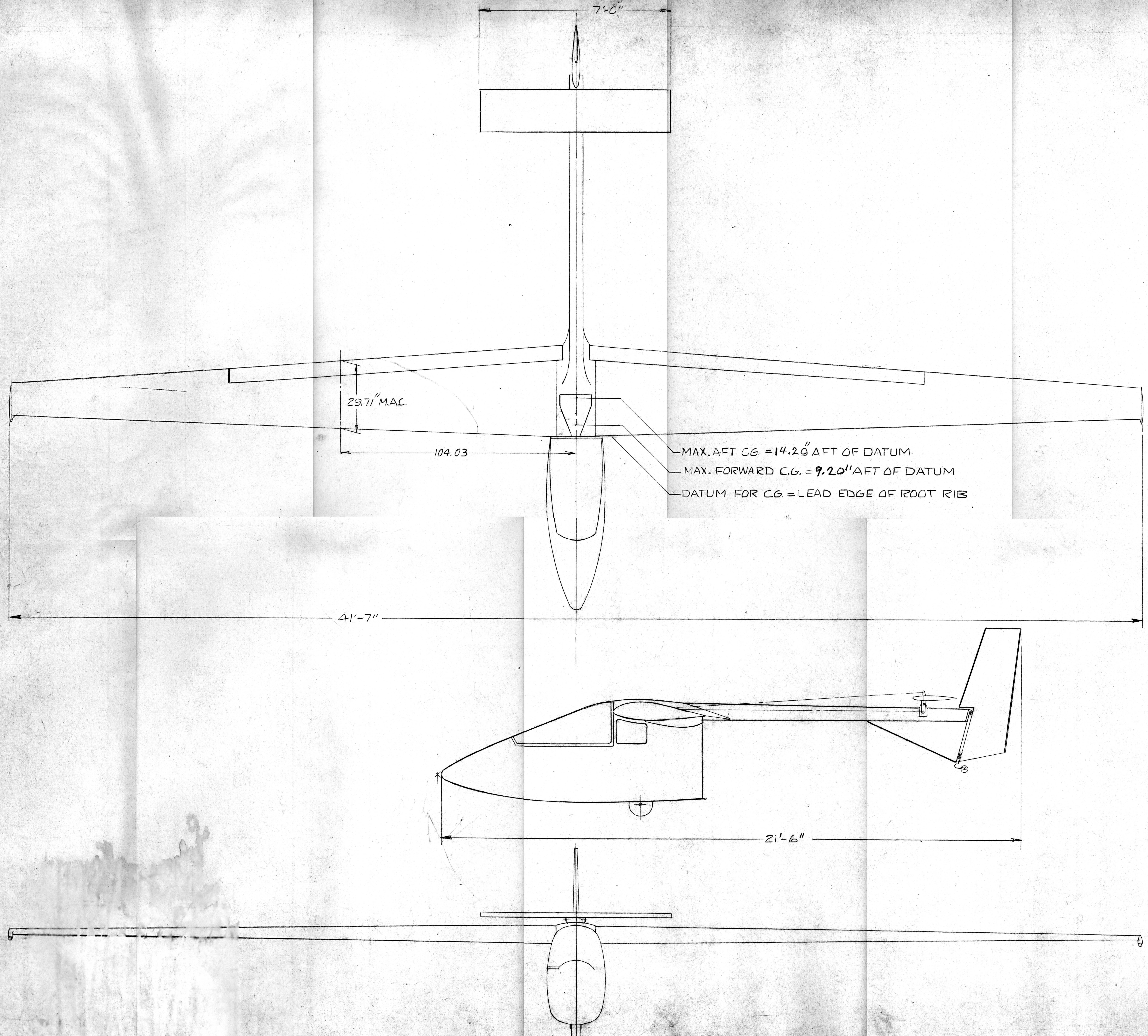


An aircraft built from these drawings and instructions is not built to meet any standards of airworthiness as with a certified aircraft. This aircraft does not have a FAA Form 317 Statement of Conformity on file, since there is no FAA approved data to conform to. This is an experimental aircraft and the registered owner is the experimenter. The aircraft is not built in a permanent jig and parts are not interchangeable with any other aircraft of the same facsimile. FAA records list the registered owner as the manufacturer of an experimental-amature built aircraft. The registered owner is free to make any modifications or changes he so wishes. The aircraft is an example of the owner's creative ability. The owner of an experimental-amature built aircraft becomes its manufacturer, when it is registered to him. He becomes responsible for its aerodynamic and structural concept. The owner is responsible for the performance and fit for purpose of every part and piece on the aircraft. Warranty is not expressed or implied for any feature or part of this experimental-amateur built aircraft. In building an aircraft from these plans and instructions, the builder accepts all responsibility for the aircraft. Possesion of these prints does not constitute the right to manufacture a windrose glider. KYLE YATES has paid for the right to construct only one glider from this set of prints, serial number 215, and has agreed not to loan, copy or resell any of these print or copies thereof. Additional payment of $175.00 must be made for each and every additional glider or part thereof built from these plans.

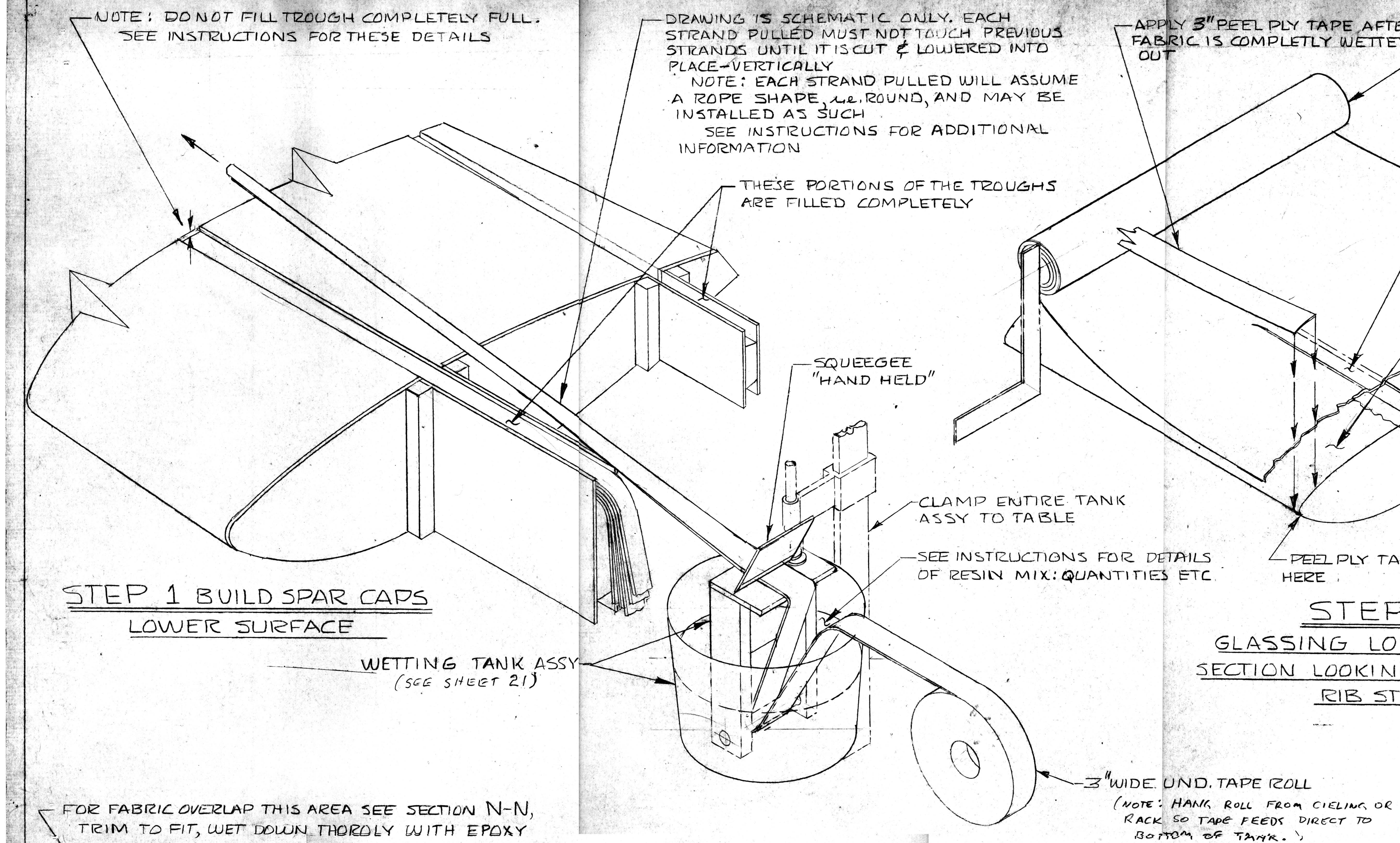
JIM MAUPIN

SHEET 1 OF 27

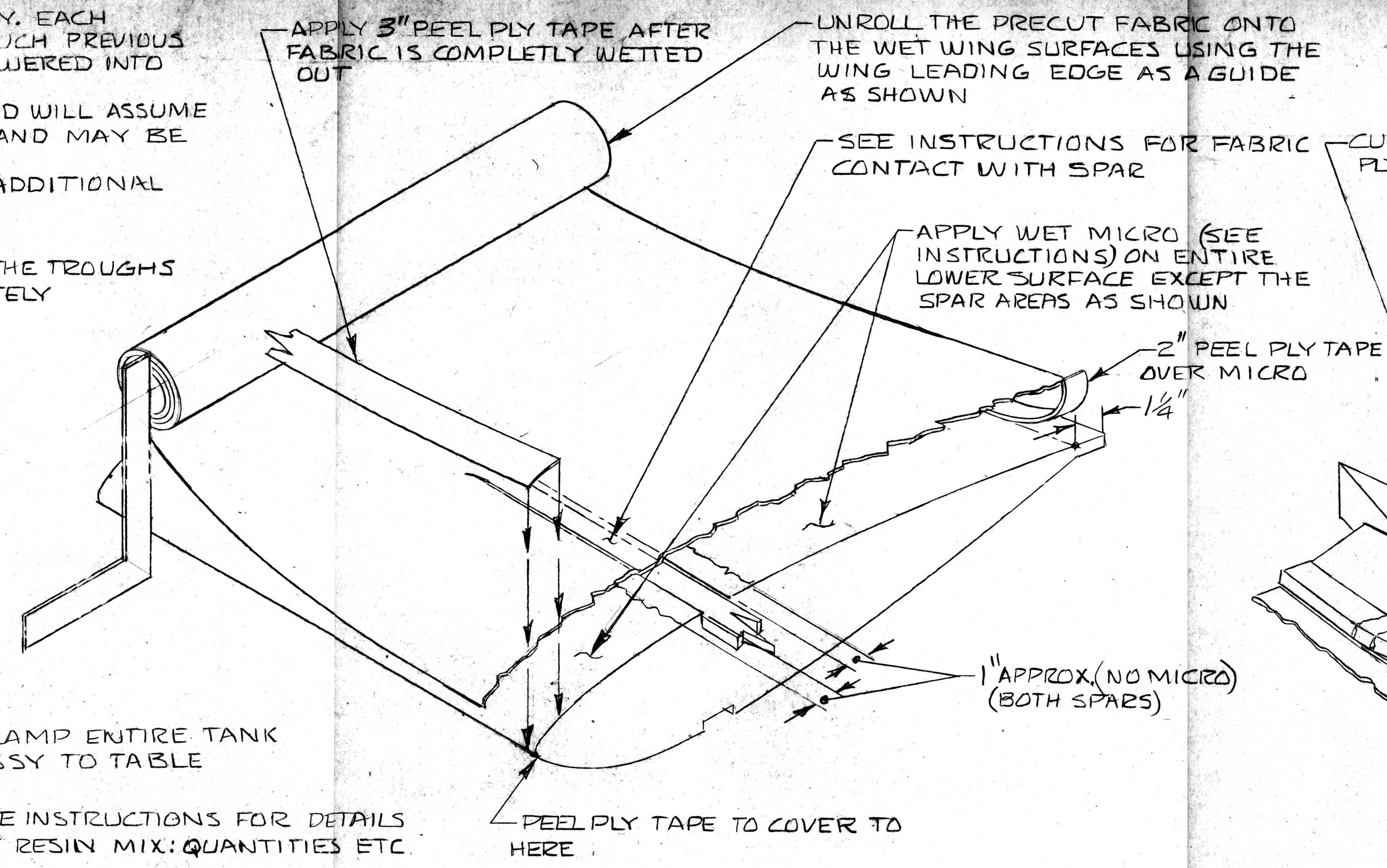
JM

WINDROSE SAILPLANE
SCALE = 1/20

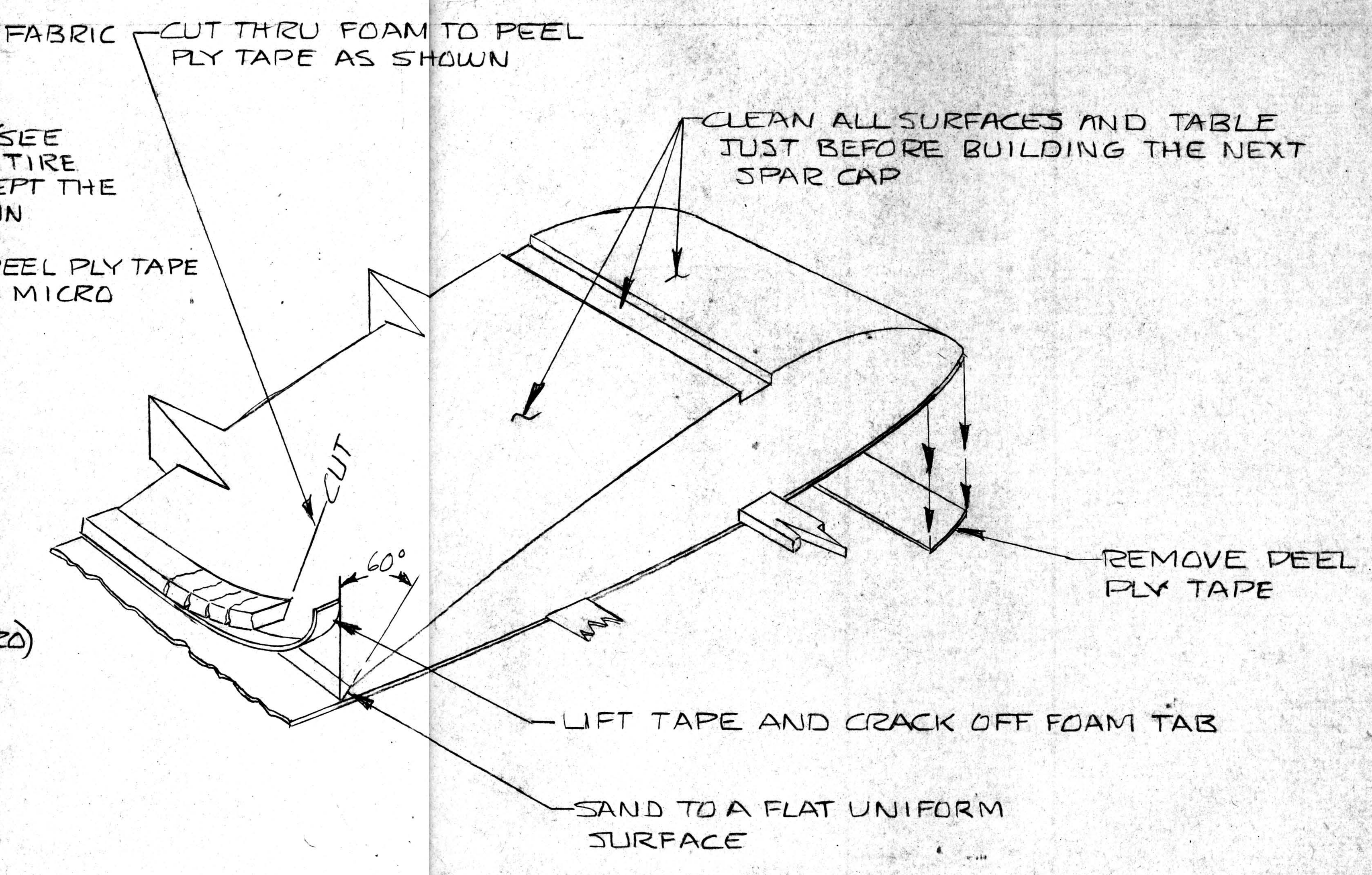
DRAWN	BILL BAKER	DATE	DESCRIPTION
CHECKED	[illegible]	12/83	WING-COMPLETE
ENG. APP.			WINDROSE SAILPLANE
CUST. APP.			SHEET NO. 2 OF 27 — REV. A
SCALE 1/8	DWG. NO.		



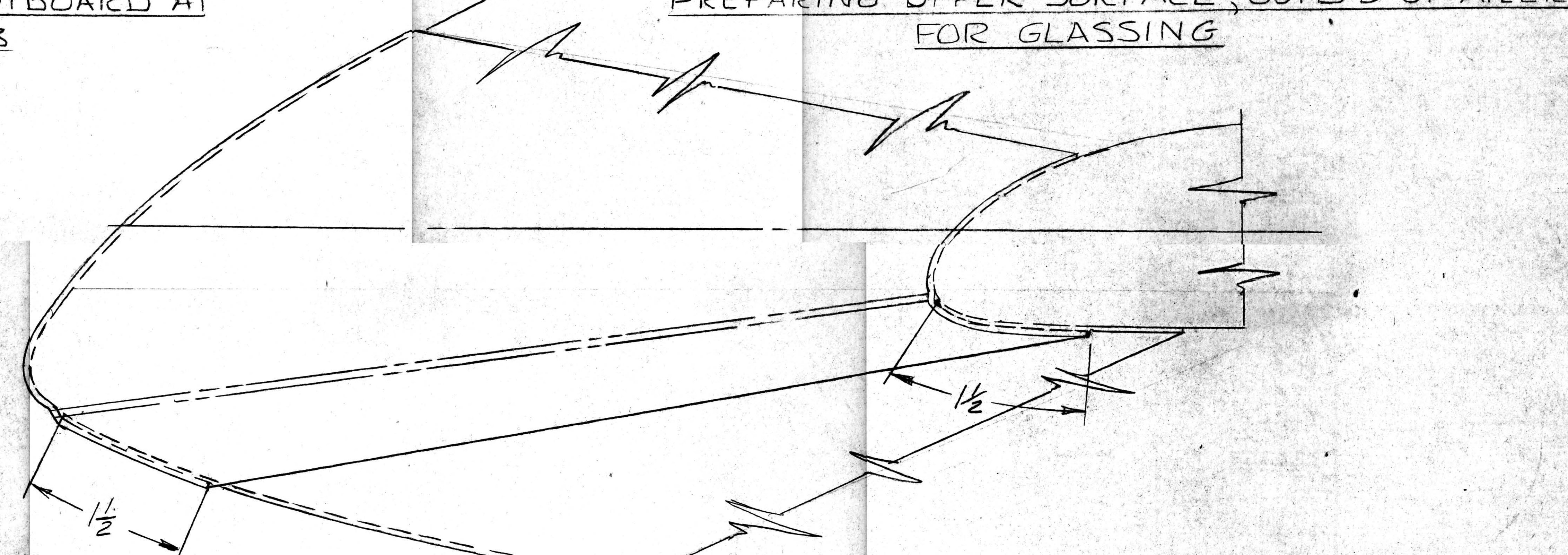
STEP 1 BUILD SPAR CAPS
LOWER SURFACE



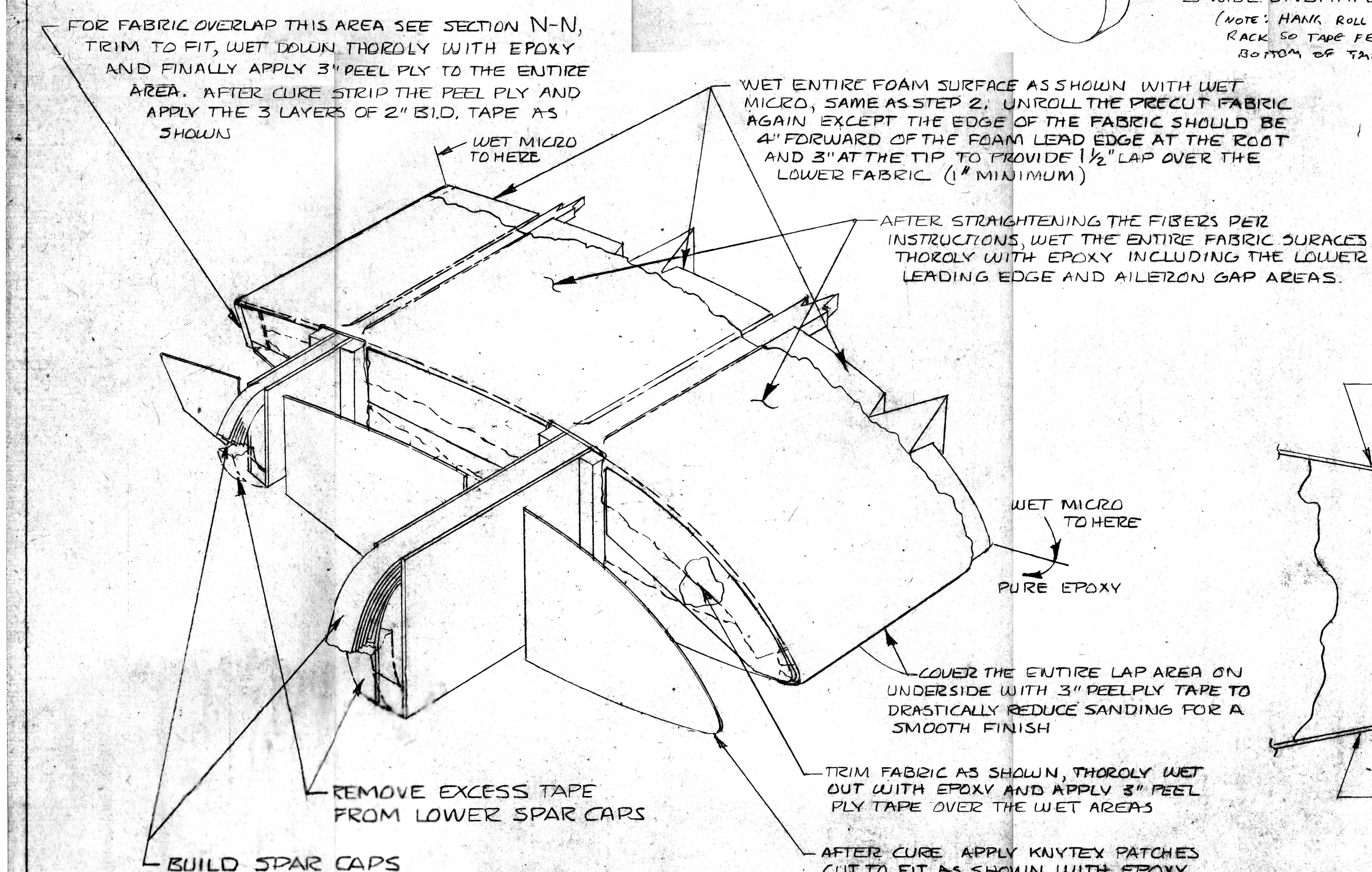
STEP 2
GLASSING LOWER SURFACE
SECTION LOOKING OUTBOARD AT RIB STA 4B



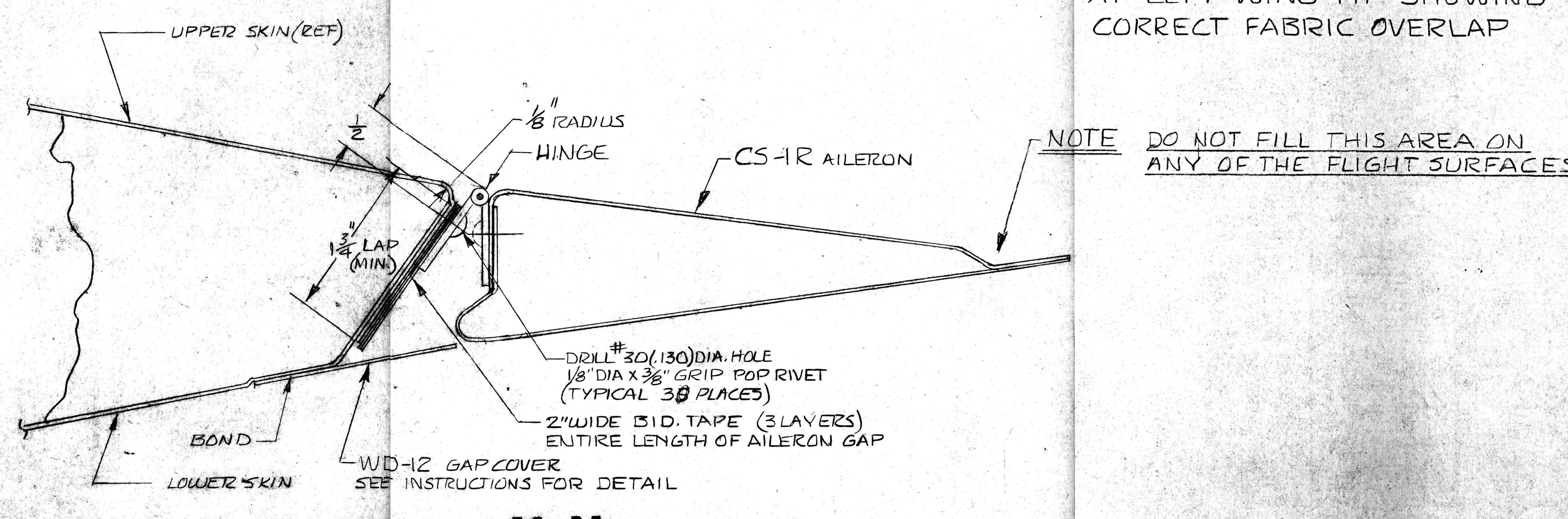
STEP 3
PREPARING UPPER SURFACE, OUTB'D OF AILERON, FOR GLASSING



VIEW LOOKING INBOARD
AT LEFT WING TIP SHOWING
CORRECT FABRIC OVERLAP



STEP 4
GLASSING TOP SURFACE



SECTION N-N FULL SCALE
SEE SHEET No 2

DRAWN	BILL BAKER	DATE	DESCRIPTION WING CONSTRUCTION PROCESSES
CHECKED	L. Morgan	12/83	
ENG. APP.			WINDROSE SAILPLANE
CUST. APP.			
SCALE 1/4	DWG. NO.		SHEET NO. 3 OF 27

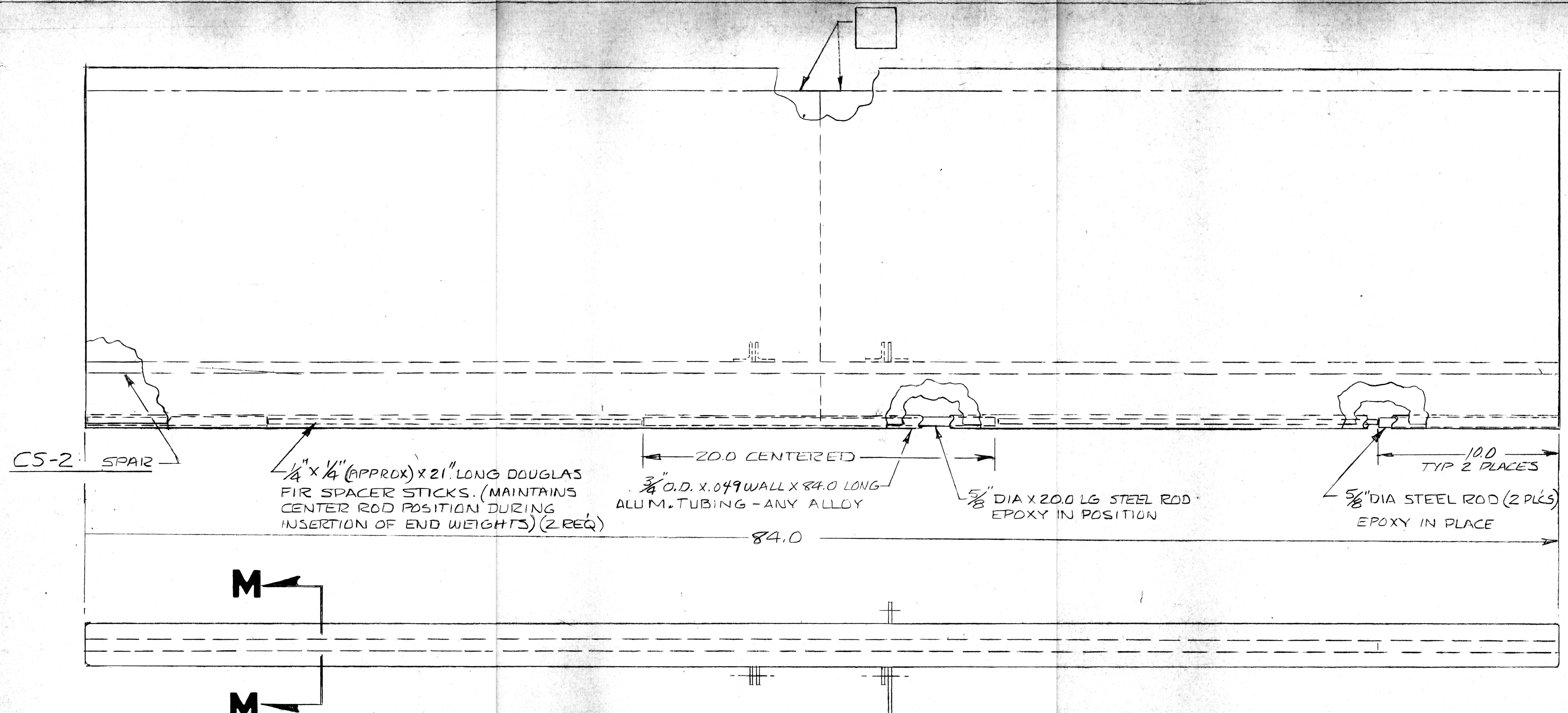
DRAWN	BILL BAKER	DATE	DESCRIPTION: WING TEMPLATES LARGE
CHECKED	[signature]	12/83	
ENG. APP.			WINDROSE SAILPLANE
CUST. APP.			
SCALE: FULL	DWG. NO.		SHEET NO. 4 OF 27 — REV.

DRAWN	BILL BAKER	DATE	DESCRIPTION: WING TEMPLATES AND ATTACH FITTINGS
CHECKED	[illegible]	12/83	
ENG. APP.			WINDROSE SAILPLANE
CUST. APP.			
SCALE: FULL			SHEET NO. 5 OF 27 — REV. A

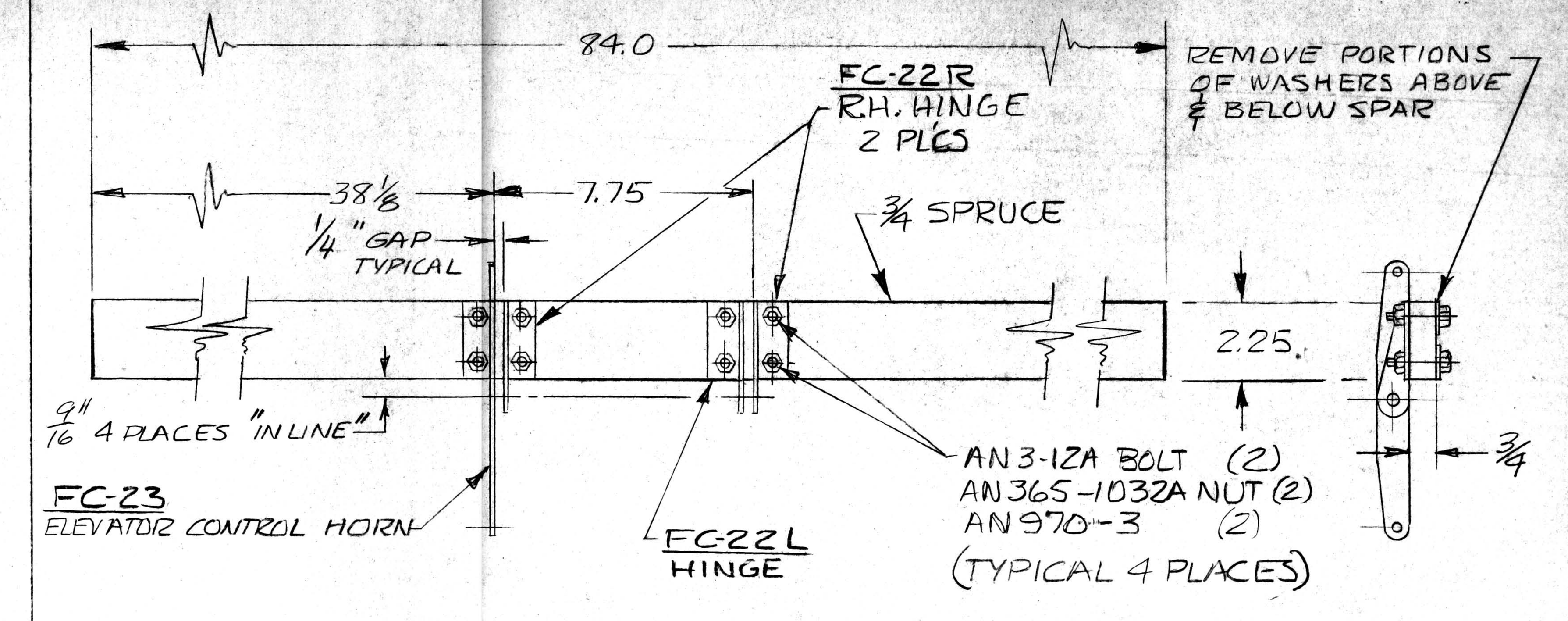
DRAWN	BILL BAKER	DATE	DESCRIPTION WING DETAILS	
CHECKED	[illegible]	12/83		
ENG. APP.				
CUST. APP.			WINDROSE SAILPLANE	
SCALE FULL	DWG. NO.		SHEET NO. 6 OF 27	REV. B


.51
147.75"
(12'-3 3/4")
FC 9
FC 9
FC 9
FC 9
FIBER DIRECTIONS
SECOND LAYER OF FABRIC
BOTH SIDES
19.0
ROOT RIB
SEE SHEET 5
5.0
TYP 3 PL'CS
30.0
30.0
30.0
27.5
15.0
2.6
.51
KNYTEX DB-170 FABRIC
1 LAYER TOP SURFACE
1 LAYER BOTTOM SURFACE
1 1/2" B.I.D. TAPE X 8" LONG
3 LAYERS
(TYPICAL 4 PLACES)
AS SHOWN
1 1/2" X 18" B.I.D. TAPE
3 LAYERS AS SHOWN
END TREATMENT SAME
AS WING (2 PL'CS)
1/8" RADIUS. THESE 2
FOAM CORNERS
G
G
F
F
1.0 SPACING TYPICAL
STAGGER HOLE PATTERN
ON OPPOSITE HINGE LEG
SO RIVET HEADS DON'T
INTERFERE
(TYPICAL)
MS20257P5 X 5.0 LONG
(4 PLACES)
MS20257P5 X 15.0" LONG
R.H. AILERON DETAIL SHOWN
L.H. AILERON - OPPOSITE
NOTE: LEAVE THIS AREA
OPEN AS SHOWN - DO NOT
FILL
KNYTEX FABRIC
KNYTEX FABRIC
SECTION G-G
SEE INSTRUCTION HANDBOOK PAGE ___ FOR
BUILDING PROCEDURE
TOP 4.125"
BOTTOM 3.75"
DETAIL-WA-6 WING PIN MAKE 2
MAKE FROM: 5/8" (.625) AIRCRAFT BOLTS
DRILL HEAD AND SAFETY WIRE
IN PLACE FOR FLIGHT.
1.0
7/8
APPROX.
10°
DRILL 5/64" .078 DIA
THRU
DETAIL WA-7 PIN
MAKE FROM: AN5-14-A
(OR LONGER) BOLT
MAKE 2
2 1/2"
WA-8 PIN
MAKE FROM AN 5 BOLT
5/16 DIAM.
TOP OF HINGE FLUSH
WITH SURFACE CONTOUR
1/2 MAX
DRILL #30 (.193) DIA HOLE
1/8 X 3/8 GRIP POP RIVET
(TYPICAL 35 PLACES)
NOTE: IF SPACERS ARE REQUIRED
ADJUST LENGTH ACCORDINGLY
SECTION F-F
FULL SCALE
DRILL 5/16" DIA. THRU BOTH
PLATES "IN LINE" (2 PLACES)
AFTER ASSEMBLY
1.50 AND PARALLEL
MAKE FROM: 3/16 (.187) THICK, 6061-T6
ALUM. ALLOY PLATE
WA-11 TEMPLATE MAKE 1
FULL SCALE
#10 (.193) DIA (18 PLACES)
AN3-10A 10 (10)
AN365-1032 A (10)
AN960-10 (10)
WA-7
DRAG SPAR ATTACH PLATE ASSY
WA-12 2 REQ
SEE TEMPLATE
1 1/16 (2 PL'CS)
1/4" X 1 3/8" X 2 3/8"
ALUM ALLOY BLOCK
2 REQD
TEMPLATE
WA-12
CLEVIS HALF-DRAG SPAR
ATTACH MAKE 2
MAKE FROM 3/16" (.187) 6061-T6 ALUM.
#10 (.193) DIA
(6 HOLES)
4 1/8 (REF)
21/32" (.656) DIA. HOLE
LG-5 WHEEL SUPPORT PLATE
MAKE 2 PC'S FROM 1/8" 6061T6 ALUMINUM
(INSTALLS ON SHEET 11)
DRAWN BILL BAKER
CHECKED
DATE 12/83
ENG. APP.
CUST. APP.
DESCRIPTION
AILERON DETAIL
WINDROSE SAILPLANE
SCALE 1/4 AND NOTED
DWG. NO.
SHEET NO. 7 OF 27
REV. A

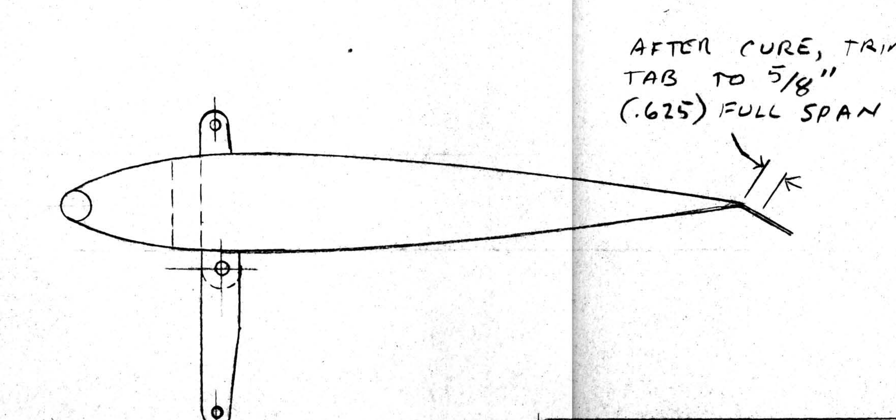

USE 3" PEEL PLY TAPE THIS AREA ON FIRST AND SECOND LAYERS, SAME AS THE WING.
ONE LAYER B.I.D. FIBERGLASS CLOTH PRECUT TO SHAPE APPLIED SAME AS THE FIRST LAYER
CUT AND LIFT OFF FOAM TAB SAME AS THE WING TRAILING EDGE
CUT
LIFT
45°
1" TO 1½"
BOND FABRIC DIRECTLY TO WOOD
ONE LAYER OF BID FIBERGLASS CLOTH, PRECUT TO SHAPE, APPLIED OVER WET MICRO ON THE FOAM, AND THOROLY WETTED OUT WITH EPOXY (FABRIC THICKNESS IS EXAGERATED IN THIS VIEW)
SECTION E-E
SEE INSTRUCTION HANDBOOK FOR PROCEDURE DETAILS
CUT OFF AFTER BONDING
4 5/32
FC-31 RIB
1/2" X 1.0" X 1.50" X 9 9/16" LONG 6061-T6 ALUM ALLOY ANGLE
FC-28 TEMPLATE-RUDDER HORN MAKE 1
25°
#10 (.193) DIA. HOLE 4 PLACES
SECTION D-D
FULL SCALE
E
E
5/8 DIA. X 25.0 LONG STEEL ROD, CEMENT IN PLACE WITH EPOXY
FC-10
5/8"
AN970-3 (2)
AN365-1032A (2)
AN3-12A (2)
FC-29 HINGE
3/4" O.D. X .049" WALL X 37.5 LONG ALUMINUM ANY ALLOY
RUDDER STOP 3/4" PLY BLOCK GLUE & SCREW TO TAIL BOOM TO CONTACT RUDDER HORN. LIMITS RUDDER TRAVEL TO 25° LEFT & RIGHT.
FC-11
FC-12
1 3/4
D
D
FC-28 HORN
FC-29 HINGE
AN3-13A (2)
AN365-1032A (2)
23 1/2
19.41
SPAR
RADIUS THIS SURFACE
4 15/16
FC-29 HINGE (2)
AN3-20A (4)
AN365-1032A (4)
AN970-3 (4)
AN3-17A (2)
AN365-1032A (2)
AN960-10 (2)
LG-7 WHEEL
AN395-43 PIN
AN380-2-3 COTTER
CUT OFF AFTER BONDING
3/4 X 2 1/2" X 6 1/4 SPRUCE
SPRING SUPPORT SEE SHEET 27
2 1/4
1 1/8
5/16 R
#10 (.193) DIA. HOLE 3 PLCS
1.0
.50
1.00
5/16
1 5/8
FC-29 RUDDER HINGE DETAIL
FULL SCALE — MAKE 6 PCS
MAT'L: 1/8" X 1.0 X 1.0 X 2 1/4 LONG 6061-T6 ALUM ANGLE
RUDDER TEMPLATE No. 1B
RUDDER TEMPLATE #1A
FC-11
41 1/4
FC-10
41 1/4
PLY'D CORE
#10 (.193) DIA. HOLE (12 PLACES)
RUDDER TEMPLATE No 2B (USED TWICE)
RUDDER TEMPLATE #2A
FC-12
21 3/4
FOR TEMPLATES SEE SHEET No. 21
RUDDER TEMPLATE #3
FOAM CORES DETAIL
SCALE = 1/8
1/4
5/8
60.0
7/16
1 5/8
22.0
3 3/8
3/16
R
2 1/2
19 15/16
FC-30
SPAR DETAIL-RUDDER
DRAWN BILL BAKER
CHECKED
DATE 12/83
ENG. APP.
CUST. APP.
SCALE AS NOTED
DESCRIPTION RUDDER ASSEMBLY
WINDROSE SAILPLANE
DWG. NO.
SHEET NO. 8 OF 27
REV. A

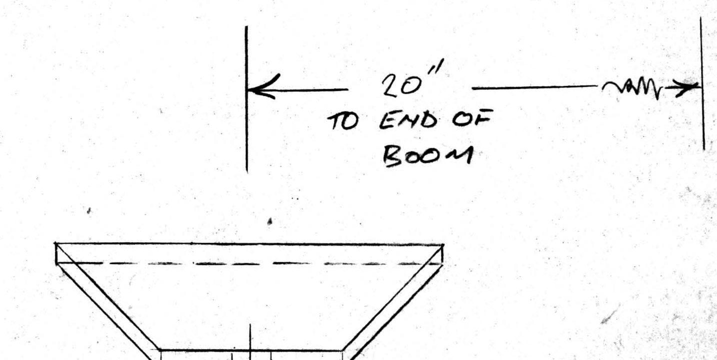


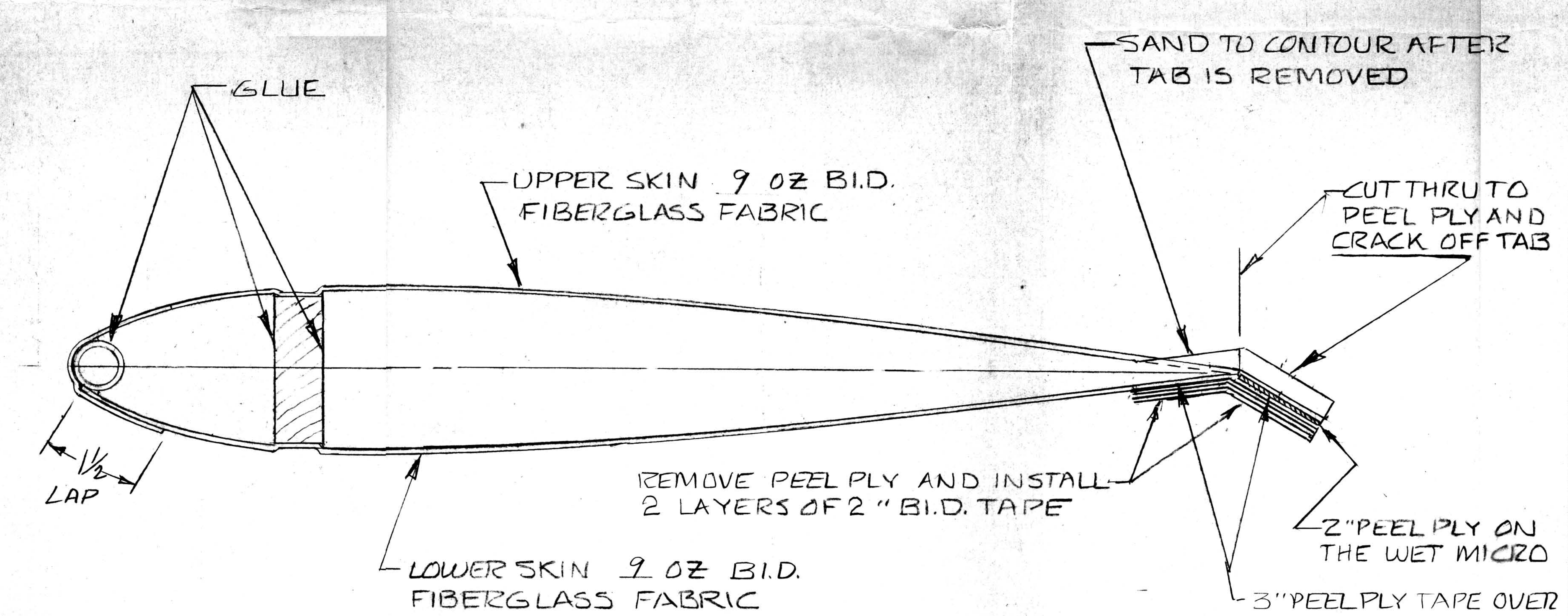
CS-2 ELEVATOR ASSY
VIEW LOOKING AFT
1/4 SCALE



SPAR ASSY DETAIL
VIEW LOOKING FORWARD
1/4 SCALE

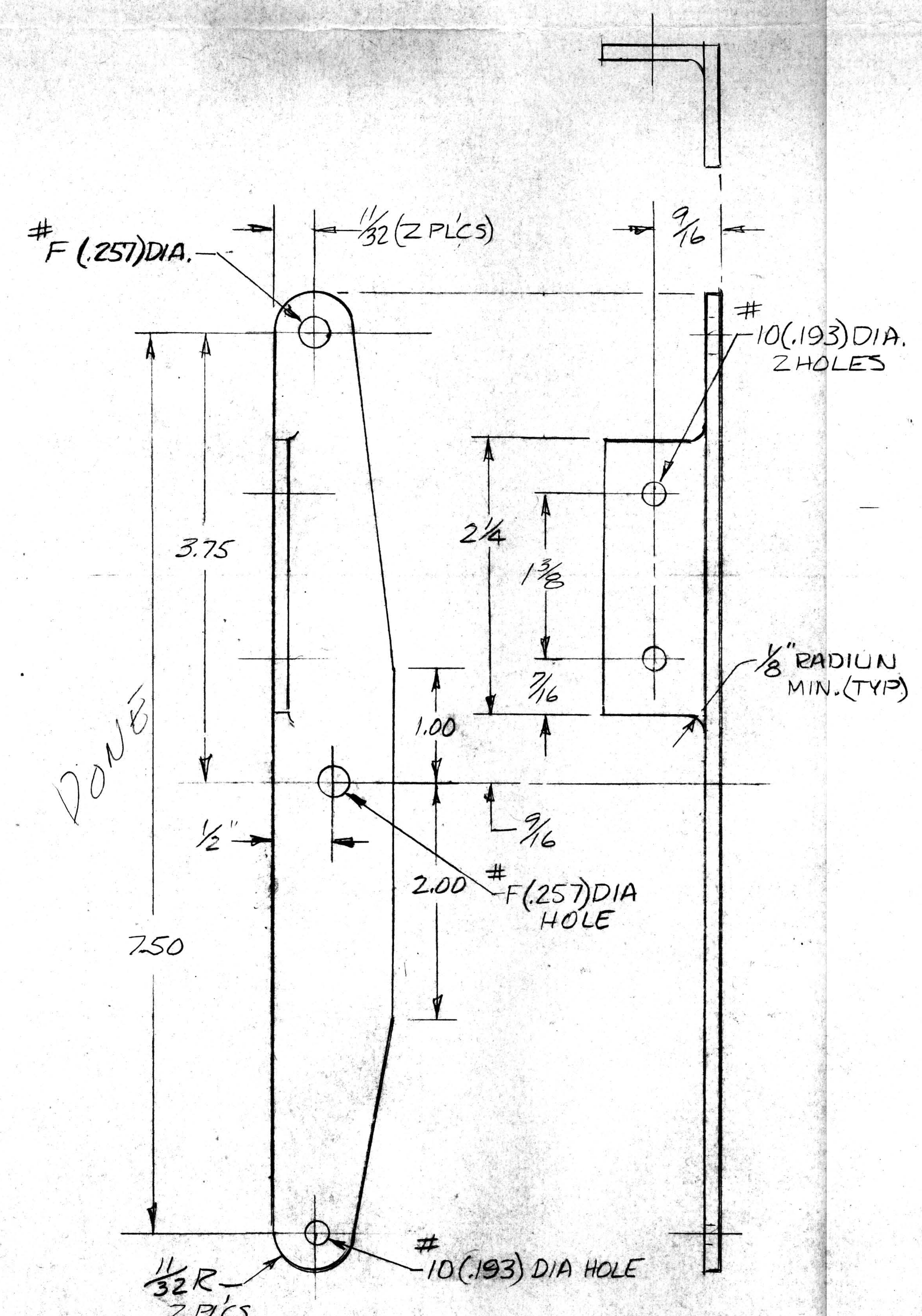




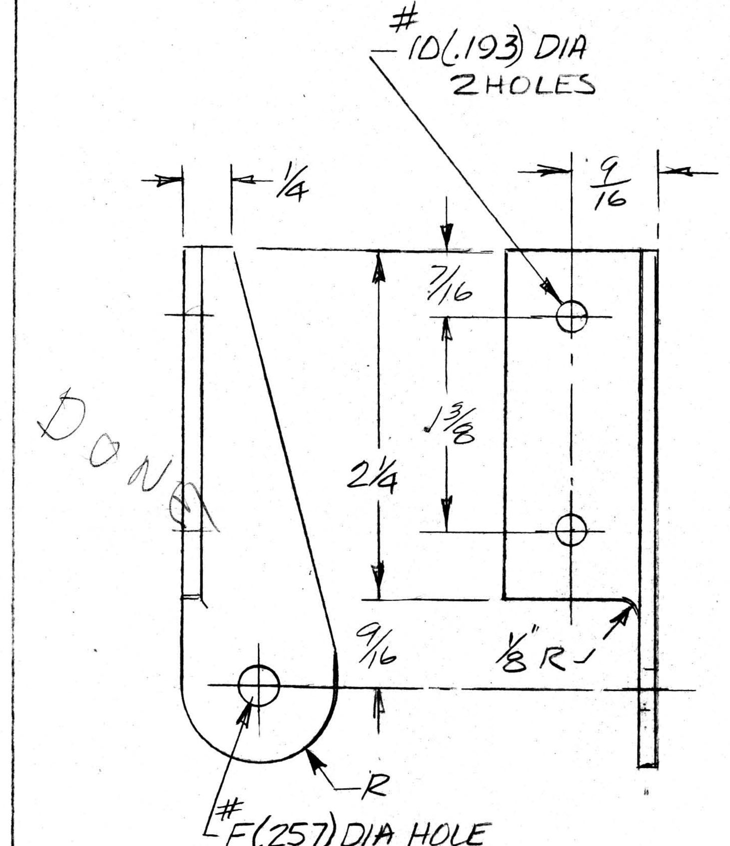


SECTION **M-M** 1/2 SCALE

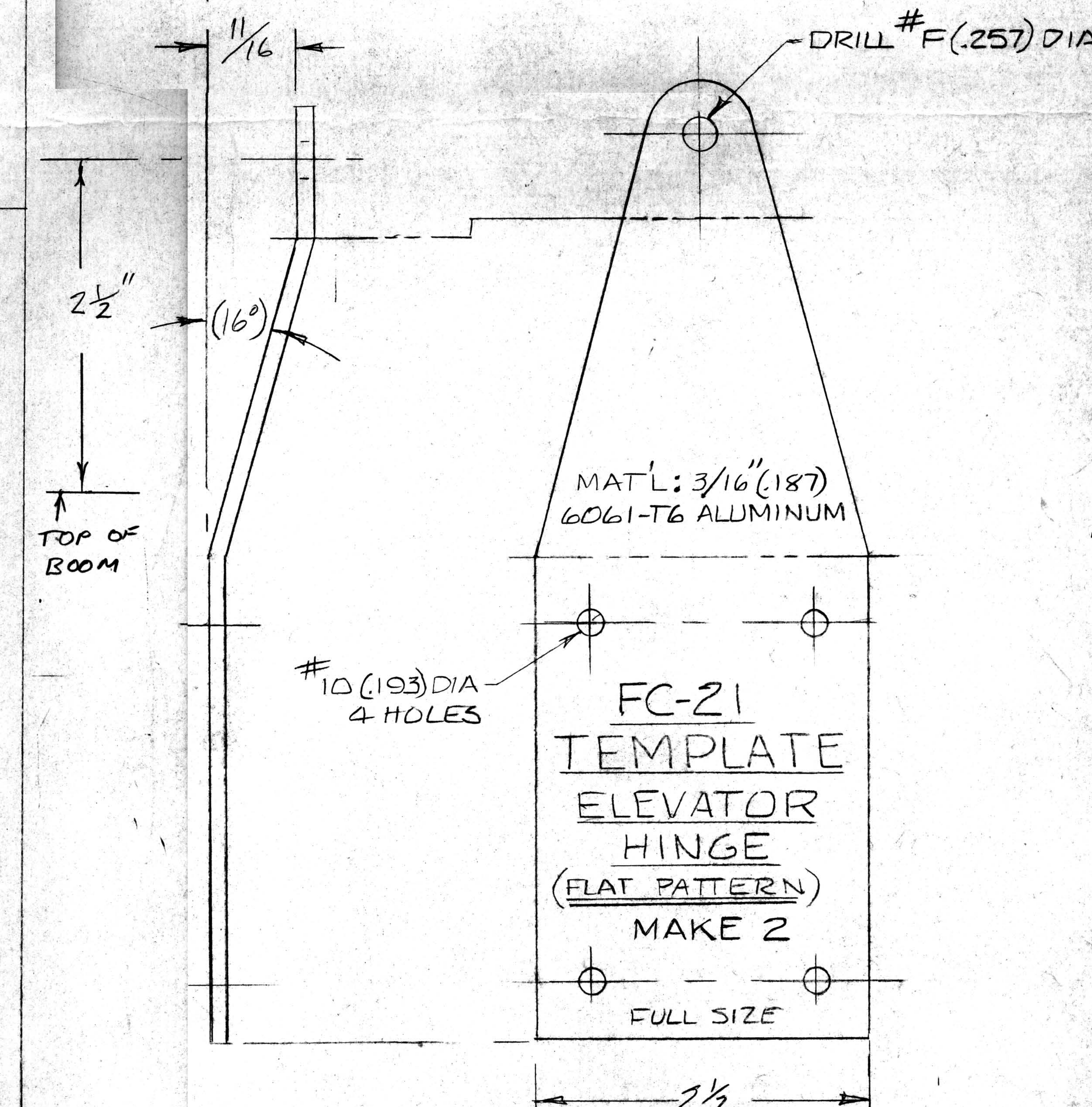
SEE INSTRUCTION HANDBOOK, SECTION FOR DETAIL ASSY INSTRUCTIONS



FC-23 ELEVATOR CONTROL HORN
MAKE 1 PC FROM 1/8" x 1.0 x 1.0 x 8 3/16 LG. 6061-T6 ALUM ANGLE

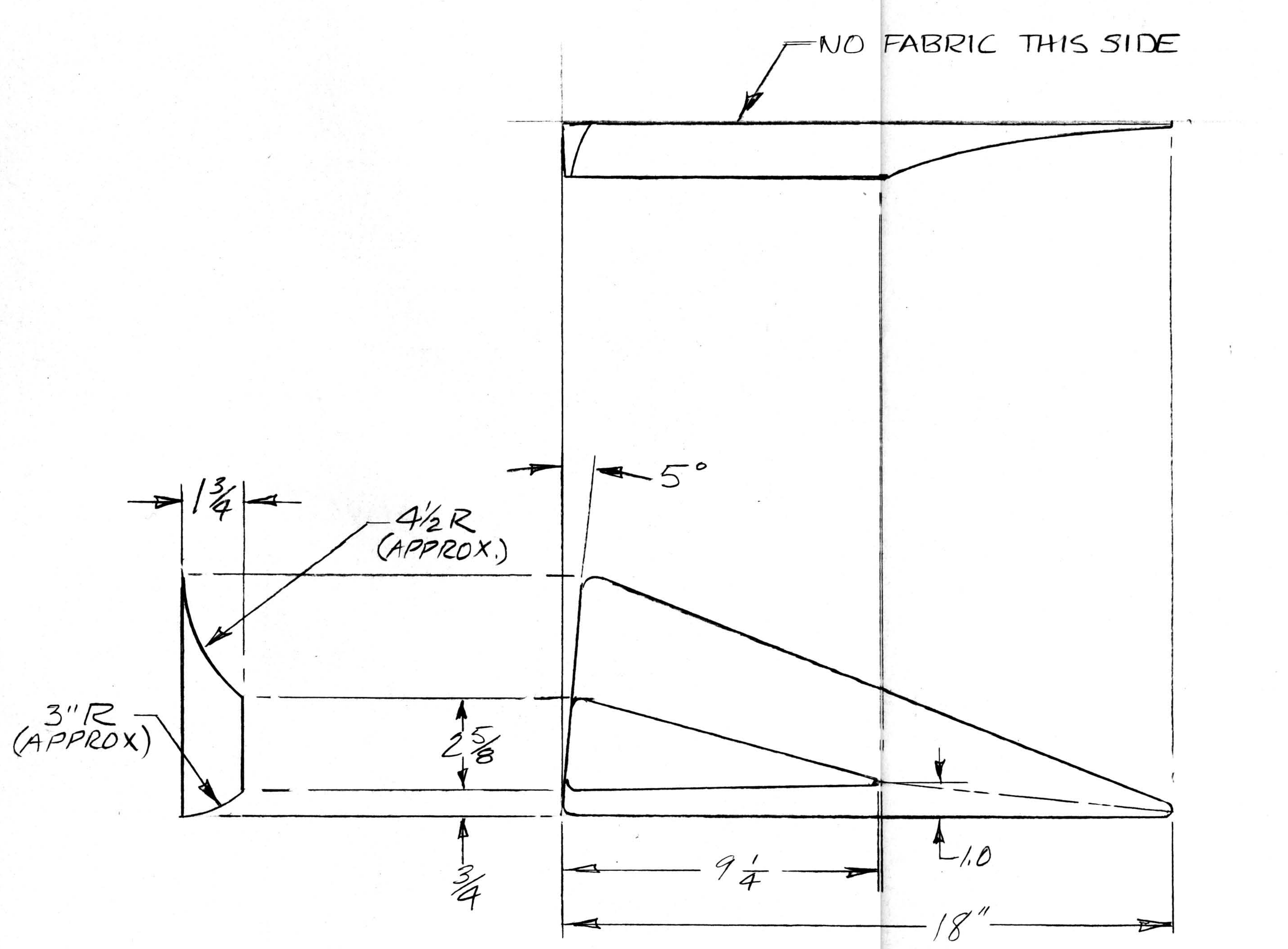


FC-22 L/R HINGE
L.H. SHOWN - MAKE 1
R.H. OPPOSITE - MAKE 2
MATL: 1/8" x 1" x 1" x 3 3/8 LG. 6061-T6 ALUM.



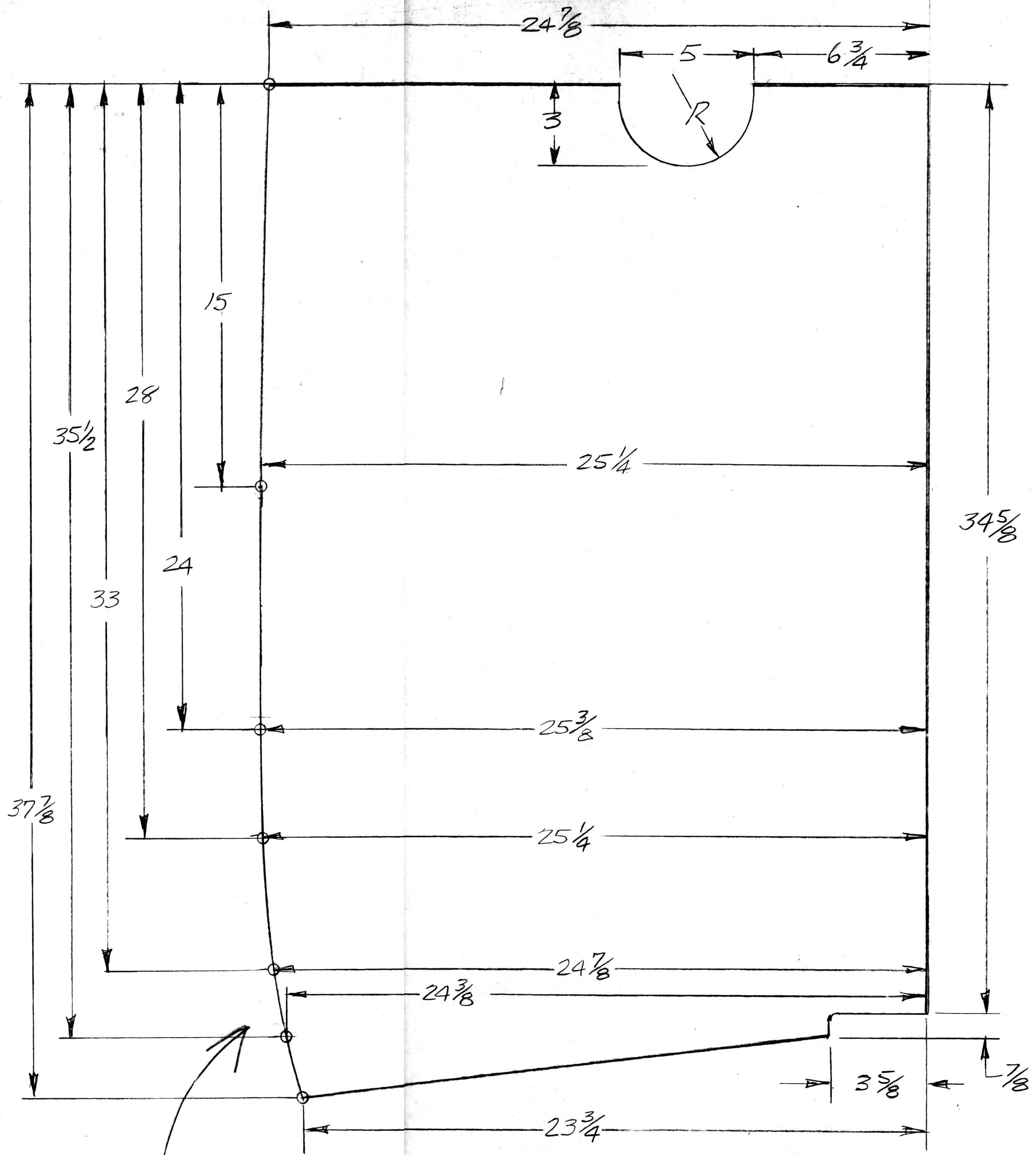
FC-21 TEMPLATE ELEVATOR HINGE (FLAT PATTERN)
MAKE 2
FULL SIZE

DRAWN	BILL BAKER	DATE	DESCRIPTION HORIZONTAL · TAIL
CHECKED	[illegible]	12/83	
ENG. APP.			WINDROSE SAILPLANE
CUST. APP.			
SCALE 1/4 AND NOTED			SHEET NO. 9 OF 27 REV. A

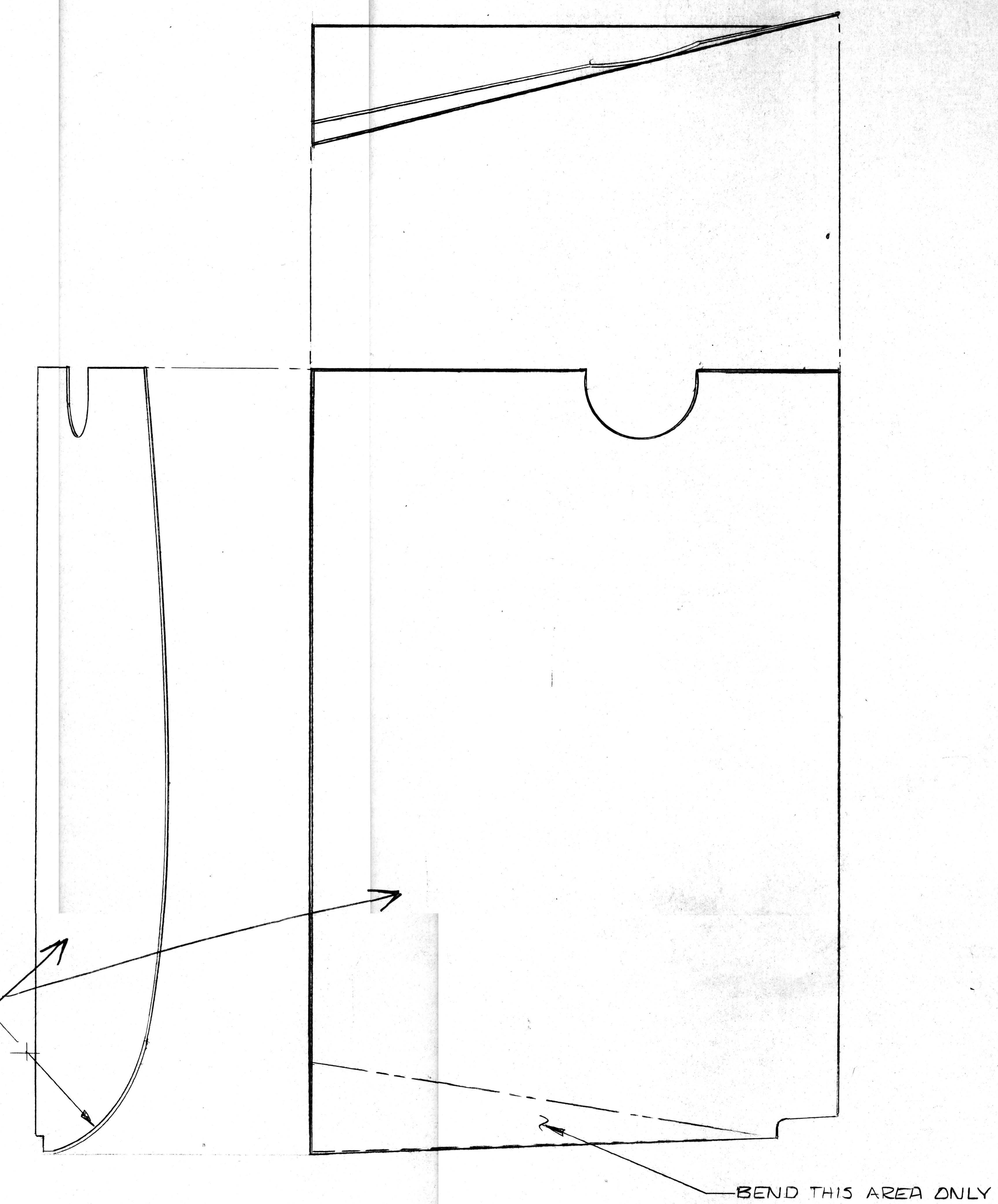


DETAIL PD-6
L.H. SHOWN - MAKE 1
R.H. OPPOSITE - MAKE 1
MATERIAL: 2#/FT³ FOAM

GLASS WITH TWO LAYERS OF BID. FABRIC AFTER SHAPING

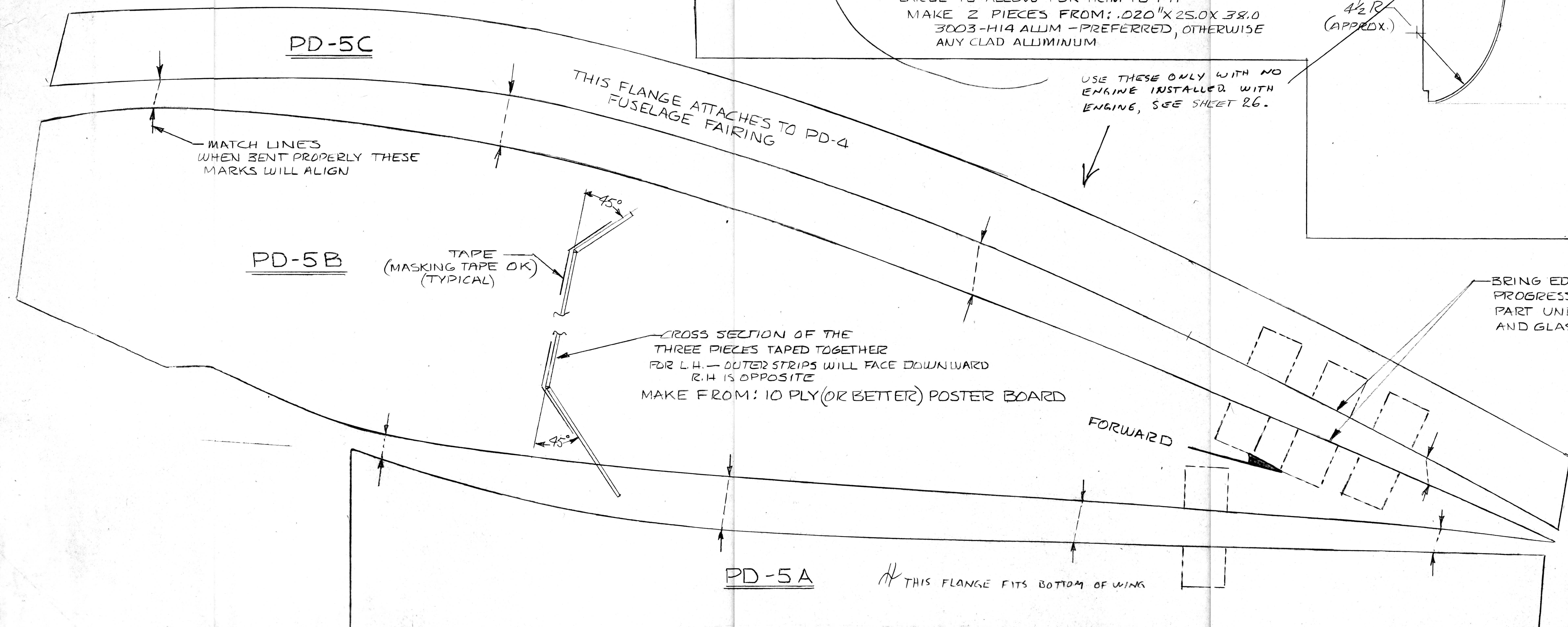


FLAT PATTERN FOR PD-4 FAIRING
HORIZONTAL DIMENSIONS SHOWN ARE 1/4" LARGE TO ALLOW FOR TRIM TO FIT
MAKE 2 PIECES FROM: .020"X 25.0X 38.0 3003-H14 ALUM - PREFERRED, OTHERWISE ANY CLAD ALUMINUM



USE THESE ONLY WITH NO ENGINE INSTALLED. WITH ENGINE, SEE SHEET 26.

DETAIL, PD-4 FAIRING
L.H. SHOWN - MAKE 1
R.H. OPPOSITE - MAKE 1
MATERIAL: SEE FLAT PATTERN



BRING EDGES TOGETHER AND TAPE PROGRESSIVELY AS SHOWN, TAPE ASSEMBLED PART UNDER WING, ON FUSELAGE AFT FAIRING AND GLASS WITH TWO LAYERS OF B.I.D. FABRIC

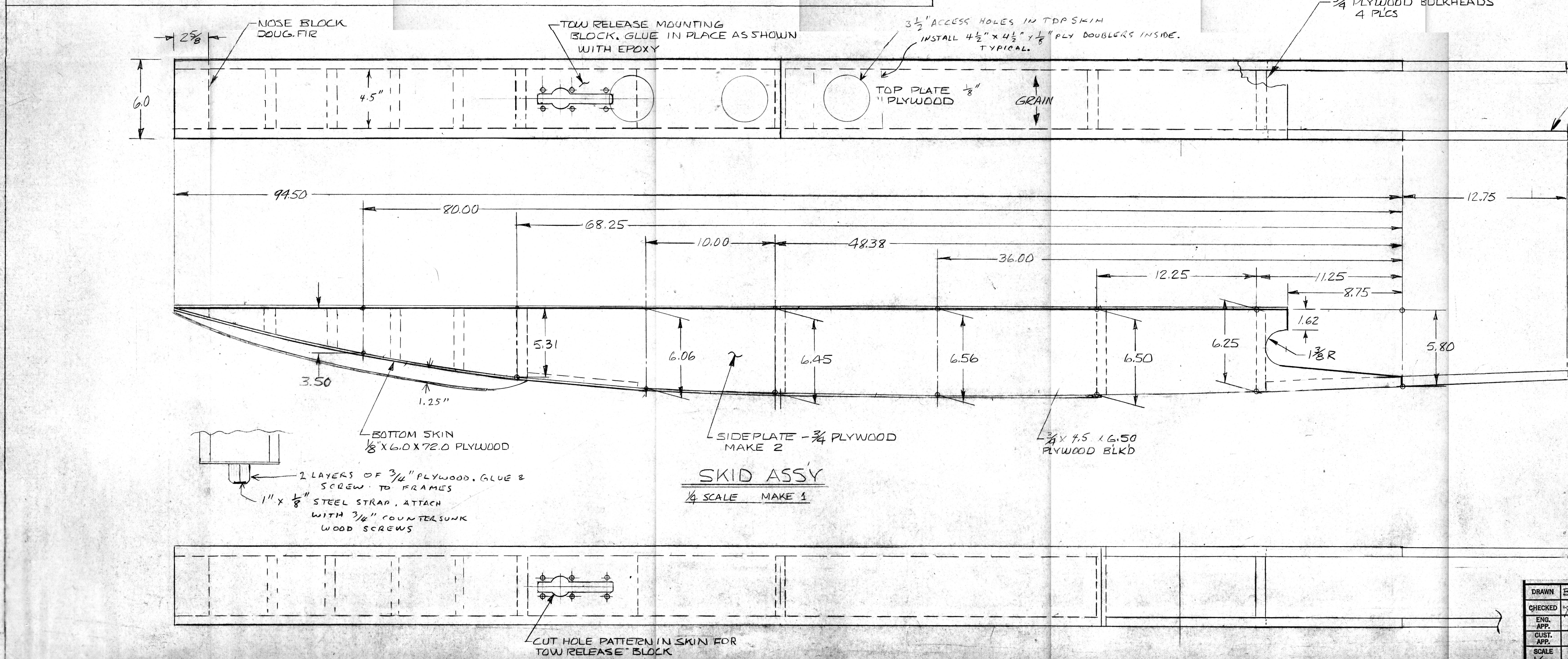
TEMPLATES FOR PD-5 FAIRINGS

NOTE: THESE PARTS ARE SHOWN INSTALLED ON SHEET No. 15

DRAWN	BILL BAKER	DATE	DESCRIPTION
CHECKED	[illegible signature]	12/83	FUSELAGE FAIRINGS
SCALE 1/4			SHEET NO. 10 OF 27 REV.

STA 14.00 FUS
STA 22.00 FUS
STA 30.00 FUS
STA 46.00 FUS
STA 62.00 FUS
STA 78.00 FUS
STA 94.00 FUS
STA 110.00 FUS
STA 117.60 FUS
SEE SHEET 23 FLOORBOARD
FC-32 (2) SPRING
FC-5R ANGLE
FC-4 PIVOT ANGLE
SEAT IS OMITTED FOR CLARITY
AN3-6A (3)
AN365-1032 (3)
AN970-3 (3)
AN960-10 (3)
TYPICAL EACH PEDAL
AN3-11A (3)
AN365-1032A (3)
FC-20
FC-18
FC-17
AN210-2A
TWO PLACES THIS SIDE
DOWN SPRING FOR SPOILER
AN3- (3)
AN365-1032A (3)
AN960-10 (3)
TYPICAL EACH PEDAL
AN210-2A PULLEY (3)
FC-17 PLATE
FC-19 GUIDE
FC-20 GUARD
AN3-17A (3)
AN365-1032A (3)
TWO PLACES THIS SIDE
AN3-5A (3)
AN365-1032A (3)
AN960-10 (3)
(TYPICAL EA. SIDE)
FC-5L ANGLE
AN3-5A (4)
AN365-1032A (4)
AN960-10 (4)
CONTOUR OF FUSELAGE AT FLOORBOARD LEVEL
AN960-416
AN380-2-3
FORWARD
AN3- (2)
AN310-3 (2)
AN380-2-2 (2)
(4) A3235-28-935 TINNERMAN WASHERS
AS 2K693-594 (4)
AN365-1032A (4)
AN960-10 (4)
FC-25 SPOILER
WA-11
DRAG SPAR ATTACH FITTING SEE SHEET #7
4 PLACES
SEE BOOK PARTS LIST P 21
VIEW 0-0
FC-1 WELDED ASSY CONTROL STICK
FC-2 WELDED ASSY ROLL CONTROL
FC-13 SPOILER CONTROL ROD
FC-3 WELDED ASSY PITCH CONTROL
FC-10 WEIGHT 2 LB. LEAD WEIGHT.
FOR SEAT INSTALLATION SEE SHEET 26
FC-13 ROD (2 PLCS)
AN970 WASHERS GRIND WHERE NEC.
FC-8 L & R RUDDER PEDALS
LOCATE RUDDER PEDALS TO SUITE. SUGGEST 2" FORWARD OF STA 30.0 TO START
FC-16 ROD
AN316-6R (2)
AN3-14A (8)
AN365-1032A (8)
AN970-3 (8)
AN960-10 (AS REQ'D)
FC-12 SPOILER SHAFT (SHEET 22)
AN3-13A (3)
AN365-1032A (3)
AN960-10 (3)
NEAR AND FAR SIDES
7.0"
AN960-10 (2)
AN365-1032A (2)
AN3-5A (2)
(TYP 2 PLACES)
AN970-3 (4)
AN365-1032A (4)
AN3-10A (4)
FC-15 NEAR & FAR SIDES SHT. 22
FC-4 ANGLE, PIVOT MOUNT SEE SHEET 18
SPRING
ALUM CLIP
FC-9 BELLCRANK
7.0"
1.25"
4 1/2
2 1/2"
ONE COUNTERSUNK 3/16" BOLT
10."
TURNBUCKLES IN ELEVATOR SYSTEM
3/8 TYP.
1.50
14.50
50.0"
FC-7
AN3-12A (4)
AN365-1032A (4)
AN970-3 (4)
(NEAR & FAR SIDES)
AN115-8
AN100-3
AN393-9
18-1-C (NICOPRESS)
(TYP. FOR EACH CABLE)
FC-17A PLATE
FC-18 GUARD
FC-20 GUIDE
AN3-22A (3)
AN365-1032A (3)
AN960-10 (3)
AN210-2A (1)
AN4-24
AN310-4
AN380-1-3
AN115-8 (2)
AN100-3 (2)
AN393-9 (2)
18-1-C NICOPRESS (2)
AN3-12A (4)
AN365-1032A (4)
AN960-10 (4)
FC-6 ANGLE BOTH SIDES
GLUE AND NAIL IN PLACE (2 PLCS EA. SIDE)
LG-5 (2 PL)
AN3-16A (6)
AN365-1032A (6)
AN960-10 (6)
(TYPICAL NEAR & FARSIDE)
DRAWN BILL BAKER
CHECKED
ENG. APP.
CUST. APP.
DATE 12/83
DESCRIPTION INSTALL'N-COCKPIT CONTROLS
WINDROSE SAILPLANE
SCALE 1/4
DWG. NO.
SHEET NO. 11 OF 27
REV A

DRAWN	BILL BAKER	DATE	DESCRIPTION MATING - TAIL BOOM SKID AND PYLON
CHECKED	J. Maupin	12/83	
ENG. APP.			
CUST. APP.			WINDROSE SAILPLANE
SCALE 1/4			SHEET NO. 12 OF 27 — REV. A

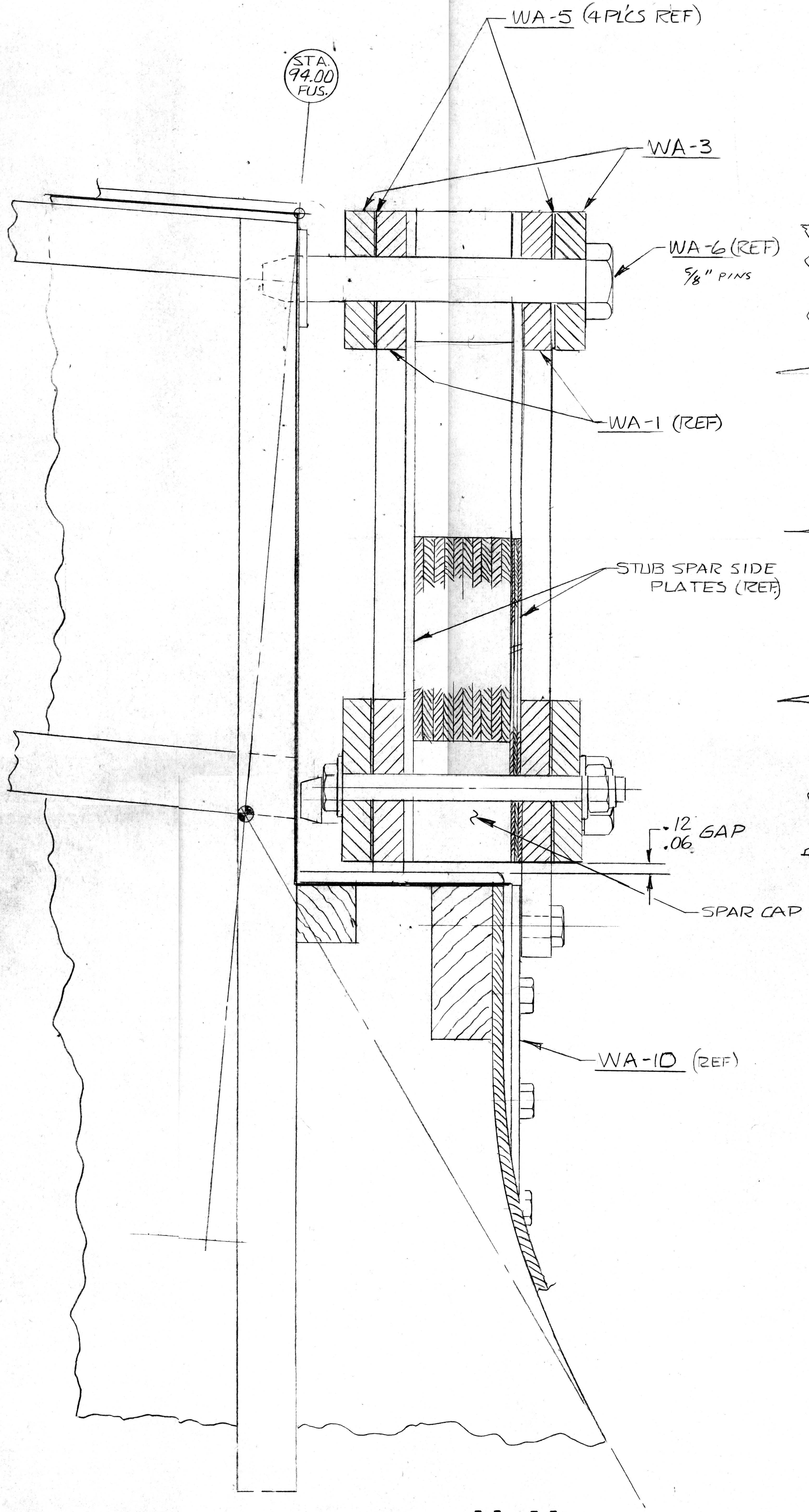


NOTE:
1. ALL PLYWOOD TO BE AA MARINE OR BETTER
2. ALL LUMBER TO BE AIRCRAFT QUALITY SPRUCE OR DOUGLAS FIR

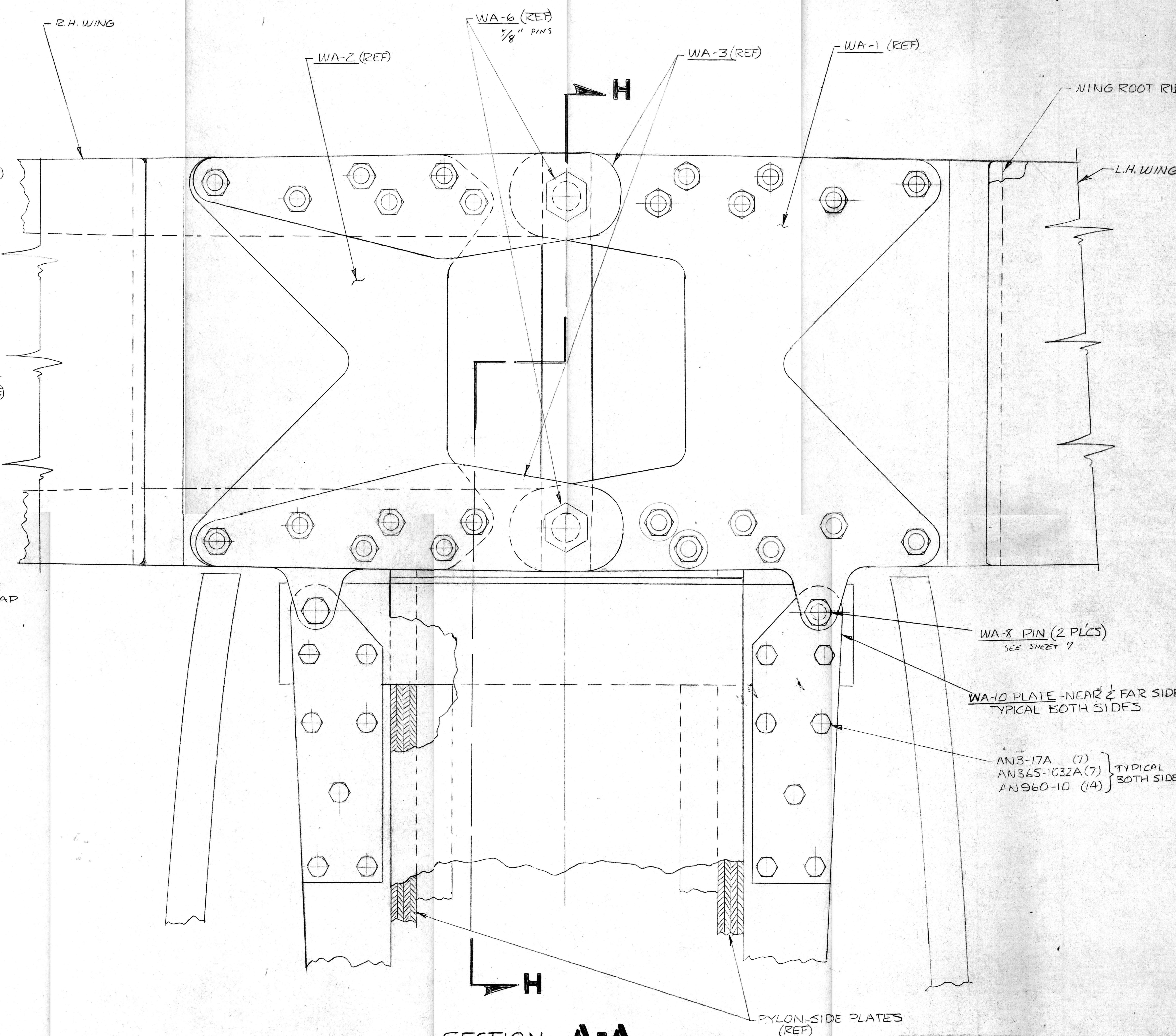
DRAWN	BILL BAKER	DATE	DESCRIPTION: DETAILS - TAIL BOOM AND SKID ASSY'S
CHECKED	[illegible]	12/83	
ENG. APP.			WINDROSE SAILPLANE
CUST. APP.			
SCALE 1/4	DWG. NO.	SHEET NO. 13 OF 27	REV. B

DRAWN	BILL BAKER	DATE	DESCRIPTION
CHECKED	[illegible]	12/83	TAIL BOOM BULKHEADS & PULLEY BRACKETS
ENG. APPR.			
CUST. APPR.			WINDROSE SAILPLANE
SCALE FULL	DWG. NO.		SHEET NO. 14 OF 27

DRAWN	BILL BAKER	DATE	DESCRIPTION POD STRUCTURE
CHECKED	[illegible]	12/83	
ENG. APP.			
CUST. APP.			
SCALE 1/4	DWG. NO.		SHEET NO. 15 OF 27 — REV.



SECTION **H-H** FULL SCALE

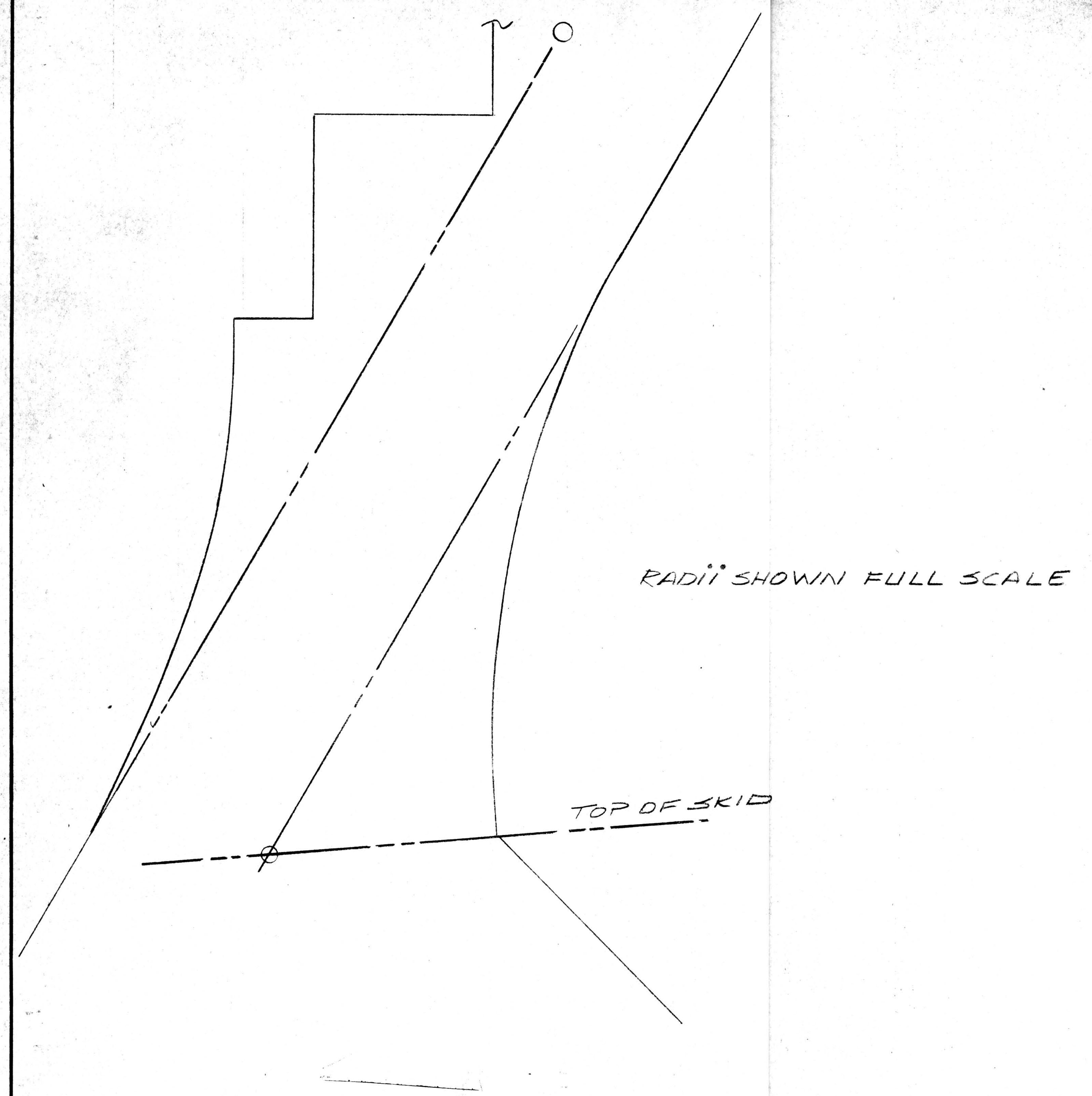


SECTION **A-A** FULL SCALE

WING ATTACHMENT

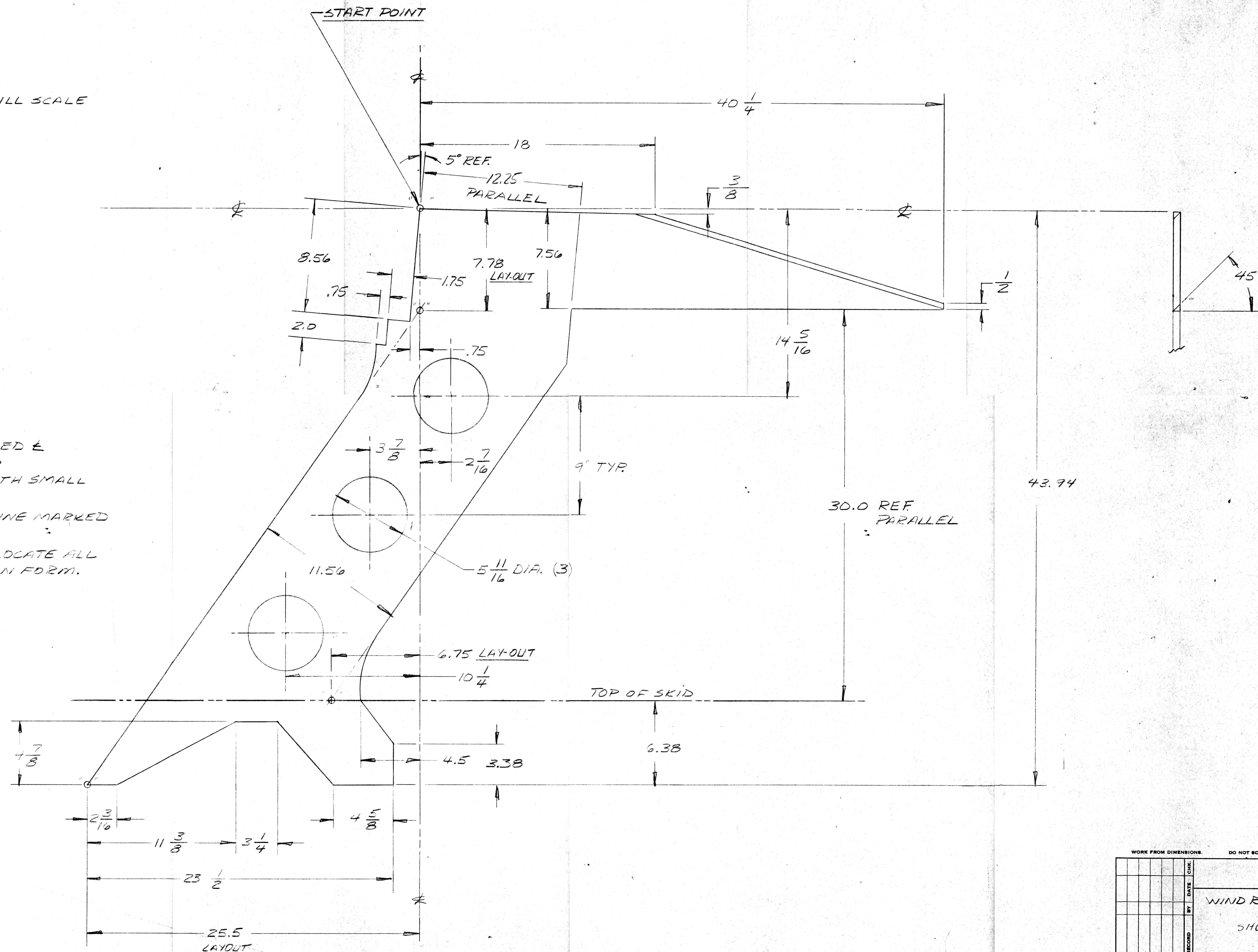
DRAWN	BILL BAKER	DATE	DESCRIPTION WING ATTACHMENTS
CHECKED	[illegible]	12/83	
ENG. APP.			WINDROSE SAILPLANE
CUST. APP.			
SCALE FULL	DWG. NO.	SHEET NO. 16 OF 27	REV. A

AF 14058



NOTES:

1. MATL $\frac{1}{2}$ PLYWOOD
2. LAY-OUT LINES MARKED ℄ AS SHOWN, ON PLYWOOD
3. LOCATE DIM. MARKED WITH SMALL CIRCLE "O" (4)
4. LOCATE AND DRAW IN LINE MARKED "TOP OF SKID"
5. GO TO START POINT & LOCATE ALL DIM. AND DRAW IN PYLON FORM.



TOLERANCE: .X = ± .02, .XX = ± .01, .XXX DEC. = ± .005, .XXXX DEC. = ± .0005, FRACTIONS = ± 1/64, ANGLES = ± 1° UNLESS OTHERWISE SPECIFIED.

WORK FROM DIMENSIONS. DO NOT SCALE. REMOVE ALL BURRS.

NO.	REVISION RECORD	BY	DATE	CHK.

WIND ROSE PYLON.

SHEET 17

DRAWN: B. PRITCHETT DATE: 11-7-85
CHECKED: APPROVED: [signature]
SCALE: 1/4 REF No.:
SHEET NUMBER
DRAWING NUMBER #17

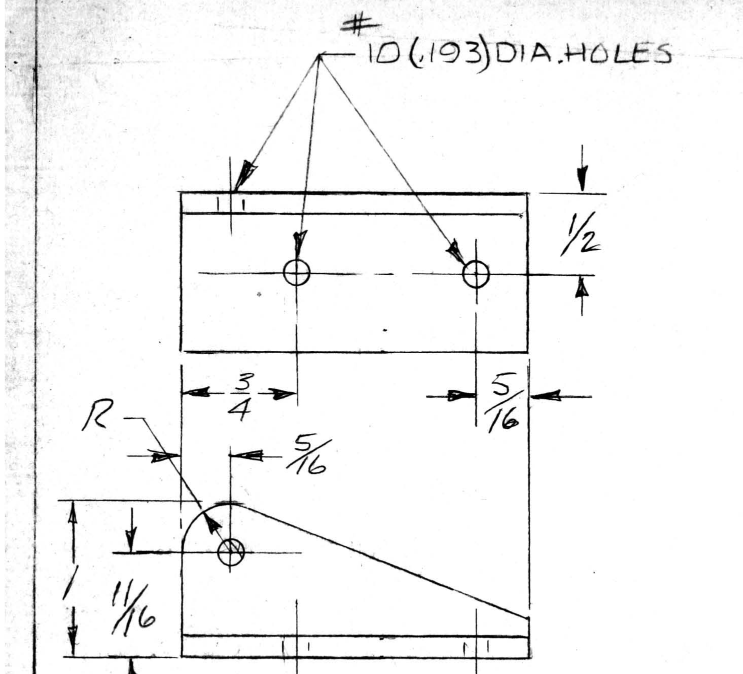

WELD THESE 2 ANGLES & PLATE TOGETHER FIRST USING 2 PIECES OF 7/8" OD TUBE AS SPACERS, THEN WELD TO VERTICAL TUBE AS SHOWN
.885 MIN.
.935 MAX.
.01 SHIM FOR CLEARENCE.
1/4 R
WELD
17°
6 1/8"
3 1/16
.870D
DRILL #F(.257) DIA
9/16 R
USE 2 OR 3 WASHERS HERE AT ASSEMBLY
12 1/2°
49.5"
ROLL CONTROL ASSEMBLY
FULL SCALE MAKE 1
#10(.193) DIA HOLE 11 PLACES
DONE 3-28-98
CONTROL SUPPT. ANGLE
FC-6 L.H. SHOWN MAKE 1 MAT'L 1/8" X 1.5" X 1.5" ALUM ALLOY ANGLE
R.H. OPPOSITE MAKE 1
#10(.193) DRILL 4 PLACES
7/16 TYP
3/4 TYP
45° TYP.
7.00
8.00
4.00
#F(.257) DIA HOLE
.62 MIN.
DONE 3-29-98
DETAIL - PIVOT MOUNT
FULL SCALE MAKE 2 PCS. MATL: ALUMINUM ANGLE 1/8 X 1.0 X 1.50
FC-7
#10(.193) DIA HOLE 4 PLACES
TEMPLATE
#J(.277) DIA. HOLE
WELD
45°(REF.)
CUT TUBES TO 22 1/2°
5.65(REF.)
7 3/16
WELD "ALL AROUND"
PIVOT PLATE DETAIL MAKE 2
1/4" DIA HOLE (TYPICAL)
9/16" R
NOTE: THESE TWO HOLES MUST LIE IN THE SAME PLANE AS THE STICK ℄
DRILL No. F(.257) DIA. HOLE 2 PLACES IN LINE
5/16 R
CONTROL STICK ASSY
FULL SCALE MAKE 1
.5" OD .25" ID REAM WITH "F" DRILL TO .257"
BOLT 2 LB LEAD WEIGHT
#10(.193) DIA HOLE 4 PLCS
1/4 DIA HOLE
#10(.193) DIA 3 PLCS
#F(.257) DIA. HOLE
DETAIL PITCH CONTROL PIVOT
L.H. SHOWN MAKE 1 MATERIAL 1/8 X 1.0 X 1.50 ALUM ALLOY ANGLE
RH OPPOSITE MAKE 1
WELD "ALL AROUND" THIS FACE ONLY TYPICAL
3/16 DIA. HOLE THRU ONE WALL
2.25" THIS ARM ACTUATES HORIZONTAL TAIL.
3.0" THIS ARM CONNECTS TO SPRINGS.
#F(.257) DIA. HOLE
60°
30°
90°
10"
4.00
8.00
PITCH CONTROL ROD ASSEMBLY
FULL SCALE - MAKE 1
#10(.193) DIA HOLE 4 PL.
NOTES: UNLESS OTHERWISE SPECIFIED:
1. ALL TUBING TO BE 7/8" O.D. X .049 WALL COLD ROLLED STEEL (WELDED OK) 7/8" THINWALL CONDUIT MAY BE SUBSTITUTED
2. ALL FLAT PLATE TO BE 1/8" STEEL PLATE
3. ALL PIVOT DOWELS TO BE 1/4"(.250) DIA. STEEL ROD
4. ALL ALUM ANGLE TO BE 6061-T6 ALLOY
DRAWN BILL BAKER
CHECKED 12/83
ENG. APP.
CUST. APP.
SCALE FULL
DESCRIPTION WELDED ASSEMBLIES COCKPIT CONTROLS
WINDROSE SAILPLANE
SHEET NO. 18 OF 27
REV. A

DRAWN	BILL BAKER	DATE 6-6-83	DESCRIPTION FUSELAGE FRAMES
CHECKED	[illegible]	12/83	
ENG. APP.			
CUST. APP.			
SCALE FULL	DWG. NO.	SHEET NO. 19 OF 27	REV.

DRAWN	BILL BAKER	DATE	DESCRIPTION
CHECKED	[signature]	12/83	FUSELAGE FRAMES
ENG. APP.			
CUST. APP.			WINDROSE SAILPLANE
SCALE FULL	DWG. NO.	SHEET NO. 20 OF 27	REV. A

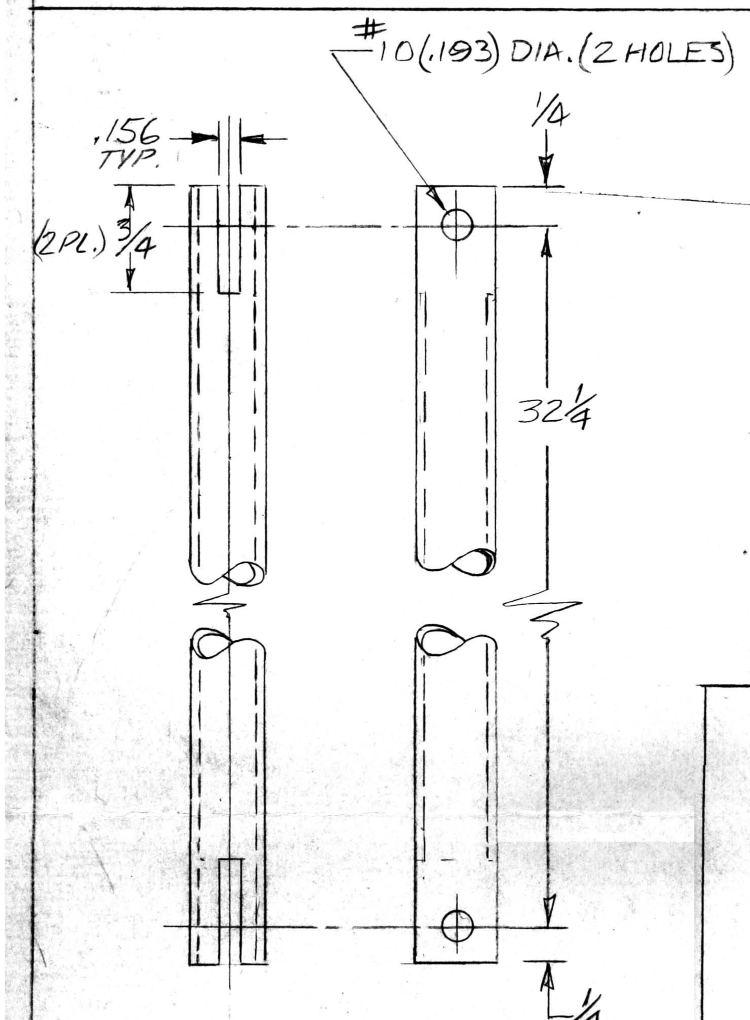
DRAWN	BILL BAKER	DATE	DESCRIPTION TEMPLATES RUDDER, ELEVATOR
CHECKED	[illegible signature]	12/83	
ENG. APP.			WINDROSE SAILPLANE
CUST. APP.			
SCALE FULL	DWG. NO.		SHEET NO. 21 OF [illegible]

#10 (.193) DIA (2 HOLES)
¢ HOLES
10°
SECTION S-S
S
S
1/2
1.0
13.0
1 1/4
4.00 R (MAX) (TYP.)
27.0
11.0
5/8 O.D. STEEL TUBE .035" WALL PREFERRED - .065 MAX
1 1/16
CHAMFER 3/16" X 45° 2 PLCS
3/4
#F (.257) DIA HOLE ALSO THRU TUBE
1.0
.062 STEEL SHEET
WELD
2 1/2"
CUT TO FIT
CHAMFER AS SHOWN
.281 (CENTERED)
3/4
1/4
5/8
2.0
FC-13 DETAIL - SPOILER CONTROL ROD
FULL SCALE MAKE 1
#10 (.193) DIA HOLE
#F (.257) DIA
R
TEMPLATE - TOW RELEASE LOCK
MAKE FROM 1/4" (.250) THICK STEEL PLATE
1/16" (.062) ON ¢
1/16" (.062) DIA. HOLE
#F (.257) DIA.
TEMPLATE - TOW HOOK
MAKE FROM: 1/4" (.250) THICK STEEL PLATE
R
5/8
17/32
1 1/16
#10 (.193) DIA HOLE 3 PLCS
1.0
5/16
5/16
1 1/2
5/16 R
3/8
R
1.0 R
FC-15
DETAIL SHAFT SUPPT.
FULL SCALE MAKE 2
MATERIAL 1/16" ALUM ALLOY
WELD BOLT
FOR HOLD DOWN SPRING
SPOILER DRIVE
60°
DOWN SPRING RT. SIDE ONLY GOES TO LOWER CORNER OF FRAME # 94.
5/8 I.D. STEEL WASHER 1 5/16 OD MAX 2 PLCS
.062" DIA HOLE
1 3/8
5/8 O.D. STEEL TUBE .035" WALL PREFERRED .065" WALL MAX. 11 1/4" LONG
3/8
1 1/16
7 3/8
10 3/4
UP
1
9/16
1"
3/8
2 1/4
3 5/8
2 9/16
6 1/8
.437
FWD
#10 (.193) DIA. DRILL WITH PART MATED TO OPPOSITE PART
TR-5
ANGLE - TOW RELEASE - UPPER
R.H. SHOWN — L.H. OPPOSITE
MATERIAL - 6061-T6 ALUM ALLOY 1/8" X 3/4" X 1.0 X 6 1/8
#F (.257) DIA. HOLE DRILL WITH PART MATED TO OPPOSITE PART
3/4
1"
15/32 (.469)
9/16
3/16
1 5/16
2 3/16
2 1/4
FWD.
13/16
5 5/8
7/32
2 9/16
30° 2 PL
5/16
2 PL
#10 (.193) DIA. 3 HOLES
DONE
TR-4 ANGLE - TOW RELEASE, BOTTOM L.H.
L.H. SHOWN R.H. OPPOSITE
MATERIAL: 1/8" X 1.0" X 1.0, 6061-T6 ALUM ALLOY ANGLE
#F (.257) DIA HOLE IN ARM
90°
#10 (.193) DIA HOLE
SPOILER DRIVE
4.0
4.0
5/16 R TYP 3 PLCS
1/2 R TYPICAL 3 PLCS
2 ARMS REQD
DRIVE LEVER FROM COCKPIT
1/4 DIA STEEL ROD
NOTE: MAKE THE TWO ARMS FROM 3/32" OR #12 GAUGE COLD ROLLED STEEL SHEET
WELD (BOTH ARMS)
TACKWELD 4 PLACES, ON SIDES SHOWN ONLY
THESE TWO FACES TO BE PERPENDICULAR TO THE TUBE
FC-12 DETAIL - SPOILER SHAFT
FULL SCALE MAKE 1
DRAWN BILL BAKER
CHECKED
DATE 12/83
ENG. APP.
CUST. APP.
SCALE FULL
DESCRIPTION SPOILER CONTROLS AND TOW RELEASE DETAILS.
WINDROSE SAILPLANE
SHEET NO. 22 OF 27
REV. A



DETAIL FC-25 ANGLE

L.H. SHOWN MAKE 1
R.H. OPPOSITE MAKE 1
MATERIAL: 1/8" X 1.0" X 1.0" X 2 1/4"
6061 T6 ALUM
FULL SCALE



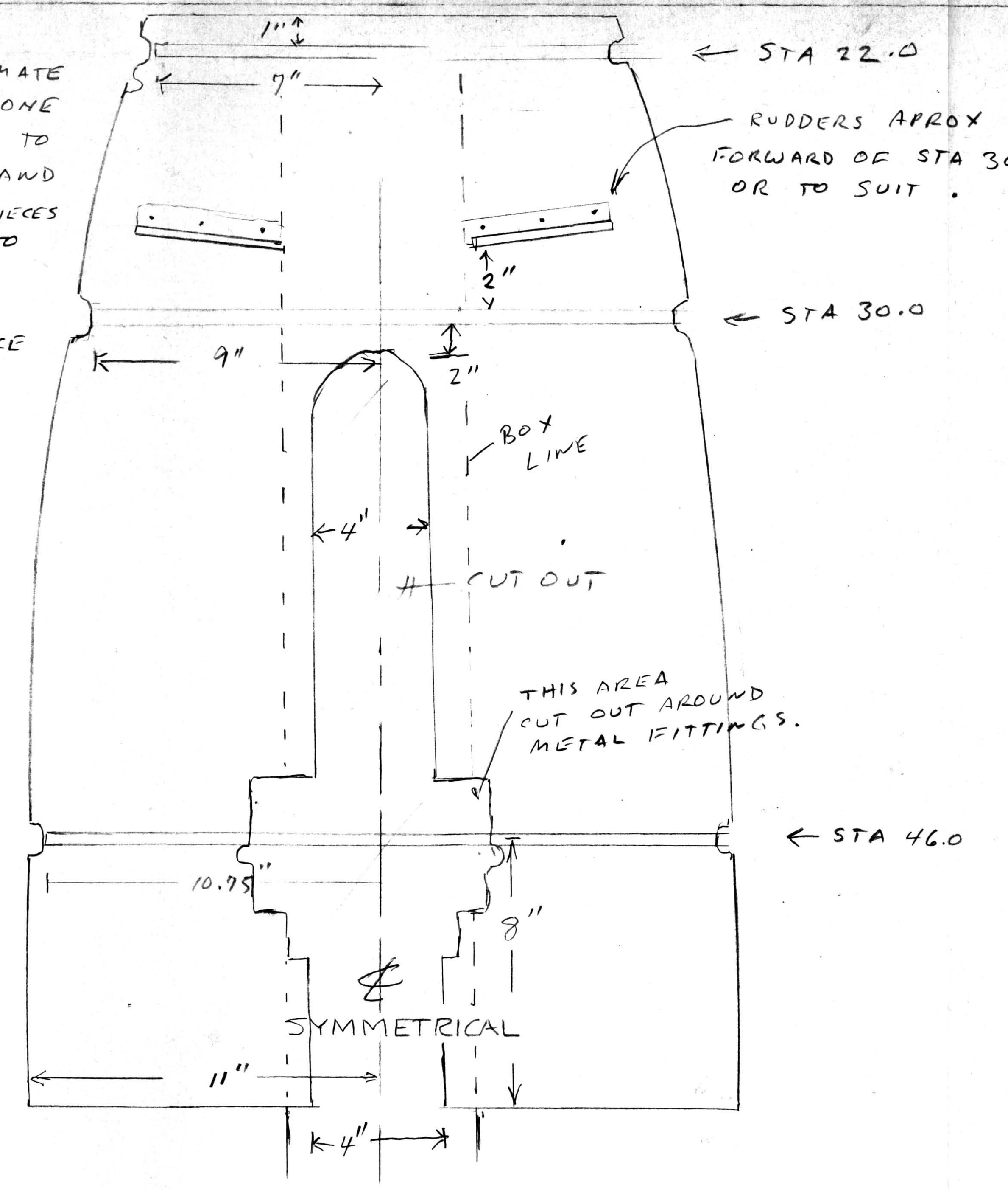
DETAIL FC-13 ROD

FULL SCALE
MAKE 2 PCS FROM 1/2" DIA X .065" WALL, 6061-T6 ALUMINUM

THIS IS THE APROXIMATE PATTERN FOR THE ONE PIECE FLOORBOARD. TO MAKE YOURS, CUT AND TRIM TWO OR 3 PIECES OF POSTER BOARD TO FIT. TAPE PIECES TOGETHER IN PLACE, REMOVE IN ONE PIECE FROM GLIDER AND USE AS PATTERN

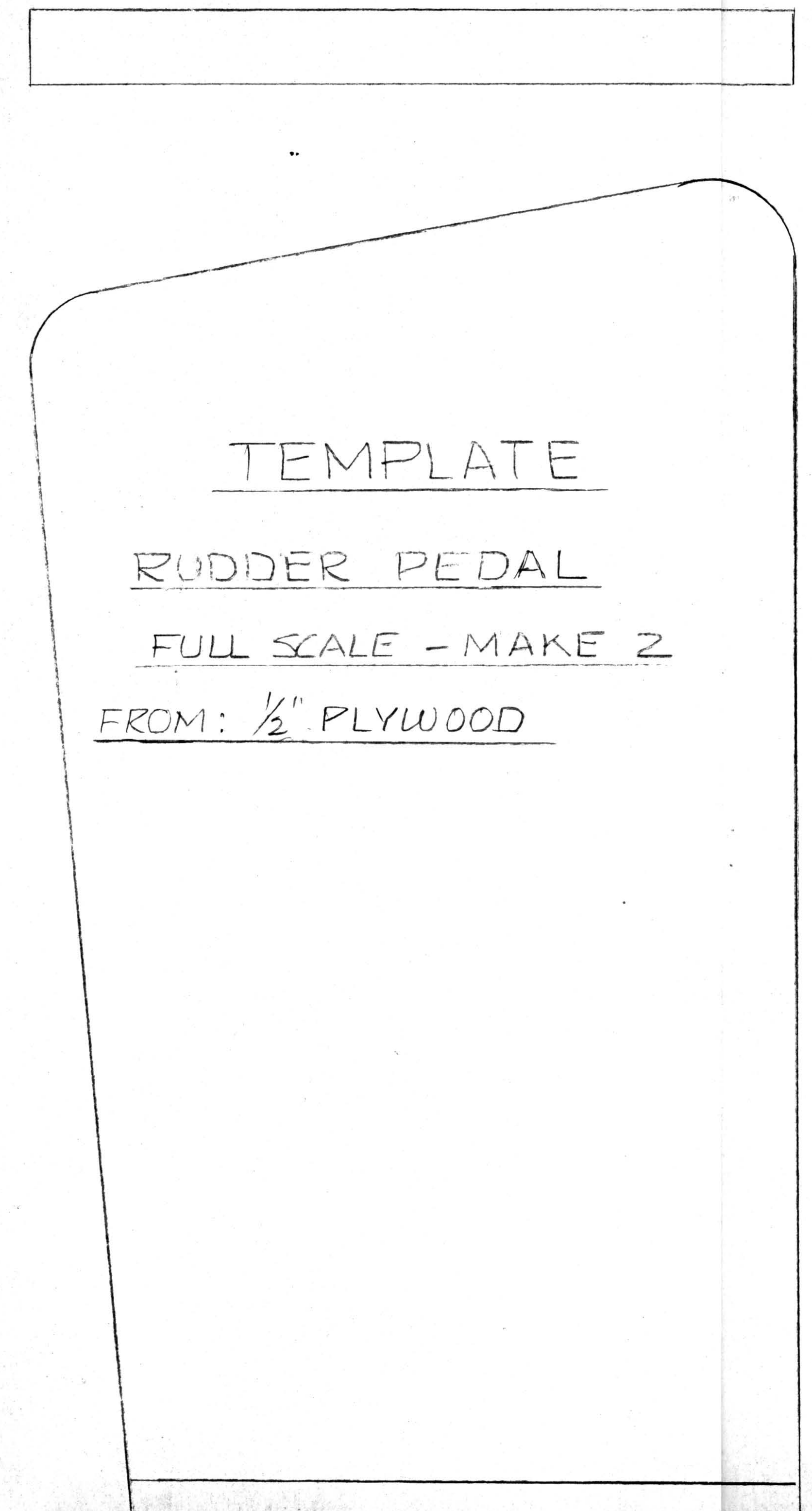
— —

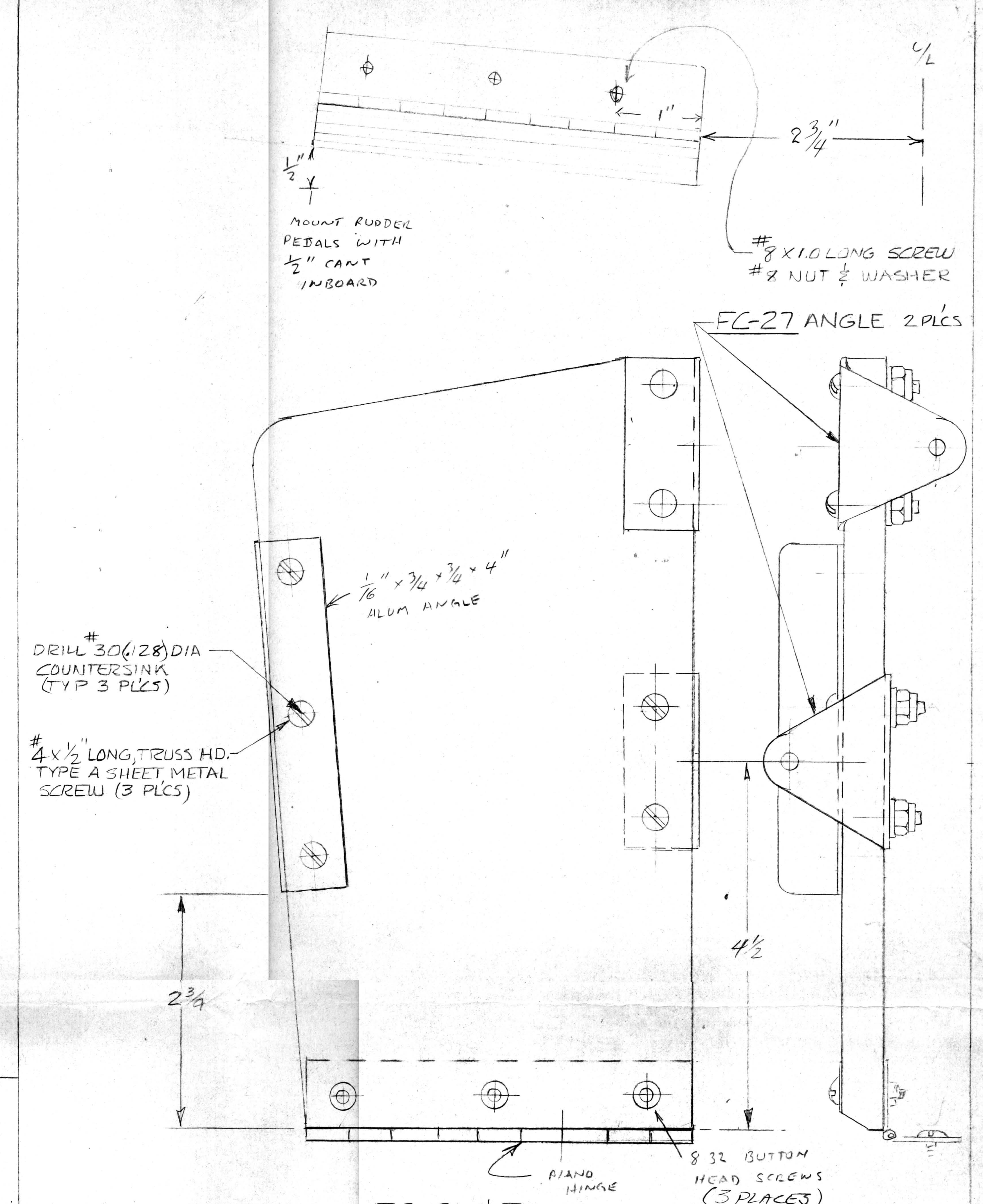
FLOOR RESTS ON BOX, STRINGERS, AND FRAMES.



DETAIL PD-27 FLOORBOARD

1/4 SCALE MAKE 1 PC.
MATERIAL: 1/4" PLYWOOD

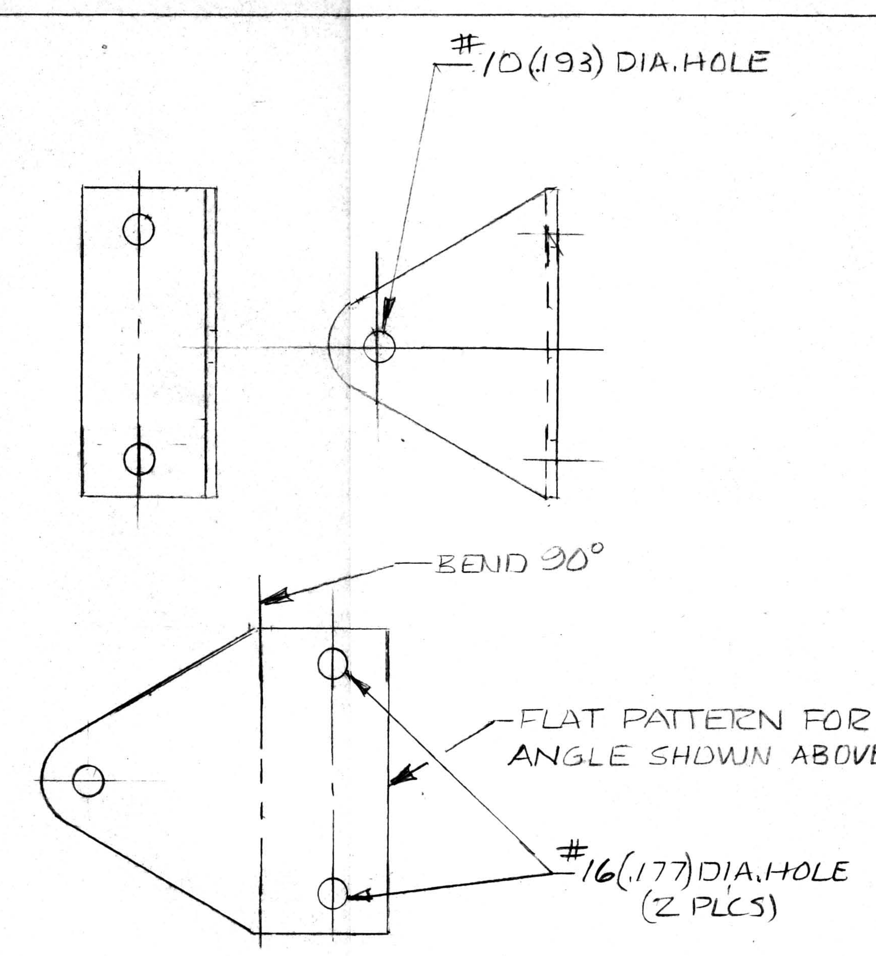




FC-8L&R

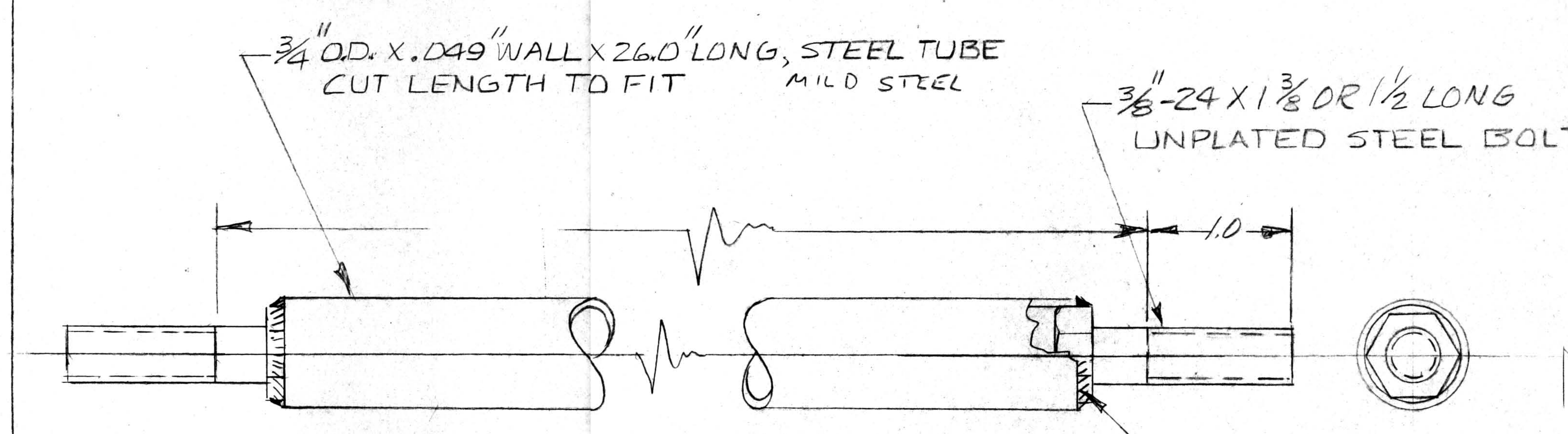
RUDDER PEDAL ASSEMBLY

L.H. SHOWN - MAKE 1
R.H. OPPOSITE - MAKE 1



DETAIL FC-27 ANGLE

FULL SCALE MAKE 4 PIECES
MAT'L: 1/16" 6061-T6 ALUM ALLOY

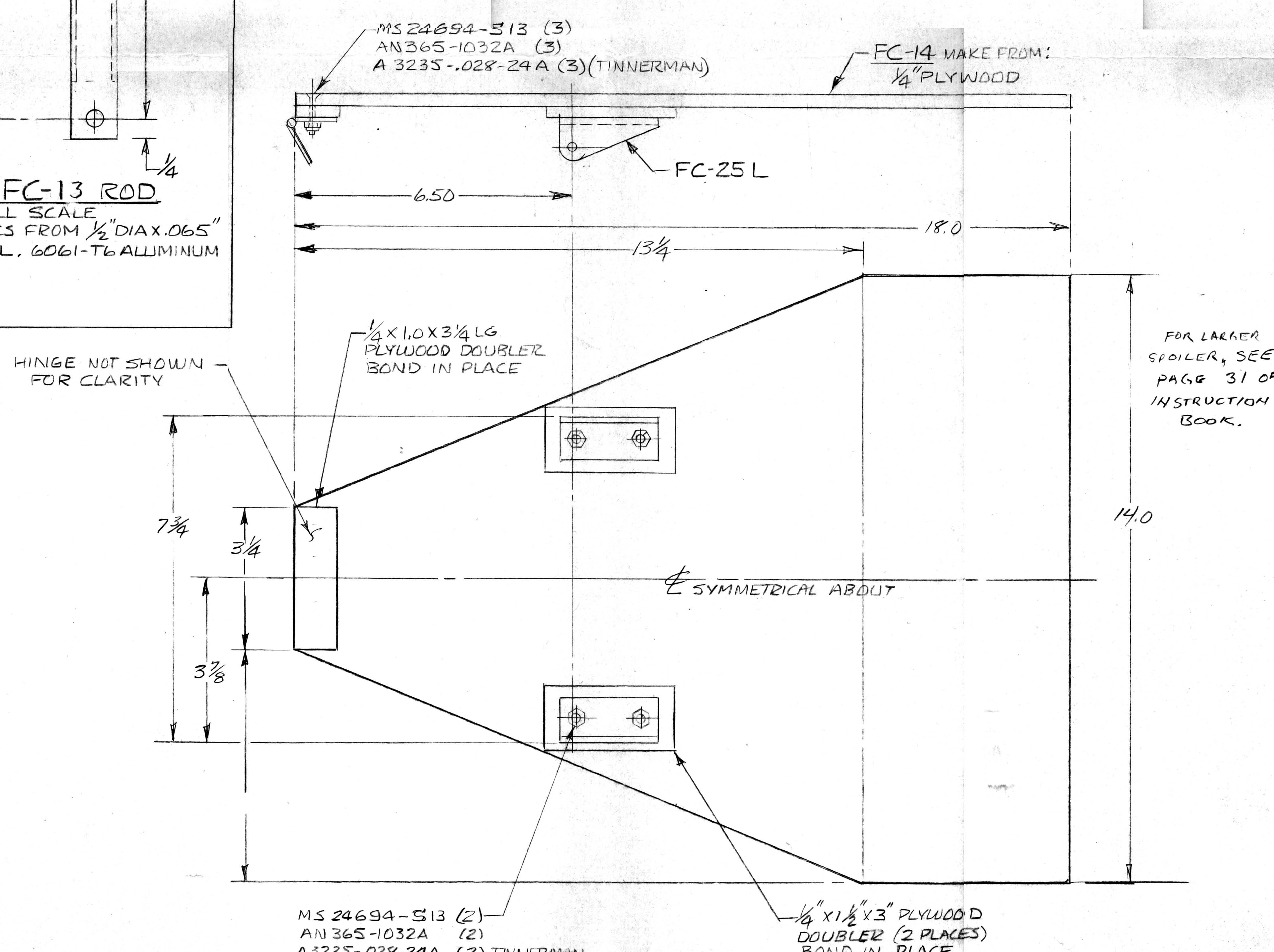


FC-16

DETAIL-AILERON CONTROL ROD

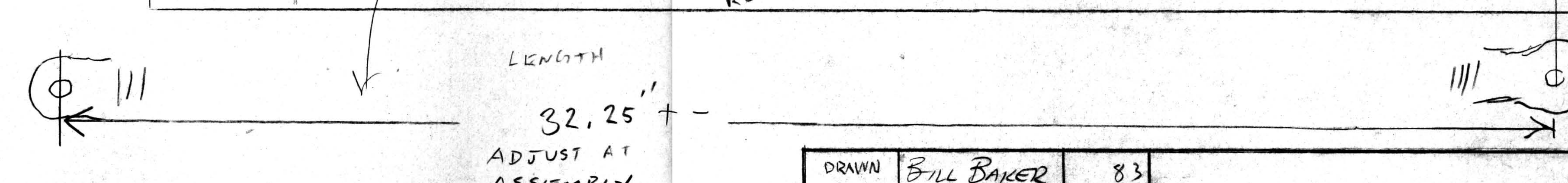
MAKE 2

SEE SHEET E-1 FOR AIL PUSH RODS WITH ENGINE.

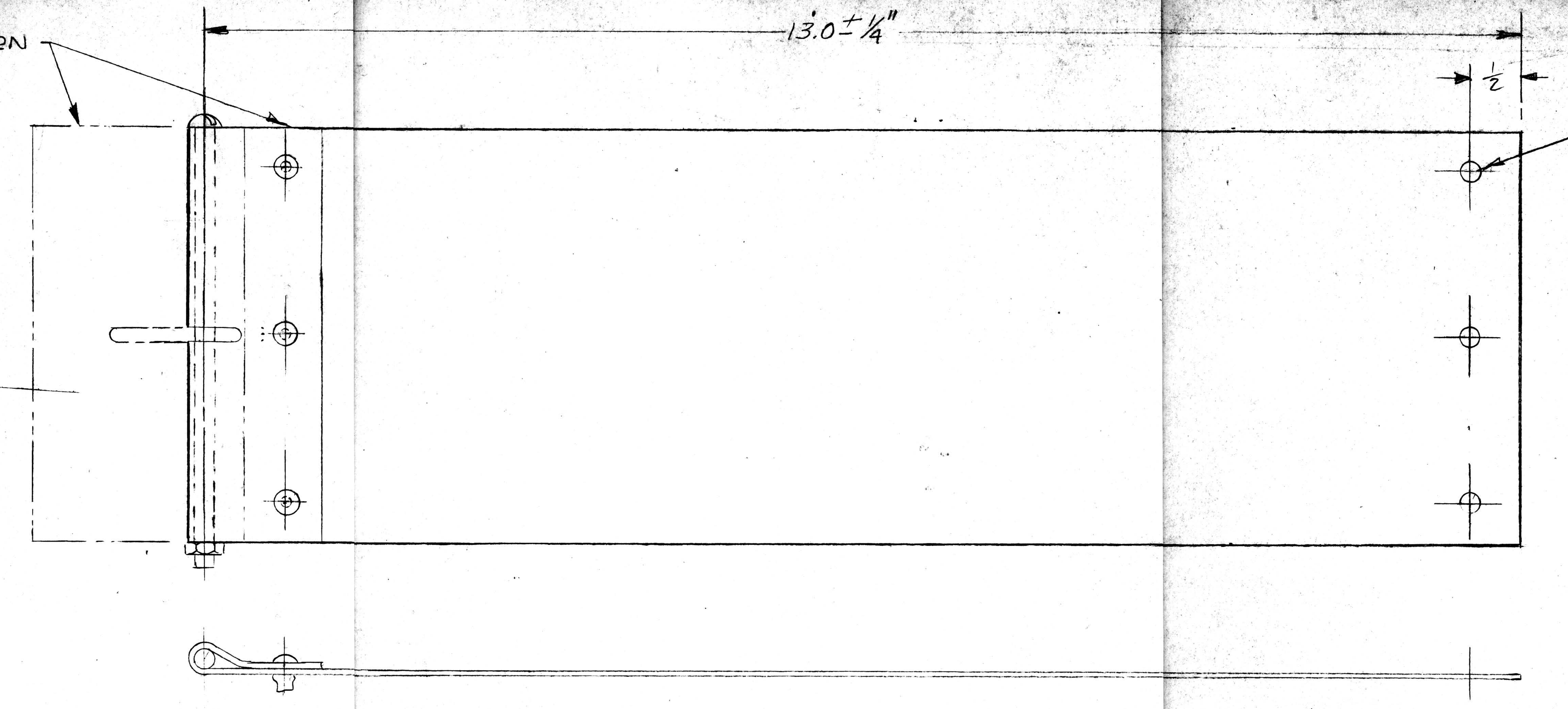


FC-25 SPOILER ASSY

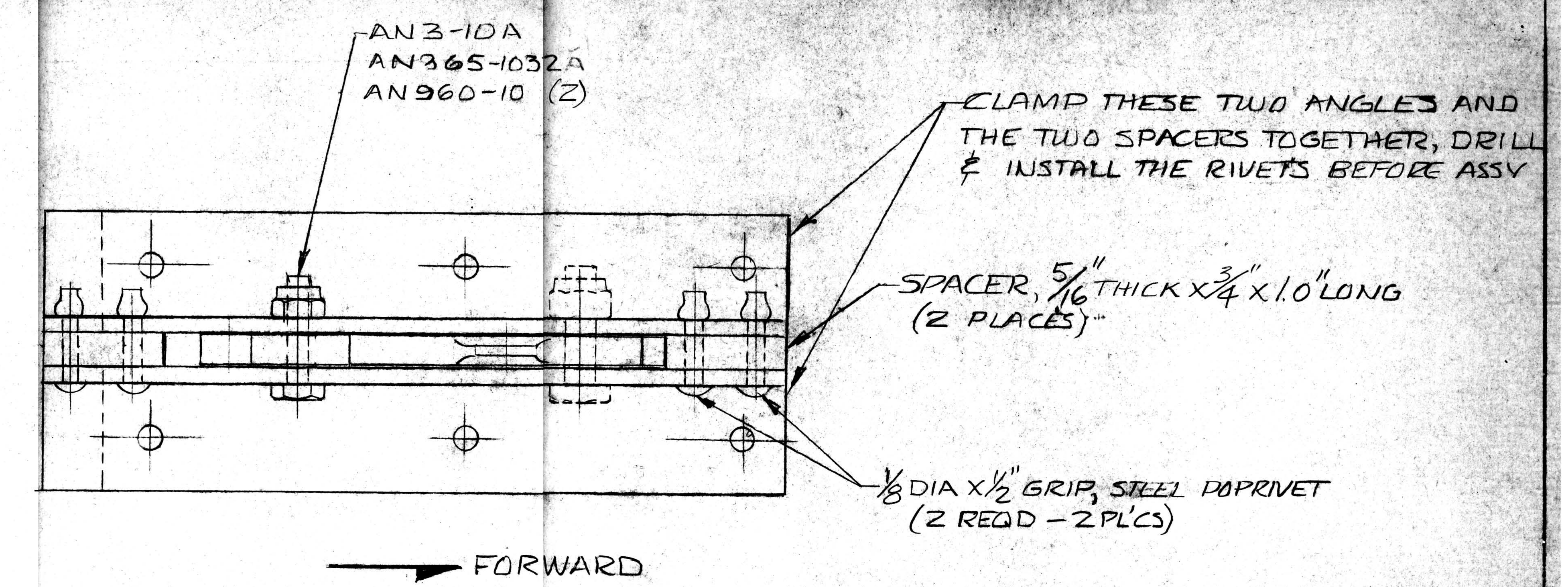
1/2 SCALE MAKE 1.

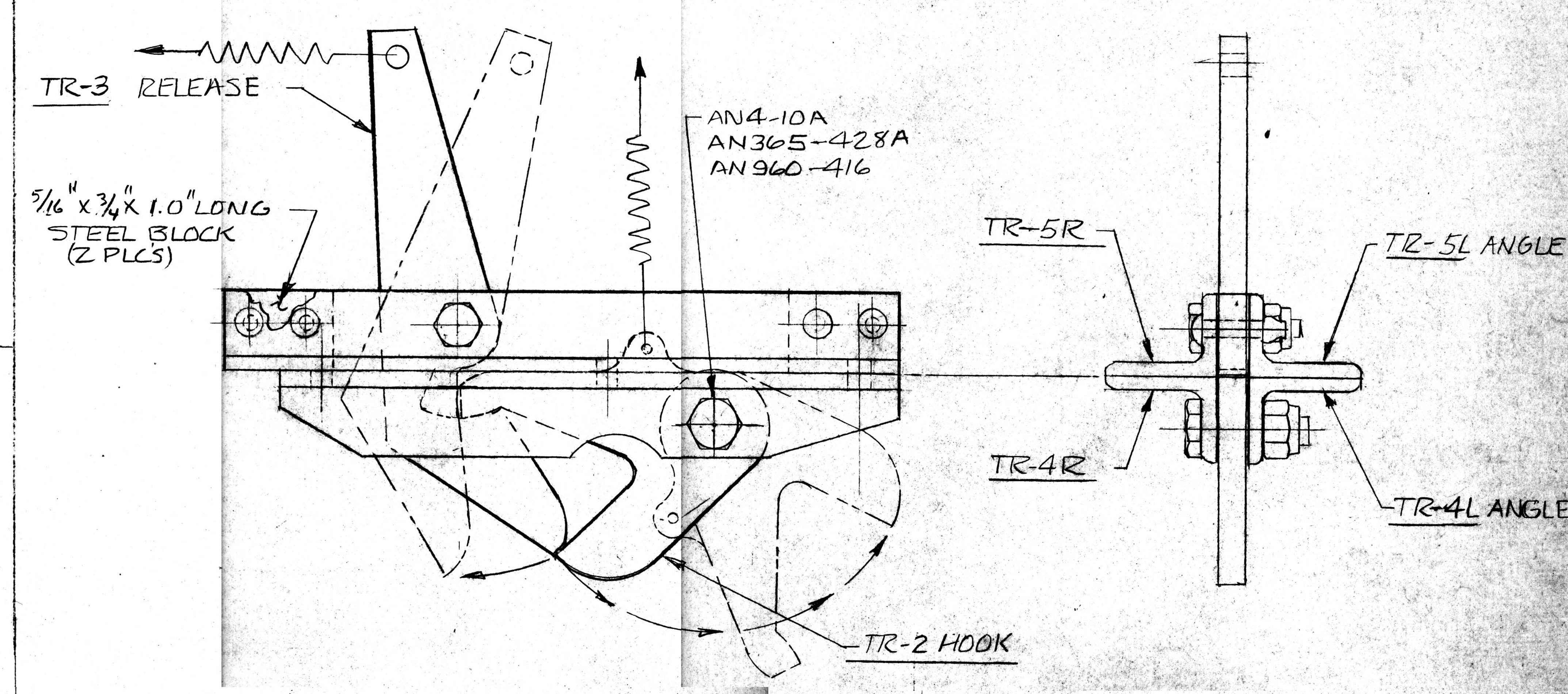


DRAWN	Bill Baker	83	CONTROL DETAILS
CHECKED	Jim Maupin	12/83	WINDROSE SAILPLANE
SCALE FULL & NOTED			SHEET NO. 23 OF 27

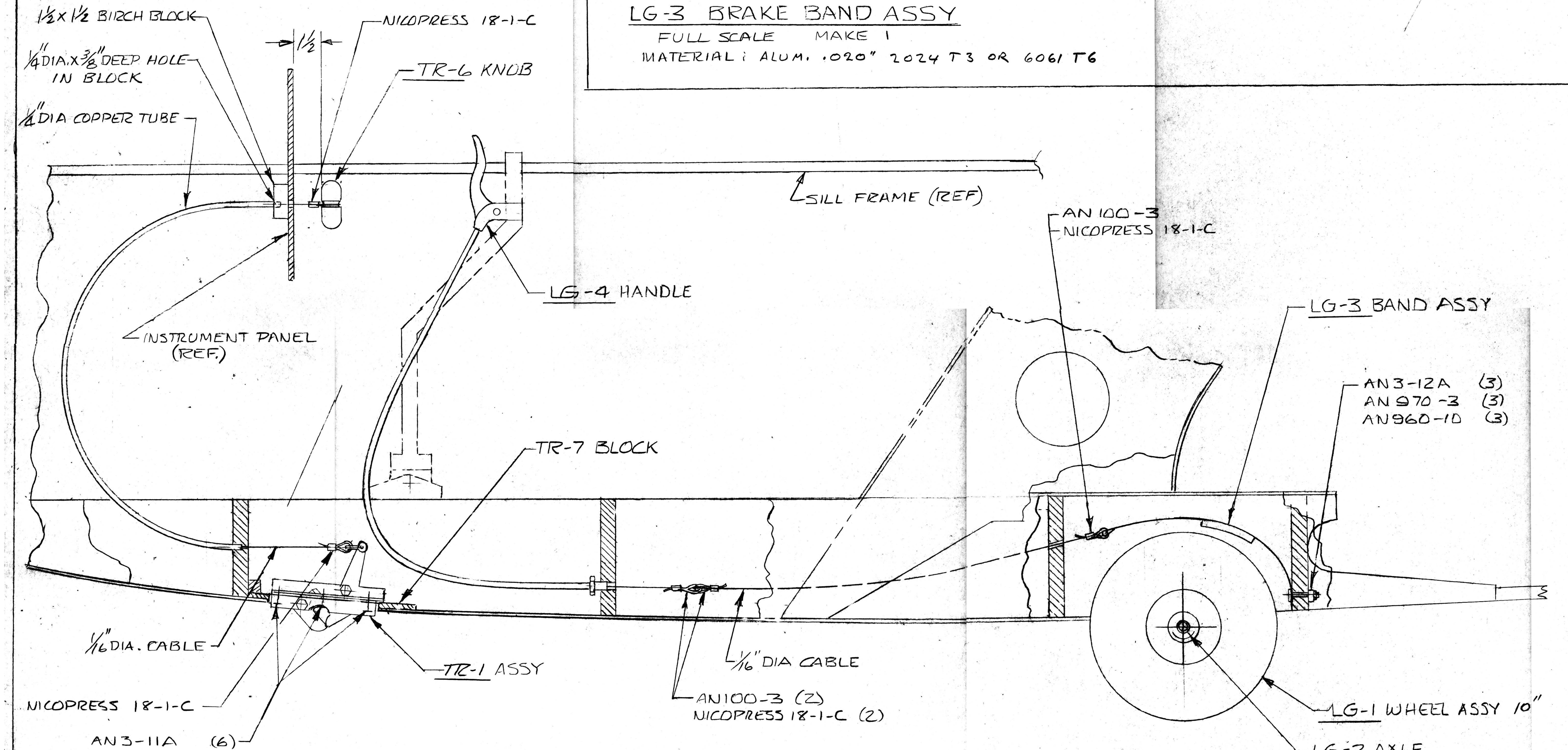


LG-3 BRAKE BAND ASSY
FULL SCALE MAKE 1
MATERIAL: ALUM. .020" 2024 T3 OR 6061 T6

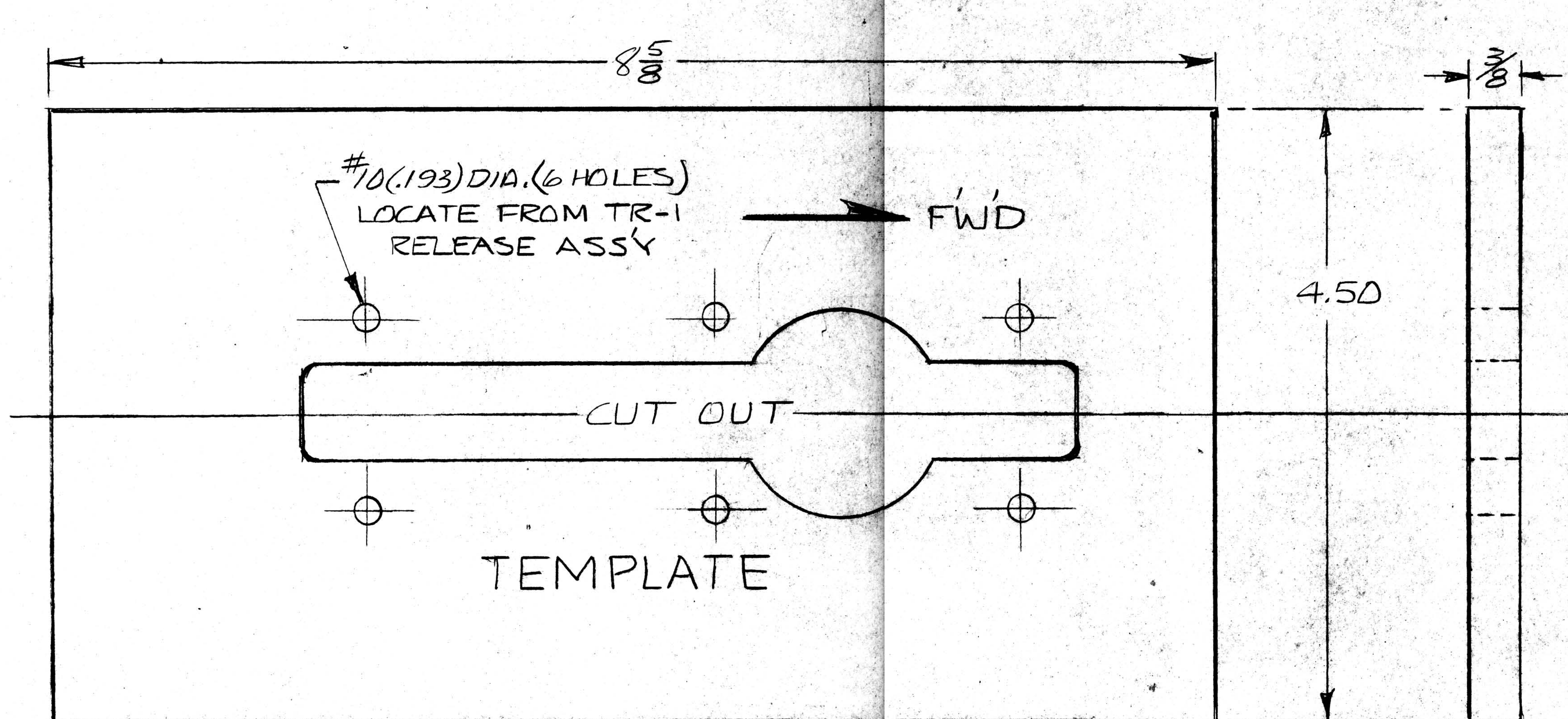




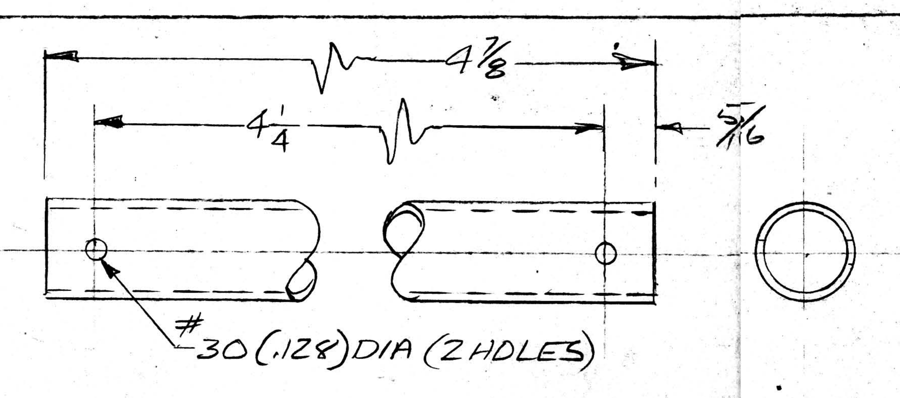
TR-1 TOW RELEASE ASSEMBLY
SEE SHEET 22 FOR THE DETAIL PARTS



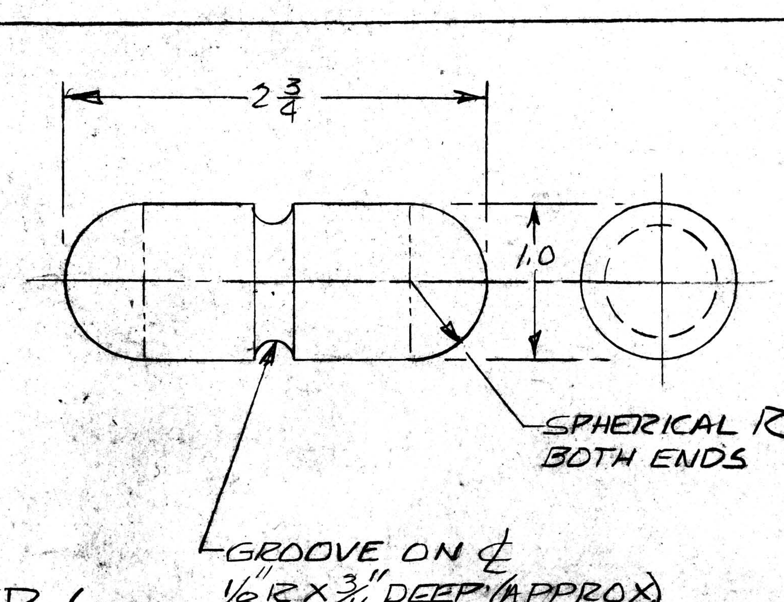
SECTIONALIZED VIEW SHOWING
LANDING GEAR AND TOW RELEASE SYSTEMS



TR-7 BLOCK
FULL SCALE MAKE 1
MAKE FROM: 3/8" MARINE PLYWOOD



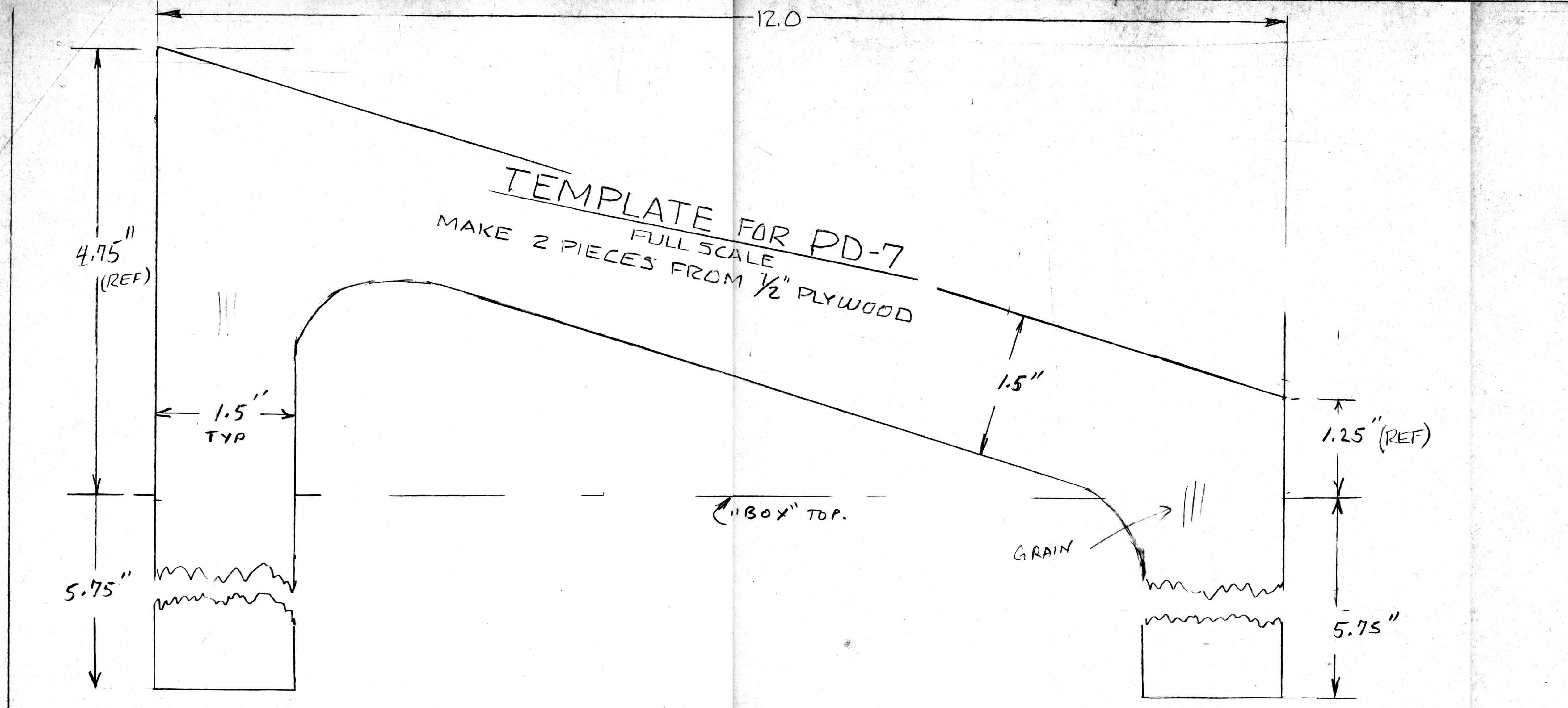
LG-2 AXLE : MAKE 1
MATERIAL: 5/8" O.D. X #16 (.065) GAGE WALL STEEL TUBE

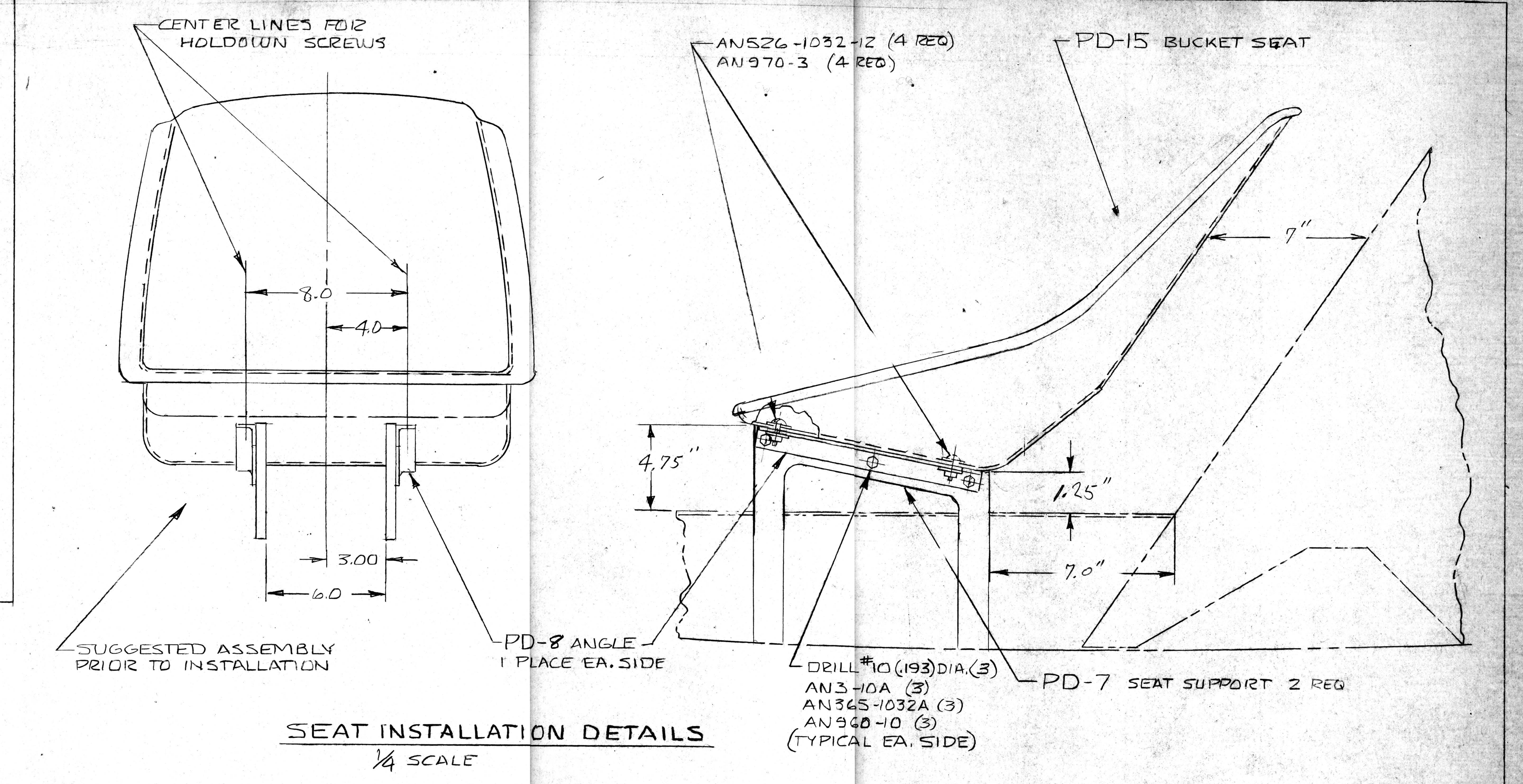


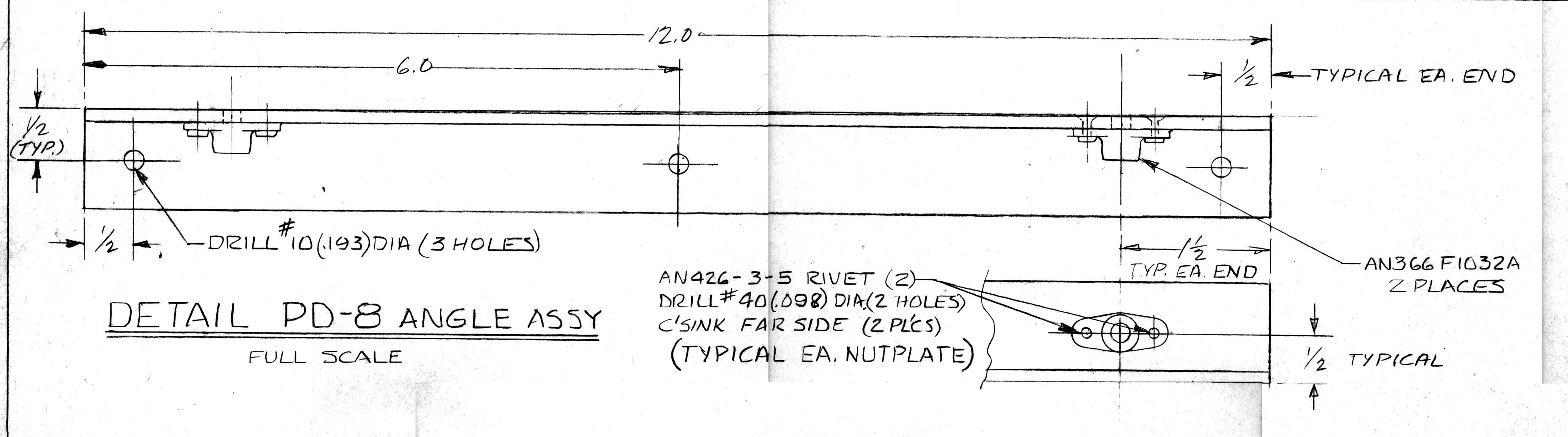
TR-6
TOW RELEASE HANDLE
MAKE 1 PIECE FROM ANY HARDWOOD

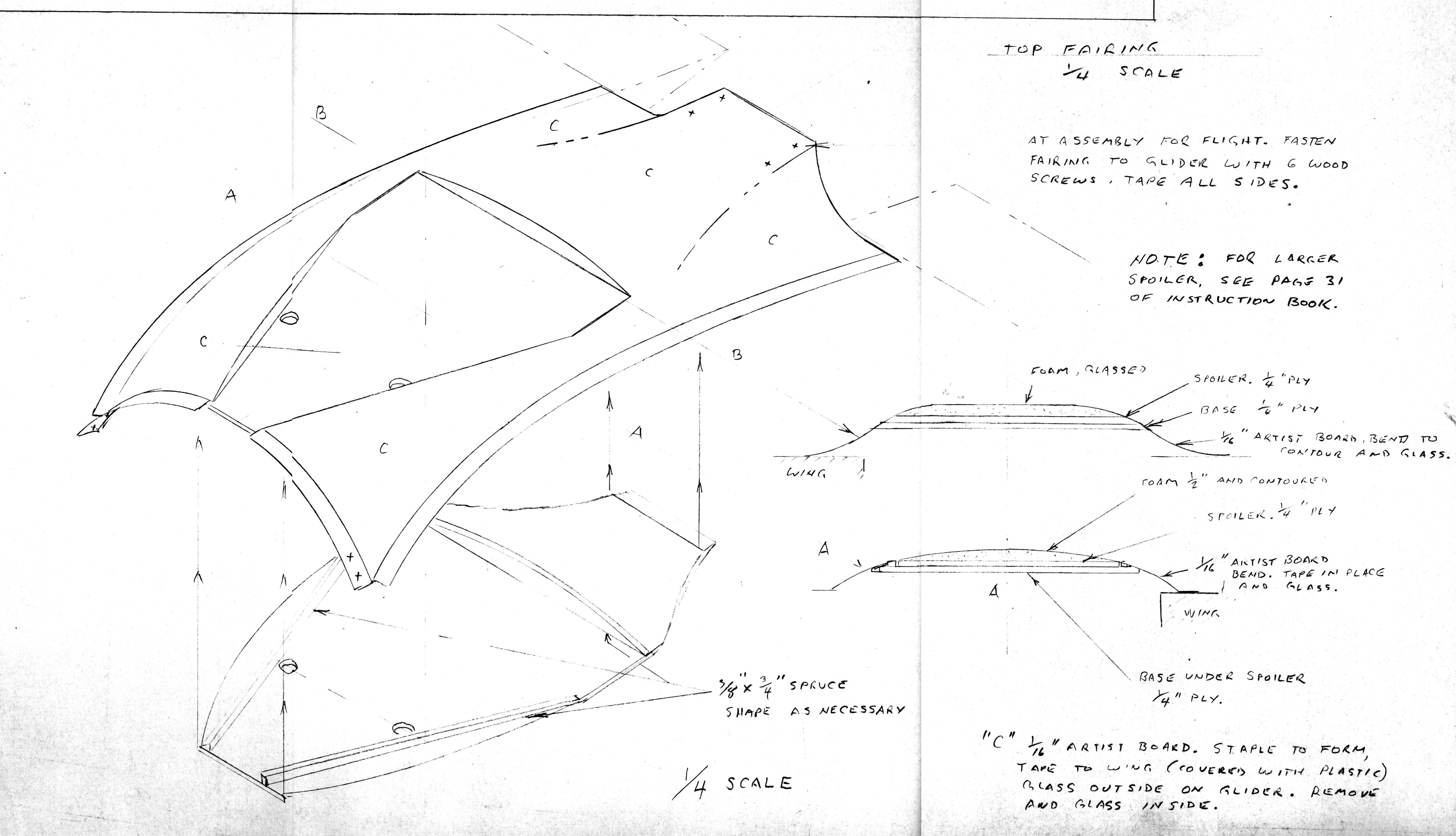
DRAWN	BILL BAKER	DATE	DESCRIPTION	LANDING GEAR & TOW RELEASE INSTALLATIONS
CHK.	J Mangen	12/83		
SCALE FULL			SHEET NO. 24 OF 27	A

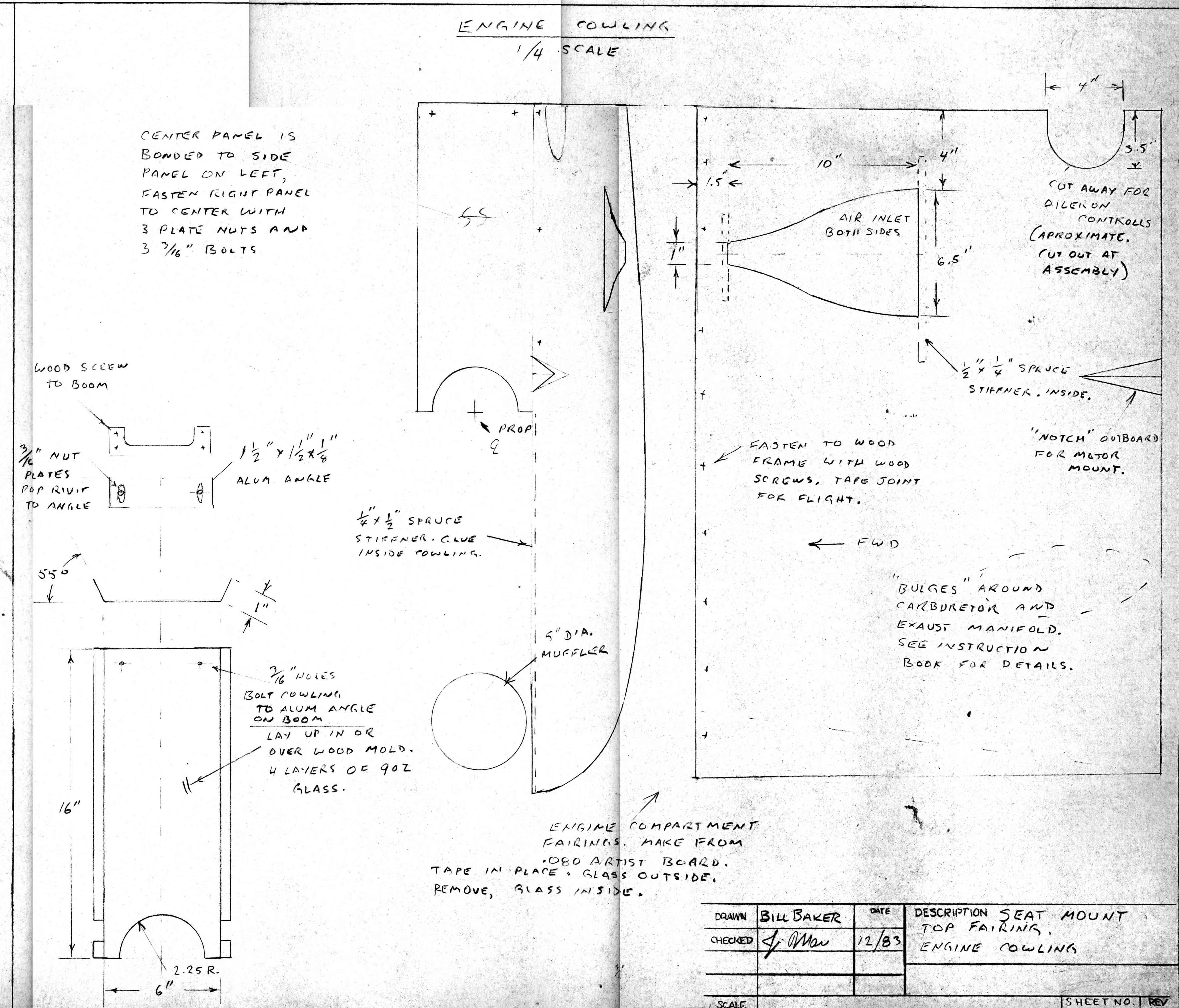
DRAWN	BILL BAKER	DATE	DESCRIPTION	
CHECKED	[signature]	12/83	CANOPY ASSEMBLY	
SCALE 1/4 & NOTED			SHEET NO 25 OF 27	REV



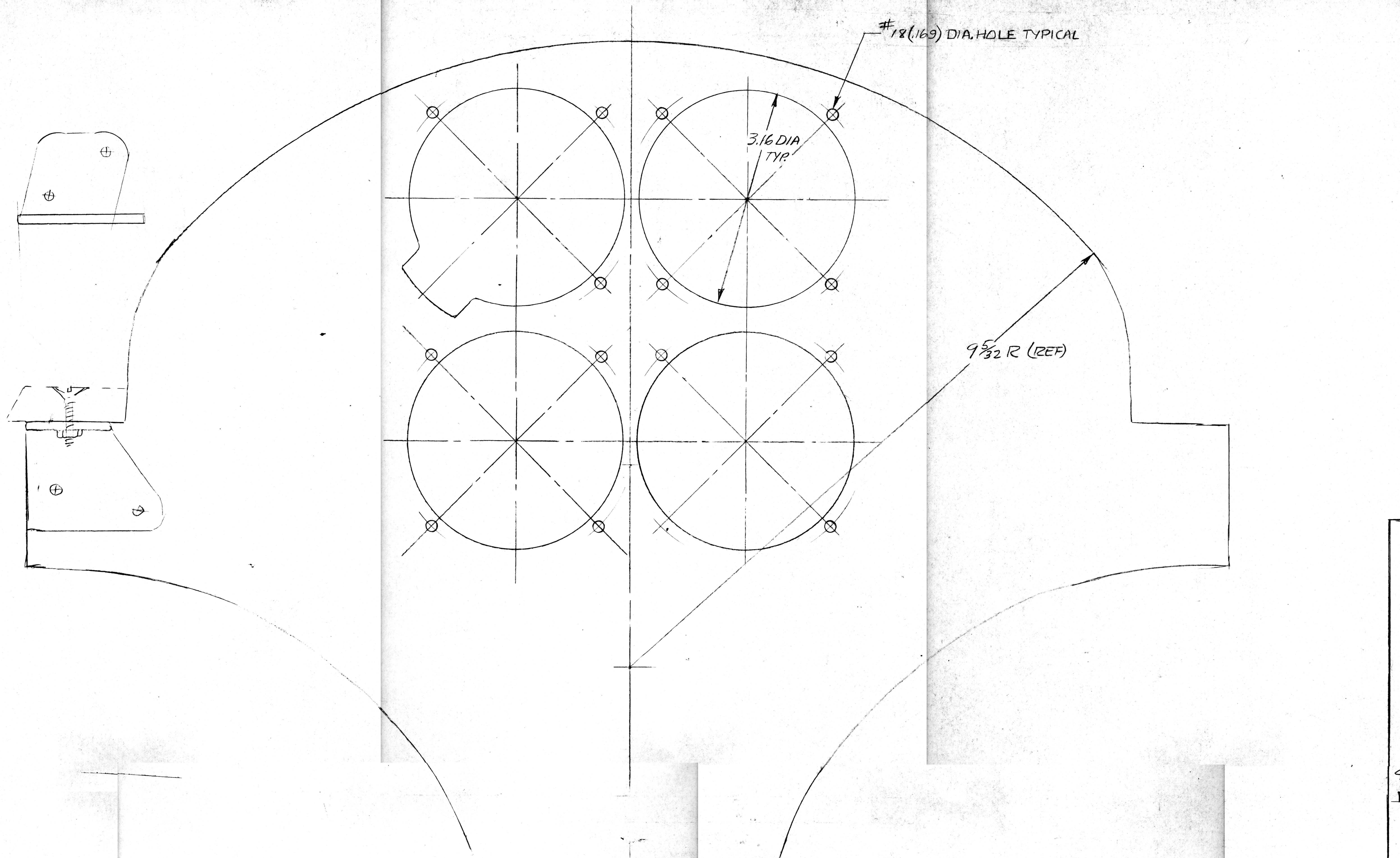








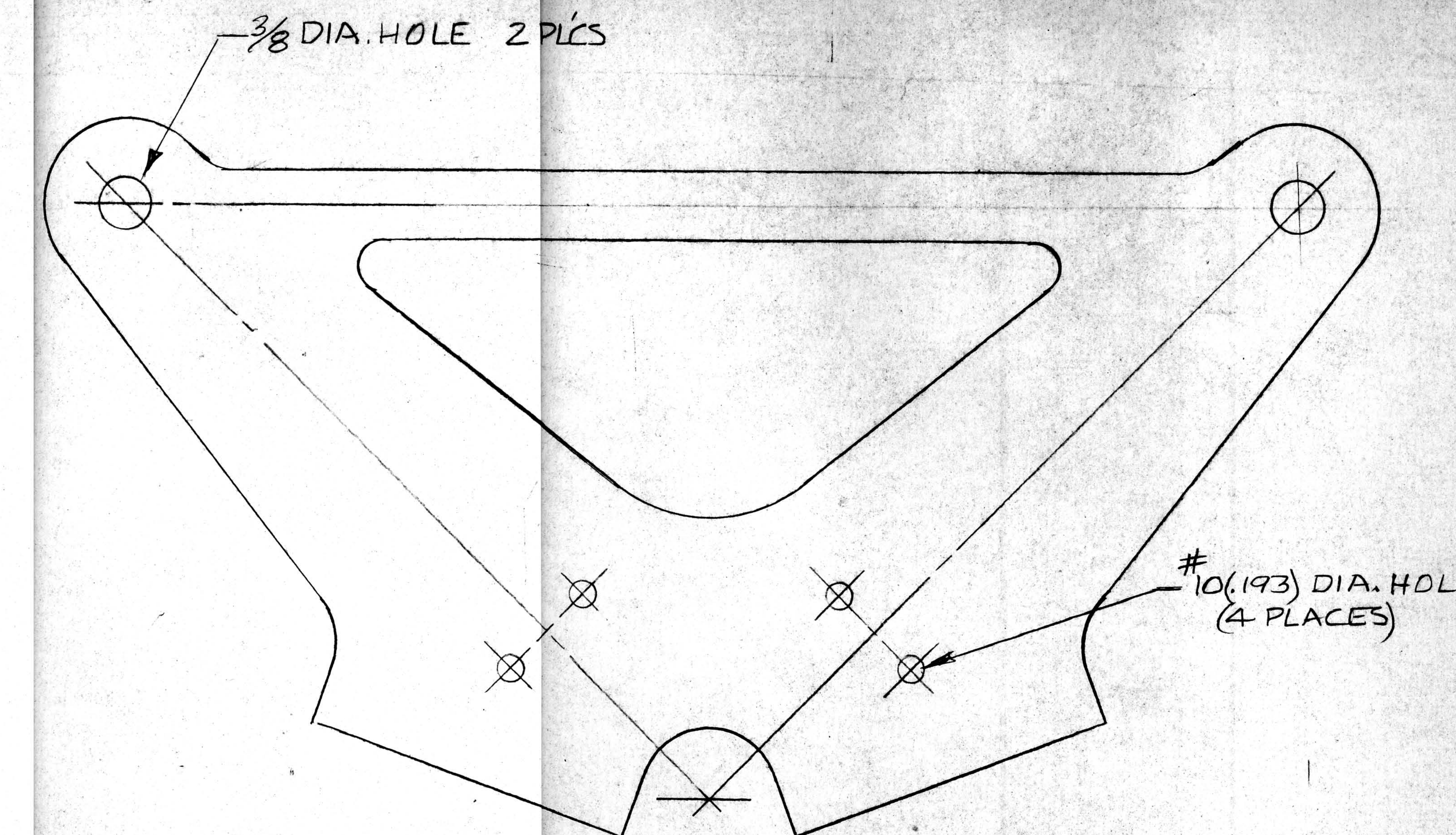
DRAWN	BILL BAKER	DATE	DESCRIPTION SEAT MOUNT TOP FAIRING, ENGINE COWLING
CHECKED	[signature]	12/83	
SCALE 1/4 & NOTED		SHEET NO. 26 OF 27	REV 8-84



PD-16

INSTRUMENT PANEL TEMPLATE

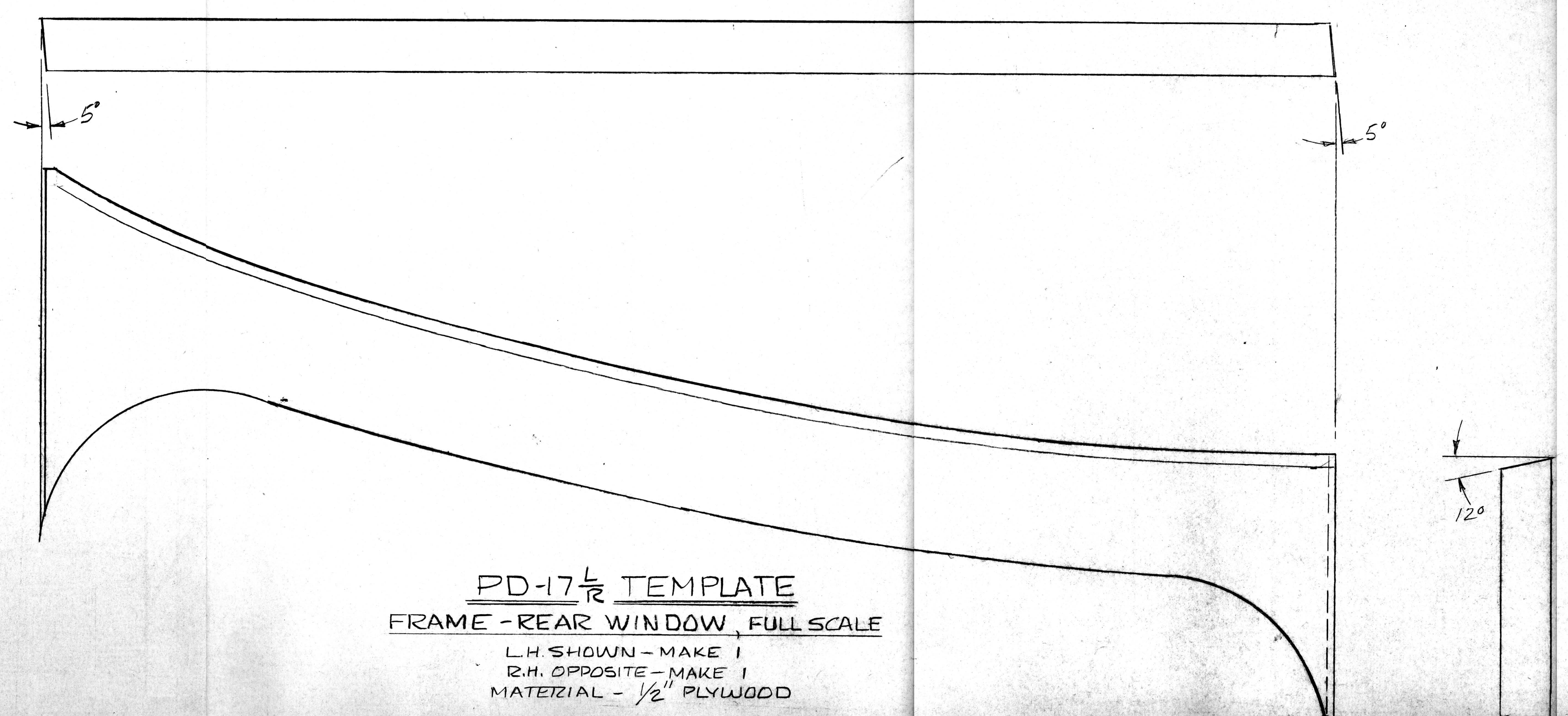
MATERIAL: 1/4" PLYWOOD   MOUNT 6" FWD OF STATION 46.



TEMPLATE FOR FC-9

MAKE 1 PIECE FROM 1/2" PLYWOOD

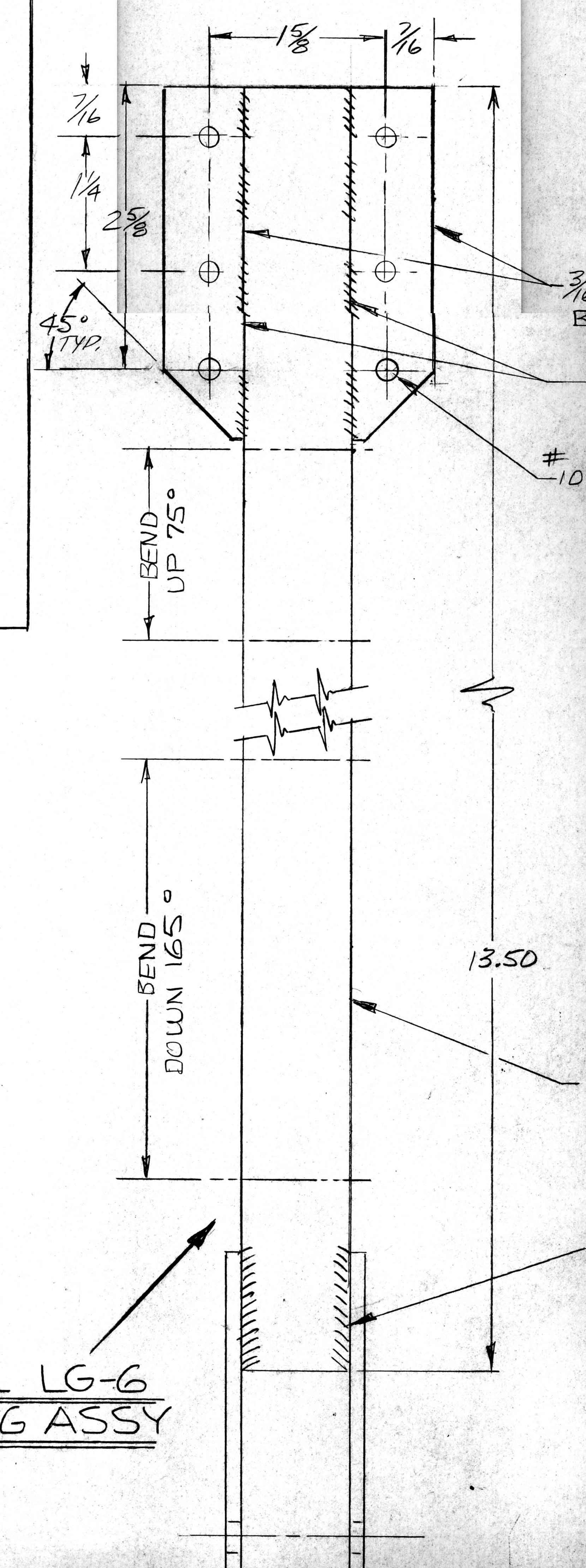
FOR USE ONLY WITHOUT ENGINE,
WITH ENGINE SEE SHEET E-1.



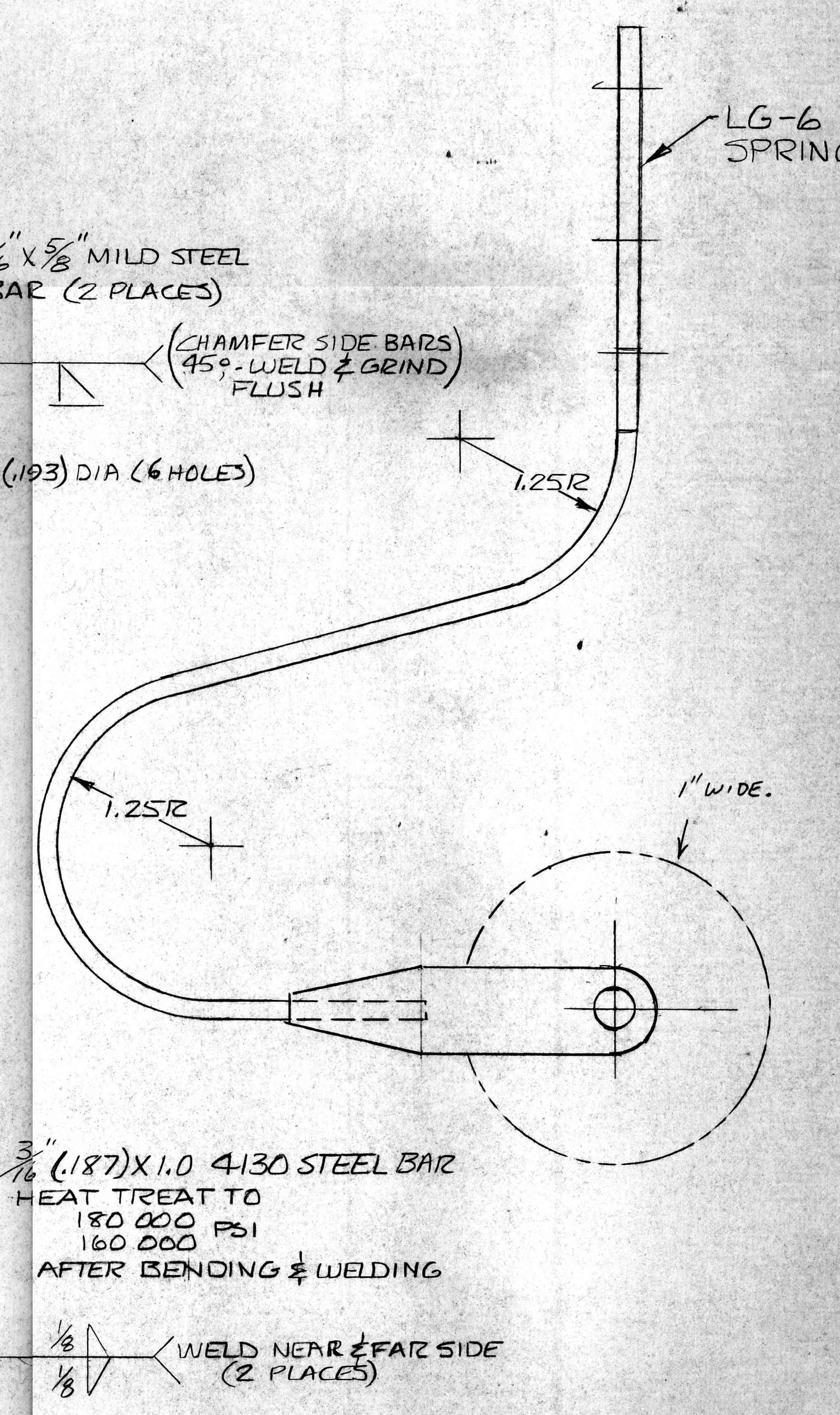
PD-17 L/R TEMPLATE

FRAME - REAR WINDOW, FULL SCALE

L.H. SHOWN - MAKE 1
R.H. OPPOSITE - MAKE 1
MATERIAL - 1/2" PLYWOOD



DETAIL LG-6
SPRING ASSY



TAILWHEEL ASSY

FULL SCALE - 1 REQ'D

DRAWN	BILL BAKER	DATE	DESCRIPTION
	[signature]	1-84	INSTRUMENT PANEL AND FUSELAGE DETAILS
SCALE FULL			SHEET NO. 27 OF 27 REV.