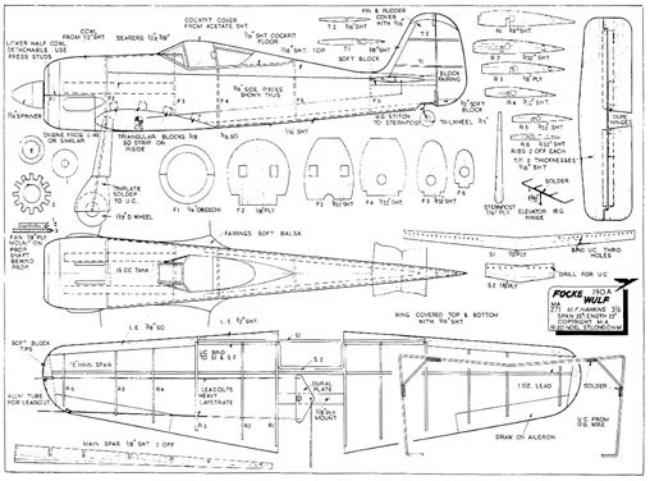
FW 190



Why not Scale Team Racing ? And for start build this Fw 190 by M.F. Hawkins.

When the First All Speed Team in California started this Team Racing business, the rules stated that the models should be " scale or semi-scale " in appearance. I have never seen a scale model flown in competition racing and the reason for this is twofold. Firstly, some of the rules that specifying a totally enclosed cylinder head is a good example make it very difficult for an accurate scale model to conform to the specifications. Secondly, to obtain the maximum speed and laps the model must be designed right down to the limits of the specification. Over the years one layout has proved to be the most consistently successful, therefore, all team racers now look alike well almost.

Scale models can never compete on even terms with the highly developed present day team racer, but what a wonderful sight it would be to see Hurricanes, Spitfires, FW 190, Thunderbolts and, perhaps, even Bristol Monoplane Scouts and Miles Libellulas racing each other. Most World War II fighters would work out at about the right size if built to a scale of 3/4 in. to 1 ft., while of kit designs the Mercury Spitfire and Mustang would be very suitable.

I would like to suggest the following rules for scale team racing. They are framed so as to give a wide choice of suitable prototypes and I do not think that any one design would predominate, while the spectacle would be worth the extra work involved in building the models.

1. Minimum wing area 100 sq. in.

2. Undercarriage must be fixed, or retracting detracting with scale type wheels. Some departure from scale will be allowed to enable safe landings and prop clearance.

3. Cockpit must contain a pilot of a scale appropriate to the model.

4. Cylinder head need not be completely cowled but should be as unobtrusive as possible, preferably inverted or side mounted.

5. Rules for racing, i.e., tank size, engine size, line length and number of laps, etc., as for S.M.A.E. Class A team racing.

6. The model judged in each heat to be best finished and nearest to scale (25 points for finish and 75 for scale and detail this means that not too much notice will be taken of the inevitable wear and tear of a team racer), shall have four laps less to fly in that heat.

To test the practicability of these rules I have built and flown models that conform to them. A Douglas Destroyer is shown in the photo overleaf, while my Focke Wulf 190 A4, as can be seen from the photographs, is an accurate and attractive model. It has even won a team race, but we are not yet very expert in Nicosia.

If by now you are sold on this scale team racing idea, you will be looking round for a suitable design, so what could be better than the F.W. 190A4, plans and building instructions for which appear herewith.

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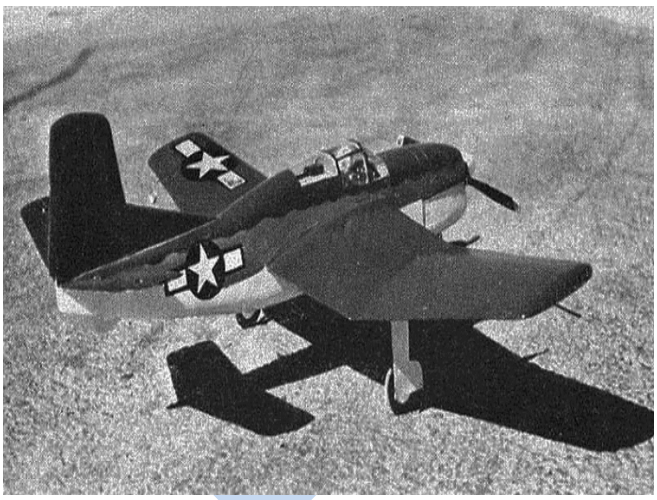
An infinite variety of colour schemes is possible for most German aircraft and the FW 190 is no exception. Michael Hawkins finished his own model with a grey - green mottle on the fuselage sides: upper surfaces of wings and tail plane medium blue - grey, and the under surfaces in pale grey.



Another model built by Michael Hawkins to his scale team race formula. This is the little-known Douglas XBTD-I "Destroyer," forerunner ofthe " Sky raider." Only one of the full size machines was built and its C/L counterpart certainly makes an unusual model.

Building Instructions: Start with the wing. Prick out the outline of the half wing on to 1/16 in. sheet balsa, butt jointed to make up the necessary width. Cut four of these. Assemble the ribs, mainspar, outer leading edge and plywood front spar S1 on to the two under surfaces, building in 1 1/4 in. dihedral under each tip. Instal the control system and push rod, also the 1 oz. outboard wingtip weight.

Bend the undercarriage to shape to fit the wing and solder on the bracing rods to each leg. Sew it to the mainspar brace and glue this firmly to the mainspar, then sew the undercarriage to S1. Add the inner leading edge from soft £ in. balsa and finally add the upper wing surfaces.

Fuselage: Assemble the plywood formers F2 and F3 with the engine bearers and tank. Add the fuselage sides (shown dotted on the plan) from 1/16 in. sheet and use plenty of 1/2 in. block gussets to brace this structure to the wing.

Add the other formers and firmly glue some scrap block under the tail- plane site. Build the stabiliser with the tape hinge and control frame sandwiched between the 1/16 in. halves, and cement in place. Sheet in the rest of the fuselage with 1/16 in. balsa and then construct the fin and rudder with 1/16 in. sheet over the 1/8 in. leading edge and tip, with ribs T1 and T2 cemented to the sternpost.

Add cockpit detail as required and a pilot to the appropriate scale. The canopy can be moulded or folded, though this latter is not so good, from acetate sheet.

The cowling is made up from 1/2 in. sheet with a front ring cut from 1/4 in. obeechi. The detachable lower half ends level with the wing leading edge, and the blisters which are attached to it overlap the fixed part. The cowling on the original was attached by two press studs on each side, sewn to small pieces of ply and let into the opposing surfaces.

Finishing: Give the entire model two thick coats of talc and clear dope mixed, then cover all over with lightweight tissue doped on.

Mark the control surfaces by cutting a shallow V with a sharp knife and indicate their ribs with thin strips of paper stuck in position, then add bond} rack, guns, trim tabs, oil cooler gills, and any other details you can dig up.

The fan is made from 1/8 in. ply and mounted on the prop shaft behind the propeller and the model should

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balance on the front spar. Ballast in the nose may be necessary with a light motor.

The performance is not startling by normal team race standards 29 laps at 60 m.p.h. with a Frog 249 B.B., but the model flies steadily and will do a genuine three-point landing with no fear of nosing over.

Whether you fly this model for sport or racing you will find it well worth the building time.

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