



A 1/12th scale, 45 in. span  
control line

## BEAGLE BASSET

using two 1.5 c.c. engines,  
designed by IAN BARRETT

IT TOOK BRITISH EXECUTIVE AND GENERAL AVIATION LTD less than one year from the initial decision to design and build a twin-engine light executive aeroplane, until the prototype '206' flew for the first time in August 1961. This aircraft soon found popularity, with its ability to carry 5-7 persons, and it was not long before the Ministry of Aviation took an interest in it, with a view to adopting it as a communications and ferrying aircraft for the R.A.F. Indeed, in late 1964, twenty were ordered for these purposes, under the name of the Basset CC Mk 1.

The model presented here was inspired by the Airfix plastic kit of the *Basset*, and the designer can thoroughly recommend buying this kit if it is intended to finish the model in its military guise.

Construction should provide no difficulty to the modeller with some previous experience, as standard techniques are used throughout. The airframe is built in two main components, the fuselage and tail as one unit, the wings and engine nacelles as the other.

To build the fuselage, first cut out the 1/8" sheet keels (F10-14, 16 and 17), pin down over the plan, then add the port side half-formers, using a set square to check that they are truly vertical. When quite dry, add the 3/32" sheet balsa sides. As soon as this assembly is dry, remove from the plan and add the remaining half-formers, not forgetting to fit the nose leg bearer.

Fret out the 3/32" ply full-former F5 and place in position before adding the starboard fuselage side – but do *not* cement it to the lower keel piece. Check carefully at this stage that the basic fuselage is not distorted or warped in any way. If you intend to add full cockpit furnishings, then it should be done at this stage while the whole area is readily accessible.

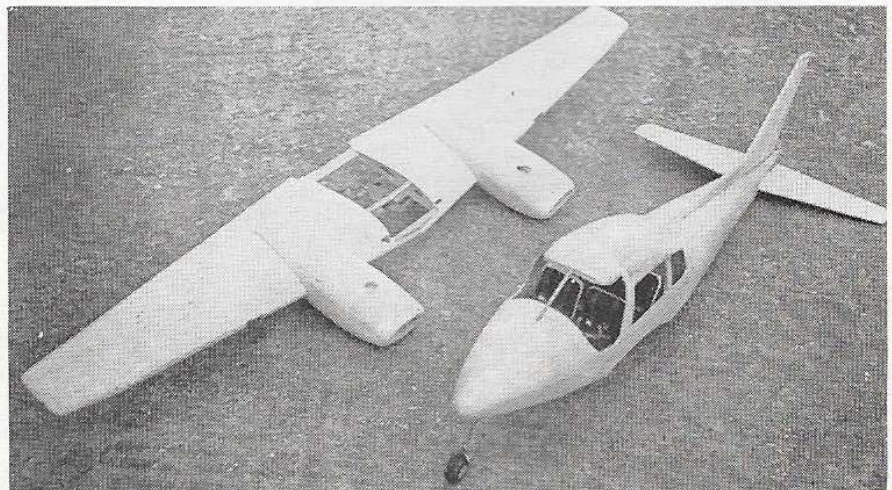
Attractive shape of the Beagle Basset is evident from the heading picture of the R.A.F. Transport Command's replacement for the long-serving Anson as a general purpose, light communication aircraft. *Flight photograph.*

The model is made as two basic units before they are finally joined. This makes jobs such as planking the fuselage and sheeting the wings much easier, as well as making the model easier to handle – and less liable to knock items off the building board whilst building!

Cut the tailplane and elevators from 3/16" sheet (duplicate parts are needed for lamination) and sand outside surfaces to shape. Laminate the two halves, remembering to include the tape hinges and elevator horn, and making sure that the elevator moves freely. Glue this assembly in position, checking carefully that it is at right-angles to the fuselage sides. Fit the push-rod to the elevator horn, leaving the forward end of the pushrod with sufficient excess length to enable it to be later connected to the bellcrank. Bend 14swg nose-leg to shape, add wheel, bind with fusewire then solder as indicated. Finally bind and epoxy to the hardwood mount.

Glue former F17 in place over the cockpit area, then proceed to plank the entire fuselage with strips cut from 3/32" balsa and using balsa cement as the adhesive. This is preferred as no other form of adhesive may be sanded down with ease of balsa cement, and blobs of glue on the outer surface could easily ruin the final finish. Note that the planking continues right under the centre section – this will be removed later to allow the wings to be fitted. With planking completed, add nose formers N1 and N2, then fill in with soft block before sanding the whole fuselage smooth. When satisfied with this, laminate the fin and rudder (complete with stiff aluminium hinges) before glueing securely in place.

Wing structure is concentrated around the main spar, which consists of two 1/8" sheet spars bonded to a plywood doubler – a P.V.A. glue is ideal for this task. Bond a 3/8" x 1/4" hardwood block to this spar at the centre section to provide a bellcrank support. Make the port wing structure first. Pin the mainspar over the plan, with 3/32" packing under it, followed by the trailing edge also with suitable packing to enable it to conform to the required wing section. Pin the leading edge directly over



the plan - but not forgetting to pack up the last tip section to suit the dihedral. Now add all the ribs, noting that the centre section ribs must fit into the plywood fuselage former slots at a later stage. Remove from the board when quite dry, and repeat for starboard panel.

The lower engine bearers (with former C4) are now added to the wing frame cutting away the leading edge where necessary. These bearers transmit engine thrust and undercarriage loads, so take particular care over assembly. Cut out the remaining nacelle formers and glue in position (use an epoxy resin on formers C1 and C2) making sure that they are true and square. When dry, add the top bearers and sheet infill. Next bind and epoxy the undercarriage legs in position, install the fuel tanks and drill the engine mounting holes.

The bellcrank and leadout wires should now be installed, as should the 2 oz. wing tip weight. Add the 1/4" x 3/8" doublers behind the landing lights on the leading edge, then cut the leading edge as shown. Cement all remaining gussets in place, then sheet upper and lower wing surfaces with medium-soft 3/32" sheet, using a P.V.A. glue as the adhesive.

A small slot will have to be cut in the top surface sheeting adjacent to the centre section ribs to clear the plywood fuselage former. Plank the nacelles up to the plywood bulkhead. Either install blind mounting nuts for the engine bolts, or else install the bolts with wire soldered across the heads to prevent them from turning. Build up the cowling from soft 1/2" sheet, hollowing the removable section to clear the engine, and securing it with press studs epoxied in position. Add the 3/8" sheet nose block and the wing tips, then carefully sand the entire wing/nacelle units smooth.

The next step is to join the two major components - this is done by carefully cutting away the lower fuselage sheeting at the centre section, and fitting the wing securely. Connect up the elevator pushrod, then replace the bottom sheeting.

All the final detail such as window glazing, landing lights, wing fillets, etc., may now be fitted, then give the entire model two coats of sanding sealer. Rub down and cover with heavyweight tissue before adding further coats of sanding sealer, rubbing down between each coat until a satisfactory finish is obtained. Now add the aerials and undercarriage doors (filling the grain with sealer as before) then paint the model in the colour scheme of your choice. The original model was painted with Humbrol gloss enamel, while the lettering was applied from "Letraset" sheets. The final finish was achieved with a coat of "egg-shell" (semi-matt) clear Polyurethane varnish, which also acts as a fuel proof.

The *Basset* flies well on 45 foot lines, but needs rudder offset to overcome any swing or yaw that may develop should the inboard engine stop first. Once airborne, the model is quite nippy while the tricycle undercarriage makes the ground roll very stable - indeed the touch and goes would be a dream if a third-line throttle control system was incorporated!

The original model met its demise when the designer attempted to fly it on long lines without rudder offset, and of course, the inboard engine stopped without warning when the model was high. Two laps of "free flight" ensued, the resulting prang removing the nose most effectively! However, this was purely attributed to 'pilot error' and with the rudder offset shown, no troubles will be evident.

FULL-SIZE COPIES OF THIS 1/7th SCALE REPRODUCTION ARE AVAILABLE AS PLAN No. CL 1140, PRICE 75p POST FREE FROM AEROMODELLER PLANS SERVICE, 13-35 BRIDGE STREET, HEMEL HEMPSTEAD, HERTS.

