A 6 FT SPAN AMERICAN RADIO CONTROL MODEL

RUDDER BUG

DESIGNED BY
WALTER A GOOD

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THE AEROMODELLER PLANS SERVICE
38. CLARENDON RD. WATFORD HERTS.

ALL WOODS ARE BALSA UNLESS OTHERWISE STATED.

POWER

ORIGINAL MODEL USED DE LONG 'B' 5CC PETROL ENGINE.
SUITABLE BRITISH ENGINES ARE
'K' VULTURE' & 'WILDCAT II' 5 CC DIESELS
'YULON 30' & 'ETA 29' GLOW PLUG ENGINES
ALSO OTHERS OF SIMILAR SIZE.

BALANCE MODEL HERE.

A VARIETY OF ENGINES MAY BE USED E.G. 'K' VULTURE SHOWN.

TANK TO SUIT ENGINE FIXED TO BK-HD BETWEEN BEARERS.

DETACHABLE TOP COWLING FASTENED BY DRESS SNAPS.

1/4" DIAM WING RETAINING DOWEL

1/8" SHEET CABIN ROOF (NOT SHOWN IN PLAN VIEW FOR CLARITY.)

DOOR FASTENER THIN ALUMINIUM TAB & BRASS SCREW

1/4" SHEET WING RESTS ON OUTSIDE EDGES.

1/2" x 1/4"

1/4" x 1/4"

1/16" PLY DASHBOARD

BRASS PIN

EXHAUST VENT.

1/4" SHEET

1/8" SHEET

HALVED JOINT

3/16" HOLE FOR BATTERY FIXING DOWEL

GROUND BATTERY SOCKET ST-BD SIDE FOR GLOW PLUG.

1/8" PLY

THESE MEMBERS MUST BE TWISTED BEFORE GLUEING IN PLACE.

1/8" SHEET

1/4" x 1/4"

FLUSH WITH OUTSIDE

1/8" GUSSET.

1/8" BAMBOO PEG.

RADIO EQUIPMENT LAYOUT.

1 1/2 V RECEIVER L.T.

STRONG RUBBER BANDS.

RECEIVER

ACTUATOR

BATTERIES LOCATED SIDEWAYS BY BALSA PACKING GLUED TO FLOOR

SHORTING PLUG

3/8" x 1/4" SCRAP BALSA

67 1/2 V RECEIVER BATTERY.

SLOT FOR WIRE KEY TO WIND ACTUATOR.

ACTUATOR SWITCH (RECEIVER SWITCH ON OTHER SIDE OR UNDER WINDSCREEN SIDE PANELS.)

4 1/2 V ACTUATOR BATTERY

KEEP TAIL LIGHT BY NOT USING HARDEST WOOD FOR UPRIGHTS FORMERS & FIN.

CELLULOID WINDOW

CABIN DOORS FROM 1/4" SQ SLIGHTLY BEVEL INSIDE EDGES UNTIL DOORS ARE TIGHT PUSH FIT.

STEAM THIS MEMBER TO CURVE OF LONGERON BEFORE ASSEMBLING DOOR.

SOFT 1/8" GUSSET.

FABRIC HINGES

SPAR TAPERS FROM 21/32" x 3/16" TO 3/8" x 3/16"

FIN IS GLUED ON PERMANENTLY AFTER COVERING.

1/2" SHEET

20 SWG ALUM TUBE

3/8" x 1/4" TAPERED TO 3/16" x 1/4"

1/8" SHEET

3/8" x 3/8"

RUDDER 3/16" SOFT SHEET.

20 SWG. PIANO WIRE

20 SWG ALUM TUBE.

BLOCK

1" x 1/4"

1/8" SHEET

1/2" x 3/16"

3/8" x 1/8" GROOVED TO TAKE WIRE

1/2" x 1/4"

1/8" SHEET

BALSA BLOCK

1/8" BAMBOO PEG

16 SWG SKID

FIN BOTTOM RIB 1/4" SHEET.

FIN TOP RIB 1/8" SHEET

RUDDER MOVEMENT.

3 1/4" DIAM AIRWHEEL OR NEAREST SIZE
ADJUST U/C LEG TO KEEP GROUND LINE CONSTANT WITH VARYING WHEEL SIZES.

COWLING FROM 3/4" BALSA.

1/16" SHEET

1/8" SHEET

1/8" SHEET

1/4" x 1/4"

HARD 1/8" ON BOTTOM

GUSSETS 2 LAYERS 1/4" SHEET

COWLING.

COWLING SIDES & BOTTOM FROM 3/4" BALSA WHICH MAY BE GLUED PERMANENTLY TO BEARERS & BULKHEAD.
FOR COMPLETE ACCESSIBILITY, COWLING CAN BE MADE TO SLIDE FORWARD, IN WHICH CASE GROOVES IN SIDES MUST BE GOOD FIT OVER BEARERS.
VALVE NEEDLE & PROP MUST BE REMOVED BEFORE COWLING.
COOLING HOLE IN BOTTOM OF COWLING MUST BE MADE TO SUIT ENGINE USED.

1/2" x 1/4"

1/8" SHEET FORMER

MODEL IS COVERED WITH NYLON
3 COATS OF CLEAR DOPE &
2 COATS OF COLOUR.

1/16" DURAL BRACKETS TO SUIT ENGINE USED FASTENED TO BEARERS BY 4 BA C'SUNK BOLTS IN POSITIONS DECIDED BY PARTICULAR ENGINE
BEARERS REMAIN AS SHOWN FOR ALL ENGINES.

1/8" PEG FOR DETACHABLE COWLING.

UPPER OUTSIDE EDGES ROUND OFF AFTER ASSEMBLY.

1/4" DOWEL

1/8" SHEET FORMER

RECOMMENDED PROPELLER FOR 'YULON 30'
12" x 1 1/16" x 1/2". 4" PITCH.

1/2" x 3/16"

1/8" BAMBOO PEG

1/4" x 1/4" SPACER

WIRE CLIP ON T/PLANE SHOWN IN RECESS AS WHEN TAILPLANE IN POSITION.

CUT AWAY TO CLEAR INTAKE TUBE.

N.B. NO SIDETHRUST.

DRESS SNAPS SEWN & GLUED TO LOWER COWLING.

ENGINE BEARERS ARE 3/8" x 1" x 1/4" PLY

1/2" x 1/2" SPRUCE GLUED TO BK-HD

3/4" x 1/2" x 1/4" PLY BLOCKS GLUED TO TOP OF 1/8" PLY FLOOR TO TAKE 3/8" WOODSCREWS.

1/4" x 1/4"

1/8" SHEET.

HOLES FOR WING RETAINING RUBBER BANDS

TAIL PLANE TRAILING EDGE FIXING.

20 SWG CLIP SEWN TO TOP OF T.E.

SLOT AT REAR
SLOT AT FRONT

ENGINE BEARERS 1" WIDE FROM 1/4" PLY.

3/4" C'SUNK WOODSCREWS

1/4" PLY

FRONT U/C LEG FROM 10 SWG PIANO WIRE FIXED TO BK-HD BY 6 BA 'U' OR 'J' BOLTS OR TINPLATE CLIPS & 1/4" WOODSCREWS AS SHOWN.

HOLE FOR GROUND BATTERY SOCKET TO ENGINE LEADS FOR GLOW PLUG.

ORIGINAL MODEL'S IGNITION LAYOUT.

COIL BETWEEN BEARERS.

TIMER (ST-BD SIDE)

BATTERY.

CONDENSER

REAR EDGE

10 SWG PIANO WIRE.

FRONT EDGE

MAIN U/C FIXED BY 6 BA 'U' OR 'J' BOLTS OR BY TINPLATE CLIPS & WOODSCREWS IF BOLTS NOT AVAILABLE.

1/4" x 1/4"

10 SWG PIANO WIRE

TRACK 12"

WING RESTS

1/8" SHEET

1/4" SHEET 2 REQUIRED

DOORS SWING OUT & DOWN

DOOR HINGE

1/2" x 1/4"

1/8" SHEET

1/2" x 1/4"

CELLULOID WINDOW

1/4" x 1/4"

1/8" SHEET

ALL 8 FORMERS ARE FROM MED SOFT 1/8" SHEET.

FORMERS F, G, H & I. EXTEND TO TOP OF 1/2" x 1/4" SPACER.

1/2" x 3/16"

1/2" x 3/16"

SHEET 1 OF 2

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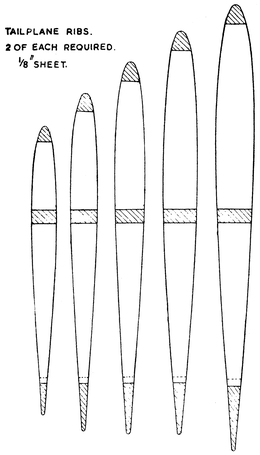
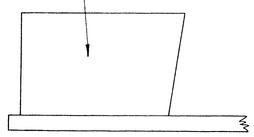
ALL WOODS ARE BALSA UNLESS OTHERWISE STATED.

TAILPLANE RIBS.
2 OF EACH REQUIRED.
1/8" SHEET.

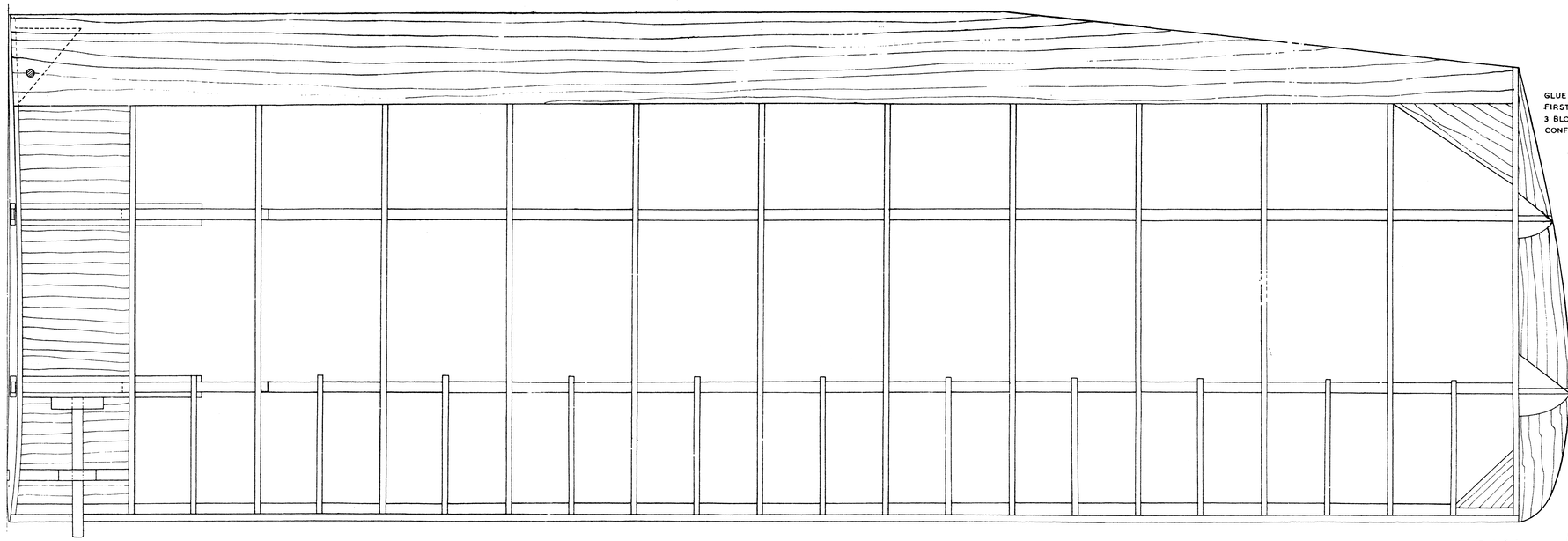


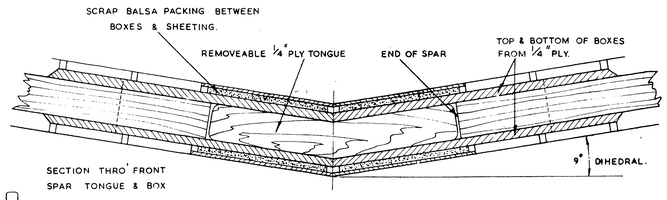
CARD TEMPLATE FOR SETTING ROOT RIBS AT CORRECT ANGLE.



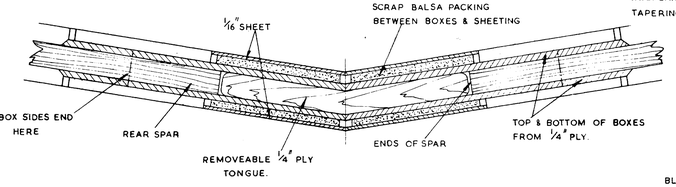
MAKE 4 WING RIBS TO FIT AROUND BOXES
MAKE 22 " " " " SPARS
ALL RIBS 1/8" SHEET

MAKE 20 RIBLETS FROM 1/8" SHEET TO FIT AROUND SPAR
MAKE 2 TO FIT AROUND BOX.

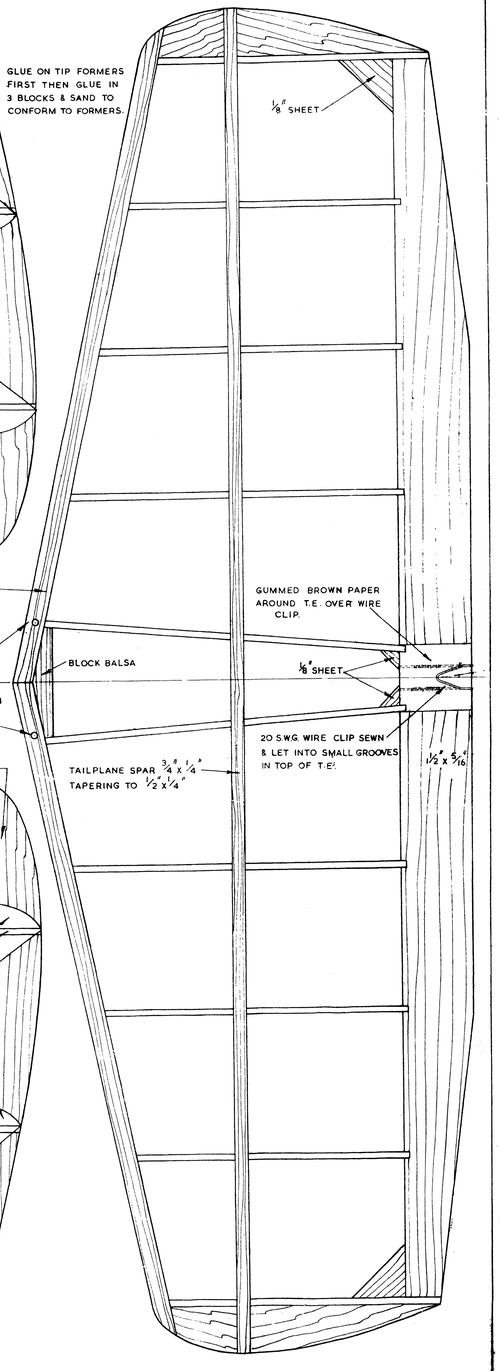


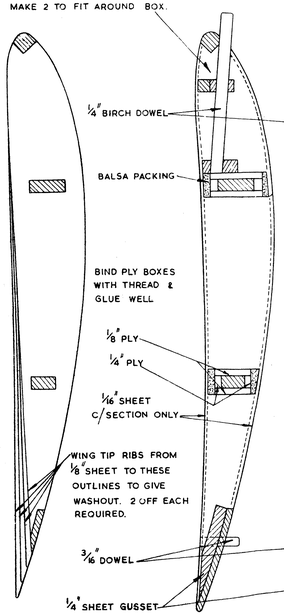


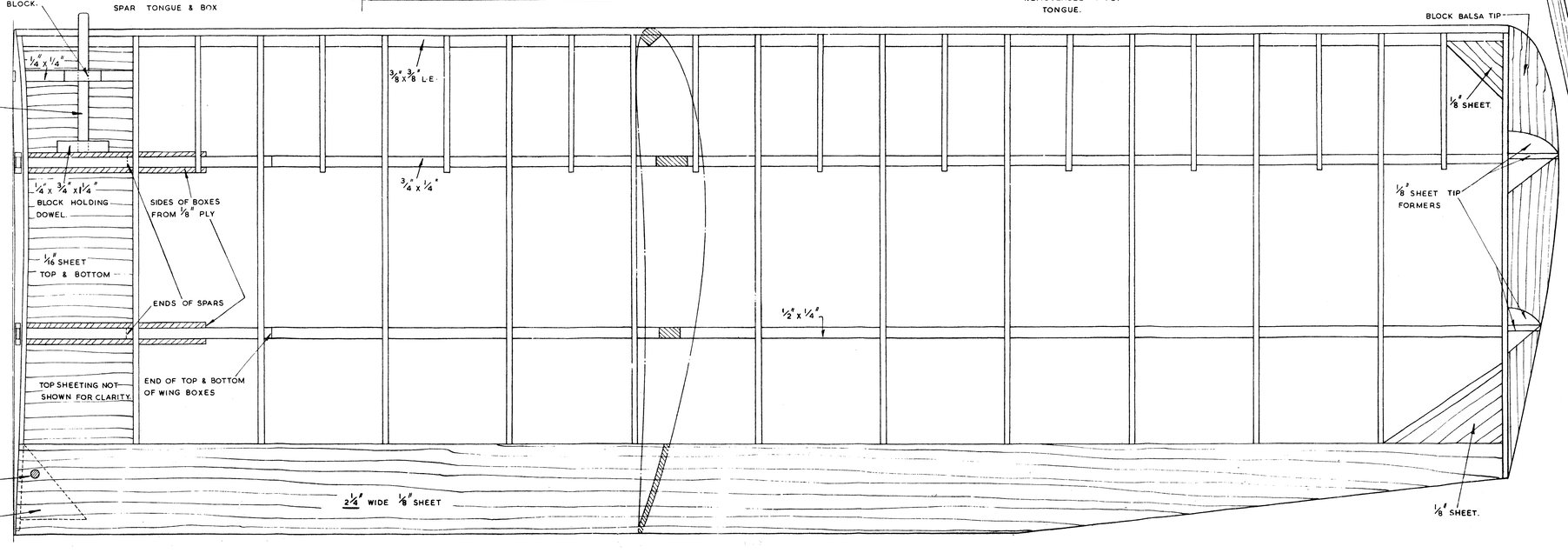
SECTION THRO' FRONT SPAR TONGUE & BOX



GLUE ON TIP FORMERS FIRST THEN GLUE IN 3 BLOCKS & SAND TO CONFORM TO FORMERS.







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