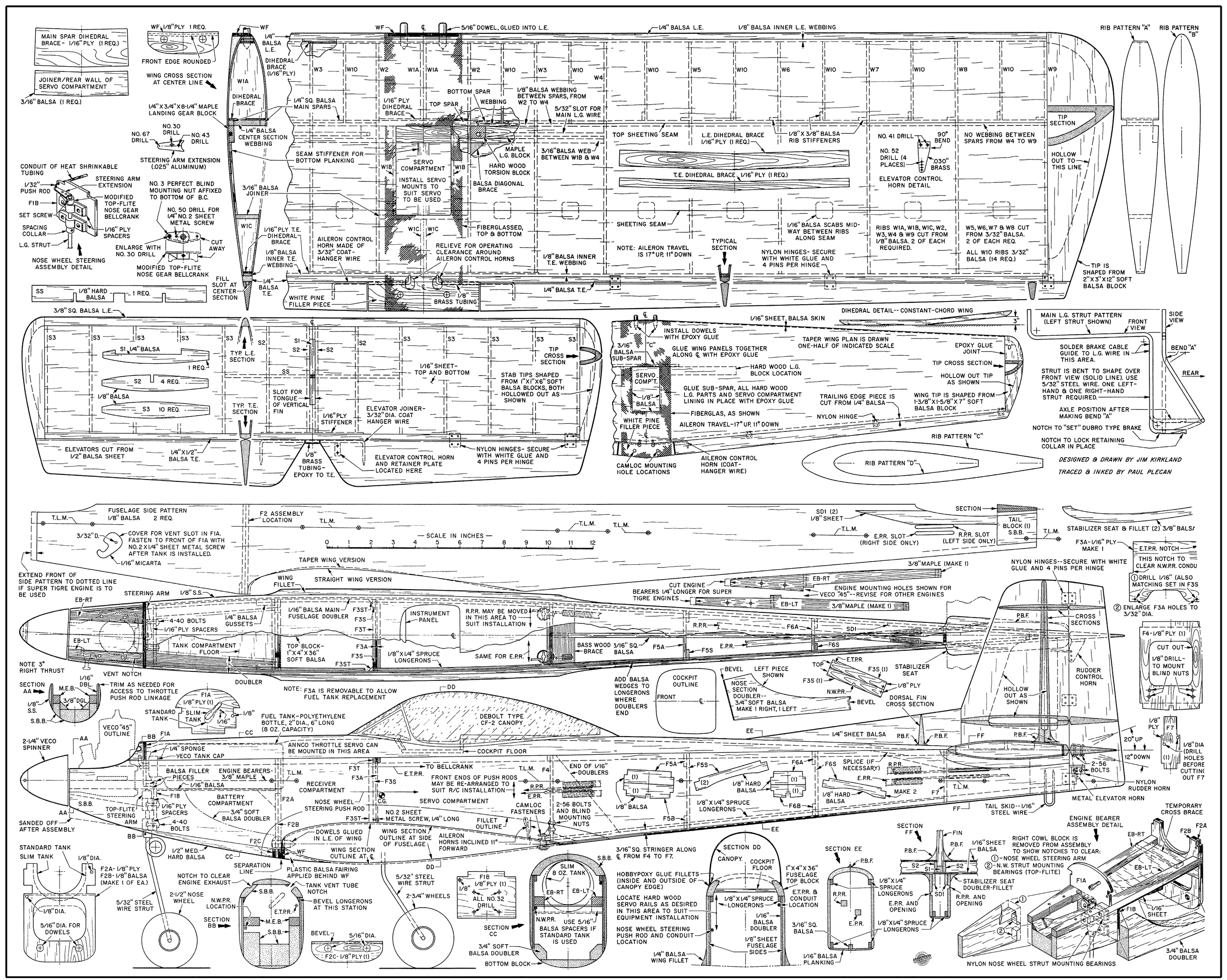
MAIN SPAR DIHEDRAL BRACE - 1/16" PLY (1 REQ.)
JOINER/REAR WALL OF SERVO COMPARTMENT
3/16" BALSA (1 REQ.)
WF 1/8" PLY 1 REQ.
FRONT EDGE ROUNDED
WING CROSS SECTION AT CENTER LINE
1/4" X 3/4" X 8-1/4" MAPLE LANDING GEAR BLOCK
NO. 67 DRILL
NO. 30 DRILL
NO. 43 DRILL
STEERING ARM EXTENSION (.025" ALUMINUM)
CONDUIT OF HEAT SHRINKABLE TUBING
1/32" PUSH ROD
STEERING ARM EXTENSION
F1B
MODIFIED TOP-FLITE NOSE GEAR BELLCRANK
SET SCREW
SPACING COLLAR
1/16" PLY SPACERS
L.G. STRUT
NOSE WHEEL STEERING ASSEMBLY DETAIL
NO. 3 PERFECT BLIND MOUNTING NUT AFFIXED TO BOTTOM OF B.C.
NO. 50 DRILL FOR 1/4" NO. 2 SHEET METAL SCREW
ENLARGE WITH NO. 30 DRILL
CUT AWAY
MODIFIED TOP-FLITE NOSE GEAR BELLCRANK
SS 1/8" HARD BALSA 1 REQ.
WF
1/4" BALSA L.E.
DIHEDRAL BRACE (1/16" PLY)
DIHEDRAL BRACE
1/4" SQ. BALSA MAIN SPARS
1/4" BALSA CENTER SECTION WEBBING
SEAM STIFFENER FOR BOTTOM PLANKING
3/16" BALSA JOINER
1/16" PLY T.E. DIHEDRAL BRACE
1/8" BALSA INNER T.E. WEBBING
FILL SLOT AT CENTER SECTION
1/4" BALSA T.E.
WHITE PINE FILLER PIECE
AILERON CONTROL HORN MADE OF 3/32" COAT-HANGER WIRE
RELIEVE FOR OPERATING CLEARANCE AROUND AILERON CONTROL HORNS
1/8" BRASS TUBING
1/8" BALSA INNER T.E. WEBBING
1/4" BALSA T.E.
5/16" DOWEL, GLUED INTO L.E.
1/4" BALSA L.E.
1/8" BALSA INNER L.E. WEBBING
W1A W3 W10 W2 W1A W1A W2 W10 W3 W10 W4 W10 W5 W10 W6 W10 W7 W10 W8 W10 W9
1/16" PLY DIHEDRAL BRACE
BOTTOM SPAR
TOP SPAR
WEBBING
1/8" BALSA WEBBING BETWEEN SPARS, FROM W2 TO W4
5/32" SLOT FOR MAIN L.G. WIRE
W1B
SERVO COMPARTMENT
INSTALL SERVO MOUNTS TO SUIT SERVO TO BE USED
MAPLE L.G. BLOCK
HARD WOOD TORSION BLOCK
BALSA DIAGONAL BRACE
3/16" BALSA WEB BETWEEN W1B & W4
W1C
FIBERGLASSED, TOP & BOTTOM
TOP SHEETING SEAM
L.E. DIHEDRAL BRACE 1/16" PLY (1 REQ.)
1/8" X 3/8" BALSA RIB STIFFENERS
T.E. DIHEDRAL BRACE 1/16" PLY (1 REQ.)
SHEETING SEAM
NOTE: AILERON TRAVEL IS 17° UP, 11° DOWN
TYPICAL SECTION
1/16" BALSA SCABS MID-WAY BETWEEN RIBS ALONG SEAM
NYLON HINGES- SECURE WITH WHITE GLUE AND 4 PINS PER HINGE
NO. 41 DRILL
90° BEND
NO. 52 DRILL (4 PLACES)
.030" BRASS
ELEVATOR CONTROL HORN DETAIL
NO WEBBING BETWEEN SPARS FROM W4 TO W9
RIBS W1A, W1B, W1C, W2, W3, W4 & W9 CUT FROM 1/8" BALSA. 2 OF EACH REQUIRED.
W5, W6, W7 & W8 CUT FROM 3/32" BALSA. 2 OF EACH REQ.
ALL W10 RIBS 3/32" BALSA (14 REQ.)
TIP SECTION
HOLLOW OUT TO THIS LINE
TIP IS SHAPED FROM 2" X 3" X 12" SOFT BALSA BLOCK
RIB PATTERN "A"
RIB PATTERN "B"
3/8" SQ. BALSA L.E.
S3 S1 1/4" BALSA 1 REQ.
S2 4 REQ.
1/8" BALSA S3 10 REQ.
TYP. L.E. SECTION
TYP. T.E. SECTION
SS
SLOT FOR TONGUE OF VERTICAL FIN
1/16" PLY STIFFENER
ELEVATOR JOINER- 3/32" DIA. COAT HANGER WIRE
1/16" SHEET- TOP AND BOTTOM
TIP CROSS SECTION
STAB TIPS SHAPED FROM 1" X 1" X 6" SOFT BALSA BLOCKS, BOTH HOLLOWED OUT AS SHOWN
ELEVATORS CUT FROM 1/2" BALSA SHEET
1/4" X 1/2" BALSA T.E.
1/8" BRASS TUBING- EPOXY TO T.E.
ELEVATOR CONTROL HORN AND RETAINER PLATE LOCATED HERE
NYLON HINGES- SECURE WITH WHITE GLUE AND 4 PINS PER HINGE
DIHEDRAL DETAIL-- CONSTANT-CHORD WING
1/16" SHEET BALSA SKIN
3"
INSTALL DOWELS WITH EPOXY GLUE
3/16" BALSA SUB-SPAR
"C"
GLUE WING PANELS TOGETHER ALONG ℄ WITH EPOXY GLUE
TAPER WING PLAN IS DRAWN ONE-HALF OF INDICATED SCALE
EPOXY GLUE JOINT
"D"
TIP CROSS SECTION
HARD WOOD L.G. BLOCK LOCATION
SERVO COMP'T.
HOLLOW OUT TIP AS SHOWN
1/8" BALSA
GLUE SUB-SPAR, ALL HARD WOOD L.G. PARTS AND SERVO COMPARTMENT LINING IN PLACE WITH EPOXY GLUE
TRAILING EDGE PIECE IS CUT FROM 1/4" BALSA
WING TIP IS SHAPED FROM 1-3/8" X 1-5/8" X 7" SOFT BALSA BLOCK
FIBERGLAS, AS SHOWN
NYLON HINGE
WHITE PINE FILLER PIECE
AILERON TRAVEL-17° UP, 11° DOWN
RIB PATTERN "C"
RIB PATTERN "D"
CAMLOC MOUNTING HOLE LOCATIONS
AILERON CONTROL HORN (COAT-HANGER WIRE)
MAIN L.G. STRUT PATTERN (LEFT STRUT SHOWN)
FRONT VIEW
SIDE VIEW
SOLDER BRAKE CABLE GUIDE TO L.G. WIRE IN THIS AREA.
BEND "A"
REAR
STRUT IS BENT TO SHAPE OVER FRONT VIEW (SOLID LINE). USE 5/32" STEEL WIRE. ONE LEFT-HAND & ONE RIGHT-HAND STRUT REQUIRED.
AXLE POSITION AFTER MAKING BEND "A"
NOTCH TO "SET" DUBRO TYPE BRAKE
NOTCH TO LOCK RETAINING COLLAR IN PLACE
DESIGNED & DRAWN BY JIM KIRKLAND
TRACED & INKED BY PAUL PLECAN
FUSELAGE SIDE PATTERN 1/8" BALSA 2 REQ.
T.L.M.
3/32" D.
COVER FOR VENT SLOT IN F1A. FASTEN TO FRONT OF F1A WITH NO. 2 X 1/4" SHEET METAL SCREW AFTER TANK IS INSTALLED.
1/16" MICARTA
EXTEND FRONT OF SIDE PATTERN TO DOTTED LINE IF SUPER TIGRE ENGINE IS TO BE USED
F2 ASSEMBLY LOCATION
SCALE IN INCHES
0 1 2 3 4 5 6 7 8 9 10 11 12
TAPER WING VERSION
STRAIGHT WING VERSION
WING FILLET
STEERING ARM
1/8" S.S.
EB-RT
EB-LT
4-40 BOLTS
1/16" PLY SPACERS
1/4" BALSA GUSSETS
1/16" BALSA MAIN FUSELAGE DOUBLER
F3ST F3S F3T F3A F3S F3ST
TOP BLOCK- 1" X 4" X 36" SOFT BALSA
TANK COMPARTMENT FLOOR
INSTRUMENT PANEL
R.P.R. MAY BE MOVED IN THIS AREA TO SUIT INSTALLATION
1/8" X 1/4" SPRUCE LONGERONS
SAME FOR E.P.R.
BASS WOOD BRACE
3/16" SQ. BALSA
F5A F5S E.P.R. F6S F6A SD1 R.P.R.
SD1 (2) 1/8" SHEET
E.P.R. SLOT (RIGHT SIDE ONLY)
R.P.R. SLOT (LEFT SIDE ONLY)
SECTION
TAIL BLOCK (1) S.B.B.
STABILIZER SEAT & FILLET (2) 3/8" BALSA
F3A- 1/16" PLY MAKE 1
E.T.P.R. NOTCH
THIS NOTCH TO CLEAR N.W.P.R. CONDU
① DRILL 1/16" (ALSO MATCHING SET IN F3S
② ENLARGE F3A HOLES TO 3/32" DIA.
CUT ENGINE BEARERS 1/4" LONGER FOR SUPER TIGRE ENGINES
3/8" MAPLE (MAKE 1)
ENGINE MOUNTING HOLES SHOWN FOR VECO "45"-- REVISE FOR OTHER ENGINES
NYLON HINGES--SECURE WITH WHITE GLUE AND 4 PINS PER HINGE
P.B.F.
CROSS SECTIONS
F4-1/8" PLY (1)
CUT OUT
1/8" DRILL- TO MOUNT BLIND NUTS
NOTE 3° RIGHT THRUST
VENT NOTCH
DOUBLER
NOTE: F3A IS REMOVABLE TO ALLOW FUEL TANK REPLACEMENT
SECTION AA
M.E.B.
1/16" DBL.
3/8" DGL.
TRIM AS NEEDED FOR ACCESS TO THROTTLE PUSH ROD LINKAGE
1/8" S.S.
S.B.B.
F1A
1/8" PLY (1)
STANDARD TANK
SLIM TANK
1/8"
1/16"
VECO "45" OUTLINE
FUEL TANK- POLYETHYLENE BOTTLE, 2" DIA., 6" LONG (8 OZ. CAPACITY)
DEBOLT TYPE CF-2 CANOPY
ADD BALSA WEDGES TO LONGERONS WHERE DOUBLERS END
COCKPIT OUTLINE
FRONT
BEVEL
LEFT PIECE SHOWN
NOSE SECTION DOUBLER-- 3/4" SOFT BALSA MAKE 1 RIGHT, 1 LEFT
TOP
E.T.P.R.
F3S (1)
N.W.P.R.
1/8" PLY
STABILIZER SEAT
DORSAL FIN CROSS SECTION
HOLLOW OUT AS SHOWN
RUDDER CONTROL HORN
2-1/4" VECO SPINNER
1/4" SPONGE
VECO TANK CAP
ANNCO THROTTLE SERVO CAN BE MOUNTED IN THIS AREA
COCKPIT FLOOR
1/4" SHEET BALSA
20° UP
12° DOWN
1/8" PLY F7
1/8" DIA (DRILL HOLES BEFORE CUTTING OUT F7
2-56 BOLTS
NYLON RUDDER HORN
METAL ELEVATOR HORN
TAIL SKID-- 1/16" STEEL WIRE
BALSA FILLER PIECES
ENGINE BEARERS- 3/8" MAPLE
1/16" BALSA
TO BELLCRANK
END OF 1/16" DOUBLERS
RECEIVER COMPARTMENT
FRONT ENDS OF PUSH RODS MAY BE RE-ARRANGED TO SUIT R/C INSTALLATION
SERVO COMPARTMENT
BATTERY COMPARTMENT
F1B
1/16" PLY SPACERS
TOP-FLITE STEERING ARM
3/4" SOFT BALSA DOUBLER
NOSE WHEEL STEERING PUSH RODS
NO. 2 SHEET METAL SCREW, 1/4" LONG
CAMLOC FASTENERS
2-56 BOLTS AND BLIND MOUNTING NUTS
FILLET OUTLINE
1/8" BALSA
1/8" X 1/4" SPRUCE LONGERONS
F5B F6B
1/8" HARD BALSA
MAKE 2
SPLICE (IF NECESSARY)
SANDED OFF AFTER ASSEMBLY
4-40 BOLTS
DOWELS GLUED IN L.E. OF WING
WING SECTION OUTLINE AT ℄
WING SECTION OUTLINE AT SIDE OF FUSELAGE
AILERON HORNS INCLINED 11° FORWARD
3/16" SQ. STRINGER ALONG ℄ FROM F4 TO F7.
1/2" MED. HARD BALSA
SEPARATION LINE
PLASTIC BALSA FAIRING APPLIED BEHIND WF
STANDARD TANK
SLIM TANK
1/8" DIA.
F2A- 1/8" PLY
F2B- 1/8" BALSA (MAKE 1 OF EA.)
1/8" DIA.
5/16" DIA. FOR DOWELS
NOTCH TO CLEAR ENGINE EXHAUST
TANK VENT TUBE NOTCH
BEVEL LONGERONS AT THIS STATION
5/32" STEEL WIRE STRUT
2-1/2" NOSE WHEEL
N.W.P.R. LOCATION
SECTION BB
E.T.P.R.
M.E.B.
S.B.B.
BEVEL
5/16" DIA.
F2C- 1/8" PLY (1)
5/32" STEEL WIRE STRUT
2-3/4" WHEELS
F1B 1/8" 1/8" PLY (1)
ALL NO. 32 DRILL
SECTION CC
3/4" SOFT BALSA DOUBLER
BOTTOM BLOCK
SLIM 8 OZ. TANK
EB-RT EB-LT
N.W.P.R.
USE 5/16" BALSA SPACERS IF STANDARD TANK IS USED
HOBBYPOXY GLUE FILLETS (INSIDE AND OUTSIDE OF CANOPY EDGE)
LOCATE HARD WOOD SERVO RAILS AS DESIRED IN THIS AREA TO SUIT EQUIPMENT INSTALLATION
NOSE WHEEL STEERING PUSH ROD AND CONDUIT LOCATION
1/4" BALSA WING FILLET
SECTION DD
CANOPY
COCKPIT FLOOR
1" X 4" X 36" FUSELAGE TOP BLOCK
1/8" X 1/4" SPRUCE LONGERONS
E.T.P.R. & CONDUIT LOCATION
1/16" BALSA DOUBLER
1/8" SHEET FUSELAGE SIDES
SECTION EE
R.P.R.
E.P.R.
3/16" SQ. BALSA
1/16" BALSA PLANKING
1/8" X 1/4" SPRUCE LONGERONS
E.P.R. AND OPENING
1/8" X 1/4" SPRUCE LONGERONS
SECTION FF
FIN
1/16" SHEET BALSA
S2 S1 S2
SD1
STABILIZER SEAT DOUBLER-FILLET
R.P.R. AND OPENING
ENGINE BEARER ASSEMBLY DETAIL
TEMPORARY CROSS BRACE
RIGHT COWL BLOCK IS REMOVED FROM ASSEMBLY TO SHOW NOTCHES TO CLEAR:
① - NOSE WHEEL STEERING ARM
② - N.W. STRUT MOUNTING BEARINGS (TOP-FLITE)
F2A
F2B
F1A
F1B
1/16" SHEET
3/4" BALSA DOUBLER
NYLON NOSE WHEEL STRUT MOUNTING BEARINGS