

REVIEW OF SHUTTLE/S



Hirobo's tiny little Shuttle is a familiar sight on many flying fields. It was the first ready built model to be marketed in England and must be one of the most widely used trainers to date.

Lots of people who have progressed beyond the training stage turn their attentions toward scale models, the Shuttle is well catered for in the 'hang on' body stakes there being several available. The Squirrel featured in this review is available from Dave Nieman Models (sole importer of Hirobo in the U.K.).

The body is of polyester resin/glass cloth construction as are the horizontal and vertical fins, the whole front end is removable making the access to the radio gear relatively easy, the tedious job of cutting out the window apertures has already been done and the edges are

turned inwards to produce a 5mm wide flange. This combined with a large flange where the body halves fit together makes for a very torsionally rigid assembly.

Putting it Together

Start construction by first removing the upper flange of the front tail drive pulley and lifting the belt off so that the tail housing can be pulled off the boom. (Do not slacken the front boom retaining bolts to preserve belt tension setting). The fins and undercarriage must also be removed.

Longer blades, tail boom and drive belt are available for this body but we elected to use the standard items. This necessitated the removal of 42mm from the length of the body's tail. Slide the mechanics into the body and mark the position of

This makes an ideal first subject for the budding scale buff. Painting is virtually all that is required apart from drilling a few holes. The fuselage was extremely light and had no imperfections to correct except the need for a little filler on the joint line.

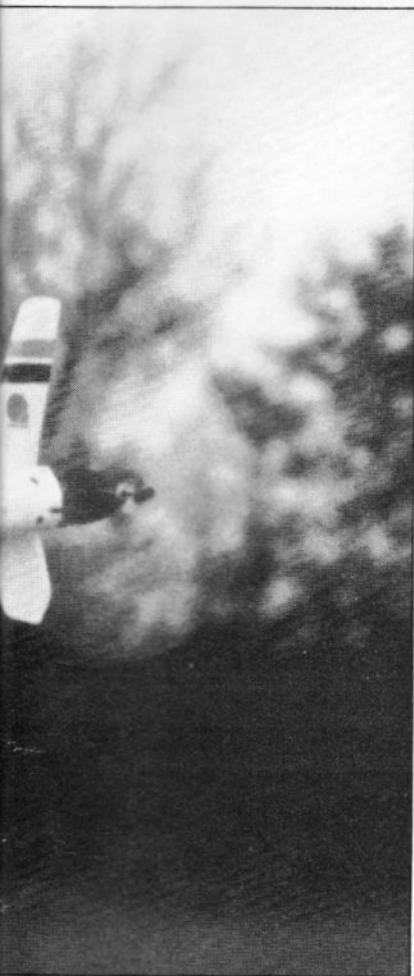
Subject for beginner to scale by Nigel Ashwood.

the four undercarriage bolt holes, the exit hole for the exhaust, and two holes for the tail housing/fin clamping bolts. Cut a rectangular hole underneath to allow air from the cooling duct to escape and also provide access to the glo plug.

The front section of the body is held on by small self-tapping screws (I used six). Do not rely on just the fibre-glass which is very thin but back up these screw holes with small squares of 3mm thick ply, this provides something for the screws to bit into. The slot for the horizontal fin has to be cut using the moulded projections on the tail boom as a guide.

The joint line needs just a minimum of filling and sanding down prior to painting the surface proved to be free from pin holes and other defects.

QUIRREL CONVERSION



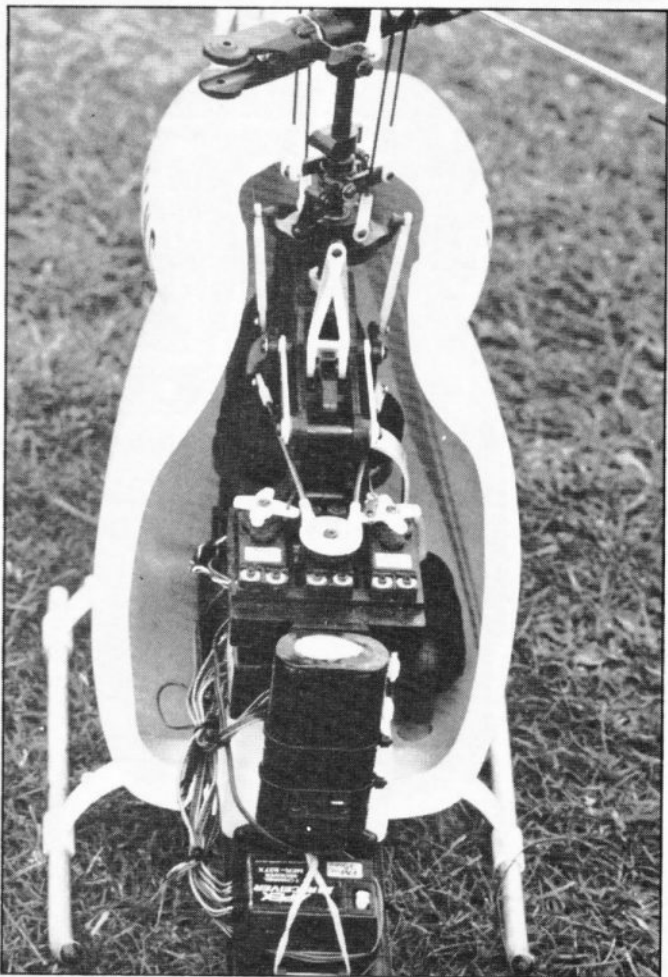
After painting the body slide in the mechanics and secure the side frames using the undercarriage bolts to retain them. Using a thin piece of piano wire pull the belt through the tail boom and slip it onto the front pulley and do not forget the fitment of the pulley upper flange.

Using two 14mm long spacers and 35mm long 3mm cap screws secure the tail fin and tail box housing together. All that remains to do is to refit the tail pitch control wire and secure the front section of the body. There is a slot in the port side of the body that provides access to the starting belt, but if you do not like risking damaging your paint job Helimprovements make a rear cone start conversion to fit the O.S.28 engine used in the Shuttle. This unit is fully ballraced and is very nicely made. The only criticism is that the cone could be made a little longer so it would clear the rear undercarriage strut a little more.

The painted body and fins weighed 465 grammes, deduct the weight of the original canopy and fins and you end up with an increase in flying weight of 232 grammes. Flight performance does not seem to suffer despite the increase in bulk and weight. If anything it seems to feel steadier in the hover and appears to be quieter. This body is not the ultimate in scale but gives the Shuttle a very pleasing Squirrel lookalike appearance. Altogether a very good quality product. □

Excellent access to the radio is afforded by removal of the entire front section (six self-tap screws).

Colour scheme is based on the full-size aircraft belonging to Dollar Helicopters which is normally kept at Bagington Airport, near Coventry. O.S.28 FSR with 10% nitro in the fuel, can easily handle the small increase in weight. MB flies while author takes the piccies.



Helimprovements cone-start arrangement which was used in the enclosed Shuttle.

