A 52" SPAN F.A.I. CLASS R/C PYLON RACER

# PHAETON

designed by Frank Van den Bergh

75p

The R.C.M.&E. Plans Service

## BASIC MATERIALS' LIST.

| | | | | | |
|---|---|---|---|---|---|
| 5 | LGTHS | 3/32" x 3" x 36" | MED. SHEET BALSA | | |
| 10 | " | 3/32" x 1/4" x 36" | " | " | " |
| 1 | " | 1/16" x 4" x 36" | SOFT | " | " |
| 1 | " | 1/16" x 4" x 36" | MED. | " | " |
| 4 | " | 1/16" x 1/4" x 36" | HARD STRIP | " | " |
| 1 | " | 1/16" x 3/16" x 36" | MED. | " | " |
| 1 | " | 3/16" x 3" x 36" | " | SHEET | " |
| 2 | " | 1/4" x 4" x 36" | " | " | " |
| 2 | " | 1/4" x 3" x 36" | " | " | " |
| 2 | " | 1/4" x 1/4" x 36" | " | STRIP | " |
| 2 | " | 3/8" x 1 1/2" x 36" | T.E. STOCK. | | |

| | | | |
|---|---|---|---|
| 2 | LGTHS | 3/8" x 3/8" x 36" | MED. STRIP BALSA. |
| 2 | " | 3/8" x 1/2" x 36" | " " " |
| 2 | " | 3/8" x 4" x 36" | SOFT SHEET " |
| 1 | " | 3/8" x 3/8" x 36" | ◢ FILLET. |
| 1 | " | 1/2" x 3" x 36" | SOFT SHEET " |
| 1 | PCE | 1/32" x 10" x 25" | PLYWOOD. |
| 1 | " | 1/8" x 2 1/2" x 6" | " |
| 1 | LGTH | 3/8" x 3/8" x 7" | HARDWOOD. |
| 1 | " | 3/8" x 1/2" x 10" | " |
| 1 | " | 10 S.W.G. x 36" | PIANO WIRE. |
| 1 | " | 1/4" DIA. x 3" | DOWEL. |

NOTE FOAM WING USED ON ORIGINAL MODEL.

3/8" SQ. STRIP L.E.

SOFT SHEET TIPS.

SPARS 1/4" x 1/8" HARD STRIP TOP & BOTTOM.

1/32" PLY DOUBLERS.

U/C BEARER - 5/8" x 1/8" HARD-WOOD BLOCK OR PLY

1/4" DIA. LOCATING DOWEL.

1/32" PLY PATCH - TOP SURFACE.

1/4" x 1/8" SPARS.

SOFT SHEET TIPS.

WING TIP SECTION.

NOTE - DIHEDRAL. ZERO ALONG TOP SURFACE. 0·8" UNDER EACH TIP.

W.13 W.12 W.11 W.10 W.9 W.8 W.7 W.6 W.5 W.4 W.3 W.2 W.1 W.2 W.3 W.4 W.5 W.6 W.7 W.8 W.9

PORT WING SHOWN UN-COVERED.

NOTE NO DIHEDRAL BRACES. SPARS & SHEETING BUTT JOINTED & WELL GLUED.

W1 - 3/16" SHEET. ALL OTHER RIBS FROM 3/32" SHEET.

1/8" SHEET SPACERS.

SHEET COVERING.

1/4" x 1/4" HARD-WOOD MOUNTING RAILS.

TOP & BOTTOM WING SURFACES COVERED WITH 3/32" SHEET.

1/2" x 1/2" HARDWOOD STRIPS DRILLED TO TAKE 6 B.A. WING FIXING BOLTS.

AILERON SERVO

3/32" SHEET.

1/32" PLY

10 S.W.G. BRASS TUBE

BIND & EPOXY 10 S.W.G. BRASS TUBES.

10 S.W.G. PIANO WIRE TORQUE ROD.

AILERONS FROM 1/2" SHEET.

W1 W2 W3 W4 W5 W6 W7 W8 W9 W10 W11 W12 W13

F5 F6 F7 F8

1/8" SHEET.

F6,7,8. - 1/8" SHEET. F5 - 1/4" SHEET.

WING FAIRING.

1/8" SHEET

1/4" SHEET SIDES.

1/32" PLY DOUBLERS.

F4 - 1/4" SHEET.

F2 F2A

F3 - 1/8" PLY

DURAL PLATE.

SOFT BLOCK COWL.

1/32" PLY.

CUT DOWN 'RIVETS' CANOPY.

1/8" SOFT SHEET TOP (1 PEDE)

F3 - 1/8" SHEET.

F1 - 1/8" PLY.

FIN & RUDDER 3/8" SOFT SHEET.

TAILPLANE & ELEVATOR 3/8" SOFT SHEET.

3/8" x 1/2" RUDDER POST.

ELEVATOR HORN.

10 S.W.G. PIANO WIRE.

1/8" STEEL PLATES DRILLED & TAPPED TO TAKE ENGINE FIXING BOLTS

F1 F2A F2 F3 F4 F5 F6 F7 F8

1/8" DURAL ENGINE MOUNTING PLATES.

8 OZ FUEL TANK.

FAIRING OUTLINE.

F3A 1/8" PLY.

K&B 40 MOTOR SHOWN

COWL LOCATING DOWEL - 1/8" DIA

SOFT BLOCK HOLLOWED OUT TO ALLOW AIR TO PASS THROUGH.

COWL FIXING B.A. BOLTS & BRACKETS

1/4" DIA DOWEL.

10 S.W.G. WIRE.

BALANCE POINT

3/8" x 3/8" HARDWOOD MOUNTING RAILS.

1/32" PLY DOUBLER

TOP DECKING ENDS HERE.

BALSA FAIRINGS.

1/8" x 3/16" STRIP STIFFENERS.

1/16" PLY MOUNTING.

1/8" PLY INSERT.

USE RUDDER HORN, CUT, DRILLED & TAPPED TO TAKE 6 B.A. WING FIXING BOLTS.

3/8" TRIANGULAR FILLET.

1/16" PLY MOUNTS.

1/4" SHEET SIDES.

1/4" SHEET BOTTOM (CROSSGRAIN).

NYLON TAILWHEEL BRACKET.

16 S.W.G. WIRE.

3/4" DIA. TAILWHEEL.

LEG PROTRUDES THROUGH TOP SURFACE OF WING.

BRASS TUBING EPOXIED TO HARDWOOD BEARERS.

DETAILS OF U/C LEG. 10 S.W.G. PIANO WIRE - 2 OFF.

3/8" x 1/2" HARDWOOD

1/32" PLY DOUBLERS

2 3/8" DIA. WHEELS

MOUNTING RAILS.

WING FAIRING.

1/4" SHEET SIDES.

3/8" TRIANGULAR FILLETS TAPERED AS SHOWN.

SERVO.

1/4" x 1/4" HARDWOOD MOUNTING RAILS.

1/32" PLY.

3/32" SHEET.

DETAILS OF FIXING FOR AILERON SERVO.

F3A - 1/8" PLY.

BRASS TUBE FLATTENED

DRILL TO TAKE KWIK LINK.

SOLDER

1" - 1 1/4"

10 S.W.G. WIRE.

DETAILS OF AILERON LINKAGE.