

This sleek Dewoitine D-510 experienced great success in the French Air Force during the early thirties. Its armament and speed were superior to the contemporary Boeing P-26A. With a 20mm cannon and two wing-mounted machine guns, the D-510 had a maximum speed of 250-mph. Its 500-hp Hispano-Suisa 12 cylinder engine took this ship to an altitude of 9,840 feet in three minutes, 36 seconds. The P-26A, armed with only two machine guns had a top of 227-mph.

The D-510 was widely exported. Un-

fortunately for France, it wasn't to be long before Germany's powerful Focke Wulf 190's would shoot them out of the skies. While the D-510's saw active service with the French Air Force during 1939 - 40, their effectiveness had long

since passed by then. Begin fuselage construction by cutting two 1/16" sheet balsa sides, Mark bulkhead locations, Glue 1/2" x 1/2" hardwood motor mounts to each side: taper mounts slightly near nose (see top view). Glue in bulkhead F-10, proceed toward front with other formers. Rubber bands insure

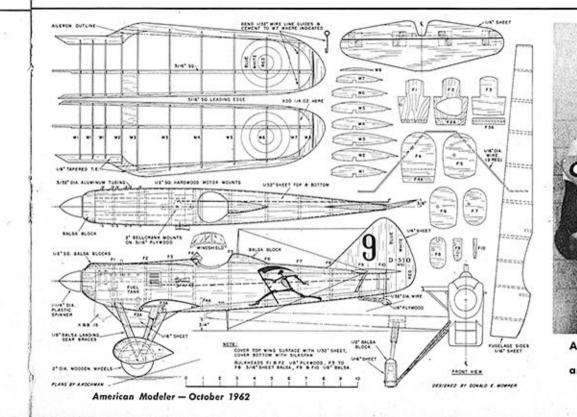
slight fuselage roundness. Build in the Perfect No. 8 gas tank when installing 1/8" plywood bulkheads F-1 and F-2. Install 2" belicrank and push rod after inserting 3/16" plywood mount. Drill motor-mount holes, secure nuts to hardwood (solder to imbedded tin plate). Install pre-sanded 1/2" x 1/2" balsa blocks on motor mount top. Bind 1/16" landing gear wire to F-1 with soft wire. Bind 1/32" diameter tail skid piano wire to F-9. To form tail skid, cut groove in 1/4" plywood so it slips into place over piano wire. Plank fuselage top and bottom with 1/32" sheet balsa, Add headrest,

Cut tail surfaces from 1/4" sheet balsa. sand to shape. Note 3" hardwood added to elevator. Slip control horn in place, connect elevator to stabilizer with cloth strips, glue stab on fuselage. Glue fin and rudder in place with 36" offset in latter.

Cut 1/16" sheet balsa wing ribs and line up over 3/16" square spar. Pin and glue into place. Keep alignment correct by inserting leading edge, glue latter. Shim up 3/8" trailing edge and glue in. Add 14" wing tips. Glue wings together with 34" dihedral at each tip. Wire-lace second 1/16" landing gear wire to F-3A and glue to main spar at wing center. Insert 1/4" balsa between ribs W-2 and

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American Modeler - October 1962



Author-designer Donald E. Mowrer with his D-510. Full size plans are available from Hobby Helpers (Group #1062, 60 cents.)

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W-3 to receive landing gear brace. Cover top surface of wing with 1/32" sheet balsa which has been lightly sprinkled with water. Cover wing undersurface with Silkspan to hold weight down. Slip line guides in place over rib W-7, add ¼-oz. lead weight to right wing tip. Sand wing

to shape.

Final assembly: Position wing and glue to fuselage. Solder landing gear wires together and fit with 1/8" balsa struts. For wheel pants cut %" balsa and add 1/16" sheet balsa sides. Sand pants to shape then glue to landing struts. Add 2" wooden wheels, glue pants to landing gear struts. Put on wheel shocks, add small spring inside larger housing for realism. Sand noseblock from ¾" balsa, spot glue in place. Give entire model a thorough sanding. Add 1/16" sheet balsa radiator, cover bottom only. Painting: Give entire model two coats of clear Aero-Gloss dope. then two coats of sanding sealer. Then alternate between clear dope and sanding sealer until all balsa grain marks are hidden. Spray entire model with Aero-Gloss Silvair Aluminum.

Body and wing markings can present a problem. Skeleton is copied by laying a sheet of pencil "carbon paper" on the fuselage side. Trace skeleton; then remove and hand-paint this figure with a No. 00 brush and Aero-Gloss Black. Do the same with rudder lettering. Cut other markings from colored decal sheets.

Add pitot tube made from typing paper wrapped around a pencil point. Cut windshield from celluloid. Cut exhaust ports from 3/32" aluminum tubing or wooden dowels and insert into holes drilled in motor mount—fill each hole with glue before inserting tubing. Cut antenna masts from round toothpicks. Use gray thread for antenna wire. Paint false engine vents on fuselage; ailerons are inked on wings with ball point pen.

Model should balance just forward of main wing spar. A .15 engine should be the maximum power for this model. I used an 8-4 prop and fifty foot lines. Due to its long tail moment, this D-510 is unusually stable for a scale job. If you employ an engine smaller than a .15 shorten your flying lines. Flown off grass or concrete, your Dewoitine will provide many happy hours of flying enjoyment.