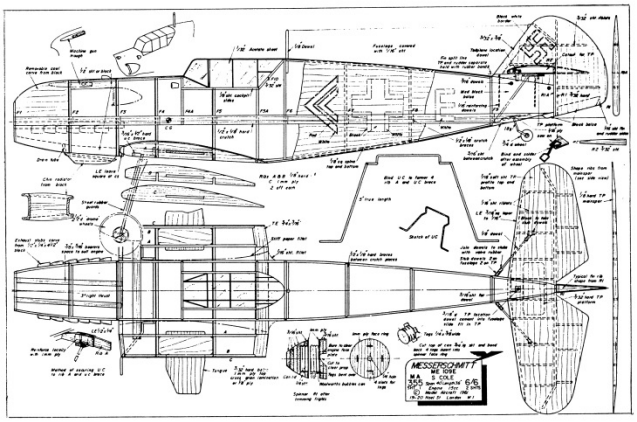
Me 109E



If you have a 1.5 c.c. engine waiting for an airframe, Stan Cole's very practical F/F scale replica of this infrequently modelled fighter, will fill the bill perfectly.

We first saw this model at the Richmond Club's exhibition and we were immediately struck by its obvious practicability. It was tough, of straightforward construction, and obviously built to fly. As a F/F subject the Me. 109 is not often considered, but Stan Cole's very' attractive design should soon alter that situation. It is a fine testimony to the design, that a replica has been built from the original drawings by someone who has never previously attempted F/F scale and it flies as well as the original model—need we say more ?

Fuselage and Wings: Start by building the 1/8 in. x 1/2 in. crutch from hard balsa, flat on the plan. Next cut formers (1) to (9) paying particular attention to accuracy in formers (4) and (5) as these will later determine the wing incidence. Former (4) is pre-drilled to take the u/c binding. The formers are now cemented into the crutch, checking for squareness from both side and top. Next add the 1/8 in. sq. spines to top and bottom of the formers and block balsa to the front and rear of fuselage, together with tail wheel assembly, prior to adding the sheeting.

This is best done in two separate pieces, cemented along the top line of the crutch. The sheet should be pre-shaped by damping, to curve it over the top half of the fuselage along the entire length between formers (3) and (9). The rear lower half of fuselage is best " planked " with 1/4 in. x 1/16 in. balsa strip, starting from the bottom line of the crutch. At this stage it is essential to assemble ribs A and B—together with wing tongues— " dry " (uncemented) to formers (4) and (5).

The fuselage assembly can now be placed on a flat surface and the completed wing halves (which are of conventional construction) are pushed onto the wing tongues and the wing tips arc packed up to give 3 1/8 in. dihedral under each tip. Holding everything in place with suitable weights, the wing tongues arc now finally cemented to ribs A and B in situ, this method ensuring accuracy', and equality of dihedral angles.

Little instruction is needed on tail and wing construction, as these will be found quite simple to build from the plan. For final " embellishment " add pilot, wing radiators, oil cooler, etc. Colour trim should be light and dark grey' mottle on top with very light blue undersides; the spinner is yellow. Standard Luftwaffe markings are shown on the plan, alternatively the entire top sides of the model may be painted olive green with very light blue undersides.

Built as per plan, the model is sufficiently robust to withstand any initial trimming " prangs " without damage. " Durofix " was used for all hardwood components, and a strong carpet thread is a must for the u/c binding; 2 1/2 in. balloon type " Drome " wheels also assist greatly in absorbing landing shocks and protecting the u/cart—" solid " type wheels being quite unsuitable, event apart from their un-scalish appearance. A departure from true scale has been purposely made in retaining the tail unit with outside rubber bands, since this vulnerable component is now both practical and really crashproof! If desired, the

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prop (a 9 in. x 5 in. on a 1.5 c.c. engine) may be reversed and the spinner omitted, until characteristics of the model are learned.

Flying: The initial trimming of the model proved that fairly high revs are needed from the start, with about 3 deg. right side-thrust to counteract torque. The rudder is best left in neutral position with a 10 deg. to 15 deg. " down " trimtab to keep the left wing up on the model's left- hand flight path. With the c.g. as per plan, the prototype needed no down- thrust.

Never trim for right-hand circles, but adjust engine right thrust, to obtain wide safe left-hand circles. For its size, the model is by no means heavy (all-up flying weight is about 25 oz.), but a smooth " follow-through " launch with power on will give best results. No adjustment was necessary to obtain a flat hand launch glide, which, of course, is best done over long grass in fairly calm weather; however the tailplane is easily adjustable, should this be necessary'. Pack up T.E. if nose dips and L.E. if the model stalls.

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