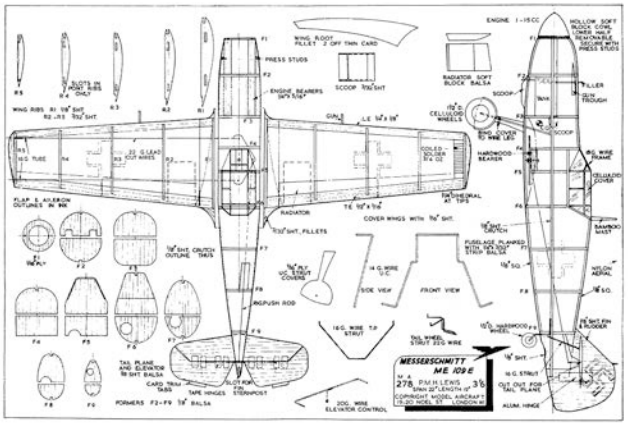
Me 109E



The Luftwaffer's famous fighter as a control line scale model designed by Peter Lewis.

Together with the FW 190, the Me 109 formed the major part of the Luftwaffe's single-seater fighter strength during the war. From its long line of variants, the 109E of the Battle of Britain has been chosen for this 1 1/2 c.c. powered model. The full-size original used a 1,150 h.p. Daimler-Benz DB601A inverted-Vee motor, which produced a top speed of 354 m.p.h. Armament installed comprised two 7.7 mm. machine-guns in the upper cowling and two 20 mm. cannon in the wings.

Proven construction methods result in an easily-built and a very rugged miniature of this famous German fighter.

Fuselage: A piece of hard 1/8 in. sheet for the crutch provides the starting point. The slots for the push-rod and for the engine-bearers are cut out; those for the latter may need some slight adjustment in spacing according to the engine to be fitted. A piece of 14G. wire is cut to length, bent to shape to form the undercarriage and sewn and cemented to the crutch.

At the same time, the 1/2 in. tailwheel is fitted to its 22G. wire axle, and also sewn and cemented in place.

The next step is to cut the 1/8 in. sheet formers F2-F9 to shape and to add them at their stations above and below the crutch. The tank then goes in, followed, by the control-plate and the accompanying hardwood 1/4 x 1/4 in. bearer. A 6 B.A. nut and bolt form the pivot, while 16G. wire is used for the push-rod. After adding the 1/8 in. sheet fin and 1/8 x 1/8 in. keel strips and cockpit edges, the fuselage is ready for sheeting. This consists of 1/4 x 3/32 in. strips, kept in place with pins until the cement has set. The underside, between formers F3 and F6 is filled with a piece of 1/8 in. sheet, added after the 22G. lead-out wires have been installed on the control-plate.

Pin and glue the 1/16 in. plywood front ring (F1) to the bearers and, after the engine mounting bolts have been inserted, fill in to F2 with hollowed-out soft block. The lower half of the cowling is removable and is kept in position with press-fasteners. The fuselage is given a smooth finish by sandpapering and is then laid on one side while the tail unit and the wings are made.

Tailplane and Elevators: These are cut from 1/8 in. sheet and sanded to section. The tailplane is slotted into the fin and the elevators are fitted to the 20G. wire control horn, the arm of which is looped over the end of the 16G. push-rod. Tape hinges complete the installation, and a thin aluminium hinge joins the 1/8 in. sheet rudder to the fin.

Wings: These are built direct on the plan, the 1/8 x 1/4 in. leading edges and the 1/2 x 1/16 in. trailing edges being the first pieces to be pinned down. The root ribs R1 are cut from 1/8 in. sheet, while the remainder are from 3/32 in. thick balsa. The port set must embody cut-outs for the lead-out wires; and the starboard wing is fitted with a lead or coiled solder balance weight.

Laminated 1/8 in. sheet tips complete the wing frames, with the lead-out wires passing through 16G.

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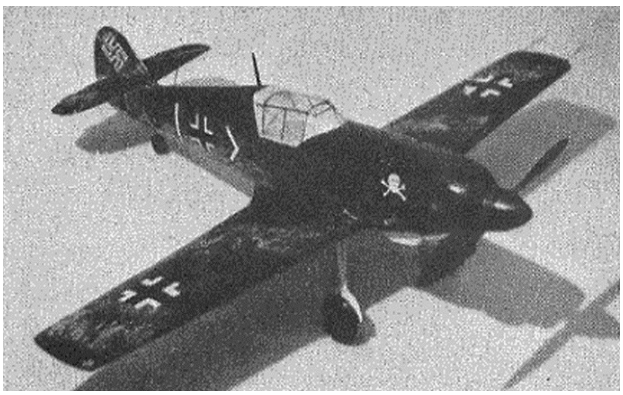

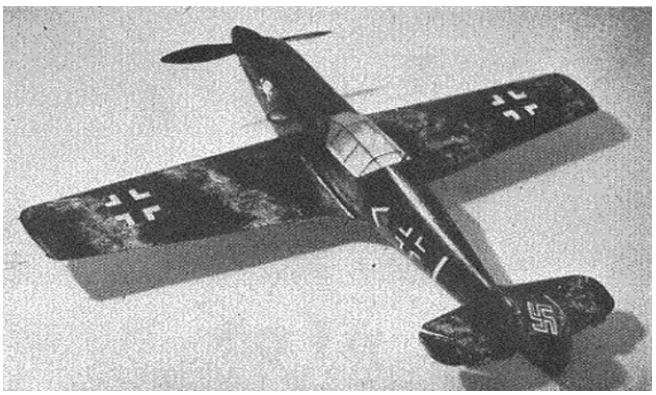

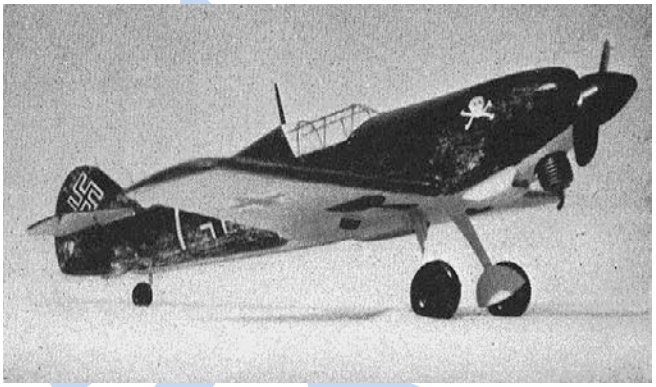

Comparatively simple in construction, P. M. H. Lewis's Me I09e is nevertheless robust and, like its full-size counterpart, will take plenty of punishment.

brass tubing. Both wings are covered with 1/16 in. sheet and after they have been sanded to a clean finish, they are cemented firmly to the fuselage, any gaps being filled in with scrap sheet.

The root fillets are cut from card and the wheel wells may either be cut out of the lower surfaces or painted on later. It now only remains to add the 1/6 in. plywood wheel covers which are bound and glued to the legs, the wheels being retained with soldered stops. Note the characteristic splayed-out wheel angle owing to the upturned axles.

Finishing: The model is now ready for sealing and sanding, and when it is smooth enough, the tissue covering is doped on. Further doping and rubbing down prepare it for the required number of coloured coats of camouflage in mottled dark blue and grey above and pale blue below.

Insignia are added together with the final details: the 18G. wire cockpit frame, followed by its celluloid covering, aerial masts, intake scoops and radiators.

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