A 24½" SPAN RUBBER POWERED SCALE MODEL

AVRO AVIAN MONOPLANE

by Bill Dennis

PRESENTED WITH FEBRUARY 1986 AEROMODELLER
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Box 35, Wolsey Road, Hemel Hempstead, Herts.

Use light balsa except for med. L.E. and longerons

POWER 4 strands of 1/8"flat x24" adjust as necessary

Windscreen template

COLOUR SCHEME:
All lime green with white lettering (Austin Morris "Apple jack"DS MB102)

U/C FRONT VIEW

locates in lower 22 s.w.g. tubes

22s.w.g. rear legs

22s.w.g. main legs

When axle is in place, cut away main leg bottom part to save weight

Section at F4

Section at F5

F1 1/32"ply and 1/8"sheet

Side U/C member Solder to top front main

Solder to lower front main

Fill between F1 and S1 with 1/8"scrap

Temporary S2

Nose block 1/32"ply rear, 3/8"sheet and 1/64"ply disc

Use 8" dia Peck prop cut to 7½"

See sketch for bulges on port side

Temporary 1/16"sheet S2 to align S1

Holes on top of cowling

Top

Bottom

Celluloid screen

PLAN

1/32"fill on bottom

Crack and glue longerons add 1/16"sq. and sand to curve

Soft 3/8"sheet hollow out

Fin structure as tailplane

1/16"sheet tail mount

Scrap 1/16"fill

Fill between F1 and F2 with scrap 1/8"x1/16"

F2 1/16"sheet

F3

F4

F5

Luggage locker from doped on paper, port side only

Fuselage structure all 1/16"sq.

Make former for top decking from 2 pieces of 1/2"sheet, take plaster mould from this and lay up 3 layers of light Modelspan tissue with P.V.A. glue (use wax release agent)

Frame from litho plate

Temporary jig pieces to locate F1

Rigging attachment points

S1

BALANCE

Hard 3/16"x1/16"

Three stringers each side taper to zero at rear ends

24s.w.g. skid laminated with 3/32"x1/64"ply

Tail struts 1/16"x1/32" basswood

Rigging wires are double- loop elastic thread around hooks made from bent litho plate glued to ribs, longerons and lower U/C. Form around pin.

Riblets

Optional lightening holes

TYPICAL WING SECTION

1/16"reinforcement Louvres port, starboard and on bottom

20 s.w.g. tubes for wing dowels

Fair struts with 1/8"x1/16"

SIDE

One central stringer

Scale prop mid grey, mount on seperate noseblock Turn spinner and wheels on electric drill

TAIL SECTION

STARBOARD WING

Lettering above and below

All ribs 1/32"

1/16"root rib (note angle)

2 laminations of 1/16"x1/32" basswood or 3 laminations of balsa

Ribs 1/32"x3/16" sanded to section after assembly

Flying wire attachment point

Axle

X

Paper disc

1/8"sheet tyres

Add paper cone

Soldered washer

3/32"sheet doublers for tube

1/32"ply core

WHEELS

4 off 20s.w.g. wing dowels Spot glue wings in place- they will knock off in a hard arrival

20s.w.g. tube bush

20 s.w.g. tubes

Arrows indicate side panels litho plate or doped paper overlay after covering

Add scrap block and shape bulges on port side

Top decking former sections for making moulding plug

1/2"sheet

F1

F2

Exhaust holes

Panel with litho plate

PORT SIDE OF COWL

1/8"x1/32" bracing to end rib

3/4" dihedral

PORT WING

Rigging wire points

3/32" L.E.

1/4"x1/16"

1/8"x1/16"

1/16"sheet sub spars

1/16"riblet

Riblet

1/8"x1/16"T.E.

Ribs butt to T.E.

1/32"sheet gussets

Insert 1/64"scrap to preserve gap

1/8"sheet plug

True length of main U/C leg fairings

S1 2 off 1/16"

TAILPLANE

Strut attachment

1/32"sheet top and bottom

1/16"x3/16"spars

Insert scrap 1/64"sheet to maintain gap