

**PILOT MODELS'**  
small sized 48<sup>5</sup>/<sub>16</sub> in.  
span, .19-.35 power,  
scale model is reviewed  
by BRIAN PECKHAM

# FOCKE-WULF Fw 190A

**P**ILOT'S FOCKE-WULF 190A is a welcome addition to their range of .19-.35 powered scale kits which includes the P-51D *Mustang*, *Zero* and *Spitfire*. The 190, however, differs from previous kits in having fewer plywood parts, ply only being used for the fuselage formers and reinforcement of specific areas.

As with all the Pilot kits it is a de-luxe package with superb die cutting of the balsa sheets and a number of moulded ABS parts for the cowling and forward fuselage decking. A crystal clear canopy/rear fairing, spindle shaped balsa strip and band-sawn parts, very accurately cut, complete the kit.

Plans are drawn on two sheets, one a very detailed general drawing with numerous sections and the second sheet has parts shown full-size, a three-view colour scheme, and written assembly instructions with stage by stage construction photos which are not very explicit, but when studied in conjunction with the detail drawings and 'dry runs' the assembly becomes clear.

## Construction

Wing construction is conventional;  $\frac{3}{32}$  in. balsa ribs with two spruce spars, sheeted leading and trailing edges, cap strips over the exposed ribs and triangular section sheet balsa ailerons. The wing section is quite thick but does not incorporate washout. Wing span is 48<sup>5</sup>/<sub>16</sub> in.



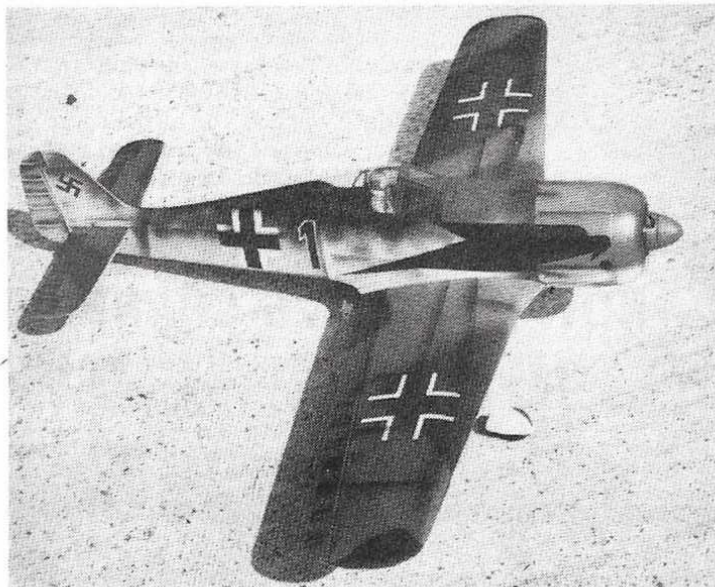
Details are shown for both fixed torsion bar undercarriage and a retract system using 'MK' retracts, and all the necessary reinforcing and bearers for either type are supplied. It seems wrong to me to see a model of a WW2 fighter flying round with its undercarriage legs dangling, so I opted for the retracts, using the **Radio Sailplanes** mini type. These are in effect a copy of the original **Goldberg** type retracts with a nylon base moulding, a simple locking device and counter sprung legs, and fitted easily, although I adjusted the scale length of the legs and the wheel size to fit between the ribs. Not scale on the ground but

the object was to get them out of the way in the air! It was necessary to build a servo box just forward of the main spar at the wing root to house the retract servo, a standard Futaba 16M which had enough power to operate the retracts satisfactorily. The well covers were cut from 30g aluminium sheet and attached to the legs using 12BA nuts and bolts and small brass brackets soldered to the legs.

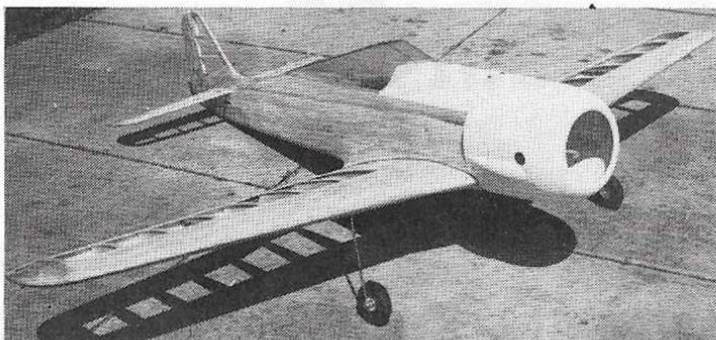
The fuselage construction is straightforward, with ply formers on a ply and balsa crutch and  $\frac{1}{8}$  in. and  $\frac{3}{32}$  in. balsa planking. Tail surfaces are an open framework of large section strip balsa with elevators and rudder from balsa sheet. The forward fuselage deck is an ABS moulding and fits perfectly as does the canopy.

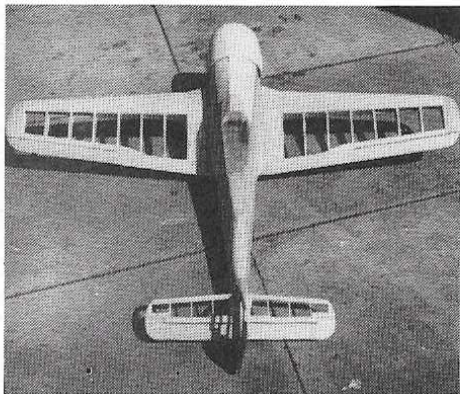
The cowling is assembled from four ABS mouldings and makes up into a strong unit secured by small self-tapping screws into hardwood blocks.

Quoted engine range is 19-25-35, so I fitted an O.S. 25FSR which, complete with standard silencer, fits within the cowling, using the short length of rubber tube sup-

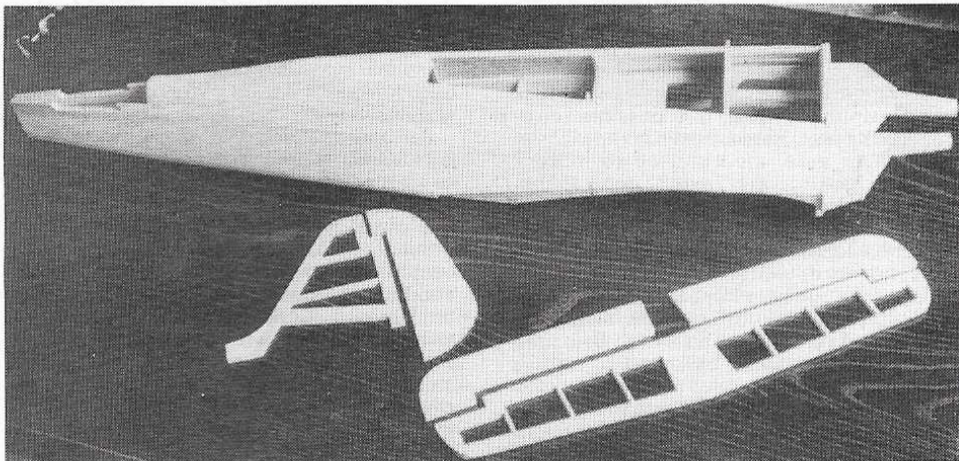
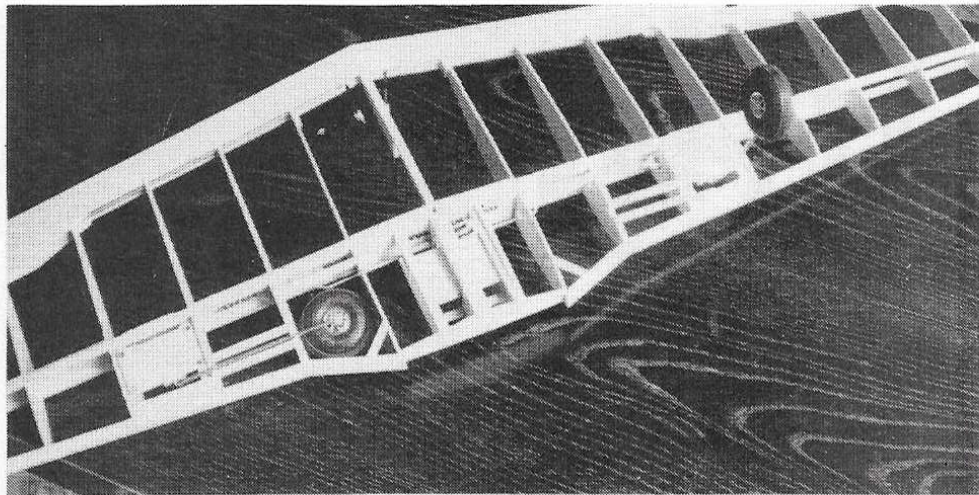


Photos on this page indicate how realistic the model looks despite its small size. Below, before covering reveals the large moulded ABS plastic cowling and top decking.





At right: the partially completed wing is shown revealing torque rod linkages to the ailerons and the simple but non-scale undercarriage installation. Short, low aspect ratio wings are emphasised in the photo above. Below, structure of the fuselage and tail surfaces revealed.



plied to carry the exhaust clear of the cowling. In order to keep the weight forward the receiver Ni-Cad was attached to the engine bearers with double sided tape.

No wheels, tank, spinner, push rods, clevises or hinges are included although control horns and a steerable tail wheel bracket are. Aileron torque rods are formed from a long brass tube with wire fittings soldered into each end, bearing in ply blocks.

The building time was very quick due to the accuracy of all the parts and only took about 22 hours to complete the airframe including fitting the retracts.

### Covering

To achieve a light finish I used the new 'Coverite' Micafilm from Flair Products, which is extremely light and far stronger than any heat shrink covering I have used to date, in fact it is almost impossible to tear. This material has a super smooth finish on one side but has to be attached with Balsarite (also from Flair), the material having no adhesive of its own. An iron temperature similar to that used for film coverings is all that is necessary to achieve good adhesion, with a higher temperature for shrinking, but it does need a little more care in applying to avoid unnecessary wrinkles as the heat shrinkage will not remove them easily. However, it does save grain filler, etc., and if the airframe is sanded really smooth, when painted it looks just like a filler/tissue job.

I used K&B satin finish paints, mixing them to provide the correct shades. (MAP Scale Plan pack 2993a, £3.05 inc. p&p, is very helpful here). Only one coat of each colour was needed over one coat of cellulose primer and K&B is 100% fuel proof against even high nitro content fuels. Weathering was achieved with a very thinned-down black in a small air brush sprayed over card and balsa hand held masking. The kit's vinyl crosses were used but well rubbed down with 400 wet and dry paper used wet to remove the high gloss finish. With the quick drying time of the K&B the painting was completed in a day!

Although I had put the Ni-Cad in the engine bay I still needed a few ounces of lead screwed to the bearers to achieve the correct balance point. Two are indicated, the written instructions say 2-2 $\frac{3}{8}$ in. back from the leading edge, but the drawing shows it 3 $\frac{3}{4}$ in. back! I used the 2 $\frac{3}{8}$ in. position as in my estimation this was where it should be.

All up weight, ready to fly was 76oz. (4 $\frac{3}{4}$ lb.), an ounce less than the indicated top weight.

Another photo of the uncovered structure shows the straightforward wing construction and also emphasises the length of the moulded, transparent cockpit canopy with its integral rear fairing.

### Staffel scramble!

The day for the test flight was fortunately calm. I had reservations about the ground handling, with the C of G almost over the wheels and only  $\frac{3}{16}$ in. movement on the elevator as recommended, but it was all too easy. With the 2S FSR driving a 9 x 5in. prop she fairly whistled tail-up across the grass and needed just a touch of right rudder. Once in the air the FW190's behaviour was impeccable, fully aerobatic and completely viceless — much to my surprise as the wing loading was 29oz. per sq. ft., somewhat high for a small tapered wing model, but she could not be faulted. Every take-off was easy and the flying really smooth, the O.S. 25FSR supplying ample power. With the motor on tick over I snapped in the elevator to see what would happen, just a straight gentle stall, no suggestion of dropping a wing.

Landings presented no problems although it's not so easy to avoid nosing over on grass. On dead stick the glide was fastish but very flat and controllable.

### Summary

I must say that this little beauty is one of the most enjoyable small scale models I have had the pleasure to fly, and with such excellent prefabrication, building could never be described as a chore.

Distributor: Irvine Engines, Unit 2, Brunswick Industrial Park, Brunswick Way, New Southgate, London N11 1JL.

Price: £44.75.

