FULL SIZE LANDING GEAR STRUT - MAKE TWO FROM BAMBOO 1/16" THICK

LANDING GEAR FILLER PIECE -FULL SIZE-

CROSS SECTION OF UPPER PORTION OF FUSELAGE AT STATION 8.

BAMBOO WING SUPPORTS

CROSS BRACE

1/32" SHEET BALSA

FULL SIZE WING SPAR TIP

~WING DIHEDRAL DETAIL- 1/8 FULL SIZE ~

AFTER THE LEADING EDGE AND SPAR HAVE BEEN CRACKED FOR DIHEDRAL, REINFORCE THOSE JOINTS WITH TWO OR THREE COATS OF CEMENT.

SIDE AND TOP VIEWS OF FUSELAGE ARE GIVEN ONE-HALF ACTUAL SIZE.

DIMENSIONS GIVEN FOR HEIGHT AND WIDTH OF BASIC FUSELAGE FRAME ALL REFER FROM CENTERLINE TO OUTSIDE OF LONGERON.

NOTE HOW TRAILING EDGE IS PROPPED UP WITH SCRAP 1/20 SHEET BALSA.

CROSS SECTION OF NOSE AT STATION 1

OUTLINE OF PAPER WING COVER

R1

R2

R3

R4

REAR PLUG IS KEPT IN PLACE WITH A FEW DROPS OF CEMENT

FUSELAGE CONSTRUCTION

MAKE TWO FUSELAGE SIDES, USING HARD BALSA LONGERONS AND MEDIUM BALSA UPRIGHTS. BASIC FUSELAGE SIDES ARE SHADED FOR CLARITY. WHEN FRAMEWORK HAS DRIED, REMOVE FROM PLANS AND CEMENT CROSS BRACES IN PLACE. START AT THE WIDEST POINT (STATIONS 6 TO 10), AND WORK TOWARDS TAIL. KEEP FUSELAGE IN INVERTED POSITION ON WORKBENCH SO THAT SQUARENESS MAY BE CHECKED BY PLACING DRAWING TRIANGLE AGAINST IT. RUBBER BANDS STRETCHED AROUND THE NOSE AND TAIL ENDS OF THE FUSELAGE WILL KEEP THE TWO SIDES FROM SPRINGING APART. CROSS BRACES MAY THEN BE INSERTED WITHOUT DIFFICULTY. THE LANDING GEAR STRUTS SHOULD BE CEMENTED IN PLACE AT STATION 6 AND THEN THE TAPERED NOSE FAIRING STRIPS WHICH EXTEND FROM NOSE TO STATIONS 5 AND 6. THE LANDING GEAR FILLER PIECE SHOWN AT TOP OF THIS PAGE SHOULD BE CEMENTED IN PLACE WITH TWO OR THREE SUCCESSIVE COATS OF CEMENT.

LANDING GEAR ASSEMBLY DETAIL

1/8" BALSA WHEELS 1/8 THICK

.040" WIRE HINGE IS SOLDERED TO TWO OUTSIDE METAL FITTINGS.

NOTE HOW REAR PLUG IS ROUNDED AT CENTER

DETAIL OF REAR PLUG ATTACHMENT. -SHOULD BE A SNUG FIT.

HOOK IS COVERED WITH TAPE TO KEEP PROP SHAFT FROM CUTTING RUBBER

.028" BRASS BUSHINGS

SPINNER IS CARVED FROM HARD BALSA

2 1/2" LENGTH OF .040" STEEL WIRE

MOLD FOR COUNTERWEIGHT IS MADE BY WRAPPING A PIECE OF PAPER AROUND A PENCIL AND CEMENTING THE SEAM. PLUG UP ONE END WITH A ROUNDED PIECE OF BALSA. POUR IN LEAD AFTER WIRE HAS BEEN INSERTED. MAKE CW. LARGER THAN SHOWN TO ALLOW TRIMMING FOR FINAL BALANCE WHEN ENTIRE PROP ASSEMBLY HAS BEEN COMPLETED.

FULL SIZE STABILIZER SPAR TIP

FULL SIZE WING AND STABILIZER TIP OUTLINES GIVEN ON OPPOSITE PAGE

FULL SIZE DRAWINGS ARE NOT NEEDED FOR WING CONSTRUCTION. MARK OFF 1 1/2" SPACING FOR RIBS ON SPAR, LEADING, AND TRAILING EDGES. SLIDE RIBS INTO PROPER SPACE ON SPAR AND CEMENT LIGHTLY. FRAMEWORK SHOULD NOW BE PINNED TO A FLAT SURFACE. LEADING AND TRAILING EDGES ARE CEMENTED IN PLACE NEXT. THE FRONT OF THE TRAILING EDGE SHOULD BE PROPPED UP WITH SMALL SCRAPS OF 1/8" SHEET. CUT WING TIPS FROM SOFT 1/8" SHEET AND CEMENT IN PLACE. STABILIZER MADE IN THE SAME MANNER AS THE WING.

40" SPAN WITHOUT DIHEDRAL

NOTE "V" SHAPED GROOVE FOR LEADING EDGE

WING AND STABILIZER TIPS CUT TO SHAPE FROM 1/8 SOFT SHEET BALSA

FULL SIZE MAIN RIB -21 REQUIRED- TWO #2 REQUIRED

AFTER CUTTING OUT 23 MAIN RIBS, CUT TWO SHORT THIS AMOUNT TO OBTAIN TWO #2 RIBS

#3 -2 REQUIRED-

#4 -2 REQUIRED-

#5 -2 REQUIRED-

#6 -2 REQUIRED-

ALL WING AND STABILIZER RIBS GIVEN FULL SIZE

CUT STABILIZER AND WING RIBS FROM 1/20 SHEET

.040" WIRE

SOLDER TWO WASHERS TO AXLE. ONE ON EACH SIDE OF WHEEL

FULL SIZE STABILIZER AND WING TIPS

#3 -2 REQUIRED-

#1 & #2

2 #2 RIBS REQUIRED
11 #1 RIBS REQUIRED

USE 1/16 OR 3/32 BALSA FOR THIS PORTION OF THE RUDDER

FULL SIZE RUDDER LEADING EDGE

CUT R1, R2, R3, AND R4 FROM SOFT 1/8" SHEET.

FULL SIZE RUDDER TAB AND BASE. USE BALSA THAT IS EASY TO WARP FOR ADJUSTMENTS.