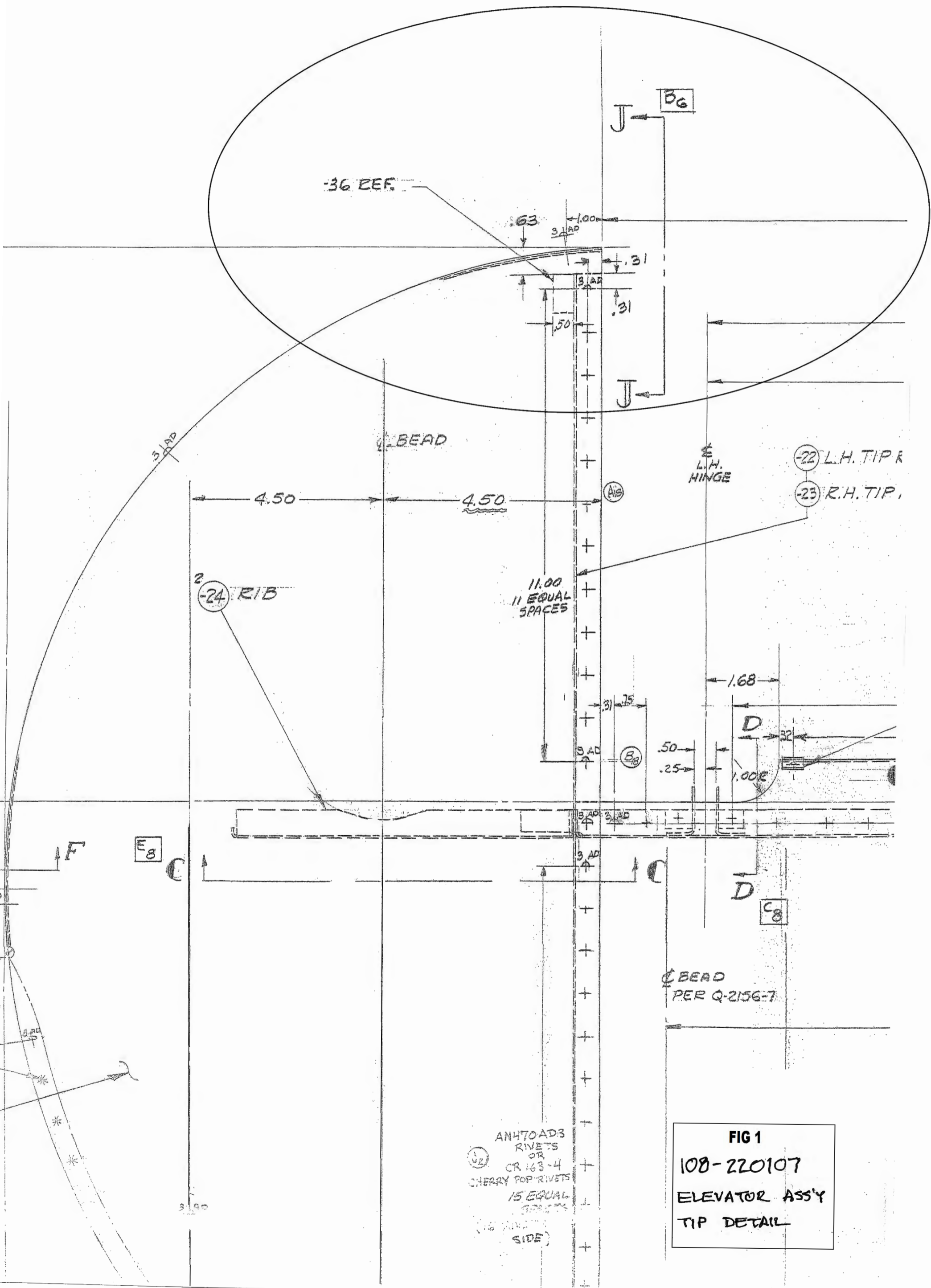


STINSON 108 SERIES CONTROL SURFACE BALANCE WEIGHT INFORMATION

1. ELEVATOR: P/N 108-1811000 - Stinson Drawing Number 108-2201007 states that P/N 108-2201007-36 lead weight is used on the Left Elevator and P/N 108-221007-38 is used on the Right Elevator. 108-2201007-36 measures .50" X .75" X 1.36". 108-2201007-38 measures .50" X .75" X 2.36". Reference Figures 1 and 2 for additional information. Figure 1 is a portion taken from Stinson Drawing 108-220107 and shows a left hand elevator. The right is opposite.
2. AILERON: P/N 108-1711000 – Stinson Aileron Drawing 108-1711000 states that a lead weight P/N 108-1711000-20 is used for surface balance. It measures .25" X .88" X 8.00". Reference Figures 3 and 4 for additional information.
3. Rudder: 108-2611000 "Small Rudder" used on the 108, 108-1 and 108-2 models use a lead weight that weighs 1.39 lbs. ± .05 lbs.

Rudder 108-2602100 "Large Rudder" is used on the 108-3 models. The redesigned 108-12905 rudder is a direct replacement. Reference the portion of Stinson Drawing 108-12905 included with this information. Reference No. 11 states: "When 108-2602100-20 Mold is filled to the top with lead & 108-2602100-20 block is installed in rudder, the static balance requirement of note 3 will be met."

Note 3 states: "Static unbalance shall not exceed 19.4 in. lbs.



-36 EEF.

.63

3 AD

1.00

J B6

.31

3 AD

.31

.50

3 AD

BEAD

4.50

4.50

L.H. HINGE

-22 L.H. TIP R

-23 R.H. TIP

2 -24 RIB

11.00
11 EQUAL SPACES

1.68

.31

.75

D

.32

3 AD

.50

.25

1.00

F

E8

C

3 AD

3 AD

3 AD

D

C8

BEAD
PER Q-2156-7

ANHTOADS
RIVETS
OR
CR 163-4
CHERRY POP RIVETS
15 EQUAL SPACES
(SEE OTHER SIDE)

FIG 1
108-220107
ELEVATOR ASS'Y
TIP DETAIL

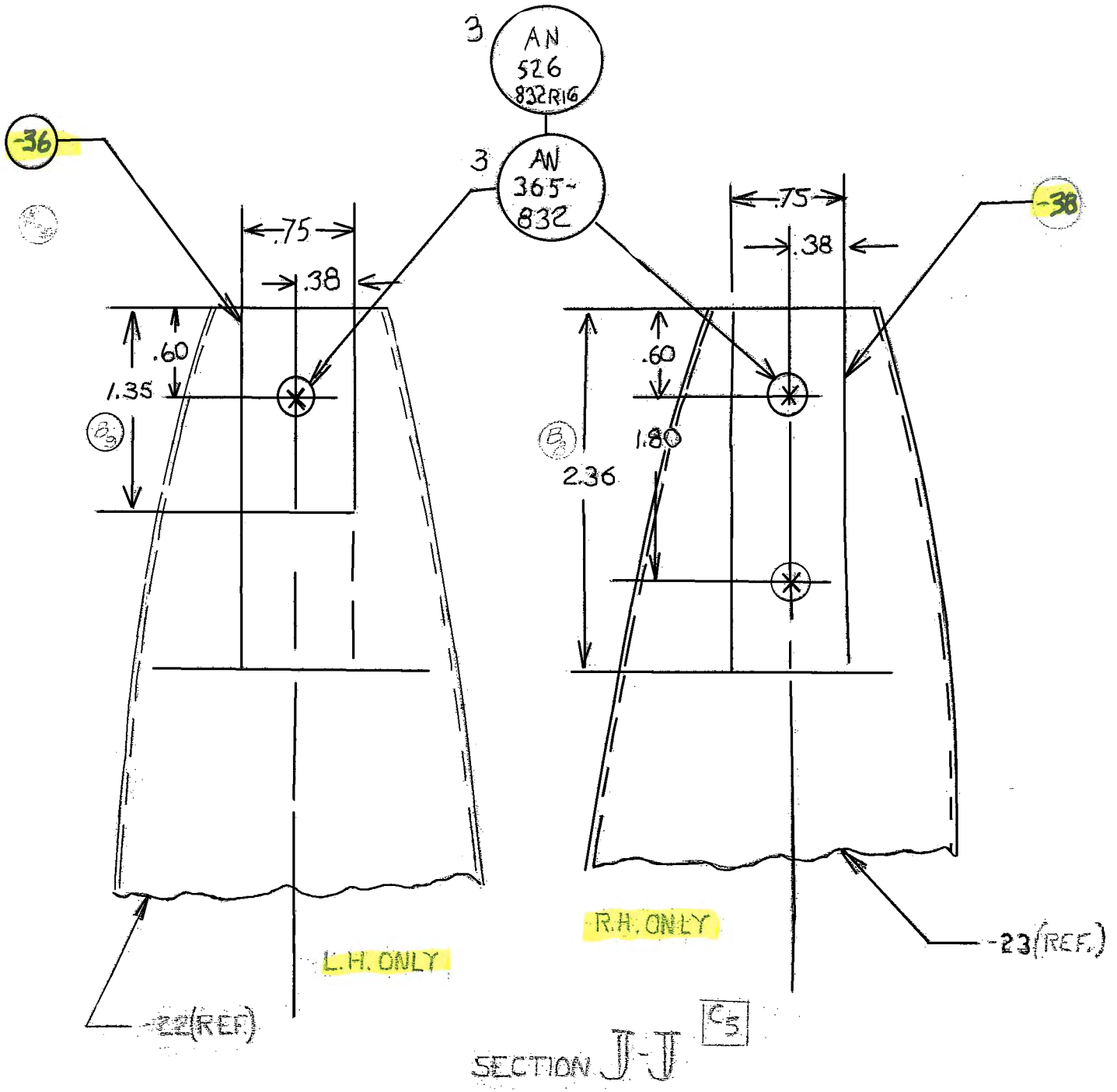
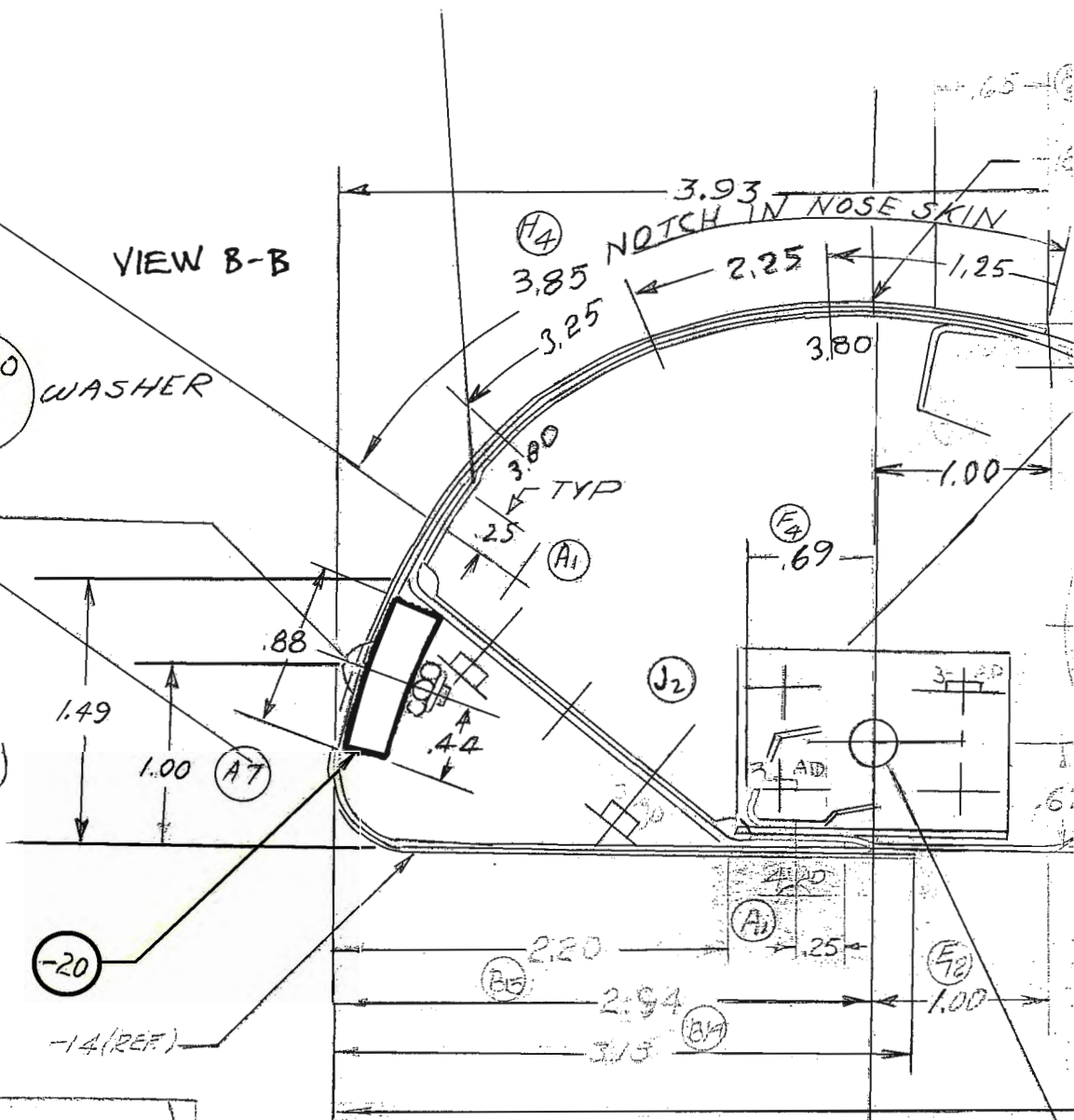


FIG. 2
108-2201007
DETAIL - LEAD
WEIGHT ATTACHMENT

VIEW B-B

- 2 AN960 -8 WASHER
- 2 AN526 832 R10 SCREW
- 2 AN365 832 NUT
- 2 HOLES DIA. #17 (.177, .173)



DRILL LINE REAR .250 ± .001
ON ASSEM WITH -285-2
IN LINE WITH 108-17110

HINGE

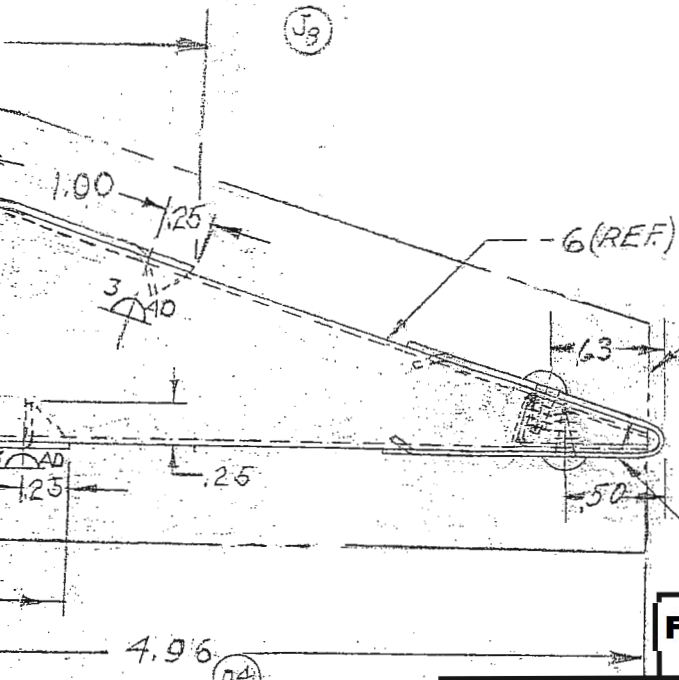
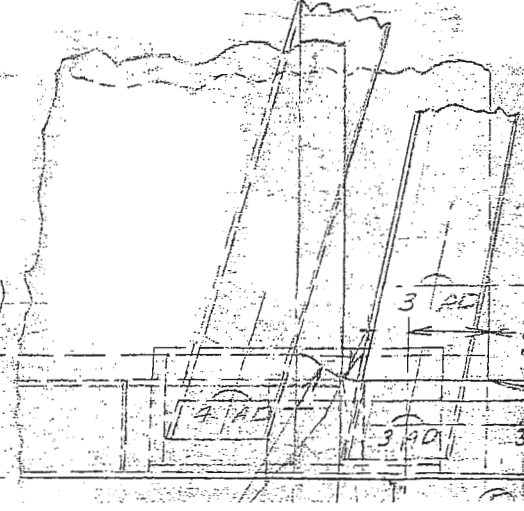
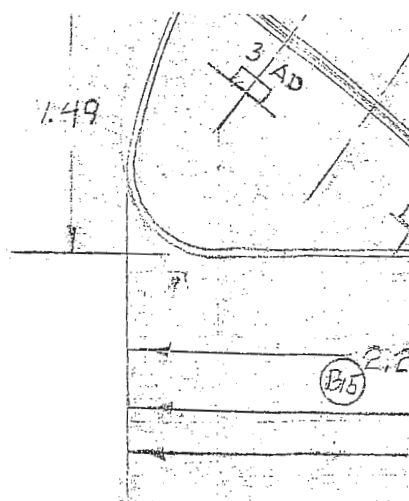
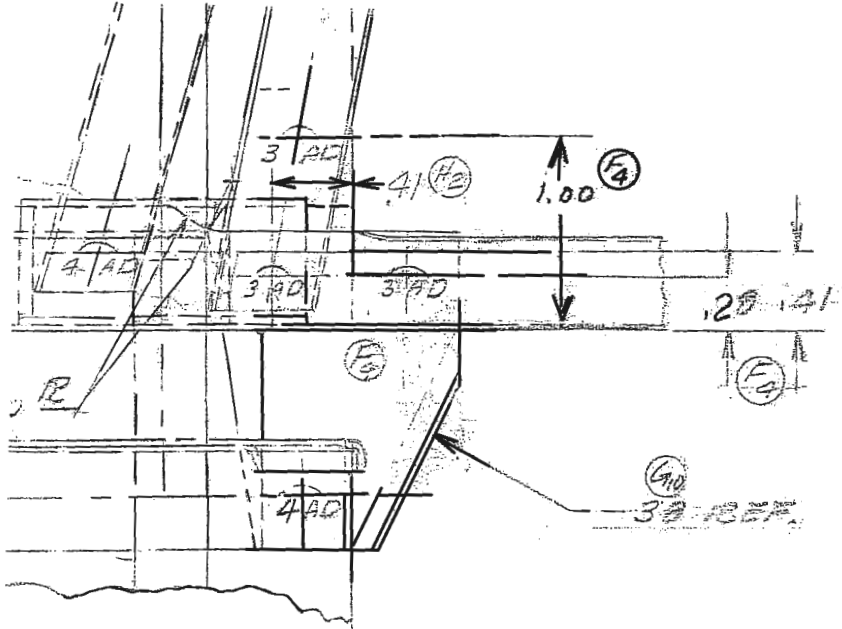


FIG. 3

108-1711000 VIEW B-B





DRILL LINE REAM
ON ASSEMBLY
IN LINE WITH

HINGE

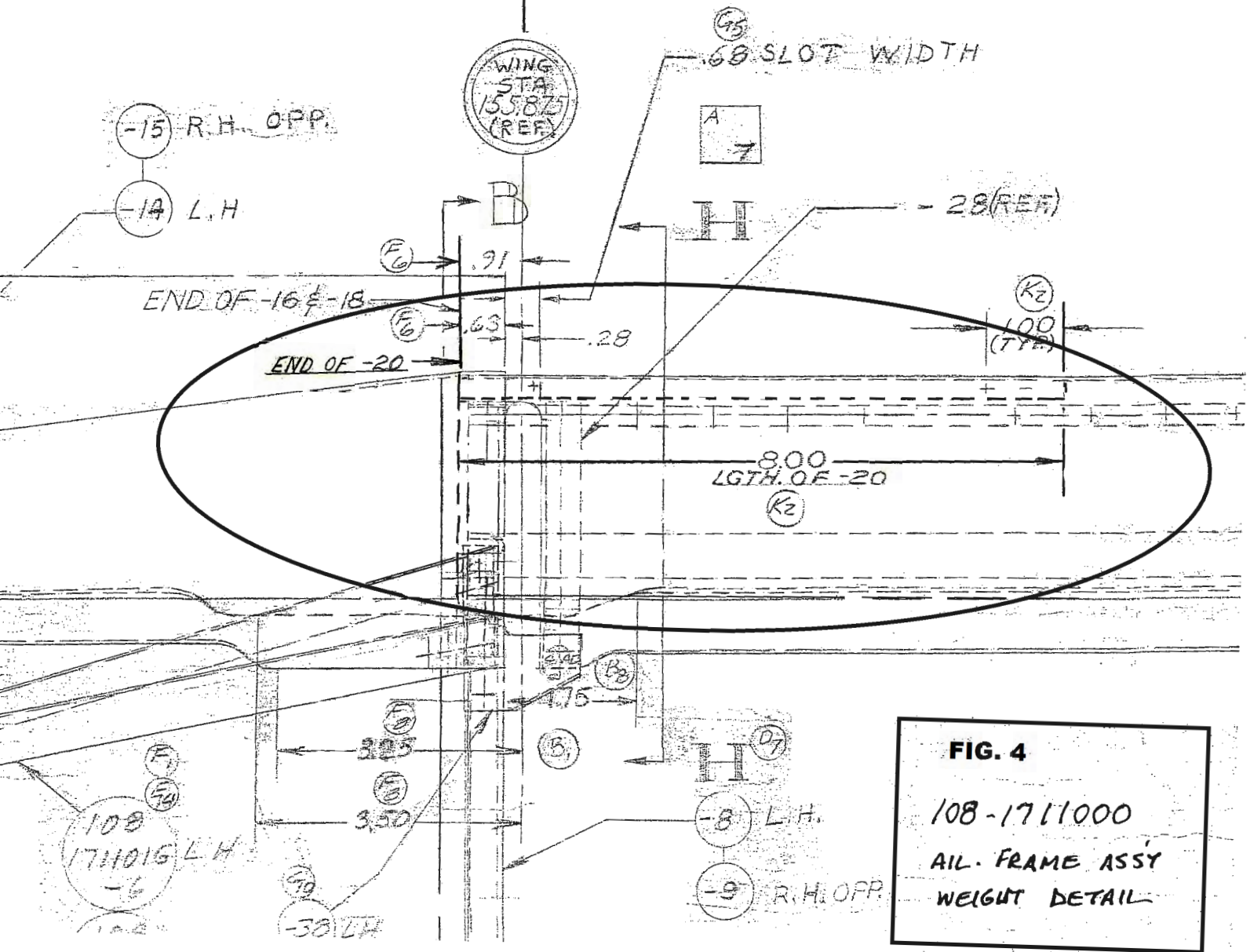


FIG. 4
108-1711000
AIL. FRAME ASSY
WEIGHT DETAIL

12. ALL OPERATIONS SHALL CONFORM TO UNIVAIR PROCESS MANUAL NO. 1.

11. WHEN 108-2602100-20 MOLD IS FILLED TO THE TOP WITH LEAD & 108-2602100-20 BLOCK IS INSTALLED IN RUDDER, THE STATIC BALANCE REQUIREMENT OF NOTE 3 WILL BE MET.

10. 108-2611007 RIB IS ALT. FOR 108-2602100-54 RIB FOR REPLACEMENT SPARE PARTS.

9. AN470 RIVETS ALT. FOR AN456 & AN442 RIVETS
8. TAB ASS'Y. 12905-12 SAME AS 108-2602100-64 EXCEPT SKIN MATERIAL CHANGED FROM .016 24 SO CLAD ALUM (WITH BEADS) TO .020 24ST CLAD ALUM (WITHOUT BEADS).

AN4703AD RIVETS ALT. (F)

AN442-AD4-4	12	1215E1
AN456-AD4-7	2	
AN456-AD4-6	2	
AN456-AD4-5	24	
AN960-10	10	WASHER
AN380-2-2	2	COTTER PIN
AN320-3	1	NUT
AN23-10	1	
AN3-21	2	BOLT
AN3-12	1	
AN3-5A	6	
AN931-6-10	1	GROMMET
AN310-3	1	NUT
108-3042430-0	1	CONTROL SHAFT ASS
108-3042425-8	1	BUSHING
108-2661001	1	BRACKET
108-2611008-2	1	HORN ASS'Y.
108-2611004	2	CHANNEL
108-2611003-0	1	FITTING ASS'Y
108-2611002-0	1	FITTING ASS'Y.
108-2611000-22	1	SPACER
108-2611000-12	2	REINFORCEMENT
108-2602101-6	1	SPRING
108-2602100-52	1	BRACKET
108-2602100-62	1	FAIRING (.020 3003 H14 A
108-2602100-54	1	RIB
108-2602100-42	1	CHANNEL
108-2602100-36	1	HINGE
108-2602100-34	1	
108-2602100-32	2	CLIP
108-2602100-30	1	
108-2602100-28	1	
108-2602100-20	1	BLOCK (SEE NOTE 11)
108-2602100-16	1	RIB
108-2602100-15	1	REINFORCEMENT
108-2602100-14	1	
108-2602100-9	1	TIP SKIN
108-2602100-8	1	
-12	1	TAB ASS'Y (SEE NOTE 8)
-11	2	.020x4.5x7.5
-10	1	.020x1.75x30.5
-9	1	.020x2.13x12.5
-8	1	
-7	1	.032x.5x6
-6	2	.020x2x14.28
-5	2	.020x2x36
-4	1	.032x4x73.75
-3	1	.020x15.25x76
-2	1	

NOTES:
 1. THIS RUDDER ASS'Y. IS INTERCHANGEABLE WITH STINSON RUDDER ASS'Y. NO. 108-2602100-0 & SHALL BE USE IN PLACE OF RUDDER ASS'Y 108-2602100-0 FOR SERVICE USE.
 2. PART NUMBERS WITH "108" AS THE FIRST 3 DIGITS ARE ORIGINAL STINSON PART NUMBERS.
 3. STATIC UNBALANCE SHALL NOT EXCEED 19.4 IN. LBS.
 4. SEE STINSON LOFT LAYOUT FOR BEVELS & CONTOURS.
 5. TOLERANCES:
 ANGULAR ±1° (F)
 GENERAL ±.03
 6. RIVET SYMBOLS:
 # AN456 DIA. IN 32NDS MATERIAL
 # AN442
 7. PARTS MARKED USED ON LEFT SIDE ONLY.
 PARTS MARKED USED ON RIGHT SIDE ONLY.

LET.	REVISION	DATE	BY
J	SEE E.O. 60510	2-27-58	CB
H	SEE E.O. 60431	12-8-50	MW
G	SEE E.O. 60348	12-27-50	JD
F	DWG. UPDATE 60252	7-13-54	JW
E	SEE E.O. 60233	2-17-54	JN
D	SEE E.O. 60072	1-31-58	CB
C	SEE E.O. 60062	10-27-57	CB
B	14608 & RIVETS ADD. RIVET REV.	4-27-55	ECN
	NOTE 8 REV. 1/2 SPLICE SEC'S D & E-ADD. BJM FOR 2-3-56 WAS 1-5-56 WAS 3-5-56 WAS 1-13-54 ADD.	2-23-53	JWM

NEW
 RUDDER ASSEMBLY
 INTERCHANGEABLE WITH
 STINSON 108-2602100
 H. R. K.
 5-23-50
 108-12905

PIPER AIRCRAFT CORP.
 LOCK HAVEN, PENNA.

SCALE 6 IN = 1 FT & NOTED	TOTAL WT. - LBS.
FINISH - PIPER SPECIFICATION #10	
MANUFACTURING PRACTICES - PIPER SPECIFICATION #9	
DRAFTSMAN	CHECKER
STANDARDS	