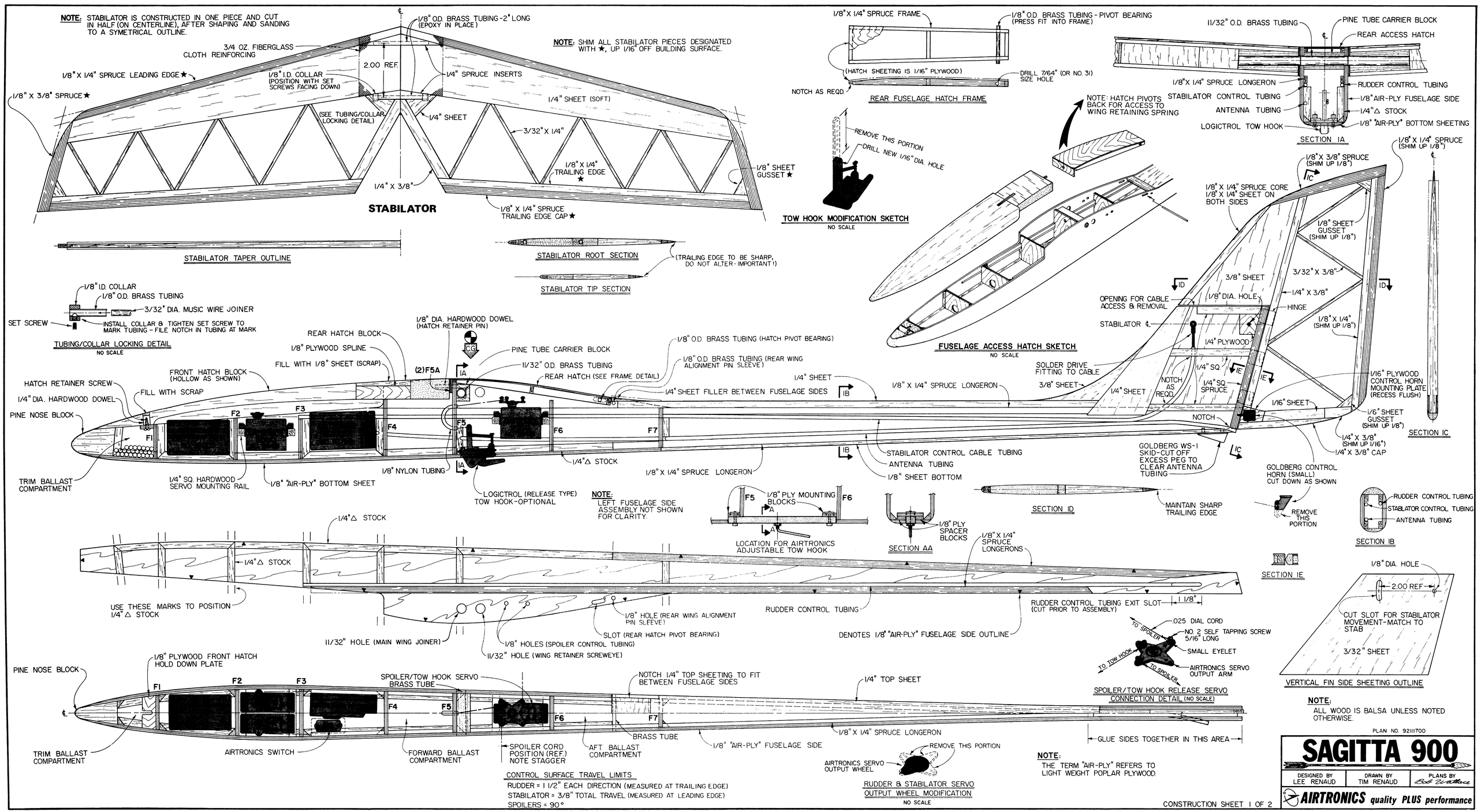
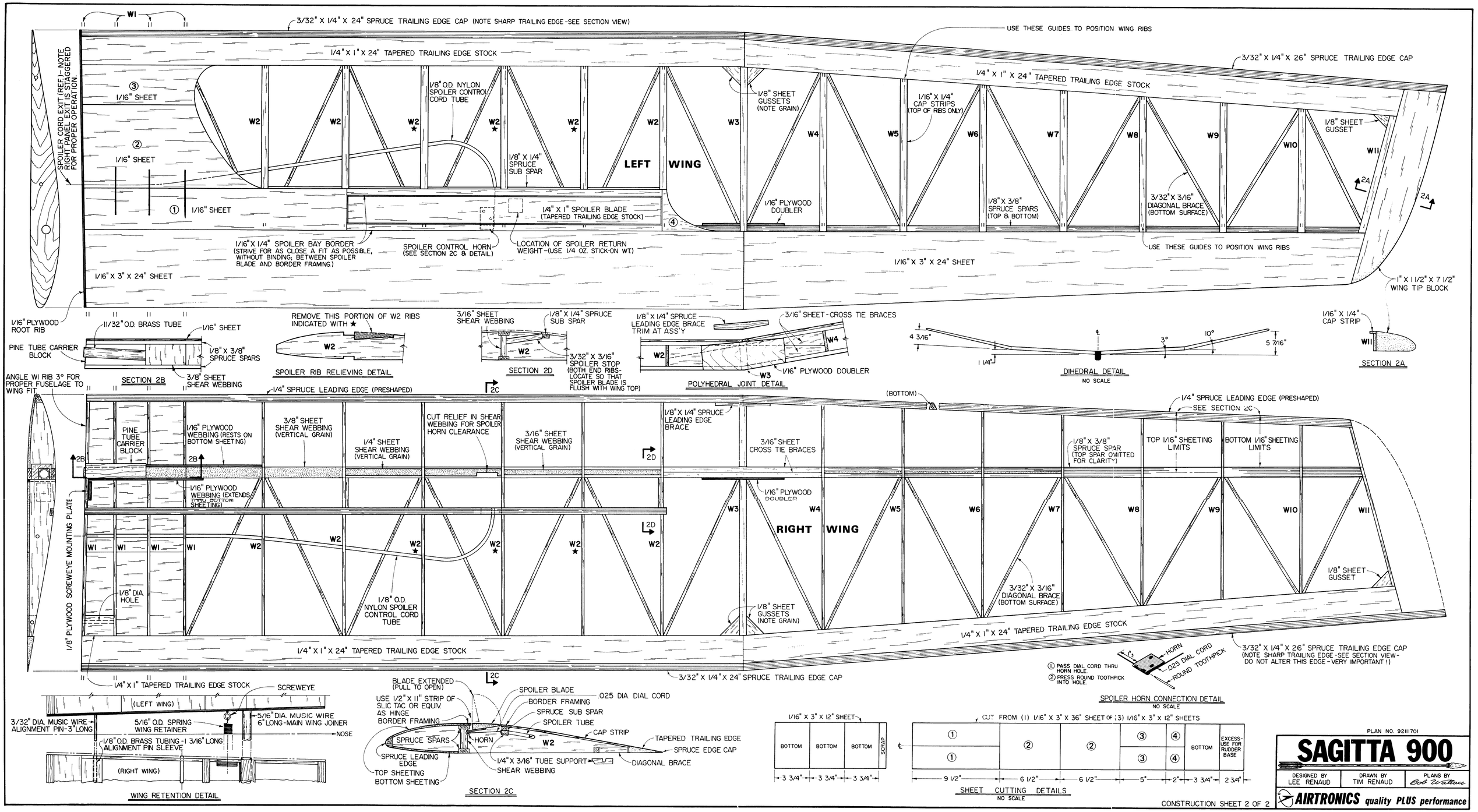

NOTE: STABILATOR IS CONSTRUCTED IN ONE PIECE AND CUT IN HALF (ON CENTERLINE), AFTER SHAPING AND SANDING TO A SYMETRICAL OUTLINE.
1/8" O.D. BRASS TUBING - 2" LONG (EPOXY IN PLACE)
NOTE: SHIM ALL STABILATOR PIECES DESIGNATED WITH ★, UP 1/16" OFF BUILDING SURFACE.
3/4 OZ. FIBERGLASS CLOTH REINFORCING
2.00 REF.
1/8" X 1/4" SPRUCE LEADING EDGE★
1/8" I.D. COLLAR (POSITION WITH SET SCREWS FACING DOWN)
1/4" SPRUCE INSERTS
1/8" X 3/8" SPRUCE★
1/4" SHEET (SOFT)
(SEE TUBING/COLLAR LOCKING DETAIL)
1/4" SHEET
3/32" X 1/4"
1/8" X 1/4" TRAILING EDGE ★
1/8" SHEET GUSSET★
1/4" X 3/8"
1/8" X 1/4" SPRUCE TRAILING EDGE CAP★
STABILATOR
STABILATOR TAPER OUTLINE
STABILATOR ROOT SECTION
(TRAILING EDGE TO BE SHARP, DO NOT ALTER - IMPORTANT!)
STABILATOR TIP SECTION
1/8" I.D. COLLAR
1/8" O.D. BRASS TUBING
3/32" DIA. MUSIC WIRE JOINER
SET SCREW
INSTALL COLLAR & TIGHTEN SET SCREW TO MARK TUBING - FILE NOTCH IN TUBING AT MARK
TUBING/COLLAR LOCKING DETAIL
NO SCALE
1/8" O.D. BRASS TUBING - PIVOT BEARING (PRESS FIT INTO FRAME)
1/8" X 1/4" SPRUCE FRAME
(HATCH SHEETING IS 1/16" PLYWOOD)
DRILL 7/64" (OR NO. 31) SIZE HOLE
NOTCH AS REQD.
REAR FUSELAGE HATCH FRAME
REMOVE THIS PORTION
DRILL NEW 1/16" DIA. HOLE
TOW HOOK MODIFICATION SKETCH
NO SCALE
11/32" O.D. BRASS TUBING
PINE TUBE CARRIER BLOCK
REAR ACCESS HATCH
1/8" X 1/4" SPRUCE LONGERON
RUDDER CONTROL TUBING
STABILATOR CONTROL TUBING
1/8" AIR-PLY FUSELAGE SIDE
ANTENNA TUBING
1/4" △ STOCK
LOGICTROL TOW HOOK
1/8" "AIR-PLY" BOTTOM SHEETING
SECTION IA
NOTE: HATCH PIVOTS BACK FOR ACCESS TO WING RETAINING SPRING
FUSELAGE ACCESS HATCH SKETCH
NO SCALE
1/8" X 1/4" SPRUCE (SHIM UP 1/8")
1/8" X 3/8" SPRUCE (SHIM UP 1/8")
1/8" X 1/4" SPRUCE CORE 1/8" X 1/4" SHEET ON BOTH SIDES
1/8" SHEET GUSSET (SHIM UP 1/8")
3/8" SHEET
3/32" X 3/8"
1/4" X 3/8"
OPENING FOR CABLE ACCESS & REMOVAL
1/8" DIA. HOLE
HINGE
STABILATOR ℄
1/8" X 1/4" (SHIM UP 1/8")
1/4" PLYWOOD
SOLDER DRIVE FITTING TO CABLE
1/4" SQ.
1/4" SQ. SPRUCE
NOTCH AS REQD.
3/8" SHEET
1/4" SHEET
1/16" PLYWOOD CONTROL HORN MOUNTING PLATE (RECESS FLUSH)
1/16" SHEET
1/8" SHEET GUSSET (SHIM UP 1/8")
NOTCH
1/4" X 3/8" (SHIM UP 1/16")
1/4" X 3/8" CAP
SECTION IC
GOLDBERG WS-1 SKID - CUT OFF EXCESS PEG TO CLEAR ANTENNA TUBING
GOLDBERG CONTROL HORN (SMALL) CUT DOWN AS SHOWN
REMOVE THIS PORTION
RUDDER CONTROL TUBING
STABILATOR CONTROL TUBING
ANTENNA TUBING
SECTION IB
1/8" DIA. HARDWOOD DOWEL (HATCH RETAINER PIN)
REAR HATCH BLOCK
1/8" PLYWOOD SPLINE
FILL WITH 1/8" SHEET (SCRAP)
FRONT HATCH BLOCK (HOLLOW AS SHOWN)
HATCH RETAINER SCREW
1/4" DIA. HARDWOOD DOWEL
FILL WITH SCRAP
PINE NOSE BLOCK
(2)F5A
PINE TUBE CARRIER BLOCK
11/32" O.D. BRASS TUBING
REAR HATCH (SEE FRAME DETAIL)
1/8" O.D. BRASS TUBING (HATCH PIVOT BEARING)
1/8" O.D. BRASS TUBING (REAR WING ALIGNMENT PIN SLEEVE)
1/4" SHEET
1/4" SHEET FILLER BETWEEN FUSELAGE SIDES
1/8" X 1/4" SPRUCE LONGERON
F1
F2
F3
F4
F5
F6
F7
TRIM BALLAST COMPARTMENT
1/4" SQ. HARDWOOD SERVO MOUNTING RAIL
1/8" "AIR-PLY" BOTTOM SHEET
1/8" NYLON TUBING
LOGICTROL (RELEASE TYPE) TOW HOOK-OPTIONAL
1/4" △ STOCK
1/8" X 1/4" SPRUCE LONGERON
STABILATOR CONTROL CABLE TUBING
ANTENNA TUBING
1/8" SHEET BOTTOM
NOTE: LEFT FUSELAGE SIDE ASSEMBLY NOT SHOWN FOR CLARITY.
1/8" PLY MOUNTING BLOCKS
LOCATION FOR AIRTRONICS ADJUSTABLE TOW HOOK
1/8" PLY SPACER BLOCKS
SECTION AA
SECTION ID
MAINTAIN SHARP TRAILING EDGE
SECTION IE
1/4" △ STOCK
1/4" △ STOCK
USE THESE MARKS TO POSITION 1/4" △ STOCK
1/8" X 1/4" SPRUCE LONGERONS
RUDDER CONTROL TUBING
RUDDER CONTROL TUBING EXIT SLOT (CUT PRIOR TO ASSEMBLY)
1 1/8"
1/8" HOLE (REAR WING ALIGNMENT PIN SLEEVE)
SLOT (REAR HATCH PIVOT BEARING)
11/32" HOLE (MAIN WING JOINER)
1/8" HOLES (SPOILER CONTROL TUBING)
11/32" HOLE (WING RETAINER SCREWEYE)
DENOTES 1/8" "AIR-PLY" FUSELAGE SIDE OUTLINE
.025 DIAL CORD
NO. 2 SELF TAPPING SCREW 5/16" LONG
SMALL EYELET
AIRTRONICS SERVO OUTPUT ARM
TO SPOILER
TO TOW HOOK
TO SPOILER
SPOILER/TOW HOOK RELEASE SERVO CONNECTION DETAIL (NO SCALE)
1/8" DIA. HOLE
2.00 REF.
CUT SLOT FOR STABILATOR MOVEMENT - MATCH TO STAB
3/32" SHEET
VERTICAL FIN SIDE SHEETING OUTLINE
PINE NOSE BLOCK
1/8" PLYWOOD FRONT HATCH HOLD DOWN PLATE
F1
F2
F3
F4
F5
F6
F7
SPOILER/TOW HOOK SERVO BRASS TUBE
NOTCH 1/4" TOP SHEETING TO FIT BETWEEN FUSELAGE SIDES
1/4" TOP SHEET
TRIM BALLAST COMPARTMENT
AIRTRONICS SWITCH
FORWARD BALLAST COMPARTMENT
SPOILER CORD POSITION (REF.) NOTE STAGGER
AFT BALLAST COMPARTMENT
BRASS TUBE
1/8" "AIR-PLY" FUSELAGE SIDE
1/8" X 1/4" SPRUCE LONGERON
GLUE SIDES TOGETHER IN THIS AREA
CONTROL SURFACE TRAVEL LIMITS
RUDDER = 1 1/2" EACH DIRECTION (MEASURED AT TRAILING EDGE)
STABILATOR = 3/8" TOTAL TRAVEL (MEASURED AT LEADING EDGE)
SPOILERS = 90°
AIRTRONICS SERVO OUTPUT WHEEL
REMOVE THIS PORTION
RUDDER & STABILATOR SERVO OUTPUT WHEEL MODIFICATION
NO SCALE
NOTE: THE TERM "AIR-PLY" REFERS TO LIGHT WEIGHT POPLAR PLYWOOD.
NOTE: ALL WOOD IS BALSA UNLESS NOTED OTHERWISE.
PLAN NO. 92111700
SAGITTA 900
DESIGNED BY LEE RENAUD
DRAWN BY TIM RENAUD
PLANS BY Bob Wallace
AIRTRONICS quality PLUS performance
CONSTRUCTION SHEET 1 OF 2


W1
3/32" X 1/4" X 24" SPRUCE TRAILING EDGE CAP (NOTE SHARP TRAILING EDGE-SEE SECTION VIEW)
1/4" X 1" X 24" TAPERED TRAILING EDGE STOCK
SPOILER CORD EXIT (REF.)-NOTE RIGHT PANEL EXIT IS STAGGERED FOR PROPER OPERATION.
③ 1/16" SHEET
② 1/16" SHEET
① 1/16" SHEET
1/8" O.D. NYLON SPOILER CONTROL CORD TUBE
1/8" X 1/4" SPRUCE SUB SPAR
LEFT WING
W2
W3
W4
W5
W6
W7
W8
W9
W10
W11
1/8" SHEET GUSSETS (NOTE GRAIN)
1/4" X 1" SPOILER BLADE (TAPERED TRAILING EDGE STOCK)
④
1/16" X 1/4" SPOILER BAY BORDER (STRIVE FOR AS CLOSE A FIT AS POSSIBLE, WITHOUT BINDING; BETWEEN SPOILER BLADE AND BORDER FRAMING)
SPOILER CONTROL HORN (SEE SECTION 2C & DETAIL)
LOCATION OF SPOILER RETURN WEIGHT-(USE 1/4 OZ. STICK-ON WT.)
1/16" X 3" X 24" SHEET
USE THESE GUIDES TO POSITION WING RIBS
3/32" X 1/4" X 26" SPRUCE TRAILING EDGE CAP
1/16" X 1/4" CAP STRIPS (TOP OF RIBS ONLY)
1/8" SHEET GUSSET
1/16" PLYWOOD DOUBLER
1/8" X 3/8" SPRUCE SPARS (TOP & BOTTOM)
3/32" X 3/16" DIAGONAL BRACE (BOTTOM SURFACE)
2A
1" X 1 1/2" X 7 1/2" WING TIP BLOCK
1/16" PLYWOOD ROOT RIB
11/32" O.D. BRASS TUBE
1/16" SHEET
PINE TUBE CARRIER BLOCK
1/8" X 3/8" SPRUCE SPARS
3/8" SHEET SHEAR WEBBING
SECTION 2B
REMOVE THIS PORTION OF W2 RIBS INDICATED WITH ★
SPOILER RIB RELIEVING DETAIL
3/16" SHEET SHEAR WEBBING
1/8" X 1/4" SPRUCE SUB SPAR
3/32" X 3/16" SPOILER STOP (BOTH END RIBS-LOCATE SO THAT SPOILER BLADE IS FLUSH WITH WING TOP)
SECTION 2D
1/8" X 1/4" SPRUCE LEADING EDGE BRACE TRIM AT ASS'Y
3/16" SHEET-CROSS TIE BRACES
1/16" PLYWOOD DOUBLER
POLYHEDRAL JOINT DETAIL
4 3/16"
1 1/4"
3°
10°
5 7/16"
DIHEDRAL DETAIL
NO SCALE
1/16" X 1/4" CAP STRIP
SECTION 2A
ANGLE W1 RIB 3° FOR PROPER FUSELAGE TO WING FIT
1/4" SPRUCE LEADING EDGE (PRESHAPED)
2C
(BOTTOM)
1/4" SPRUCE LEADING EDGE (PRESHAPED) SEE SECTION 2C
PINE TUBE CARRIER BLOCK
1/16" PLYWOOD WEBBING (RESTS ON BOTTOM SHEETING)
3/8" SHEET SHEAR WEBBING (VERTICAL GRAIN)
1/4" SHEET SHEAR WEBBING (VERTICAL GRAIN)
CUT RELIEF IN SHEAR WEBBING FOR SPOILER HORN CLEARANCE
3/16" SHEET SHEAR WEBBING (VERTICAL GRAIN)
1/8" X 1/4" SPRUCE LEADING EDGE BRACE
3/16" SHEET CROSS TIE BRACES
1/8" X 3/8" SPRUCE SPAR (TOP SPAR OMITTED FOR CLARITY)
TOP 1/16" SHEETING LIMITS
BOTTOM 1/16" SHEETING LIMITS
2B
2D
1/16" PLYWOOD WEBBING (EXTENDS THRU BOTTOM SHEETING)
1/16" PLYWOOD DOUBLER
RIGHT WING
1/8" PLYWOOD SCREWEYE MOUNTING PLATE
1/8" DIA. HOLE
1/8" O.D. NYLON SPOILER CONTROL CORD TUBE
3/32" X 3/16" DIAGONAL BRACE (BOTTOM SURFACE)
1/8" SHEET GUSSETS (NOTE GRAIN)
1/8" SHEET GUSSET
1/4" X 1" X 24" TAPERED TRAILING EDGE STOCK
3/32" X 1/4" X 24" SPRUCE TRAILING EDGE CAP
3/32" X 1/4" X 26" SPRUCE TRAILING EDGE CAP (NOTE SHARP TRAILING EDGE-SEE SECTION VIEW-DO NOT ALTER THIS EDGE-VERY IMPORTANT!)
① PASS DIAL CORD THRU HORN HOLE
② PRESS ROUND TOOTHPICK INTO HOLE
HORN
.025 DIAL CORD
ROUND TOOTHPICK
SPOILER HORN CONNECTION DETAIL
NO SCALE
1/4" X 1" TAPERED TRAILING EDGE STOCK
SCREWEYE
(LEFT WING)
3/32" DIA. MUSIC WIRE ALIGNMENT PIN-3" LONG
5/16" O.D. SPRING WING RETAINER
5/16" DIA. MUSIC WIRE 6" LONG-MAIN WING JOINER
NOSE
1/8" O.D. BRASS TUBING-1 3/16" LONG ALIGNMENT PIN SLEEVE
(RIGHT WING)
WING RETENTION DETAIL
BLADE EXTENDED (PULL TO OPEN)
USE 1/2" X 11" STRIP OF SLIC TAC OR EQUIV. AS HINGE
BORDER FRAMING
SPOILER BLADE
.025 DIA. DIAL CORD
BORDER FRAMING
SPRUCE SUB SPAR
SPOILER TUBE
CAP STRIP
TAPERED TRAILING EDGE
SPRUCE EDGE CAP
SPRUCE SPARS
HORN
SPRUCE LEADING EDGE
TOP SHEETING
BOTTOM SHEETING
1/4" X 3/16" TUBE SUPPORT
SHEAR WEBBING
DIAGONAL BRACE
SECTION 2C
1/16" X 3" X 12" SHEET
BOTTOM
BOTTOM
BOTTOM
SCRAP
3 3/4"
3 3/4"
3 3/4"
CUT FROM (1) 1/16" X 3" X 36" SHEET OF (3) 1/16" X 3" X 12" SHEETS
①
①
②
②
③
③
④
④
BOTTOM
EXCESS-USE FOR RUDDER BASE
9 1/2"
6 1/2"
6 1/2"
5"
2"
3 3/4"
2 3/4"
SHEET CUTTING DETAILS
NO SCALE
PLAN NO. 92111701
SAGITTA 900
DESIGNED BY LEE RENAUD
DRAWN BY TIM RENAUD
PLANS BY Bob Wallace
AIRTRONICS quality PLUS performance
CONSTRUCTION SHEET 2 OF 2