

FIG. 1. Power Control Cubicle, Front View (Photo C-12107)

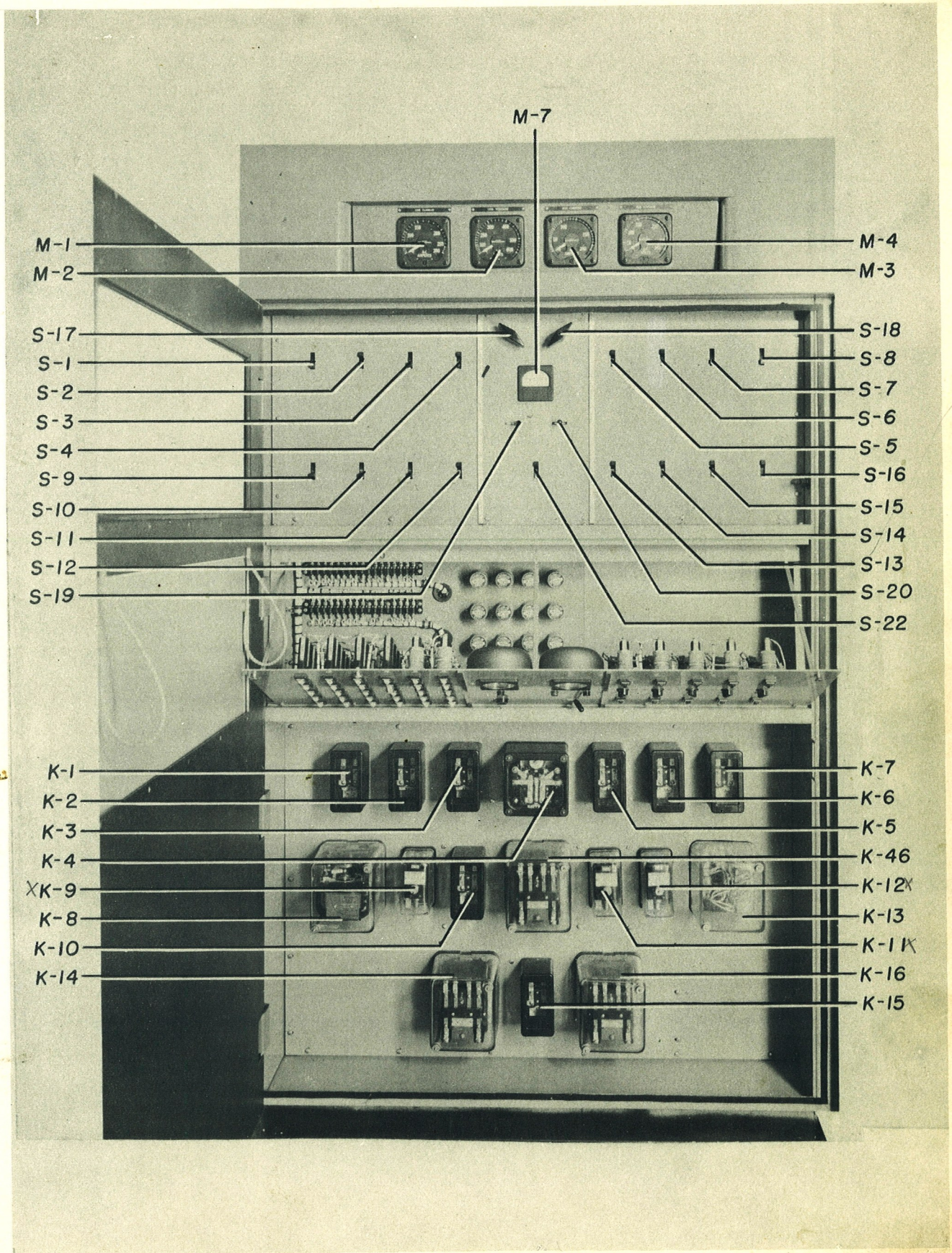
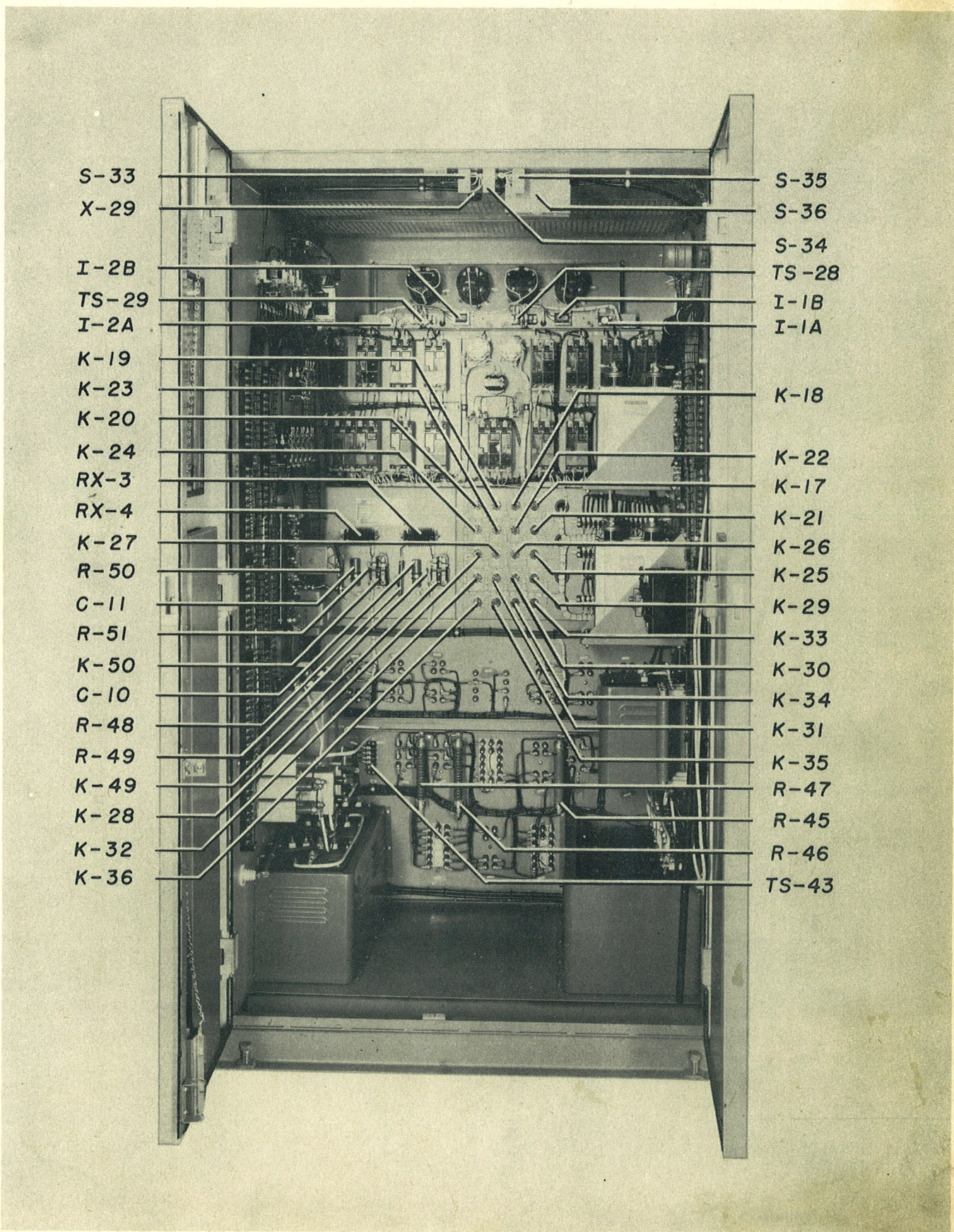


FIG. 2. Power Control Cubicle, Drop-Down Panel (Photo C-12108)



S-33
 X-29

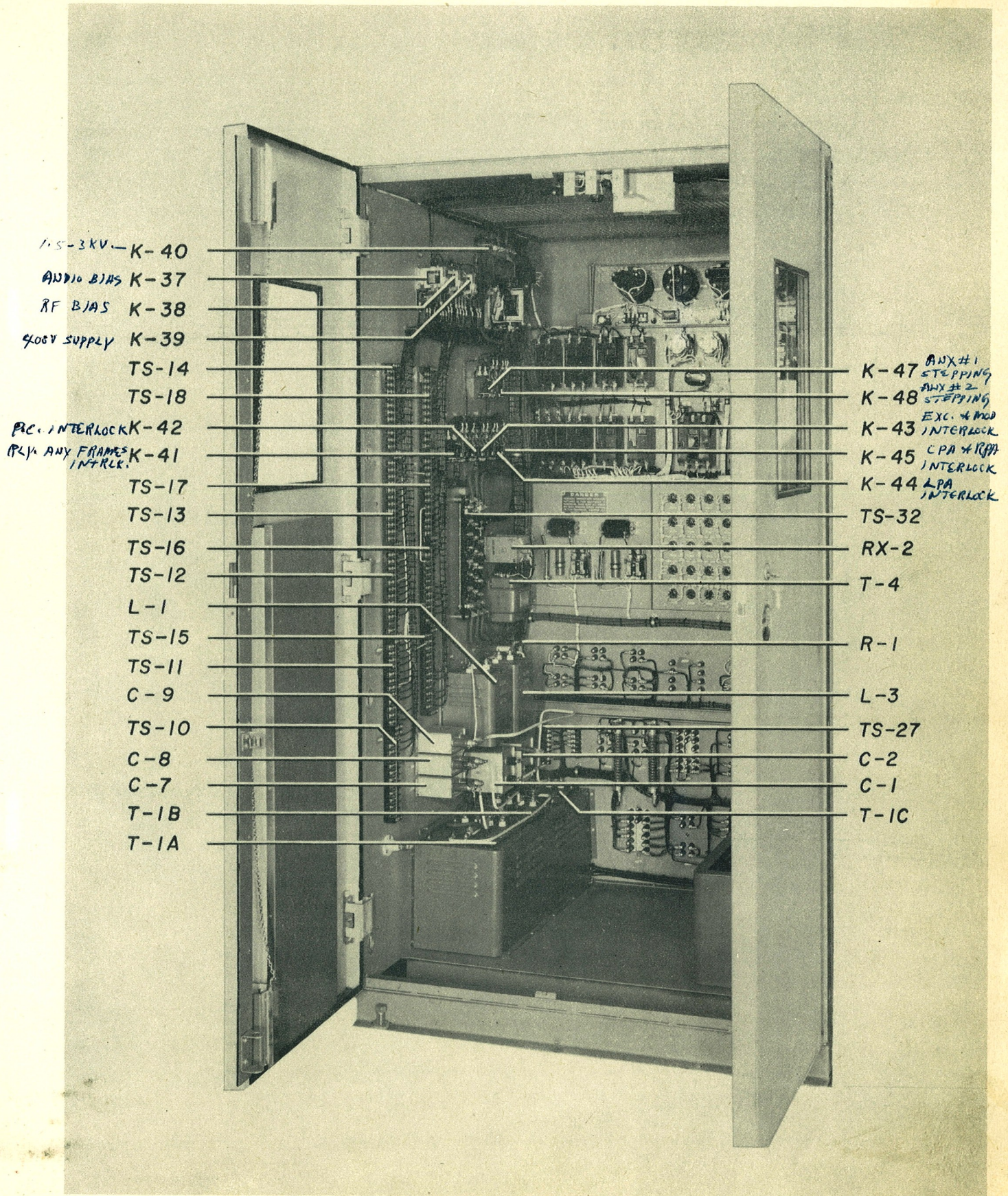
 I-2B
 TS-29
 I-2A
 K-19
 K-23
 K-20
 K-24
 RX-3
 RX-4
 K-27
 R-50
 C-11
 R-51
 K-50
 C-10
 R-48
 R-49
 K-49
 K-28
 K-32
 K-36

S-35
 S-36
 S-34
 TS-28
 I-1B
 I-1A

 K-18

 K-22
 K-17
 K-21
 K-26
 K-25
 K-29
 K-33
 K-30
 K-34
 K-31
 K-35
 R-47
 R-45
 R-46
 TS-43

FIG. 3. Power Control Cubicle Interior (Photo C-20273)



1.5-3KV - K-40

AUDIO BIAS K-37

RF BIAS K-38

400V SUPPLY K-39

TS-14

TS-18

PC INTERLOCK K-42

PLY ANY FRAME INTRLK. K-41

TS-17

TS-13

TS-16

TS-12

L-1

TS-15

TS-11

C-9

TS-10

C-8

C-7

T-1B

T-1A

K-47 ANX #1 STEPPING

K-48 ANX #2 STEPPING

K-43 EXC. & MOD INTERLOCK

K-45 CPA & RPA INTERLOCK

K-44 LPA INTERLOCK

TS-32

RX-2

T-4

R-1

L-3

TS-27

C-2

C-1

T-1C

FIG. 4. Power Control Cubicle Interior (Photo C-20275)

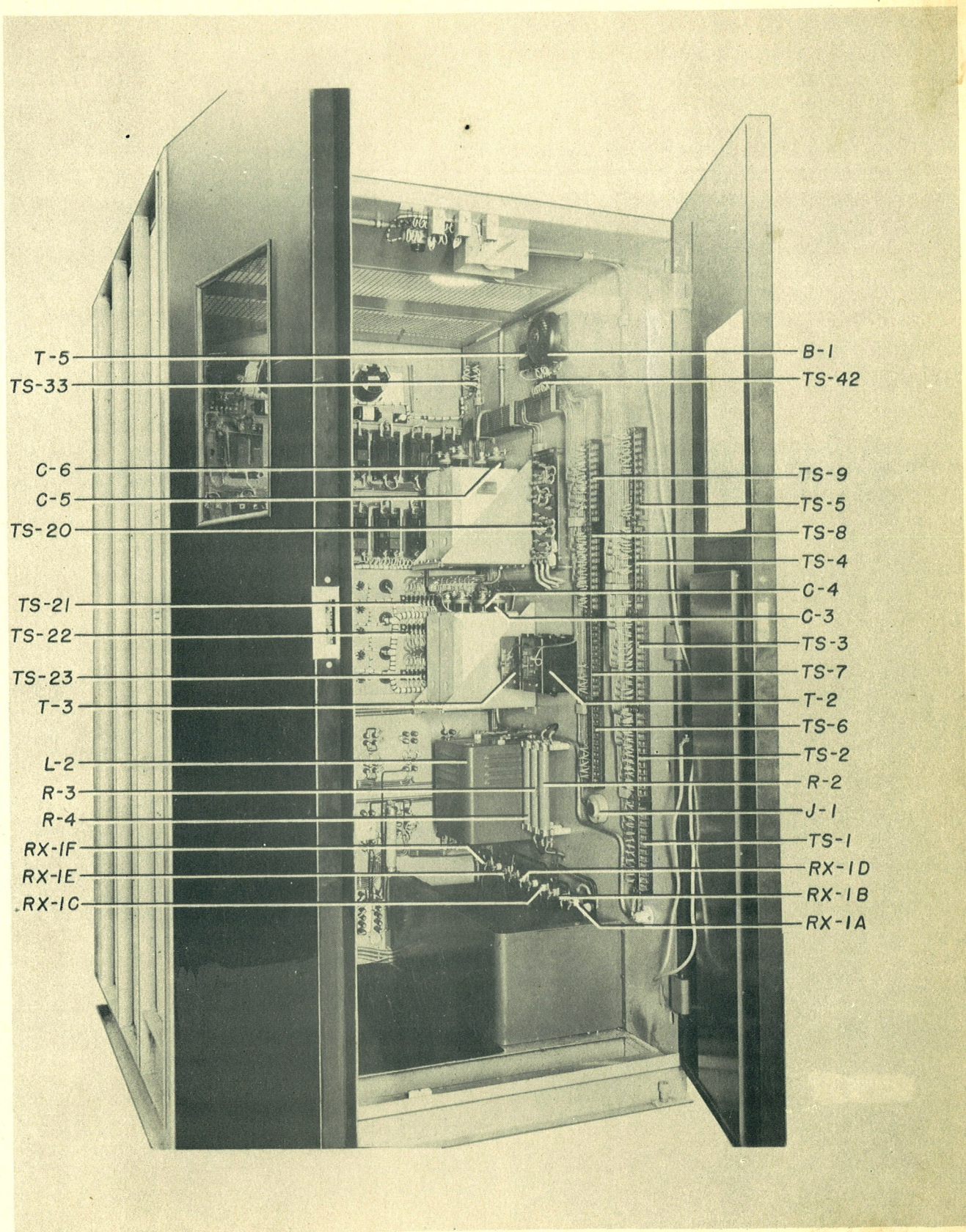


FIG. 5. Power Control Cubicle, Interior, Right Side View (Photo C-12113)

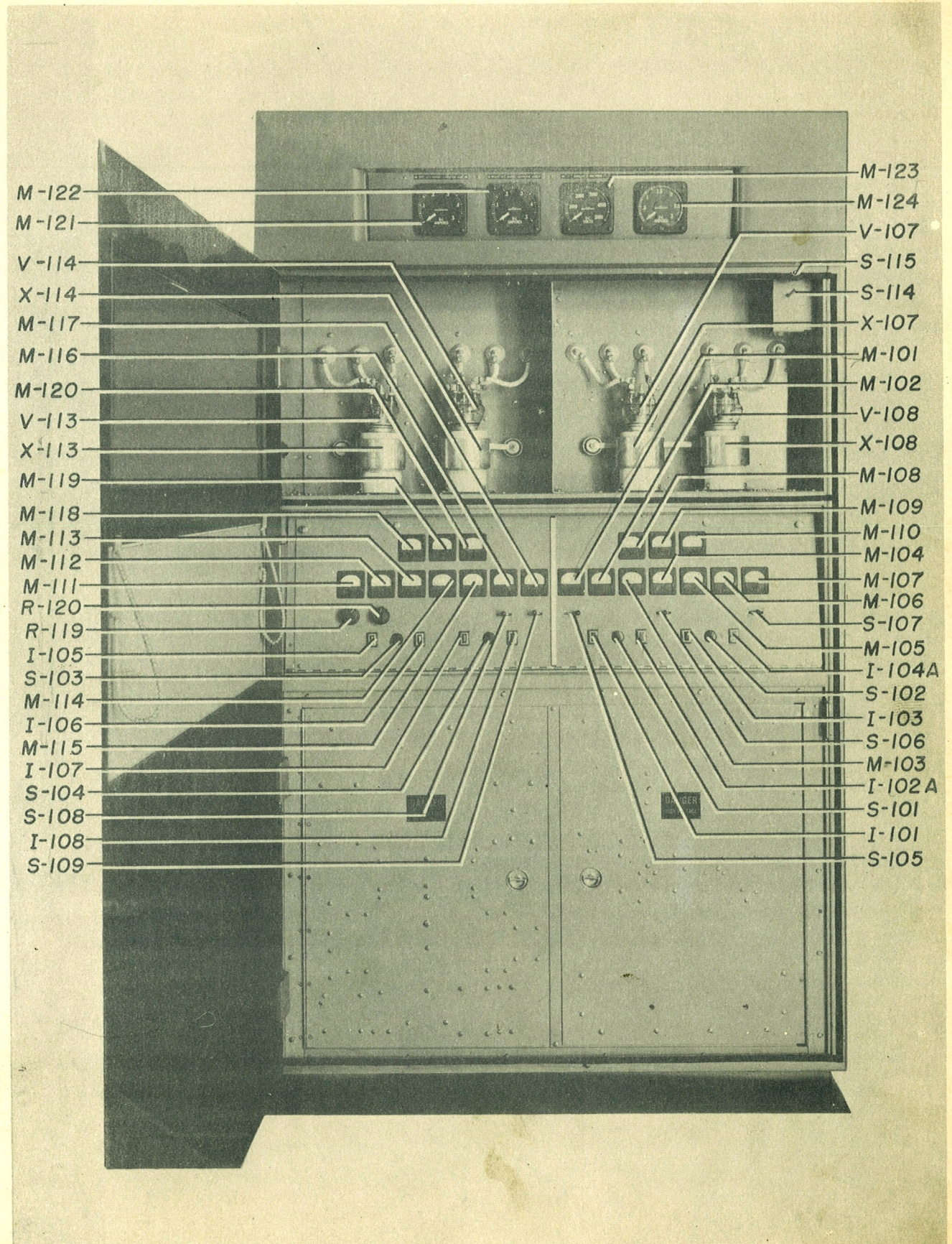


FIG. 6. Exciter Cubicle, Front View (Photo C-12115)

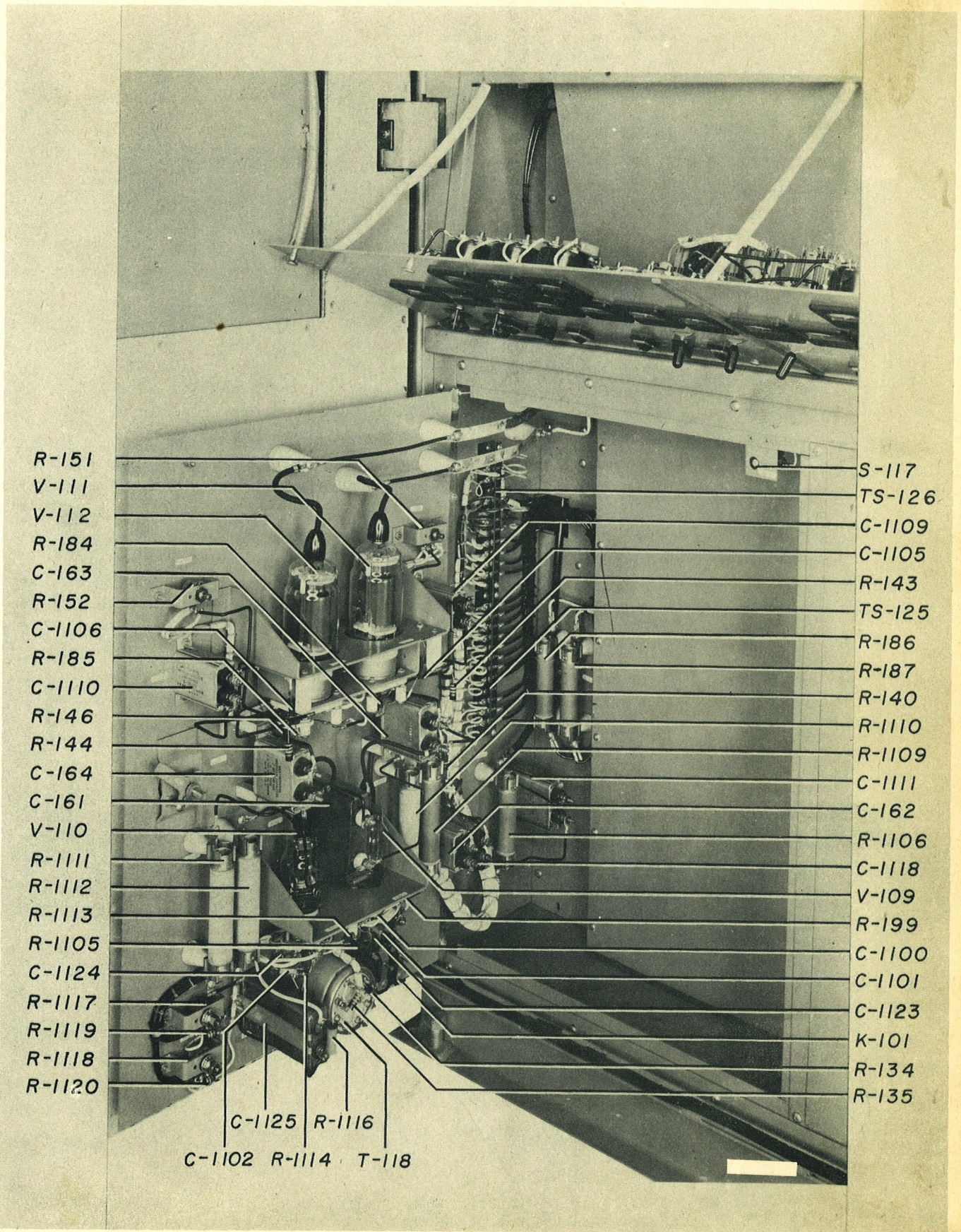


FIG. 7. Exciter Cubicle Audio Door (Photo C-20270)

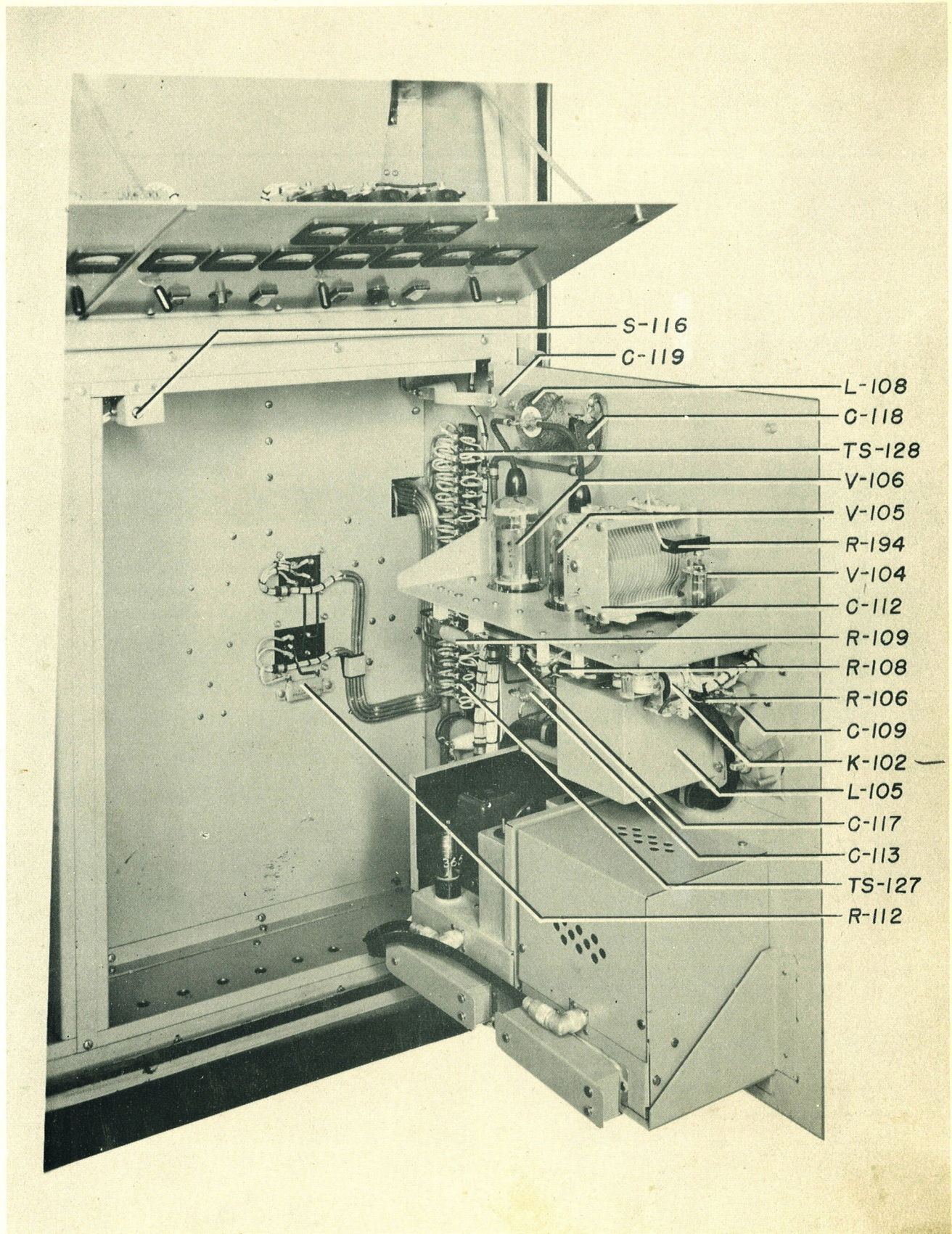


FIG. 8. Exciter Cubicle, Radio Door (Photo C-12118)

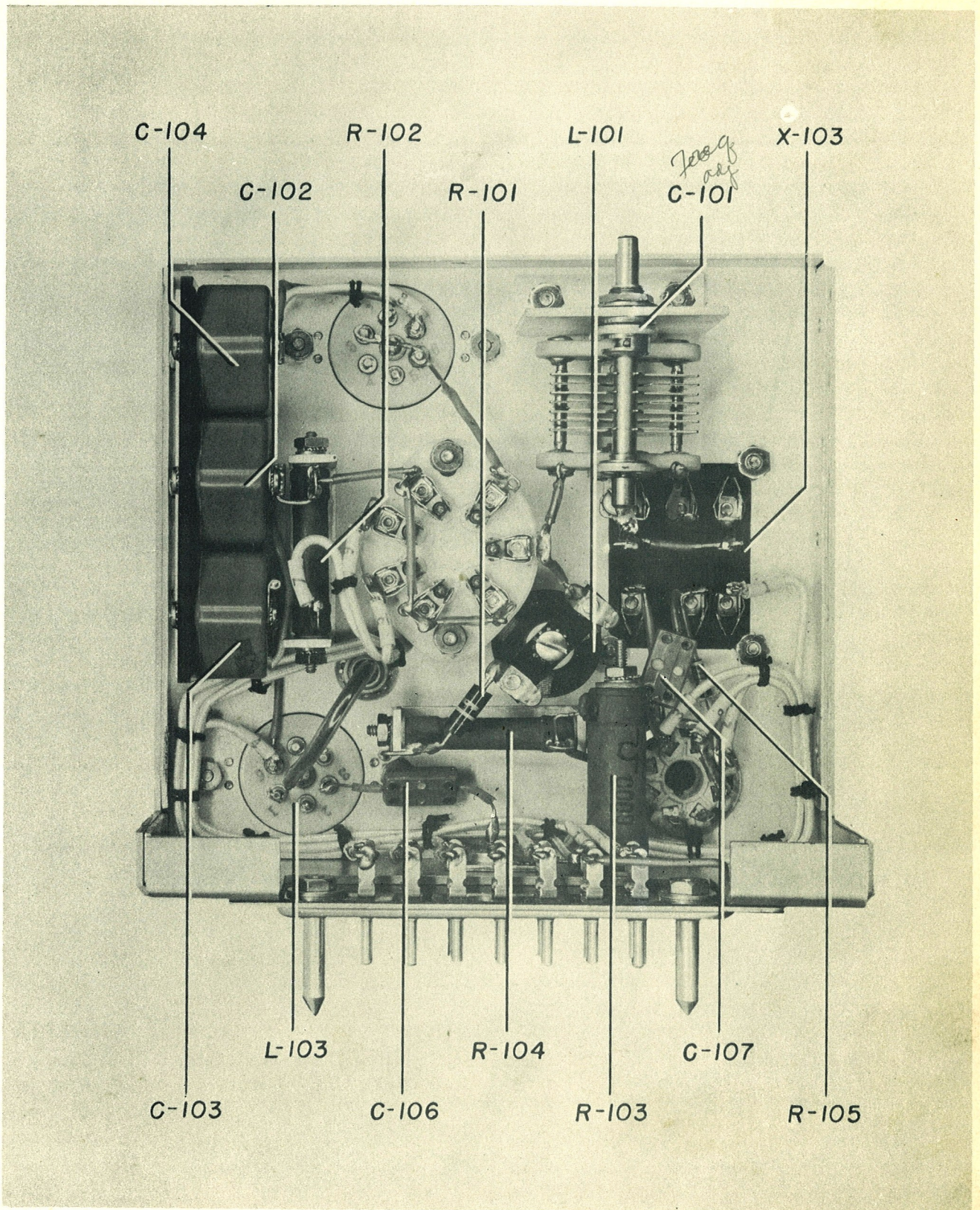


FIG. 9. Exciter Cubicle. Oscillator (Photo C-12098)

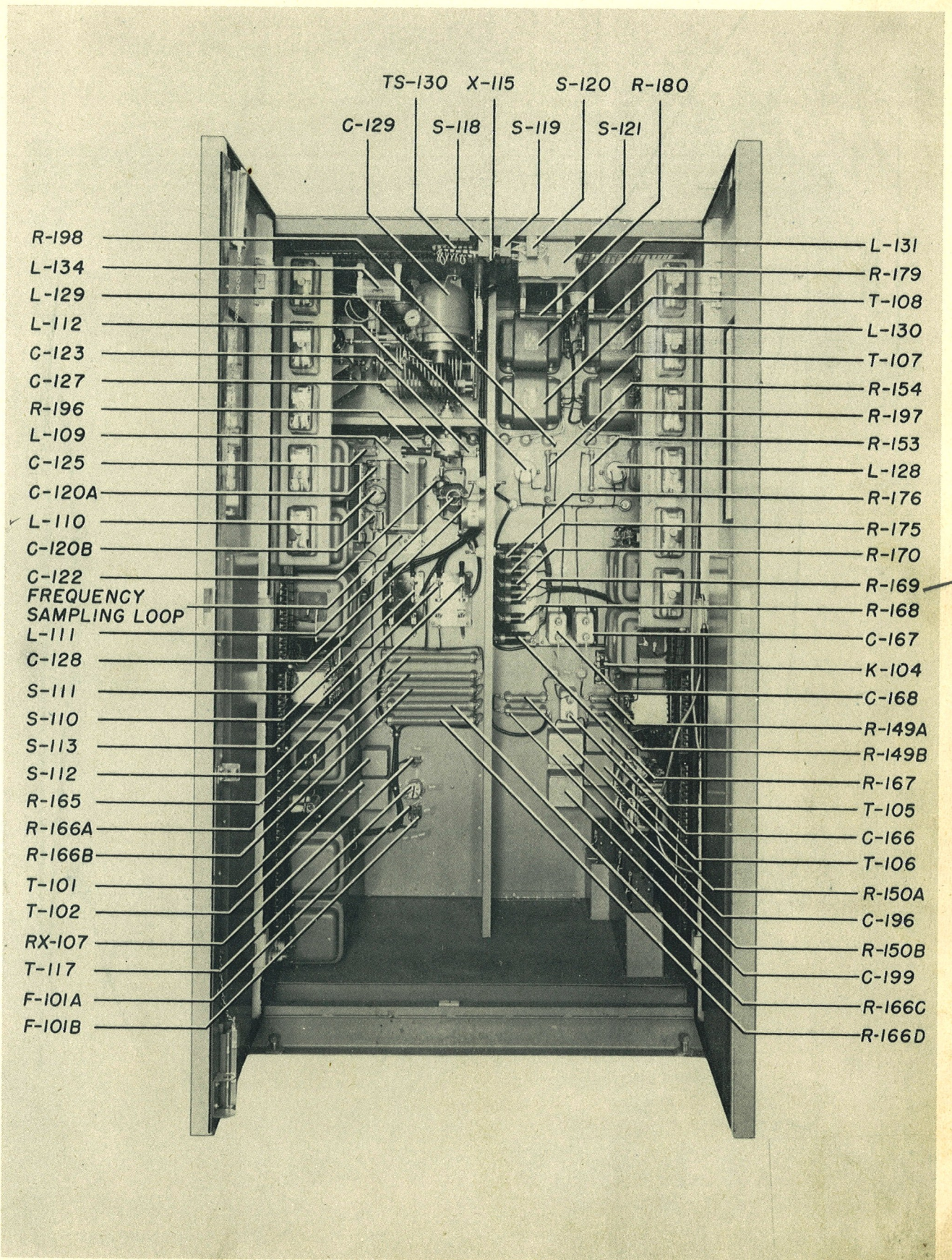


FIG. 10. Exciter Cubicle Interior (Photo C-20271)

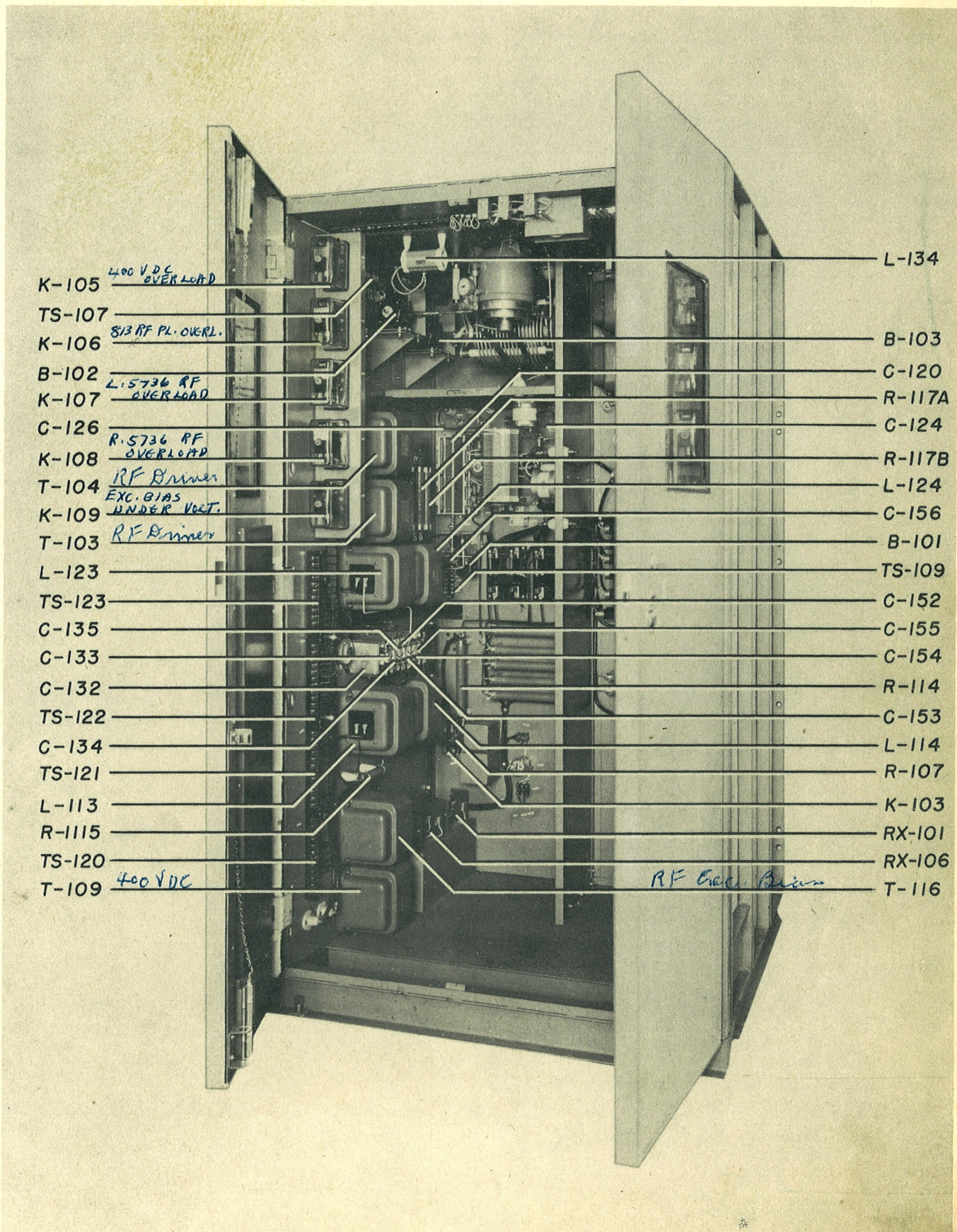


FIG. 11. Exciter Cubicle Interior, Left Side (Photo C-20267)

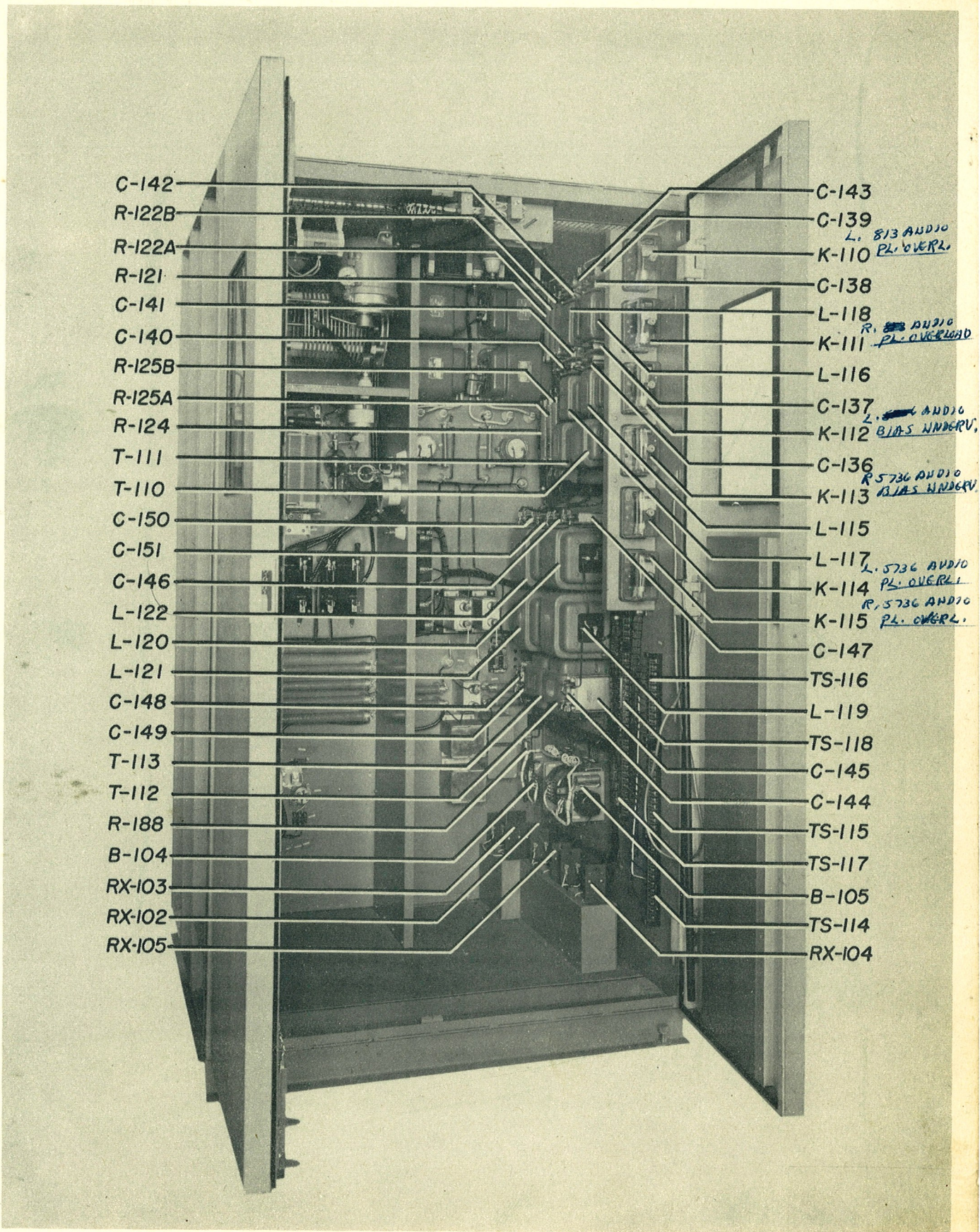


FIG. 12. Exciter Cubicle Interior, Right Side (Photo C-20269)

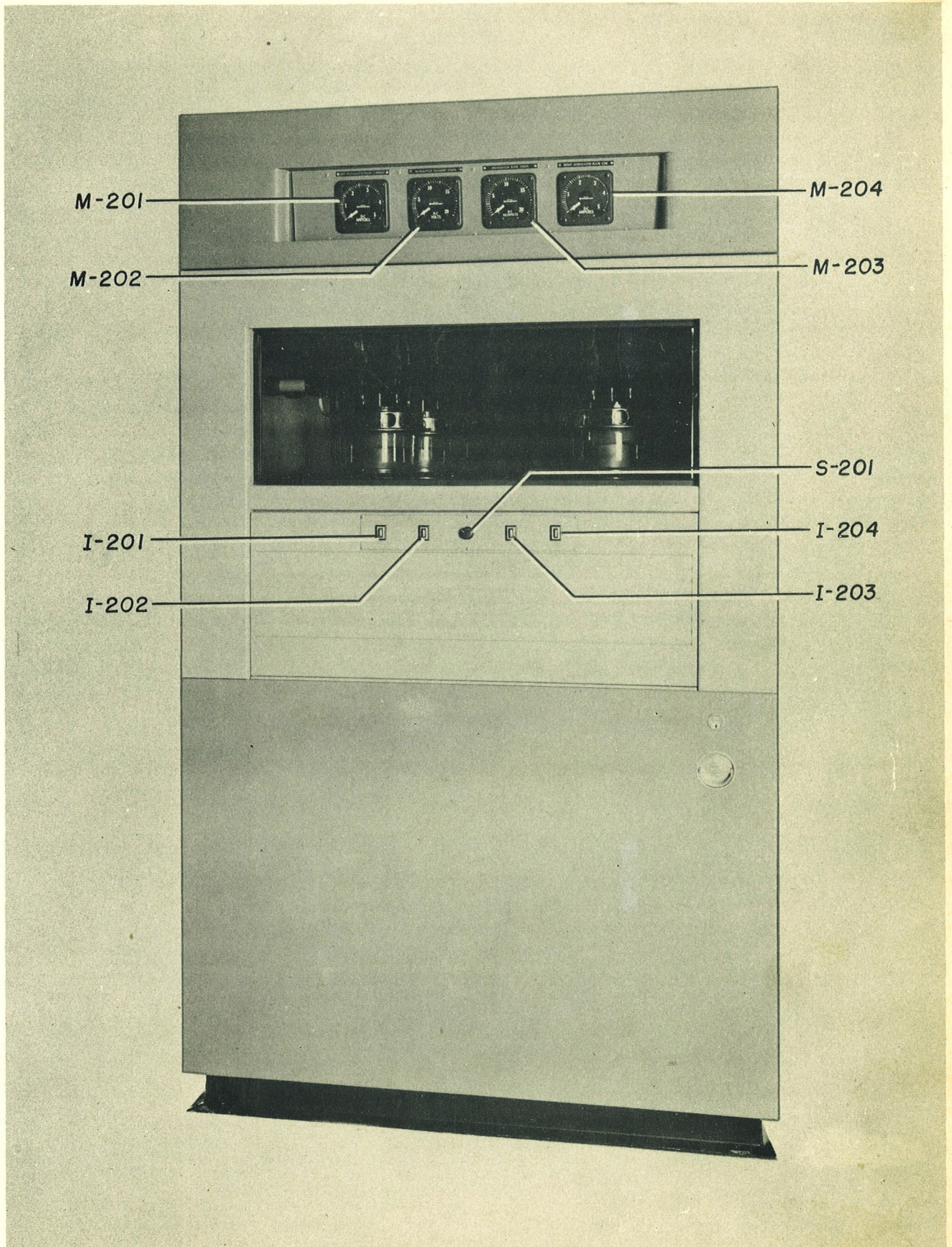


FIG. 13. Modulator Cubicle, Front View (Photo C-12123)

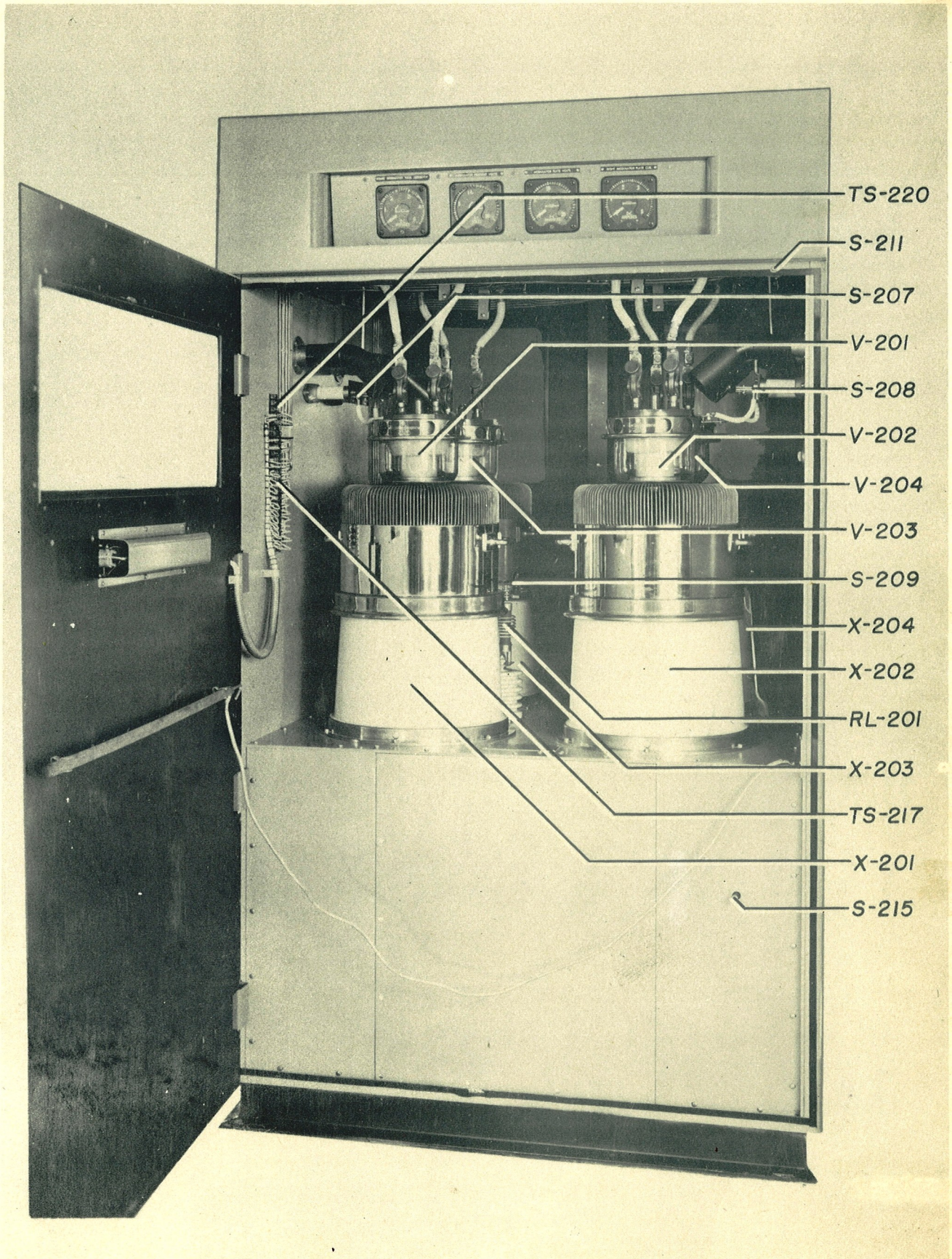


FIG. 14. Modulator Cubicle. Interior. Front View (Photo C-12124)

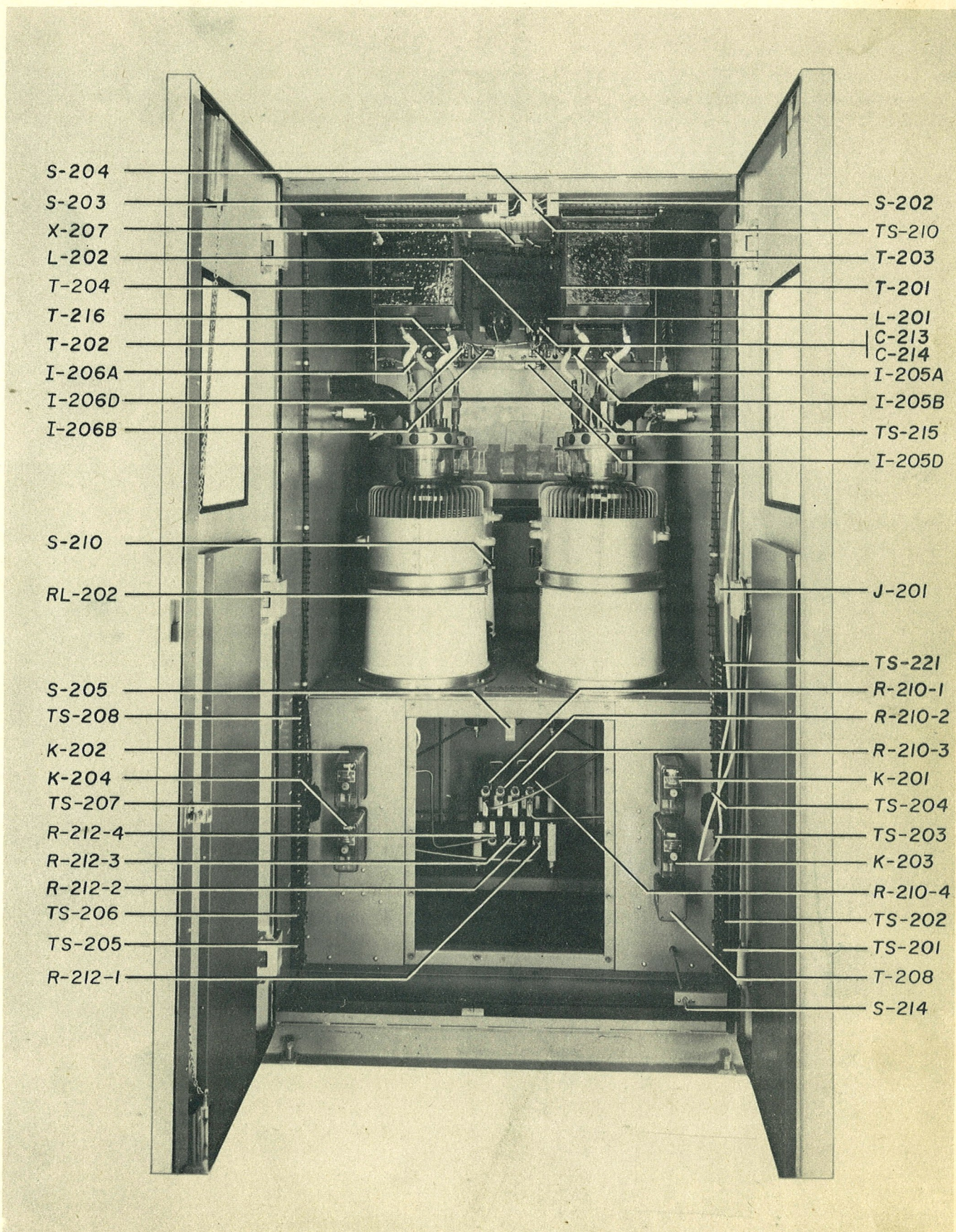


FIG. 15. Modulator Cubicle Interior (Photo C-20276)

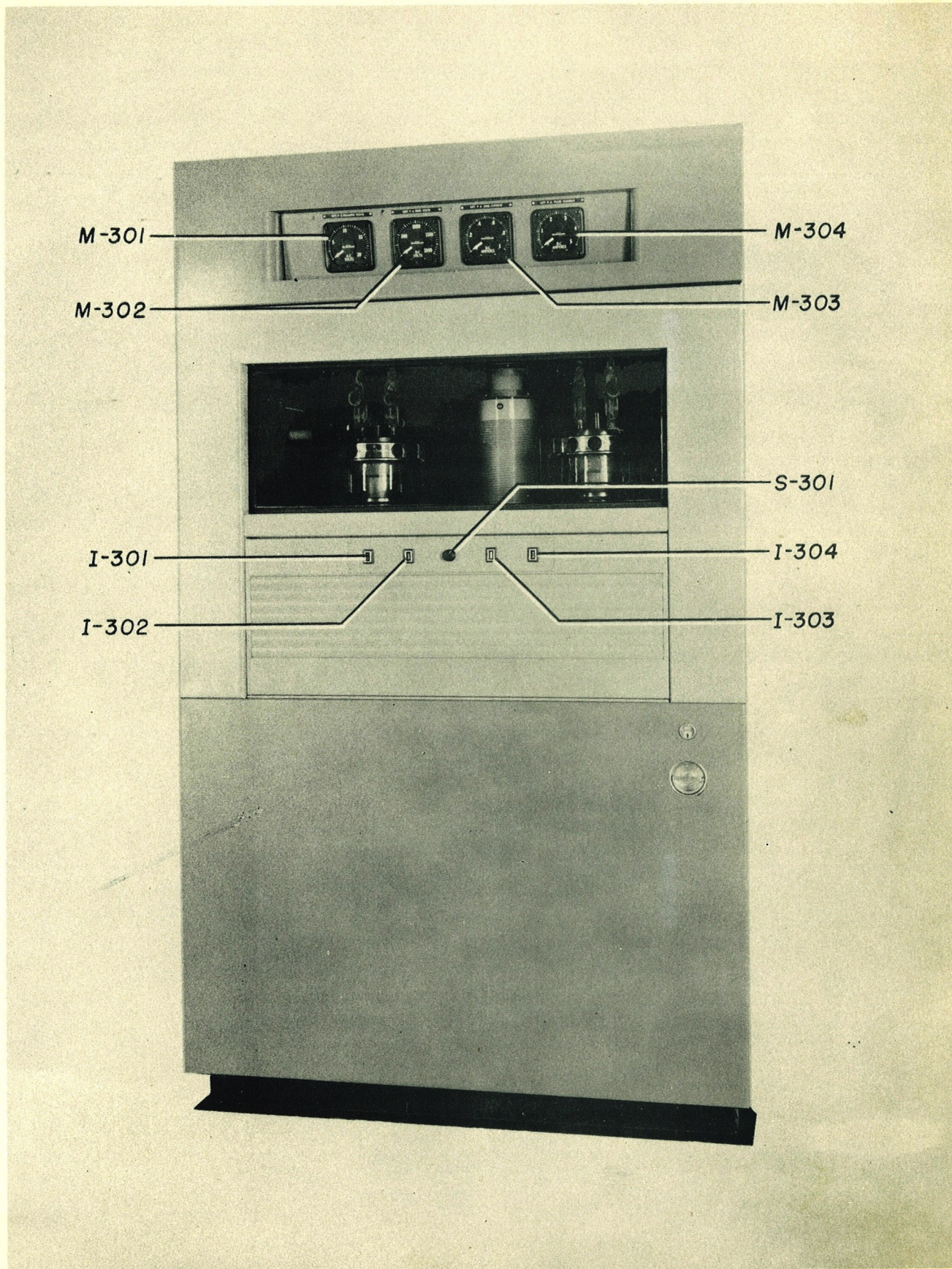


FIG. 16. Left Power Amplifier Cubicle, Front View (Photo C-12128)

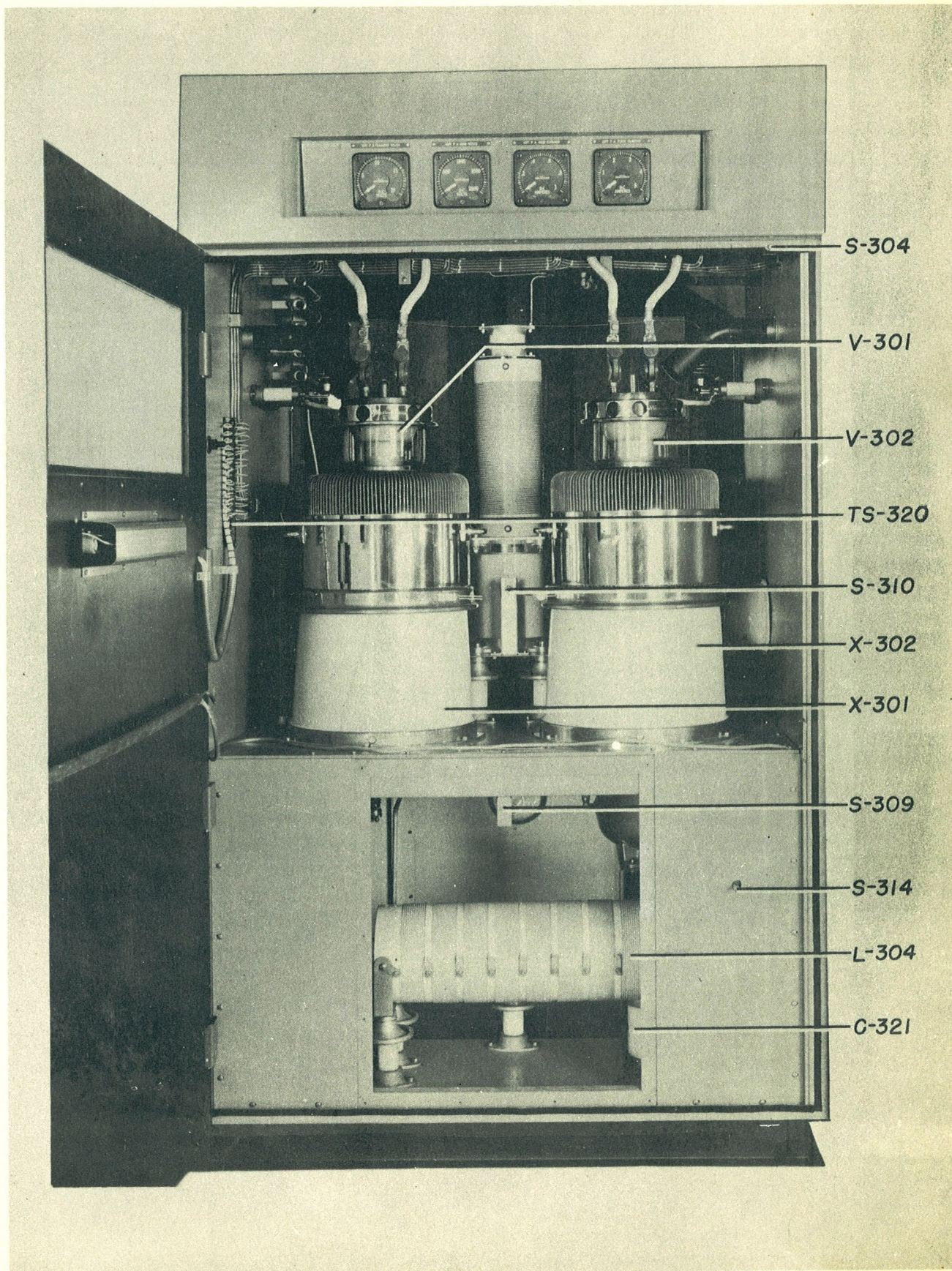


FIG. 17. Left Power Amplifier Cubicle, Interior, Front View (Photo C-12131)

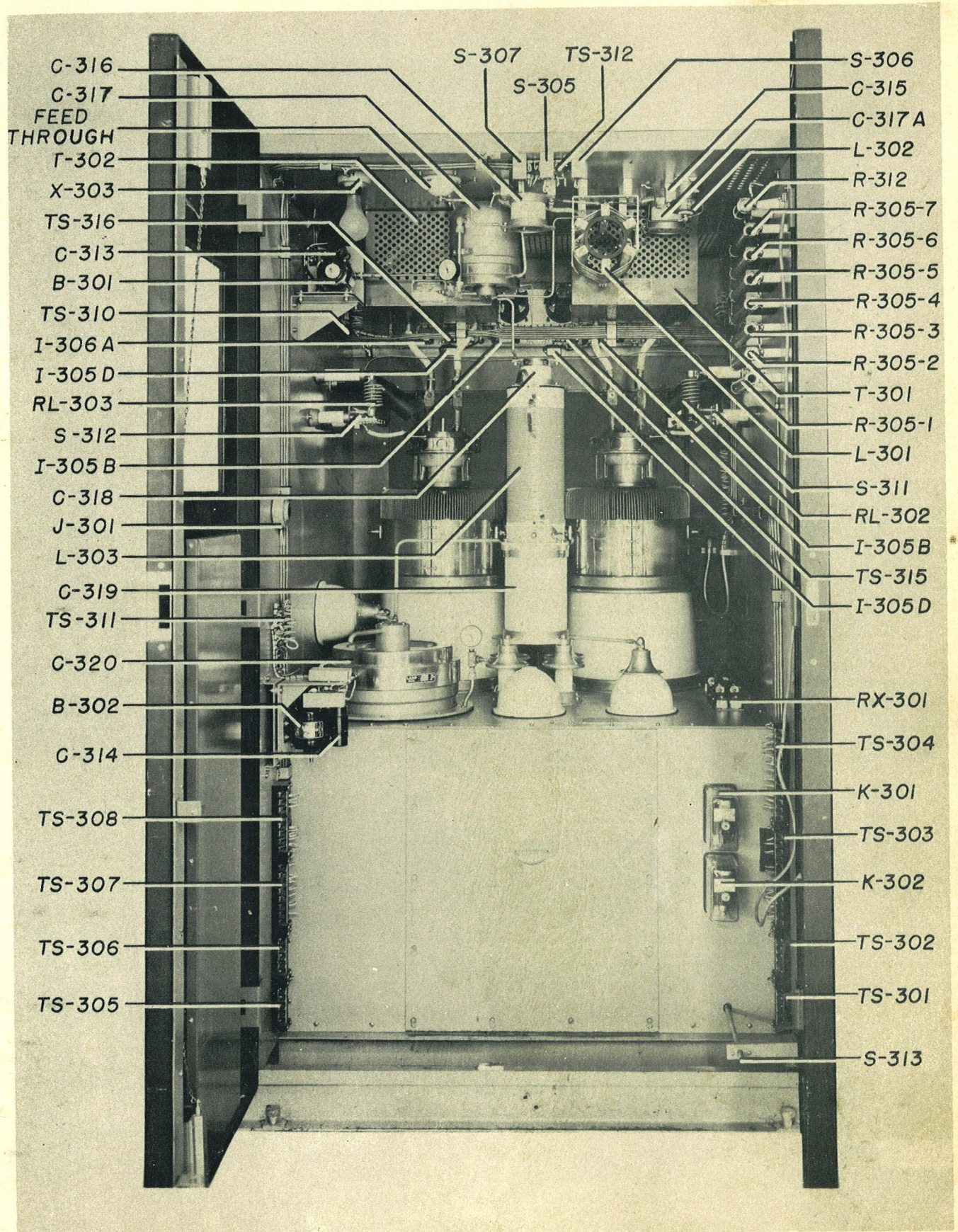


FIG. 18. Left Power Amplifier Cubicle, Interior (Photo C-12132)

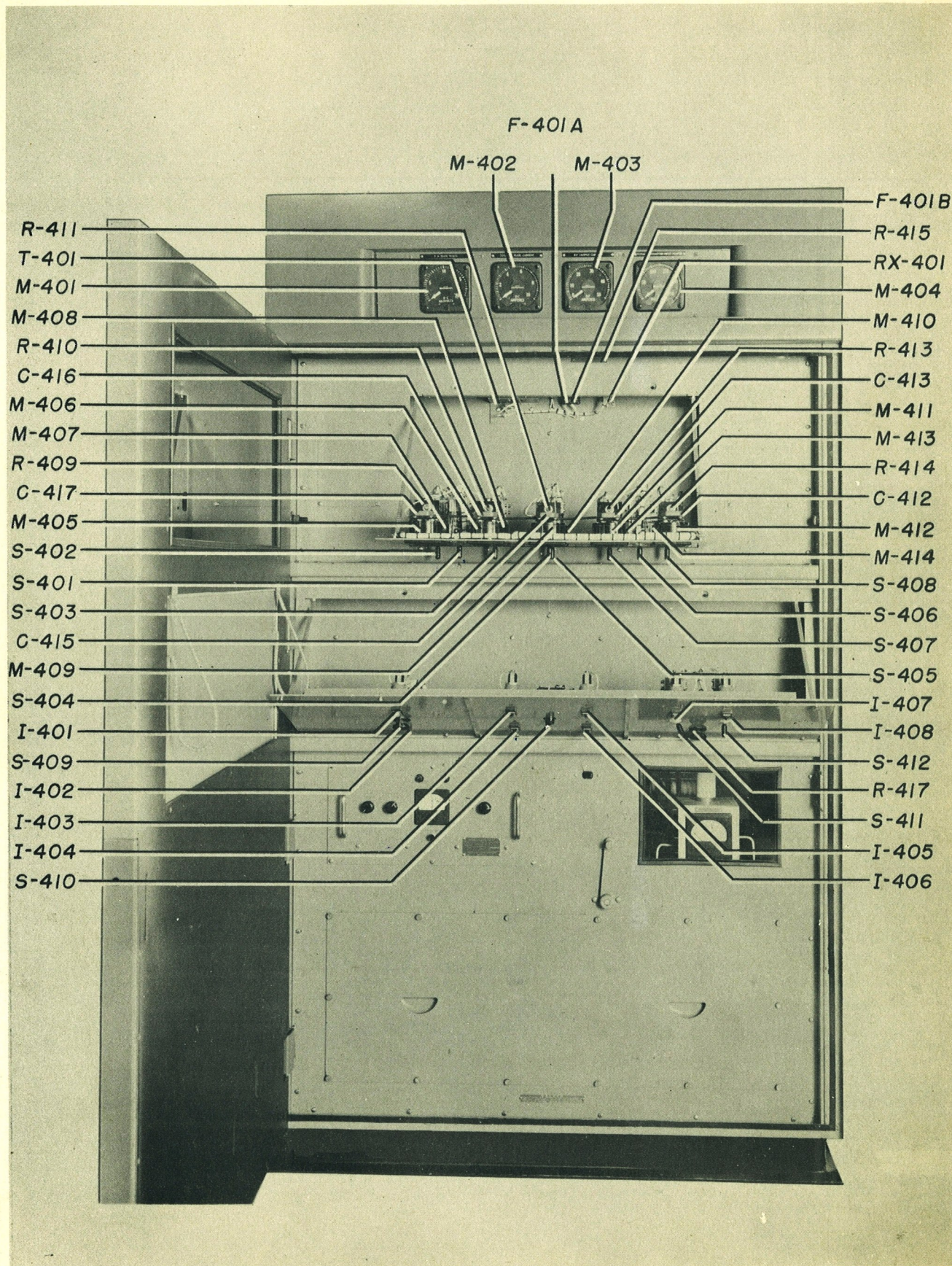


FIG. 19. Center Power Amplifier Cubicle, Front View (Photo C-12135)

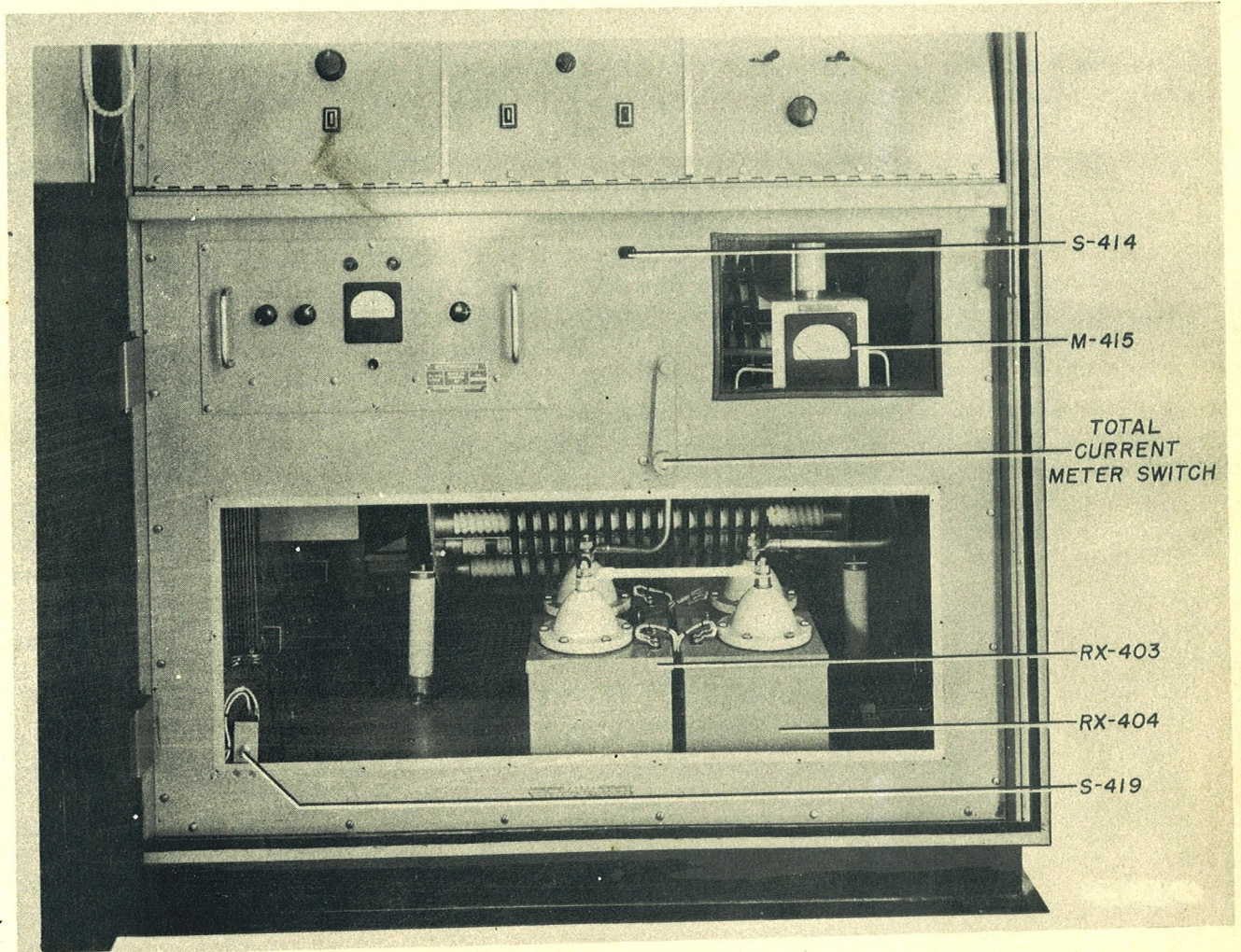


FIG. 20. Center Power Amplifier Cubicle, Lower Front View (Photo C-12136)

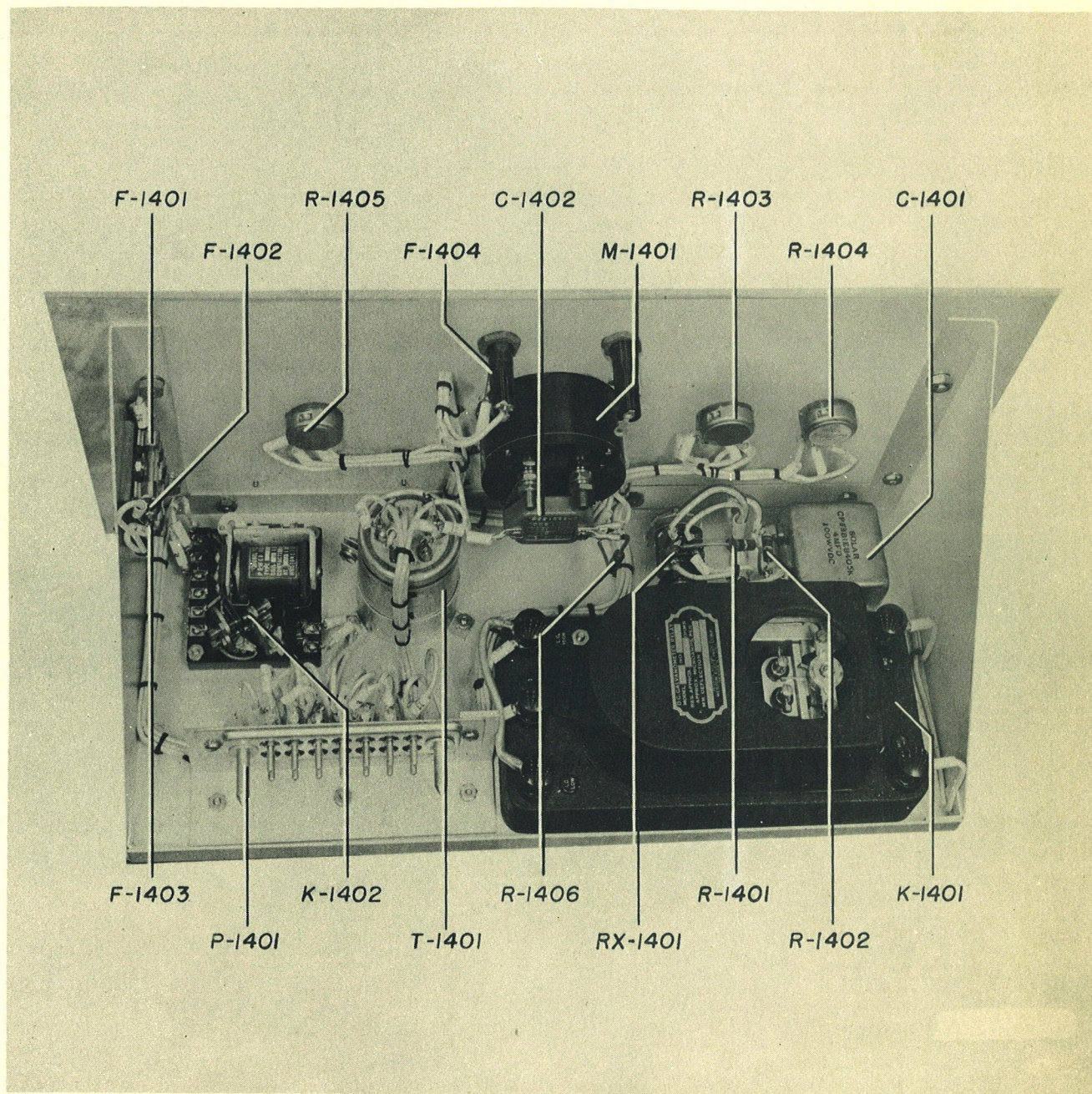


FIG. 21. Antenna Arc Interrupter Unit (Photo C-12104)

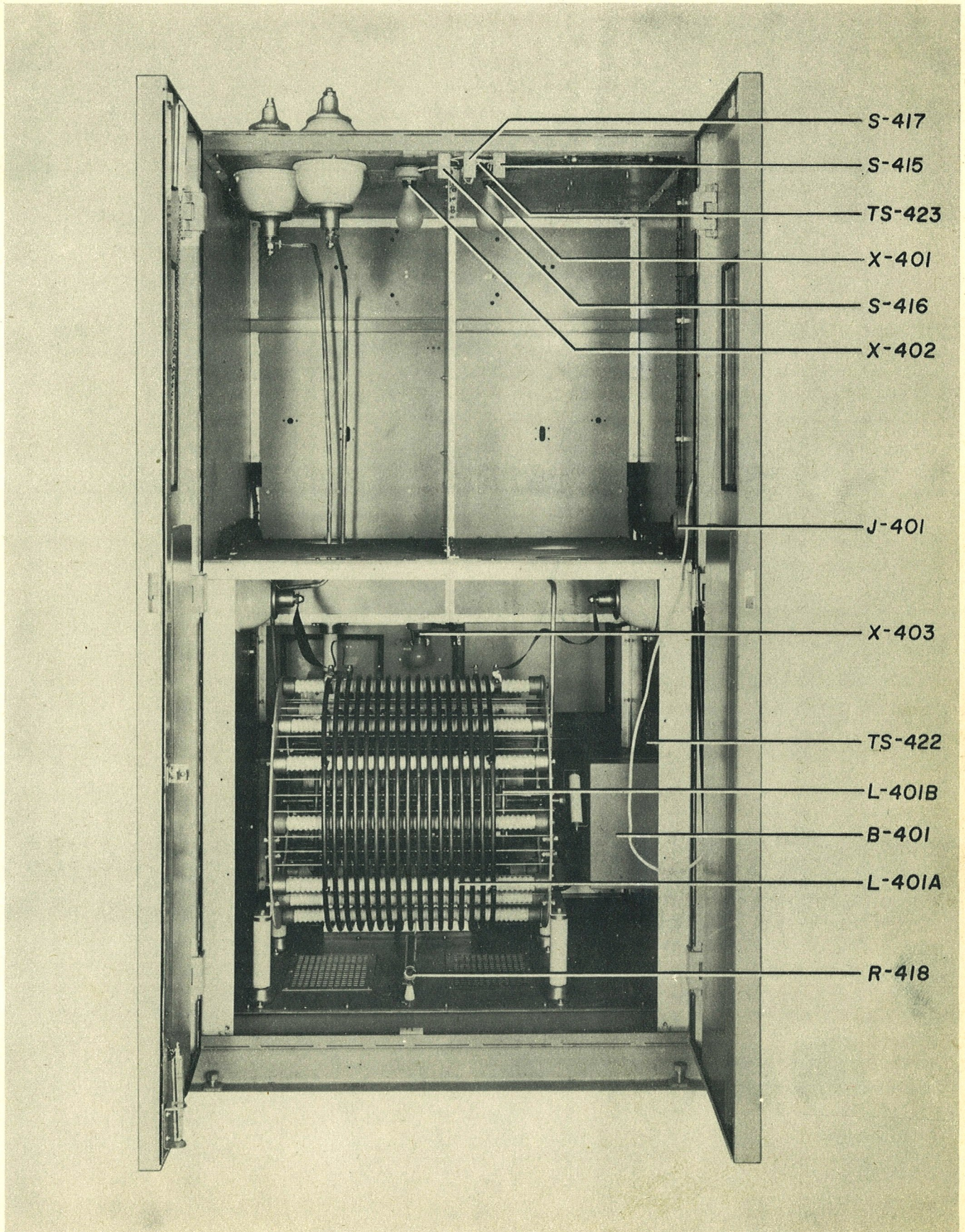


FIG. 22. Center Power Amplifier Cubicle Interior (Photo C-20278)

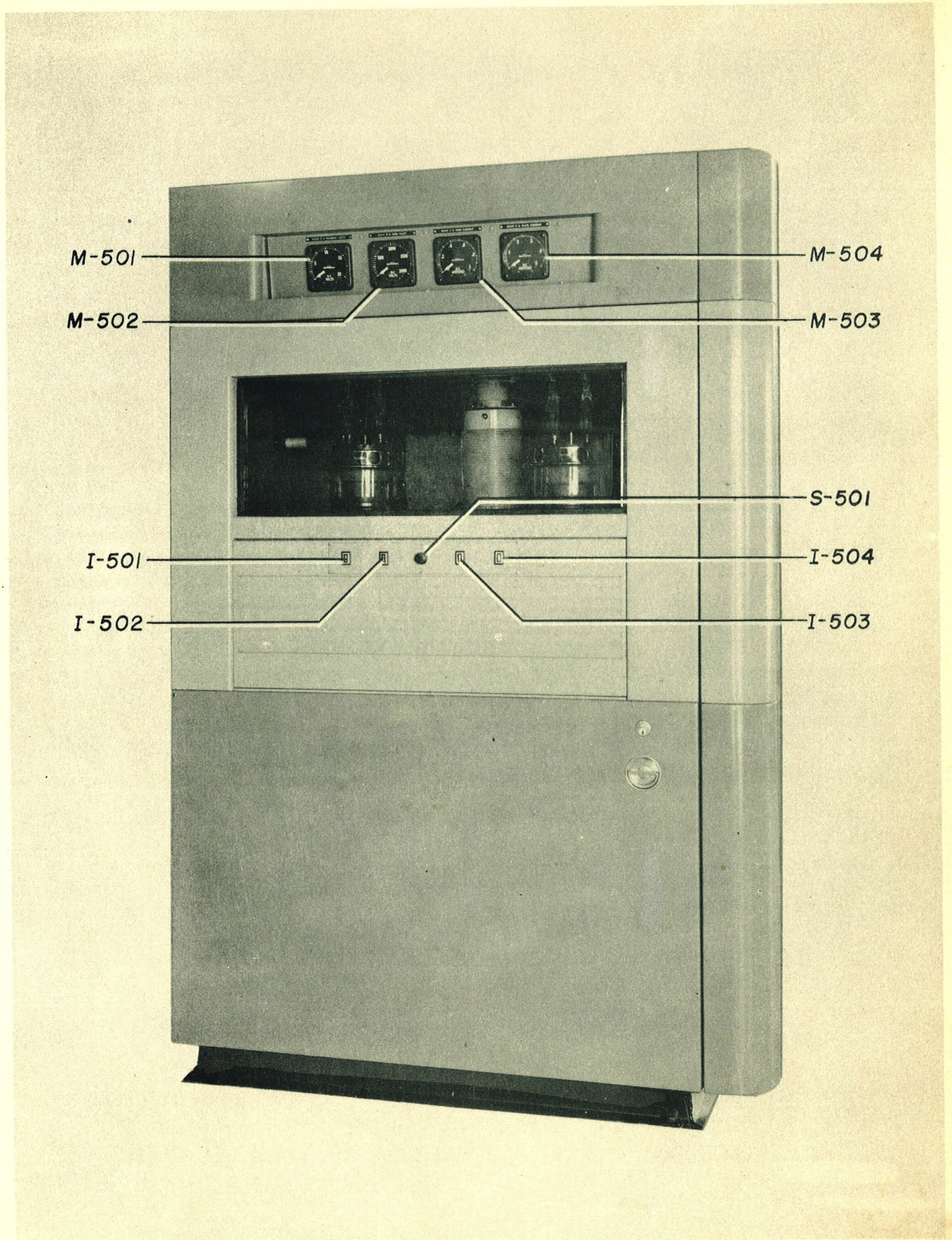


FIG. 23. Right Power Amplifier Cubicle, Front View (Photo C-12139)

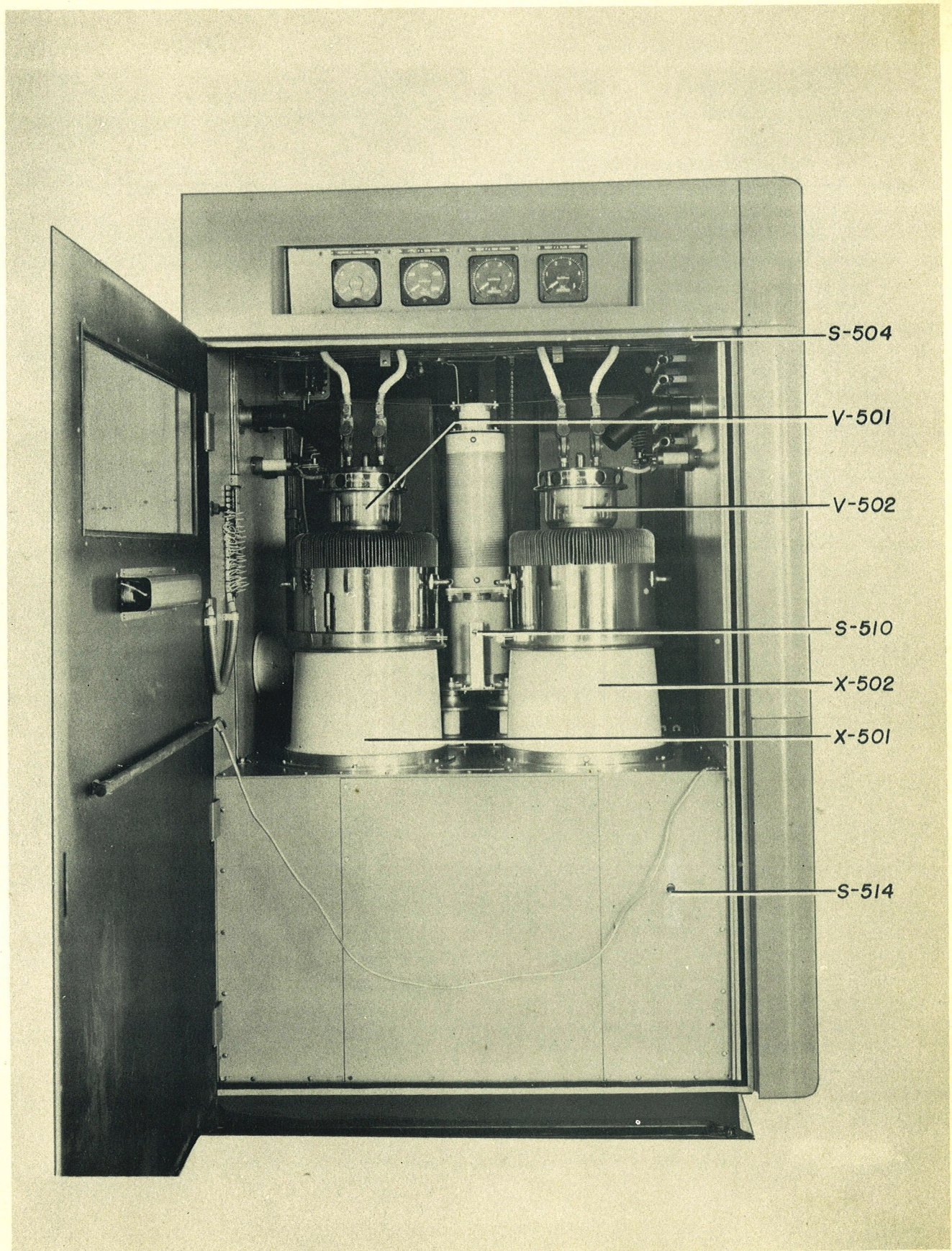


FIG. 24. Right Power Amplifier Cubicle, Interior, Front View (Photo C-12140)

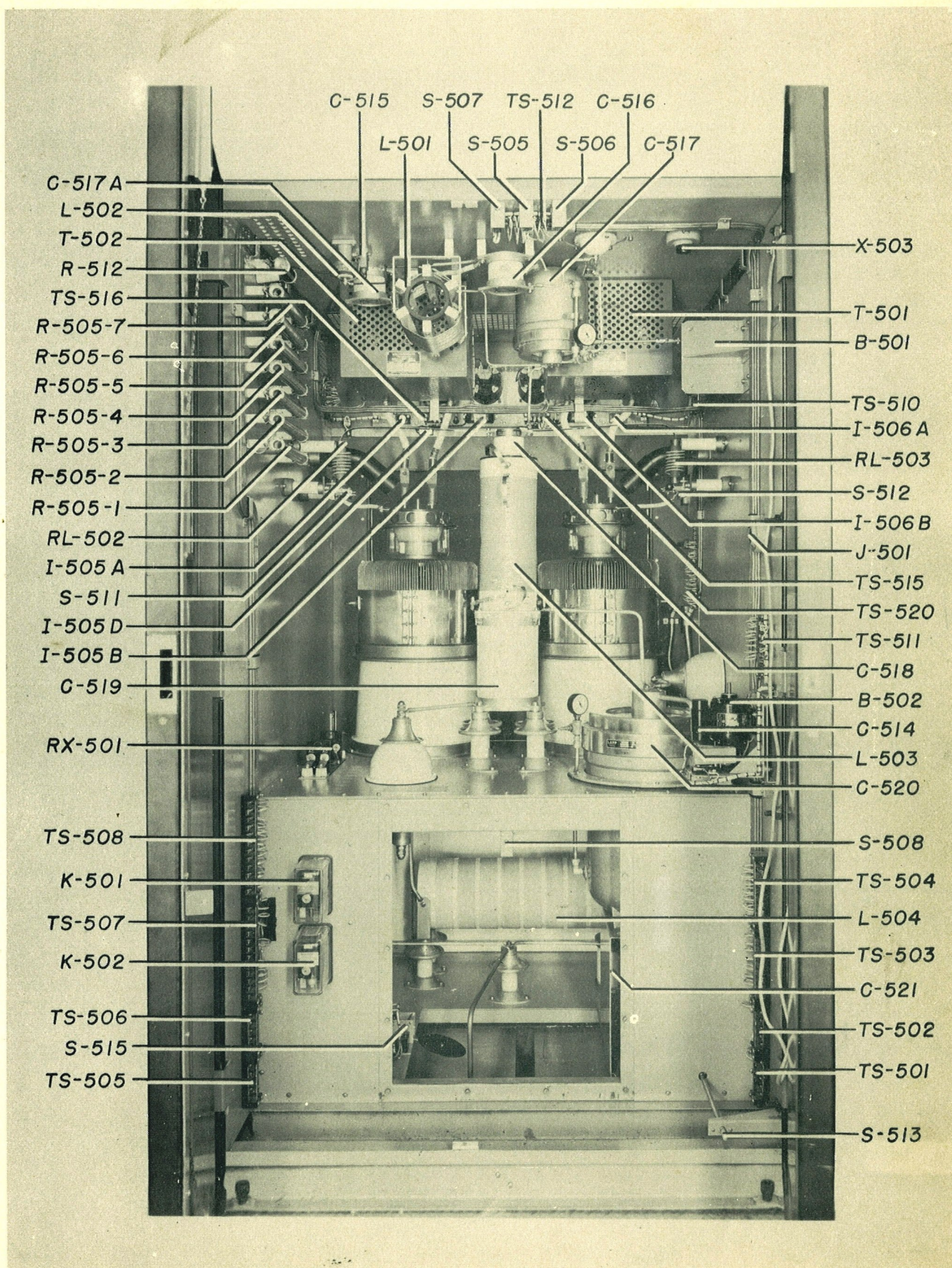


FIG. 25. Right Power Amplifier Cubicle, Interior View (Photo C-12141)

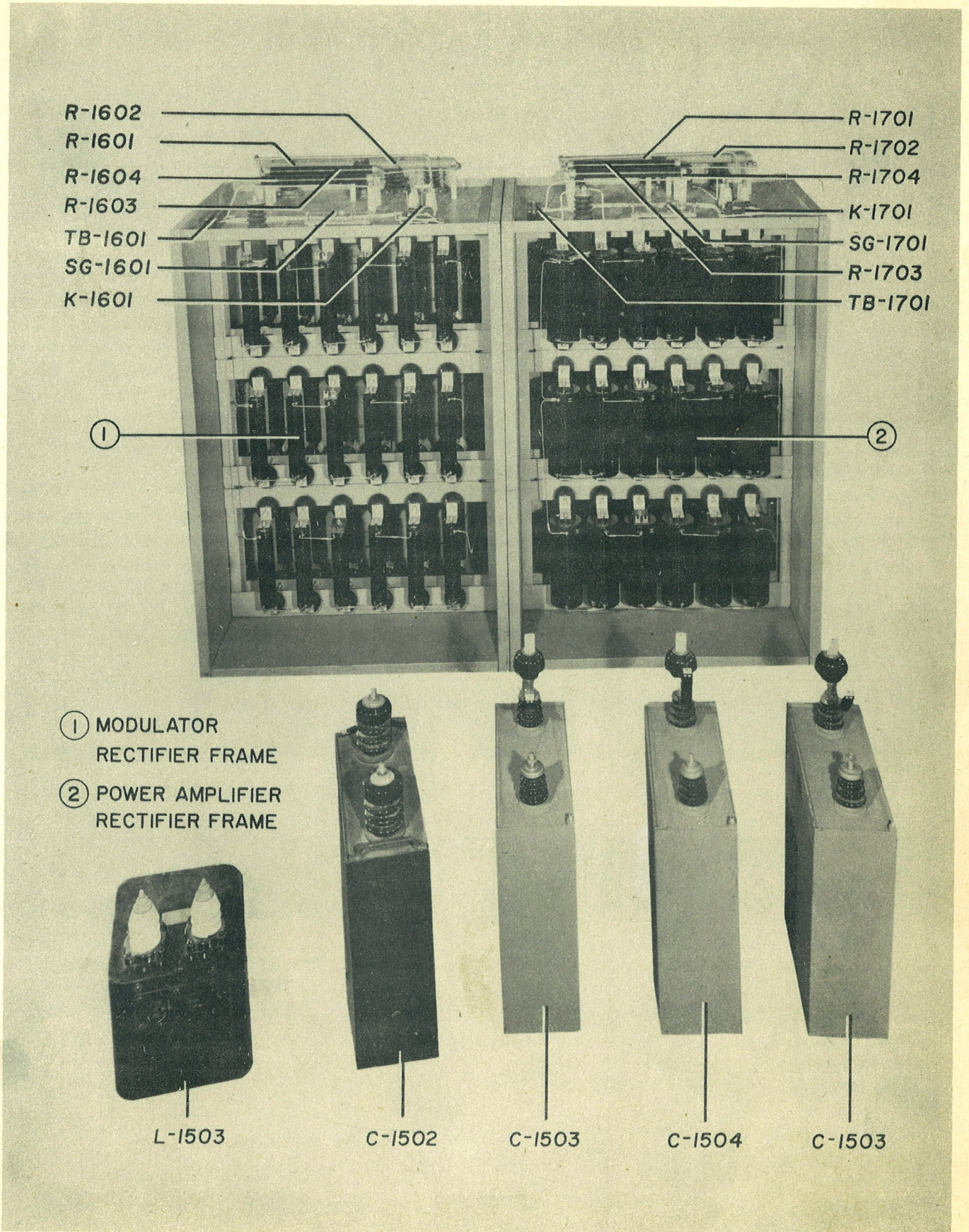


FIG. 26. Main Rectifier Components (Photo C-20409)

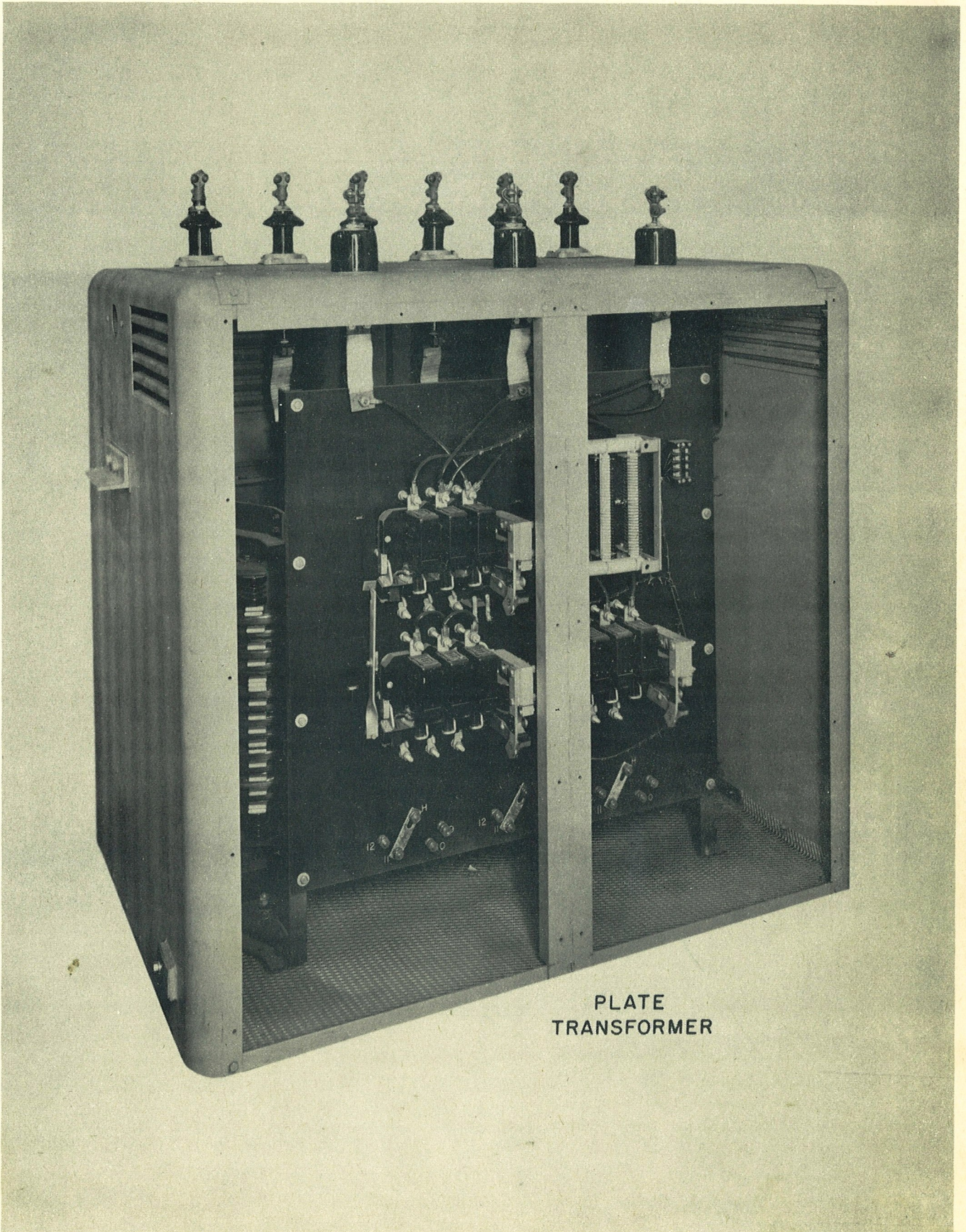
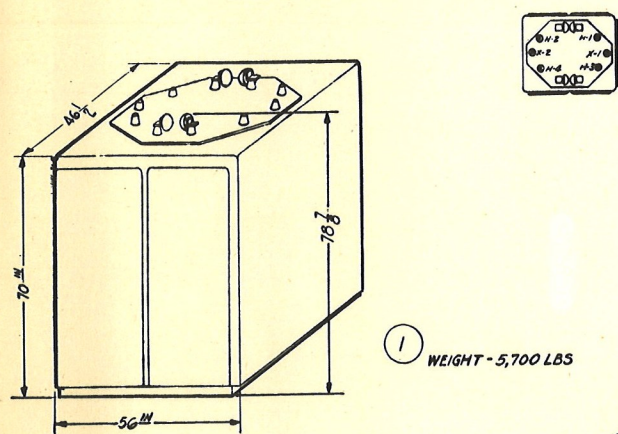
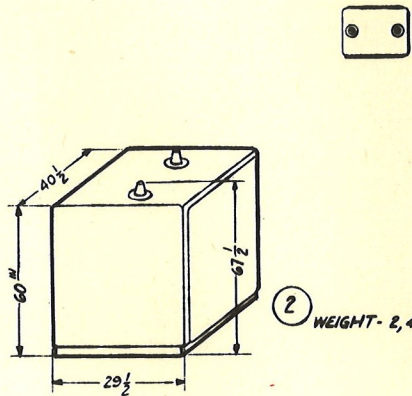


PLATE
TRANSFORMER

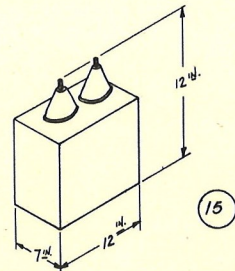
FIG. 26A. Main Rectifier Components (Photo C-20279)



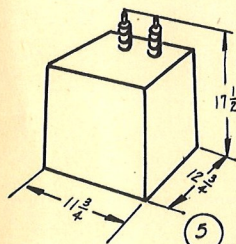
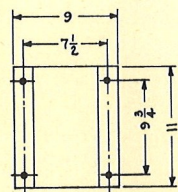
1 WEIGHT-5,700 LBS



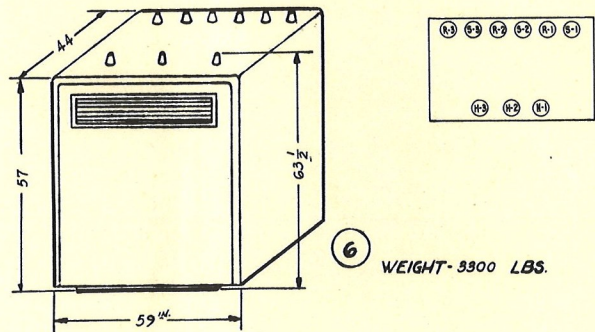
2 WEIGHT-2,450 LBS



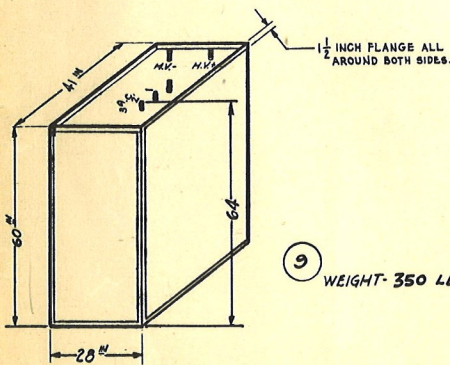
3



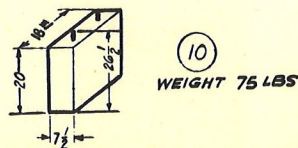
5 WEIGHT-175 LBS



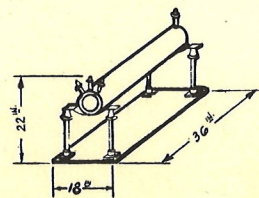
6 WEIGHT-3,900 LBS.



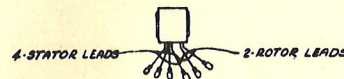
7 WEIGHT-350 LBS.



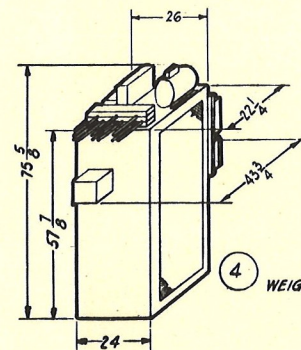
8 WEIGHT 75 LBS



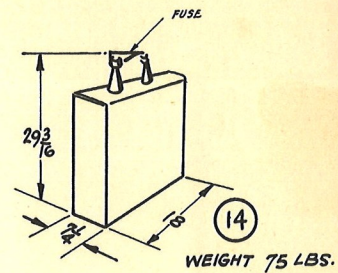
9 WEIGHT 25 LBS.



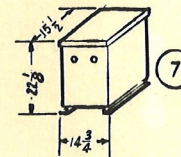
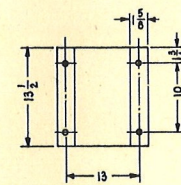
11 WEIGHT-250 LBS APPROX



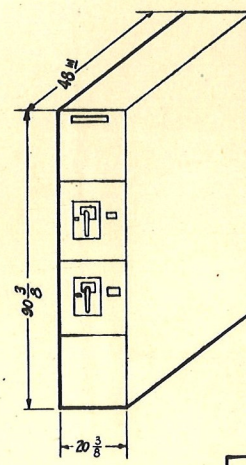
12 WEIGHT-3,325 LBS. APPROX.



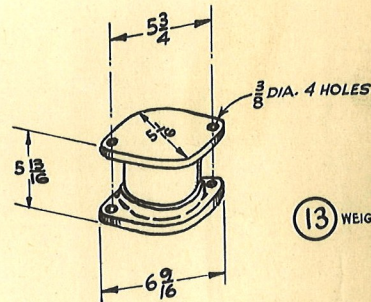
13 WEIGHT 75 LBS.



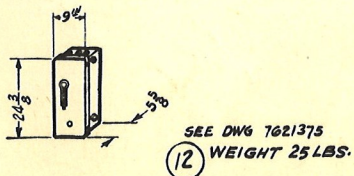
15 WEIGHT-235 LBS.



16 SEE DWG 7621364 WEIGHT-1225 LBS.



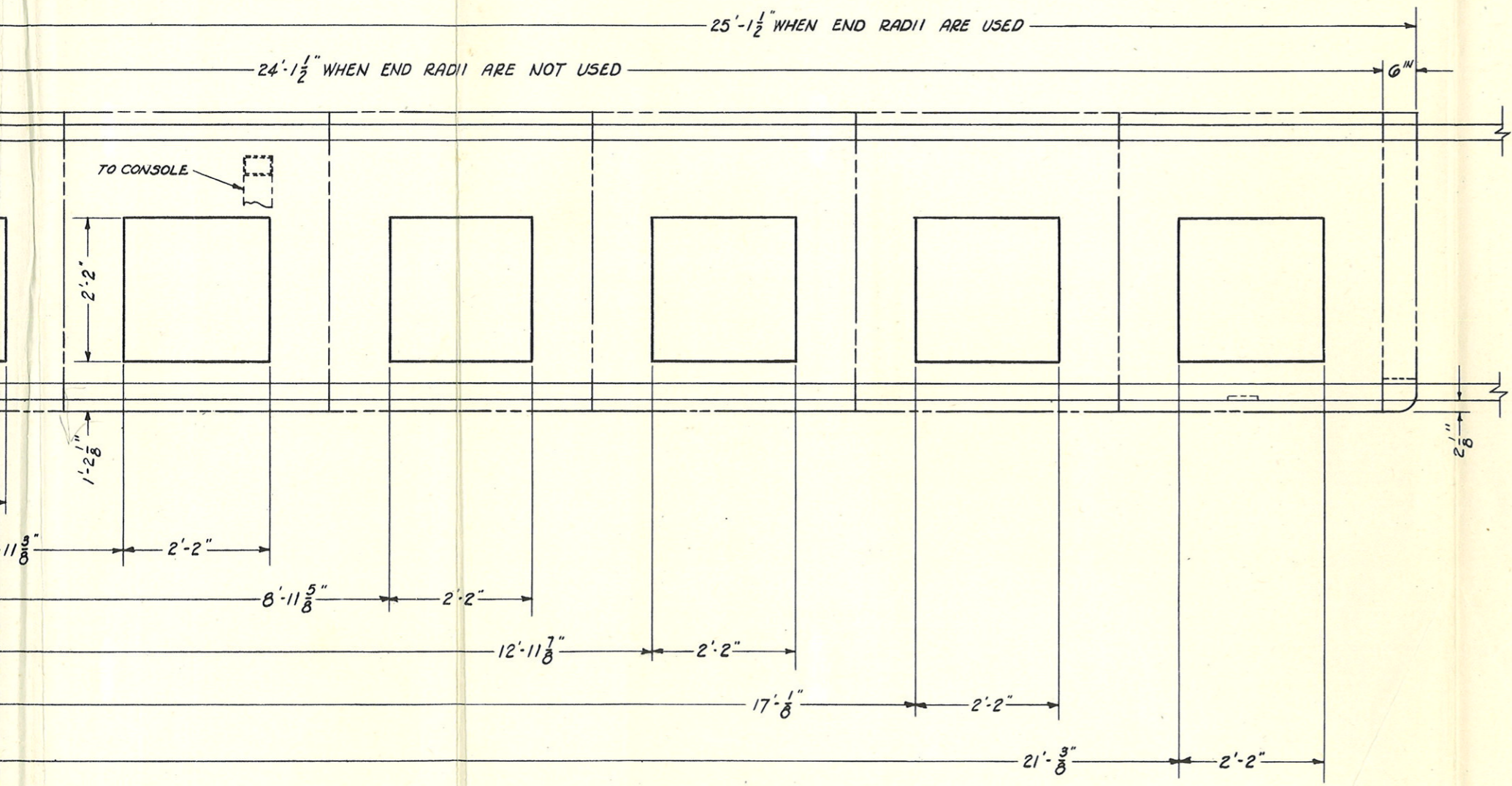
17 WEIGHT 5 LBS.



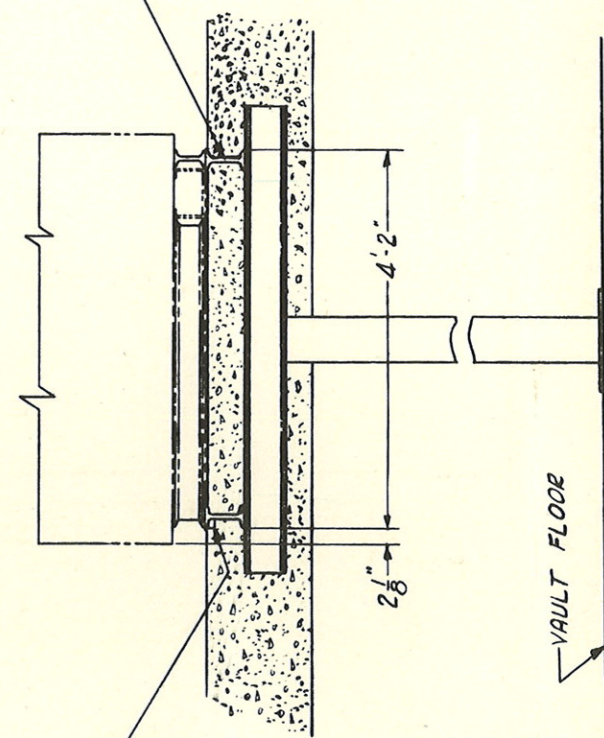
18 SEE DWG 7621375 WEIGHT 25 LBS.

SYMBOL	STYLE	MATERIAL	REFERENCE	PART	DESCRIPTION	FIG.
C1503			S-1471694	15	R.F. CURRENT TRANSFORMER	
C1504			S-1474519	14	FILTER CAPACITOR (PA MOD.)	
C1501			S-1471665	13	AUDIO FILTER CAPACITOR	
L1502			7621375	12	LINE STARTER	
C1502			7607825	11	AUXILIARY AUDIO CHOKE	
			S-1081020	10	CAPACITOR (4 MF. COUPLING)	
			S-1474566 S-1474565	9	RECTIFIER (PA MOD.)	
			7822659	8	SWITCHGEAR	
			S-1483783	7	DISTRIBUTION (BREQD PER TRANSFORMER)	
			50-D-5771	6	TRANSFORMER. MAIN RECT. PLATE	
			7822469	5	MODULATOR RECTIFIER FILTER REACTOR	
			OPTIONAL EQUIP.	4	HIGH VOLTAGE RECTIFIER INDUCTION REGULATOR	
			S-1486439	3	5/8" BUS (2 BREQD PER TRANS INDUCTION REGULATOR)	
			S-1453629	2	MODULATION REACTOR	
			S-1483785	1	MODULATION TRANSFORMER	

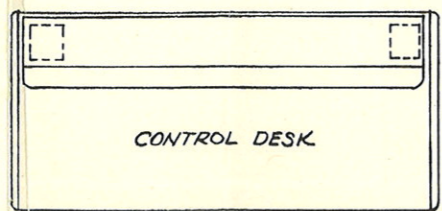
FIG. 33. External Component Outline (Dwg. 55-A-8201)



TWO 5"-10LB. I BEAMS SHOULD RUN FROM WALL TO WALL, & IN ADDITION BE SUPPORTED IN TWO PLACES BY MEANS OF TRANSVERSE BEAMS & COLUMNS TO THE VAULT FLOOR. TOP OF I BEAMS MUST BE LEVEL & FLAT & BE BETWEEN 1/16" & 1/8" ABOVE THE FLOOR

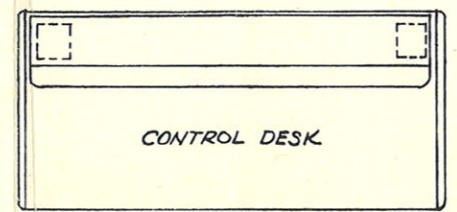
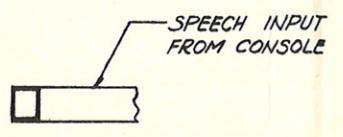
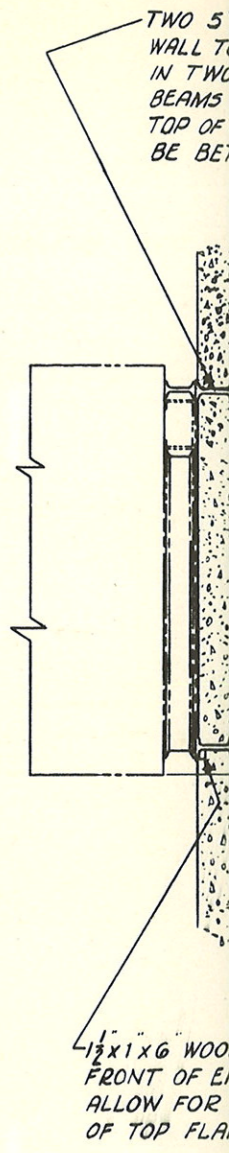
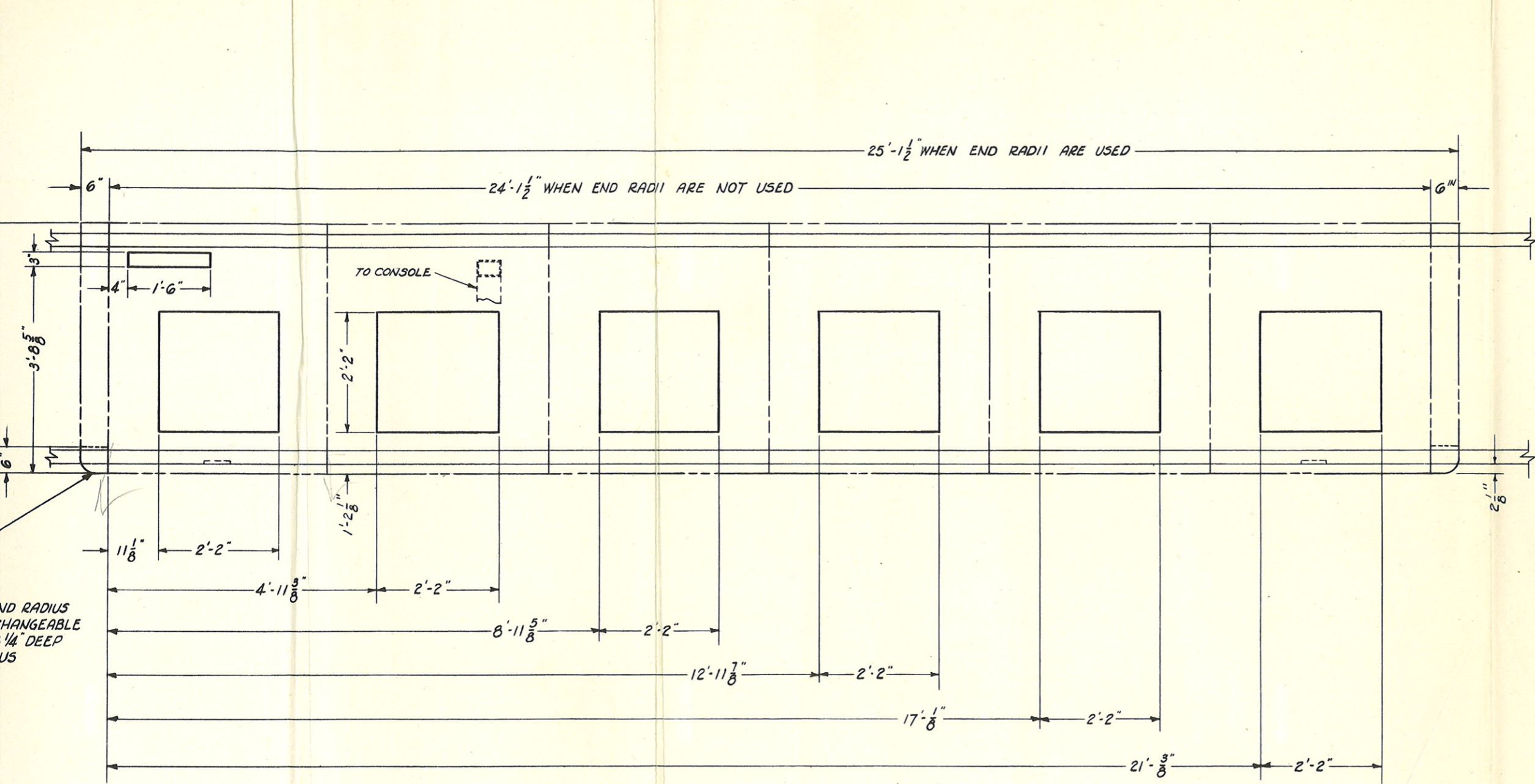


1/2" x 1" x 6" WOOD BLOCK AT CENTER FRONT OF END CUBICLES TO ALLOW FOR DRILLING & TAPPING OF TOP FLANGE OF BEAM.



- GENERAL NOTES
- (1) PROVIDE 7 RECTANGULAR HOLES THROUGH FLOOR AS SHOWN.
 - (2) DESIGN FLOOR TO CARRY 4000 LBS PER CUBICLE (6 CUBICLES)
 - (3) EACH CUBICLE IS 4'-1/4" WIDE x 4'-6 1/4" DEEP x 7'-0" HIGH.

FIG. 29. Transmitter Floor Plan (Dwg. 7621276)



- GENERAL NOTES
- (1) PROVIDE 7 RECTANGULAR HOLES THROUGH FLOOR AS SHOWN.
 - (2) DESIGN FLOOR TO CARRY 4000 LBS PER CUBICLE (6-CUBICLES)
 - (3) EACH CUBICLE IS 4'-1/4" WIDE x 4'-6 1/4" DEEP x 7'-0" HIGH.

FIG. 29. Transmitter Floor Plan (Dwg.)

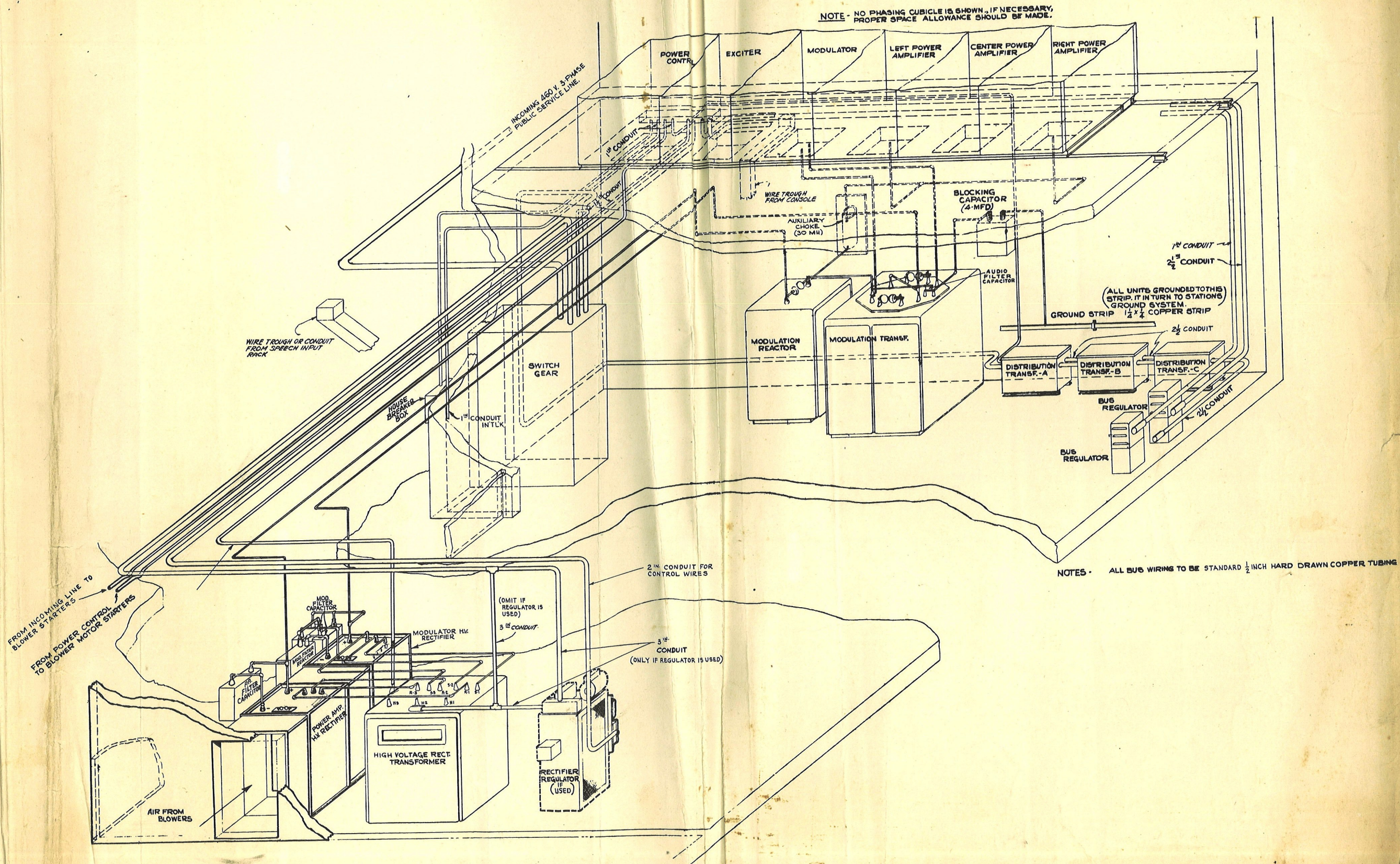


FIG. 31. Power Room Layout (Two Floor) (Dwg. 55-A-8214)

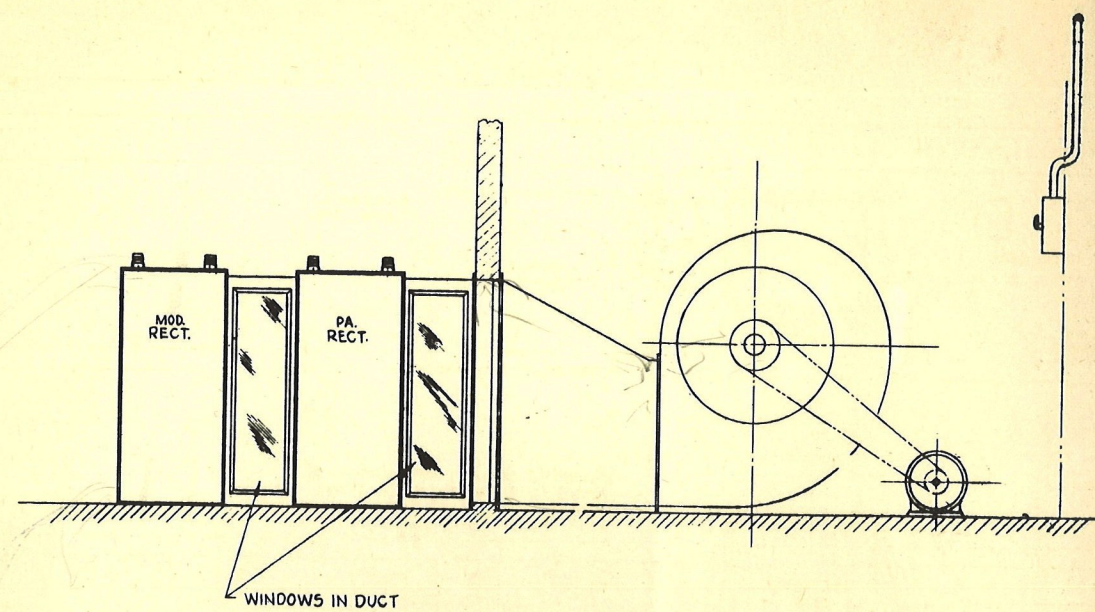
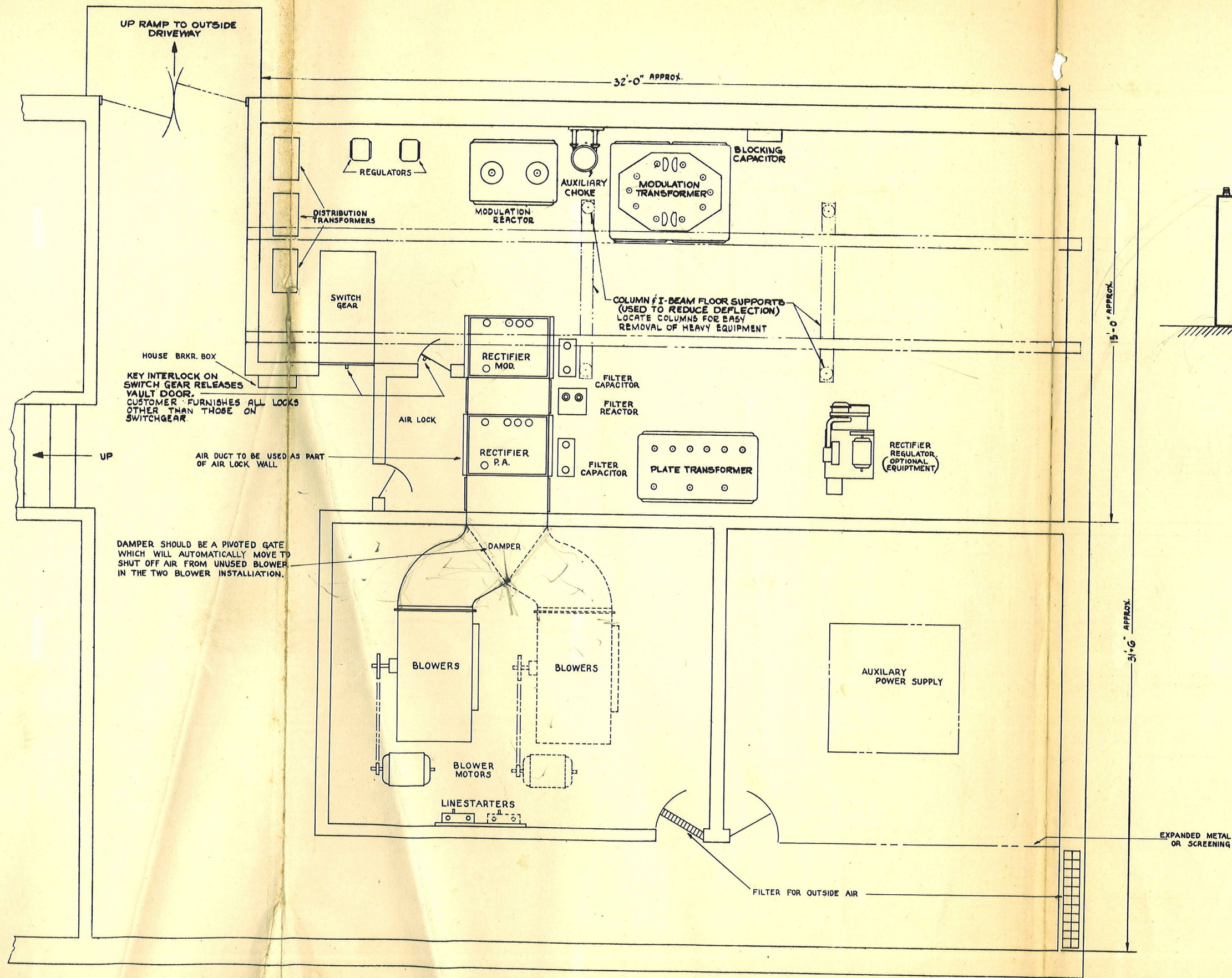
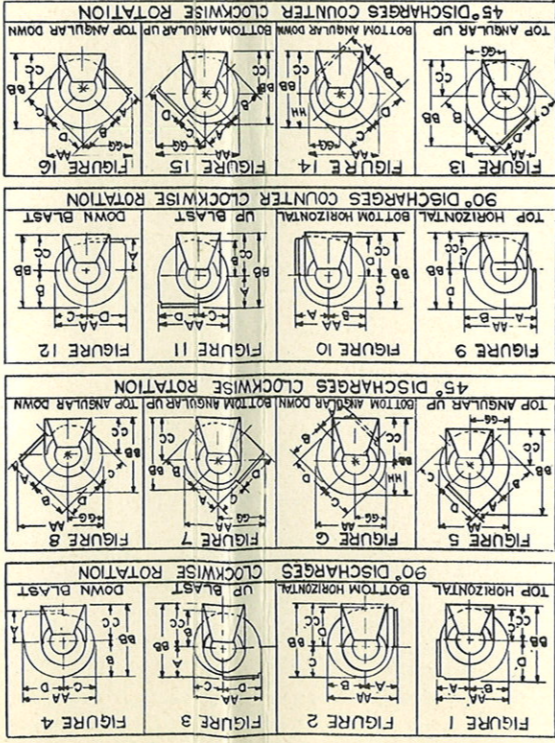


FIG. 32. Power Room Plan (Two Floor) (Dwg. 55-A-8189)

SYM. ITEM	DESCRIPTION - MATERIAL	PART NO. OR REF. DWG.	FINISH	STYLE NO.	GR.
* 1	BLOWER				
* 2	MOTOR				
* 3	MOTOR BASE				
* 4	SHEAVE				
* 5	SHEAVE				
* 6	BELT				

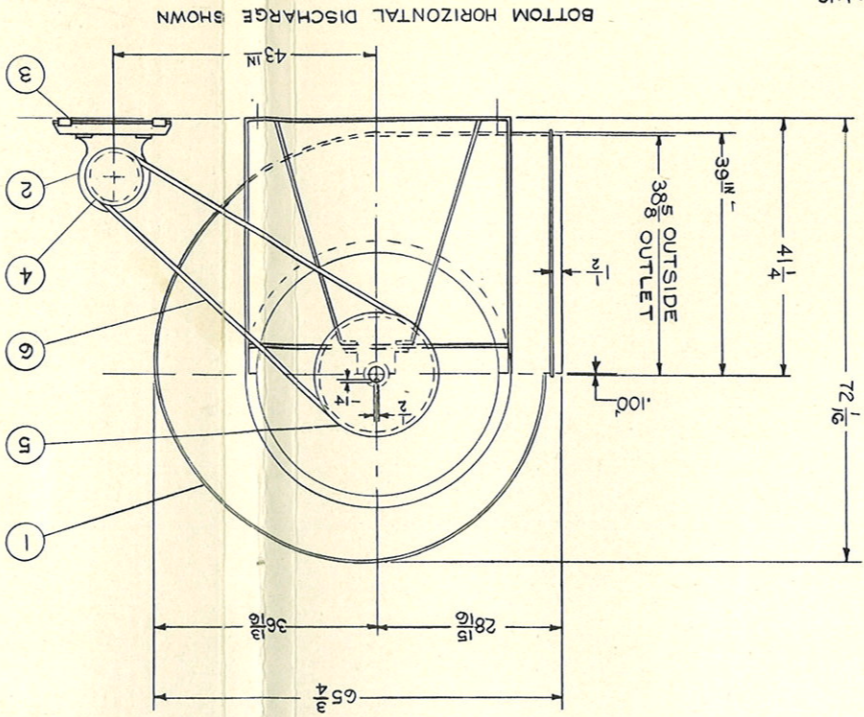


SCALE: NONE

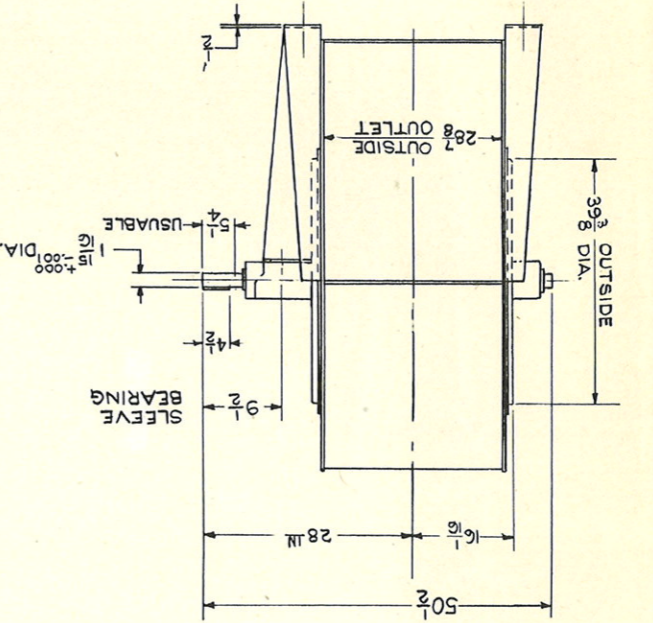
FOR ALL DISCHARGES	FIG. 1 & 9	FIG. 2 & 10	FIG. 3 & 11	FIG. 4 & 12	FIG. 5 & 13	FIG. 6 & 14	FIG. 7 & 15	FIG. 8 & 16	NET WT.	CC GG AA BB CC GG AA BB CC GG AA BB CC	SIZE DIA.
90	36	25	35	45	55	65	75	85	920		36
60	36	25	35	45	55	65	75	85	920		36
30	36	25	35	45	55	65	75	85	920		36

FIG. 4-8-1-5 ARE CONVERTIBLE AT 15° INCREMENTS FROM DOWN BLAST TO 45° TOP ANGULAR UP DISCHARGE BY ROTATING FAN HOUSING C.W.
 FIG. 12-16-9-13 ARE CONVERTIBLE AT 15° INCREMENTS FROM DOWN BLAST TO 45° TOP ANGULAR UP DISCHARGE BY ROTATING FAN HOUSING C.W.
 FIG. 2-6-7-3 ARE CONVERTIBLE AT 15° INCREMENTS FROM 75° BOTTOM ANGULAR DOWN TO 60° TOP ANGULAR UP DISCHARGE BY ROTATING FAN HOUSING C.W.
 FIG. 14-10-11 ARE CONVERTIBLE AT 15° INCREMENTS FROM 75° BOTTOM ANGULAR DOWN TO 60° TOP ANGULAR UP DISCHARGE BY ROTATING FAN HOUSING C.W.
 MOTOR LOCATION MW IS SHOWN ON ALL BLOWER ROOM INSTALLATION DWGS.
 FOR 50 HG-2 AND 19 IS CONSIDERED TO BE STANDARD. IF ANY OTHER MOTOR LOCATION IS DESIRED, CONSULT WESTINGHOUSE ENGINEERING.

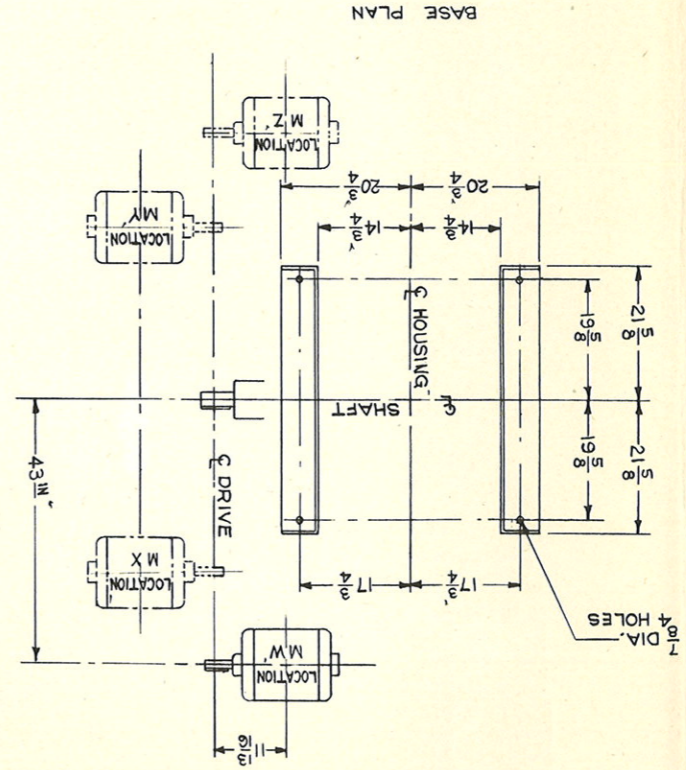
* NOTES
 IT-2-MOTOR SHOWN IS WESTINGHOUSE 220-440 V., 3φ, 50/60~, 1750 R.P.M., FRAME NO. 284-S#144222
 IT-3-BASE SHOWN IS ALLIS CHALMERS TEXSLIDE MOTOR BASE NO. 3.
 IT-4-SHEAVE SHOWN IS ALLIS CHALMERS VARI-PITCH TEXROPE DRIVE 5.250" PITCH DIA., 2 GROOVE, R SECTION.
 IT-5-SHEAVE SHOWN IS 20.0" PITCH DIA., FIXED COMPANION SHEAVE FOR WIDE RANGE VARI-PITCH SHEAVE.
 IT-6-BELT SHOWN IS R-150 TEXROPE BELT (2 REQ'D).

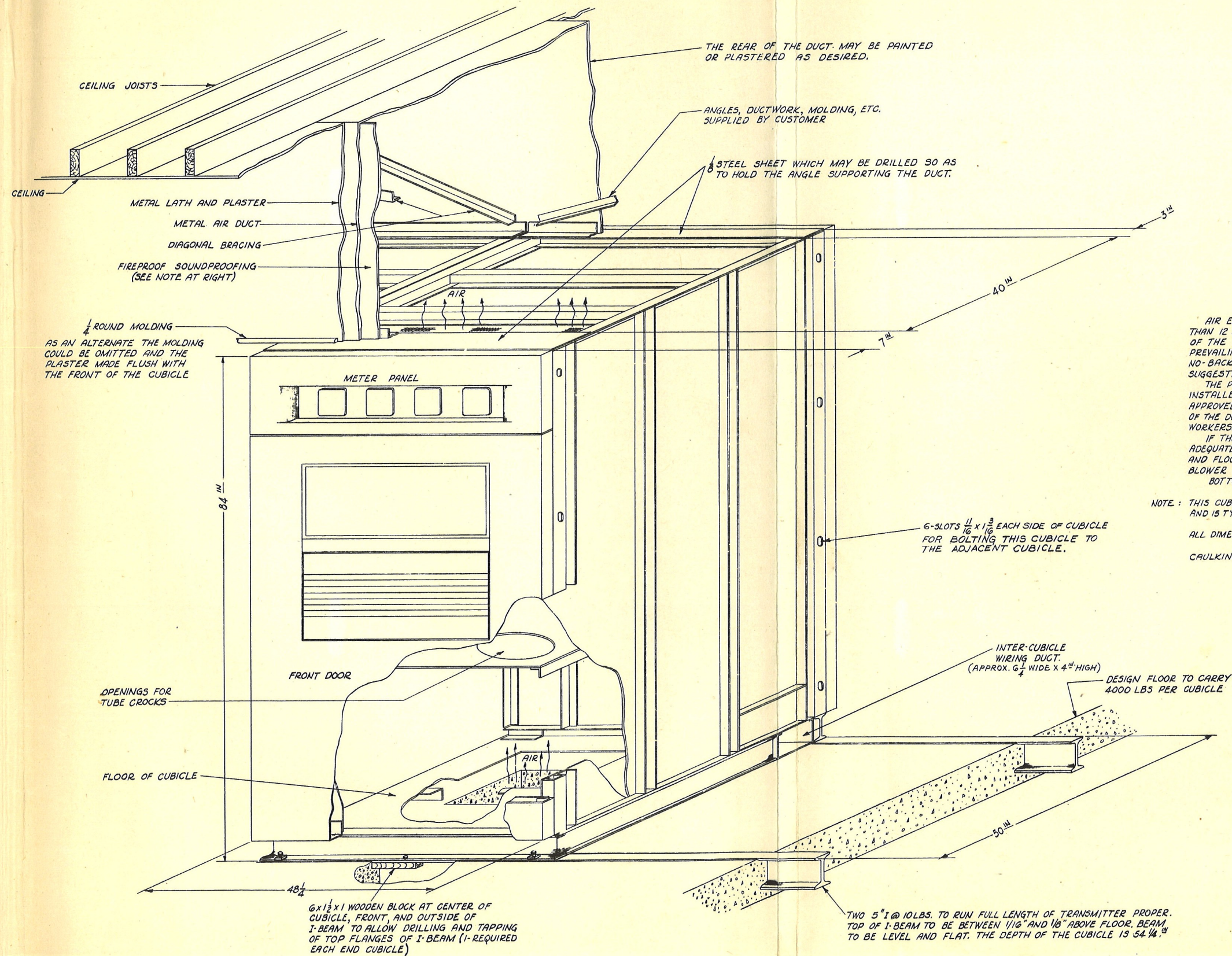


SCALE: 1:16



* IT-1
 BLOWER ARRANGEMENT SHOWN IS STURTEVANT DIVISION WESTINGHOUSE ELECTRIC CORP. DESIGN IO CLASS I SIZE 90 ARRANGEMENT 3 SINGLE INLET CLOCKWISE BOTTOM HORIZONTAL DISCHARGE WEIGHT 920 LBS.





AIR EXHAUST SHOULD BE AS DIRECT AS POSSIBLE AND NOT LESS THAN 12 SQ FT AREA. THE AIR SHOULD EXHAUST ON OPPOSITE SIDES OF THE BUILDING SO AS TO TAKE ADVANTAGE OF LEEWARD SIDE OF PREVAILING WINDS. AS AN ALTERNATE, A ROOF VENTILATOR OF THE NO-BACK DRAFT TYPE COULD BE USED IN LIEU OF THE PRECEDING SUGGESTION.

THE PROPERLY SOUND PROOFED EXHAUST DUCT SHOULD NOT BE INSTALLED UNTIL THE CUBICLES ARE IN PLACE. ONLY SOUND PROOFING APPROVED BY THE FIRE UNDERWRITERS SHOULD BE USED. THE FITTING OF THE DUCT TO THE CUBICLES SHOULD BE DONE BY LOCAL SHEETMETAL WORKERS.

IF THE AIR FROM THE TRANSMITTER IS USED TO HEAT THE BUILDING ADEQUATE AREA OF VENTS MUST BE MAINTAINED IN EXHAUST DUCT AND FLOOR TO ALLOW FREE PASSAGE OF AIR RETURN TO THE BLOWER INTAKE.

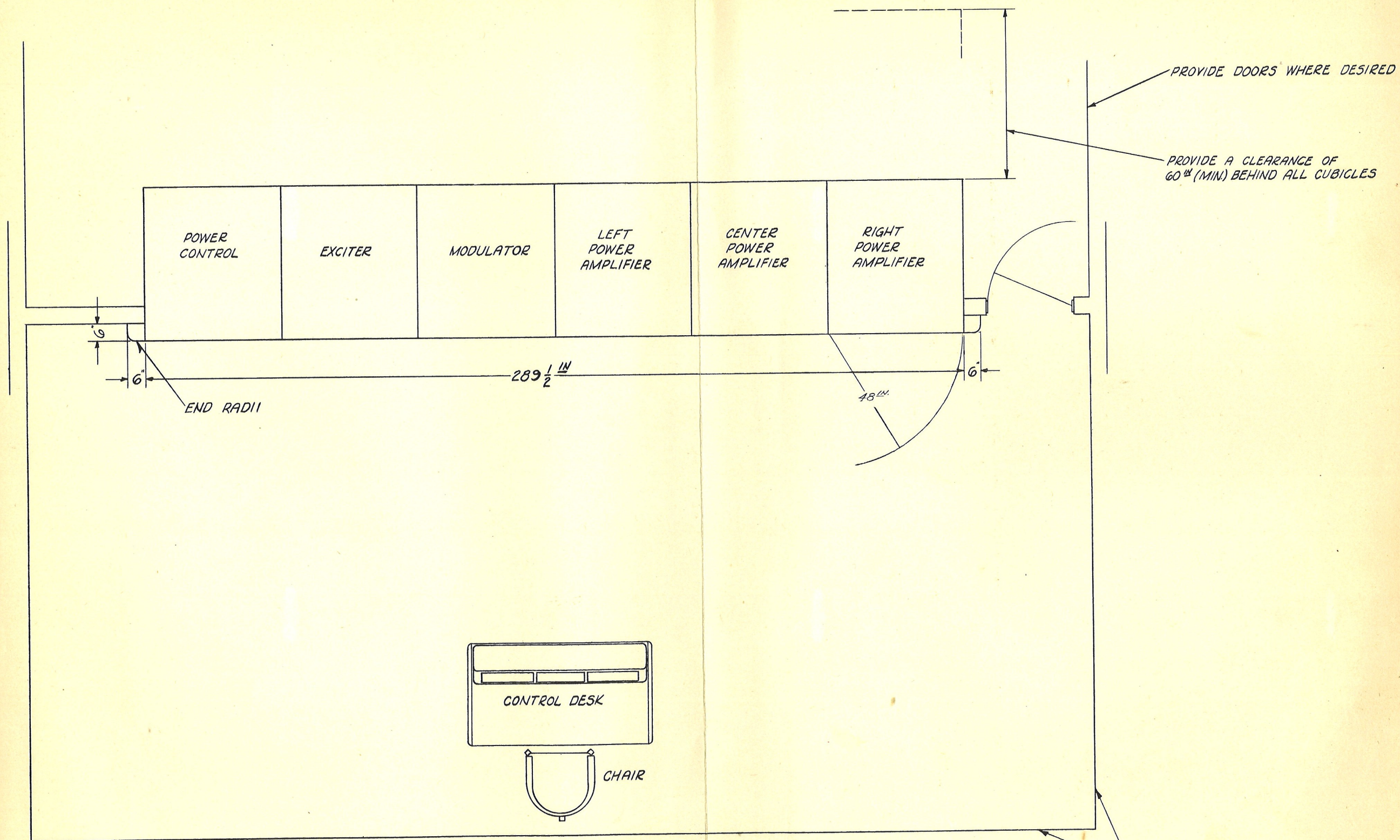
BOTTOM OF DUCT OPEN ENTIRE LENGTH OF TRANSMITTER

NOTE: THIS CUBICLE IS ACTUALLY THE RIGHT HAND POWER AMPLIFIER AND IS TYPICAL OF THE OTHER CUBICLES.

ALL DIMENSIONS ARE IN INCHES

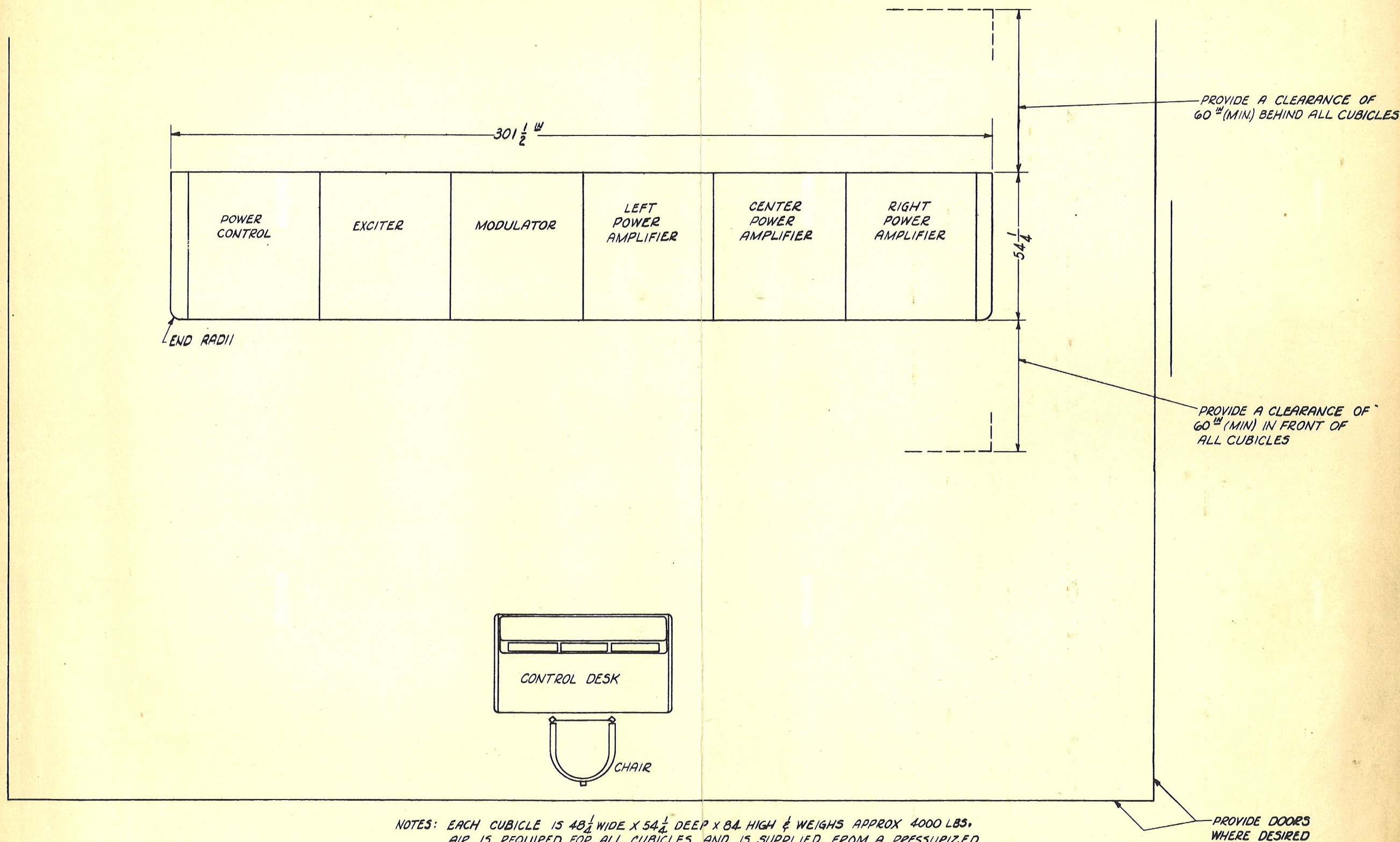
CAULKING: INSIDE SHOULD BE DONE BY REACHING THRU AIR HOLE, OUTSIDE, IN USUAL MANNER, ALL AROUND.

FIG. 35. Typical Cubicle (Dwg. 7621268)



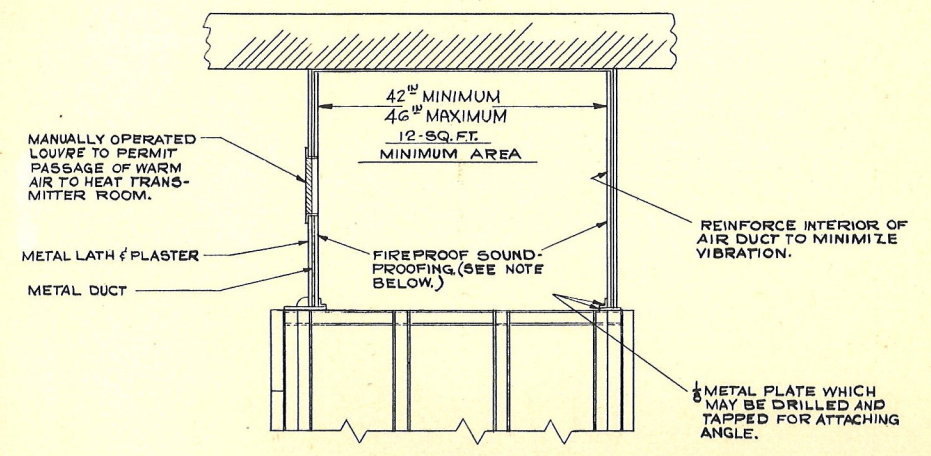
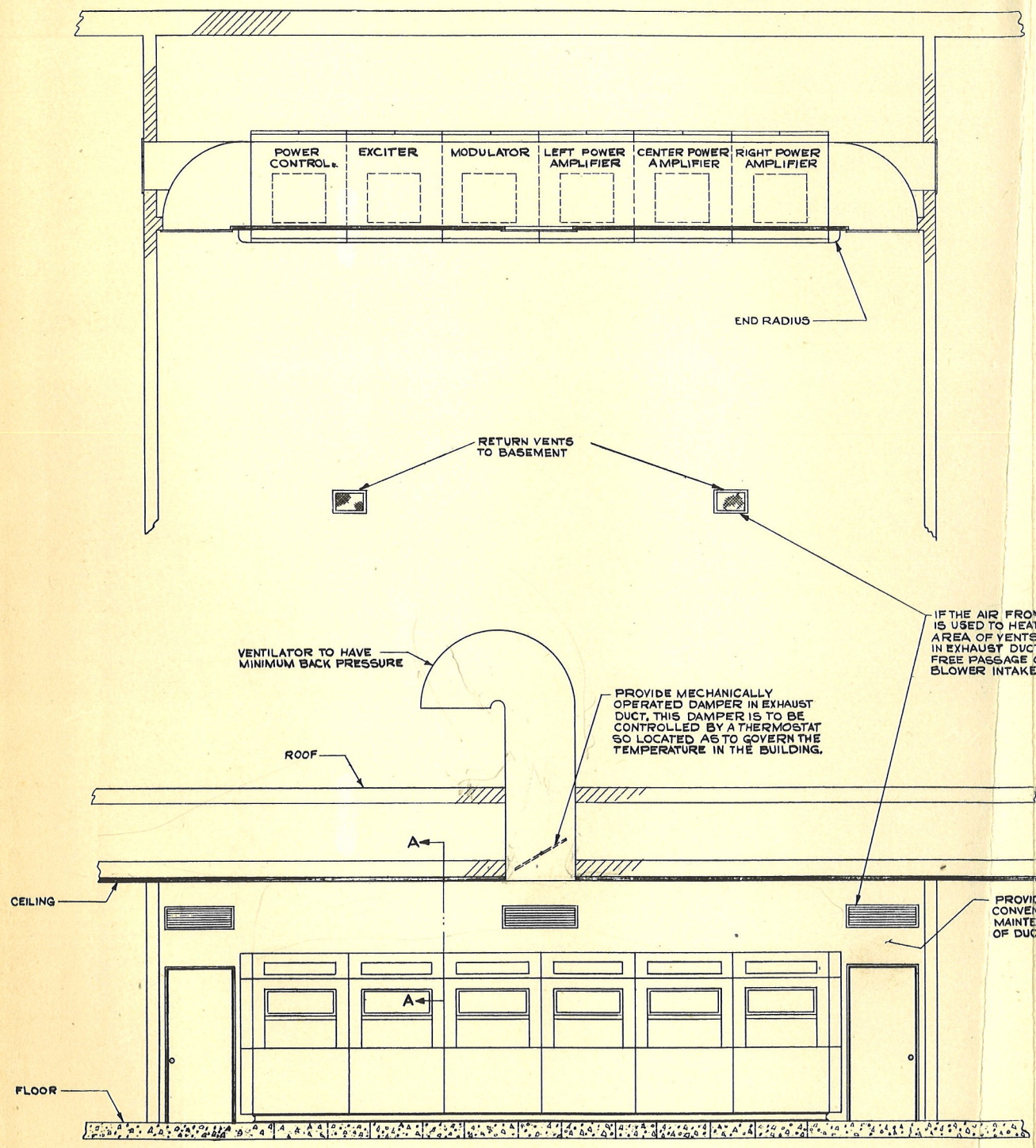
NOTES: EACH CUBICLE IS 48 1/2 WIDE X 54 1/2 DEEP X 84 HIGH & WEIGHS APPROX 4,000 LBS. AIR IS REQUIRED FOR ALL CUBICLES AND IS SUPPLIED FROM A PRESSURIZED ROOM OR TROUGH LEADING FROM SAME BELOW THE FLOOR. THE AIR TRAVELS THROUGH THE CUBICLES AND EXHAUSTS AT THE TOP THEREFORE EXHAUST DUCTS ARE NECESSARY & USUALLY EXTEND FROM THE TOP OF THE CUBICLE TO THE CEILING.

FIG. 36. Cubicle Layout—Inline (In a Wall) (Dwg. 7720597)



NOTES: EACH CUBICLE IS 48 $\frac{1}{4}$ " WIDE X 54 $\frac{1}{4}$ " DEEP X 84" HIGH & WEIGHS APPROX 4000 LBS. AIR IS REQUIRED FOR ALL CUBICLES AND IS SUPPLIED FROM A PRESSURIZED ROOM OR TROUGH LEADING FROM SAME BELOW THE FLOOR. THE AIR TRAVELS THROUGH THE CUBICLES AND EXHAUSTS AT THE TOP THEREFORE EXHAUST DUCTS ARE NECESSARY & USUALLY EXTEND FROM THE TOP OF THE CUBICLE TO THE CEILING.

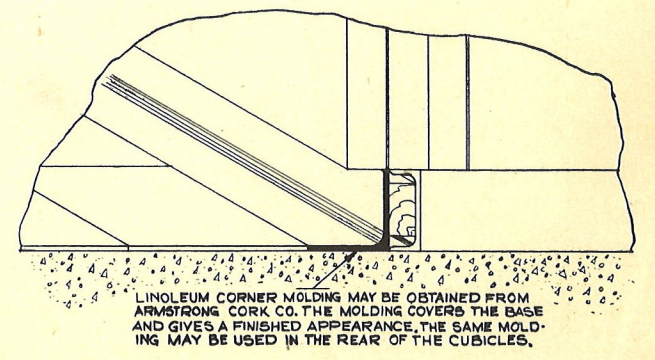
FIG. 37. Cubicle Layout—Inline (Not Walled In) (Dwg. 7720598)



SECTION A-A

GENERAL NOTES

EACH CUBICLE IS 46 1/4" WIDE X 54 1/4" DEEP X 84" HIGH, WEIGHS APPROX 4000 LBS.
 AIR EXHAUST SHOULD BE DIRECT AS PRACTICAL OF NOT LESS THAN 12-50. FT. AREA. THE AIR SHOULD EXHAUST ON OPPOSITE SIDES OF THE BUILDING SO AS TO TAKE ADVANTAGE OF LEeward SIDE OF PREVAILING WINDS. AS AN ALTERNATE, A ROOF VENTILATOR OF THE NO-BACK DRAFT TYPE COULD BE USED IN LIEU OF THE PRECEEDING SUGGESTION, THE VENTILATOR SHOWN IS ONLY ONE OF THE MANY DESIGNS THAT MAY BE INSTALLED.
 THE SOUNDPROOFED EXHAUST DUCT SHOULD NOT BE INSTALLED UNTIL THE CUBICLES ARE IN PLACE. ONLY SOUNDPROOFING APPROVED BY THE FIRE UNDERWRITERS SHOULD BE USED.



LINOLEUM CORNER MOLDING MAY BE OBTAINED FROM ARMSTRONG CORK CO. THE MOLDING COVERS THE BASE AND GIVES A FINISHED APPEARANCE, THE SAME MOLDING MAY BE USED IN THE REAR OF THE CUBICLES.

FIG. 38. Typical Air Exhaust Duct (Dwg. 7621270)

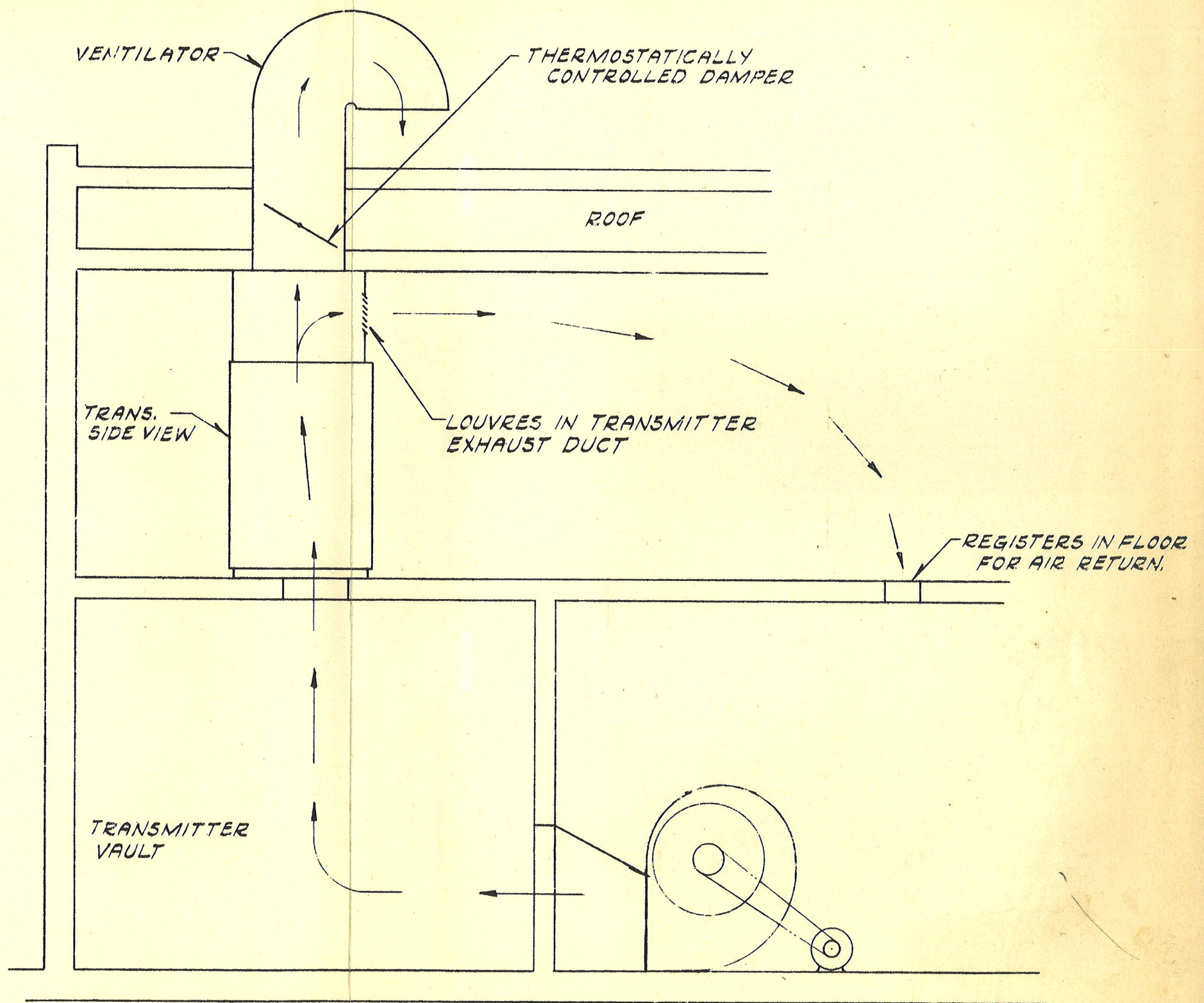
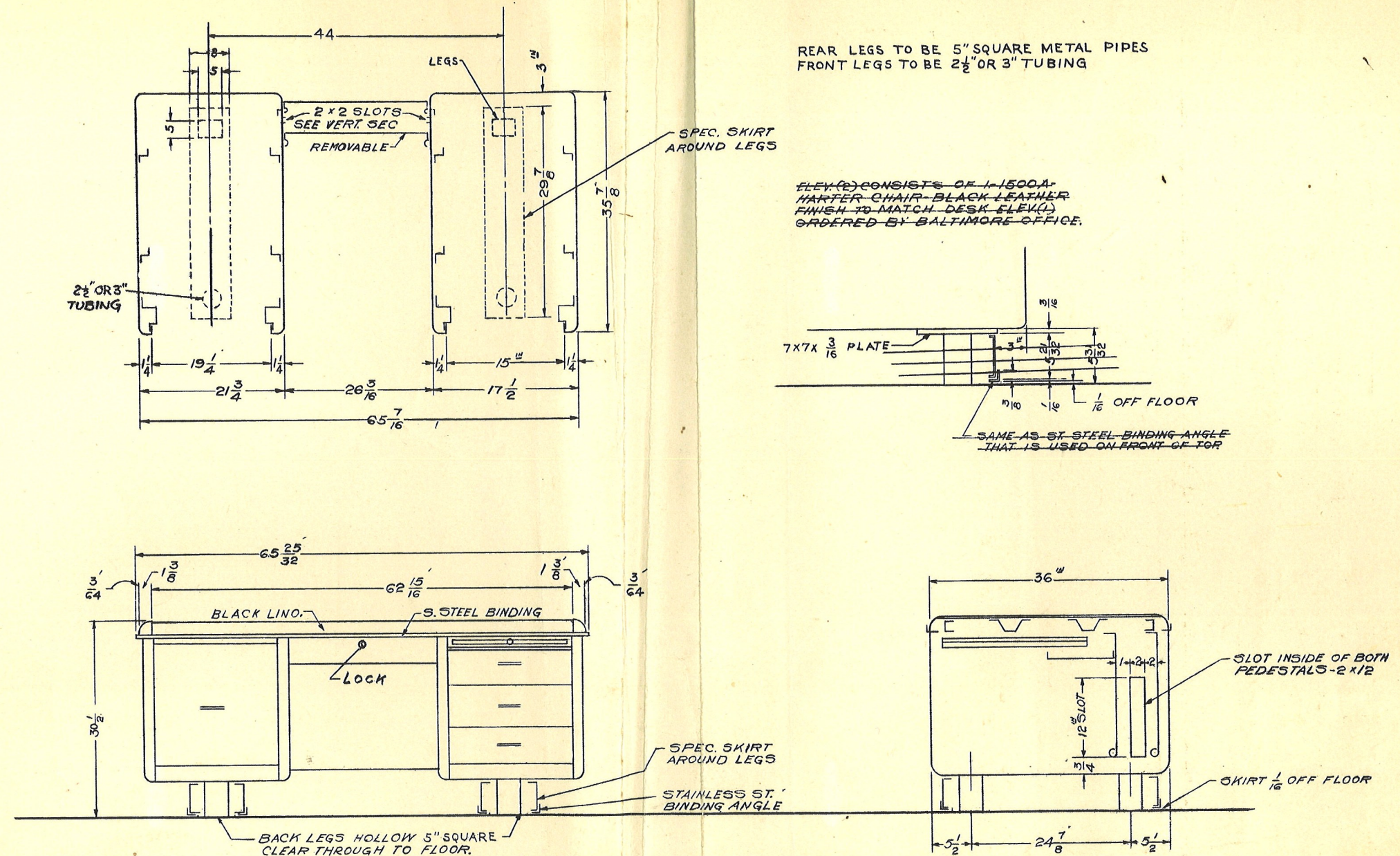


FIG. 39. Basic Air Supply System (Dwg. 7429905)



NOTES - PART-1
 1. ELEV. (1) - SPECIAL: CONTAINING ONE PEDESTAL TO HAVE STOW DAVIS MECHANISM COMPLETE WITH METAL PLATFORM, FINISH AS PER SPEC. OF DESK.
 2. KNEE SPACE BOX DRAWER CLEAR 26 1/4 x 2 1/2 x 22 1/8. ZEE SLIDE SUSPENSION CONV. TRAY PK. LOCK TO LOCK ALL OTHER DRAWERS.
 3. BOX DRAWERS CLEAR 13 3/16 x 5 27/32 x 24 1/8. EZ SLIDE SUSP.
 4. FINISH PER PROCESS SPEC. 332-B

NOTES - PART-2
 CHAIR - ORDER FROM YARRINGTON & JOHNS, INC., 320-324, W-24 ST. BALT. II, MD, THEIR #1200 EXECUTIVE TYPE DESK CHAIR UPHOLSTERED IN BLACK IMITATION LEATHER. PAINTED SURFACES TO BE FINISHED (W) SPEC. 332-B.

SYM BOL	NAVY TYPE NO.	MATERIAL	REFERENCE	PART	DESCRIPTION	FIN.
1				2	CHAIR - SEE NOTES	
1				1	DESK - SEE NOTES	
6-1						
GROUP						

FIG. 41. Desk (Dwg. 7715022)

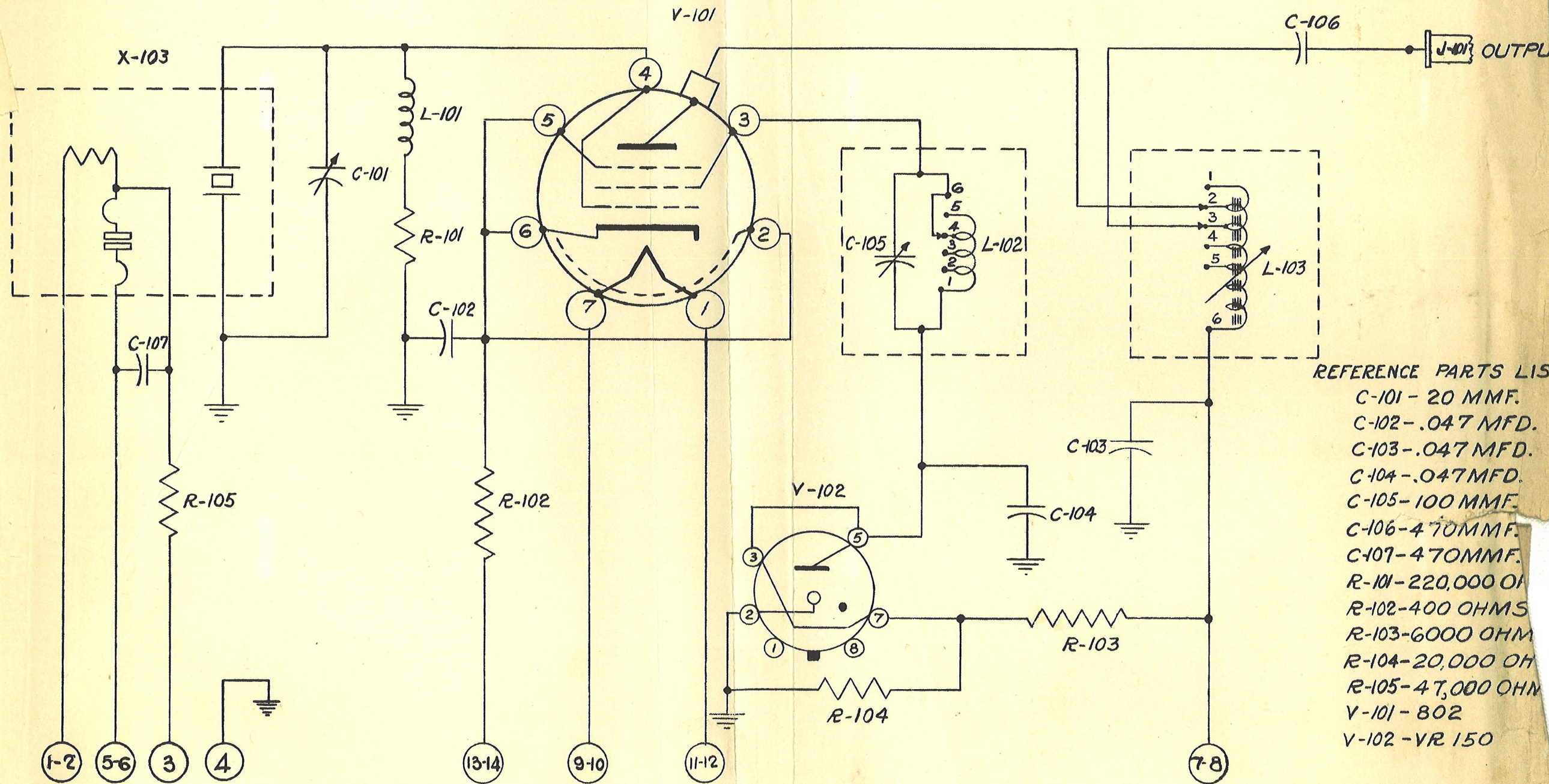


FIG. 61. Type FA Crystal Oscillator, Schematic Diagram (Dwg. 7425857)

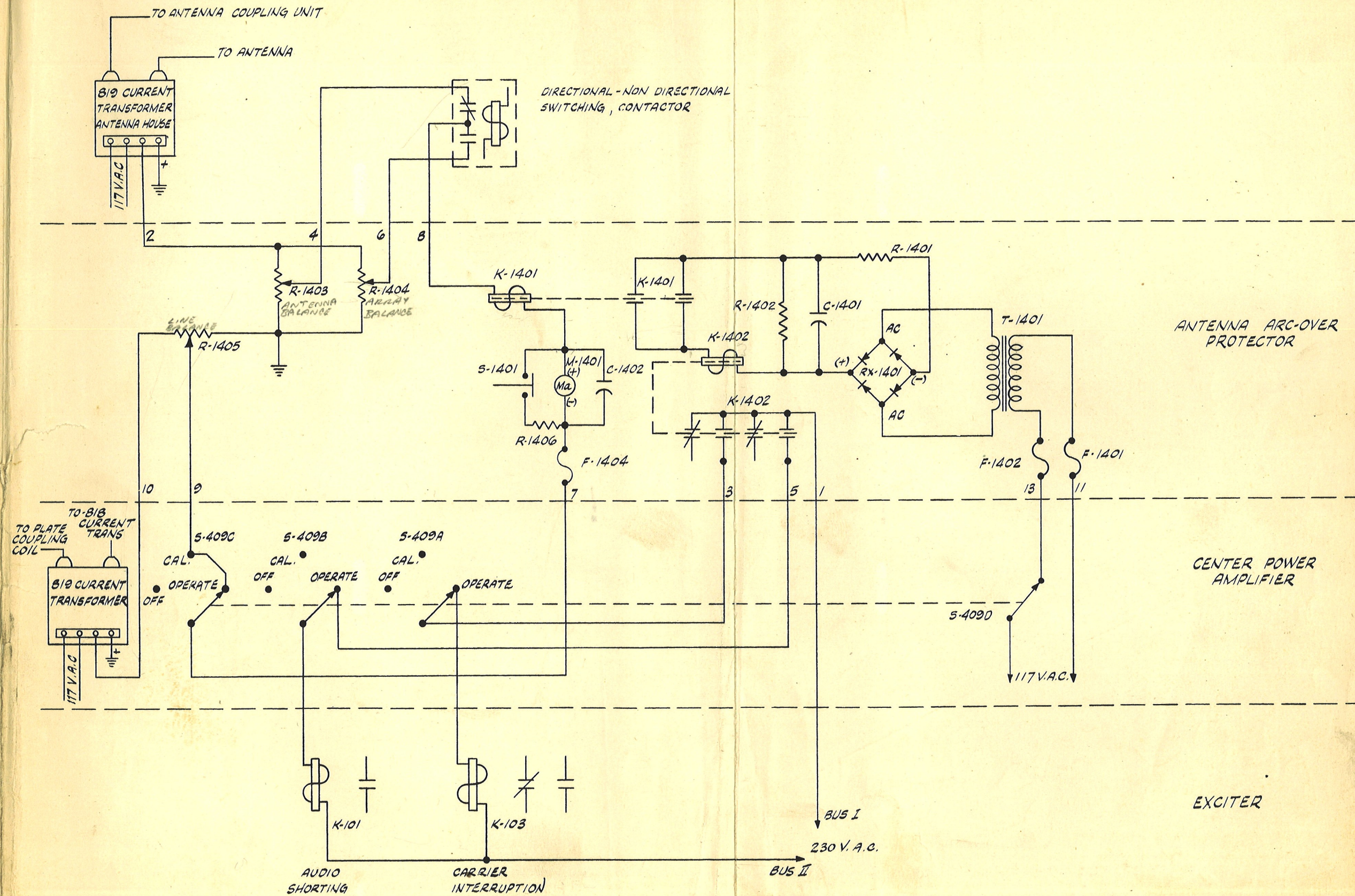
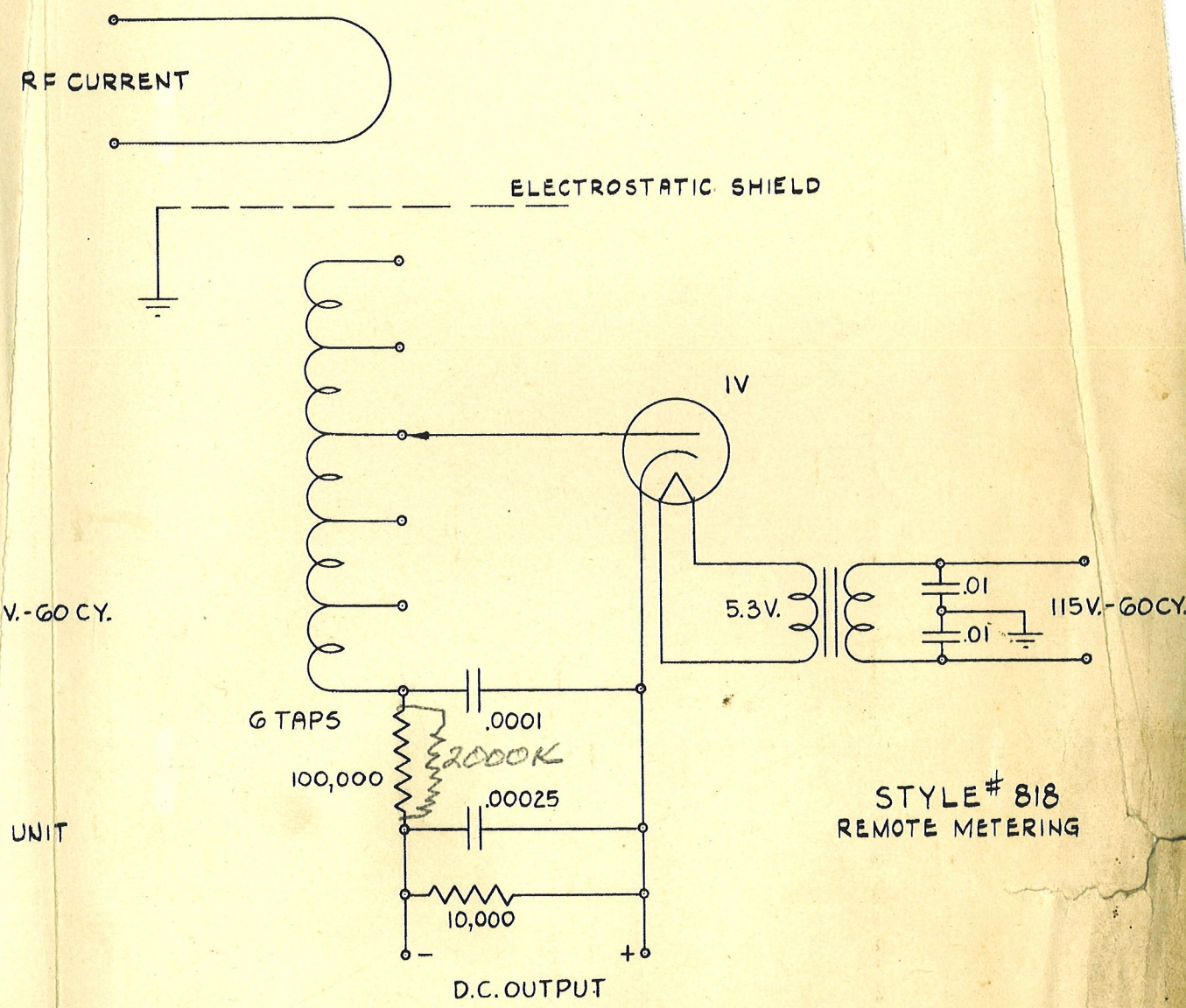
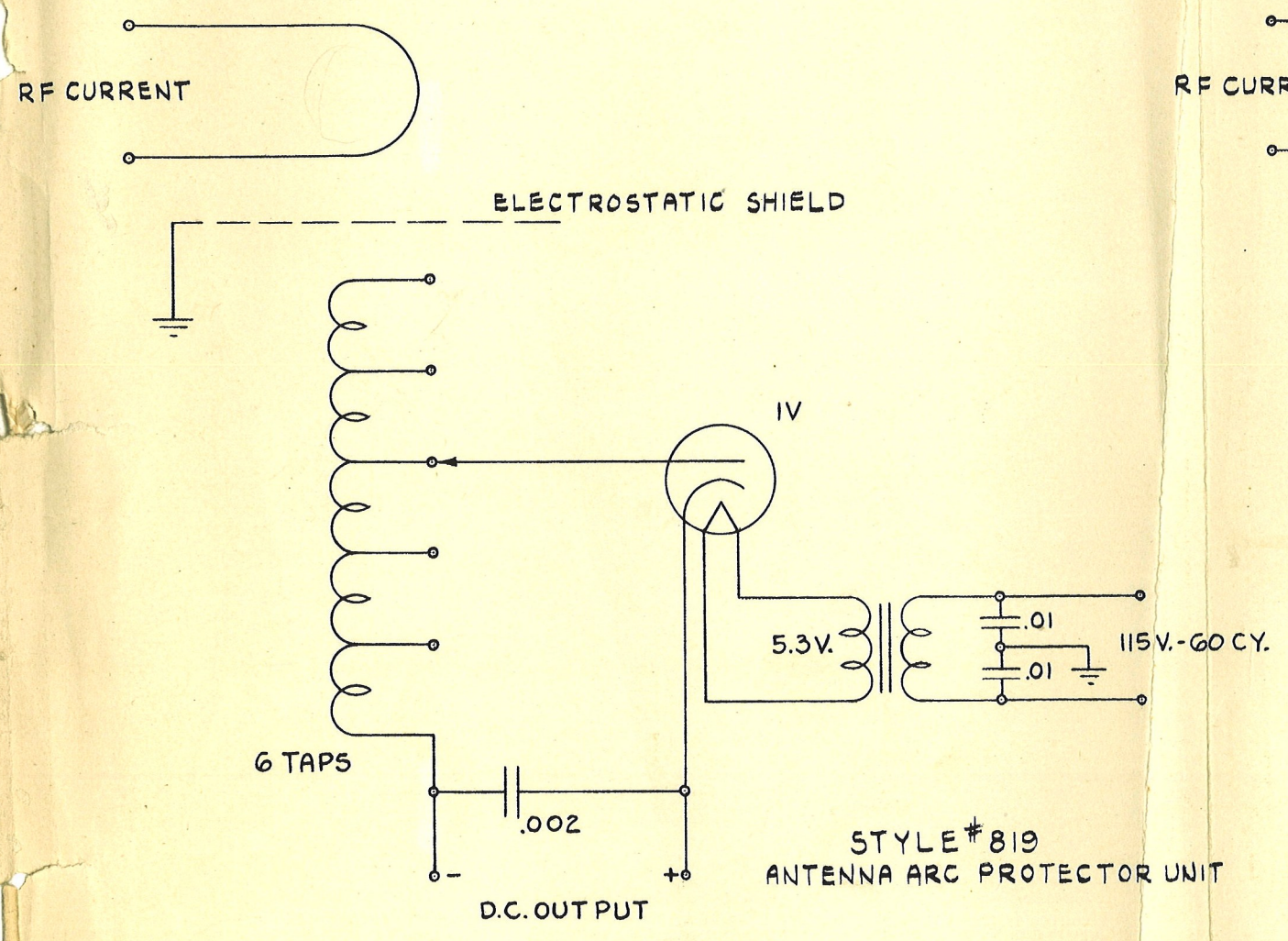


FIG. 62. Composite Diagram—Antenna Arc Interrupter Unit (Dwg. 7724452)



NOTE- TO INCREASE THE SENSITIVITY, THE PICKUP COIL CAN BE TRANSFERRED TO THE PRIMARY SIDE OF THE ELECTROSTATIC SHIELD.

Change in resistor made to use 1ma meter Ba.

FIG. 63. RF Current Transformer-Rectifier (Dwg. 7432074)

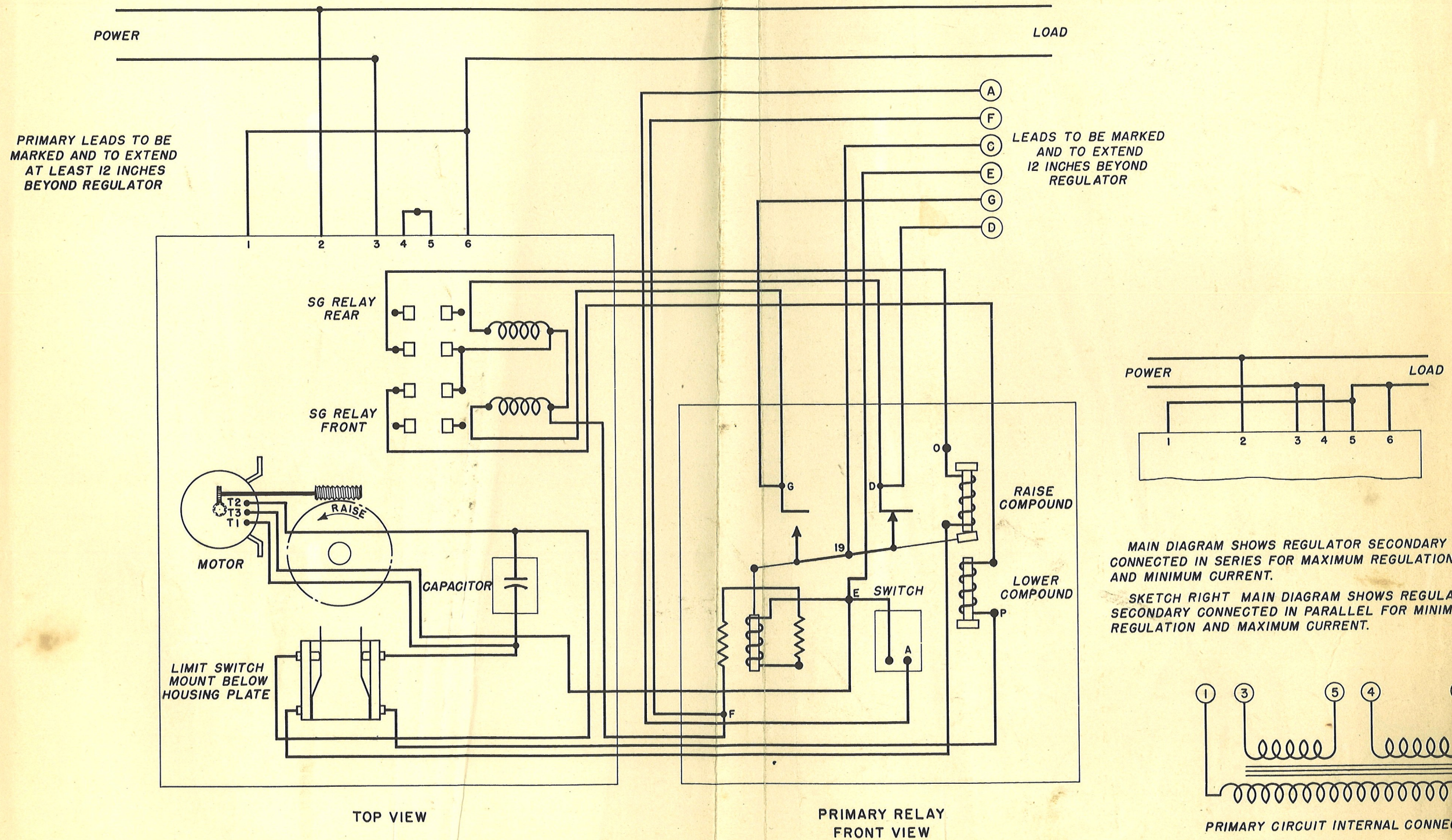


FIG. 58. Distribution Induction Regulator, Schematic Diagram (Dwg. 7718453)

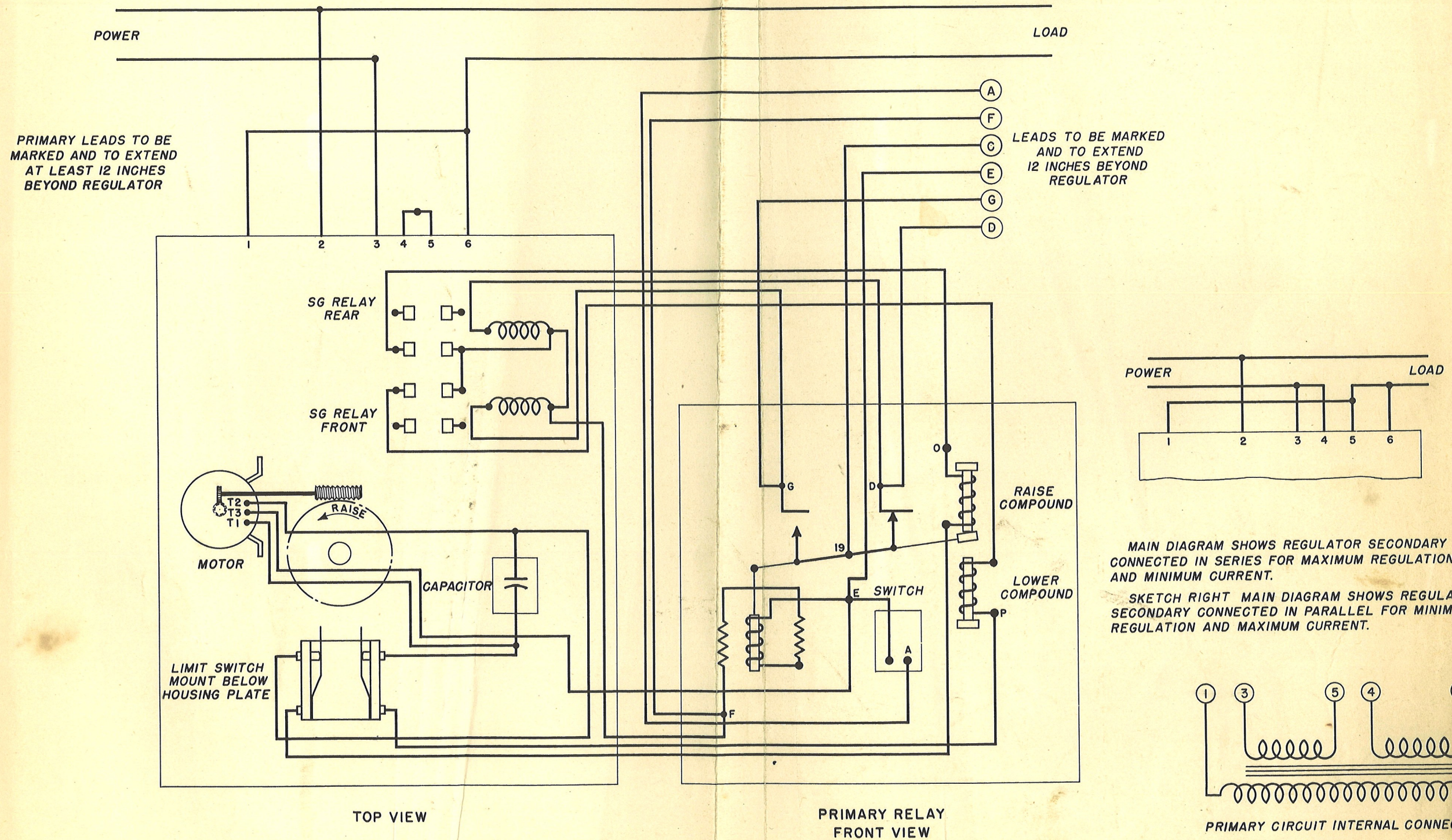


FIG. 58. Distribution Induction Regulator, Schematic Diagram (Dwg. 7718453)

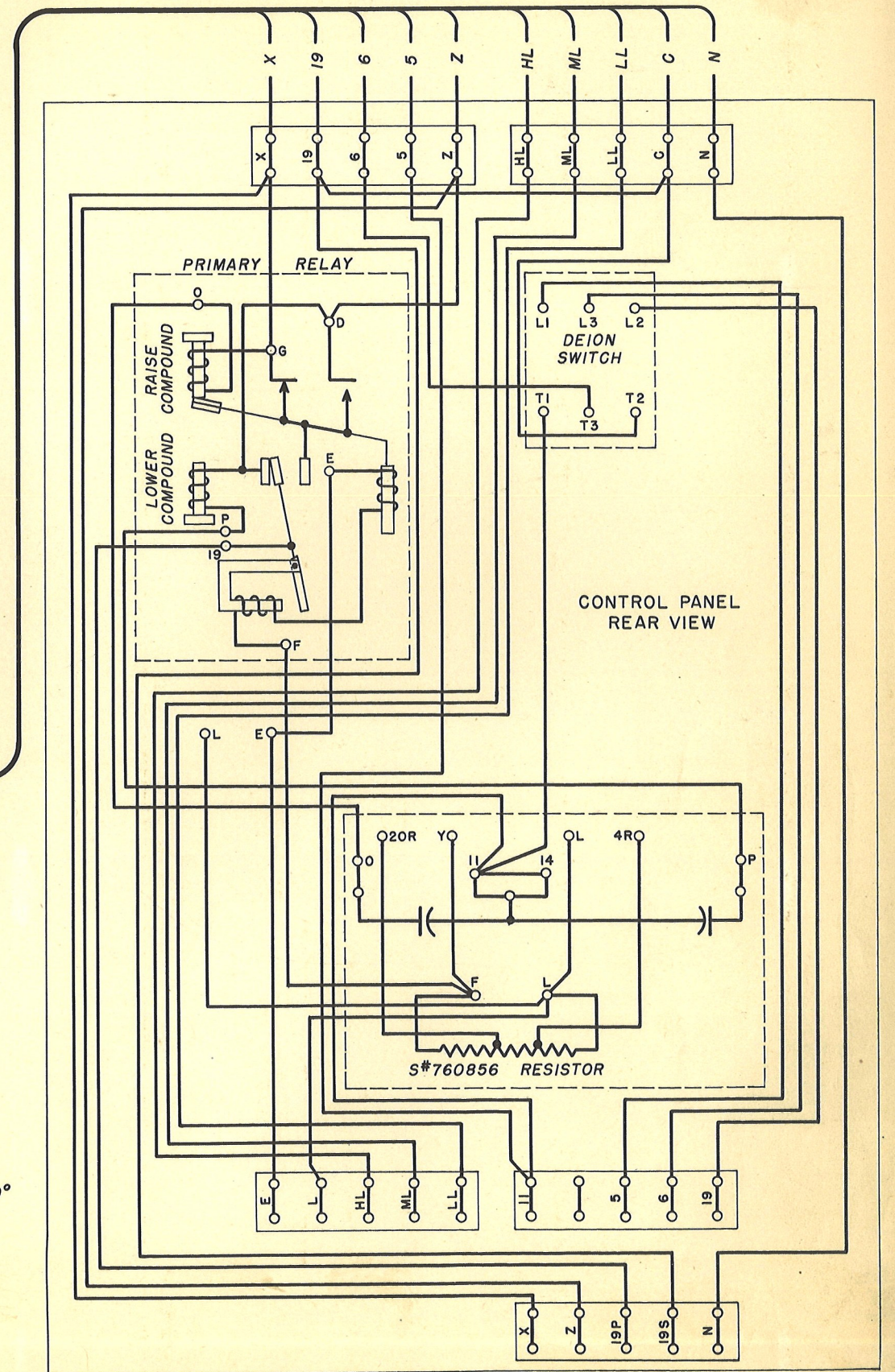
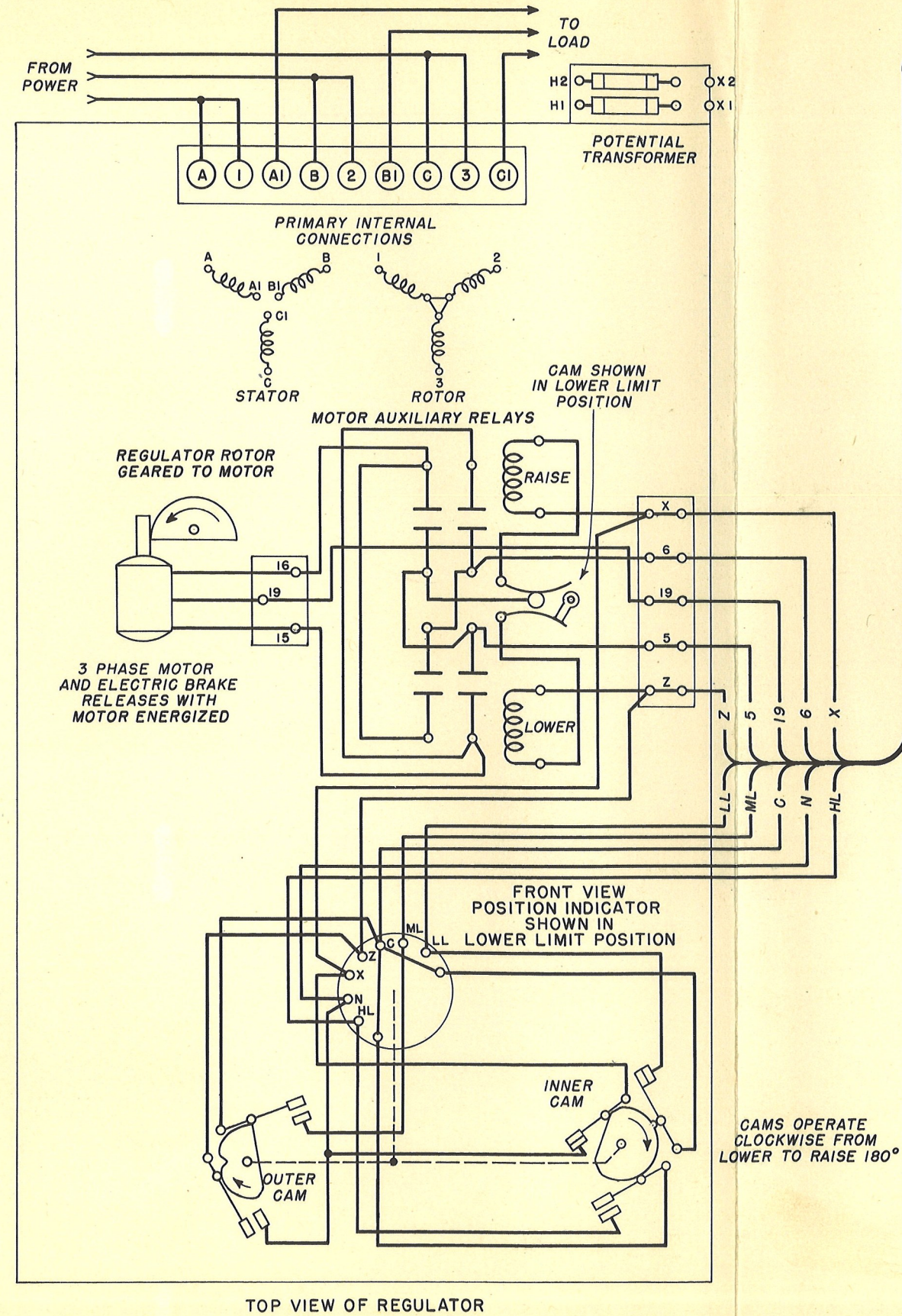
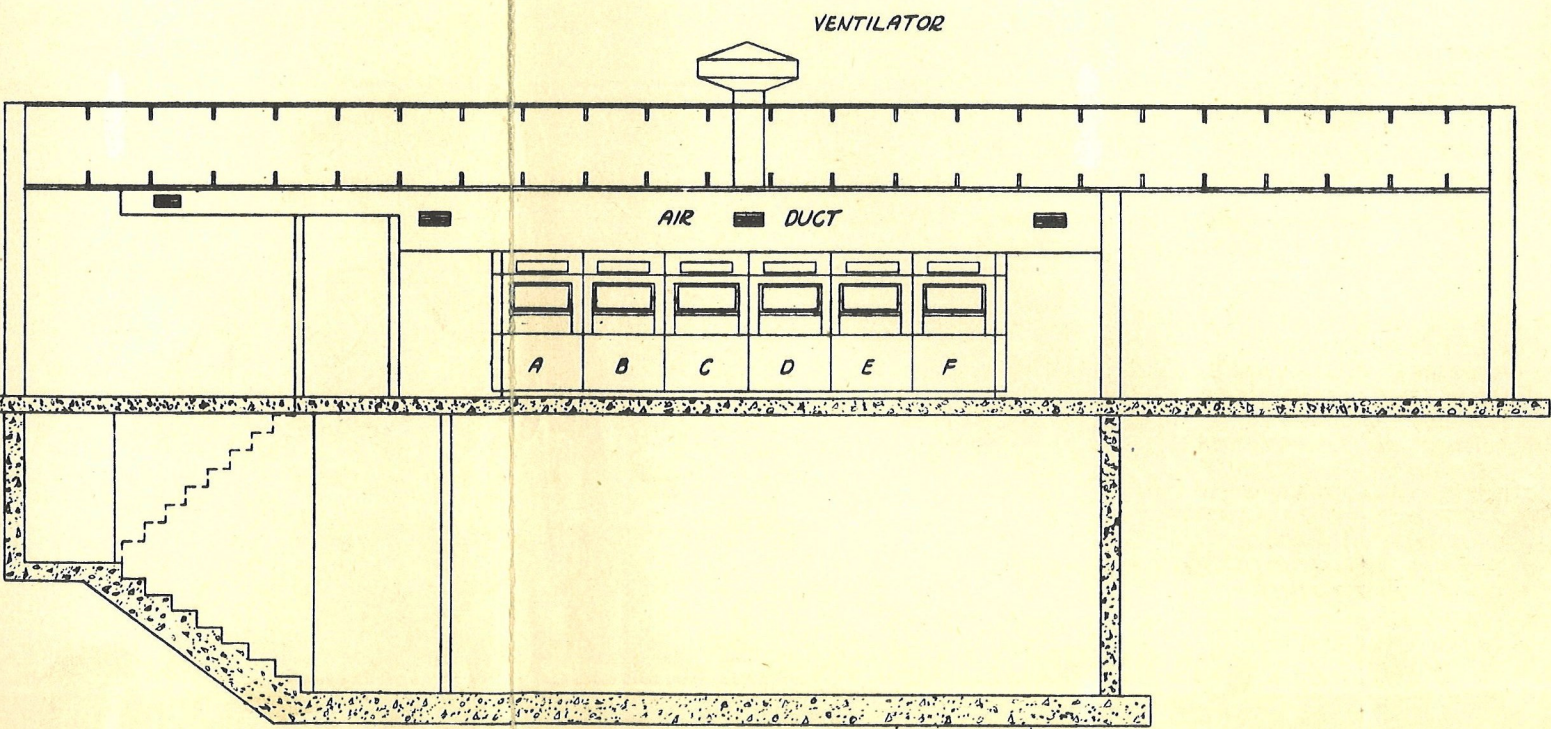
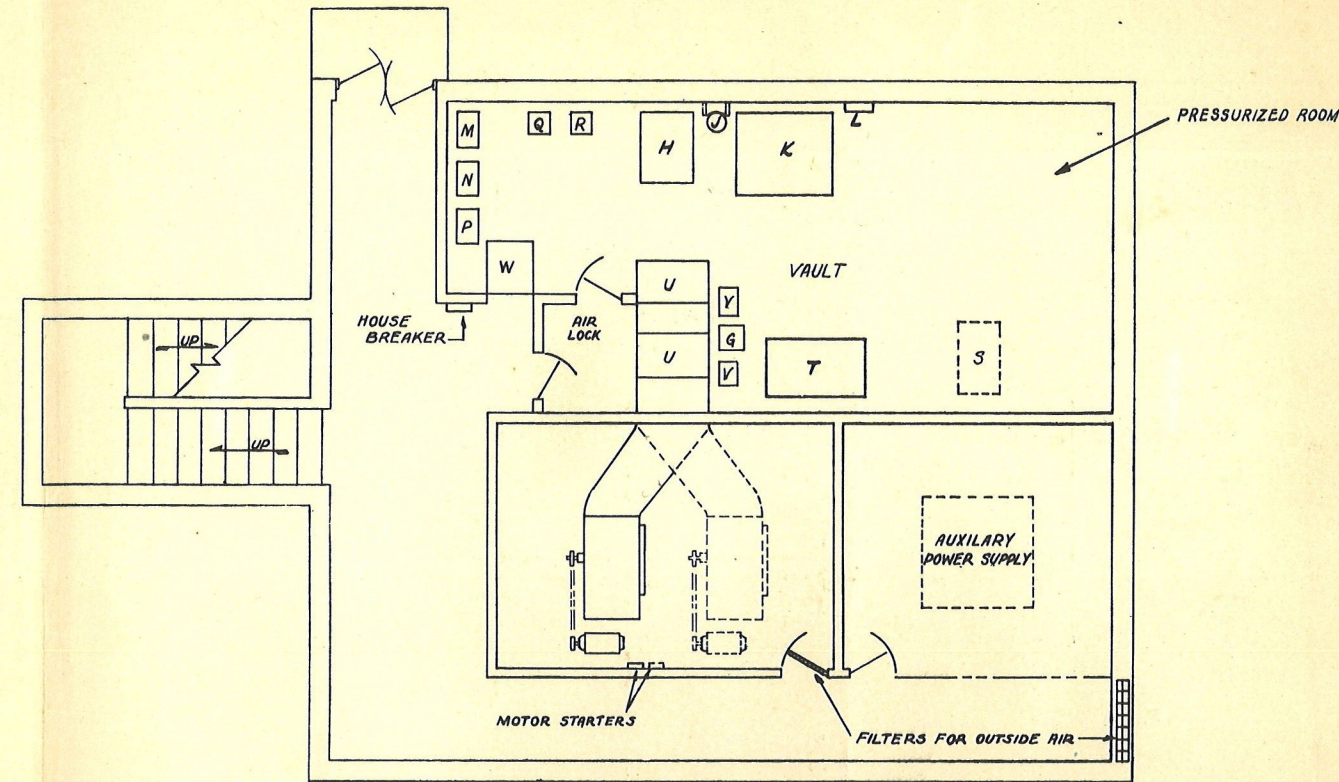
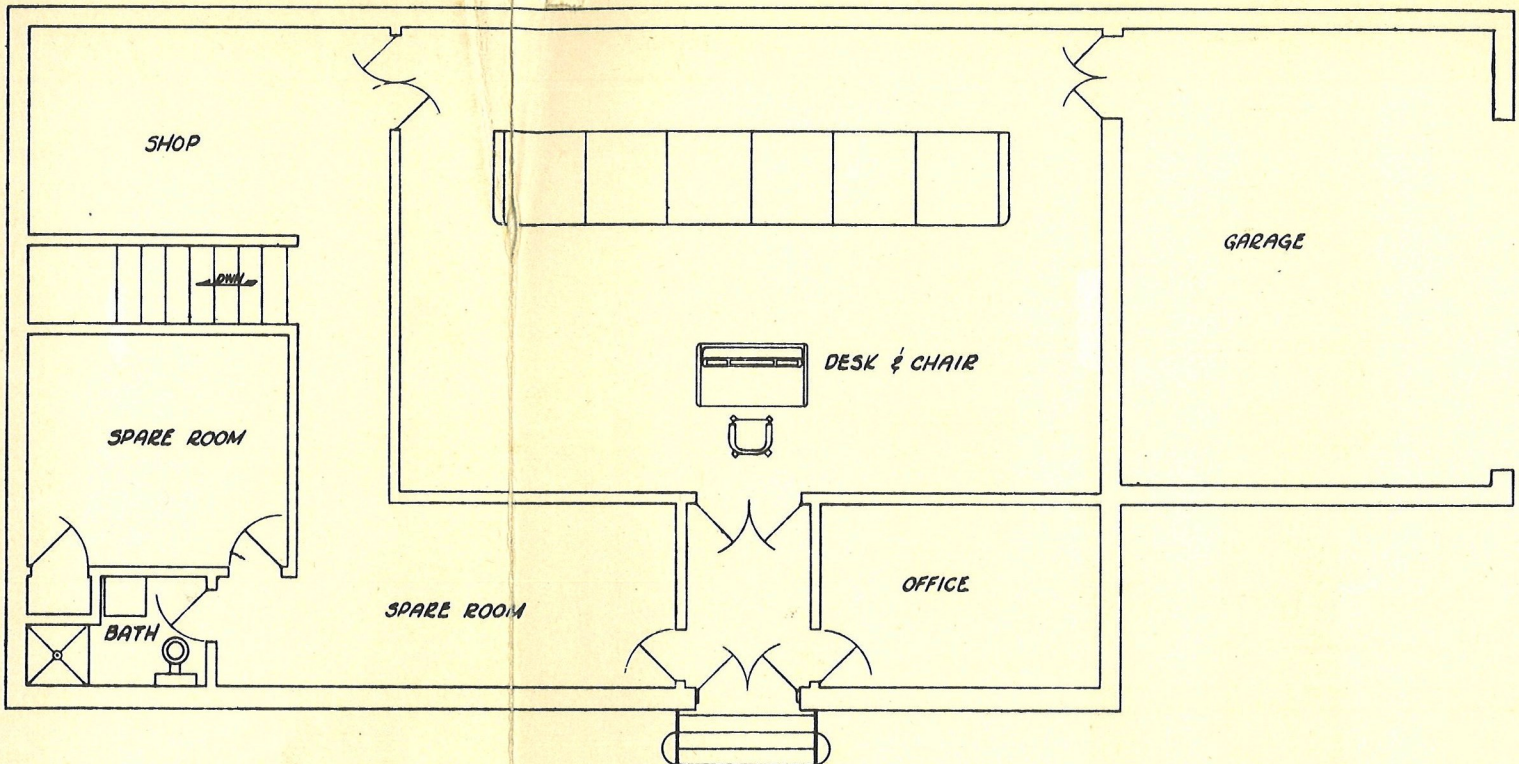


FIG. 59. Main Rectifier Regulator, Schematic Diagram (If Used) (Dwg. 7718452)



- A - POWER CONTROL
- B - EXCITER
- C - MODULATOR
- D - LEFT POWER AMPLIFIER
- E - CENTER POWER AMPLIFIER
- F - RIGHT POWER AMPLIFIER

SPACE FOR PHASING CUBICLE IS NOT SHOWN.
IF PHASING CUBICLE IS USED, DUE ALLOWANCE
SHOULD BE MADE.

- G - FILTER REACTOR
- H - MODULATION REACTOR
- J - AUXILIARY AUDIO CHOKE
- K - MODULATION TRANSFORMER
- L - COUPLING CAPACITOR
- M - DISTRIBUTION TRANSFORMER
- N - DISTRIBUTION TRANSFORMER
- P - DISTRIBUTION TRANSFORMER
- Q - DISTRIBUTION REGULATOR
- R - DISTRIBUTION REGULATOR
- S - RECTIFIER REGULATOR (OPTIONAL EQUIPMENT)
- T - PLATE TRANSFORMER
- U - RECTIFIER
- V - FILTER CAPACITOR
- W - SWITCH GEAR
- X - AUXILIARY POWER SUPPLY

FIG. 28. Building Layout (Two Floor) (Dwg. 55-A-8335)