

FROG



"WYVER"

SIDE VIEW (1)

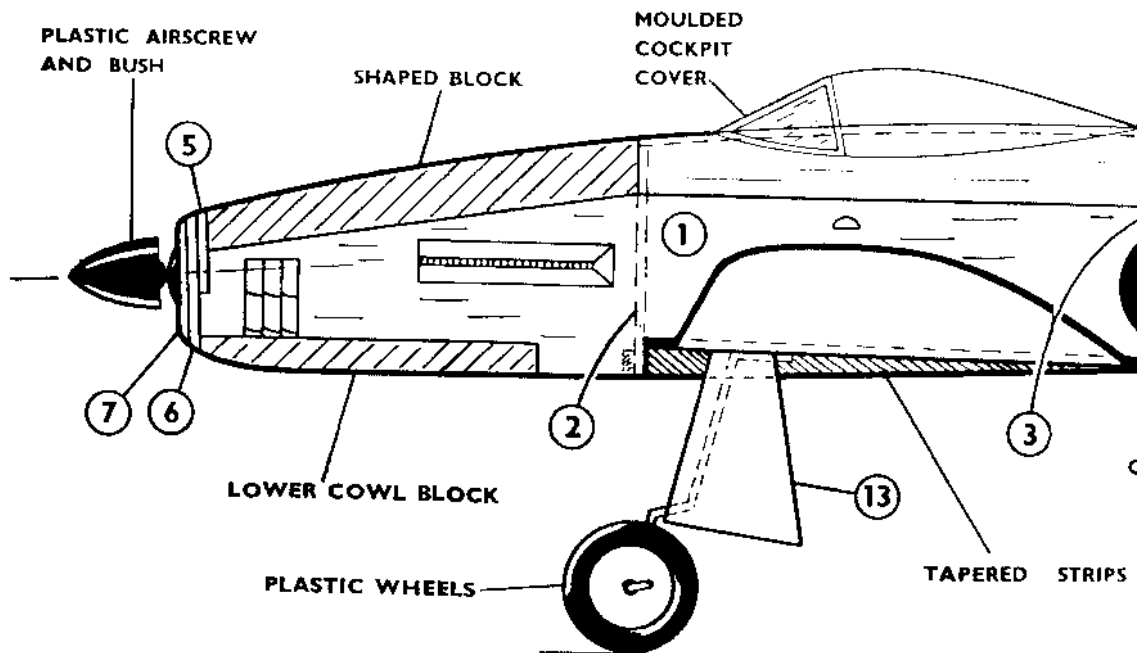
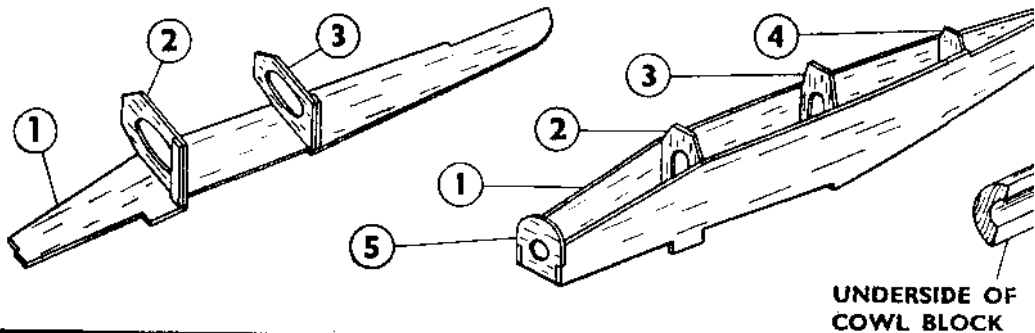


Fig. 1 CEMENT BULKHEADS 2 & 3 IN PLACE FIRST

Fig. 2 FUSELAGE SIDES ASSEMBLED TOGETHER



INTRODUCTION.

The Frog Junior Fighter Series comprises a range of models which are based on the designs of jet and piston engine fighters in service with the R.A.F., U.S.A.A.F., and Royal Navy.

In common with other Frog models, they embody very simple construction methods having all the parts cut to shape, which only require cementing together.

To ensure a satisfactory job, study the plan and check the parts with it before commencing. Assemble the model step by step as shown.

Cement and "dope" are not included in this kit, but they can be bought at any model shop. Use quick-drying balsa cement (glue) such as Frog Universal. You will also need a balsa knife or razor blade and a few pins

BUILDING INSTRU

FUSELAGE AND TAIL ASSEMBLY.

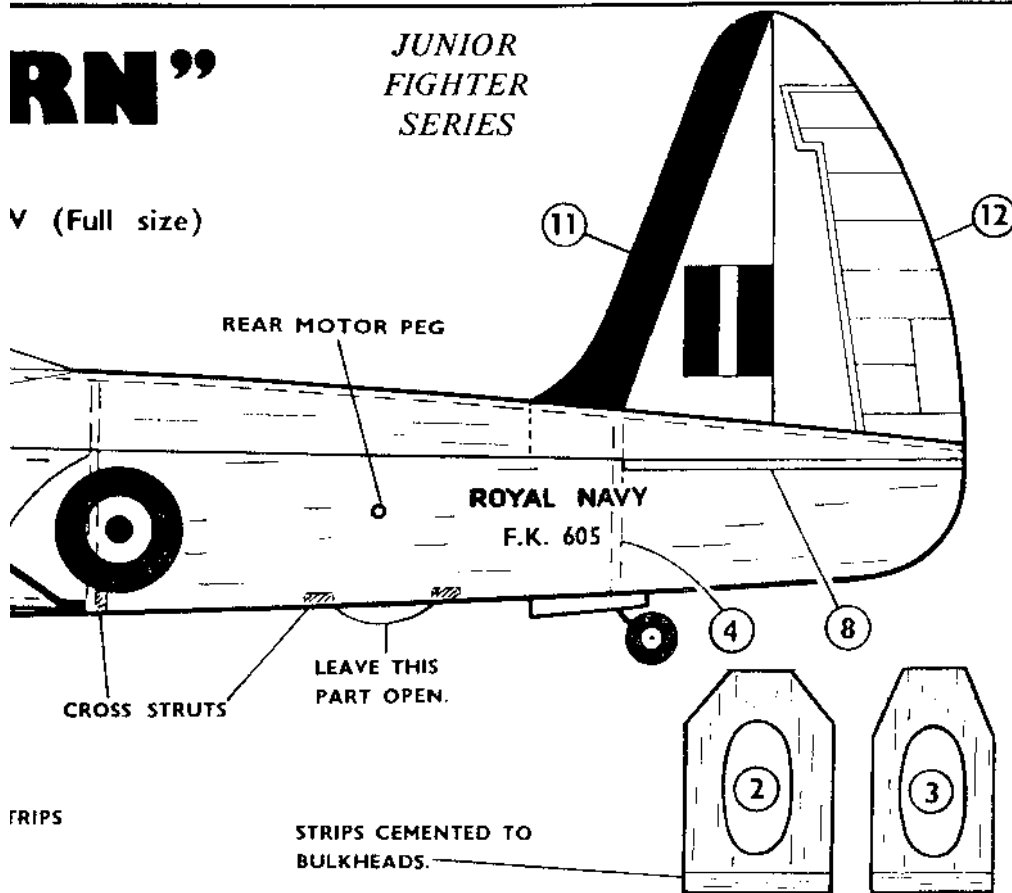
Carefully remove all the parts from the kit. Use a balsa knife or a piece of razor-blade to trim the parts to a clean edge. Do not spoil the waste wood, which will be used later for the fuselage. Start by cementing the tapered strips cut from scrap to bulkheads 2 and 3, and cement them to one of the side panels 1, as shown in fig. 1. Cement the other side panels of these on the side panels by checking the plan in the view above. Make sure they are upright, and cement the other side in place as in fig. 2. Cement the other bulkhead 4, and the front and rear end of the fuselage together.

Remove the tailplane 8 from the fuselage and sandpaper the edges to obtain a smooth fin

RN''

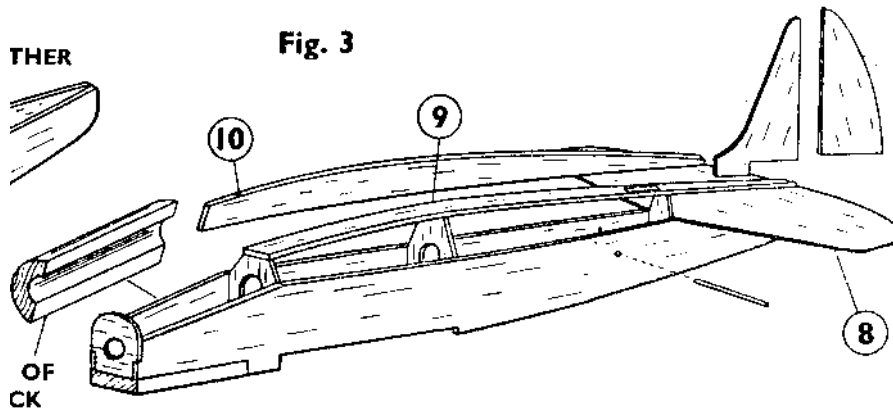
JUNIOR FIGHTER SERIES

V (Full size)



OTHER

Fig. 3



INSTRUCTIONS

From the balsa sheet using a sharp knife to separate them with a wood, as a strip of it is used for cementing pieces of balsa strip and cement these bulkheads in fig. 1. Mark the position of the bulkheads against the side of the fuselage, and allow to dry. Then cement the front piece 5 and cement

the balsa sheet and lightly sandpaper both finish.

Cement it in place as shown in fig. 3, ensuring that it is square with the fuselage.

Cement the centre strip 9 along the top of the fuselage with the narrow part at the rear. Bevel the edges of the outer pieces 10 and cement these in position as shown in fig. 3.

Cement the nose-rings 6 and 7 to the front of the fuselage together with the shaped upper cowl block. The underside of this should be cut away to allow more freedom for the rubber motor.

Trim the ends of the lower cowl block and cement it in place.

Shape the front cowl blocks with a sharp knife blade and smooth down the fuselage with sandpaper to a good finish.

Remove the fin parts 11 and 12 from the balsa sheet lightly sandpaper the edges.

Then cement them in position on the fuselage ensuring they are square with the tailplane.



“WY”

INSTRUCTIONS (contd.).

WING.

Remove the cut-out wing from the balsa sheet and lightly sandpaper the edges smooth.

Crease lines are made as shown in fig. 4 to help bend the wing to the required angle.

Place the wing on a flat board or table and holding the centre down with a small weight, raise each end 5/8in. with a small block of wood or similar article as shown in fig. 4.

Apply cement along the crease lines and allow to dry; Then remove the wing from the board and fix it to the fuselage between bulkheads 2 and 3, making quite sure that it is level with the tailplane and free from warps.

From the waste balsa sheet cut two tapered strips as shown on the side view drawing and cement them to the underside of the wing in line with the fuselage sides.

Trim the surplus material from the cockpit cover, and cement it into place on the fuselage, holding it in position until it has set.

Cover the bottom of the fuselage with thin notepaper or a strip of paper cut from the plan.

UNDERCARRIAGE.

Bend the two U/C. legs from the wire supplied, over the full size shape shown in fig. 5, making a left and right hand.

Well-cement the undercarriage legs to the underside of the wings together with the fairings 13, which fit into slots cut in the wing, as shown in fig. 6. Fit the wheels in place and bend over the ends of the wires, or glue small paper washers to the axles to hold them on. Make the tail wheel from the centre of a nose bulkhead or a piece of scrap balsa. Cut the head from a pin, bend it to make the tailwheel leg and push it into the tailwheel. Then assemble as shown in the side view drawing. The tailwheel door is cut from a piece of waste balsa sheet.

DECORATING.

The balsa wood parts being ready printed, very little painting is necessary and should be restricted to the top of the fuselage as shown in the top view of the finished model. Use Cellulose Lacquer and apply it quickly and evenly with a soft brush. Do not put it on heavily, or the model will not fly well.

MOTOR.

This is an elastic band 6in. long. Lubricate it with Frog Rubber Lubricant, or Castor Oil, and insert it with the help of a length of wire or thread. Bend a hook at one end of the wire and insert it into the front end of the fuselage. Hook the band on to it through the opening at the rear, and insert the rear motor pin (cane) through the holes in the fuselage and through the loop of elastic. Pull the band out through the front, and hook it on to the Airscrew shaft (complete with airscrew). The model is now complete and ready for flying. A drop of thin oil on the airscrew shaft will improve the running.

FLYING.

This model can be flown indoors or out, but it should only be used out-doors on a calm day, owing to its size.

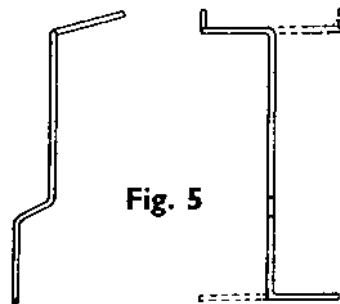
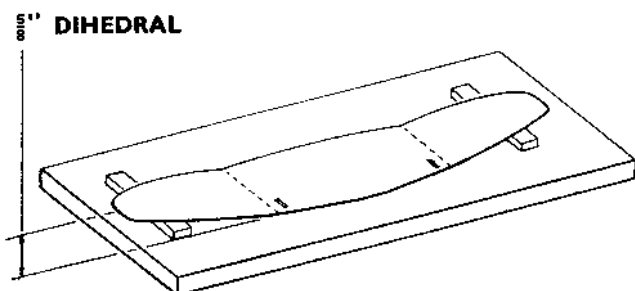
A slight difference in balance may be shown with each individual model, owing to the varied density and weight of balsa wood.

Test-glide the model first to check the balance. Hand-launch it in a slight downward direction. If it dives to the ground, add a small weight such as a small nail or pin to the rear end of the fuselage. If the model climbs steeply and stalls, add a small weight to the nose of the fuselage. A small nail or drawing pin can be pushed into the cowl block for this

VERN

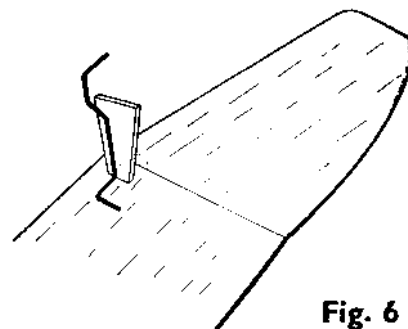
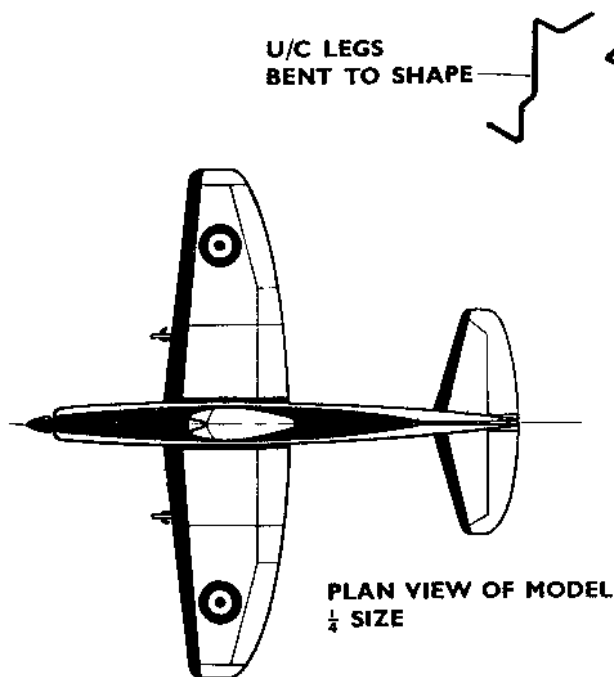
CAT. No. 605FK.

Fig. 4 RAISE WING TIPS AND CEMENT ALONG CREASE LINES



U/C LEGS BENT TO SHAPE

BEND LEFT U/C LEG TO THIS SHAPE AND RIGHT U/C LEG AS SHOWN DOTTED



UNDERSIDE VIEW OF WING SHOWING U/C FIXING

When the glide seems satisfactory, put a few turns on the motor and launch the model into wind (if any). The turn can be adjusted by bending the fin, or by twisting the wing slightly.

Increase the turns on the motor gradually, up to a maximum of approximately 300; if the motor is not lubricated, the turns must be limited to approximately 150.

Designed and Made in England by
INTERNATIONAL MODEL AIRCRAFT LTD.
MORDEN ROAD, MERTON, LONDON, S.W.19.

Printed In England.