

KEIL KRAFT

AVRO 707A Building Instructions

NOTE: No wheels are supplied in this kit.

FUSELAGE

Pin the plan to a small wooden "Building Board" and cover with a sheet of greaseproof paper.

Pin pieces A, B, C, E, "Backbone" and "Trough strip" directly over the plan. Refer to the sketch labelled "FIRST STEP in building Fuselage," while pinning parts in place. Cement all joints.

The half formers for this first side may now be added by cementing them across the previously constructed OUTLINE, directly over their positions shown on the plan. Place pins on each side of the half formers to hold them perfectly upright while the cement is setting. Apply cement to the outer notches in formers 4, 5, 6, 7, and 8 then carefully press piece D (left) in position.

Piece D must be curved downwards slightly at the rear in order to fit into the notch provided in former 8.

Cement the 1/16" x 1/16" stringers into the notches in all the half formers. Study their arrangement in the Side View. The centre front stringer fits notches in formers 1, 2 and 3, and then into a hole in former 4 directly behind piece D, where it stops.

Notice that the stringer directly above the TROUGH STRINGER stops at former 6, also there is a short stringer at the rear which extends between 7 and 8 only, this occurs immediately above piece D near the position of the aircraft serial number WD 280 shown in the Side View.

It may be found easier to leave out the TROUGH STRINGER until this side is removed from the plan and the other side built on to it.

The second (or right hand) side may now be "built-on" to the first side, by cementing the right hand set of half formers directly opposite and in line with their counterparts on the first side. Add the other parts including the stringers as described for the first half.

Cement the two halves of the nose block, one on each side of pieces A and B, and carefully carve to the shapes shown, using a sharp knife and finishing with fine sandpaper.

WINGS.

Pin the 1/16" x 1/16" lower spars (Front and Rear) in position on the plan. Place the pins on each side of the spars and NOT through them. Cut to length at the tip end.. Add the lower tip piece of 1/4" x 1/16". Apply cement to the lower notches in the ribs then place in position over the spars. It will be necessary to DRAW THE SPARS UP into the rib notches. Place pins on each side of the ribs until the cement sets..

TILT rib R1 as instructed on the plan, using the template as indicated. Apply cement to the front notches in the ribs and add the LEADING EDGES, similarly add the TRAILING EDGES. Cement the small piece of 1/4" x 1/16" forming the "centre" of

From the 1/4" x 1/4" balsa supplied, cut the CLIP MOUNT to the length shown in the Side View. Cement the JETEX 50 CLIP (supplied in each JETEX outfit and NOT contained in this kit) to the CLIP MOUNT in the Side View, which also shows the JETEX 50 in position.

Check that the CLIP is central and parallel to the CLIP MOUNT—THIS IS IMPORTANT!—if correct, SCREW the CLIP to the MOUNT using the small screws supplied in the JETEX outfit (see sketch).

Install the Clip Mount with the Clip in place into the notches in the formers 5 and 6 and the "recess former" E - cement well.

BEND the Catapult Hook from a wire paper clip as shown, then cement in place with its hooked ends over former 4 and with one 'leg' on each side of piece B.. Bind with thread for extra strength. Cement pattern Z in place in the recesses formed in the undersides of formers 6 and 7 so as to form a TROUGH, adding a piece of (JETEX) asbestos paper on to pattern Z as shown.

CUT OUT piece A between formers 2 and 3, and also the two stringers on either side of A, this is to form a cockpit opening.

Sandpaper the whole Fuselage to remove any protruding edges, etc., then cut the TAILCONE from postcard, wrap round and cement to former 8 to form a dummy 'jet opening'.

Using paste as adhesive, cover the Fuselage using "bands" of tissue, which wrap round filling the space between two formers, start at the tail end. When the paste is dry, WATER SHRINK the tissue—do not dope yet.

Paint the top of the Fuselage at the cockpit position and also inside the cockpit with Light Green dope. Trim the COCKPIT COVER to the length and shape shown, then paint the inside with Red or Flame colour dope, leaving transparent only those parts shown in the Side View. The windows of course occur both sides.. Cement the Cover in place centrally on top of the fuselage.

the tip position, also the top piece of the tip (see sketch). Add the top spars and the Top pieces of the INTAKES, the lower strips are added when the wings are removed from the plan.

Remove the wings from the plan when the cement has hardened and round off all corners with fine sandpaper. Note the shape to which the tips must be sanded.

Cut out and shape the patterns W then cement in place over the intake strips, trim off any surplus. then add the "backing pieces" - patterns X, these "seal" the dummy intakes and prevent air entering the wing. Do not tissue cover yet.

ASSEMBLY

Apply cement to ribs R1 of each wing and carefully press into position on pieces D of the Fuselage. Note how the Jig spar fits into the hole provided in D. Check that the shape of R1 follows D and that the Trailing edges of the wing are level when viewed from the rear.

It will be seen that the "noses" of ribs R1 each side jut out beyond D, this is quite in order as it follows the shape of the full size aircraft. Cement patterns Y in place on each side to seal the gap between R1 and D at the rear.

Cement the DORSAL FIN 'F' and the FIN together, sand smooth both sides and round off the corners. Sand, a piece of 1/4" x 1/4" round and to the shape shown on the fin, SLOT - then cement to the fin. This represents a container for a spin arresting parachute used on the full size machine.

Tissue cover the wings making a slight overlap where the wings join the fuselage. Water shrink the wings, and when dry, clear dope the whole model.

Whilst using dope, cover the Fin and F with tissue by dopping the wood surfaces then pressing the tissue in place.

Cement the Fin assembly perfectly upright on top of the fuselage directly over piece C.

Make up two ELEVATORS using patterns V and pieces G and H. *Don't forget to make a left and right-hand; this means the tabs will be turned up in the opposite directions (see sketch).*

Fix the Elevators lightly in place on the wings, cementing to the lower wing spars and preferably attaching to the top spars with small squares of CELLOTAPE as this allows adjustments to be made. Check that measurement of 3/16" is correct at the position shown.

Unless Red tissue has been used, the model may be finished using red or flame colour dope all over USE COLOURED DOPE THINLY. The intakes and patterns W may be doped black for a scale appearance, also the inside of the Tailcone. Add R.A.F. transfers where indicated.

FLYING.

With the JETEX motor loaded and clipped in place, add the small pieces of plasticine to the nose or tail until the model balances level when supported on the fingertips at the position where the FRONT wing spars cross Rib R2 each side.

Choose a calm day and test glide the model over long grass, launching from shoulder height on a slightly downward path, into the wind.

If the model dives, remove some of the weight from the nose or slightly increase the measurement of 3/16" on the Elevators. Should the model stall, add weight to the nose or remove weight from the tail, or decrease the measurement of the Elevators—whichever gives the best result. *Make all adjustments*

a little at a time.

Try a few Catapult launches before lighting the Jetex unit, and, if necessary make further adjustments as described above. If the model turns excessively to left or right, or tends to dip one wing, check first for warps. If there are no warps—decrease the Elevator measurement on the wing which is dipping.

Refer to the instructions supplied with the Jetex 50 unit to ensure correct operation of the motor.

Other models in this JET FIGHTER SERIES are shown on the plan. Watch KEIL KRAFT in the JET FIELD. Full page advertisements appear in "Model Aircraft" and the "Aeromodeller".