

THE ATTACKER

Designed and Drawn by Albert E. Hatfull.

The ATTACKER is a single seat jet fighter used by the Royal Navy. Power is provided by a Rolls Royce Nene. Unlike most other jet fighters the ATTACKER features a tail wheel type undercarriage.

Note:—No wheels are supplied in this kit.

BUILDING INSTRUCTIONS

Cover the plan with greaseproof paper.

FUSELAGE.

Pin pieces A, B, C, D, H and the pieces of $3/16"$ x $1/16"$ to the plan, apply cement to all the joints. These parts form the Side View "outline" of the Fuselage. Notice how pieces A and D join at the nose to give the side profile to the nose block. Cement the half formers 1, 2, 3, 4, 5, 6, 7, 8 and 9 to the previously laid outline (A, B, C, D, etc.) directly over the positions indicated on the plan. Keep these half formers perfectly upright by placing pins on either side of them until the cement sets, then remove pins. Apply cement to the slots in half formers 4, 5 and 6, then press piece 'G' (left) well up into these slots. Cement the $1/16"$ x $1/16"$ stringers into the notches in the formers after studying their arrangement and position of joints shown in the Side View of the Fuselage. A few stringers are left out on the plan for clearness. The notch in the rear end of piece 'G' is for a stringer which "stops" on the front face of former 8 close to the keel strip of $3/16"$ x $1/16"$; leave this stringer out until the side is removed from the plan, it will then be easier to install. DON'T have a stringer passing across the "WING POSITION" between formers 4 and 6. Remove this half of the fuselage from the plan when the cement has set. Cement the second (or right hand side) set of half formers in position directly opposite and in line with the first (or left hand side) set. When the cement has set, add the stringers to the second (right hand) side. Apply cement to the slots in 4, 5 and 6, and press piece 'G' (right) in place as before. The stringers which fit into the notches in pieces 'G' on each side may now be added. Cement the two halves of the balsa nose block on each side of pieces 'A' and 'D' and carefully carve to the shapes shown using a sharp knife. Finish with fine sandpaper. From the piece of $1/4"$ x $1/4"$ balsa supplied cut the "Clip mount" to the exact length shown in the Side View, cement the Jetex 50 Clip (supplied in each Jetex 50 outfit and *not* contained in this kit) to the Clip mount so that the screw holes in the Clip line up with screw centres marked as dot dash lines on the plan. In this position the front of the Clip should be about $3/8"$ or slightly more from the rear face of former 4 when the Clip mount is in position. Check this measurement before finally cementing in place. Check also that the Clip is *central* and *parallel* with the "Clip mount"—THIS IS IMPORTANT—if correct, screw the Clip to the mount using the screws supplied in the Jetex 50 outfit. Install this unit into the notches in formers 4 and 5 and the recess formed by piece 'H', cement well. Cement pattern 'Z' in place in the recesses in formers 5, 6, 7 and 8, so as to form a "trough." Cement the piece of asbestos paper to pattern 'Z' as shown on the plan. Cement the pieces 'J' and 'K' in place as indicated in the perspective sketch. Piece 'J' fits into the corner formed by former 6 and the *fifth* stringer down from the top of the fuselage. Piece 'K' fits in the corner formed by former 4 and the *fifth* stringer. These pieces are fitted on each side and should fit snugly to the wing when the latter is "offered up" to pieces 'G', check this later when the wing is built and sandpaper 'J' and 'K' if necessary. Cut away piece 'A' between formers 2 and 3 to form a cockpit "well" (this is optional). Tissue cover the fuselage using strips of tissue sufficient to span the gap between two (more where possible) adjacent stringers and, where convenient, running the whole length of the fuselage. Leave the part at the tail position between formers 8 and 9 uncovered and of course the wing position each side. Water shrink and (thin) clear dope the tissue. Cut the cockpit cover to the length and shape shown on plan then cement in place where shown. Cement patterns 'X' to each side of the fuselage as shown in the sketches on the plan.

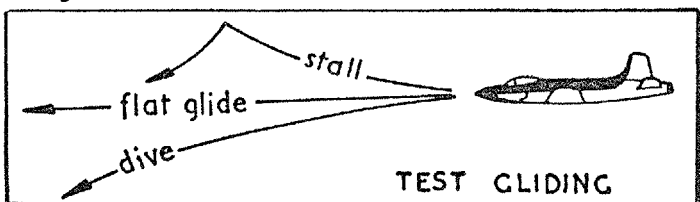
WINGS.

Cut the leading and trailing edges to the lengths and shapes shown, notch the trailing edge as noted. Hold the $1/16"$ x $1/16"$ lower spars and the $1/4"$ x $1/16"$ trailing edges in position on the plan by placing pins on either side of the wood—not through it. Leave the spars protruding beyond rib R1 as shown, these ends later fit into the notches provided in pieces 'G' on each side of the Fuselage. Cement ribs R2, R3, R4 and R5 to the spar and trailing edge directly over the positions on plan. Cement ribs R1 in place but—before they set, use the stiff card template (see Front View of Right Wing) to tilt these ribs to obtain the necessary dihedral when the wings are assembled to fuselage. Apply cement to the notches in the "noses" of the ribs then carefully press the $3/16"$ x $1/16"$ leading edge into these notches. Check the tilt in ribs R1 again and if correct cement the top $1/16"$ x $1/16"$ spar into the notches in the tops of the ribs. Add gussets where shown. Remove the wings from plan when the cement has set. Roughly shape the tip blocks from the $1/4"$ x $1/4"$ balsa, cement in place on rib R5 and finish shape with fine sandpaper. Tissue cover above and below on both wings water shrink and clear dope. Apply cement to rib R1 (one wing at a time) and carefully press the wing into position on pieces 'G' of the fuselage, when both wings are in place check that there is $1\frac{1}{2}"$ dihedral (see Front View) under each wing tip—do not attempt to fly the model unless this measurement is correct. Cut the tailplane to the shape drawn, fine sandpaper each half perfectly smooth, then with one half flat on the building board cement the other half to it and leave to set with this tip propped up to $1\frac{1}{2}"$ (this gives $\frac{1}{2}"$ dihedral each side). Cement the tailplane in position as noted on the plan and before the cement sets sight along the fuselage from the front and check the "line-up" of the tail with the wings for symmetry. Cement pattern 'Y' in position over the tail and wrap the back portion round former 9 to form the tail cone. Sandpaper the Fin and piece 'E' smooth both sides, cut away pattern 'Y' to clear the notch in piece 'C' then cement the Fin and piece 'E' in place. Check for squareness.

The position of the undercarriage is shown for those modellers who wish to build the model for "show" purposes and in this case coloured dope may be used to finish the model as desired. Colour doping is not recommended for a flying model owing to the extra weight involved, if however the colour is used thinly it should not raise the weight enough to prevent flights of moderate duration. Naval colour scheme is indicated on the perspective sketch.

FLYING.

With the Jetex 50 loaded and clipped in position, test glide the model by hand launching from shoulder height on a slightly downward path directly into the wind. If the model dives (see sketch below) add a small piece of plasticine to the inside of the tail cone. If the model stalls add a small piece of plasticine to the nose block, this may later be substituted by equal weight in lead which can be cemented into a hole in the nose block. When a flat glide has been obtained jet power may be used. We advise you to read the leaflet supplied in the Jetex 50 outfit before attempting power flights



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