A 35" span sport model for 55— 98 c.c (A P S code C D)

ENDEAVOUR

DESIGNED BY

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6/-

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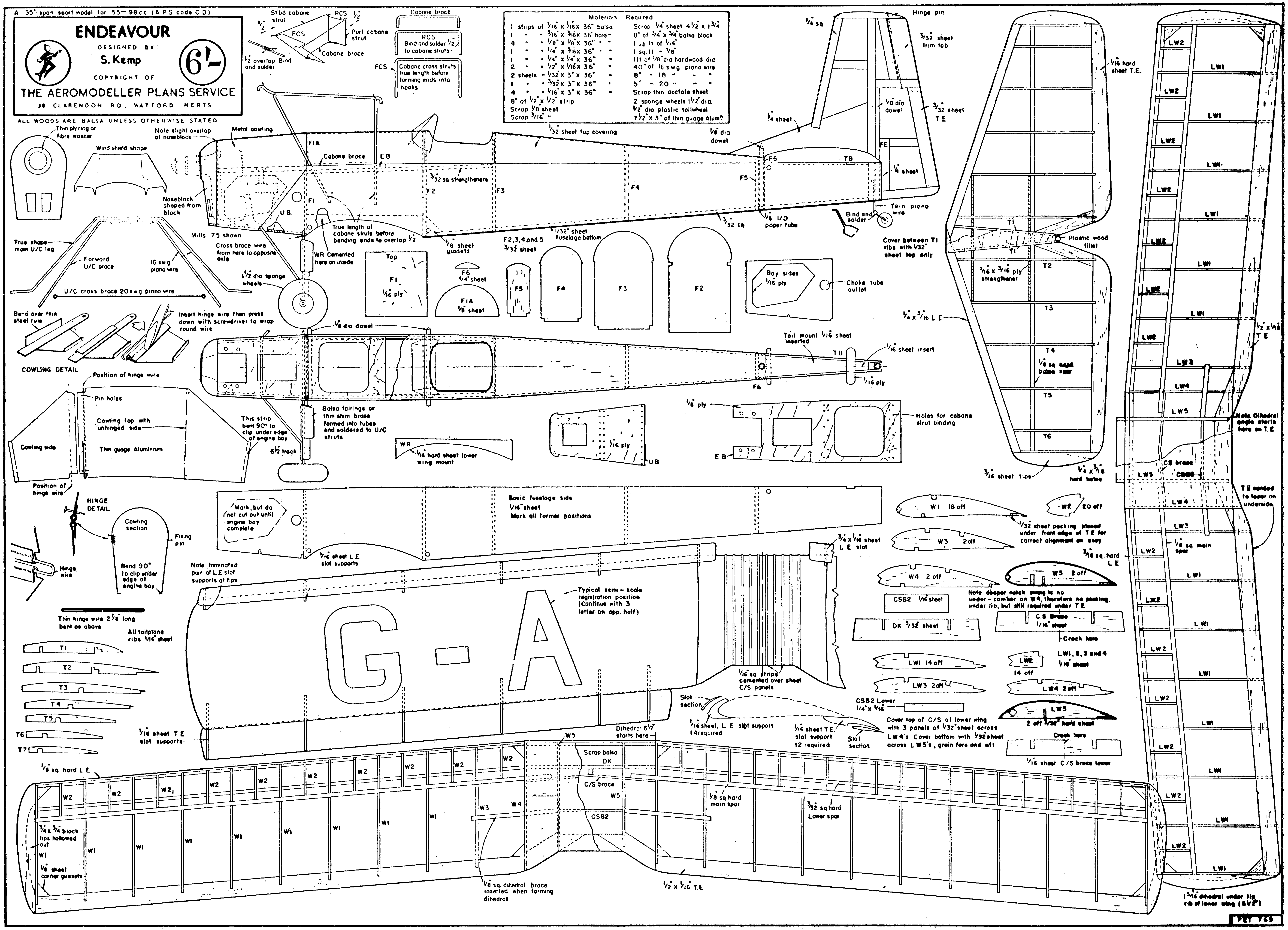
38 CLARENDON RD. WATFORD HERTS

ALL WOODS ARE BALSA UNLESS OTHERWISE STATED

Materials Required

1 strips of 1/16" x 1/16" x 36" balsa	Scrap 1/4" sheet 4 1/2" x 1 3/4"
1 - - 3/16" x 3/16" x 36" hard -	8" of 3/4" x 3/4" balsa block
4 - - 1/8" x 1/8" x 36" - -	1 sq ft of 1/16"
1 - - 1/4" x 3/16" x 36" - -	1 sq. ft - 1/8"
1 - - 1/4" x 1/4" x 36" -	1 ft of 1/8" dia hardwood dia
2 - - 1/2" x 1/16" x 36" -	40" of 16 s w g piano wire
2 sheets - 1/32" x 3" x 36" -	8" - 18 " - -
1 - - 3/32" x 3" x 36" -	5" - 20 " - -
4 - - 1/16" x 3" x 36" -	Scrap thin acetate sheet
8" of 1/2" x 1/2" strip	2 sponge wheels 1 1/2" dia.
Scrap 1/8" sheet	1/2" dia plastic tailwheel
Scrap 3/16" -	7 1/2" x 3" of thin guage Alum^m


St'bd cabane strut
RCS 1/2"
1/2"
FCS
Port cabane strut
Cabane brace
1/2" overlap Bind and solder
Cabane brace
RCS Bind and solder 1/2" to cabane struts
FCS
Cabane cross struts true length before forming ends into hooks
Thin ply ring or fibre washer
Wind shield shape
Note slight overlap of noseblock
Metal cowling
F1A
Cabane brace
E B
3/32 sq strengtheners
F2
F3
F4
F5
F6
TB
FE
1/32" sheet top covering
1/8" dia dowel
1/4" sheet
1/4" sq
Hinge pin
3/32" sheet trim tab
1/8" dia dowel
3/32" sheet T E
1/4" sheet
Noseblock shaped from block
U B
F1
True length of cabane struts before bending ends to overlap 1/2"
1/8" sheet gussets
1/32" sheet fuselage bottom
3/32 sq
1/8 I/D paper tube
Thin piano wire
Bind and solder
True shape main U/C leg
Forward U/C brace
Mills 75 shown
16 s.w.g. piano wire
Cross brace wire from here to opposite axle
WR Cemented here on inside
1 1/2" dia sponge wheels
U/C cross brace 20 s.w.g piano wire
Top
F1
1/16" ply
F6
1/4" sheet
F1A
1/8" sheet
F2, 3, 4 and 5
3/32" sheet
F5
F4
F3
F2
Bay sides
1/16" ply
Choke tube outlet
Bend over thin steel rule
Insert hinge wire then press down with screwdriver to wrap round wire
COWLING DETAIL
1/8" dia dowel
Tail mount 1/16" sheet inserted
TB
1/16" sheet insert
F6
1/16" ply
Position of hinge wire
Pin holes
Cowling top with unhinged side
Cowling side
Thin guage Aluminium
This strip bent 90° to clip under edge of engine bay
6 1/2" track
Balsa fairings or thin shim brass formed into tubes and soldered to U/C struts
WR
1/16" hard sheet lower wing mount
1/16" ply
UB
1/8" ply
E B
Holes for cabane strut binding
Position of hinge wire
HINGE DETAIL
Cowling section
Fixing pin
Hinge wire
Bend 90° to clip under edge of engine bay
Mark, but do not cut out until engine bay complete
Basic fuselage side
1/16" sheet
Mark all former positions
1/16" sheet L.E slot supports
Thin hinge wire 2 7/8" long bent as above
All tailplane ribs 1/16" sheet
T1
T2
T3
T4
T5
T6
T7
Note laminated pair of L.E slot supports at tips
G - A
Typical semi - scale registration position (Continue with 3 letter on opp. half)
3/4" x 1/16" sheet L E slot
1/16" sq strips cemented over sheet C/S panels
Slot section
1/16" sheet, L E slot support 14 required
1/16" sheet T.E. slot support 12 required
Slot section
1/16" sheet T E slot supports
Dihedral 6 1/2" starts here
1/8" sq hard L.E
W2
W2
W2
W2
W2
W2
W2
W2
W2
W2
W2
W5
Scrap balsa
DK
C/S brace
W5
CSB2
W3
W4
W1
W1
W1
W1
W1
W1
W1
W1
W1
3/4" x 3/4" block tips hollowed out
1/8" sheet corner gussets
1/8" sq hard main spar
3/32" sq hard Lower spar
1/8" sq dihedral brace inserted when forming dihedral
1/2" x 1/16" T.E.
1/16" hard sheet T.E.
T1
T1
Plastic wood fillet
Cover between T1 ribs with 1/32" sheet top only
1/16" x 3/16" ply strengthener
T2
T3
1/4" x 3/16" L E
T4
1/8" sq hard balsa spar
T5
T6
3/16" sheet tips
1/4" x 3/16" hard balsa
LW2
LW1
LW2
LW1
LW2
LW1
LW2
LW1
LW2
LW1
LW2
LW1
LW2
LW2
LW4
LW5
1/2" x 1/16" T E
Note Dihedral angle starts here on T.E
CS brace
LW5
CSB2
LW4
T.E sanded to taper on underside
LW3
1/8" sq main spar
3/16" sq. hard L.E
LW2
LW1
LW2
LW1
LW2
LW1
LW2
LW1
LW2
LW1
LW2
LW1
LW2
LW1
1 5/16" dihedral under tip rib of lower wing (6 1/2°)
W1 18 off
W2 20 off
1/32" sheet packing placed under front edge of T E for correct alignment on assy
W3 2 off
W4 2 off
W5 2 off
Note deeper notch owing to no under - camber on W4, therefore no packing under rib, but still required under T E
CSB2 1/16" sheet
DK 3/32" sheet
C S Brace 1/16" sheet
Crack here
LW1 14 off
LW2 14 off
LW1, 2, 3 and 4 1/16" sheet
LW3 2 off
LW4 2 off
CSB2 Lower 1/4" x 1/16"
LW5 2 off 1/32" hard sheet
Cover top of C/S of lower wing with 3 panels of 1/32" sheet across LW4's Cover bottom with 1/32" sheet across LW5's, grain fore and aft
Crack here
1/16" sheet C/S brace lower

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