine, downdraft carburetor, redesigned cowl and rocket launchers in the outer wing panels. F4U-4C had 20 mm. cannon. Other versions were F4U-4B, -4N, and -4P. (United Aircraft photo No. 24152)
- (5) F2G-1. The Goodyear Aircraft Corp. improved the "Corsair" line with its design of the F2G-1 which had the P & W R-4360 engine of 3,450 HP, and the bubble canopy. 16 were completed, too late for operational service in WWII. (Goodyear photo No. A44101803)
- (6) F4U-5P, the high altitude (45,000 ft.) long-range version with P & W R-2800-32E engine, automatic cooling, all metal outer wings. Other versions were -5N, and -5NL. (United Aircraft photo No. 31303)
- (7) AU-1, an F4U variant produced for the Korean War requirements of close air support for ground forces. Increased armor, relocated oil cooler for less ground fire vulnerability. (Chance Vought photo No. 8586)
- (8) F4U-7. Last of the CV "Bent-wings". Built for French Navy, similar to F4U-4. (CV photo 12407)

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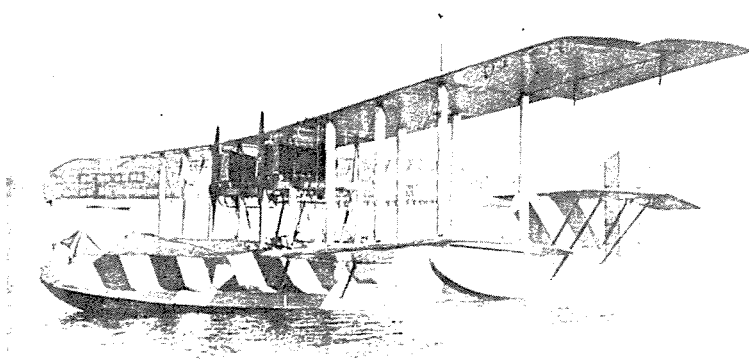
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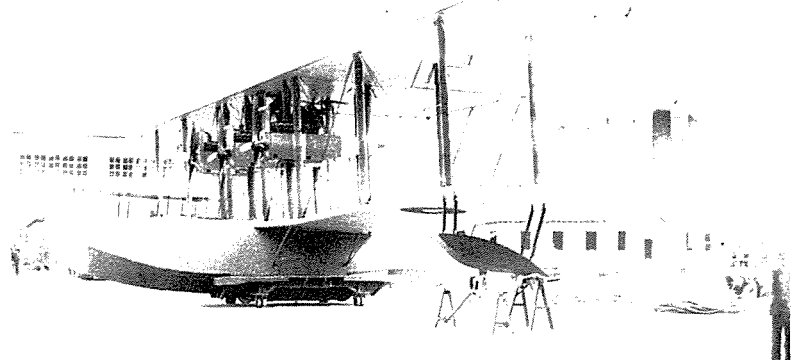
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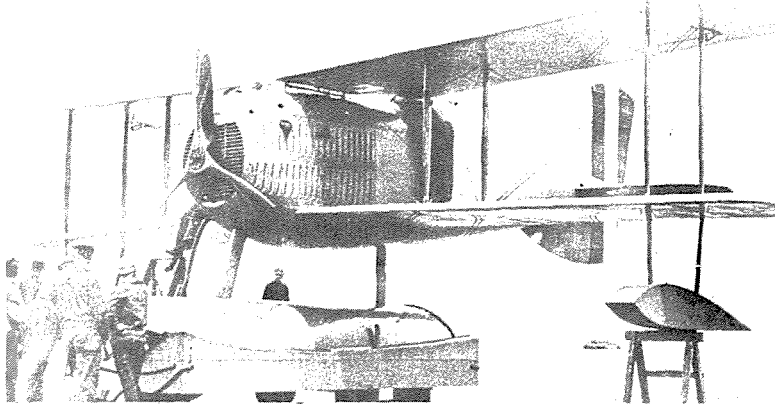
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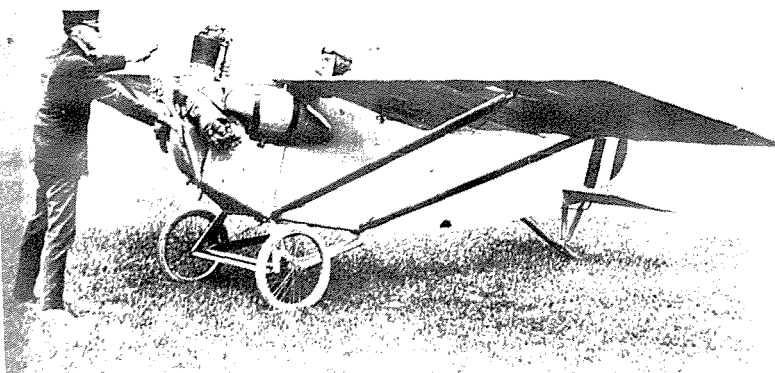
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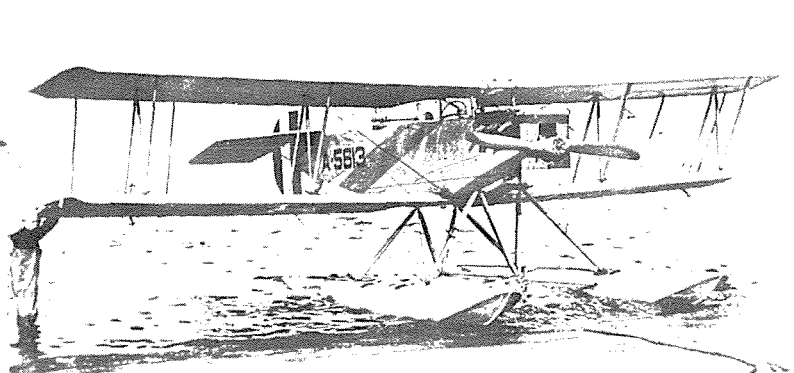
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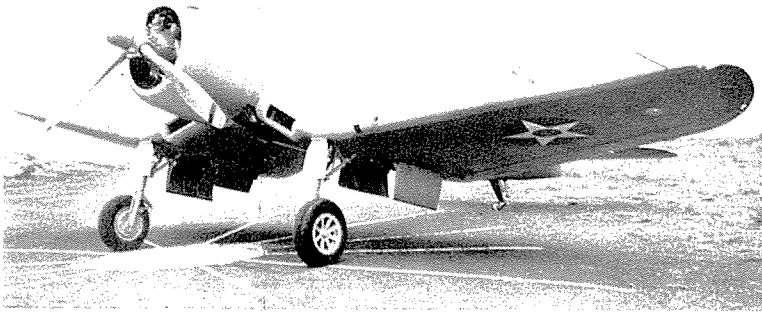
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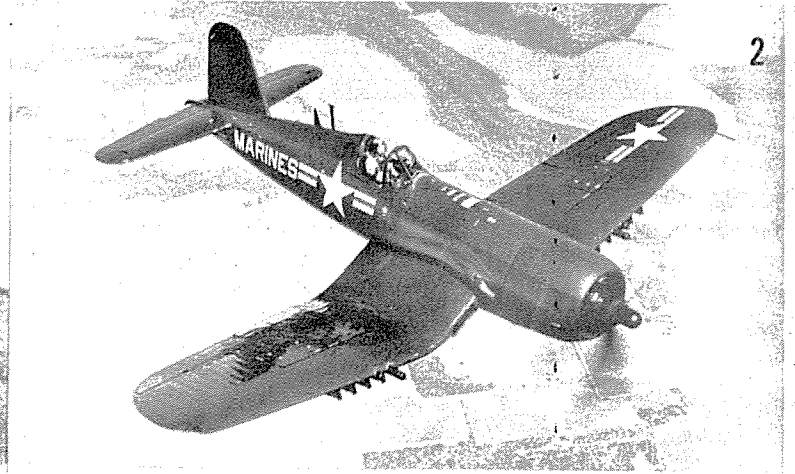
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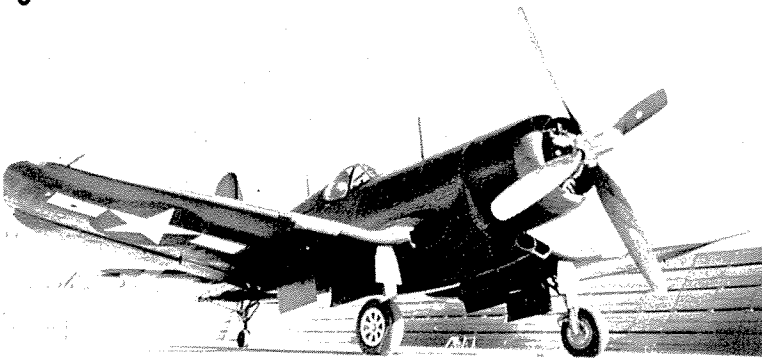
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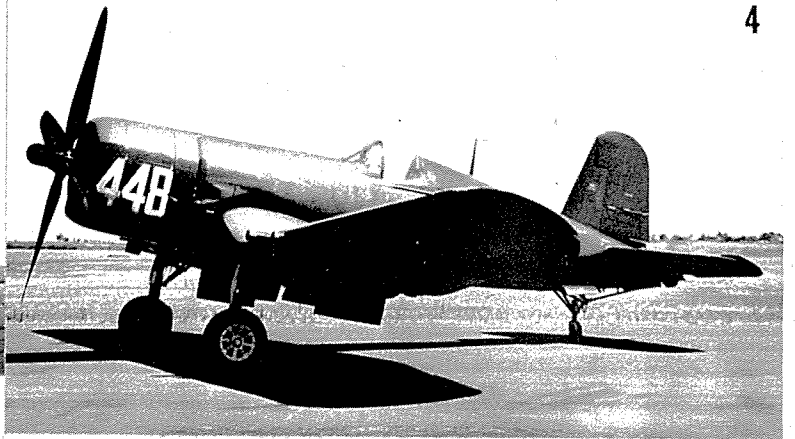
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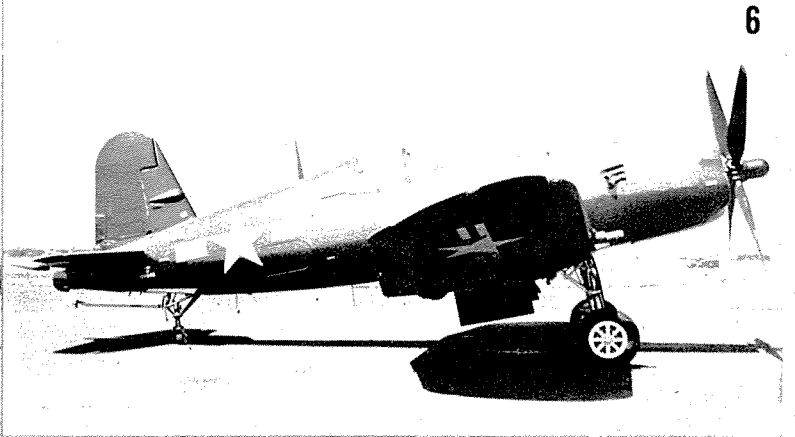
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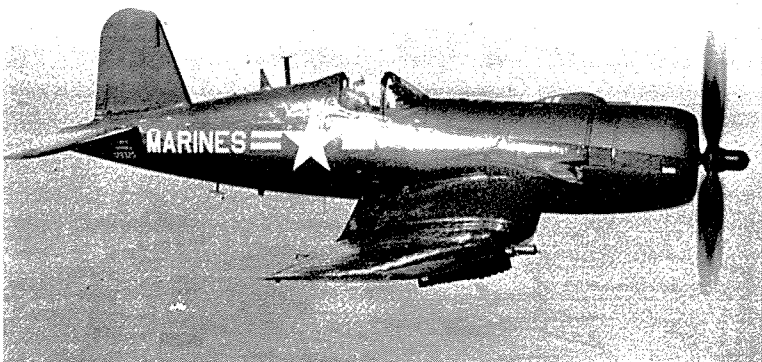
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