

CALCULATED PERFORMANCE

TOP SPEED:	65 MPH.
CRUISE:	55 MPH.
RATE OF CLIMB:	350 FT./MIN.
STALL:	26 MPH.
LANDING SPEED:	30. MPH
ENDURANCE	5 HRS.
RANGE	250 MILES

SPECIFICATIONS

SPAN:	24'-6"
CHORD:	4'-3"
ASPECT RATIO:	5.8 -1
AIRFOIL:	RHODE ST. GENESE 32
WING AREA:	102 SQ. FT.
WING LOADING:	4.2 LBS/SQ. FT
SPAN LOADING:	18.1 LBS / FT.

POWER LOADING: 27.2 LBS/HP.

WEIGHTS

EMPTY:	230 LBS
FUEL:	36 LBS
PILOT:	170 LBS
GROSS WEIGHT:	436 LBS

ENGINE: BRIGGS & STRATTON
 MODEL 401417 4 CYCLE-TWIN
 CYL. 16 HP. 656.0 CC 82 LBS.

SCALE
 1/4" = 1'-0"

BJ ENDURO 3-VIEW & SPEC'S

DESIGNED & DRAWN BY
 Herbert Deamon

DRAWING NO
 1

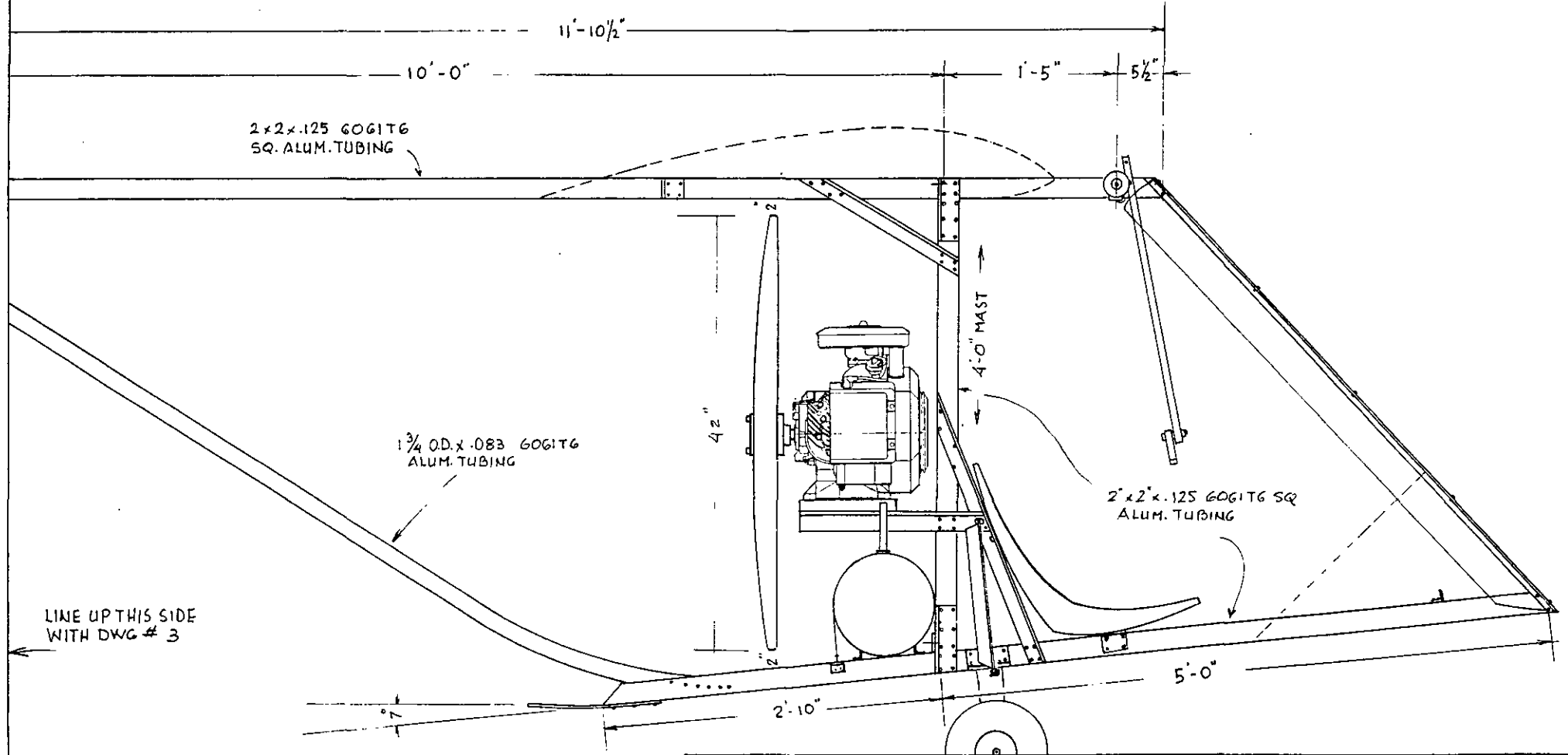
DRAWING LIST

- ① 3-VIEW & SPEC'S
- ② FUSELAGE ASSEMBLY
- ③ TAIL END DETAILS
- ④ UPPER FRAME & WING BRACKETS
- ⑤A LOWER FRAME DETAILS
- ⑤B LOWER FRAME FASTENERS

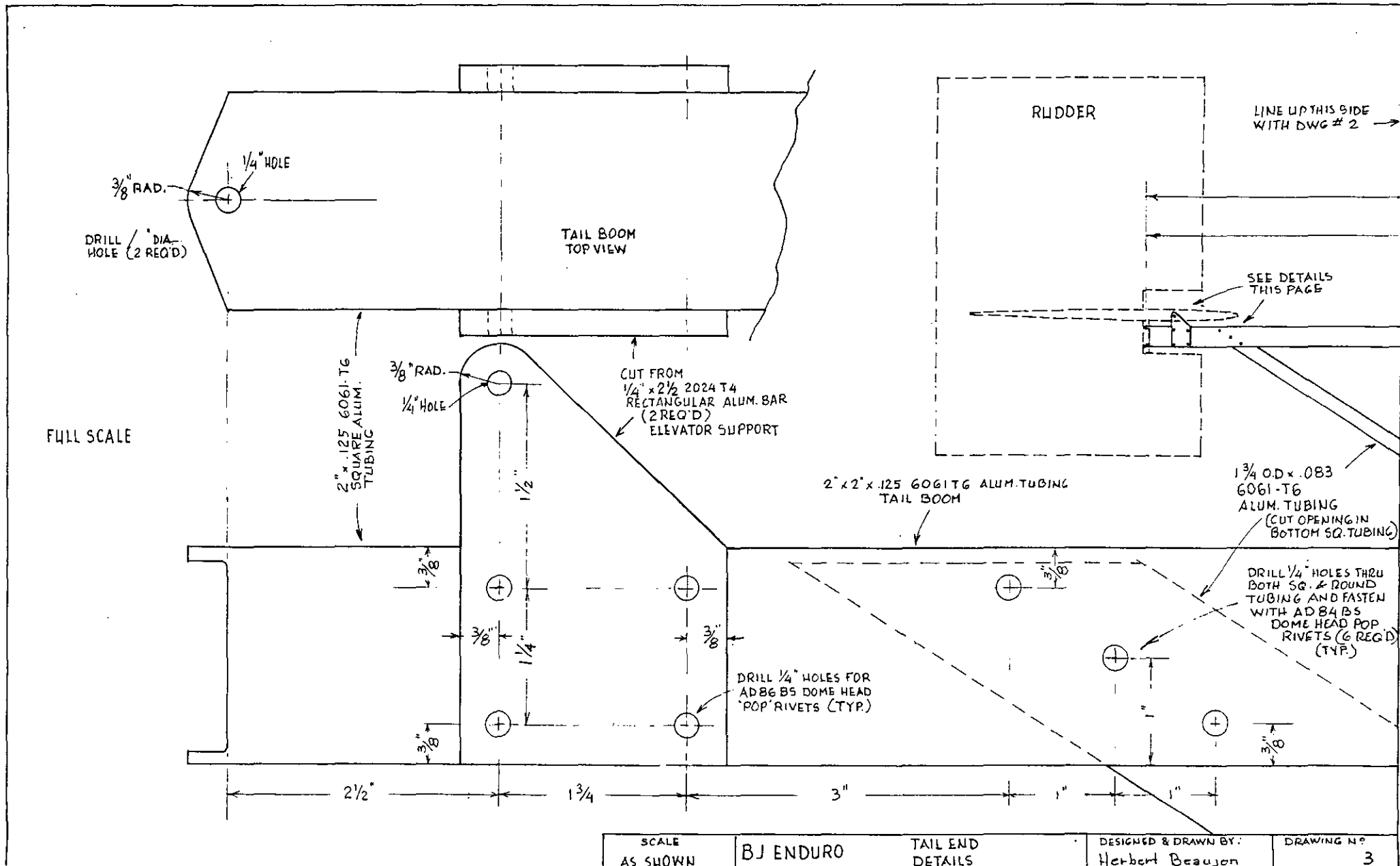
- ⑥ SKID & TAIL SUPPORT
- ⑦ FRONT END-WINDSHIELD
- ⑧ FRONT END-INSTRUMENT PANEL
- ⑨ LANDING GEAR
- ⑩ LANDING GEAR
- ⑪ ENGINE & PROP

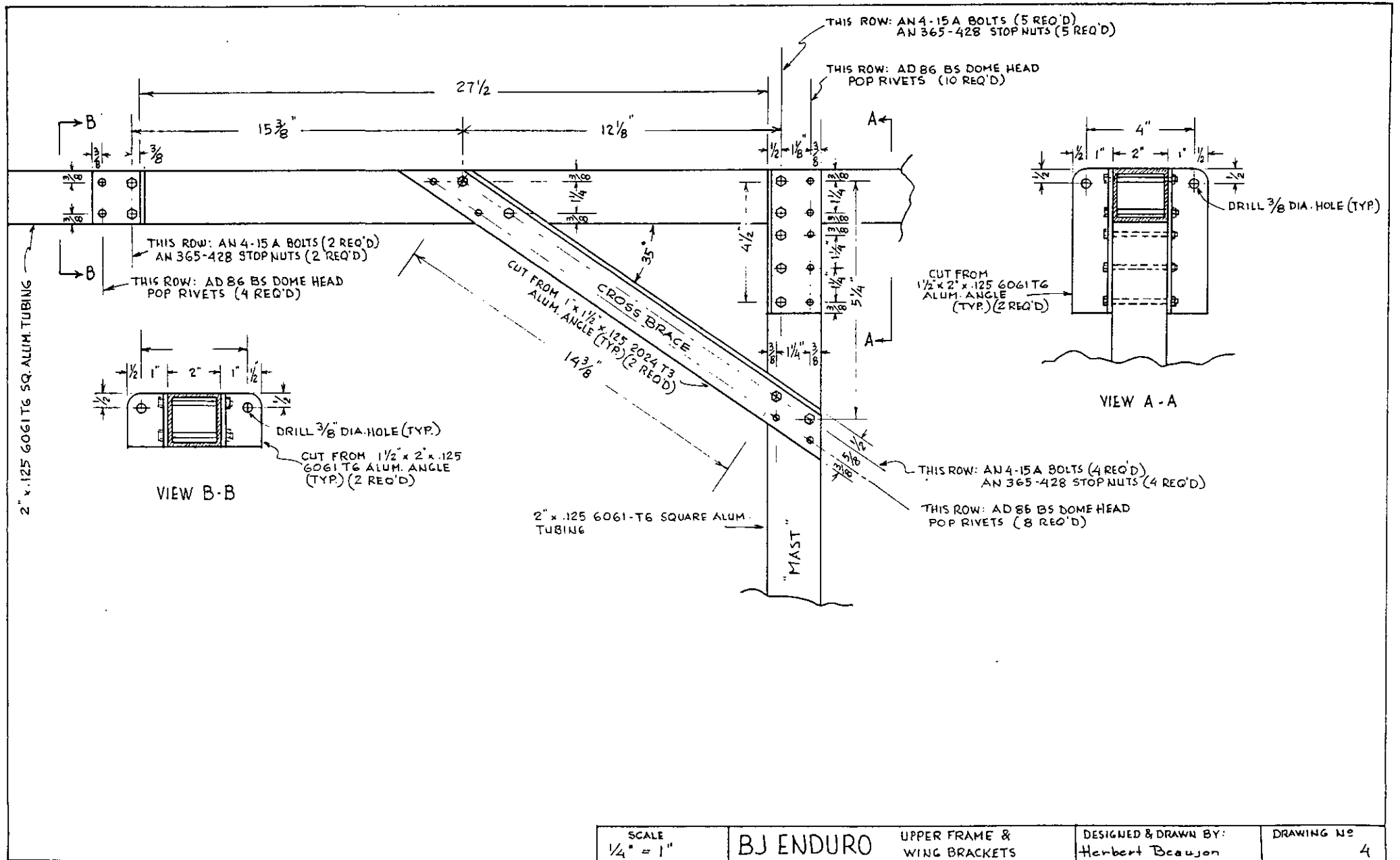
- ⑫ ENGINE & PROP
- ⑬ ENGINE & PROP
- ⑭ GAS TANK INSTALLATION
- ⑮ ELEVATOR
- ⑯ RUDDER
- ⑰ RUDDER & ELEVATOR ASSEMBLY

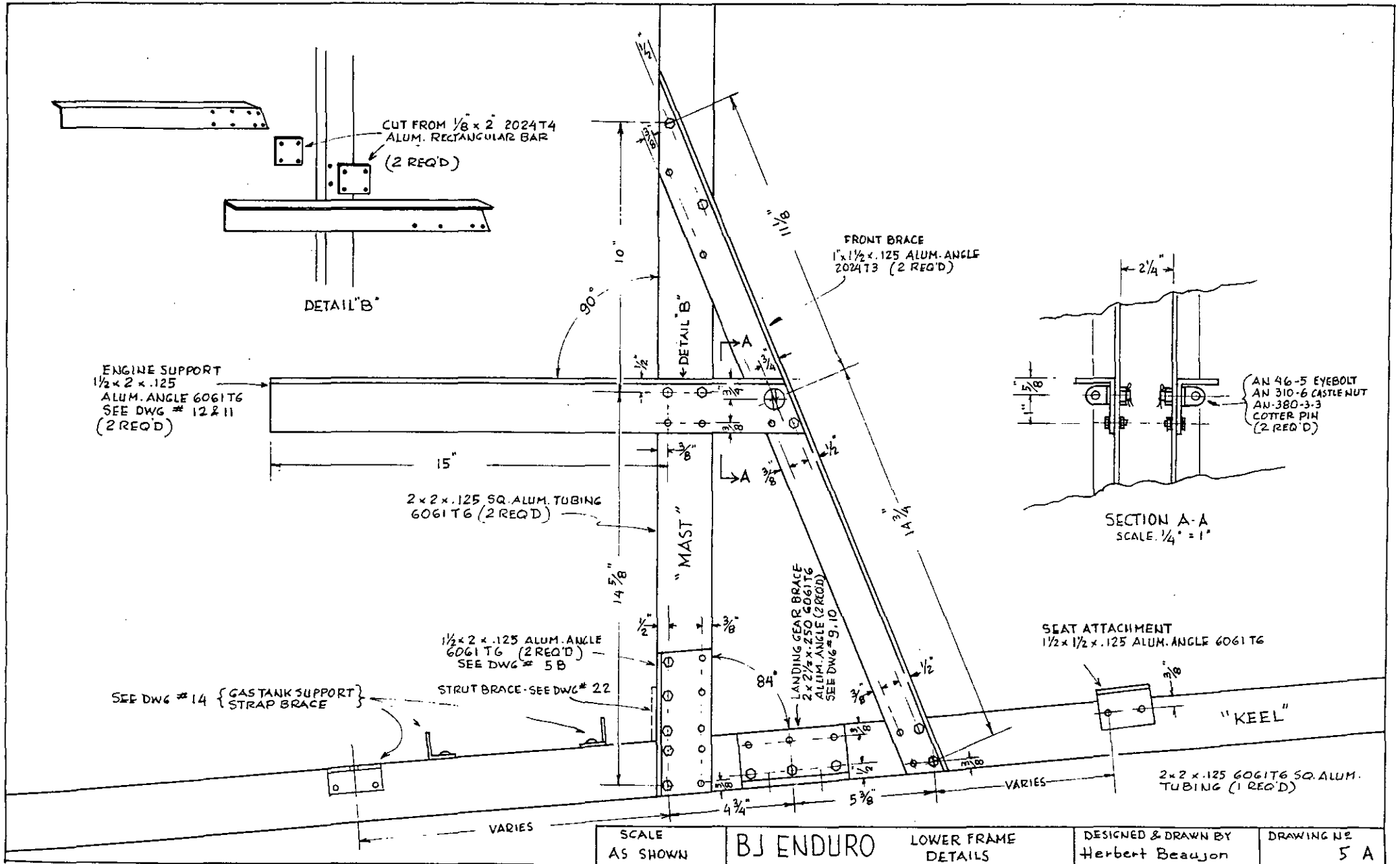
- ⑱ WING
- ⑲ WING
- ⑳ WING
- ㉑ AILERON
- ㉒ STRUT ASSEMBLY
- ㉓ CONTROLS
- ㉔ CONTROLS



SCALE	BJ-ENDURO	FUSELAGE ASSEMBLY	DESIGNED & DRAWN BY: Herbert Beaujon	DRAWING NO 2
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DETAIL "B"

CUT FROM 1/8" x 2" 2024T4
ALUM. RECTANGULAR BAR
(2 REQ'D)

FRONT BRACE
1" x 1/2" x .125 ALUM. ANGLE
2024T3 (2 REQ'D)

ENGINE SUPPORT
1/2" x 2" x .125
ALUM. ANGLE 6061T6
SEE DWG # 12 & 11
(2 REQ'D)

2 x 2" x .125 SQ. ALUM. TUBING
6061T6 (2 REQ'D)

"MAST"

1/2" x 2" x .125 ALUM. ANGLE
6061T6 (2 REQ'D)
SEE DWG # 5 B

SEE DWG # 14 { GASTANK SUPPORT
STRAP BRACE

STRUT BRACE - SEE DWG # 22

LANDING GEAR BRACE
2 x 2 1/2" x .250 6061T6
ALUM. ANGLE (2 REQ'D)
SEE DWG # 9, 10

SEAT ATTACHMENT
1/2" x 1/2" x .125 ALUM. ANGLE 6061T6

"KEEL"

2 x 2" x .125 6061T6 SQ. ALUM.
TUBING (1 REQ'D)

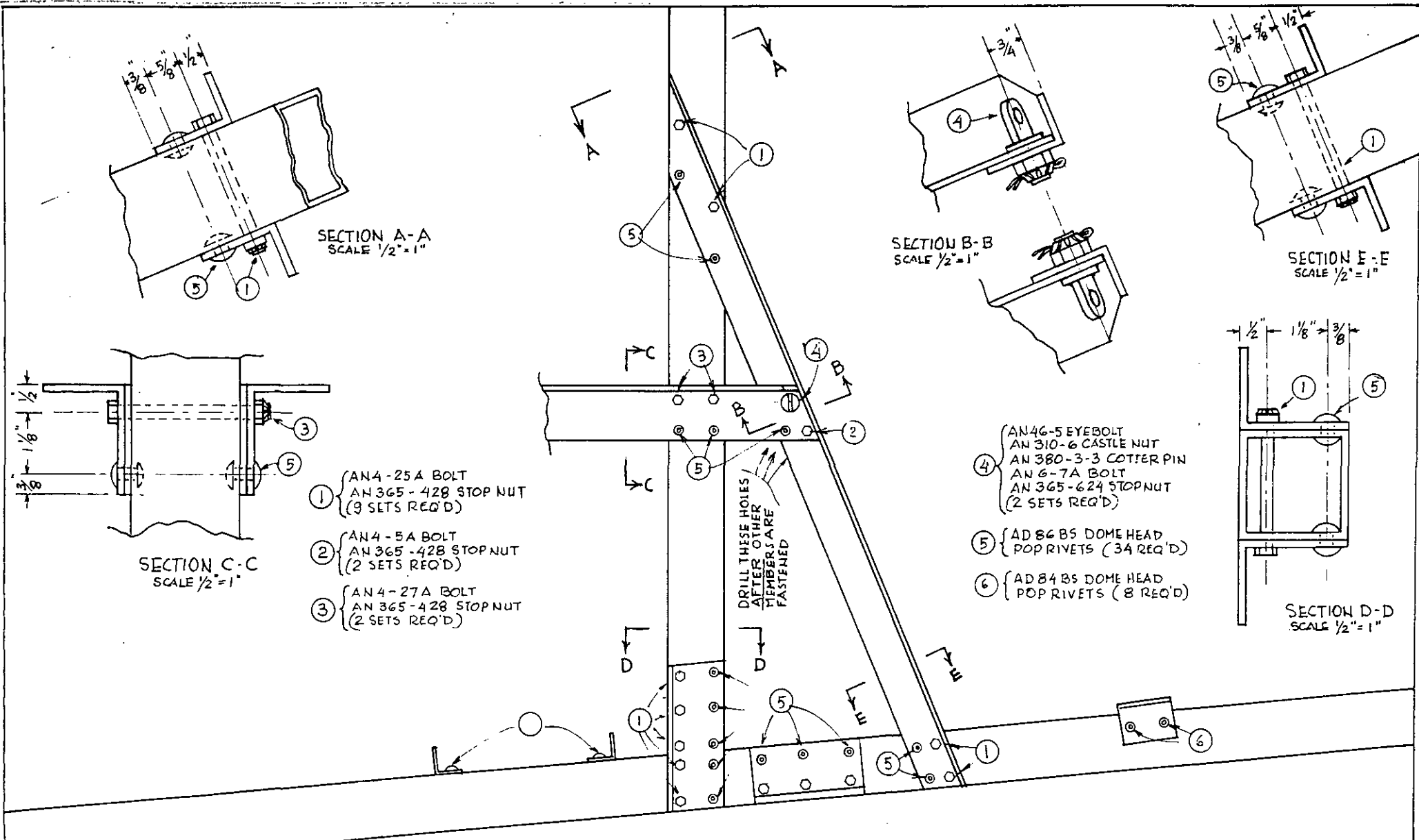
SCALE
AS SHOWN

B.J. ENDURO

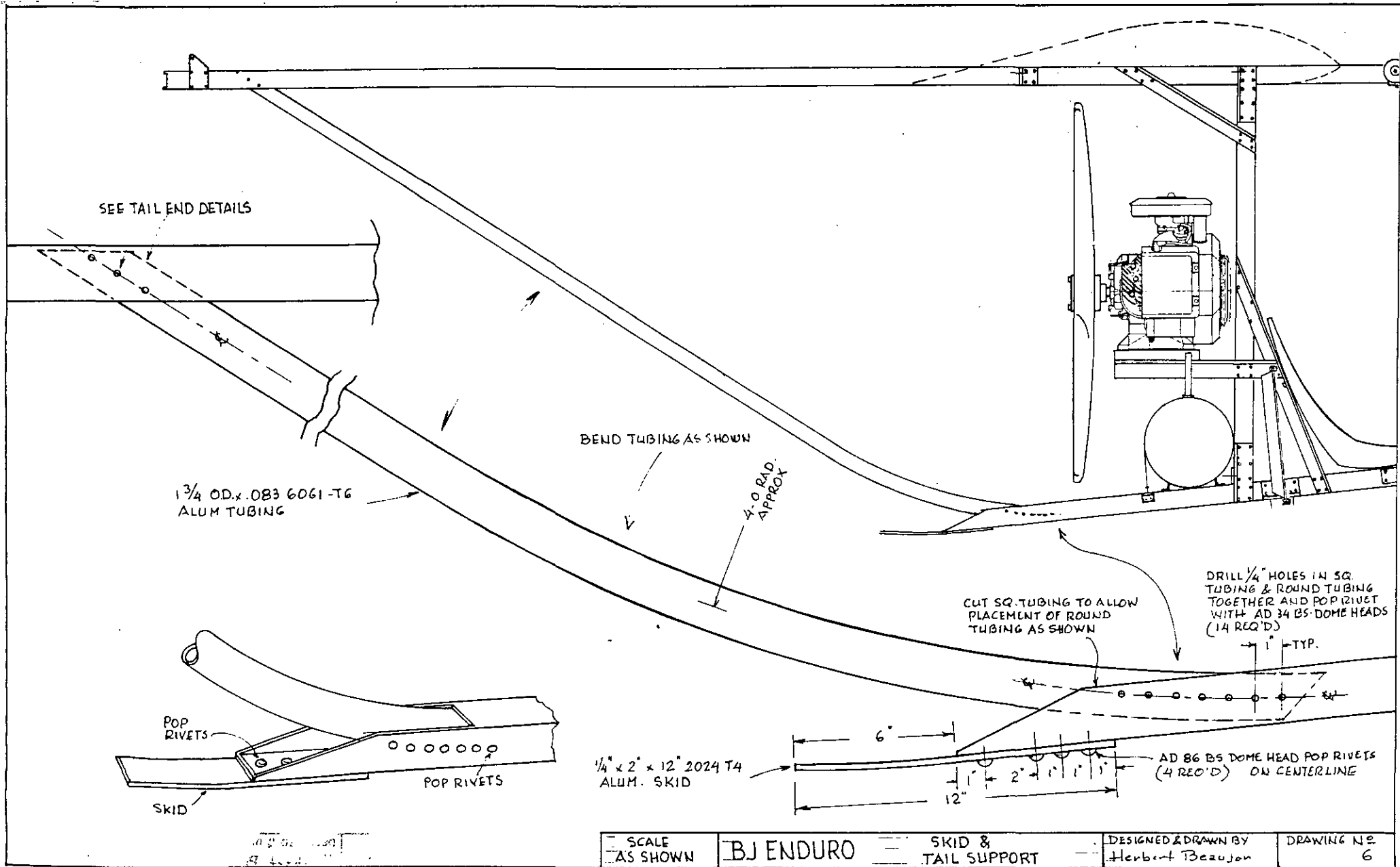
LOWER FRAME
DETAILS

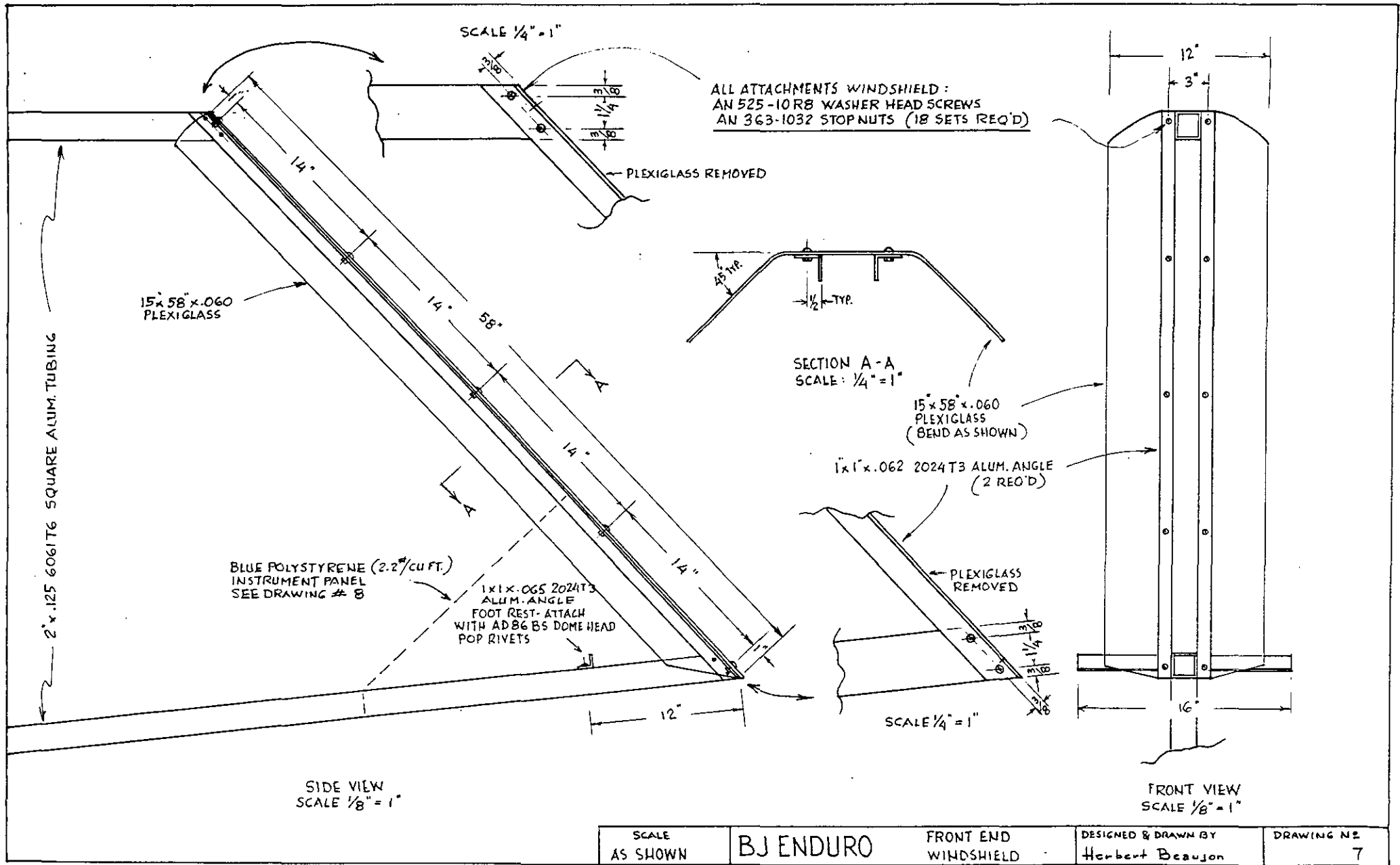
DESIGNED & DRAWN BY
Herbert Beaujon

DRAWING NO
5 A

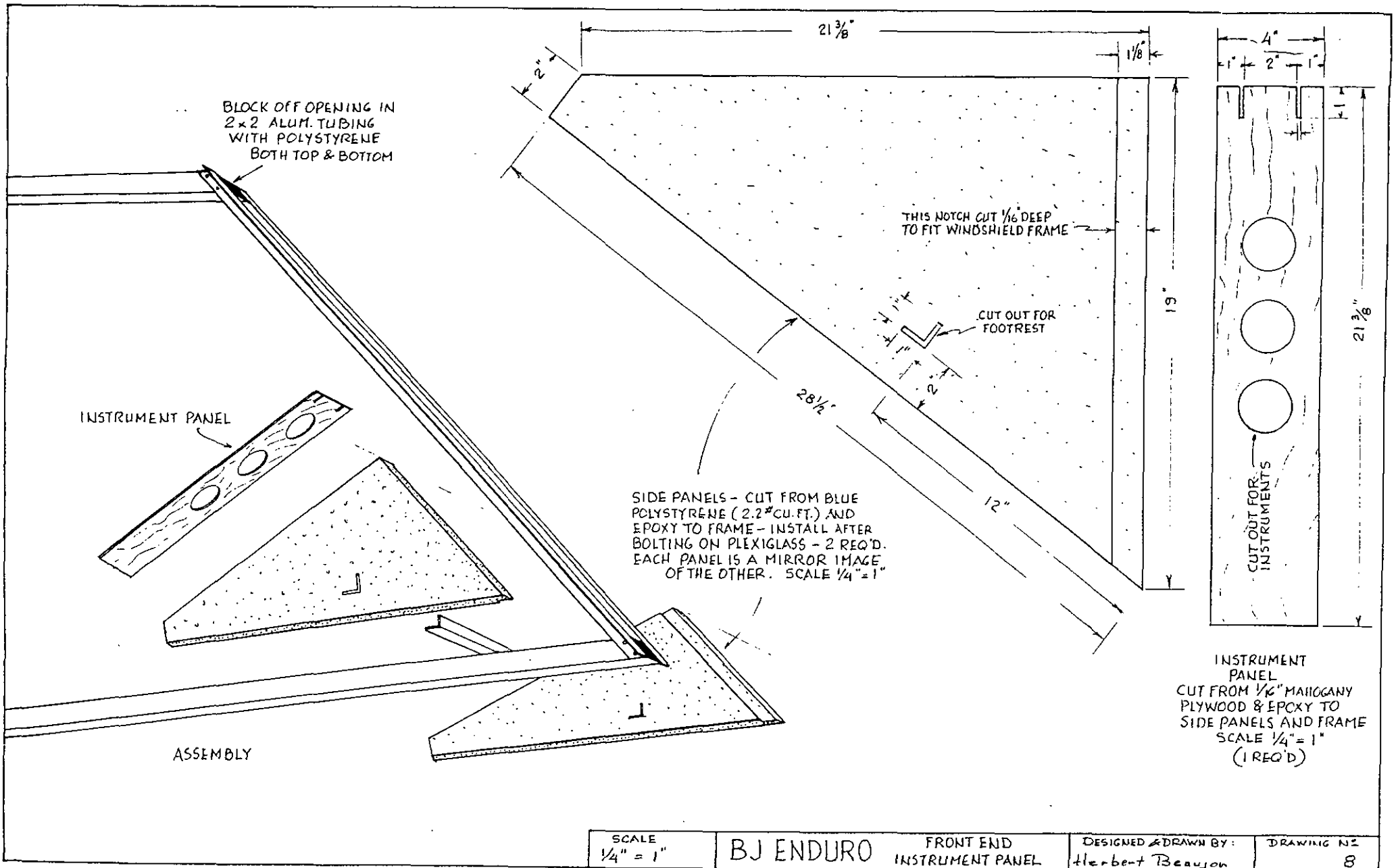


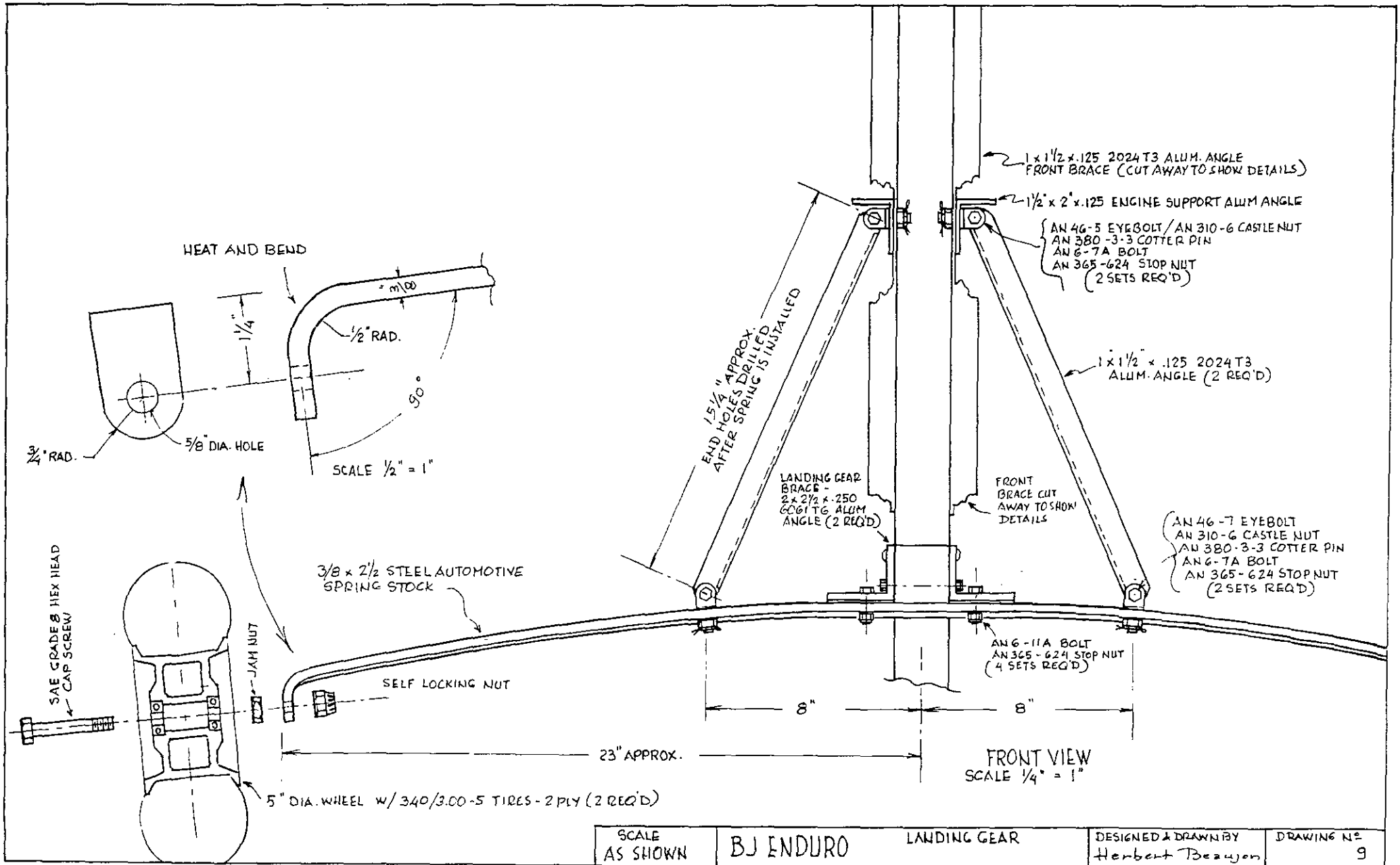
SCALE AS SHOWN	BJ ENDURO	LOWER FRAME FASTENERS	DESIGNED & DRAWN BY Herbert Beaujon	DRAWING NO 5 B
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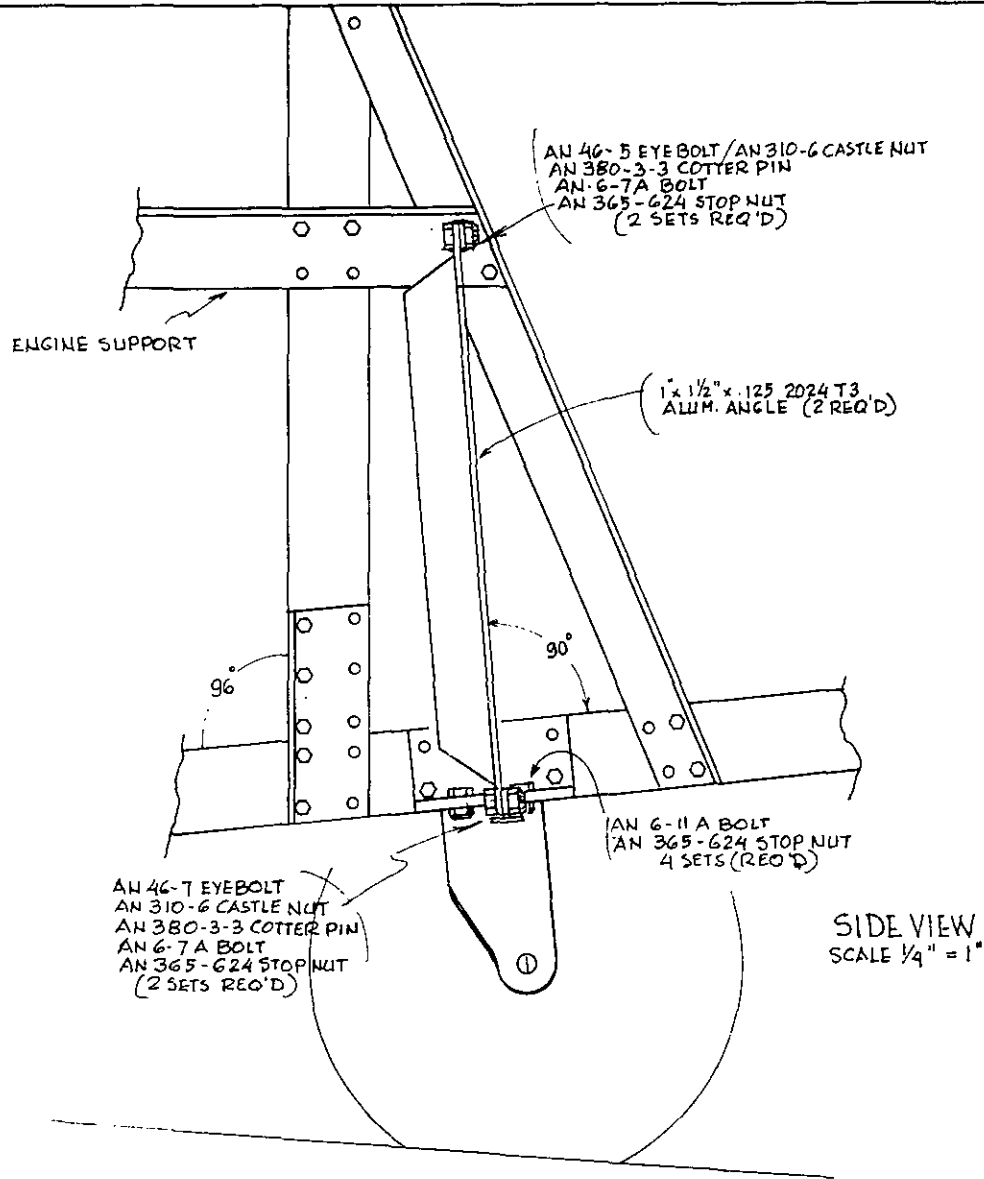


SCALE AS SHOWN	BJ ENDURO	FRONT END WINDSHIELD	DESIGNED & DRAWN BY Herbert Beaujon	DRAWING NO. 7
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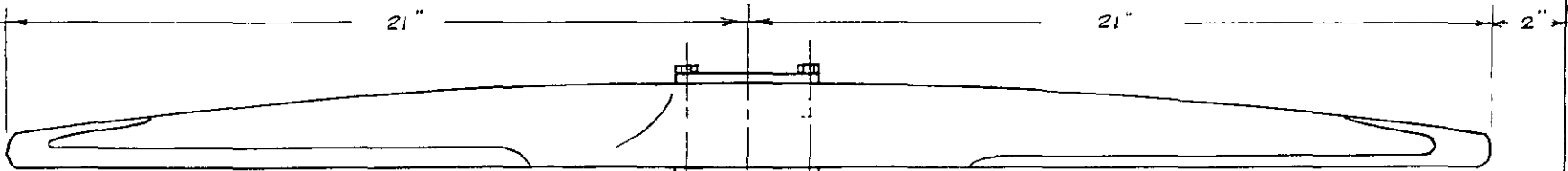




SCALE AS SHOWN	BJ ENDURO	LANDING GEAR	DESIGNED & DRAWN BY Herbert Beaujon	DRAWING NO. 9
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SCALE AS SHOWN	BJ ENDURO	LANDING GEAR	DESIGNED & DRAWN BY Herbert Beaujon	DRAWING NO. 10
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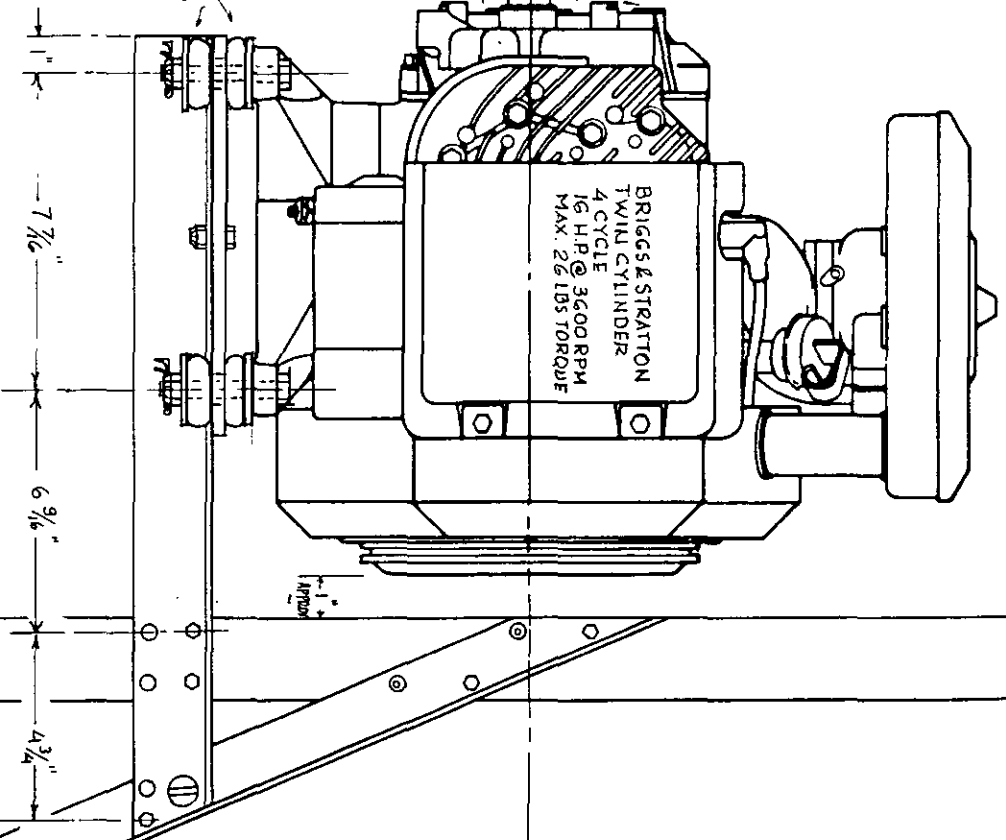


42" DIA. - 24" PITCH PROP
 - CAN BE PURCHASED WITH
 PRESSURE HUB SHOWN FROM:
 BANKS - MAXWELL PROPELLER COMPANY
 P.O. BOX 3301
 FT. WORTH, TEXAS 76105

BRIGGS & STRATTON
 TWIN CYLINDER
 4 CYCLE
 16 H.P. @ 3600 RPM
 MAX. 26 LBS. TORQUE

PRESSURE HUB

SEE
 DWGS
 12X13



7 7/16"

6 9/16"

4 3/4"

1 1/2"

2x2x.125 6061T6
SQ. ALUM. TUBING
"BOOM"

1/2 x 2 x .125 6061T6 ALUM. ANGLE
MAST TO BOOM BRACE

1x 1/2 x .125 2024 T3 ALUM. ANGLE
CROSS BRACE

2x2x.125 6061T6 SQ. ALUM. TUBING
"MAST"

BRIGGS & STRAITON
16 HP ENGINE

9 5/8"

40 DURO UREOPRENE
BOUSHING - 5/4" O.D. x 5/16" I.D.
x 1/4" (4 REQ'D)

9 1/4" x 9 7/16" x .250 2024T3
ALUM. PLATE (1 REQ'D)

AN 4-6A BOLT
AN 365-428 STOPNUT
(6 SETS REQ'D)

{ 1/4" O.D. x 5/16" I.D. x .125
(2024-T3 ALUM. WASHER,
(8 REQ'D))
{ 40 DURO NEOPRENE SHOCK MOUNT
(1 1/2" O.D. x 5/16" I.D. x 1/2" (8 REQ'D))
{ AN 5-23 BOLT
AN 310-5 NUT
AN 380-2-2 COTTER PIN
(4 SETS REQ'D)

3 5/8"

2 1/8"

2 1/8"

3 5/8"

7 1/4"

1/2 x 2 x .125 6061T6 ALUM. ANGLE
"MAST" TO "KEEL" BRACE

1x 1" x .065 2024T3
ALUM. ANGLE GAS TANK
SUPPORT

1x 1" x .065 2024T3 ALUM. ANGLE
GAS TANK STRAP BRACE

2x2x.125 6061T6 SQ. ALUM. TUBING "KEEL"

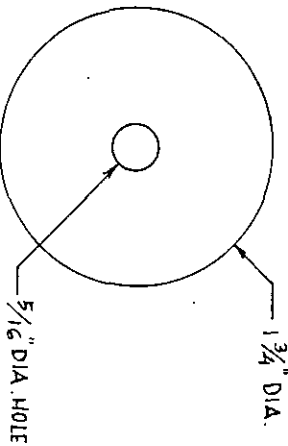
SCALE: 1/4" = 1"

BJ ENDURO

ENGINE

DESIGNED & DRAWN BY
Herbert Bauser

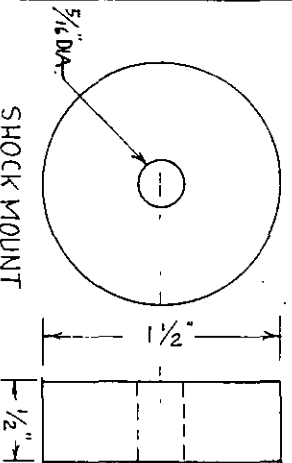
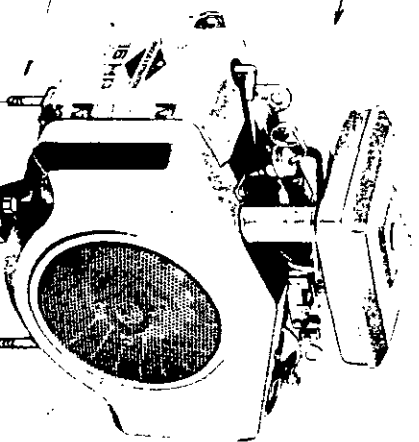
DRAWING NO
12



WASHER
2024 T3 ALUM. .125 THICK
(8 REQ'D)
SCALE: FULL

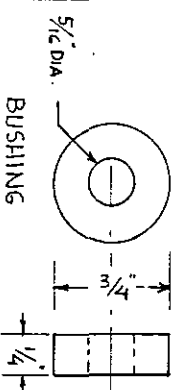
GRIGGS & STRETTON
MODEL 401417
DISPL. 656 C.C.
(40 CU. IN.)
TWIN CYLINDER
4 CYCLE
16 H.P. @ 3600 RPM.
26 LB. TORQUE
ELECTRIC STARTER
ROTATION C.C.W.
90 LBS. ST. THRUST
W/4.2" DIA.-24 PITCH
PROP.

AN5-23 BOLT
(4 REQ'D)



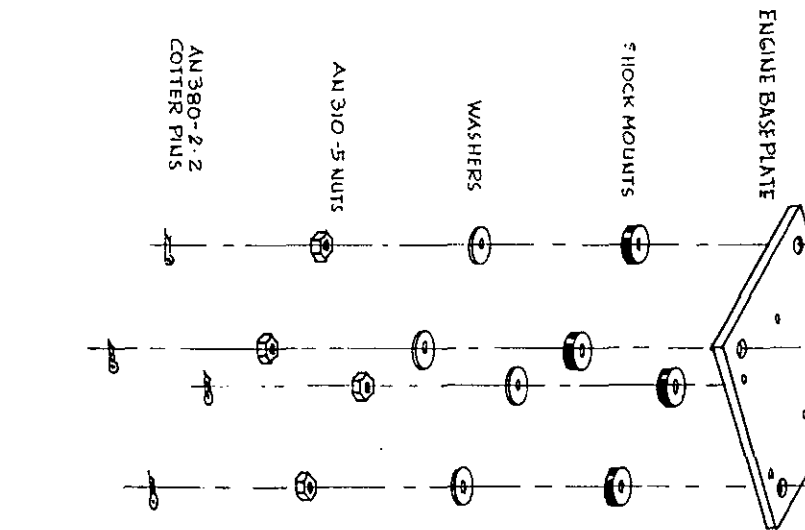
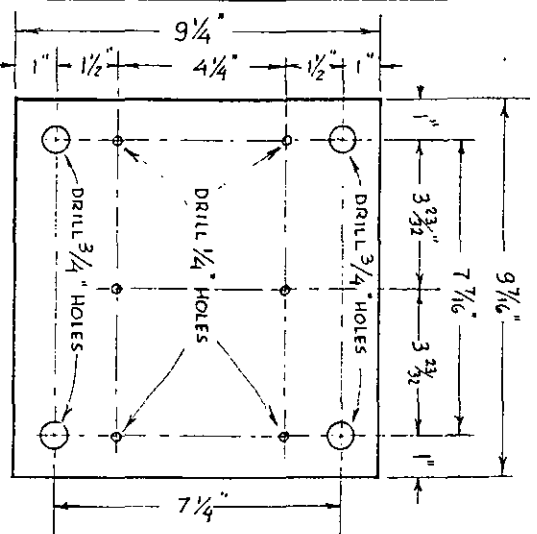
SHOCK MOUNT
40 DURO NEOPRENE RUBBER
(8 REQ'D)
SCALE: FULL

WASHERS
SHOCK MOUNTS



BUSHING
40 DURO NEOPRENE RUBBER
(4 REQ'D)
SCALE: FULL

BUSHINGS



ENGINE BASE PLATE
CUT FROM 2024 T3 ALUM. SHEET
.150 THICK (1 REQ'D)
SCALE 1/4" = 1"

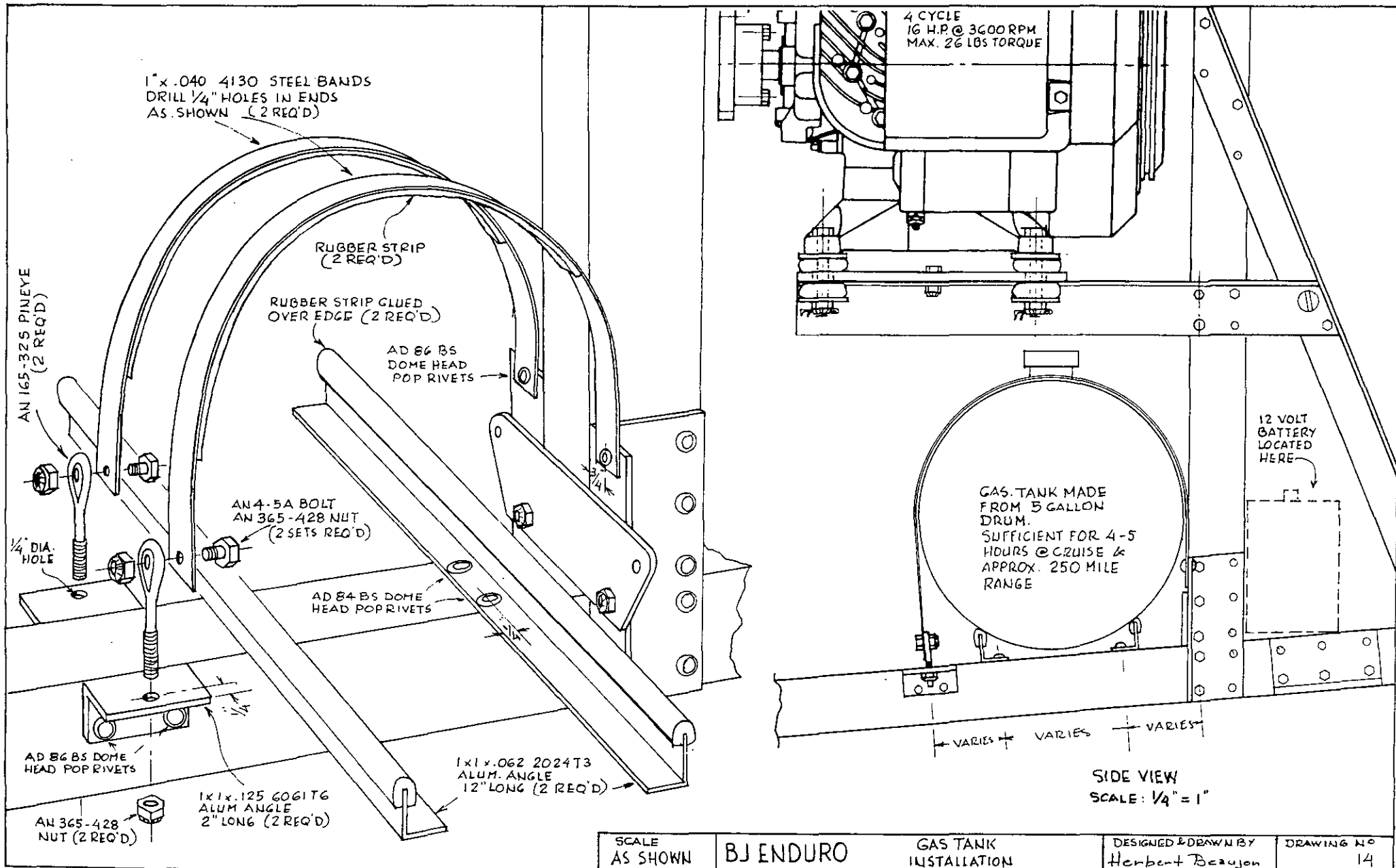
SCALE
AS SHOWN

BJ ENDURO

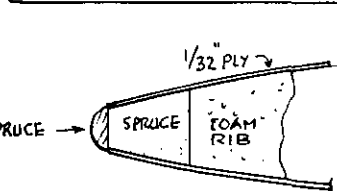
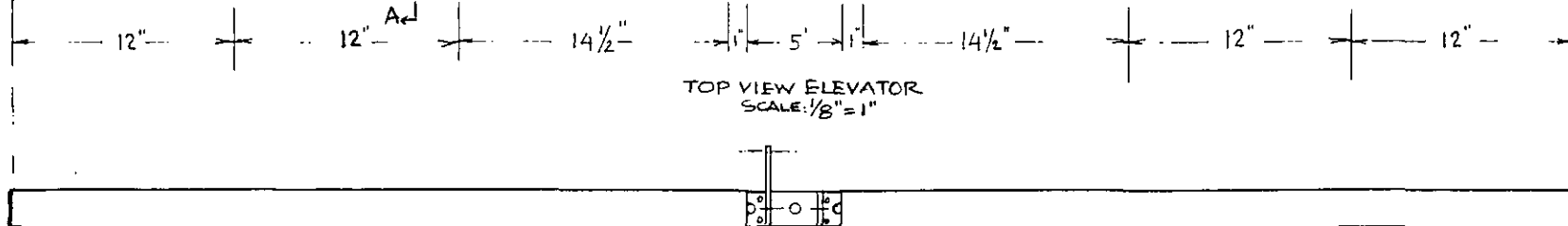
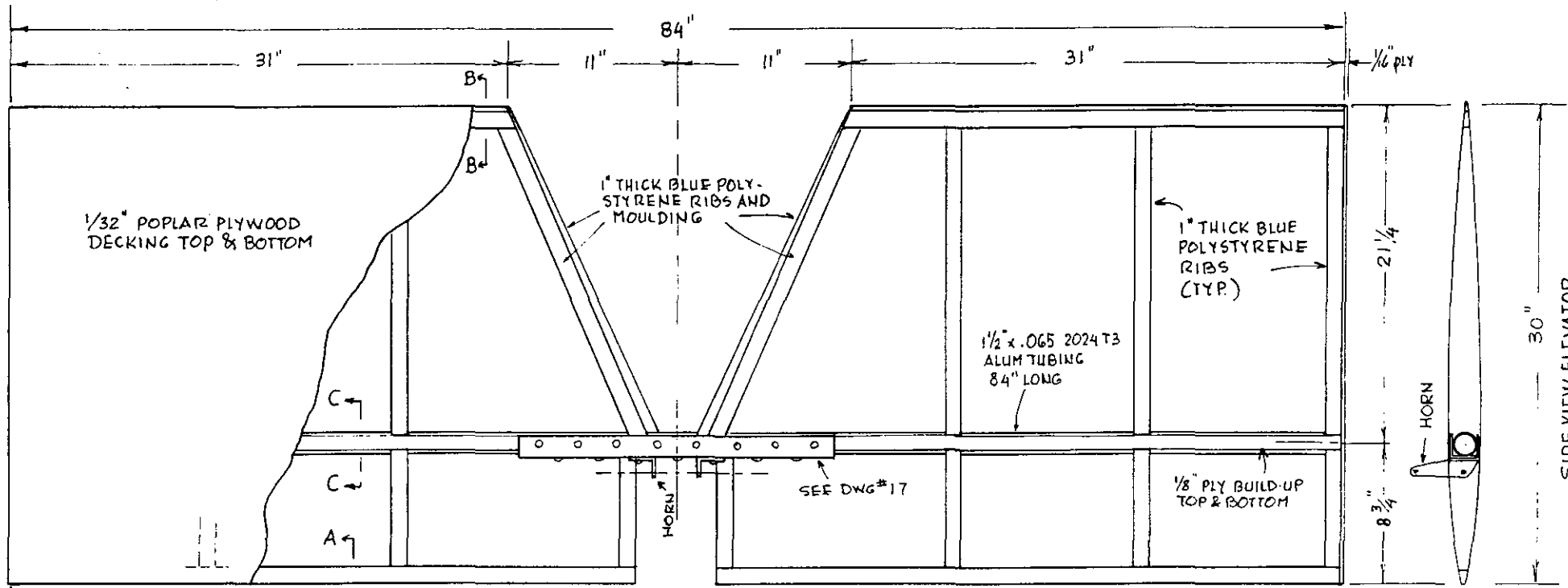
ENGINE
& PROP

DESIGNED & DRAWN BY
Herbert Beaulon

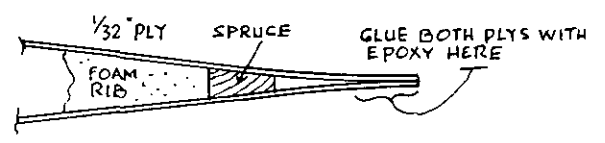
DRAWING NO
13



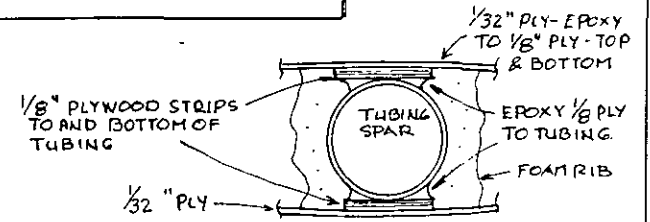
SCALE AS SHOWN	BJ ENDURO	GAS TANK INSTALLATION	DESIGNED & DRAWN BY Herbert Beaujon	DRAWING NO 14
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SECTION A-A
SCALE 1/2" = 1"

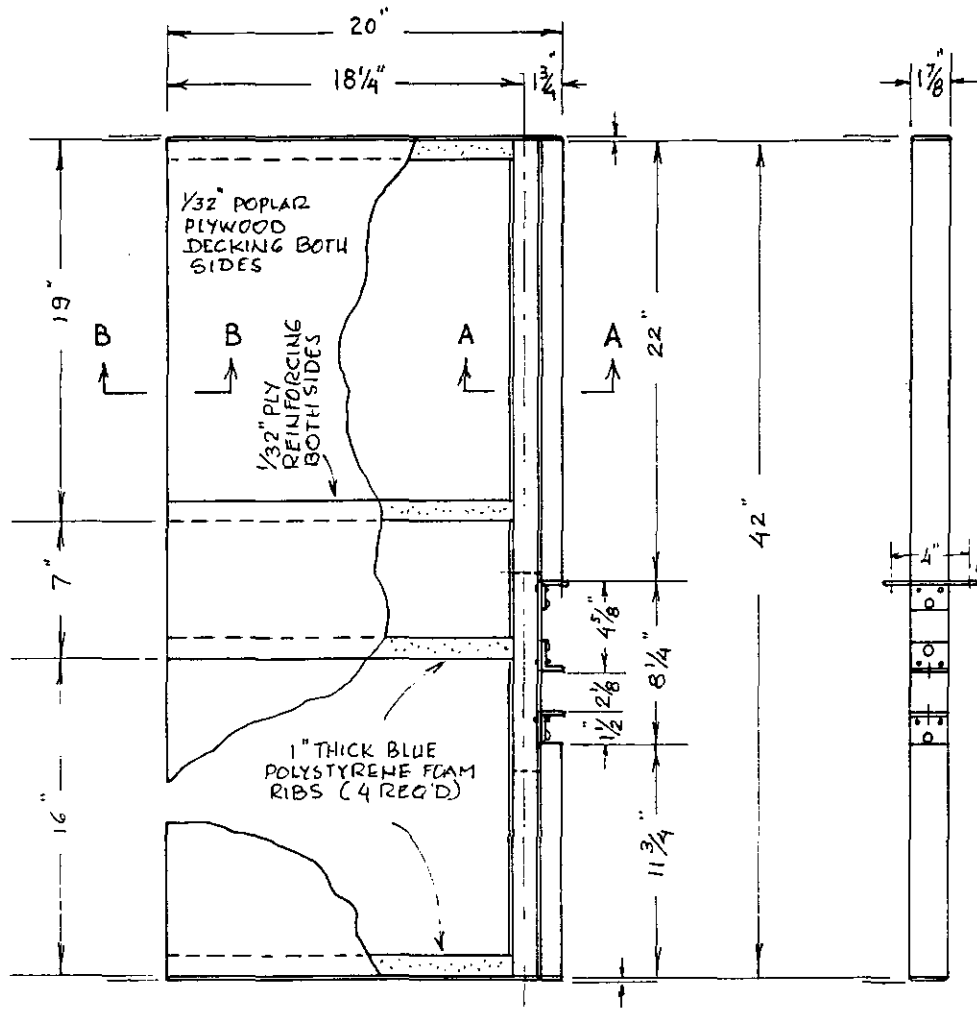


SECTION B-B
SCALE 1/2" = 1"



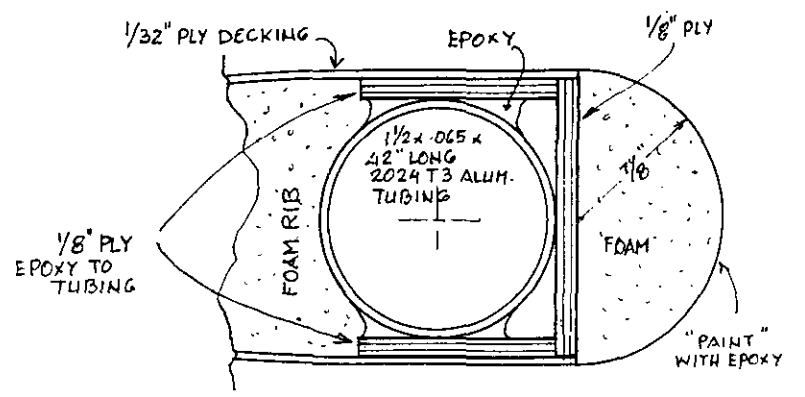
SECTION C-C SCALE: 1/2" = 1"

SCALE AS SHOWN	B.J. ENDURO	ELEVATOR	DESIGNED & DRAWN BY Herbert Beaujon	DRAWING NO. 15
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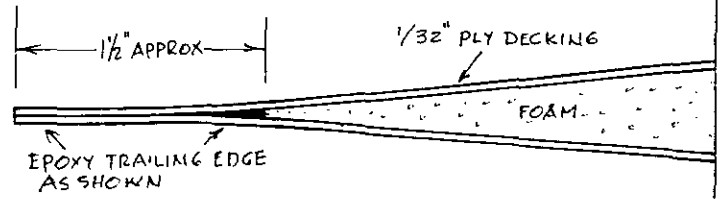


SIDE VIEW
 SCALE: 1/8" = 1"
 RUDDER.

FRONT VIEW
 SCALE: 1/8" = 1"

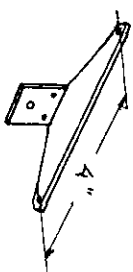


SECTION A-A
 SCALE: FULL



SECTION B-B
 SCALE: FULL

SCALE AS SHOWN	BJ ENDURO	RUDDER	DESIGNED & DRAWN BY Herbert Beaujon	DRAWING NO 16
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RUDDER HORN

1 1/2 x .065 x 42" LONG
2024 T3 ALUM. TUBING,
RUDDER SPAR

CUT FROM
1/2 x 2 x .125 6061 T6
ALUM. ANGLE 10" LONG

RUDDER HORN
CUT FROM 1 1/2 x 1/2 x .125
2024 T3 ALUM. ANGLE

3/4" 3/4"

1/8" 5/16"

RUDDER HORN
CUT FROM
1/2 x 1/2 x .125
2024 T3
ALUM. ANGLE

CUT FROM
1/2 x 2 x .125
6061 T6 ALUM.
ANGLE

7/8" 1 3/4" 7/8"

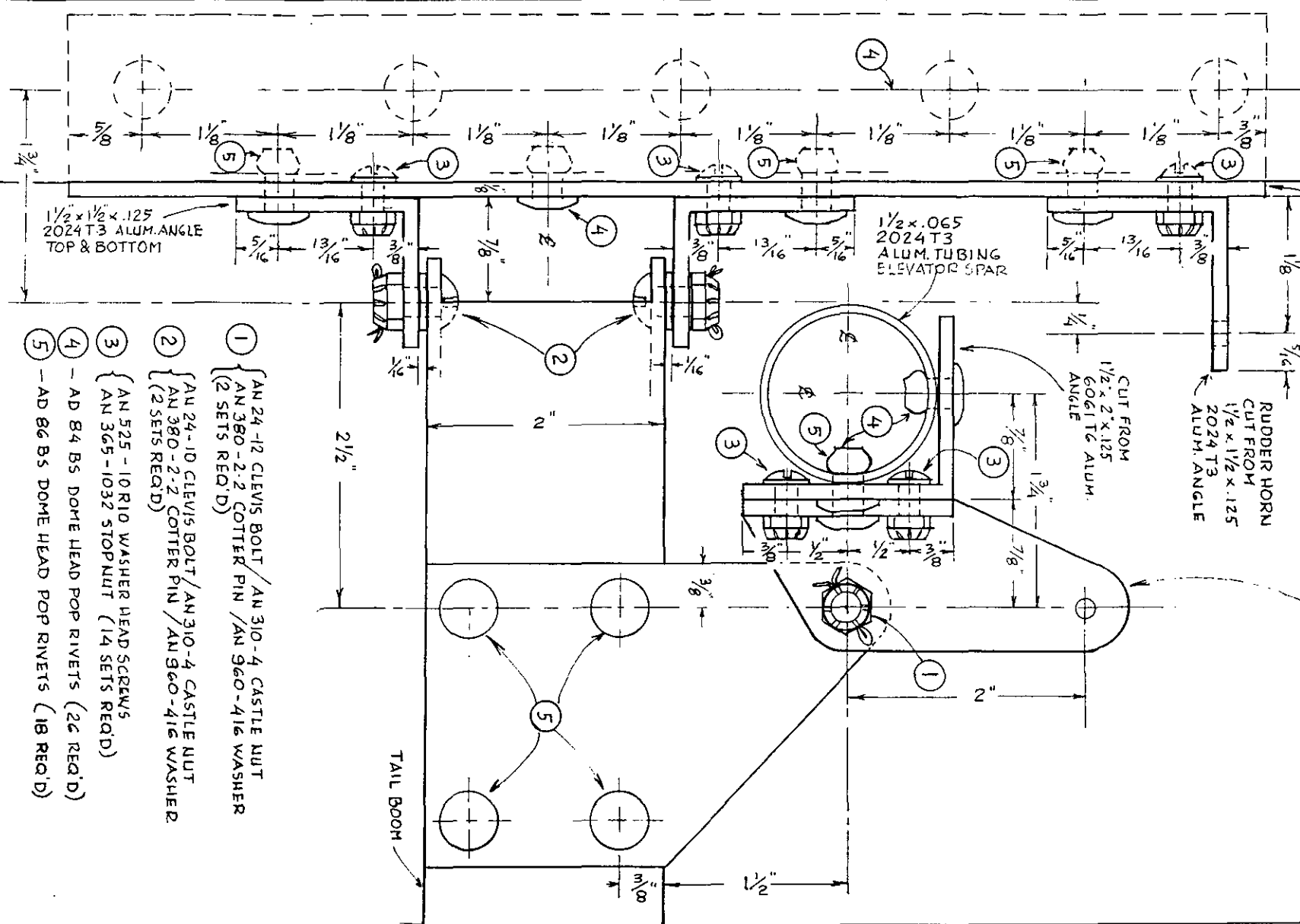
1/2 x .065
2024 T3
ALUM. TUBING
ELEVATOR SPAR

SCALE
FULL

BJ ENDURO
RUDDER & ELEVATOR
ASSEMBLY

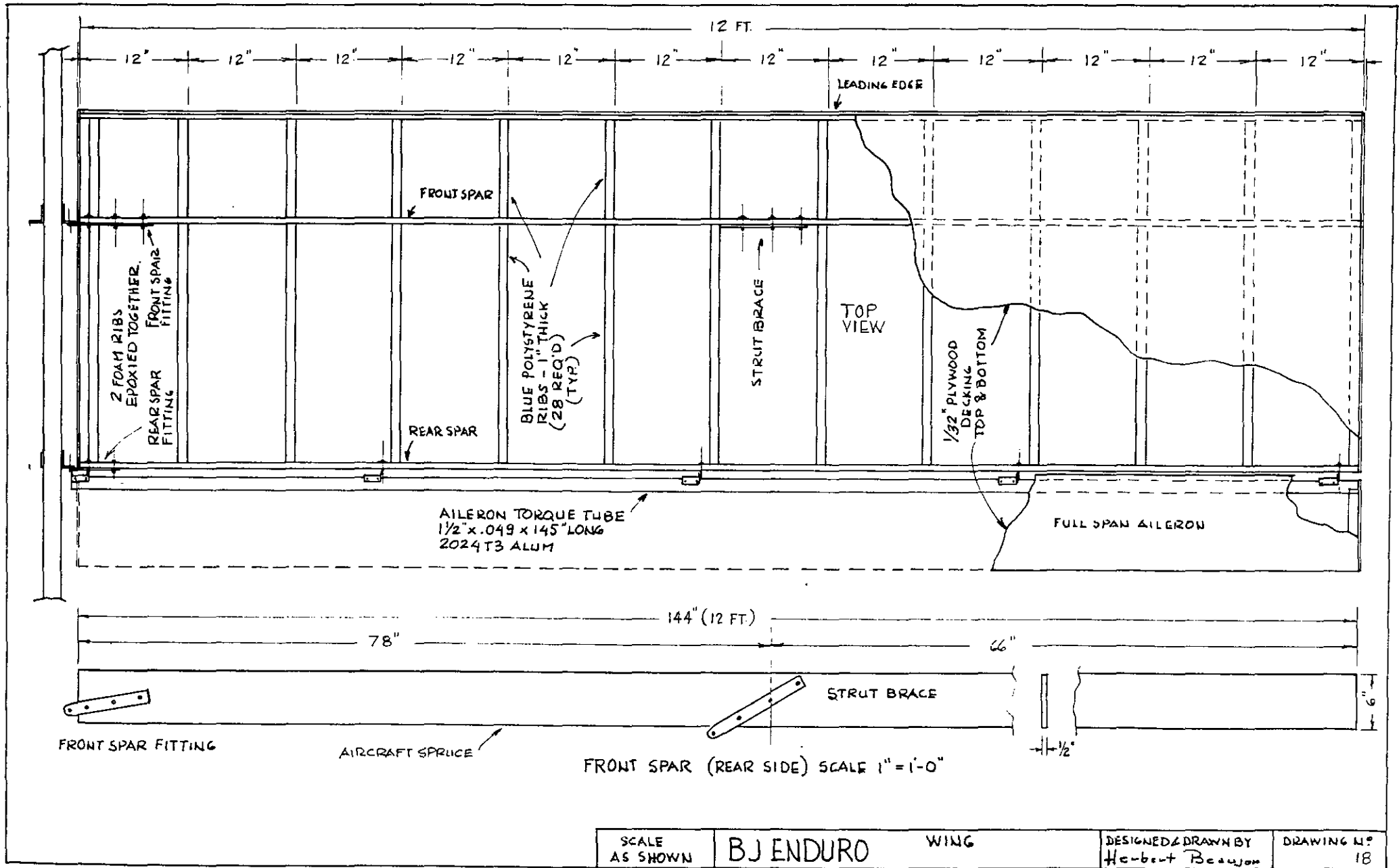
DESIGNED & DRAWN BY:
Herbert Beaulieu

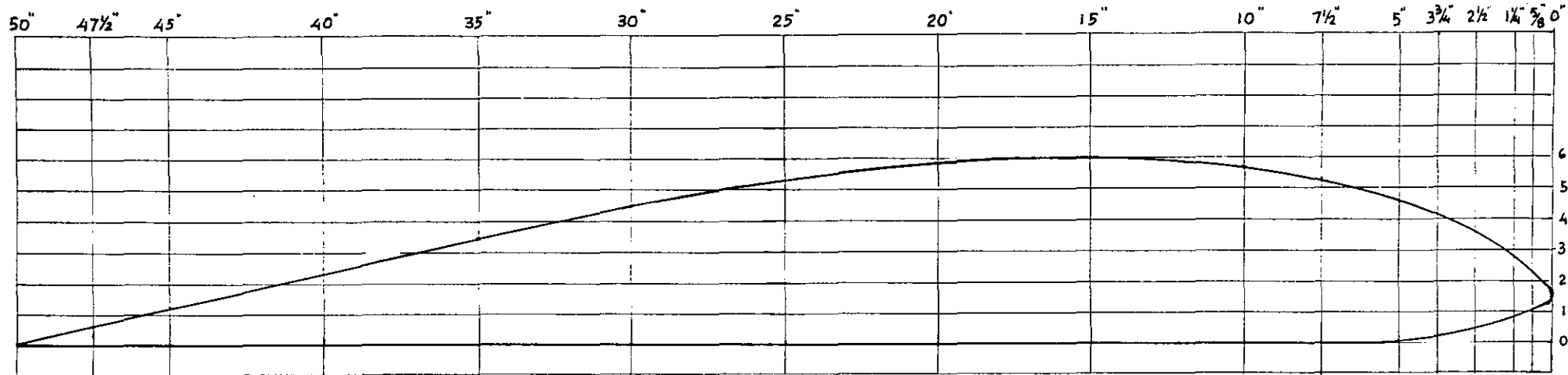
DRAWING NO.
17



TAIL BOOM

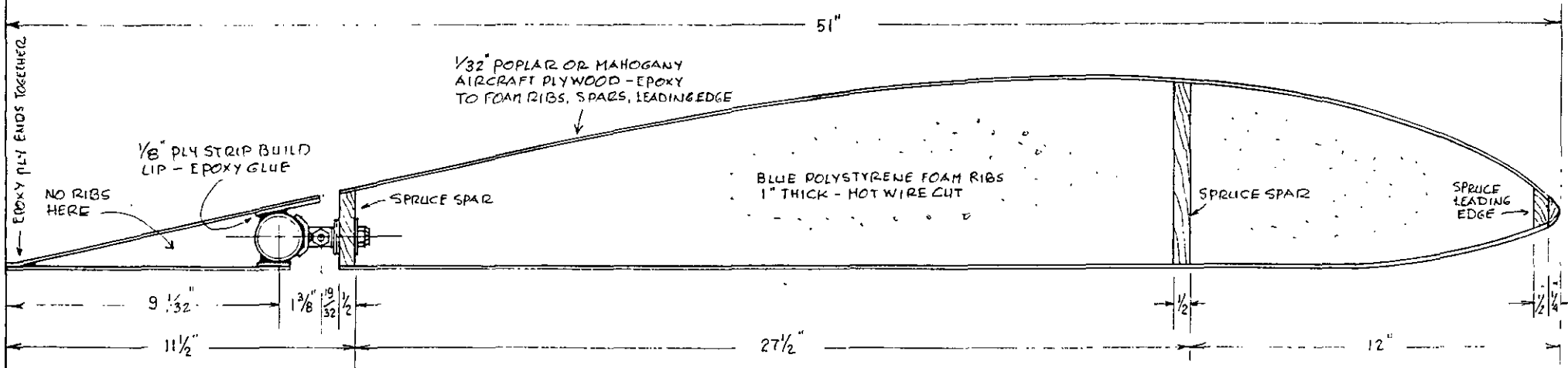
- 1 AN 24-12 CLEVIS BOLT / AN 310-4 CASTLE NUT
(2 SETS REQ'D)
- 2 AN 24-10 CLEVIS BOLT / AN 310-4 CASTLE NUT
AN 380-2-2 COTTER PIN / AN 960-416 WASHER
(2 SETS REQ'D)
- 3 AN 525 - 10 RIO WASHER HEAD SCREWS
AN 365 - 1032 STOP NUT (14 SETS REQ'D)
- 4 AD B4 BS DOME HEAD POP RIVETS (26 REQ'D)
- 5 AD 86 BS DOME HEAD POP RIVETS (18 REQ'D)





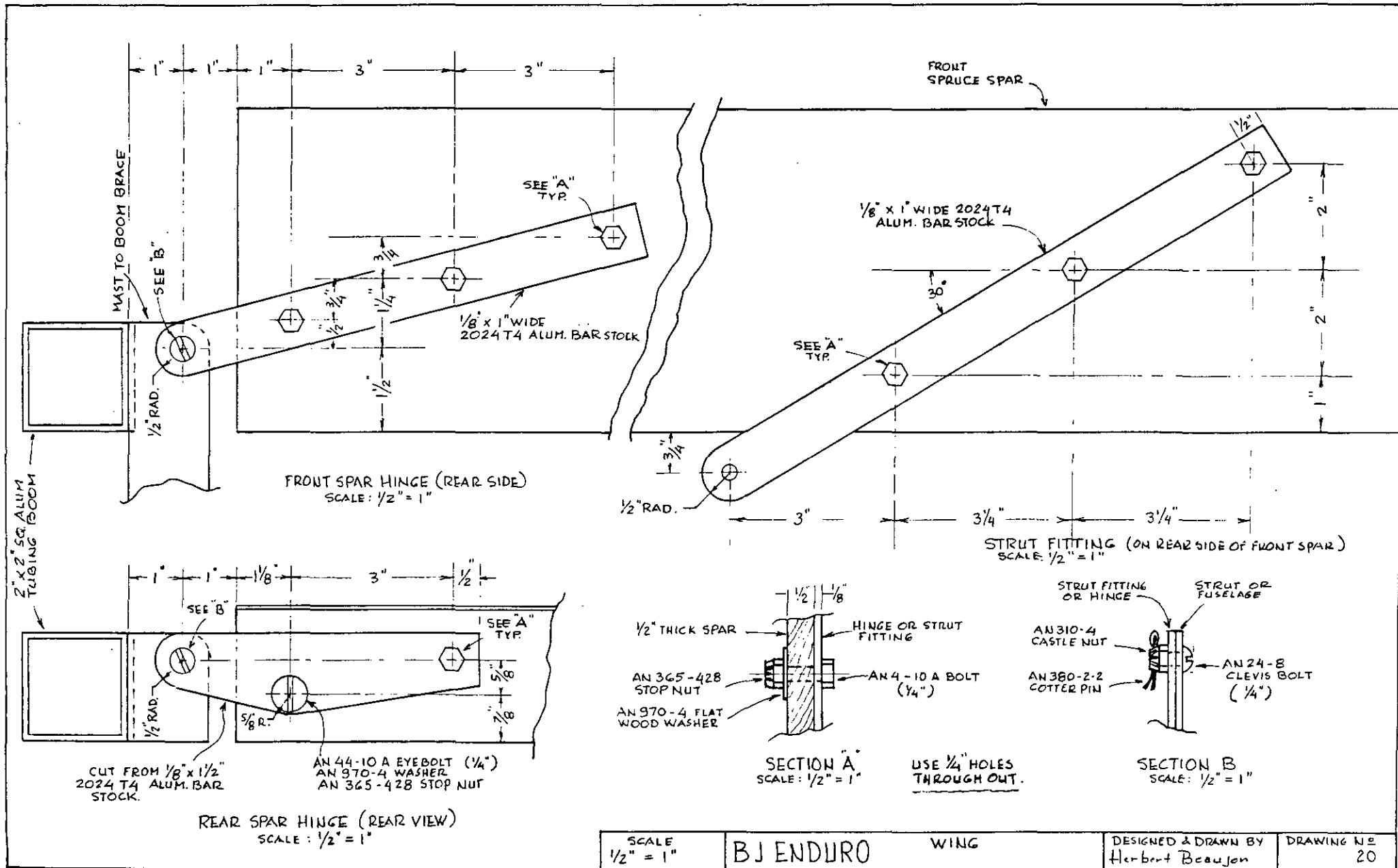
WING SECTION (USE FOR CUTTING FOAM RIBS)
SCALE $\frac{1}{8}'' = 1''$

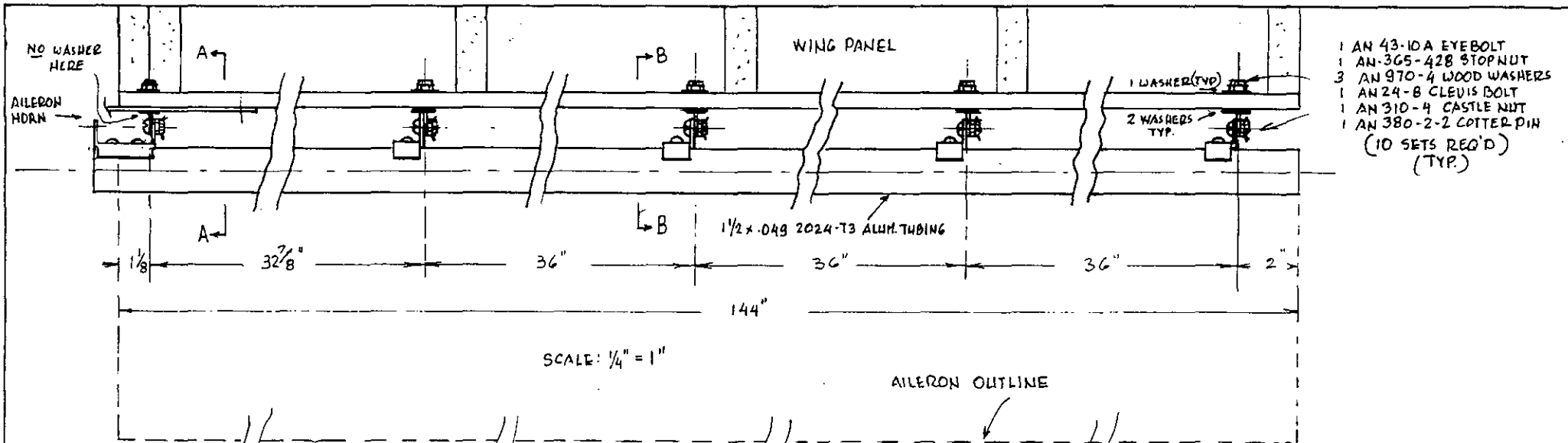
RHODE ST. GENESE 32 (HIGH LIFT - MILD STALL)



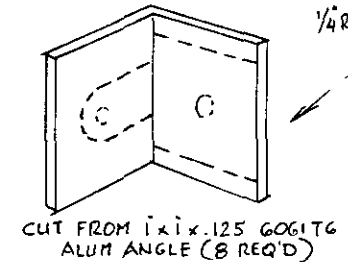
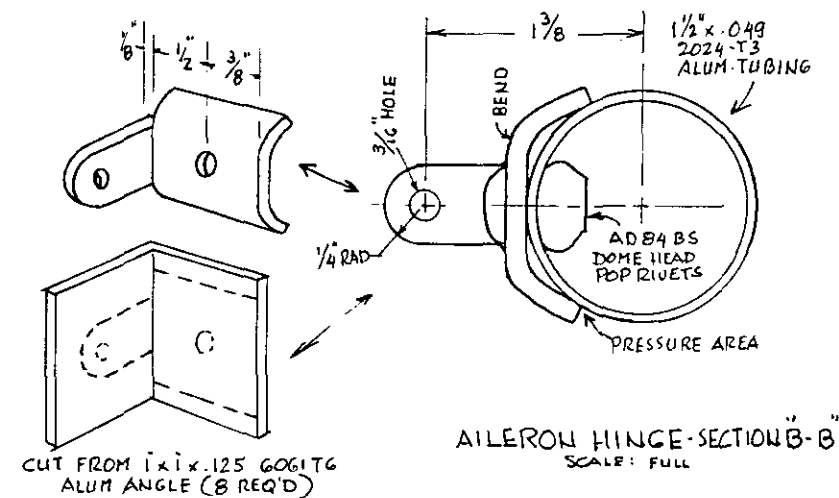
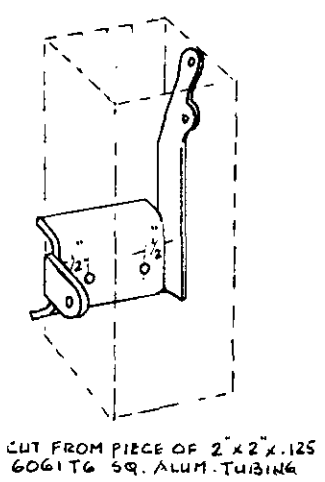
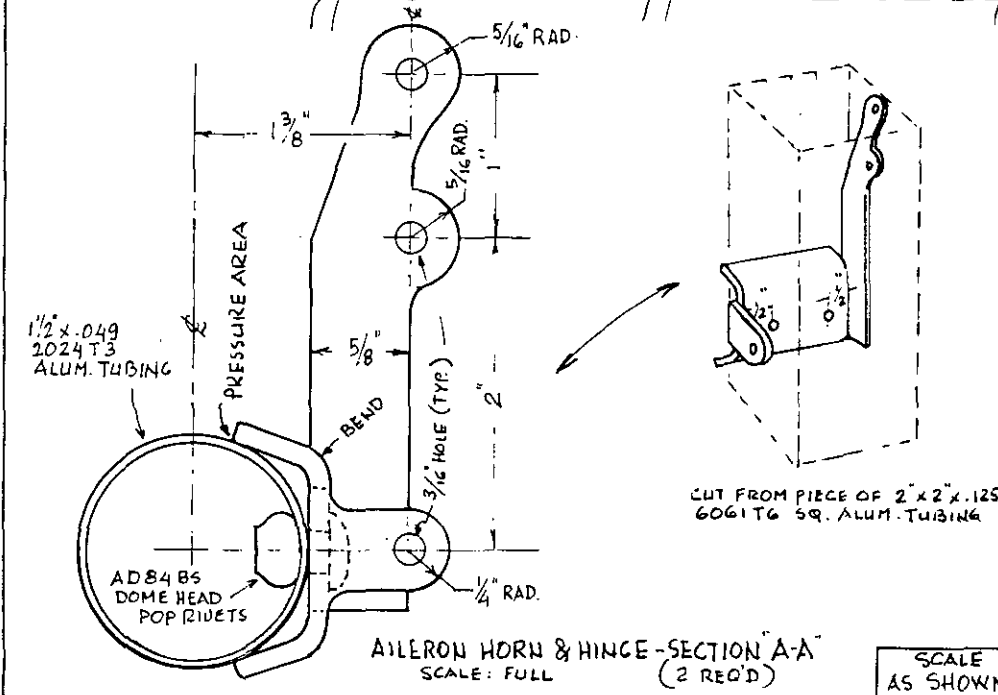
SCALE $\frac{1}{8}'' = 1''$

SCALE AS SHOWN	BJ ENDURO	WING	DESIGNED & DRAWN BY Herbert Beaujon	DRAWING NO 19
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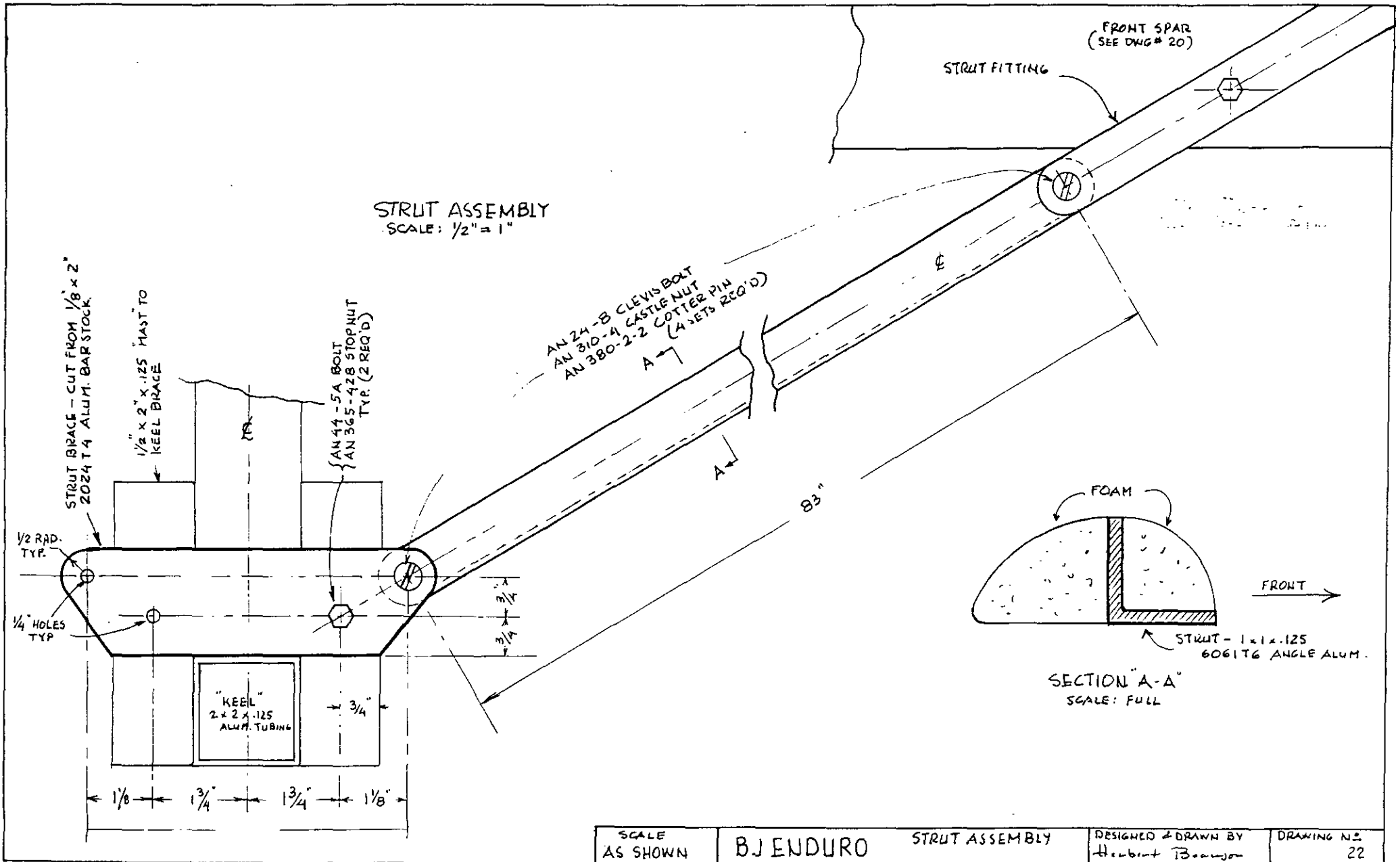


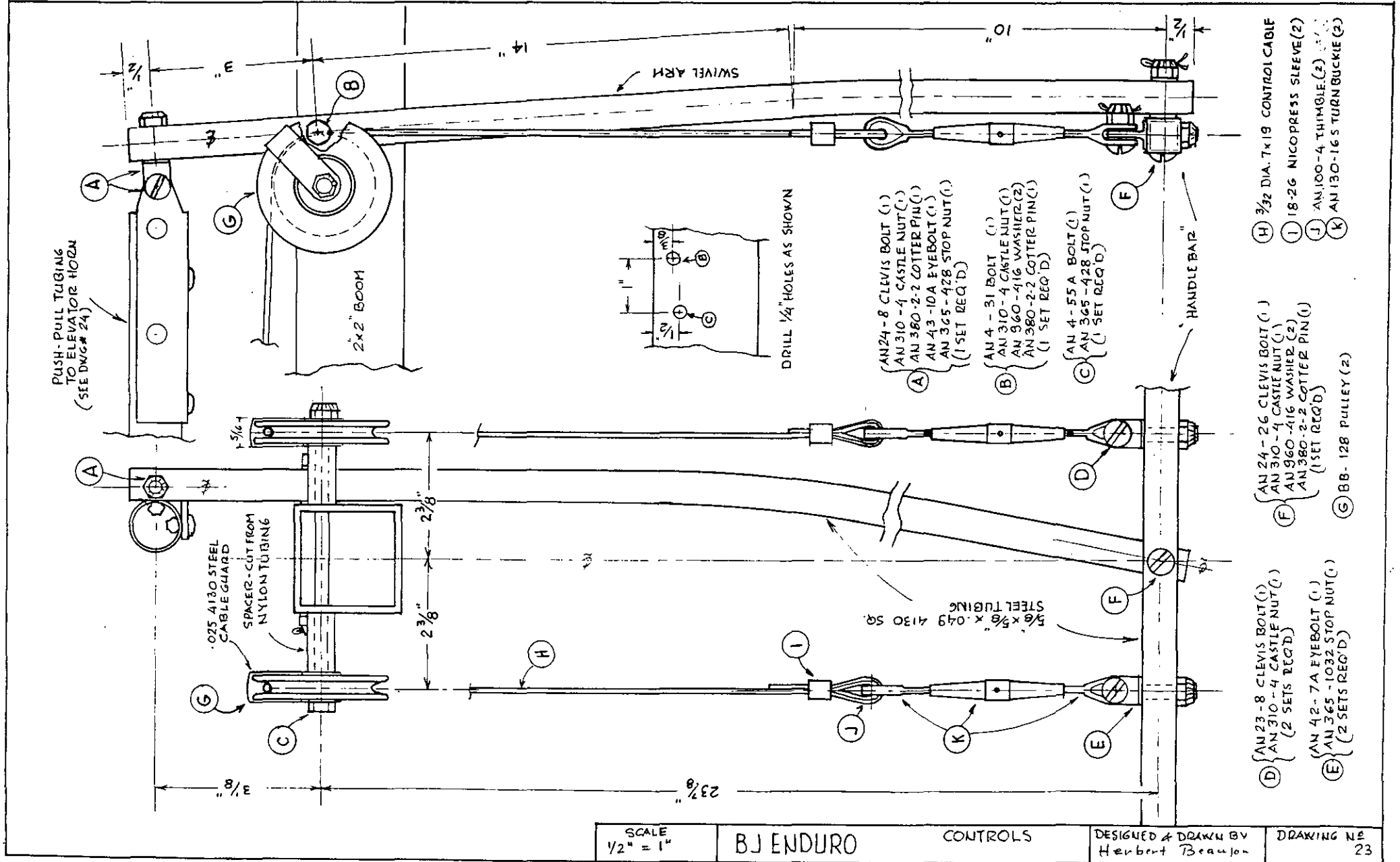


- 1 AN 43-10A EYEBOLT
- 1 AN-365-428 STOPNUT
- 3 AN 970-4 WOOD WASHERS
- 1 AN 24-8 CLEVIS BOLT
- 1 AN 310-4 CASTLE NUT
- 1 AN 380-2-2 COTTER PIN
- (10 SETS REQ'D)
- (TYP.)



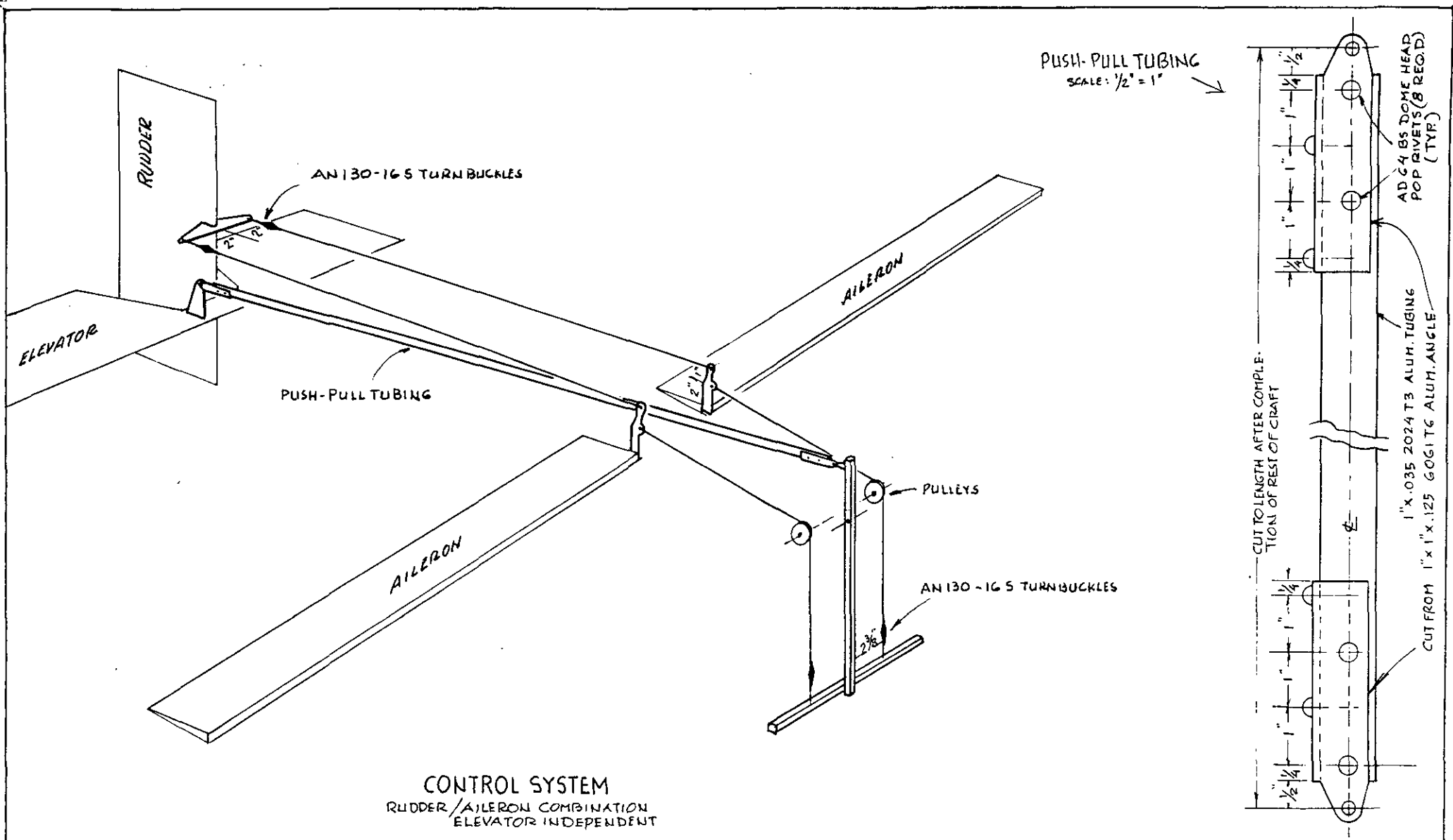
SCALE AS SHOWN	B.J. ENDURO	AILERON	DESIGNED & DRAWN BY Herbert Beanson	DRAWING NO. 21
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- (A) { AN24-8 CLEVIS BOLT (1)
AN310-4 CASTLE NUT(1)
AN380-2-2 COTTER PIN(1)
AN43-10A EYEBOLT (1)
AN365-428 STOP NUT(1)
(1 SET REQ'D)
- (B) { AN4-31 BOLT (1)
AN310-4 CASTLE NUT(1)
AN960-416 WASHER(2)
AN380-2-2 COTTER PIN(1)
(1 SET REQ'D)
- (C) { AN4-55 A BOLT(1)
AN365-428 STOP NUT(1)
(1 SET REQ'D)

- (D) { AN24-8 CLEVIS BOLT(1)
AN310-4 CASTLE NUT(1)
(2 SETS REQ'D)
- (E) { AN42-7A EYEBOLT (1)
AN365-1032 STOP NUT(1)
(2 SETS REQ'D)
- (F) { AN24-26 CLEVIS BOLT (1)
AN310-4 CASTLE NUT(1)
AN960-416 WASHER (2)
AN380-2-2 COTTER PIN(1)
(1 SET REQ'D)
- (G) BB-128 PULLEY (2)
- (H) 3/32 DIA. 7x19 CONTROL CABLE
- (I) 18-26 NICOPRESS SLEEVE(2)
- (J) AN100-4 THIMBLE(2)
- (K) AN130-16 TURNBUCKLE(2)



CONTROL SYSTEM
 RUDDER/AILERON COMBINATION
 ELEVATOR INDEPENDENT

SCALE AS SHOWN	B.J.ENDURO	CONTROLS	DESIGNED & DRAWN BY Herbert Beaujen	DRAWING NO. 24
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