

November, 1951

UGHL-1574

Subject: 300 KV Pulse
Transformer and
Pulsar

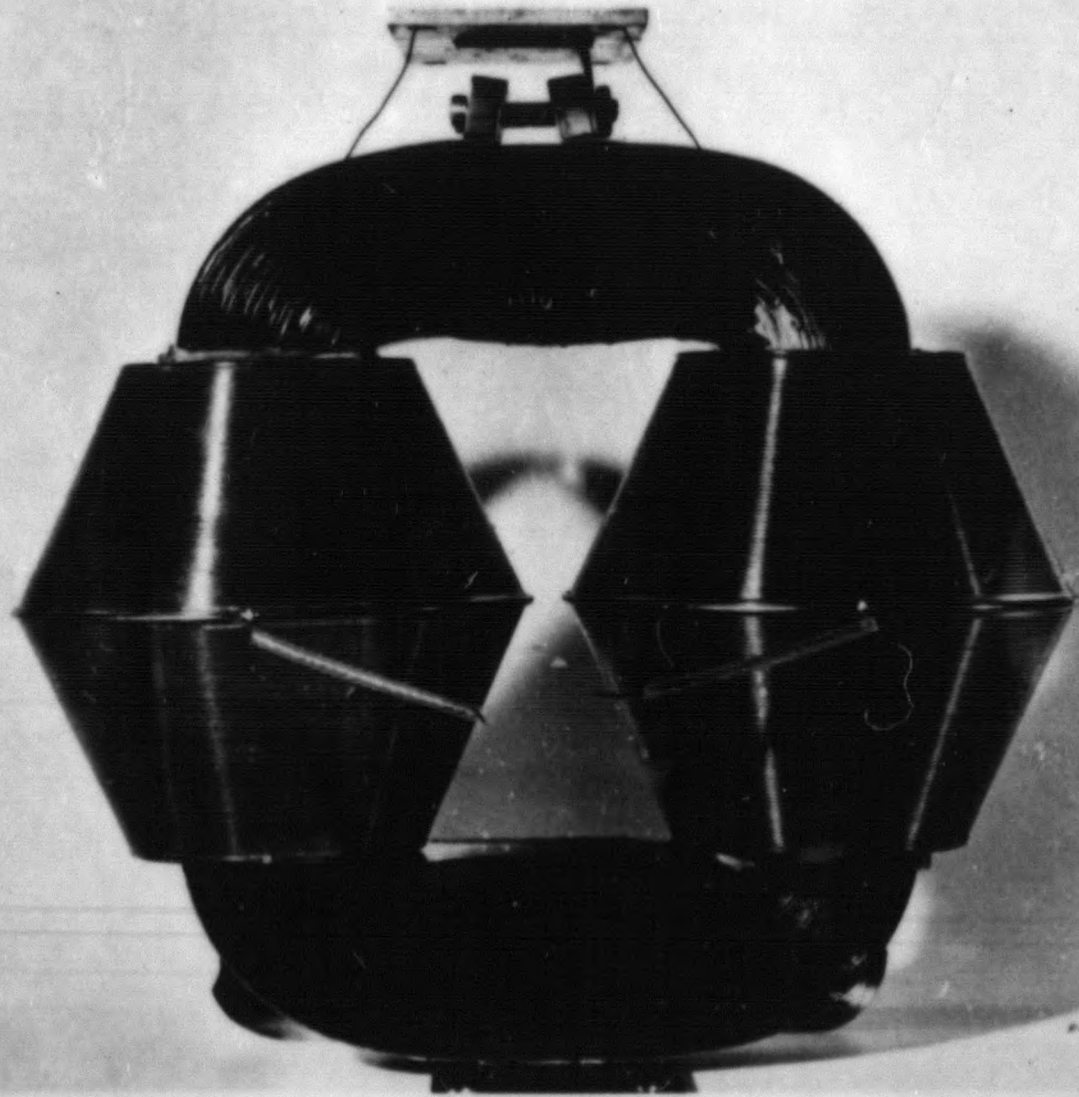
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38094

PHOTOS: Figure 1
Figure 2

DRAWINGS: 3W6871
3W7691A
3W7701
3W7682A
3W7653
3W7673C
3W7664

FIG. 1



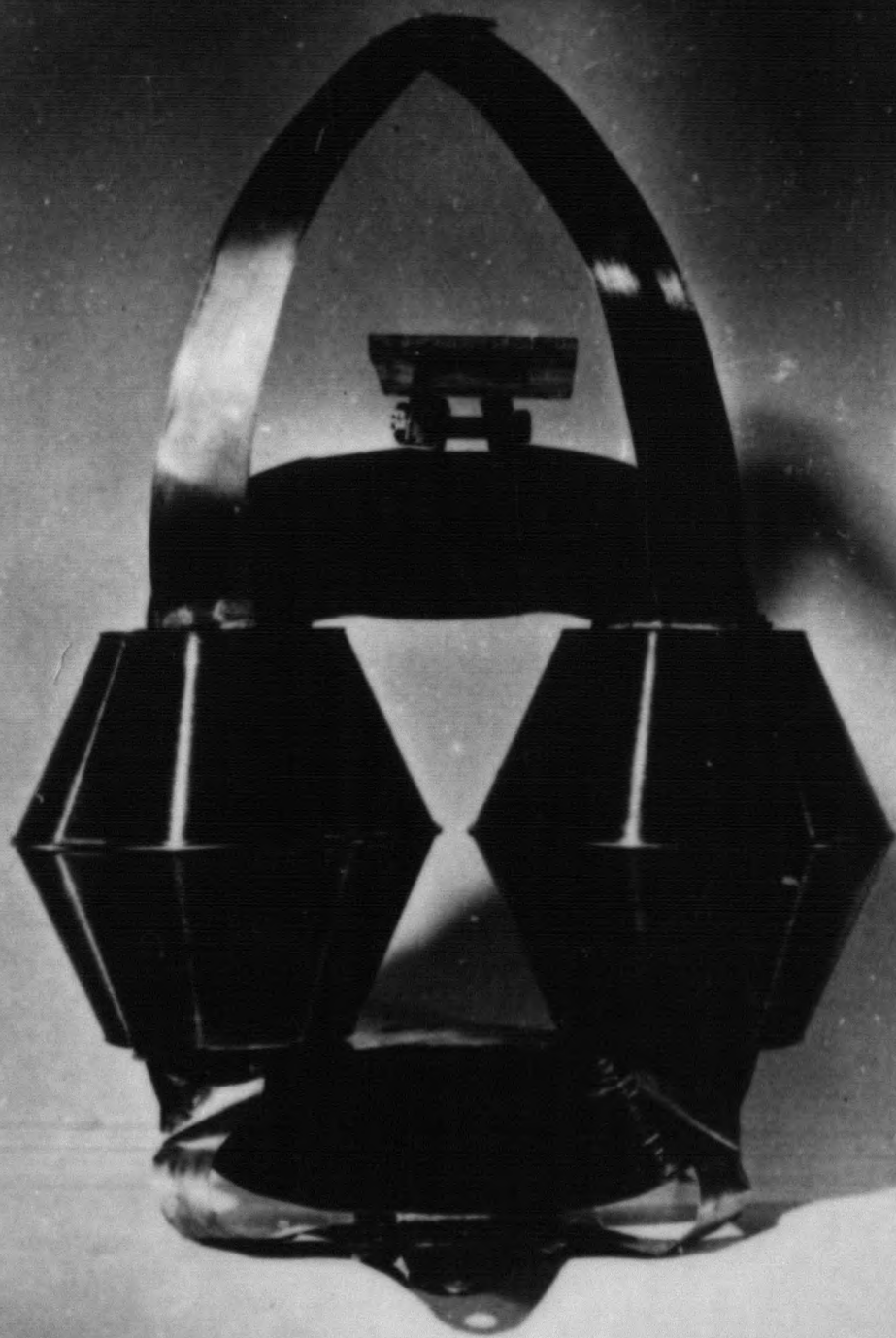


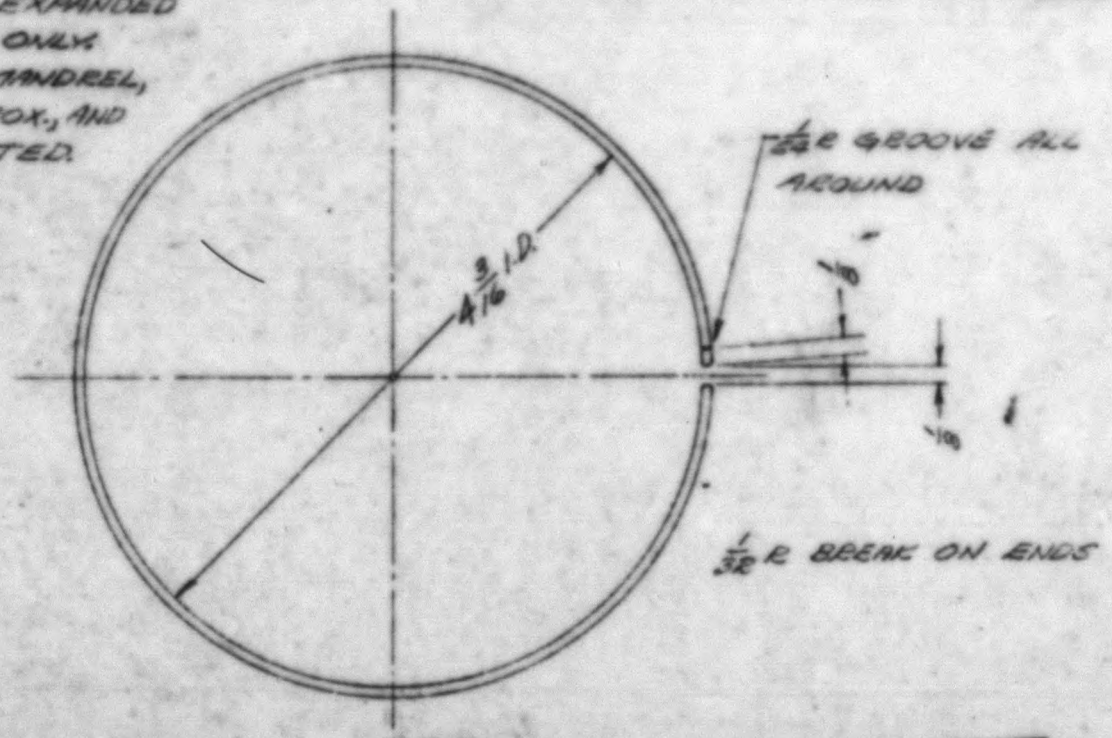
Fig. 2

DESIGN NO. 3W7691A ASST	JOB NO.	DWG. NO.	DATE ISSUED	DATE REV'D	NO. REV'S	DESIGNER	
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MATERIAL: OTE MUSIC WIRE

~~ORIGINAL USE ONLY~~

NOTE:
RING SHOWN EXPANDED
FOR DIMENSIONS ONLY
WIND ON 2" DIA MANDREL,
2.07 TURNS APPROX., AND
LEAVE CONTRACTED.



~~ORIGINAL USE ONLY~~

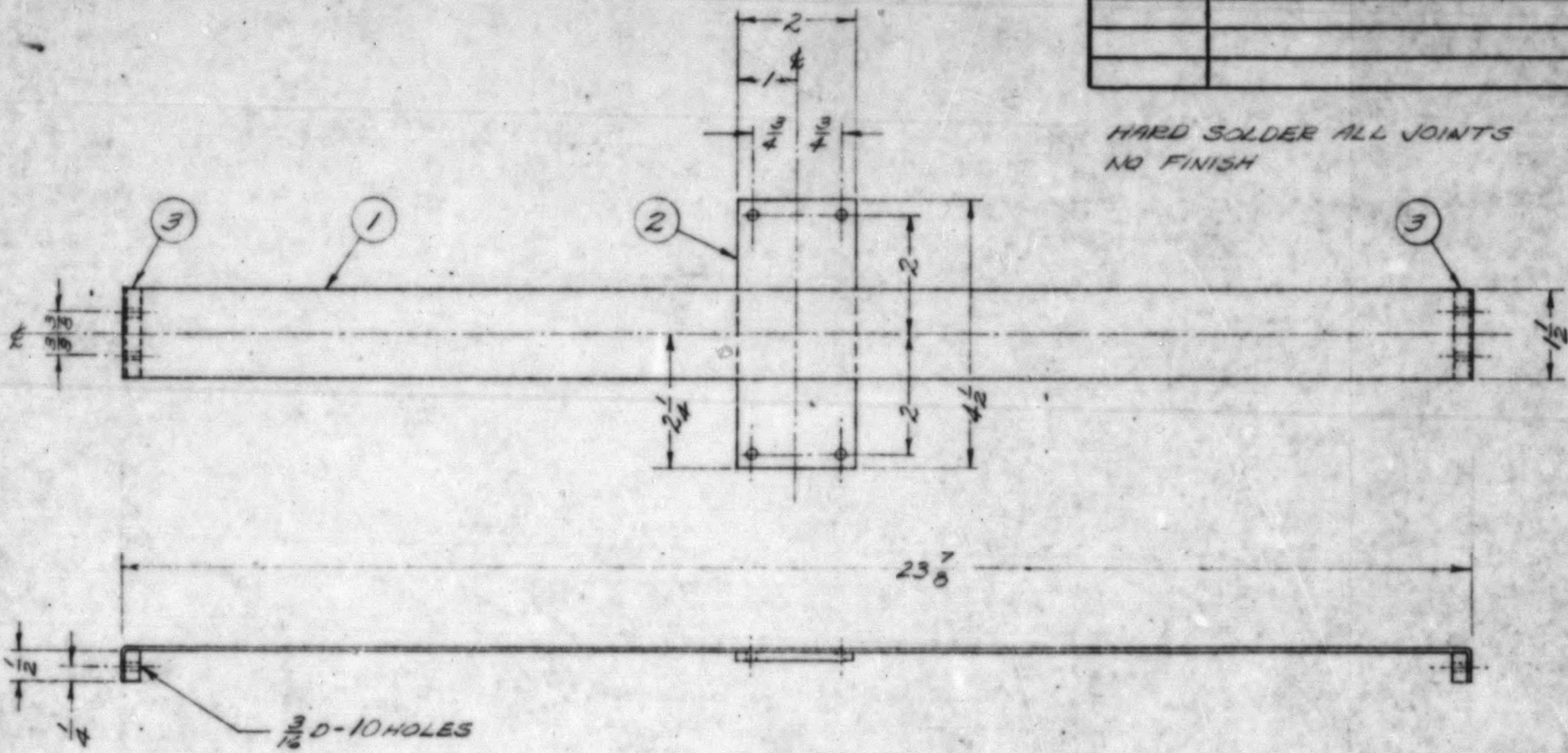
				* SAW CUT, NEAR COR. SHEAR	UNLESS OTHERWISE SPECIFIED	SCALE FULL	PULSE TRANSFORMER	
				✦ BROWN MACHINE	6. TIGHTEN + ON DOWNHOLE	DESIGN JOB NO.	DATE	CORONA RING
				+ AVERAGE MACHINE	8. BREAK ENDS 1/64 DIA.	DRAWN BY	7/9/51	
				# SMOOTH MACHINE	9. 30° CHAMFER ENDS OF ALL SCREW THREADS	CHECK BY		
A. EFH					4. 1/16 PITCH THREAD RELIEF WITH ROUND-NOSE TOOL ON MACH. CUT SCREW THREADS	APPR. BY	7-10-51	
Change Made	Drawn By	Check By	Date	CHANGES		RADIATION LABORATORY		3W7691A
						UNIVERSITY OF CALIFORNIA		
						BERKELEY		

FOR USE ONLY

2

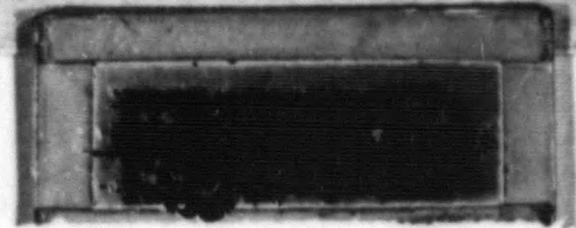
LIST OF MATERIAL	
ITEM OR PART NUMBER	DESCRIPTION
1	.037 HARD COPPER SHEET
2	1/4 BEASS SHEET
3	1/2 X 1/2 BEASS BAR

HARD SOLDER ALL JOINTS
NO FINISH



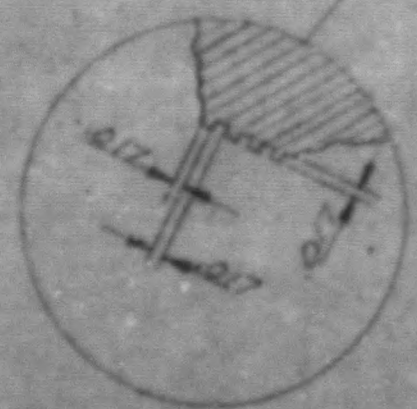
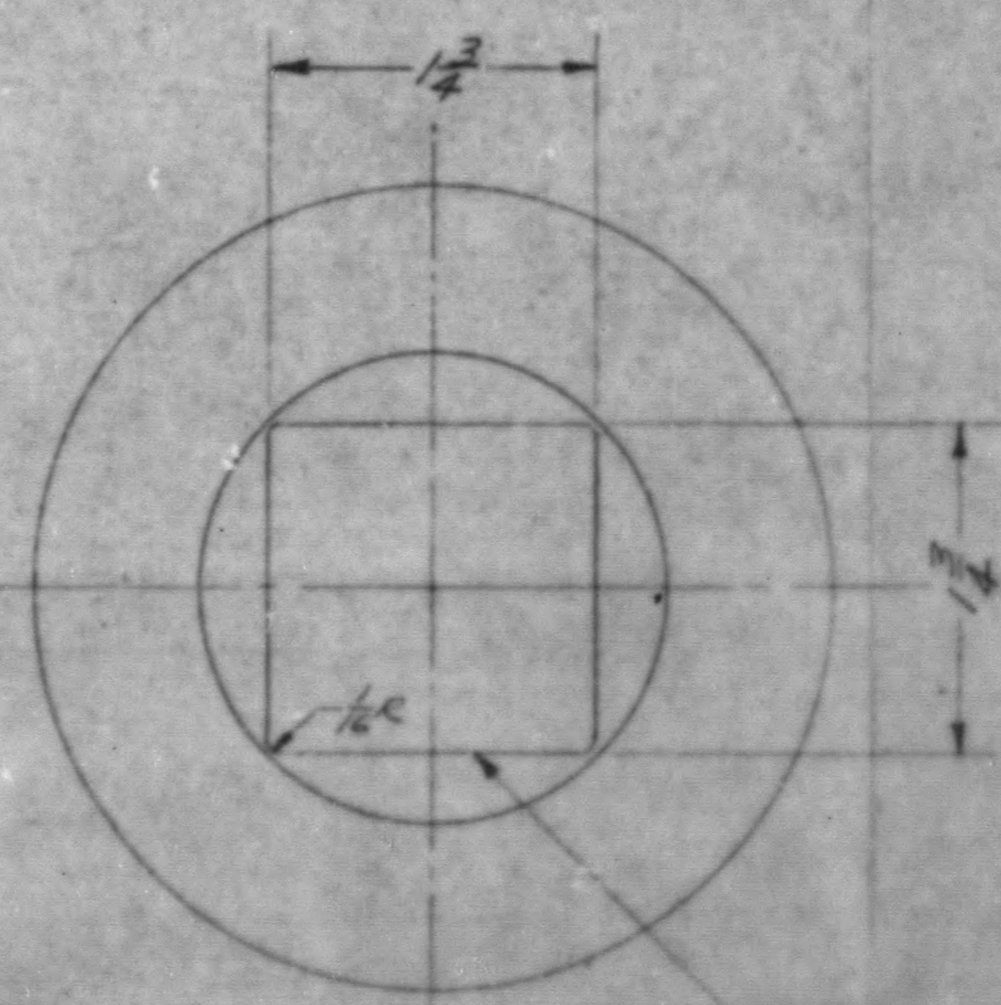
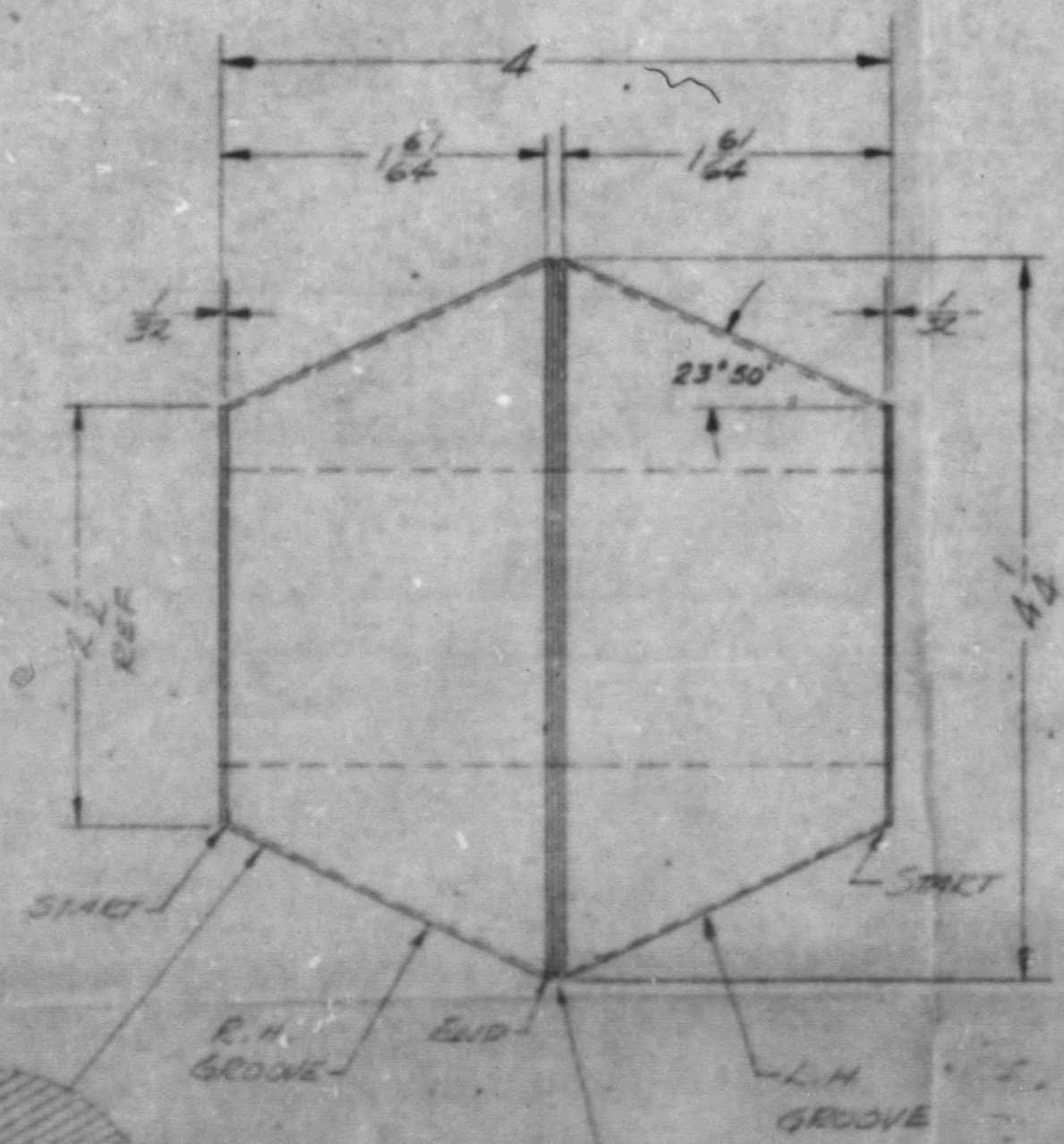
FOR USE ONLY

FINISHES				SHOP NOTES		SHOP ORDERS		DESIGN JOB NO.	
				* SAW CUT, FLAME CUT, SHEAR	UNLESS OTHERWISE SPECIFIED	JOB NO.		PULSE TRANSFORMER	
				ROUGH MACHINE	1. TOLERANCES ON DIMENSIONS	SERIAL NO.		CORE BRACKET	
				AVERAGE MACHINE	2. BREAK EDGES 1/64 MAX.	DATE ISSUED	3W7664 PL	SCALE	HALF
				SMOOTH MACHINE	3. 30° CHAMFER ENDS OF ALL SCREW THREADS	DATE RECD.		DO NOT SCALE THIS DRAWING	
A	1951	F.H.	7/9/51		4. 1 1/2 PITCH THREAD RELIEF WITH ROUND NOSE TOOL ON MACH CUT SCREW THREADS	NO. RECD.		RADIATION LABORATORY	
Change List	Drawn By	Check By	Date	CHANGES		DELIVER TO		UNIVERSITY OF CALIFORNIA - BERKELEY	
								DRAWN BY	EFH
								DATE	7-9-51
								CHECKED BY	REHeller
								DATE	7-9-51
								CHECKED BY	EBuch
									3W7682A

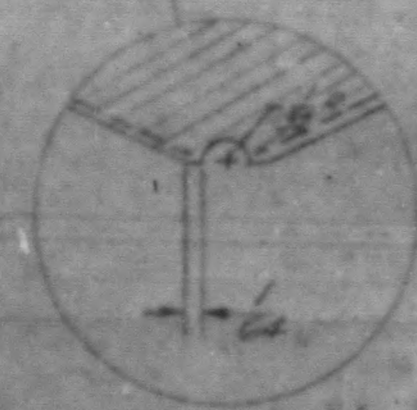


LIST OF MATERIAL	
ITEM OR PART NUMBER	DESCRIPTION
	LUCITE

NO FINISH



DETAIL OF HELICAL GROOVES 64 TURNS EACH

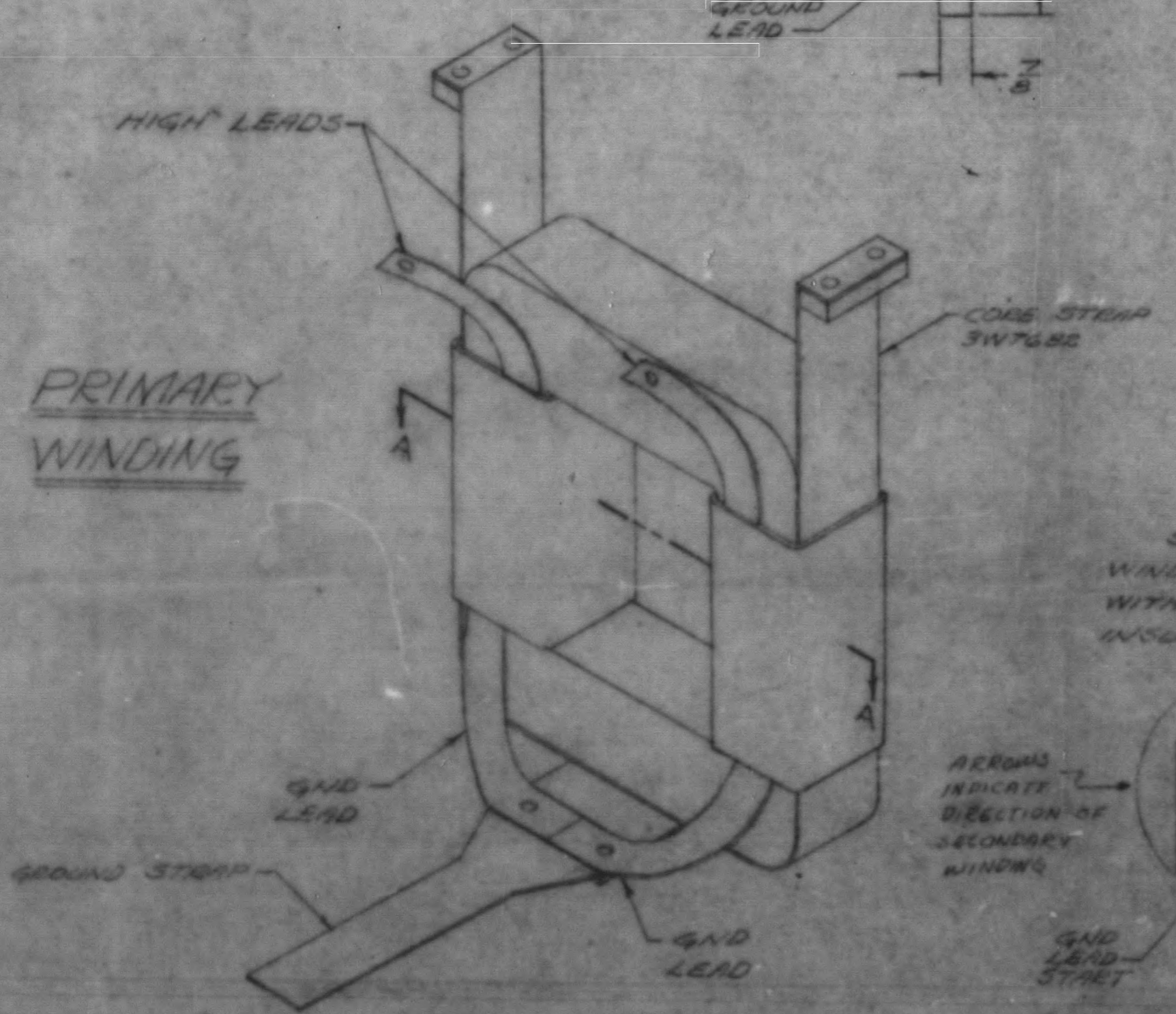
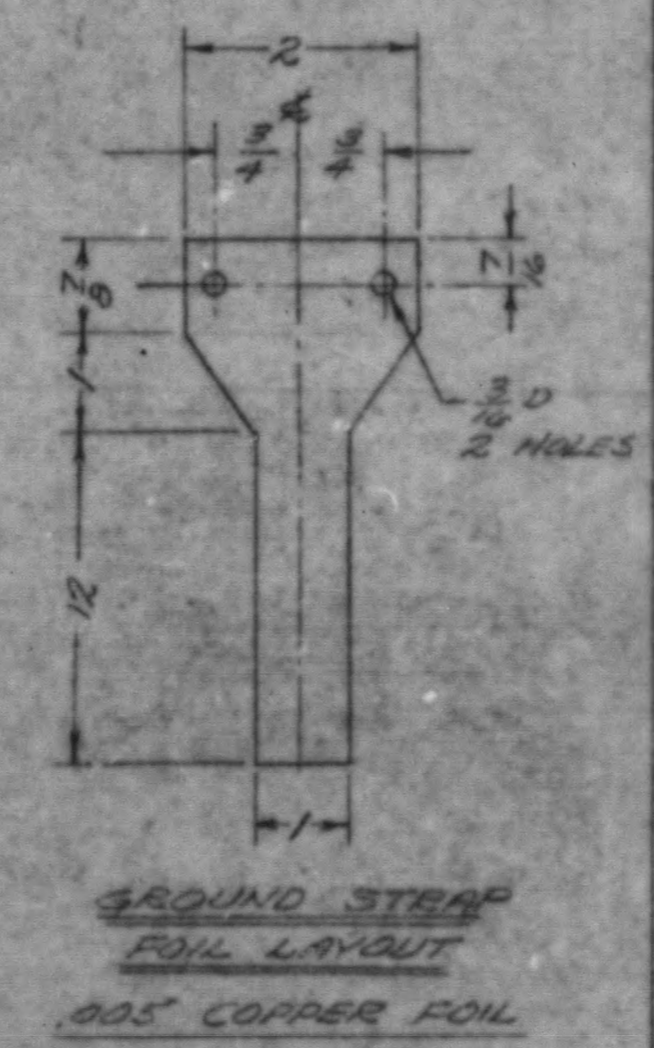
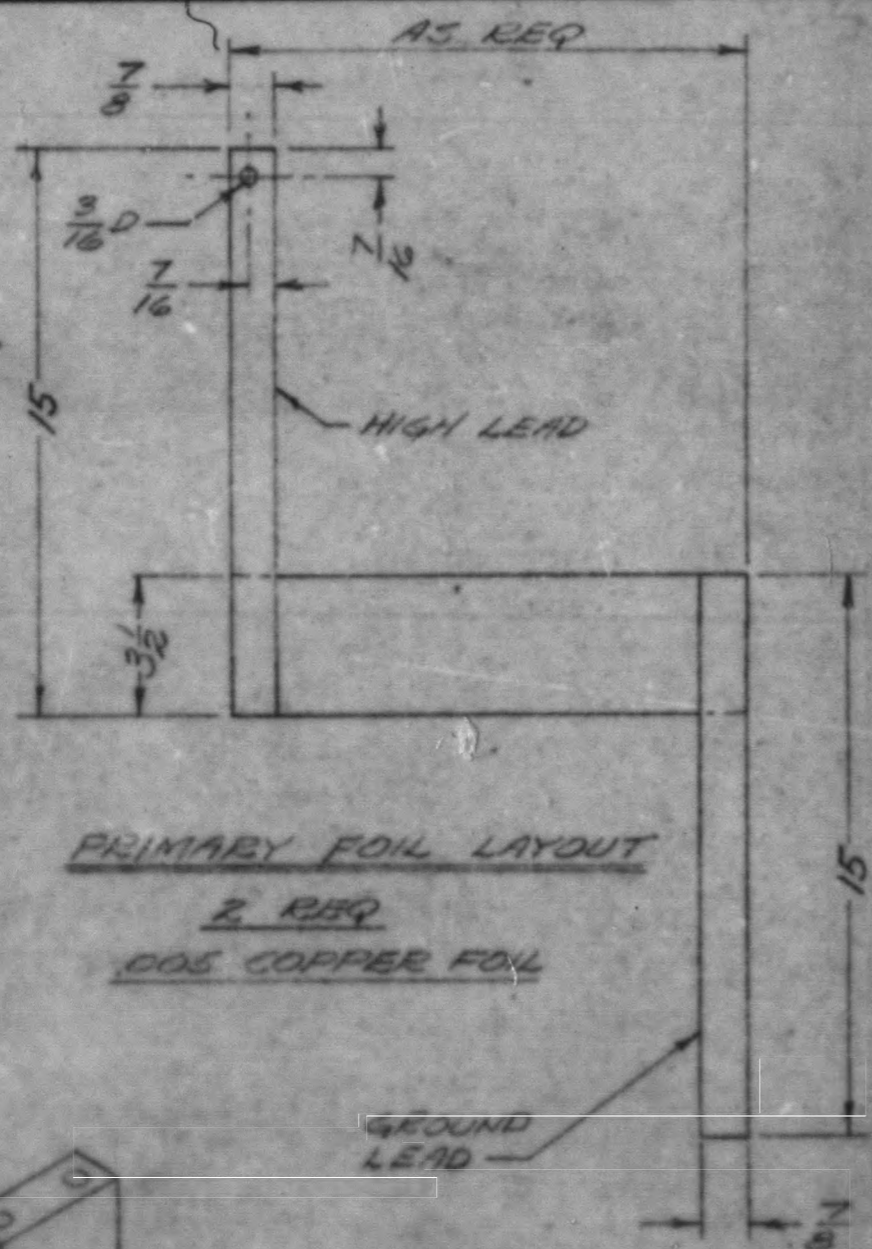


FINISHES	SHOP NOTES	SHOP ORDERS	DESIGN JOB NO.	PULSE TRANSFORMER COIL FORM	
				SCALE	DATE
* S.W. CUT, FLARE CUT, BEAR	UNLESS OTHERWISE SPECIFIED	NO. NO.	SHOWN ON	FULL	7-5-51
✓ MACHINING	1. TOLERANCES ON DIMENSIONS	DATE ORDERED		DO NOT SCALE THIS DRAWING	
+ AVERAGE MACHINING	2. BREAK SHOTS 1/8" MAX.	DATE RECEIVED			
# SMOOTH MACHINING	3. 30° CHAMFER ENDS OF ALL SCREW THREADS	NO. APPROVED			
	4. 1/8" PITCH THREAD SETUP WITH ROUND NIBBLER TOOL ON EACH CUT SCREW THREAD	DELIVER TO			
Change Order No.	Check by	Date	CHANGES	DRYER BY	APPR BY

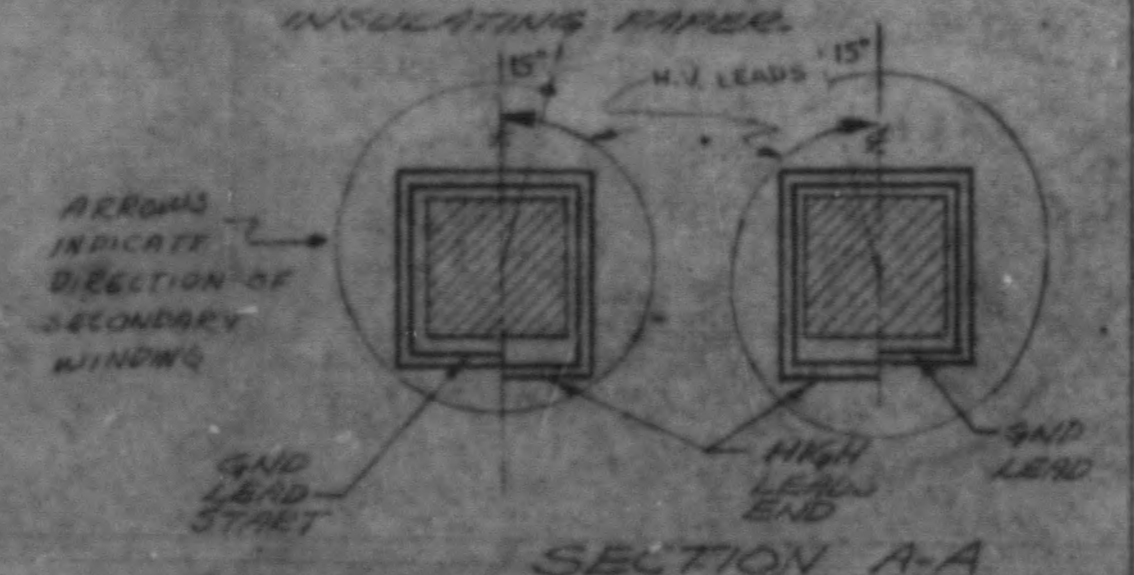
RADIATION LABORATORY
UNIVERSITY OF CALIFORNIA-BERKELEY

3W7653

INTERNAL USE ONLY

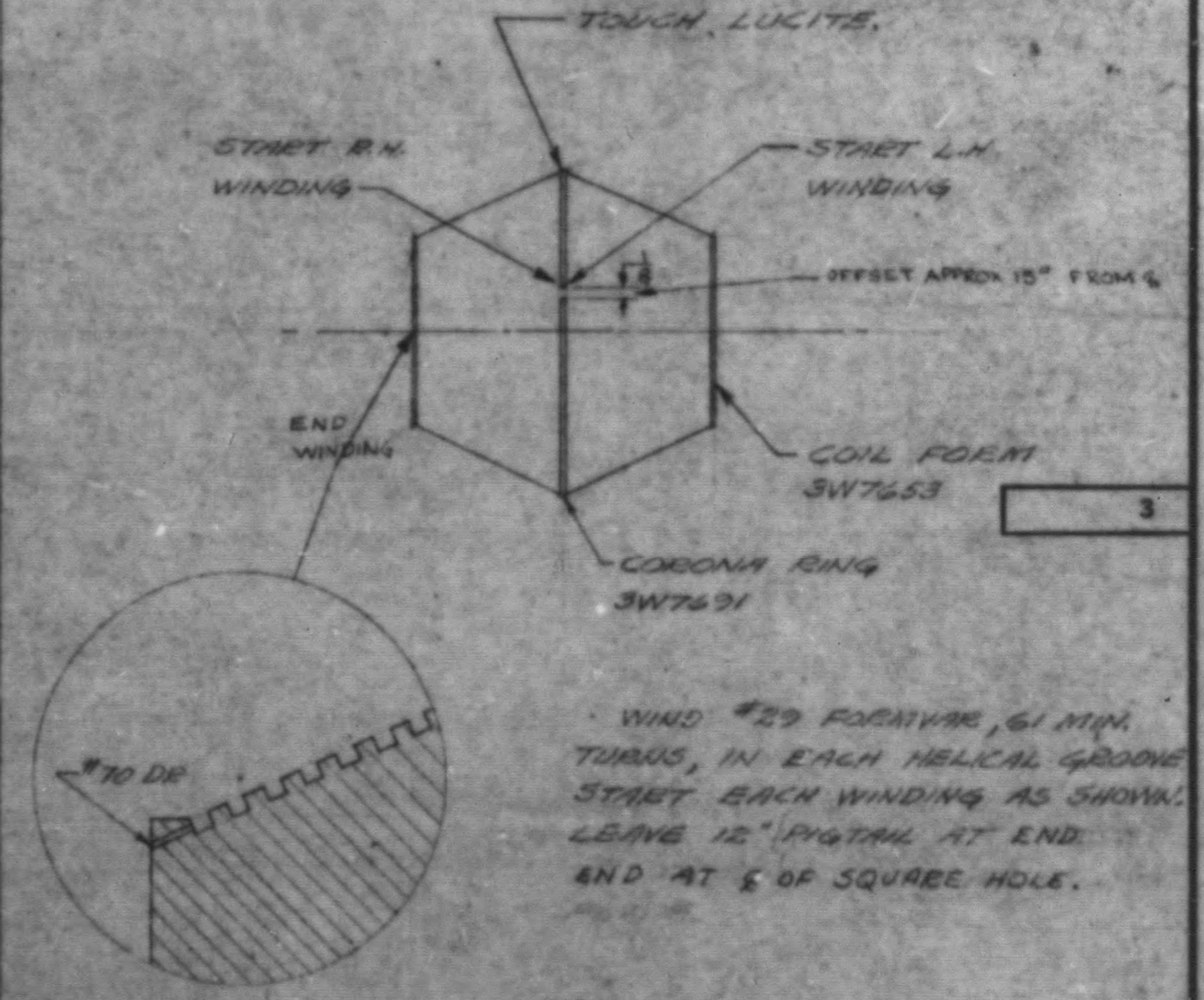


START AND FINISH EACH WINDING AT $\frac{1}{8}$ OF CORE. INSULATE WITH DOUBLE THICKNESS OF 002 INSULATING PAPER.



LIST OF MATERIAL	
ITEM OR PART NUMBER	DESCRIPTION

SOLDER START OF WINDINGS TO A POINT ON CORONA RING NEXT TO $\frac{1}{8}$ GAP. LEAVE A 12" PICTAIL OF #26 WIRE, COVERED WITH DIELECTRIC INSULATION FROM R9580, FROM THE SAME POINT. SOLDER HEAT MUST NOT TOUCH LUCITE.



WIND #29 FORMVAR, 61 MIN. TURN, IN EACH HELICAL GROOVE. START EACH WINDING AS SHOWN. LEAVE 12" PICTAIL AT END. END AT $\frac{1}{8}$ OF SQUARE HOLE.

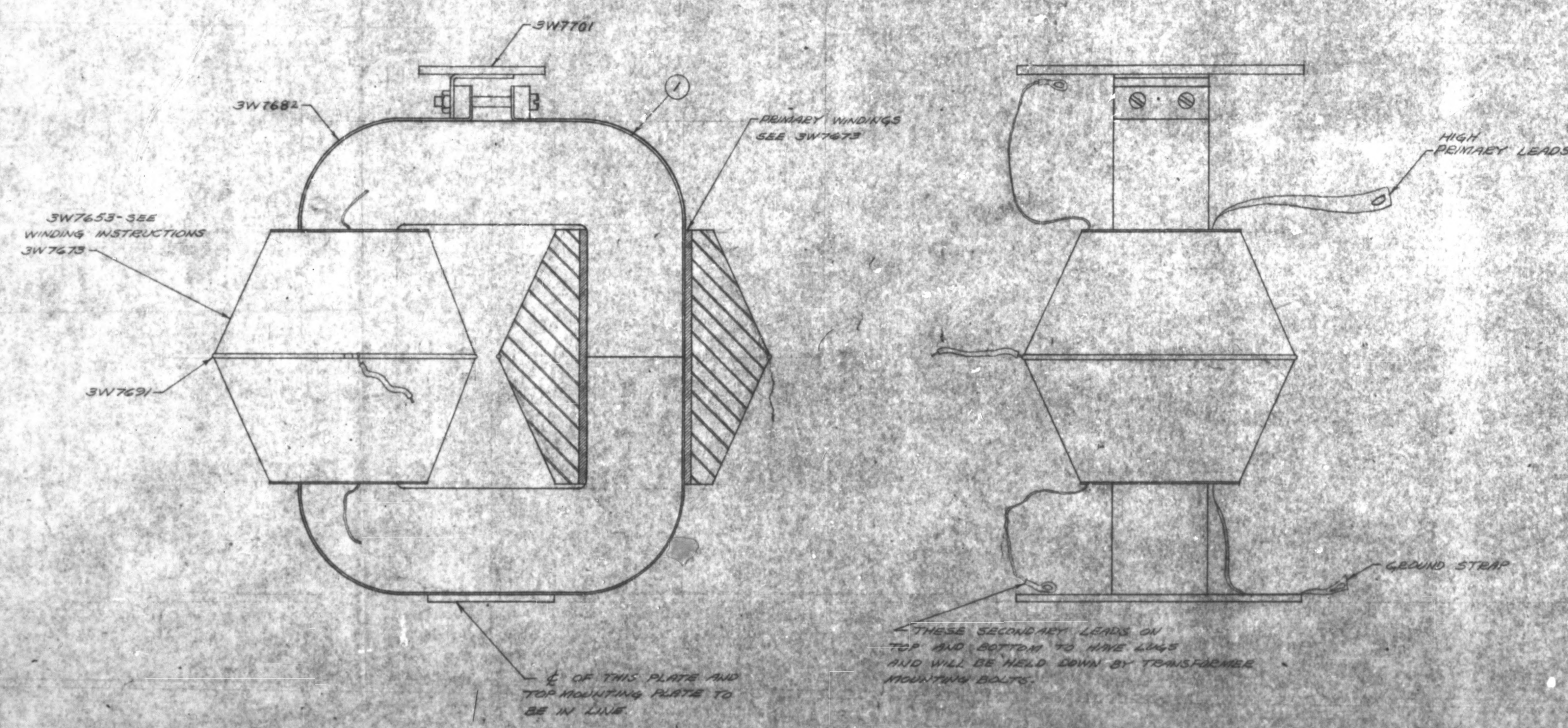
SECONDARY WINDING

TRIM GROUND LEADS $\frac{3}{16}$ PUNCH TO MATCH GROUND STRAP SO THAT ALL CAN BE BOLTED DOWN TO CORE BRACKET. SOLDER GROUND LEADS AND STRAP TOGETHER.

FINISHES		SHOP NOTES	SHOP ORDERS	DESIGN JOB NO.	PULSE TRANSFORMER WINDING INSTRUCTIONS	
*	SAW CUT FLAME CUT SHEAR	WELLS OTHERWISE SPECIFIED	FOR NO. SERIAL NO.	200-14	SCALE N.T.S.	
*	ROUND RACHING	1. TOLERANCES ON DIMENSIONS	DATE MADE	SHOWN ON 3W 7662 355-V	DO NOT SCALE THIS DRAWING	
*	AVERAGE RACHING	2. 20° CHAMFER ENDS OF ALL SCREW THREADS	DATE RECD.		RADIATION LABORATORY UNIVERSITY OF CALIFORNIA-BERKELEY	
#	SMOOTH RACHING	3. 1/8" PITCH THREAD RELIEF WITH SHARP HOLES FOR ON RACK CUT SCREW THREADS	NO. REQD.		DRAWN BY EFL	DATE 7-9-51
			QUANTITY TO		CHECKED BY RE [Signature]	APP'D BY [Signature]
C	GPL 716 181-61	CHG WINDING WSTR.				3W7673C
D	GPL 716 181-61	CHG WINDING INSTR.				
A	GPL 716 181-61	CHG WINDING INSTR.				
Change Order No.	Drawn By	Date	Checked By	Date		

OFFICIAL USE ONLY

LIST OF MATERIAL		
ITEM OR PART NUMBER	DESCRIPTION	QUAN.
3W7664	ASSEMBLY (THIS)	1
3W7655	COIL FORM	2
3W7673	WINDING INSTRUCTIONS	REF
3W7682	COPE BRACKET	1
3W7691	COBALT RING	2
3W7701	TOP MOUNTING PLATE	1
1	HYPERLIL COBE, 1/8" X 1/8" PILE	
	3X4 WINDOW, 002 HYPERLIL	2



END

REV.	DESCRIPTION	DATE	BY	CHKD BY	REVISION	DESIGN NO.	PULSE TRANSFORMER ASSEMBLY	
							DATE	BY
						RADIATION LABORATORY UNIVERSITY OF CALIFORNIA-BERKELEY		
						PART FULL		
						MATERIAL SOURCE		
						REVISED BY	DATE	
						BY	DATE	
						DATE		
						BY		
								3W7664