FULL SIZE PLAN !

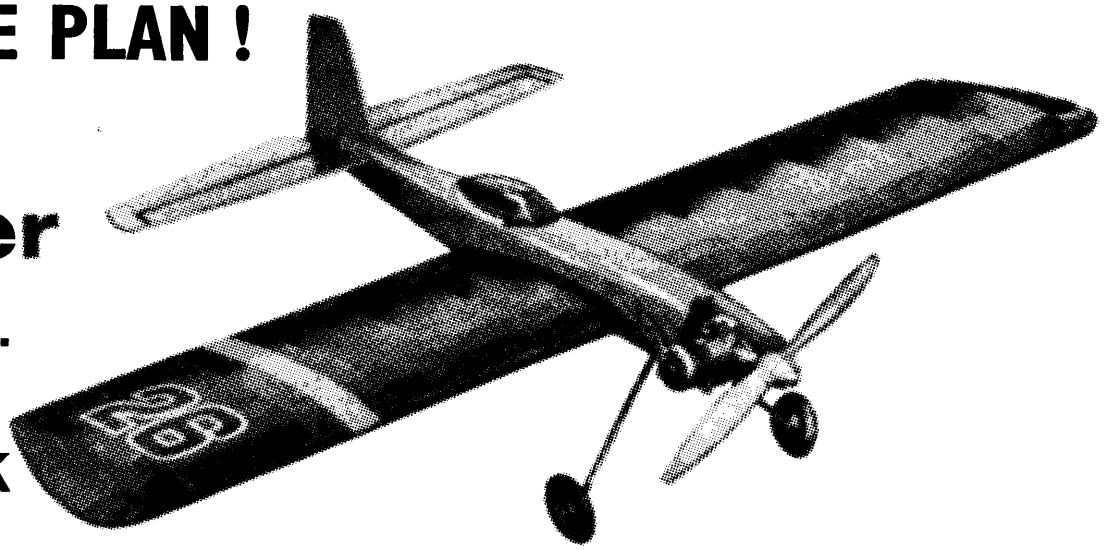
29 in. Span

Stunter

for 1-1.5 c.c.

by

H. C. QUEK



"CHIHUAHUA"

SIMPLICITY is the keynote of this design, resulting in an extremely "clean" looking model with a lively performance. If it's straightforward construction and really satisfying small-motor flying you're after, *Chihuahua* is the model for you !

Wing

Cut the ribs required from 1/16 in. sheet. Notch the TE to take the ribs, lay spar S1 flat on board and pin TE (with packing pieces) on the plan. Slide the ribs into position and cement in place—allow 1/16 in. packings under ribs R1A and R2A. Cement in place LE, spars S2 and S3 and check for squareness before cement sets. Add in the four corner gussets as shown.

Remove wing from plan when dry and add in spar S4 and the bellcrank mount B. Build the wing tips as detailed. Fix approximately ½ oz. weight to the starboard wing at position shown.

Assemble and solder up control linkage and make up the fuel tank at the same time. Plank the top and bottom centre section of the wing with 1/16 in. sheet.

Fin and Tailplane

Shape and sand tailplane and elevators from 3/32 in. sheet. Bind and cement elevator horn to joiner J. Align and cement elevators to joiner, then tape assembly to tailplane with linen tapes.

Fin can either be made from 3/32 in. balsa or 1/16 in. ply. Off-set is achieved by steaming and bending into position.

Fuselage

Cut the two fuselage sides FS from 1/16 in. sheet. Cement the top longerons L1 to the sides. Make formers F1 and F2 from 3/32 in. sheet. Choose one of the two engine layouts shown and cut bearer holes required accordingly. Slide and cement the bearers in position. Check for squareness.

Fix the fuel tank, using pieces of scrap balsa to pack it tightly in between the bearers and between formers and tank.

Bend undercarriage from 14 s.w.g. piano wire and bind and cement to ply former F2P. Now cement this assembly to the rear side of F2 with undercarriage legs facing backwards. FS can then be glued to the formers. Allow to dry, then the wing should be cemented in position. Do not forget that the 16 s.w.g. piano wire push rod must come through the slot at the starboard side of FS.

Cement L2 in place and replace the cut-away of FS under the wing. Note that L2 must be butted against F2P to prevent it tearing away from F2 on rough landings. Chamfer tail end of longerons L1 and L2 and cement both sides together, then add in the 1/16 in. spacers at positions shown.

The tailplane assembly can be cemented in place. Again check for alignment in relation to the wing. Add on the ¼ in. sheet turtle deck and plank the underside of the fuselage with 1/16 in. sheet cross grain. Sand the turtle deck to shape when dry. Cut slot at rear end of turtle deck, insert and cement fin in place. Bind tailskid to longeron L3, then cement longeron over planking.

Attach the 1 mm. ply firewall F-P to F1. Drill bolt holes through the bearers to suit 8BA mounting bolts. Solder up bolt heads with thin piano wire or tin plates. At the same time solder the wheels and the free end of the push rod at the elevator horn with retaining washers.

Cement on the nose blocks, and the ply nose ring. Allow to dry and shape to a pleasing contour.

Finishing

Apply one coat of thinned dope to the entire model, and when dry lightly sand with a fine grade of sandpaper.

Cover the wing and underside of fuselage with heavyweight tissue. Use tissue paste or clear dope as adhesive. Other parts of the model are covered with lightweight tissue using dope as adhesive. Coloured tissue can be used to cover the wing so as to save weight.

Apply two coats of 50/50 clear dope and thinners to the wing and entire model. Sandpaper between coats—lightly over the wing.

Mark the position of the canopy (optional) on the turtle deck and paint this area black, before cementing on canopy.

Finish off with two coats of fuel proofer to the engine bay and one coat of fuel proofer to the rest of the model. Allow to dry completely.

Fix on the engine, bring your model out to an authorised flying field, tank up and give your engine one full tank run. Adjust for best engine running setting for various flying attitudes of the model.

You are now ready to see it airborne. Be on the alert—*Chihuahua* is very snappy !

MATERIALS REQUIRED

1 sheet	1/16 x 3 x 36 in. medium balsa.	1 piece	1/8 x 1 x 2 in. ply.
1 sheet	3/32 x 3 x 36 in. medium balsa.	1 length	3/32 x 1/4 x 3 in. hardwood.
1 sheet	1/4 x 2 x 18 in. soft balsa.	1 length	1/4 x 1/4 x 7 in. hardwood bearers.
4 strips	1/8 x 1/8 x 36 in. hard balsa.	1 length	6 in. long x ¼ in. wide linen tape.
2 strips	3/16 x 3/16 x 36 in. soft balsa.	1 length	2 in. long x 18 S.W.G. brass tubing.
1 strip	1/4 x 1/4 x 36 in. hard balsa,	1 length	12 in. long x 16 S.W.G. piano wire.
1 strip	3/16 x 3/4 x 36 in. hard balsa shaped T.E.	1 length	13 in. long x 14 S.W.G. piano wire.
1 piece	1 mm. x 2 x 2 in. ply.	1 length	36 in. long heavy Laystrate C/L wire.
1 piece	1/16 x 3 x 4½ in. ply.	Bellcrank, Elevator Horn, Wheels.	