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ASSEMBLY AREA TROUBLE SHOOTING MANUAL -- MISSILE GUIDANCE SET AN/DPW-11. GUIDED MISSILE TEST SET AN/DMS-12. GUIDED MISSILE ELECTRICAL TEST SET M22. (NIKE-AJAX ANTIAIRCRAFT GUIDED MISSILE SYSTEM)

Human Resources Research Organization

Prepared for:

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March 1962

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This experimental manual presents illustrations, troubleshooting instructions, and schematic diagrams for the NIKE-AJAX Antiaircraft Guided Missile System.

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CONTENTS

FIRST AID INSTRUCTIONS B

ILLUSTRATIONS

Index To Illustrations

TROUBLESHOOTING INSTRUCTION

Index To Troubleshooting Instructions

SCHEMATIC DIAGRAMS

Index To Schematic Diagrams

ABBREVIATIONS

NOTE: Pages 6 thru 86, pages 145 thru 196, pages 198-199, 328 are blank.

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(1)

ONTENTS

	Back of this page
	1-5
	1
TRUCTION	87-144
ng Instructions	87
	197-327
iagrams	197
	329

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ARTIFICIAL RESPIRATION

I. GENERAL

a. Rescue. In case of electric shock, shut off the high voltage at once and ground the circuits. If the high voltage cannot be turned off without delay, free the victim from contact with the live conductor as promptly as possible. Avoid direct contact with either the live conductor or the victim's body. Use a dry board, dry clothing, or other nonconductor to free the victim. An axe with a dry wooden handle may be used to cut the high-voltage wire. Use extreme caution to avoid the resulting electric flash.

b. Symptoms.

(1) Breathing stops abruptly in electric shock if the current passes through the breathing center at the base of the brain. If the shock has not been too severe, the breath center recovers after a while and normal breathing is resumed, provided that a sufficient supply of air has been furnished meanwhile by artificial respiration.

(2) The victim is usually very white or blue. The pulse is very weak or entirely absent and unconciousness is complete. Burns are usually present. The victim's body may become rigid or stiff in a very few minutes. This condition is due to the action of electricity and is not to be considered rigor mortis. Artificial respiration must still be given, as several such cases are reported to have recovered. The ordinary and general tests for death should never be accepted.

II. TREATMENT

Start artificial respiration immediately. At the same time send for a medical officer, if assistance is available. Do not leave the victim unattended. Perform artificial respiration at the scene of the accident, unless the victim's or operator's life is endangered from such action. *In this case only,* remove the victim to another location, but no farther than is necessary for safety. If the new location is more than a few feet away, artificial respiration should be given while the victim is being moved. If the method of transportation prohibits the use of the Holger Nielson method, other methods of resuscitation may be used. Pressure may be exerted on the front of the victim's diaphragm, or the direct mouth-to-mouth method may be used. Artificial respiration, once started, must be continued without loss of rhythm. The standard technique (Holger Nielson) for executing the back-pressure, arm-lift method of artificial respiration is described here.

a. Position of Victim (A). Place the victim in the face down, prone position. Bend his elbows and place the hands one upon the other. Turn his face to one side, placing his cheek upon his hands.

b. Position of the Operator's Hands and Legs (B). Facing the head of the victim, kneel on either your right or left knee. Place this knee at the side of the victim's head close to his forearm. Place your other foot near the victim's other elbow.

Note. Kneel on both your knees if you find it more comfortable, with one knee on each side of the victim's head.

Place your hands upon the flat of the victim's back in such a way that the heels of your hands lie just below an imaginary line running between the victim's armpits. With the tips of your thumbs just touching, spread the fingers downward and outward.

c. Compression Phase (C). Rock forward until your arms are approximately vertical and allow the weight of the upper part of your body to exert slow, steady, even pressure downward upon the hands. This forces air out of the lungs. Your elbows should be kept straight and the pressure exerted almost directly downward on the back.

d. Position for Expansion Phase (D). Release the pressure, avoiding a final thrust, and commence to rock slowly backward. Place your hands upon the victim's arms just above his elbows.

e. Expansion Phase (E). Draw the victim's arms upward and toward you. Apply just enough lift to feel resistance and tension at the victim's shoulders. Do not bend your elbows, and as you rock backward the victim's arms will be drawn toward you. Then drop the arms gently to the ground. This completes the full cycle. The arm lift expands the chest by pulling on the chest muscles, arching the back, and relieving the weight on the chest.

Note. The cycle should be repeated 12 times per minute at a steady, uniform rate. The compression and expansion phases should occupy about equal times; the release periods being of minimum duration.

III. ADDITIONAL RELATED DIRECTION

It is all important that artificial respiration, when needed, be started quickly. There should be a slight inclination of the body in such a way that fluid drains better from the respiratory passage. The head of the victim should be extended, not flexed forward, and the chin should not sag lest obstruction of the respiratory passages occur. A check should be made to ascertain that the tongue or foreign objects are not obstructing the passages. These aspects can be cared for when placing the victim into position or shortly thereafter, between cycles. A smooth rhythm in performing artificial respiration is desirable, but split-second timing is not essential. Shock should receive adequate attention, and the victim should remain recumbent after resuscitation until seen by a physician or until recovery seems assured.

1.

First Aid for Electric Shock

A—POSITION OF VICTIM

B—POSITION OF OPERATOR'S HANDS AND LEGS

C—COMPRESSION PHASE

D—POSITION FOR EXPANSION PHASE

E—EXPANSION PHASE

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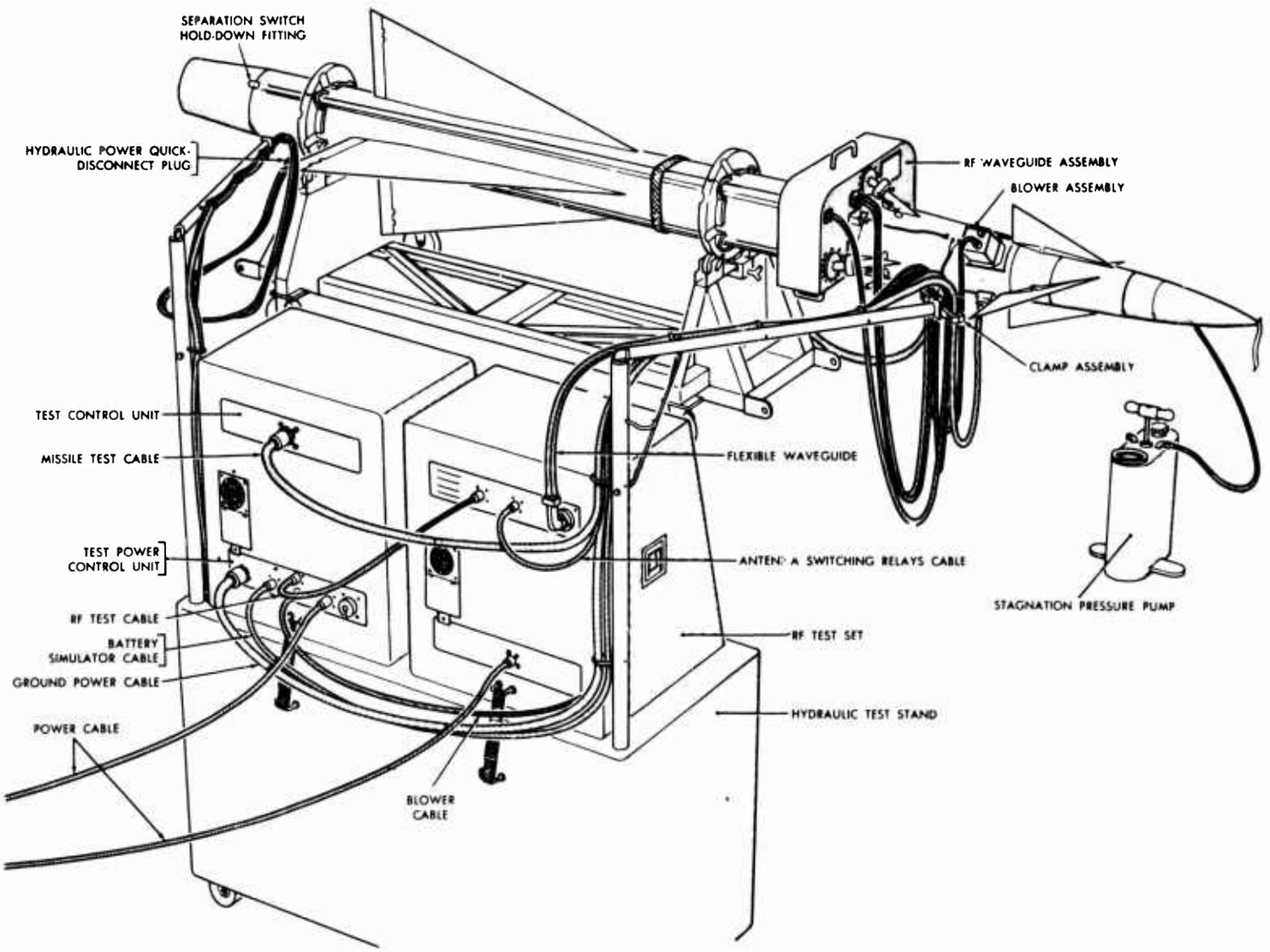

MISSILE ELECTRICAL TEST EQUIPMENT, ASSEMBLY AREA

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A

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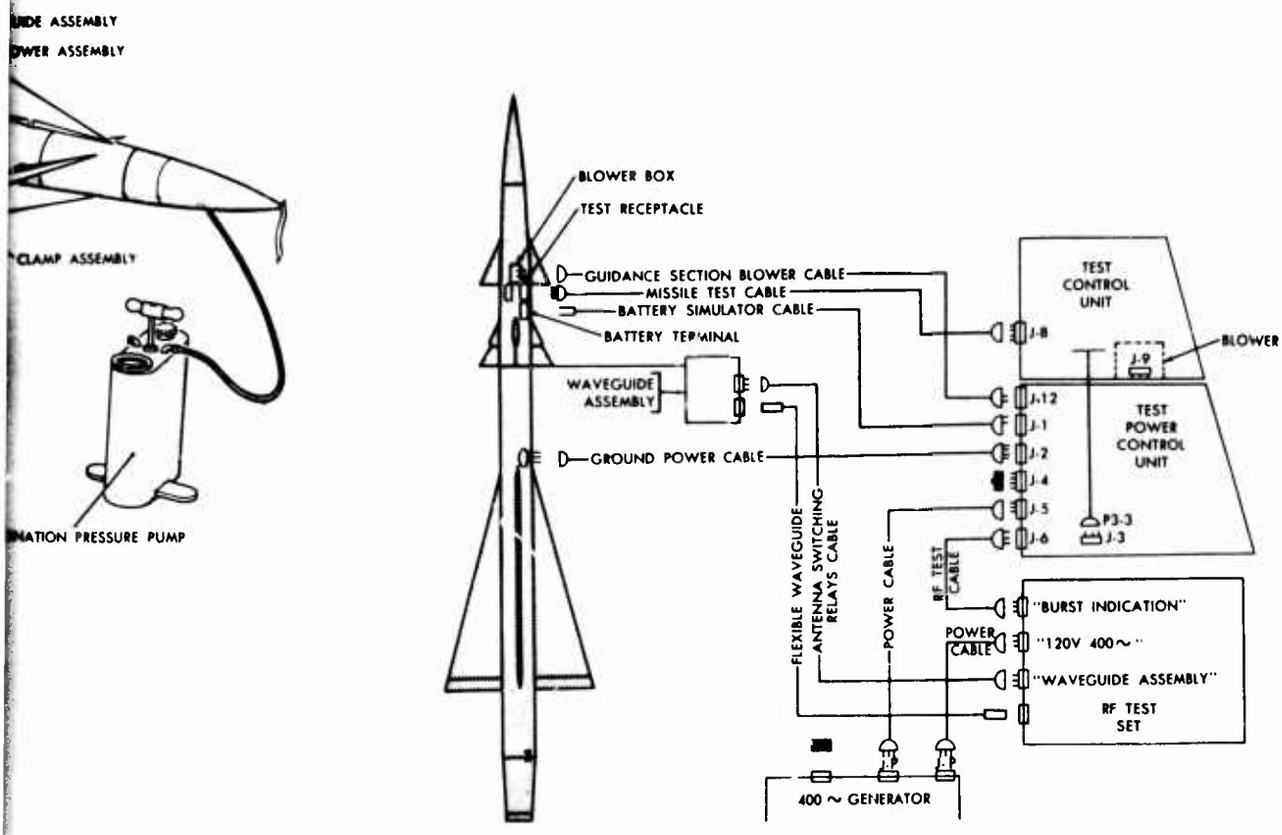

MISSILE TEST EQUIPMENT CABLING DIAGRAM,
COMPLETE MISSILE CHECKOUT

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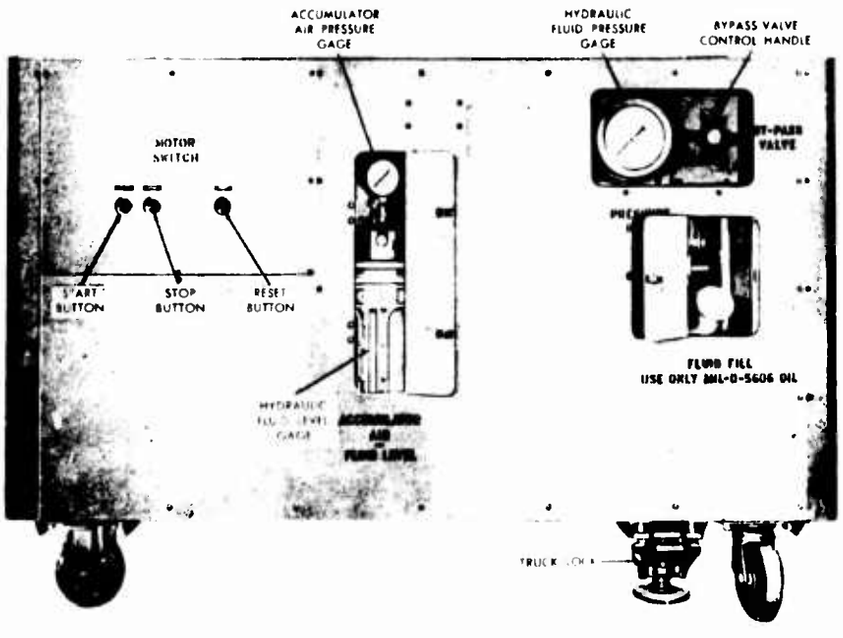
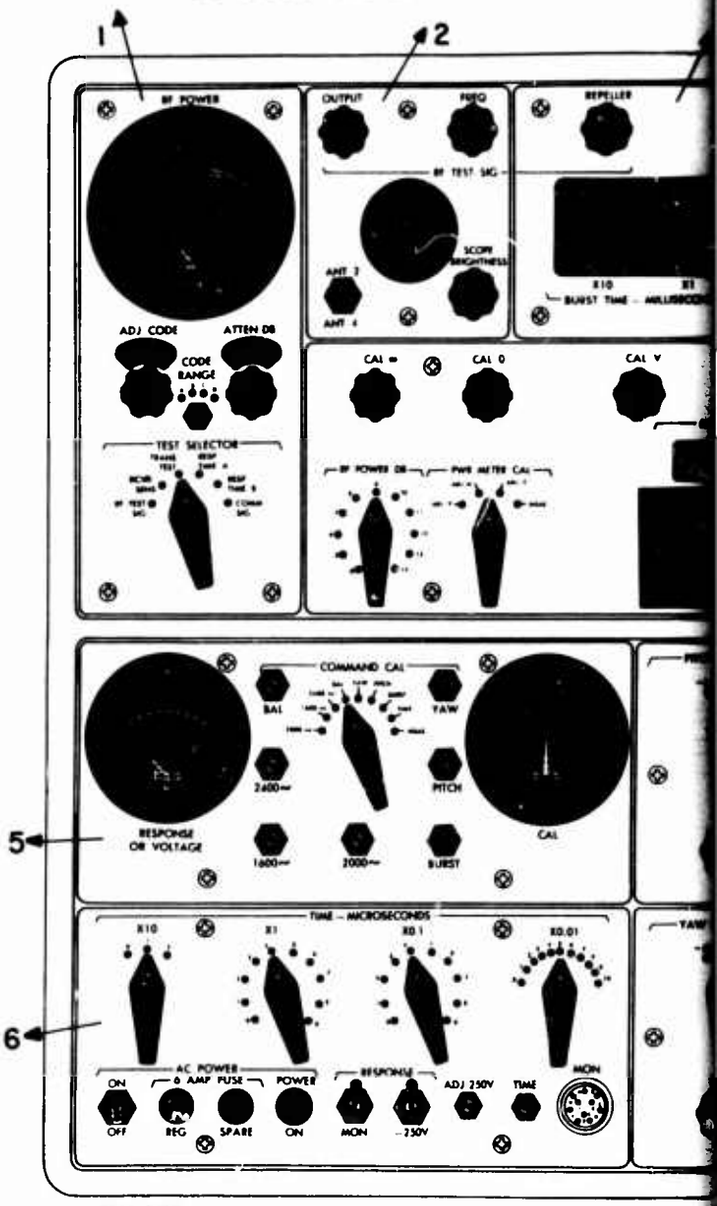


HYDRAULIC TEST STAND



1. PULSER
2. OSCILLOSCOPE
3. BURST TIMER
4. RF POWER METER CURCUIT
5. COMMAND MOD
6. MICROSECOND
7. PITCH OSCILLA
8. YAW OSCILLAT

MISSILE R.F. TEST SET PANEL FRO

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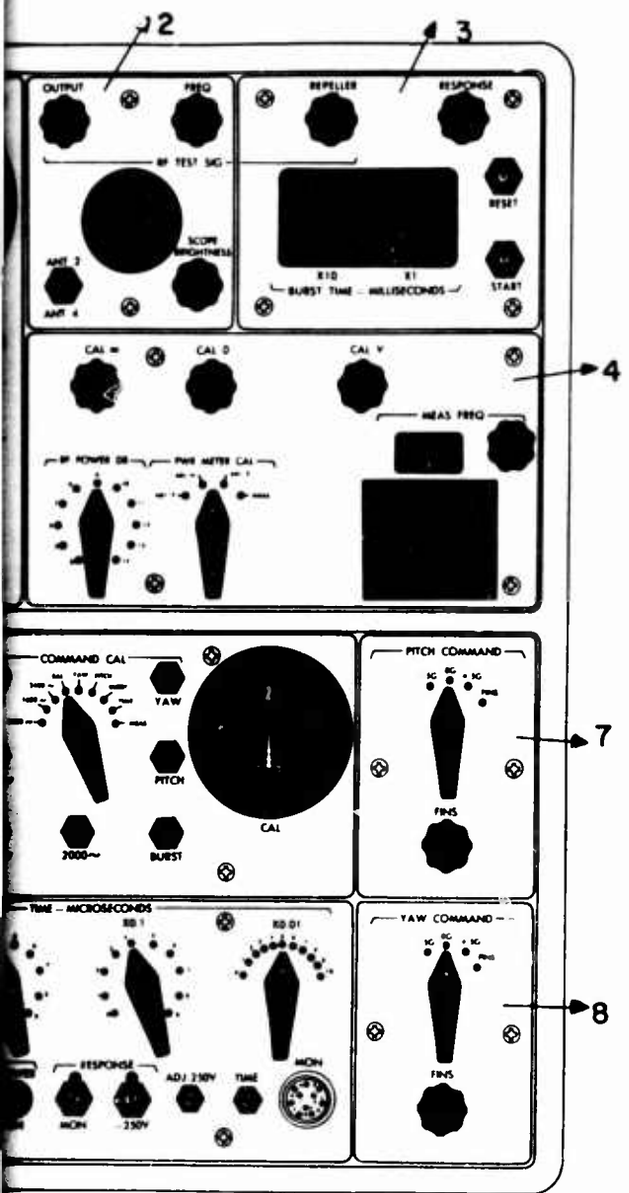

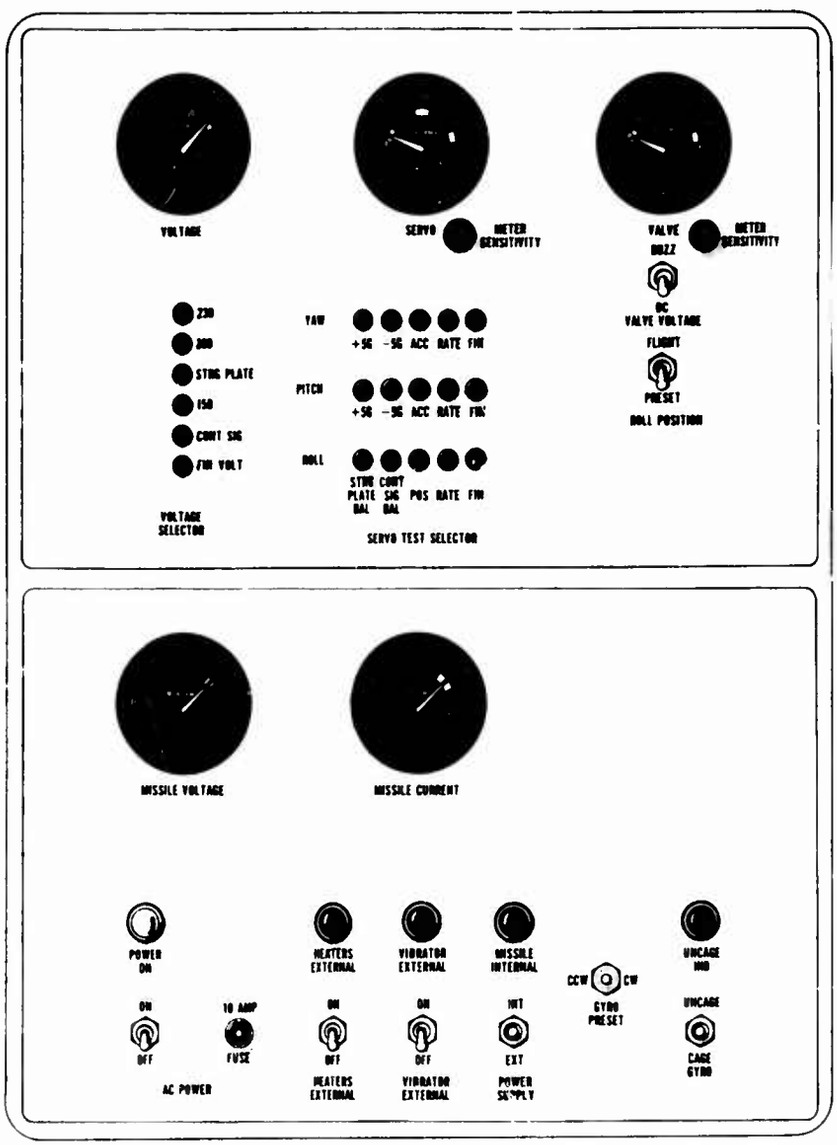

5. COMMAND MODULATOR
6. MICROSECOND OSCILLATOR
7. PITCH OSCILLATOR
8. YAW OSCILLATOR

R CURCUIT

E TEST SET PANEL FRONT

TCU AND TPCU PANEL FRONT

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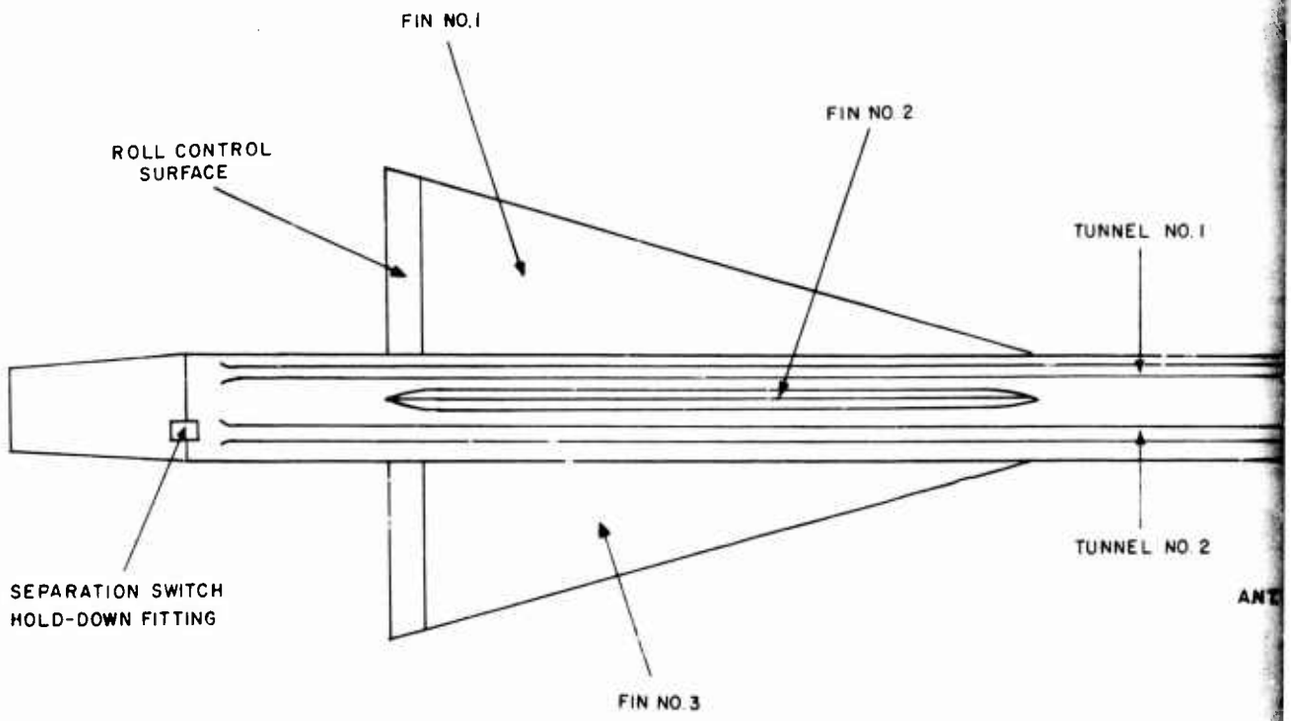
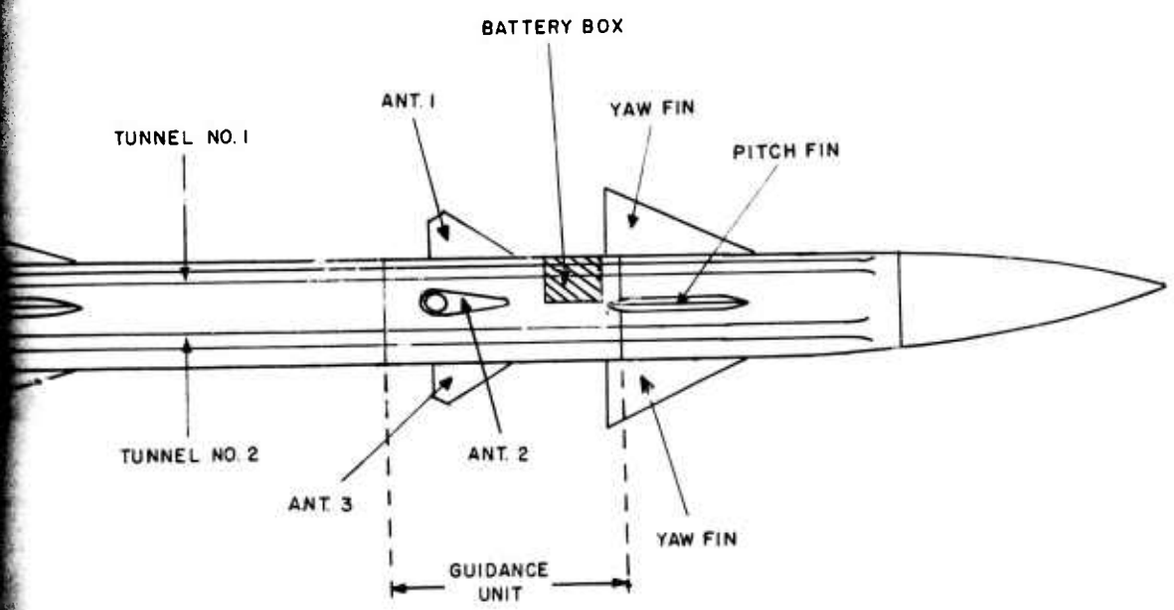


MISSILE LOCATION DIAGRAM


BATTERY BOX
ANT. 1
YAW FIN
TUNNEL NO. 1
PITCH FIN
TUNNEL NO. 2
ANT. 2
ANT. 3
YAW FIN
GUIDANCE
UNIT

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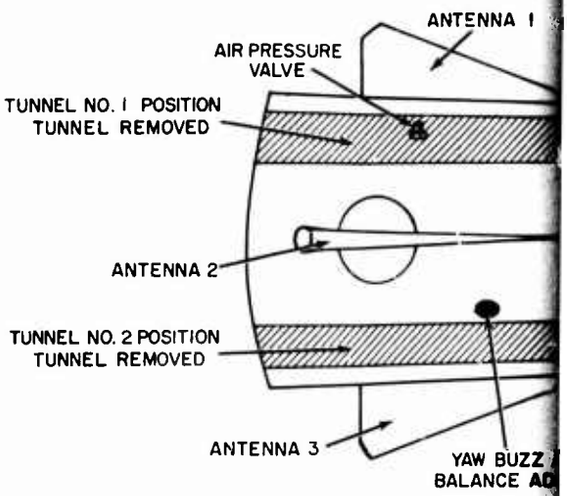
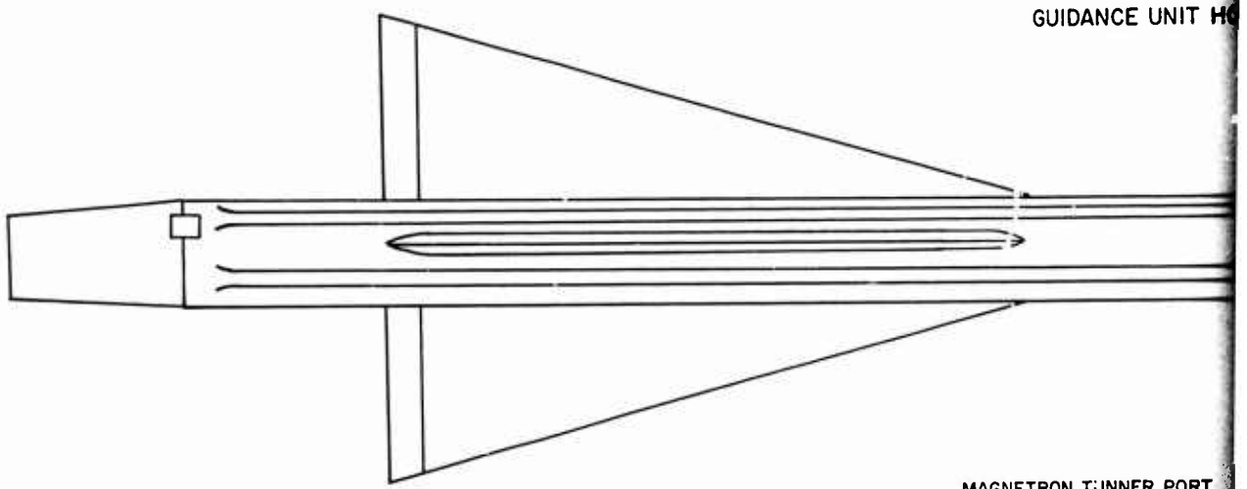
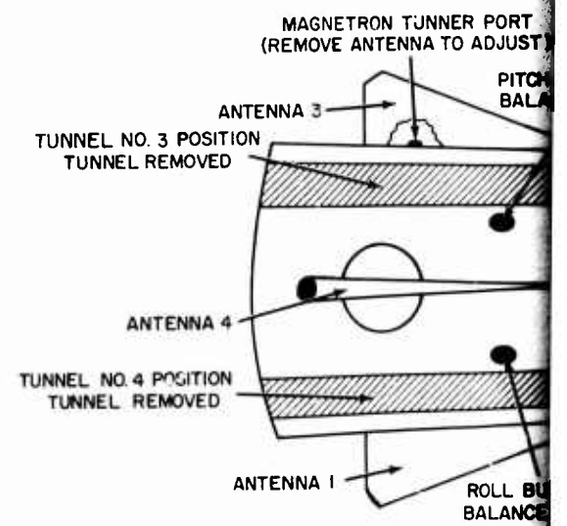


GUIDANCE UNIT H





GUIDANCE UNIT HOU

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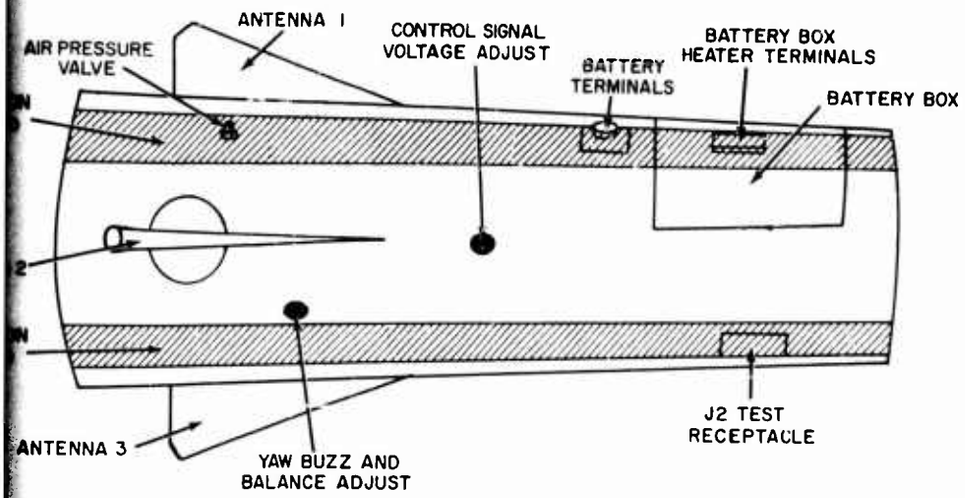
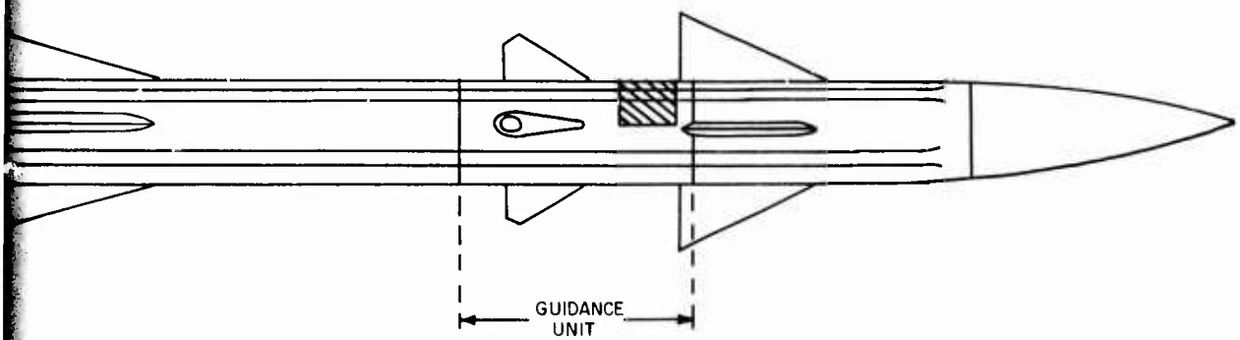
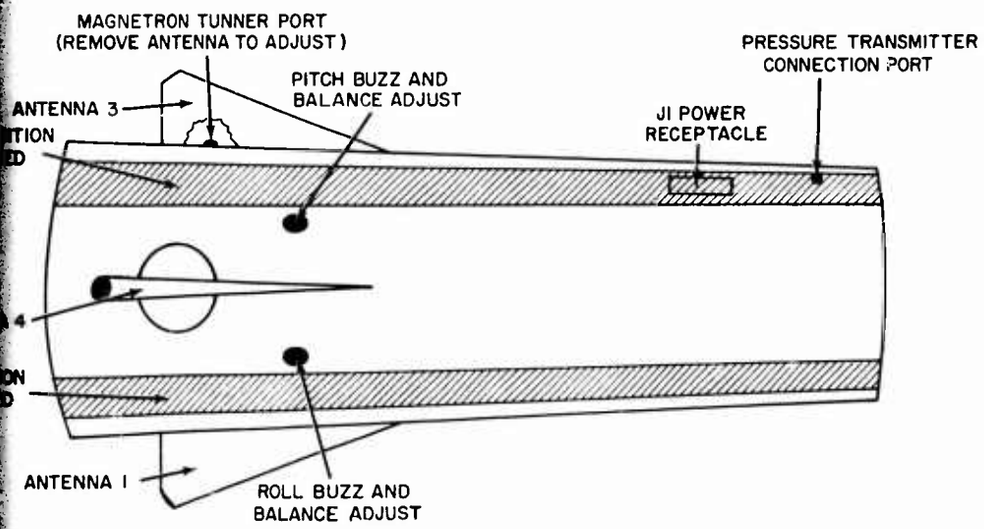


GUIDANCE UNIT HOUSING, TOP VIEW





GUIDANCE UNIT HOUSING, BOTTOM VIEW

GUIDANCE UNIT LOCATION DIAGRAM

INDEX TO TROUBLESHOOTING INSTR

RF TEST SET

		Page
Indicators		
Lights		
POWER ON	Step 1	88
Scopes		
Oscilloscope		
Brightness	Step 3-7	88
Vertical	Step 8-13	88
Horizontal	Step 14-25	88 89
Meters		
CAL	Step 26-36	90
RF POWER	Step 37-48	92
RESPONSE OR VOLTAGE	Step 55-60 64	96
Miscellaneous		
Blower	Step 2	88
BURST TIME Count Tubes	Step 49-54	96 95
Chassis		
Refer to INDEX TO SCHEMATIC DIAGRAMS		
Relays		
K-1	Fig. 37	121
K-2	Fig. 37	121
Motors		
Blower	Fig. 2	101
Miscellaneous		
Attenuators		
AT 1	Fig. 41	122
AT 2	Fig. 41	122
AT 3	Fig. 40	122

ANTENNA COUPLER

Attenuators		
AT 1	Fig. 42	122 123
AT 2	Fig. 43	123

MISSILE

Chassis		
Refer to INDEX TO SCHEMATIC DIAGRAMS		
Relays		
Transfer	Fig. 61	131
Preset	Fig. 56	128
Cage	Fig. 57-60	129
Uncage	Fig. 57-60	129
Motors		
Blower	Fig. 51	126
YAW RATE GYRO	Fig. 53 & 72	127 & 134
PITCH RATE GYRO	Fig. 53 & 75	127 & 136
ROLL RATE GYRO	Fig. 53 & 82	127 & 141
ROLL AMOUNT GYRO PRESET	Fig. 80-81	141 139
ROLL AMOUNT GYRO	Fig. 53	127
Miscellaneous		
Fins	Step 65	100

TPCU

Indic
L
M
Relay
Motor

TCU

Mete

HOOTING INSTRUCTIONS

TPCU

		Page
Indicators		
Lights		
POWER ON	Fig. 47	125
HEATERS, EXTERNAL	Fig. 48	125
VIBRATOR EXTERNAL	Fig. 49	125
MISSILE INTERNAL	Fig. 50	125
UNCAGE IND	Fig. 55	128
Meters		
MISSILE VOLTAGE	Fig. 52	126
MISSILE CURRENT	Fig. 53	127
Miscellaneous		
Blower	Fig. 51	126
Delay Timer	Fig. 64	131
Relays		
Heaters	Fig. 63	131
Battery Power	Fig. 62	131
Motors		
Blower	Fig. 51	~~121~~ 126
Delay Timer	Fig. 64	131

TCU

Meters		
VOLTAGE		
230	Fig. 65	132
300	Fig. 66	132
STRG PLATE	Fig. 67	132
150	Fig. 68	133
CONT SIG	Fig. 69	133
FIN VOLT	Fig. 70	133
SERVO		
YAW +5G	Fig. 73	135
-5G	Fig. 73	135
ACC	Fig. 71	134
RATE	Fig. 72	134
FIN	Fig. 73	135
PITCH +5G	Fig. 76	136
-5G	Fig. 76	136
ACC	Fig. 74	135
RATE	Fig. 75	136
FIN	Fig. 76	136
ROLL STRG PLATE BAL	Fig. 77	137
CONT SIG BAL	Fig. 78	137
POS	Fig. 79-81	138
RATE	Fig. 82	141
FIN	Fig. 83	141
VALVE	Fig. 84-86	~~143~~ 142

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHE
1. POWER ON light		Blower	Running Not running	
2. Blower		AC POWER ON LIGHT	Glows Out	
3. SCOPE, Brightness CCS: Any except BAL or MEAS				
4. SCOPE, Brightness CCS: BAL	Scope should be blank (grounded thru CCS sw)			
5. SCOPE, Brightness CCS: MEAS TSS: RF TEST SIG REC SENS TRANS TEST RESP TIME A RESP TIME B				
6. SCOPE, Brightness CCS: MEAS TSS: COMM SIG After RESET sw depressed	Same as CCS: MEAS and TSS: RF TEST SIG			
7. SCOPE, Brightness CCS: MEAS TSS: COMM SIG After START sw depressed	Scope should be blank (grounded thru K2 relay in Command Modul			
8. SCOPE, Vertical CCS: 2000 ~ 1600 ~ 2400 ~		CCS: TIME Adjust TIME screw-driver adjust	Approx 1/2 inch vertical deflection Insufficient vertical deflection	
9. SCOPE, Vertical CCS: BAL	Scope should be blank (grounded thru CCS sw)			
10. SCOPE, Vertical CCS: YAW PITCH BURST		CCS: TIME Adjust TIME screw-driver adjust	Ap ver Insufficient vertical deflection	

ICATIONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
					101 (1)
ing					101 (1)
					101 (2)
					101 (2)
					101 (3)
					101 (3)
IG					
K2 relay in Command Modulator)					
1/2 inch l deflection					101 (4)
icient vertical tion					101 (4)
CCS sw)					
					101 (5)
icient l deflection					101 (5)

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHECKS
11. SCOPE, Vertical CCS: TIME		CCS: 2000 ~ Adjust 2000 ~ screwdriver adjust	Approx 1/2 inch vertical deflection	
			Insufficient vertical deflection	
12. SCOPE, Vertical CCS: MEAS after RESET sw depressed	No signal inputs are supplied to scope in CCS: MEAS			
13. SCOPE, Vertical CCS: MEAS after START sw depressed	Scope should be blank (grounded thru K2 relay in command modulator			
14. SCOPE, Horizontal CCS: 2000 ~ 1600 ~ 2400 ~		CCS: YAW, adjust YAW screwdriver adjust	Standing pattern On Scope	
			No standing pattern	
15. SCOPE, Horizontal CCS: BAL	SCOPE should be blank (grounded thru CCS sw)			
16. SCOPE, Horizontal CCS: YAW TSS: RF TEST SIG REC SENS TRANS TEST RESP TIME A RESP TIME B		CCS: PITCH adjust PITCH screwdriver adjust	Standing Pattern on scope	
			No standing pattern	CCS: 2000 ~ adjust 2000 ~ screwdriver adjust
17. SCOPE, Horizontal CCS: YAW TSS: COMM SIG after RESET sw depressed	Same as CCS: YAW and TSS: RF TEST SIG			
18. SCOPE, Horizontal CCS: YAW TSS: COMM SIG after START sw depressed		CCS: 2000 ~, adjust 2000 ~ screwdriver adjust	Standing pattern on scope	CCS: PITCH depress RESET adjust PITCH screwdriver a
			No standing pattern on scope	

	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
tion					101 (6)
tion					101 (6)
CCS: MEAS					
ay in command modulator)					
n					101 (7)
tern					101 (7)
					102 (8)
tern	CCS: 2000 ~ adjust 2000 ~ screwdriver adjust	Standing Pattern on scope			102 (8)
		No standing pattern on scope			102 (8)
rn on	CCS: PITCH depress RESET sw adjust PITCH screwdriver adjust	Standing pattern on scope			102 (9)
		No standing pattern on scope			102 (9)
tern					102 (9)

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHEC
19. SCOPE, Horizontal CCS: PITCH TSS: RF TEST SIG REC SENS TRANS TEST RESP TIME A RESP TIME B		CCS: YAW adjust YAW screwdriver adjust	Standing pattern on scope	
			No standing pattern on scope	CCS: 2000 adjust 20 screwdriv
20. SCOPE, Horizontal CCS: PITCH TSS: COMM SIG After RESET sw depressed	Same as CCS: PITCH and TSS: RF TEST SIG			
21. SCOPE, Horizontal CCS: PITCH TSS: COMM SIG after START sw depressed		CCS: 2000 ~, adjust 2000 ~ screwdriver adjust	Standing pattern on scope	CCS: PITC depress R adjust PI screwdriv
			No standing pattern on scope	
22. SCOPE, Horizontal CCS: BURST		CCS: 2000 ~ adjust 2000 ~ screwdriver adjust	Standing pattern on scope	CCS: YAW YAW screw adjust, d RESET sw
			No standing pattern on scope	
23. SCOPE, Horizontal CCS: TIME		CCS: YAW, adjust YAW screwdriver adjust	Standing pattern on scope	
			No standing pattern on scope	
24. SCOPE, Horizontal CCS: MEAS after RESET sw depressed	No signal inputs are supplied to scope in CCS: MEAS			
25. SCOPE, Horizontal CCS: MEAS after START sw depressed	Scope should be blank (grounded thru K2 relay in Command Modulat			
26. CAL meter CCS: 2000 ~ 1600 ~ 2400 ~ BAL				

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TIONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
ttern on					102 (10)
g pattern	CCS: 2000 ~ adjust 2000 ~ screwdriver adjust	Standing pattern on scope			102 (10)
		No standing pattern on scope			102 (10)
ttern on	CCS: PITCH depress RESET sw adjust PITCH screwdriver adjust	Standing pattern on scope			102 (9)
		No standing pattern on scope			102 (9)
pattern					102 (9)
ttern on	CCS: YAW adjust YAW screwdriver adjust, depress RESET sw	Standing Pattern on scope			102 (11)
		No standing pattern on scope			102 (11)
pattern					102 (11)
ttern					103 (12)
pattern					103 (12)
CS: MEAS					
lay in Command Modulator)					
					103 (13)

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B

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHECKS
27. CAL meter CCS: YAW TSS: RF TEST SIG REC SENS TRANS TEST RESP TIME A RESP TIME B		Observe scope	**Standing pattern on scope**	
			No standing pattern on scope	CCS: PITCH, adjust PITCH screwdriver adjust
28. CAL meter CCS: YAW TSS: COMM SIG after RESET sw depressed		Same as CCS: YAW and TSS: RF TEST SIG		
29. CAL meter CCS: YAW TSS: COMM SIG after START sw depressed		Depress RESET sw, adjust YAW screwdriver adjust	**CAL meter reads 0**	
			CAL meter does not read 0	
30. CAL meter CCS: PITCH TSS: RF TEST SIG REC SENS TRANS TEST RESP TIME A RESP TIME B		Observe scope, adjust PITCH screwdriver adjust	**Standing pattern on scope**	
			No standing pattern on scope	CCS: YAW adjust YAW screwdriver adjust
31. CAL meter CCS: PITCH TSS: COMM SIG after RESET sw depressed		Same as CCS: PITCH and TSS: RF TEST SIG		
32. CAL meter CCS: PITCH TSS: COMM SIG after START sw depressed		Depress RESET sw, adjust PITCH screwdriver adjust	**CAL meter reads 0**	
			CAL meter does not read 0	
33. CAL meter CCS: BURST TSS: RF TEST SIG REC SENS TRANS TEST RESP TIME A RESP TIME B		CCS: PITCH, adjust PITCH screwdriver adjust	**CAL meter reads 0**	
			CAL meter does not read 0	

ONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
tern					103 (14)
pattern	CCS: PITCH, adjust PITCH screwdriver adjust	Standing pattern on scope			103 (14)
		No standing pattern on scope			103 (14)
ads 0					104 (15)
es					104 (15)
tern					104 (16)
pattern	CCS: YAW adjust YAW screwdriver adjust	Standing pattern on scope			104 (16)
		No standing pattern on scope			104 (16)
ads 0					104 (15)
es					104 (15)
ads 0					104 (17)
es					104 (17)

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHEC
34. CAL meter CCS: BURST TSS: COMM SIG after RESET sw depressed		Same as CCS: BURST and TSS: RF TEST SIG		
35. CAL meter CCS: BURST TSS: COMM SIG after START sw depressed		CCS: PITCH Depress RESET sw Adjust PITCH screw- driver adjust	CAL meter reads 0 CAL meter does not read 0	
36. CAL meter CCS: TIME MEAS				
37. RF POWER meter PMC: ADJ V				
38. RF POWER meter PMC: ADJ 0 ADJ ∞ TSS: RF TEST SIG		PMC: ADJ V	RF POWER meter reads V RF POWER meter does not read V	
39. RF POWER meter PMC: ADJ 0 ADJ ∞ TSS: REC SENS TRANS TEST RESP TIME A RESP TIME B COMM SIG		POWER meter readings uncertain (power measuring bridge is unbal		
40. RF POWER meter PMC: MEAS TSS: RF TEST SIG T/Ds: X1 NOT 4		PMC: ADJ 0	RF POWER meter reads 0 RF POWER meter does not read 0	

TIONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
reads 0					104 (15)
does					104 (15)
					103 (13)
					121 (38)
eter					104 (18)
eter ead V					104 (18)
easuring bridge is unbalanced)					
eter					105 (19)
eter ead 0					105 (19)

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHECKS
41. RF POWER meter PMC: MEAS TSS: RF TEST SIG T/Ds: X1 at 4		TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter reads between 0 and 1	TSS: COMM SIG CCS: MEAS Operate RESET wait 3 seconds then operate START sw
			RF POWER meter does not read between 0 and 1	TSS: RF TEST S PMC: ADJ 0 PMC: ADJ ∞
42. RF POWER meter PMC: MEAS TSS: REC SENS	POWER meter reading uncertain (no inputs to power measuring bridge)			
43. RF POWER meter PMC: MEAS TSS: TRANS TEST		TSS: COMM SIG CCS: MEAS Operate RESET sw +5G and -5G push-buttons on TCU must NOT be depressed YAW COMMAND: +5G, turn to -5G, turn to 0G	Fins do not respond	TSS: RF TEST S PMC: MEAS T/Ds: 00.00 RF POWER DB: 3
			Leading edges of yaw fins move upward, downward, and then return to the center line	PMC: MEAS TSS: RF TEST S T/Ds: 04.00 ATTEN-DB: 0
44. RF POWER meter PMC: MEAS TSS: RESP TIME A		PMC: MEAS TSS: RF TEST SIG T/Ds: 04.00 ATTEN-DB: 0	**RF POWER meter reads 0**	
			RF POWER meter does not read 0	TSS: RF TEST S PMC: MEAS T/Ds: 00.00 RF POWER DB: 3

ONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
ster een	TSS: COMM SIG CCS: MEAS Operate RESET sw, wait 3 seconds and then operate START sw	**Glow moves around count tubes and stops after 59 to 69 milliseconds**			106 (20)
		Glow stops too soon or too late			106 (20)
ter ad nd 1	TSS: RF TEST SIG PMC: ADJ 0 PMC: ADJ ∞	**RF POWER does not read 0** [redacted]			106 (20)
		RF POWER METER reads 0 [redacted]	TSS: COMM SIG CCS: MEAS Operate RESET sw +5G and -5G push-buttons on TCU must NOT be depressed YAW COMMAND : +5G, turn to -5G, turn to 0G.	Leading edges of yaw fins move upward, downward, and then return to the center line	106 (20)
				Fins do not respond	106 (20)
to power measuring bridge)					
respond	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter reads between 0 and 1			107 (21)
		RF POWER meter does not read between 0 and 1			107 (21)
s of yaw ward, d then re- center	PMC: MEAS TSS: RF TEST SIG T/Ds: 04.00 ATTEN-DB: 0	**RF POWER meter reads 0**			107 (21)
		RF POWER meter does not read 0	TSS: RF TEST SIG PMC: ADJ 0 PMC: ADJ∞	RF POWER meter reads 0 [redacted]	107 (21)
				RF POWER does not read 0 [redacted]	107 (21)
r					108 (22)
er d 0	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter reads between 0 and 1			108 (22)
		RF POWER meter does not read between 0 and 1			108 (22)

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13

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHE
45. RF POWER meter PMC: MEAS TSS: RESP TIME B		TSS: RESP TIME A	RF POWER meter does not read near ∞	
			RF POWER meter reads at or near ∞	PMC: ME TSS: RF T/Ds: O ATTEN-D
46. RF POWER meter PMC: MEAS TSS: COMM SIG after START sw depressed	No reading on RF POWER meter (no ground to power measurin			
47. RF POWER meter PMC: MEAS TSS: COMM SIG RESET sw depressed CCS: 2000 ~ 1600 ~ 2400 ~ BAL YAW PITCH BURST and CCS: TIME		TSS: TRANS TEST T/Ds: missile code + 1 usec adjust RESPONSE Knob	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: RF PMC: AD PMC: AD
			RESPONSE OR VOLTAGE meter does not read 80 ± 20	TSS: RE
48. RF POWER meter PMC: MEAS TSS: COMM SIG after RESET sw depressed CCS: MEAS		TSS: TRANS TEST T/Ds: missile code + 1 usec adjust RESPONSE Knob	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: RF PMC: AD PMC: AD
			RESPONSE OR VOLTAGE meter does not read 80 ± 20	TSS: RE

ICATIONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE
ER meter not read near ∞					109 (23)
WER meter at or near ∞	PMC: MEAS TSS: RF TEST SIG T/Ds: 04.00 ATTEN-DB: 0	RF POWER meter reads 0			109 (23)
		RF POWER meter does not read 0	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter reads between 0 and 1	109 (23)
				RF POWER meter does not read between 0 and 1	109 (23)
o ground to power measuring circuit)					
NSE OR GE meter 80 ± 20	TSS: RF TEST SIG PMC: ADJ 0 PMC: ADJ ∞	RF POWER meter reads 0			110 (24)
		RF POWER meter does not read 0			110 (24)
SE OR GE meter not read 80 ± 20	TSS: RESP TIME A	RESPONSE OR VOLTAGE meter reads 80 ± 20			110 (24)
		RESPONSE OR VOLTAGE meter does not read 80 ± 20	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter reads between 0 and 1	110 (24)
				RF POWER meter does not read between 0 and 1	110 (24)
SE OR GE meter 80 ± 20	TSS: RF TEST SIG PMC: ADJ 0 PMC: ADJ ∞	RF POWER meter reads 0			111 (25)
		RF POWER meter does not read 0			111 (25)
SE OR GE meter does ead 80 ± 20	TSS: RESP TIME A	RESPONSE OR VOLTAGE meter reads 80 ± 20			111 (25)
		RESPONSE OR VOLTAGE meter does not read 80 ± 20	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter reads between 0 and 1	111 (25)
				RF POWER meter does not read between 0 and 1	111 (25)

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EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHEC
49. Count Tubes TSS: RF TEST SIG REC SENS TRANS TEST RESP TIME A RESP TIME B	No glow on count tubes (no anode voltage)			
50. Count Tubes TSS: COMM SIG after RESET sw depressed			Count tubes do not glow at 0 position	
			Count tubes count	
51. Count Tubes TSS: COMM SIG after START sw depressed CCS: 2000 1600 2400 BAL	Glow does not move (no input to count tubes)			
52. Count Tubes TSS: COMM SIG after START sw depressed CCS: YAW PITCH BURST	Glow moves very rapidly (6KC input to count tubes from refere			
53. Count tubes TSS: COMM SIG after START sw depressed CCS: TIME	Count tubes do not count	TSS: REC SENS CCS: BURST Adjust SCOPE BRIGHTNESS Adjust BURST screwdriver adjust	Standing pattern on scope	TSS: TR PMC: MF ATTEN-D T/Ds: M + 0.1 u Adjust Knob
			No standing pattern on scope	
	Count tubes stop too soon or too late			

ICATIONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
voltage)					
tubes do not t 0 position					112 (26)
tubes count					112 (26)
nt tubes)					
to count tubes from reference oscillator)					112 (27)
ding pattern cope	TSS: TRANS TEST PMC: MEAS ATTEN-DB: 30 T/Ds: Missile Code + 0.1 usec Adjust RESPONSE Knob	RESPONSE OR VOLTAGE meter indicates a response			113 (28)
		RESPONSE OR VOLTAGE meter does not indicate a response			113 (28)
anding pattern ope					113 (28)
					113 (28)

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHECKS
54. Count Tubes TSS: COMM SIG after START sw depressed CCS: MEAS	Count tubes do not count	TSS: REC SENS CCS: BURST Adjust SCOPE BRIGHTNESS Adjust BURST screwdriver adjust	Standing pattern on scope	TSS: TRANS TEST PMC: MEAS ATTEN-DB: 30 T/Ds: Missile C + 0.1 usec Adjust RESPONSE Knob
			No standing pattern on scope	
	Count tubes stop too soon or too late	CSS: MEAS operate RESET sw adjust RESPONSE Knob	RESPONSE OR VOLTAGE meter indicates a response	
			RESPONSE OR VOLTAGE meter does not indicate a response	TSS: RF TEST SI PMC: MEAS T/Ds: 00.00 RF POWER DB: 3
		TSS: RESP TIME A T/Ds: missile code + 1 usec adjust RESPONSE Knobs	RESPONSE OR VOLTAGE meter indicates a response	TSS: RESP TIME
			RESPONSE OR VOLTAGE meter does not indicate a response	
55. RESPONSE OR VOLTAGE meter RESPONSE/-250V: -250V				
56. RESPONSE OR VOLTAGE meter TSS: RF TEST SIG	RESPONSE meter inoperative (response indicator cut off by bias voltage			

	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
rn	TSS: TRANS TEST PMC: MEAS ATTEN-DB: 30 T/Ds: Missile Code + 0.1 usec Adjust RESPONSE Knob	RESPONSE OR VOLTAGE meter indicates a response			113 (29)
		RESPONSE OR VOLTAGE meter does not indicate a response			113 (29)
tern					113 (29)
ponse					113 (29)
ate	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter does not read between 0 and 1			113 (29)
		RF POWER meter reads between 0 and 1	Make checks below		
	TSS: RESP TIME B	RESPONSE OR VOLTAGE meter indicates a response			113 (29)
		RESPONSE OR VOLTAGE meter does not indicate a response			113 (29)
te					113 (29)
					121 (39)
out off by bias voltage thru TSS)					

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHEC
57. RESPONSE OR VOLTAGE meter TSS: REC SENS		TSS: RF TEST SIG T/Ds: 04.00 PMC: ADJ ∞ slowly adjust CAL ∞ Knob for maximum deflection towards left on RF POWER meter PMC: ADJ 0 adjust CAL 0 Knob PMC: MEAS ATTEN-DB: 0	RF POWER meter does not read 0	TSS: RF PMC: MEA T/Ds: 00 RF POWER
			RF POWER meter reads 0	TSS: TRA PMC: MEA T/Ds: mi + 1 usec
58. RESPONSE OR VOLTAGE meter TSS: TRANS TEST	RF POWER meter reads between 0 and 2			
	RF POWER meter does not read between 0 and 2	TSS: COMM SIG CCS: MEAS Operate RESET sw +5G and -5G push- buttons on TCU must NOT be depressed YAW COMMAND: +5G, turn to -5G, turn to 0G	Fins do not respond	TSS: RF PMC: MEA T/Ds: 00 RF POWE
			Leading edges of yaw fins move upward, downward, and then return to the center line	PMC: MEA TSS: RF T/Ds: 0 ATTEN-DI

A

INDICATIONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE
POWER meter not read 0	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter reads between 0 and 1	TSS: COMM SIG CCS. MEAS Operate RESET sw, wait 3 seconds and then operate START sw	Glow moves around count tubes and stops after 59 to 69 milliseconds	114 (30)
				Glow stops too soon or too late	114 (30)
		RF POWER meter does not read between 0 and 1			114 (30)
POWER meter ds 0	TSS: TRANS TEST PMC: MEAS T/Ds: missile code + 1 usec	RF POWER meter reads between 0 and 2			114 (30)
		RF POWER meter does not read between 0 and 2			114 (30)
					115 (31)
do not respond	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00 RF POWER DB: 3	RF POWER meter reads between 0 and 1			115 (31)
		RF POWER meter does not read between 0 and 1			115 (31)
ing edges of yaw move upward, ward, and then rn to the center	PMC: MEAS TSS: RF TEST SIG T/Ds: 04.00 ATTEN-DB: 0	RF POWER meter reads 0			115 (31)
		RF POWER meter does not read 0	TSS: COMM SIG CCS: TIME Depress START sw	Count tubes count	115 (31)
				Count tubes do not count	115 (31)

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ABNORMAL INDICATION	EQUIPMENT SETTINGS	CHECKS	INDICATIONS	CHECKS
59. RESPONSE OR VOLTAGE meter TSS: RESP TIME A		TSS: RF TEST SIG T/Ds: 04.00 PMC: ADJ slowly adjust CAL ∾ Knob for maximum deflection towards left on RF POWER meter PMC: ADJ 0 adjust CAL 0 Knob ATTEN-DB: 0 PMC: MEAS	RF POWER meter reads 0	TSS: TRANS TEST PMC: MEAS T/Ds: missile c + 1 usec
			RF POWER meter does not read 0	TSS: COMM SIG CCS: MEAS Operate RESET +5G and -5G pu buttons on TCU must NOT be depressed YAW COMMAND: +5 turn to -5G, turn to 0G
60. RESPONSE OR VOLTAGE meter TSS: RESP TIME B	Incorrect delay time			
	Weak or insufficient response	TSS: RESP TIME A	RESPONSE meter reads 80 ± 20	TSS: COMM SIG CCS: MEAS Operate RESET +5G and -5G pu buttons on TCU NOT be depress YAW COMMAND: +5 turn to -5G, turn to 0G
			RESPONSE meter does not read 80 ± 20	Trouble shoot RESPONSE VOLTAGE TSS: R

	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE (FIG)
	TSS: TRANS TEST PMC: MEAS T/Ds: missile code + 1 usec	RF POWER meter reads between 0 and 2			116 (32)
		RF POWER meter does not read between 0 and 2			116 (32)
	TSS: COMM SIG CCS: MEAS Operate RESET sw +5G and -5G push-buttons on TCU must NOT be depressed YAW COMMAND: +5G, turn to -5G, turn to 0G	Fins do not respond			116 (32)
		Leading edges of yaw fins move upward, downward, and then return to the center line	TSS: COMM SIG CCS: MEAS Operate RESET sw, wait 3 seconds and then operate START sw	Glow moves around count tubes and stops after 59 to 69 milliseconds	116 (32)
				Glow does not stop	116 (32)
					117 (33)
	TSS: COMM SIG CCS: MEAS Operate RESET sw +5G and -5G push-buttons on TCU must NOT be depressed YAW COMMAND: +5G, turn to -5G, turn to 0G	Leading edges of yaw fins move upward, downward, and then return to the center line			117 (33)
		Fins do not respond			117 (33)
	Trouble shoot as specified above for RESPONSE OR VOLTAGE meter TSS: RESP TIME A				117 (33)

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHEC
61. RESPONSE OR VOLTAGE meter TSS: COMM SIG CCS: 2000 ~ 1600 ~ 2400 ~ BAL YAW PITCH BURST and CCS: TIME after RESET sw depressed		TSS: RESP TIME A T/Ds: missile code + 1 usec	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: RES
			RESPONSE OR VOLTAGE meter does not read 80 ± 20	Observe POWER me
62. RESPONSE OR VOLTAGE meter TSS: COMM SIG CCS: TIME after START sw depressed	No reading on RESPONSE meter (output from Command Modulato			
63. RESPONSE OR VOLTAGE meter TSS: COMM SIG CCS: MEAS after RESET sw depressed	RF POWER meter does not read near ∞			
	RF POWER meter reads at or near ∞	TSS: TRANS TEST T/Ds: missile code + 1 usec	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: RES
			RESPONSE OR VOLTAGE meter does not read 80 ± 20	TSS: CO CCS: MEA YAW COM

A1

DICATIONS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE
ONSE OR VOLTAGE r reads 80 ± 20	TSS: RESP TIME B	**RESPONSE OR VOLTAGE meter reads 80 ± 20**			118 (34)
		RESPONSE OR VOLTAGE meter does not read 80 ± 20	TSS: COMM SIG CCS: MEAS YAW COMMAND: +5G	**Yaw fins deflect**	118 (34)
				Yaw fins do not deflect	118 (34)
ONSE OR AGE meter does read 80 ± 20	Observe RF POWER meter	RF POWER meter does not read near ∞			118 (34)
		RF POWER meter reads at or near ∞	TSS: RF TEST SIG PMC: MEAS T/Ds: 00.00	RF POWER meter reads between 0 and 1	118 (34)
				RF POWER meter does not read between 0 and 1	118 (34)
output from Command Modulator grounded)					
					119 (35)
ONSE OR VOLTAGE r reads 80 ± 20	TSS: RESP TIME A	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: COMM SIG CCS: MEAS Depress START sw	**Glow moves around count tubes and stops after 59 to 69 milliseconds**	119 (35)
				Glow does not stop	119 (35)
		RESPONSE OR VOLTAGE meter does not read 80 ± 20			119 (35)
ONSE OR VOLTAGE r does not read ± 20	TSS: COMM SIG CCS: MEAS YAW COMMAND: +5G	**Yaw fins deflect**			119 (35)
		Yaw fins do not deflect	PMC: MEAS TSS: RF TEST SIG T/Ds: 04.00	**RF POWER meter reads 0**	119 (35)
				RF POWER meter does not read 0	119 (35)

EQUIPMENT SETTINGS	ABNORMAL INDICATION	CHECKS	INDICATIONS	CHECKS
64. RESPONSE OR VOLTAGE meter TSS: COMM SIG CCS: MEAS after START sw depressed	RF POWER meter does not read near ∞			
	RF POWER meter reads at or near ∞	TSS: TRANS TEST T/Ds: missile code + 1 usec	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: RESP TIME
			RESPONSE OR VOLTAGE meter does not read 80 ± 20	TSS: COMM SIG CCS: MEAS YAW COMMAND: +5
65. Missile Fins TSS: COMM SIG CCS: MEAS after RESET sw depressed	RF POWER meter does not read near ∞			
	RF POWER meter reads at or near ∞	TSS: TRANS TEST T/Ds: missile code + 1 usec	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: RESP TIME
			RESPONSE OR VOLTAGE meter does not read 80 ± 20	PMC: MEAS TSS: RF TEST SI T/Ds: 04.00

NS	CHECKS	INDICATIONS	CHECKS	INDICATIONS	PAGE
					119 (35)
VOLTAGE 80 ± 20	TSS: RESP TIME A	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: COMM SIG CCS: MEAS Depress START sw	Glow moves around count tubes and stops after 59 to 69 milliseconds	119 (35)
				Glow does not stop	119 (35)
		RESPONSE OR VOLTAGE meter does not read 80 ± 20			119 (35)
VOLTAGE ot read	TSS: COMM SIG CCS: MEAS YAW COMMAND: +5G	Yaw fins deflect			119 (35)
		Yaw fins do not deflect	PMC: MEAS TSS: RF TEST SIG T/Ds: 04.00	RF POWER meter reads 0	119 (35)
				RF POWER meter does not read 0	119 (35)
					120 (36)
VOLTAGE 80 ± 20	TSS: RESP TIME A	RESPONSE OR VOLTAGE meter reads 80 ± 20	TSS: COMM SIG CCS: MEAS Depress START sw	Glow moves around count tubes and stops after 59 to 69 milliseconds	120 (36)
				Glow does not stop	120 (36)
		RESPONSE OR VOLTAGE meter does not read 80 ± 20			120 (36)
VOLTAGE ot read	PMC: MEAS TSS: RF TEST SIG T/Ds: 04.00	RF POWER meter reads 0			120 (36)
		RF POWER meter does not read 0			120 (36)

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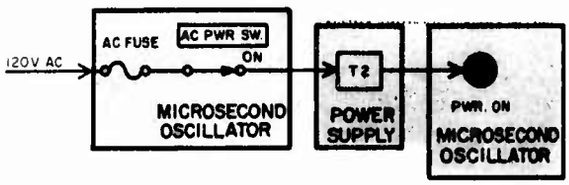

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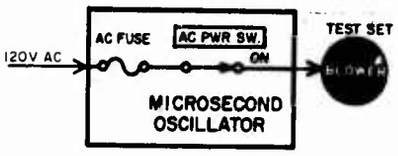

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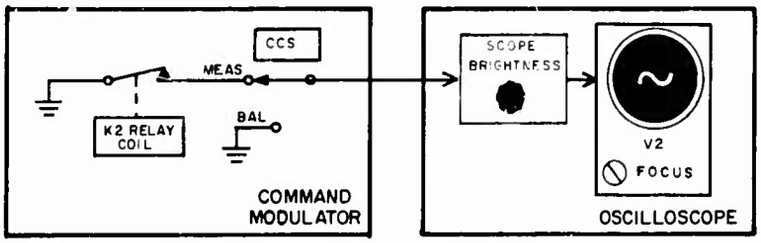

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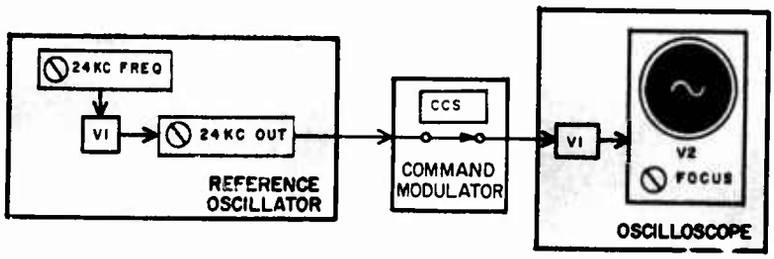

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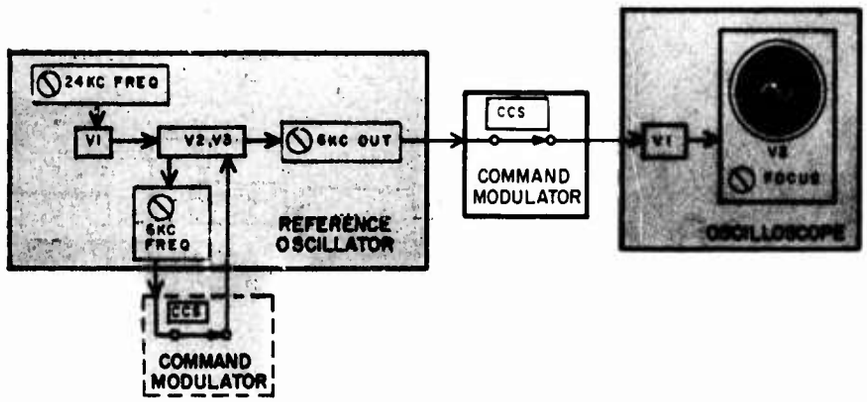

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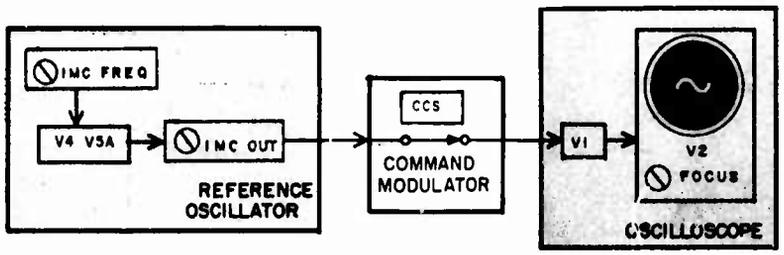

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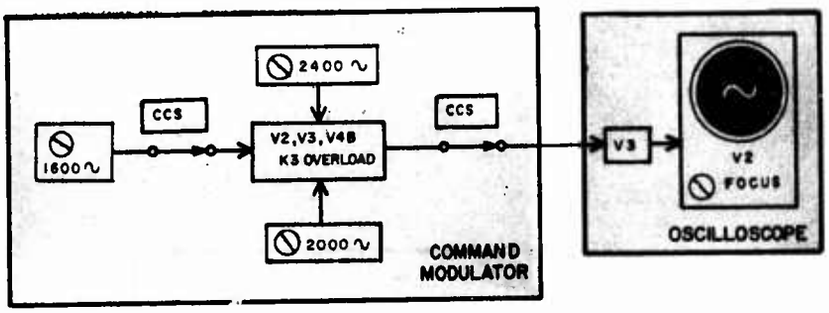

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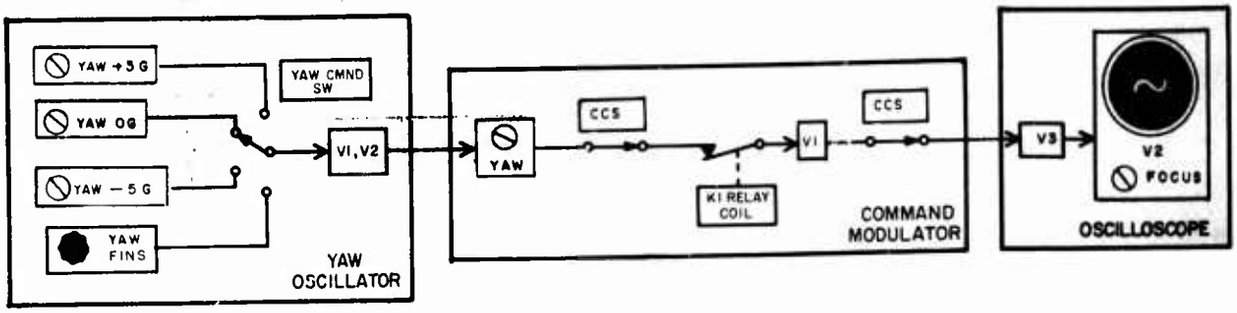

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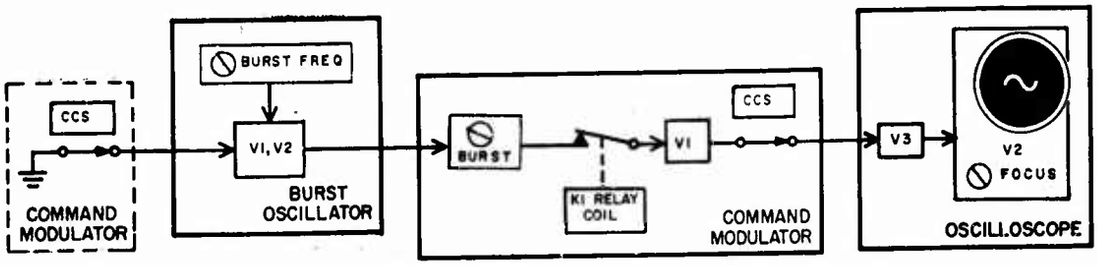

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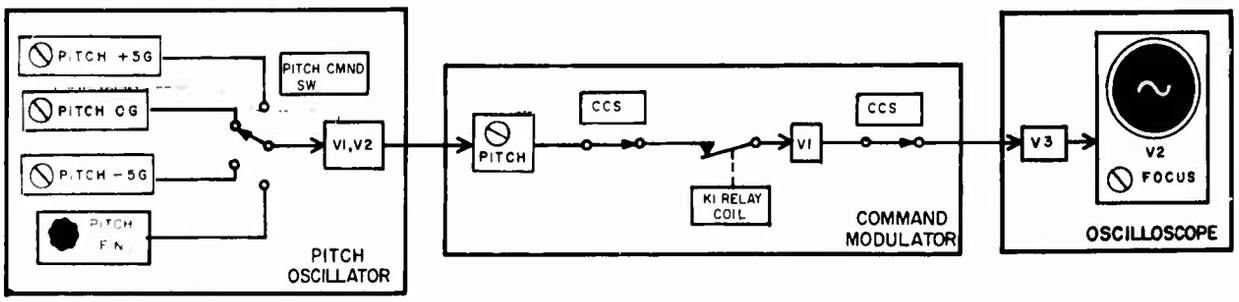

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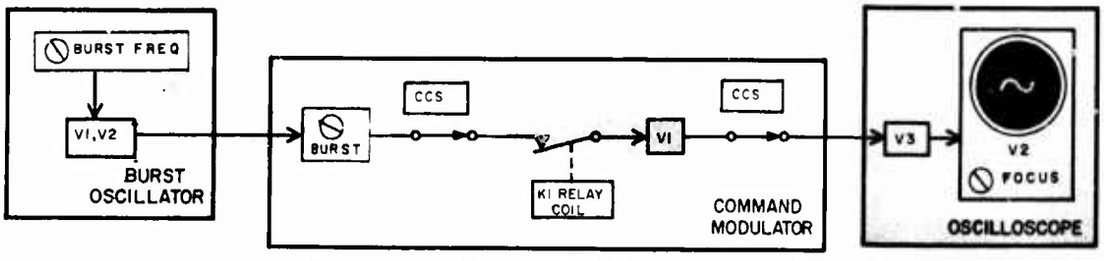

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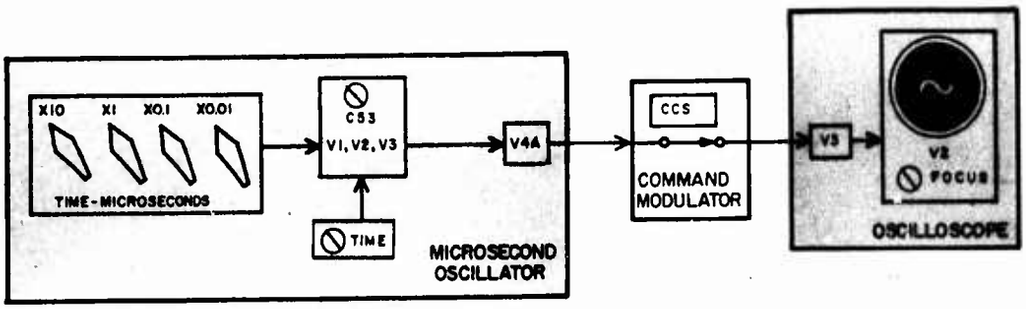
X10
X1
X0.1
X0.01
TIME - MICROSECONDS
C53
V1, V2, V3
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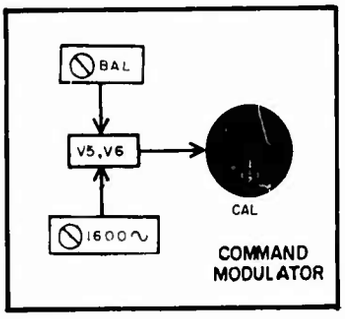
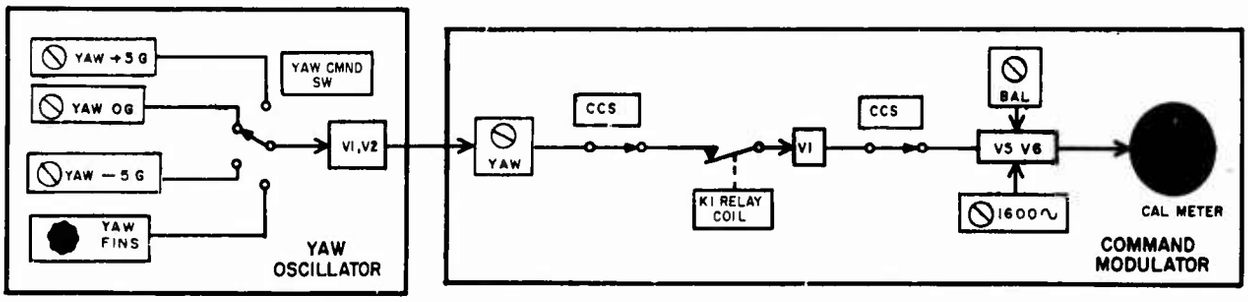
V4A
CCS
COMMAND MODULATOR
V3
V2
FOCUS
OSCILLOSCOPE

13


BAL
V5, V6
CAL
1600~
COMMAND MODULATOR

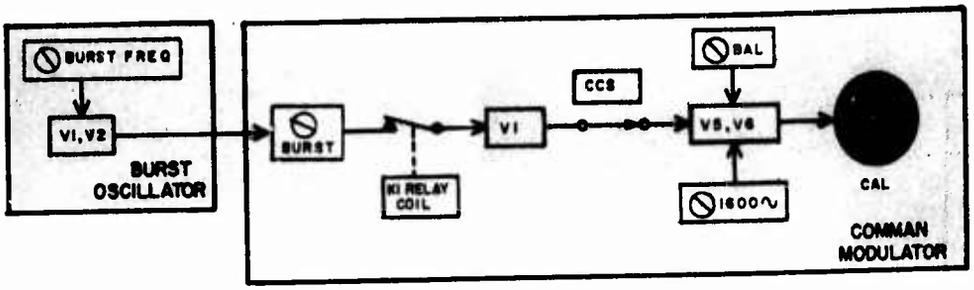
14


YAW +5 G
YAW CMND SW
YAW OG
YAW −5 G
YAW FINS
V1, V2
YAW OSCILLATOR
YAW
CCS
K1 RELAY COIL
V1
CCS
BAL
V5 V6
1600~
CAL METER
COMMAND MODULATOR

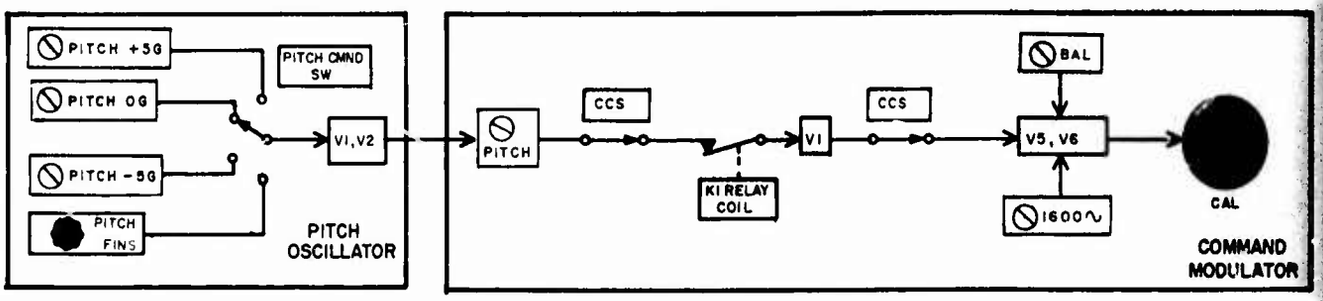
CONFIDENTIAL

UNCLASSIFIED

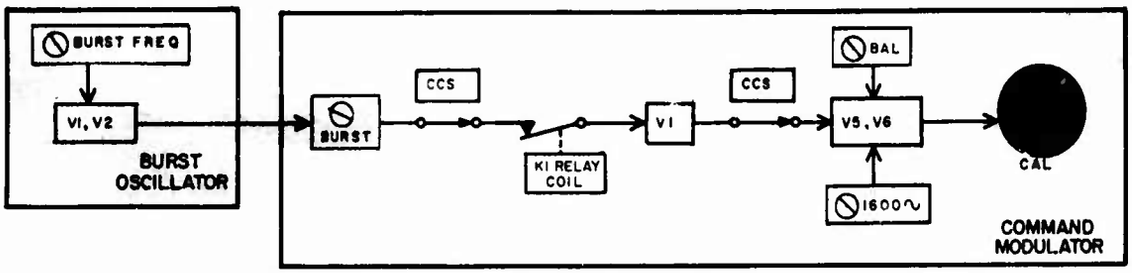
15



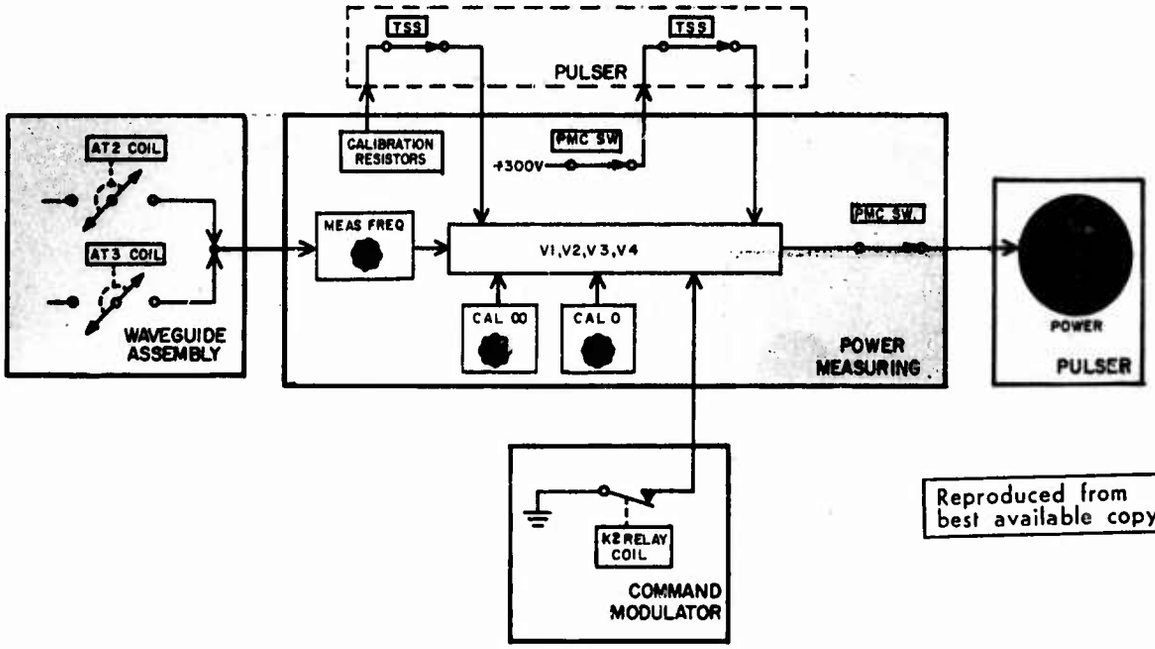
16



17



18



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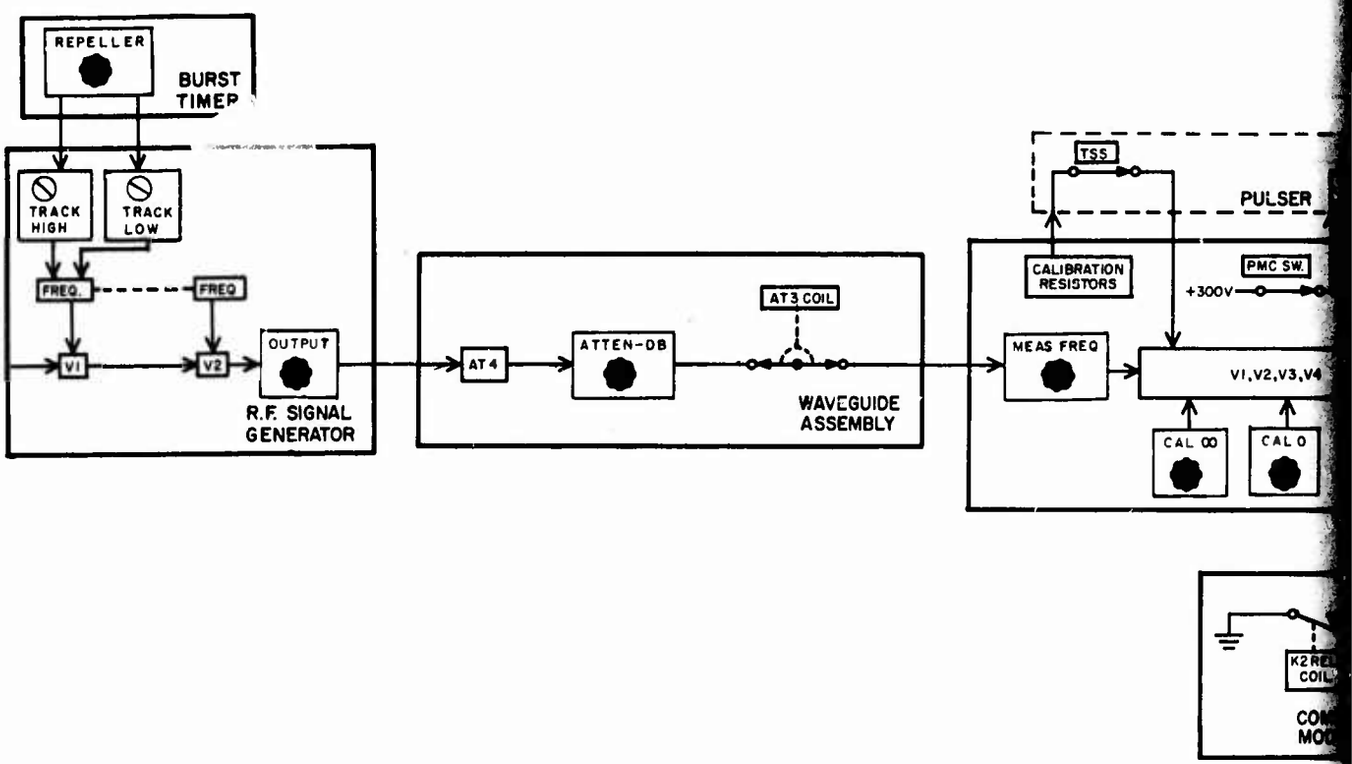
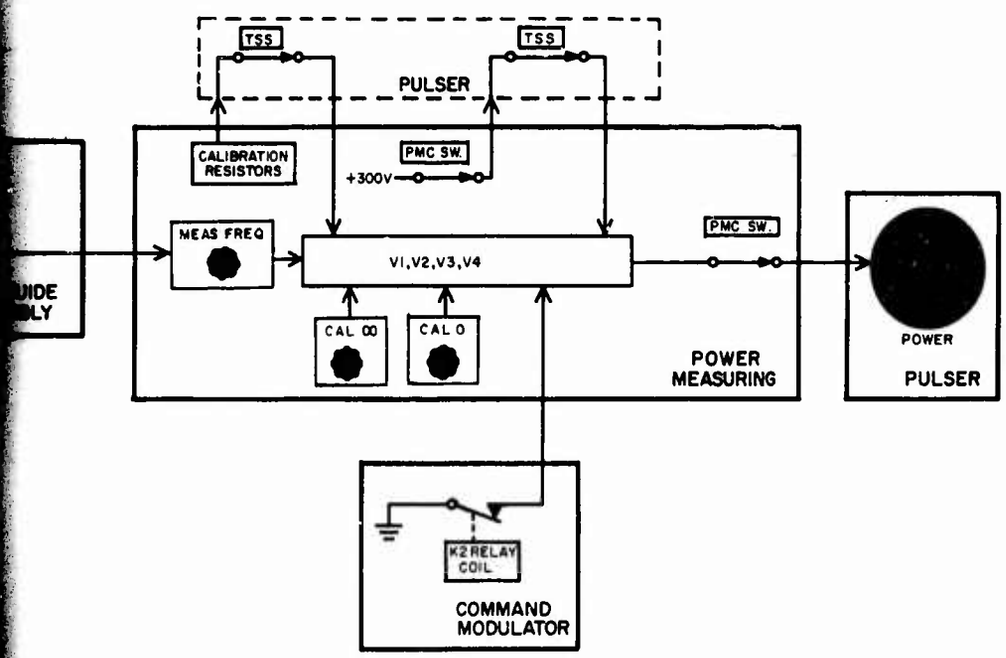
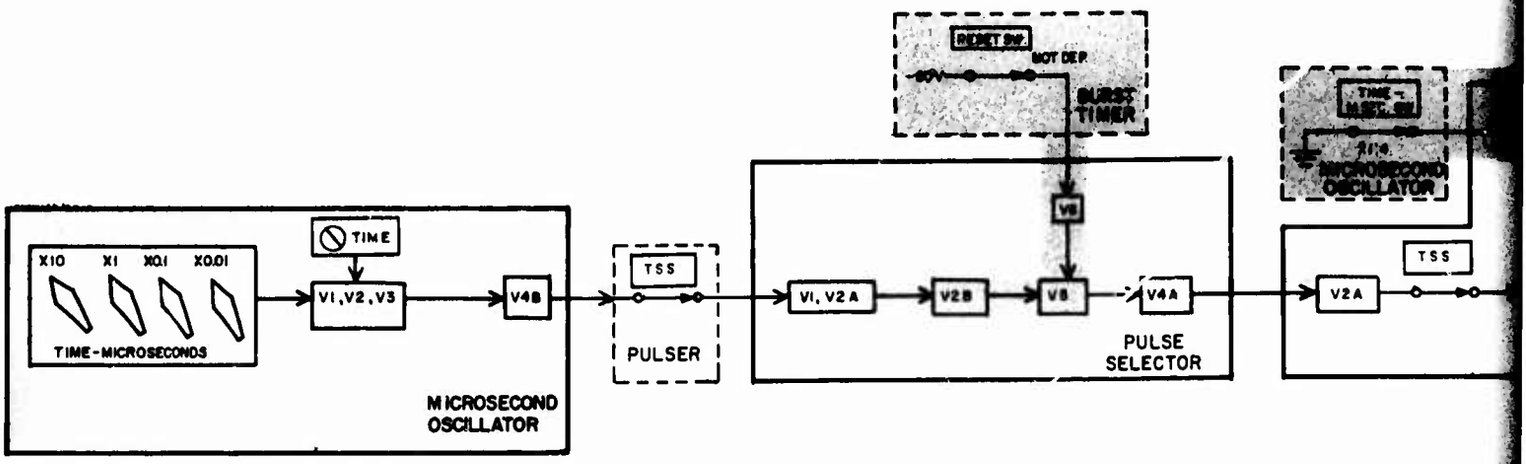
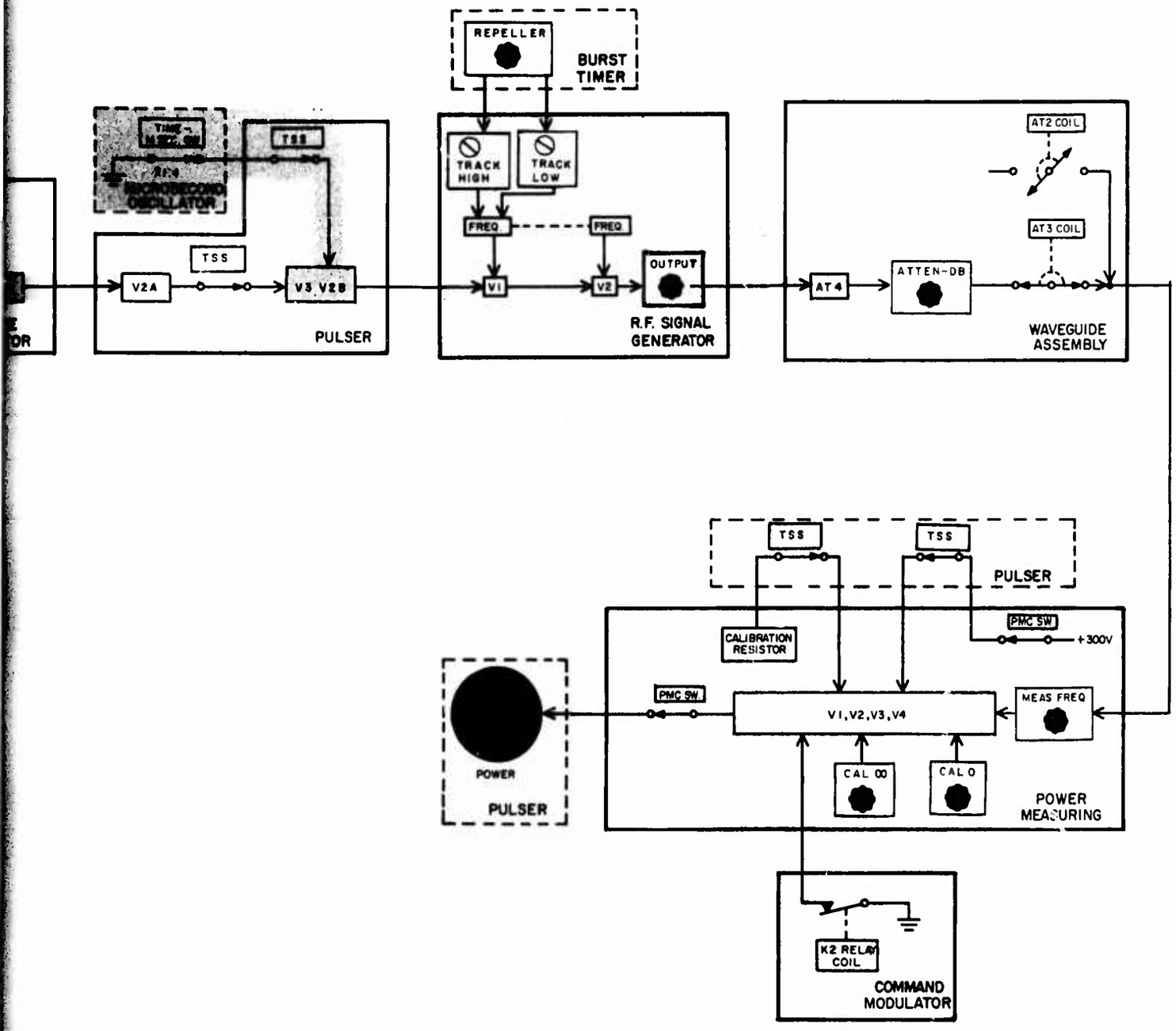

REPELLER
BURST TIMER
TRACK HIGH
TRACK LOW
FREQ.
FREQ
V1
V2
OUTPUT
R.F. SIGNAL GENERATOR
AT4
ATTEN-DB
AT3 COIL
WAVEGUIDE ASSEMBLY
TSS
PULSER
CALIBRATION RESISTORS
PMC SW.
+300V
MEAS FREQ
V1,V2,V3,V4
CAL ∞
CAL 0


TSS
TSS
PULSER
CALIBRATION RESISTORS
PMC SW.
+300V
MEAS FREQ
V1,V2,V3,V4
PMC SW.
CAL 00
CAL 0
POWER MEASURING
POWER
PULSER
K2 RELAY COIL
COMMAND MODULATOR

20

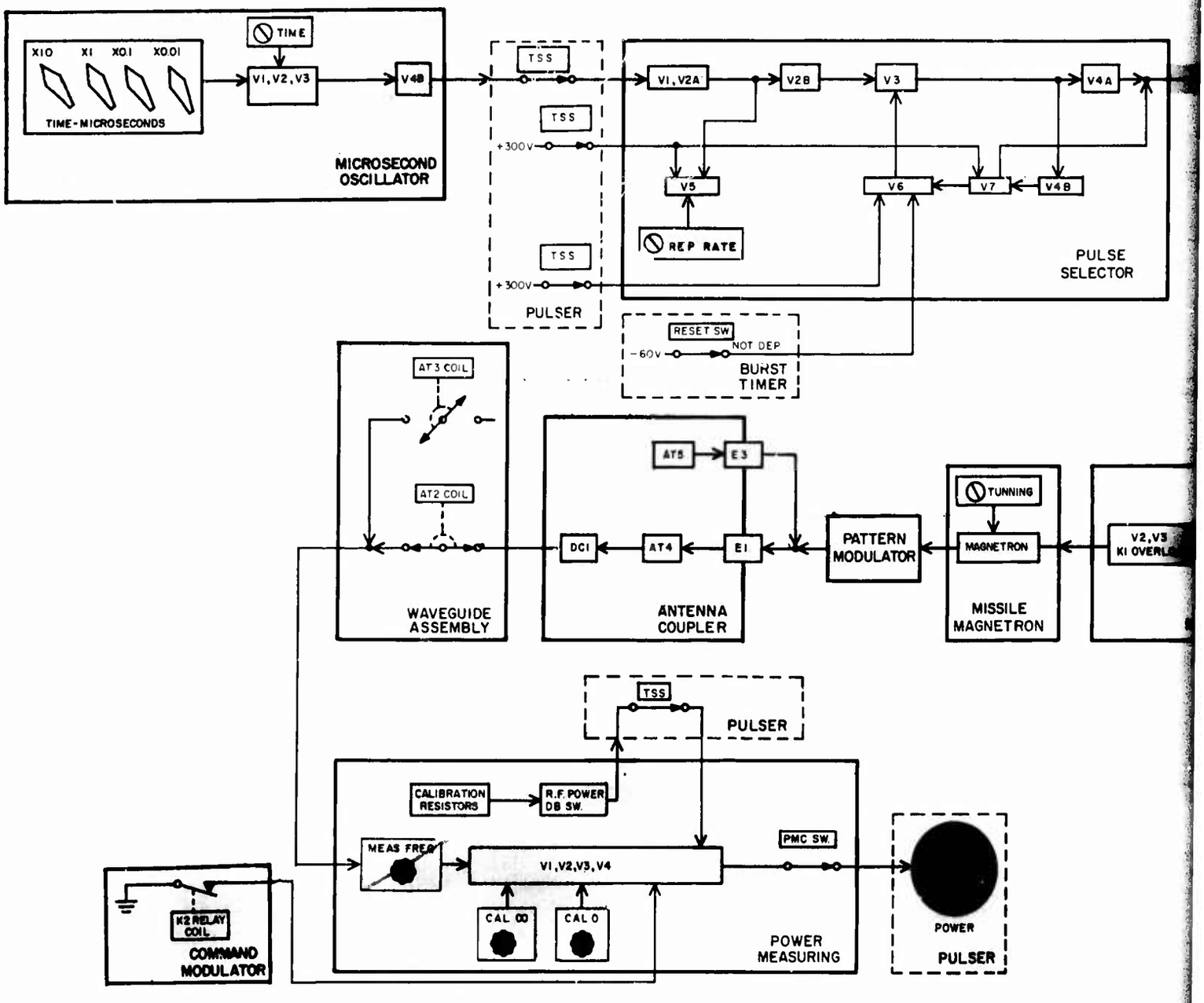

RESET SW.
NOT DEP.
-30V
BURST TIMER
V8
TIME - MSEC. SW.
MICROSECOND OSCILLATOR
TSS
X10
X1
X0.1
X0.01
TIME
V1, V2, V3
V4B
TIME - MICROSECONDS
MICROSECOND OSCILLATOR
TSS
PULSER
V1, V2A
V2B
V8
V4A
PULSE SELECTOR
V2A
TSS

CONFIDENTIAL



CONFIDENTIAL

UNCLASSIFIED



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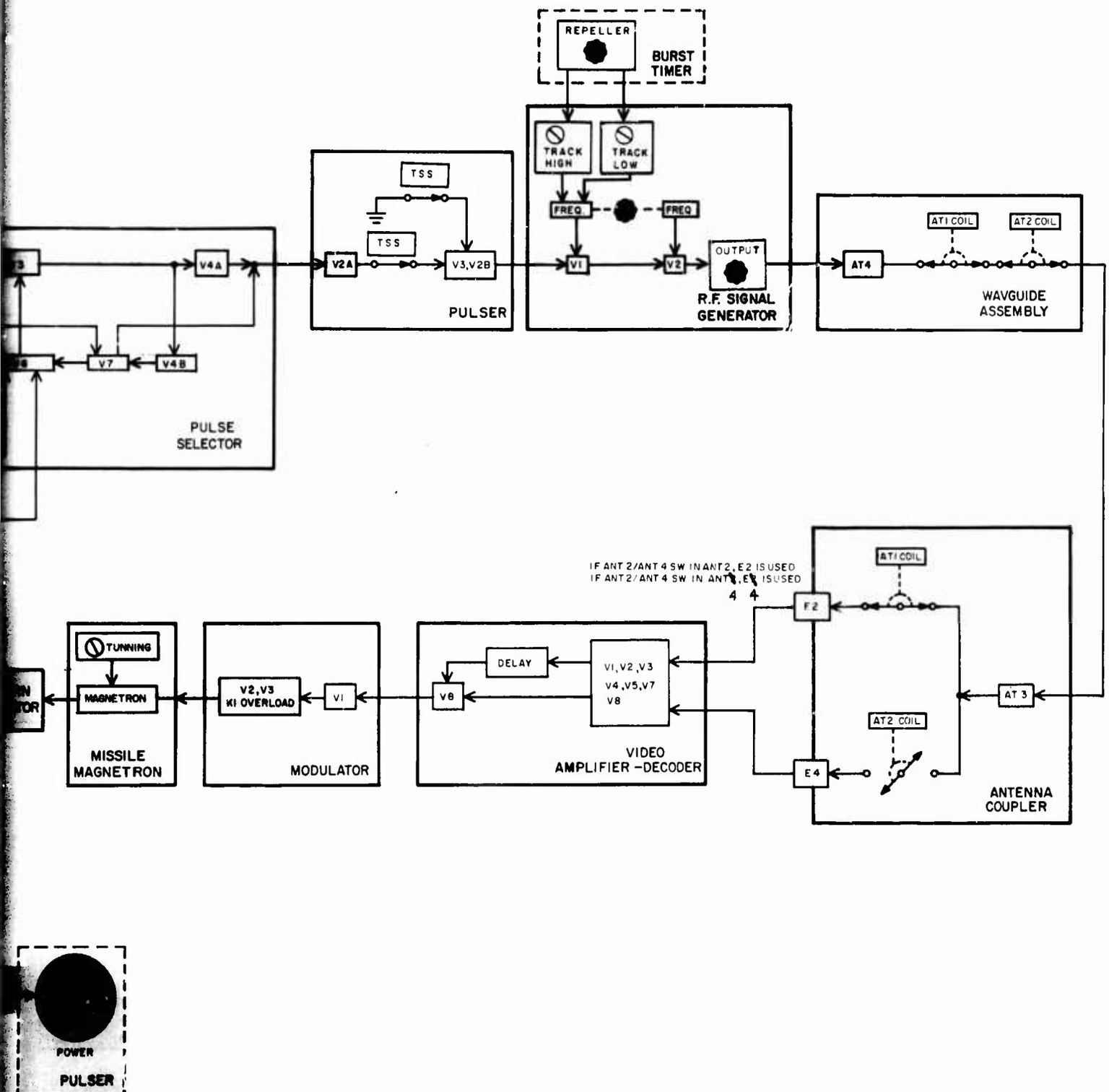
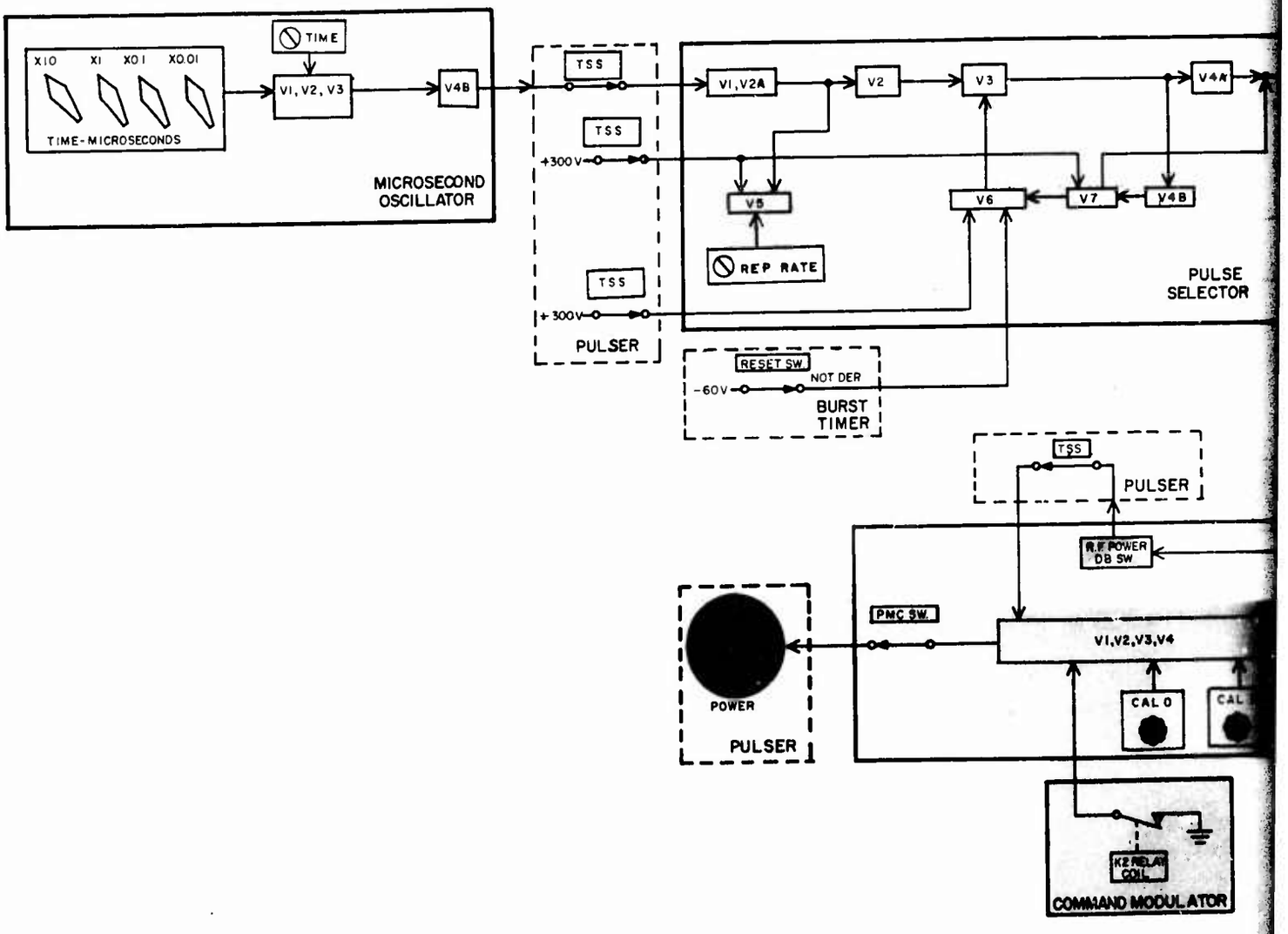

REPELLER
BURST TIMER
TRACK HIGH
TRACK LOW
FREQ.
FREQ.
TSS
TSS
V2A
V3,V2B
PULSER
V1
V2
OUTPUT
R.F. SIGNAL GENERATOR
AT1 COIL
AT2 COIL
AT4
WAVGUIDE ASSEMBLY
V4A
V7
V4B
PULSE SELECTOR
IF ANT 2/ANT 4 SW IN ANT 2, E2 IS USED
IF ANT 2/ANT 4 SW IN ANT 4, E4 IS USED
AT1 COIL
F2
AT 3
AT2 COIL
E4
ANTENNA COUPLER
TUNNING
MAGNETRON
MISSILE MAGNETRON
V2,V3
K1 OVERLOAD
V1
MODULATOR
DELAY
V8
V1,V2,V3
V4,V5,V7
V8
VIDEO AMPLIFIER -DECODER
POWER
PULSER

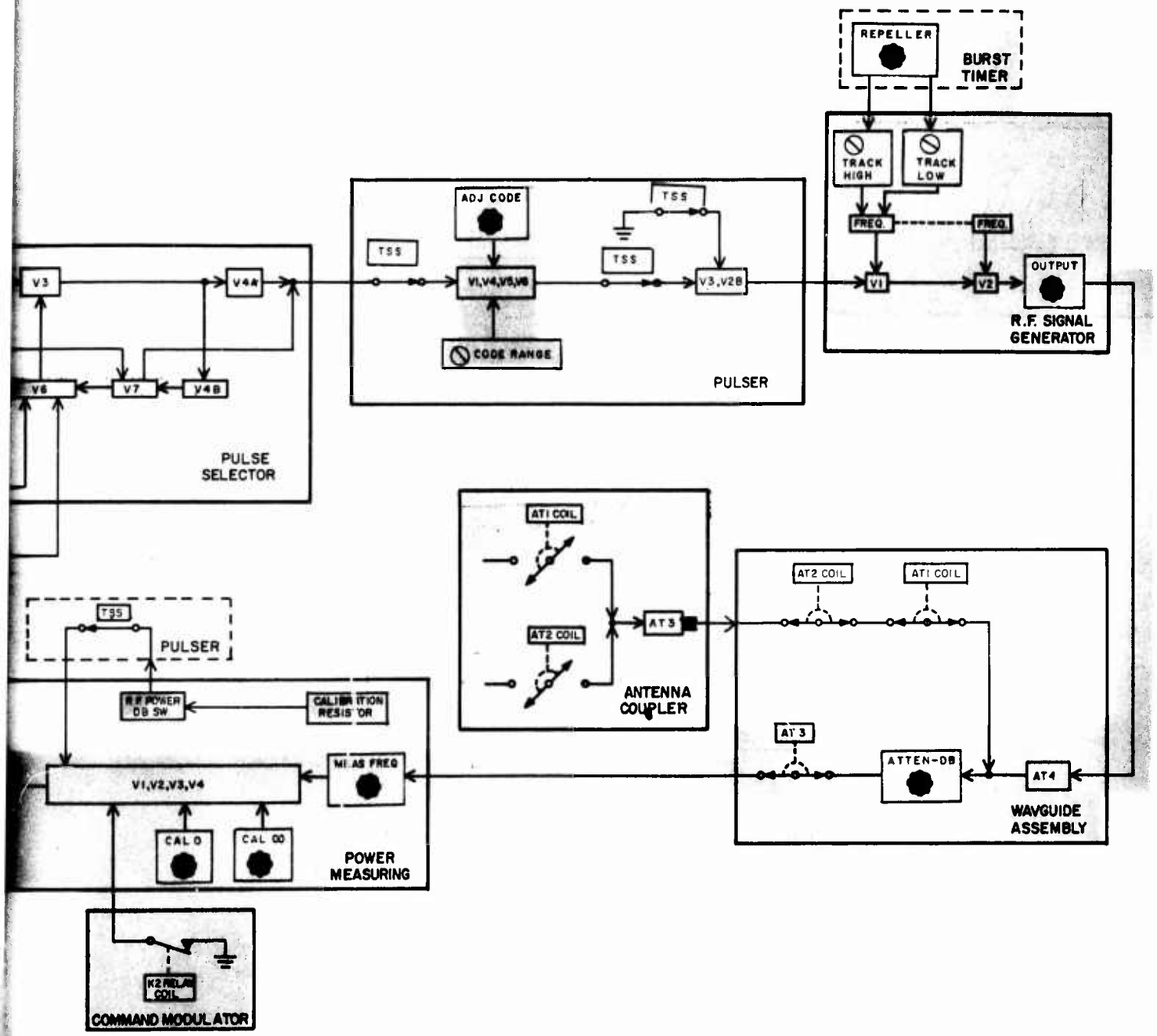
CONFIDENTIAL

22



CONFIDENTIAL

CONFIDENTIAL



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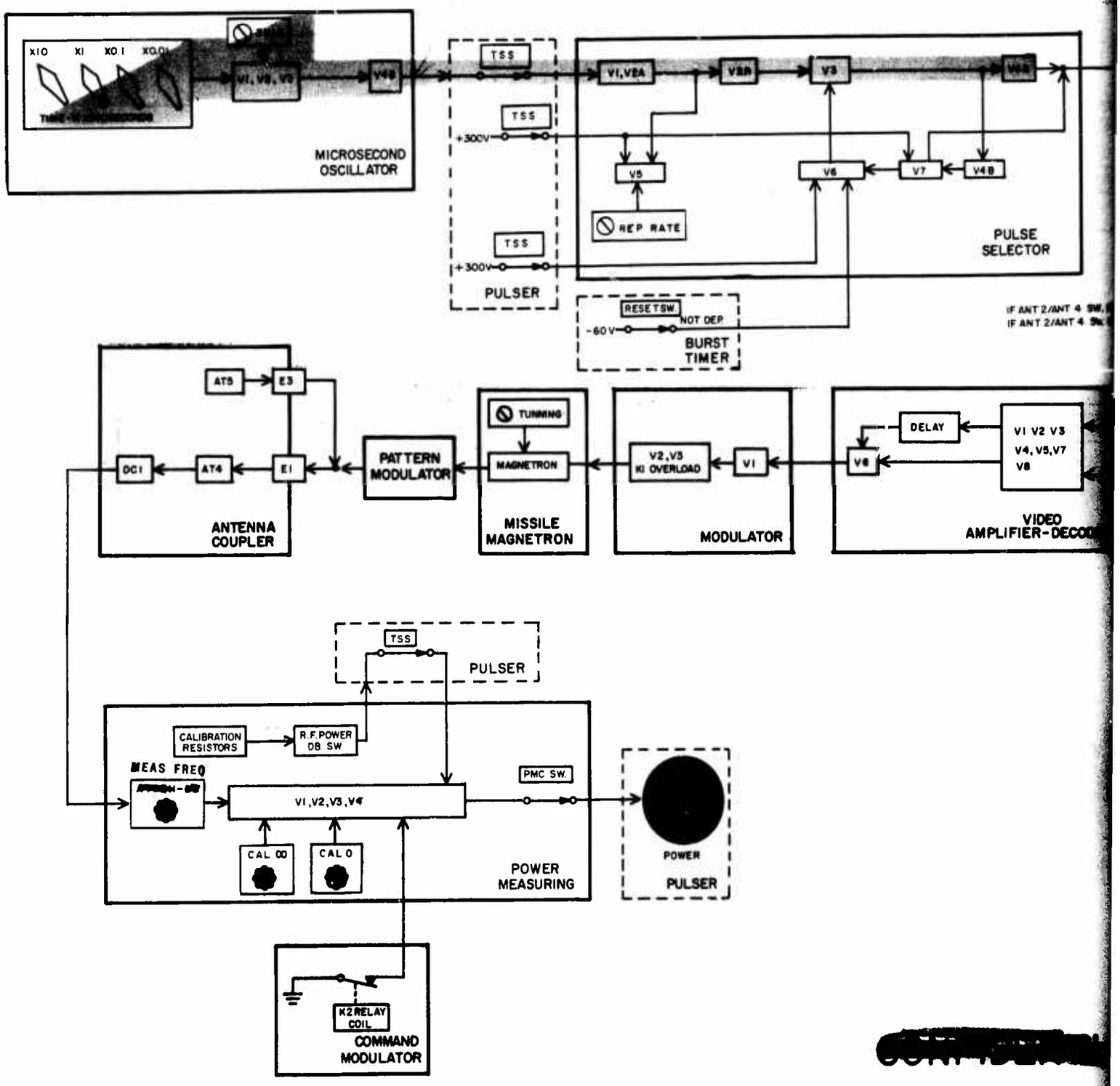
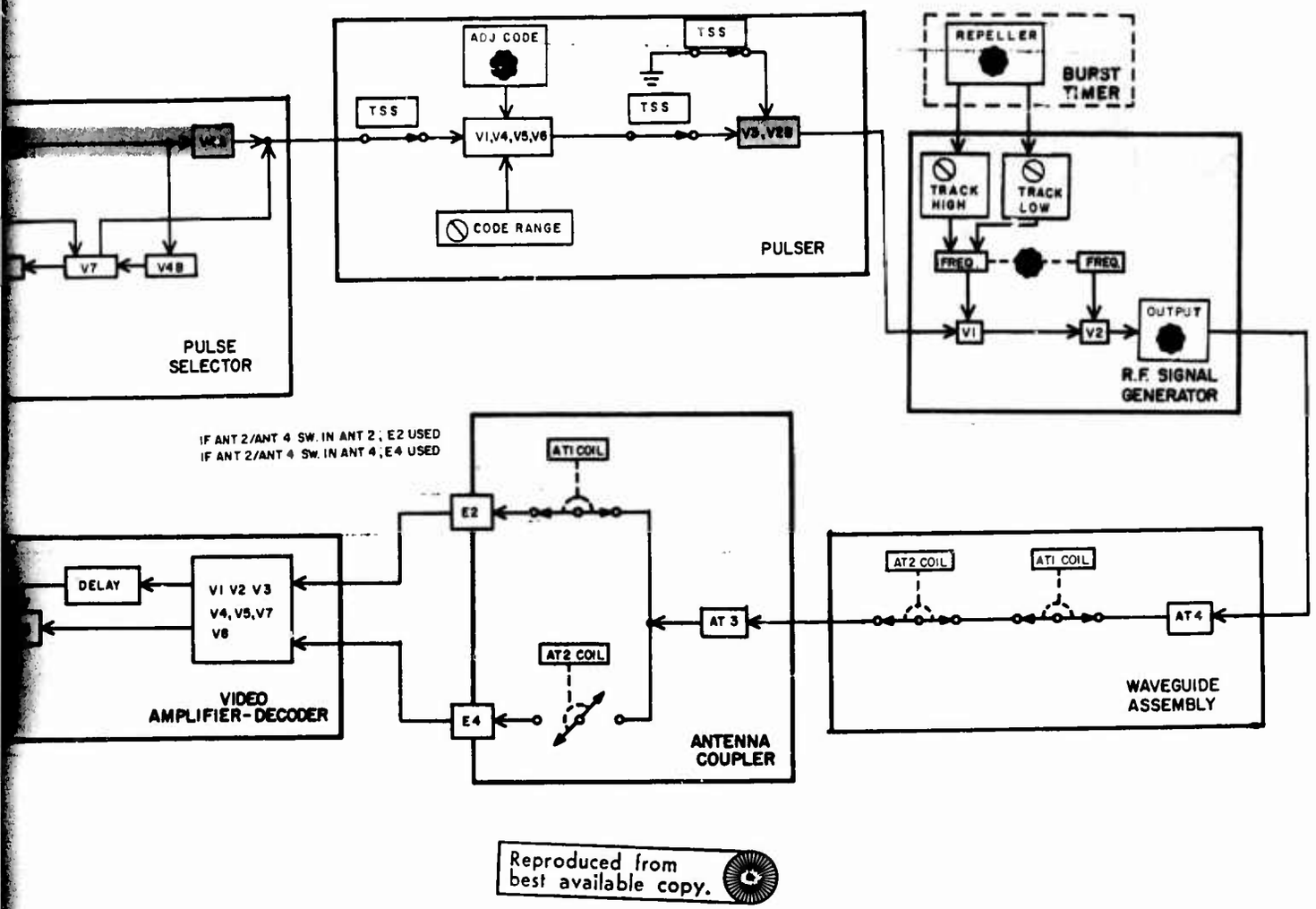

X10
X1
X0.1
X0.01
V1, V2, V3
V4B
MICROSECOND OSCILLATOR
TSS
TSS
+300V
TSS
+300V
PULSER
V1, V2A
V2B
V3
V4A
V5
V6
V7
V4B
REP RATE
PULSE SELECTOR
RESET SW.
NOT DEP.
-60V
BURST TIMER
AT5
E3
DC1
AT4
E1
ANTENNA COUPLER
PATTERN MODULATOR
TUNING
MAGNETRON
MISSILE MAGNETRON
V2, V3
K1 OVERLOAD
V1
MODULATOR
DELAY
V1 V2 V3
V4, V5, V7
V8
V8
VIDEO AMPLIFIER-DECOD
TSS
PULSER
CALIBRATION RESISTORS
R.F. POWER DB SW
MEAS FREQ
PMC SW.
V1, V2, V3, V4
CAL 00
CAL 0
POWER MEASURING
POWER
PULSER
K2 RELAY COIL
COMMAND MODULATOR



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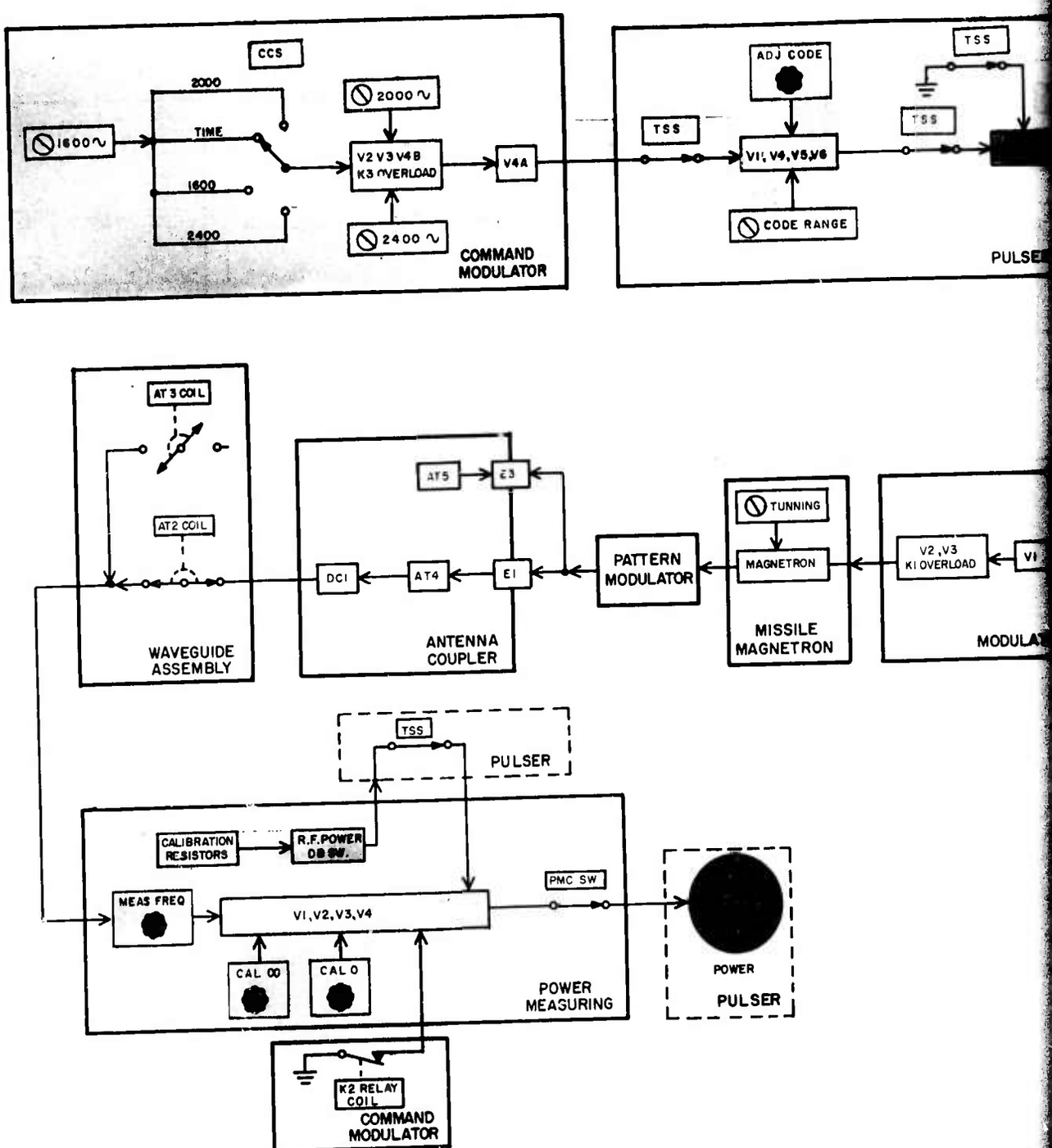
24



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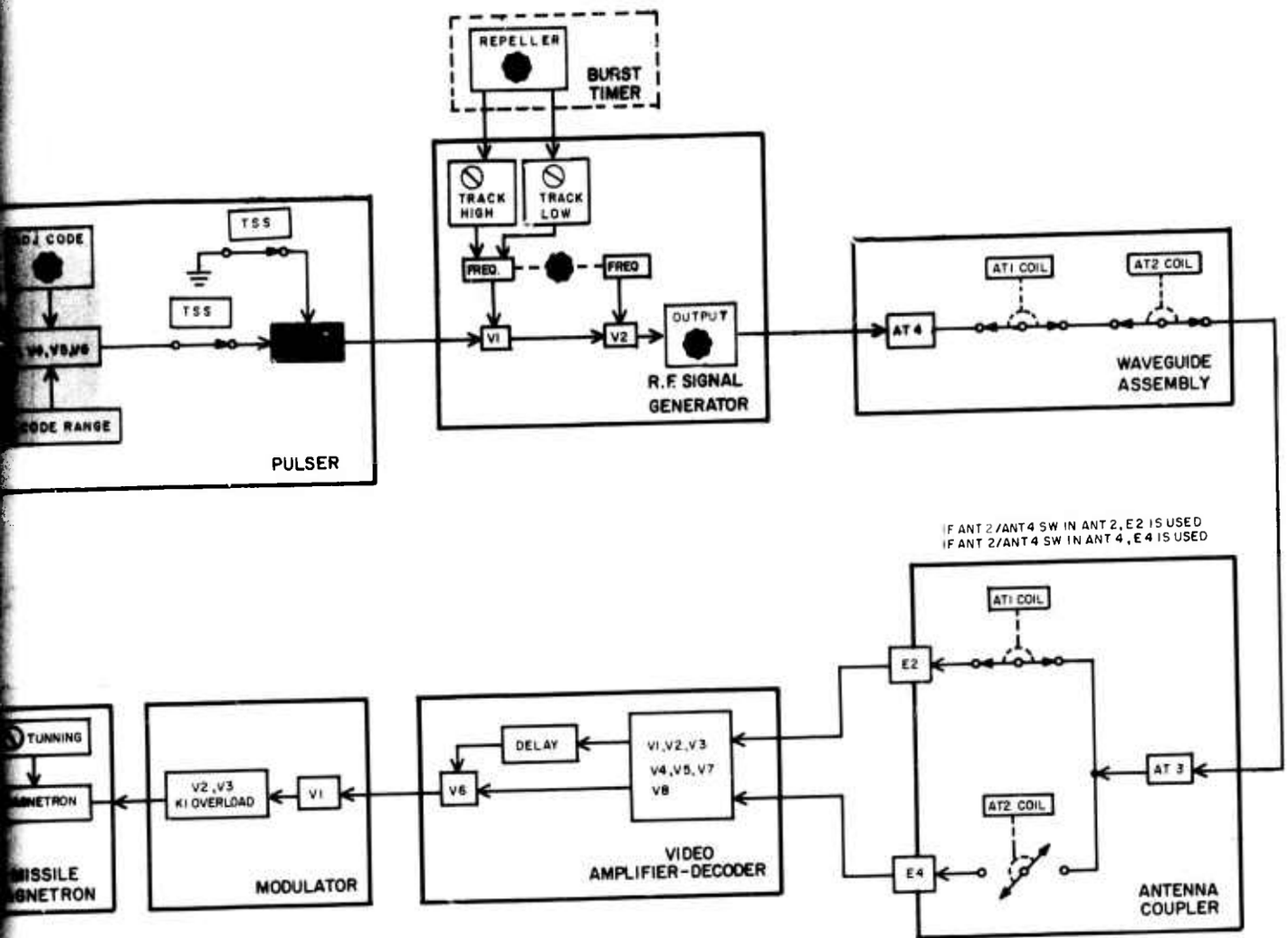
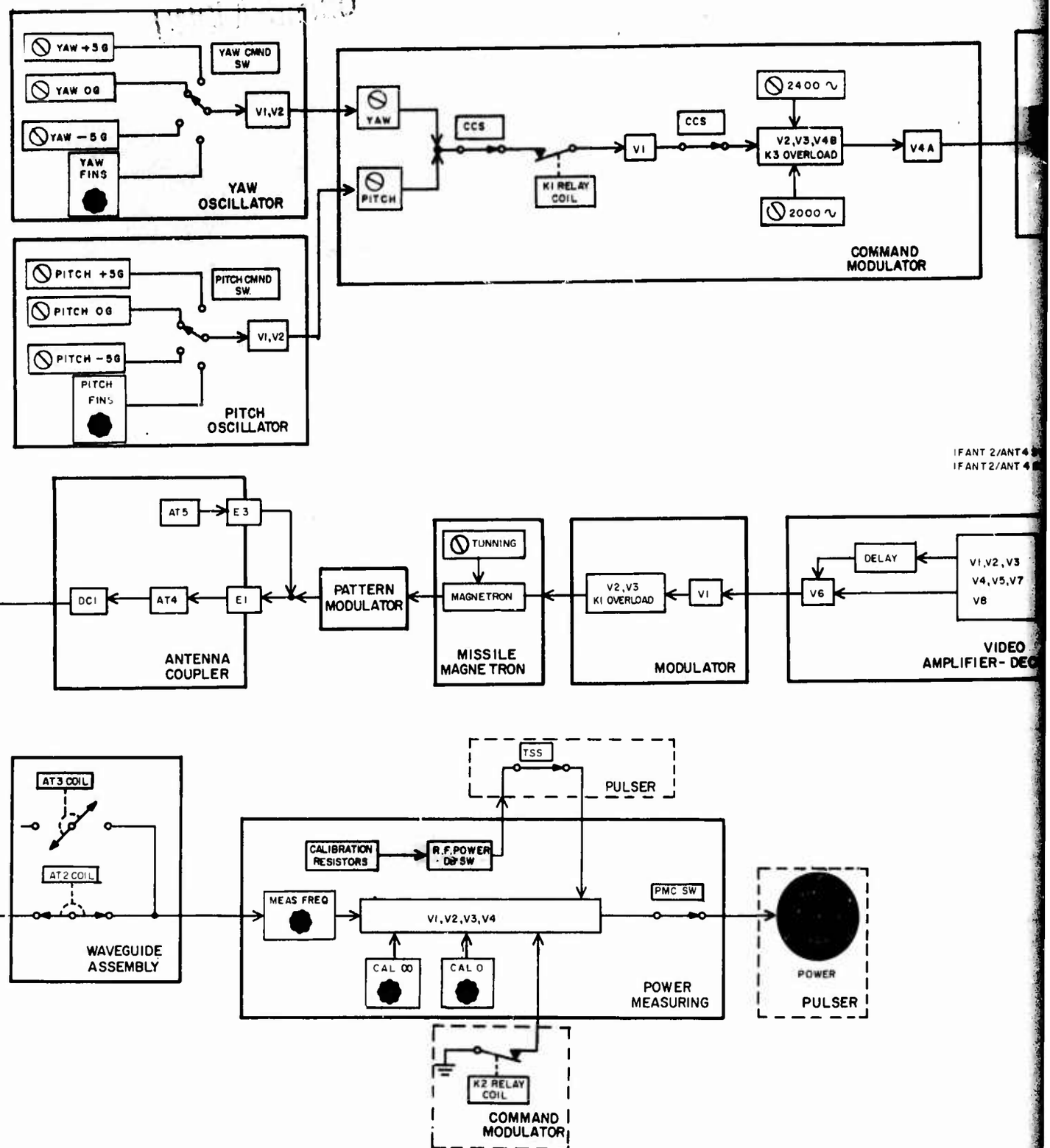
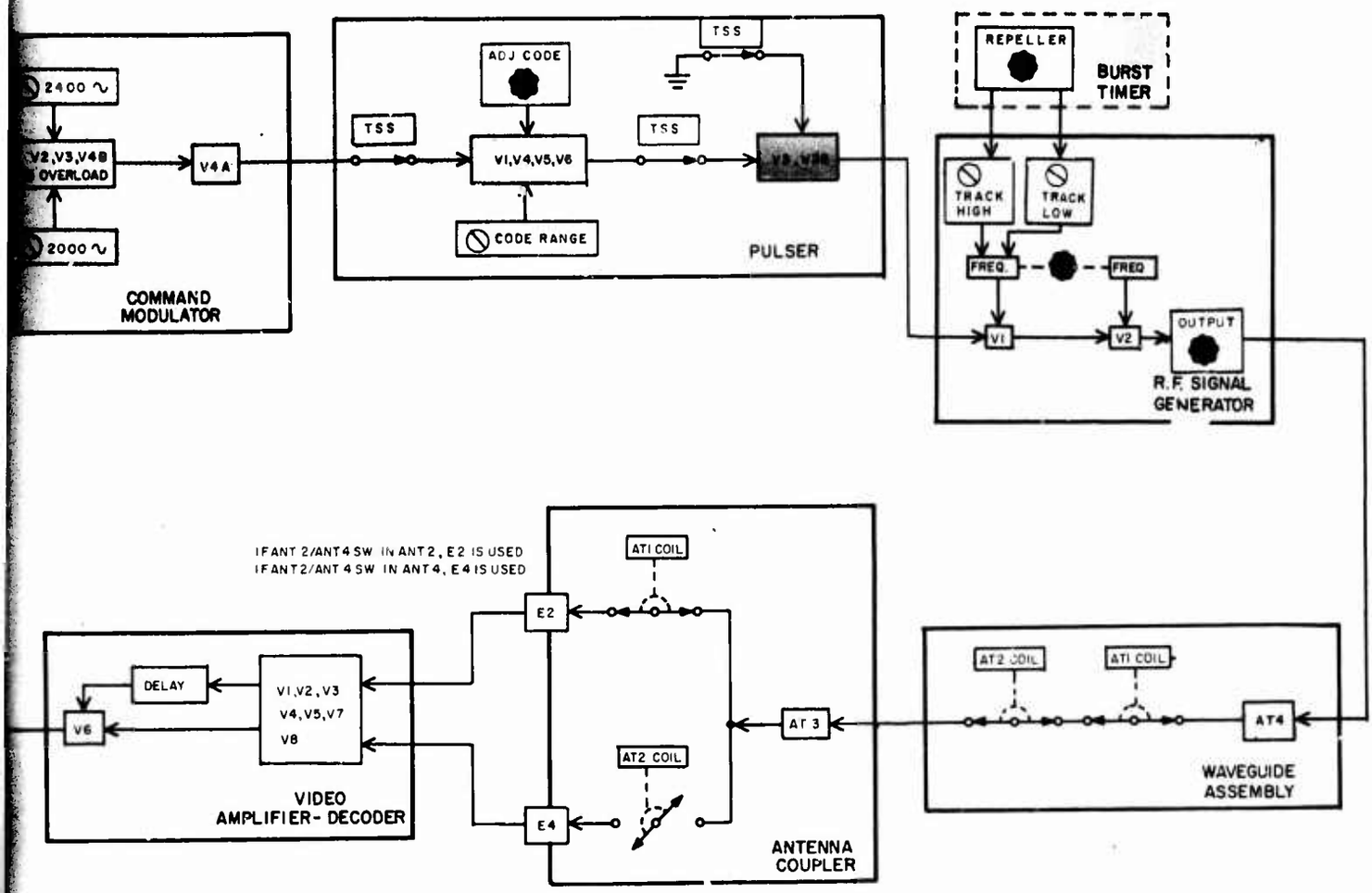

REPELLER
BURST TIMER
TRACK HIGH
TRACK LOW
FREQ.
FREQ
V1
V2
OUTPUT
R.F SIGNAL GENERATOR
TSS
TSS
CODE RANGE
PULSER
AT1 COIL
AT2 COIL
AT 4
WAVEGUIDE ASSEMBLY
IF ANT 2/ANT 4 SW IN ANT 2, E2 IS USED
IF ANT 2/ANT 4 SW IN ANT 4, E4 IS USED
AT1 COIL
E2
AT 3
AT2 COIL
E4
ANTENNA COUPLER
DELAY
V1,V2,V3
V4,V5,V7
V8
V6
VIDEO AMPLIFIER-DECODER
V2,V3
K1 OVERLOAD
V1
MODULATOR
TUNNING
MISSILE


YAW +5G
YAW CMND SW
YAW 0G
V1,V2
YAW -5G
YAW FINS
YAW OSCILLATOR
PITCH +5G
PITCH CMND SW.
PITCH 0G
V1,V2
PITCH -5G
PITCH FINS
PITCH OSCILLATOR
YAW
PITCH
CCS
K1 RELAY COIL
V1
CCS
2400 ∿
V2,V3,V4B K3 OVERLOAD
2000 ∿
V4A
COMMAND MODULATOR
AT5
E3
DC1
AT4
E1
ANTENNA COUPLER
PATTERN MODULATOR
TUNNING
MAGNETRON
MISSILE MAGNETRON
V2,V3 K1 OVERLOAD
V1
MODULATOR
DELAY
V6
V1,V2,V3 V4,V5,V7 V8
VIDEO AMPLIFIER-DEC
TSS
PULSER
AT3 COIL
AT2 COIL
WAVEGUIDE ASSEMBLY
CALIBRATION RESISTORS
R.F.POWER DIV SW
MEAS FREQ
V1,V2,V3,V4
PMC SW
CAL ∞
CAL 0
POWER MEASURING
POWER
PULSER
K2 RELAY COIL
COMMAND MODULATOR

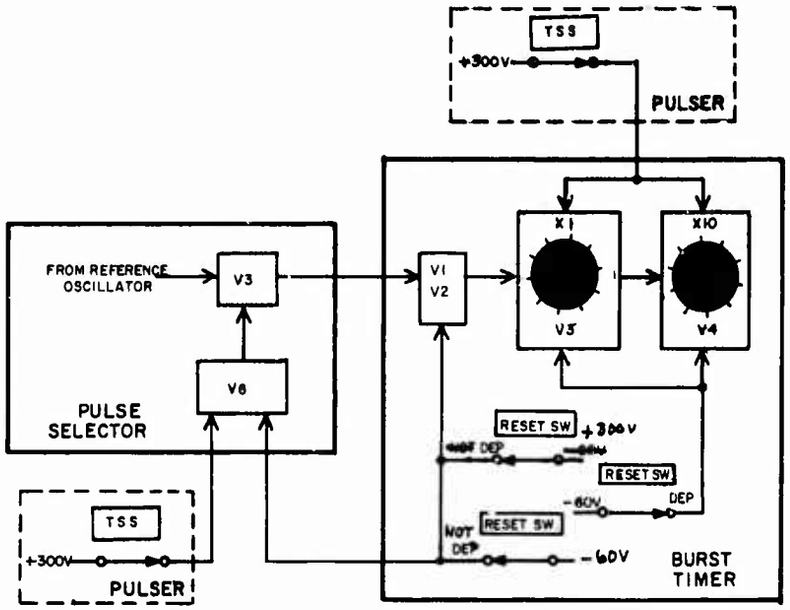

2400 ∿
V2,V3,V4B OVERLOAD
V4A
2000 ∿
COMMAND MODULATOR
TSS
ADJ CODE
TSS
TSS
V1,V4,V5,V6
V3,V7B
CODE RANGE
PULSER
REPELLER
BURST TIMER
TRACK HIGH
TRACK LOW
FREQ.
FREQ
V1
V2
OUTPUT
R.F. SIGNAL GENERATOR

IF ANT 2/ANT 4 SW IN ANT 2, E2 IS USED
IF ANT 2/ANT 4 SW IN ANT 4, E4 IS USED
ATI COIL
E2
DELAY
V1,V2,V3
V4,V5,V7
V8
V6
VIDEO AMPLIFIER- DECODER
AT3
AT2 COIL
E4
ANTENNA COUPLER
AT2 COIL
ATI COIL
AT4
WAVEGUIDE ASSEMBLY

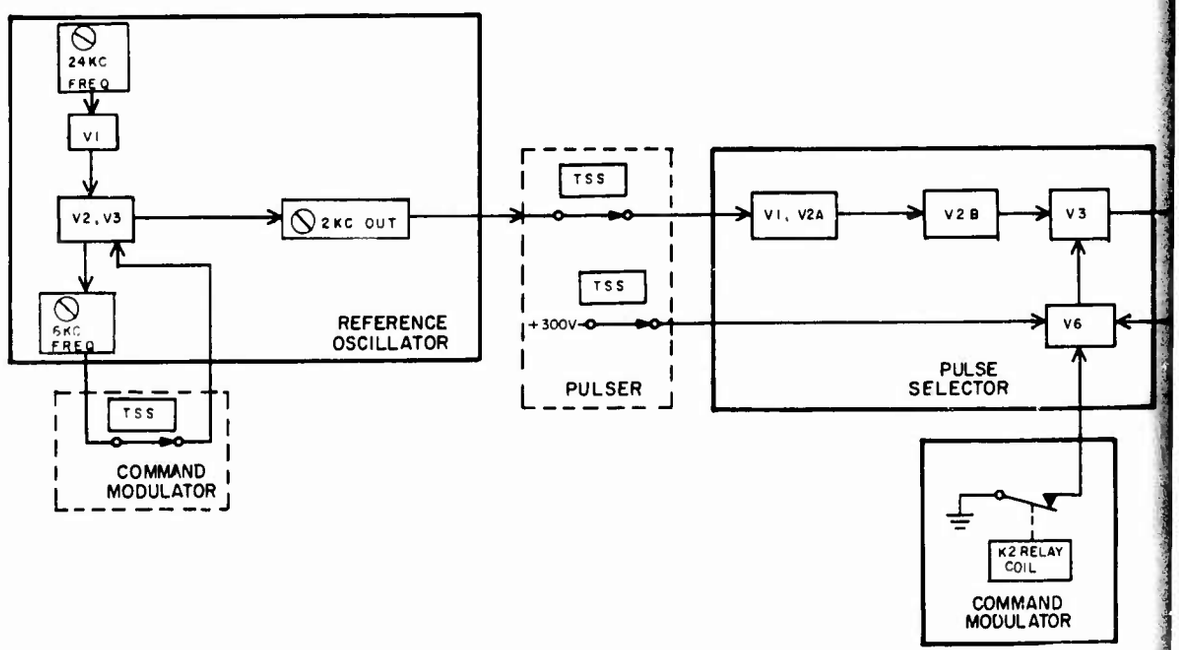
POWER
PULSER

CONFIDENTIAL

26

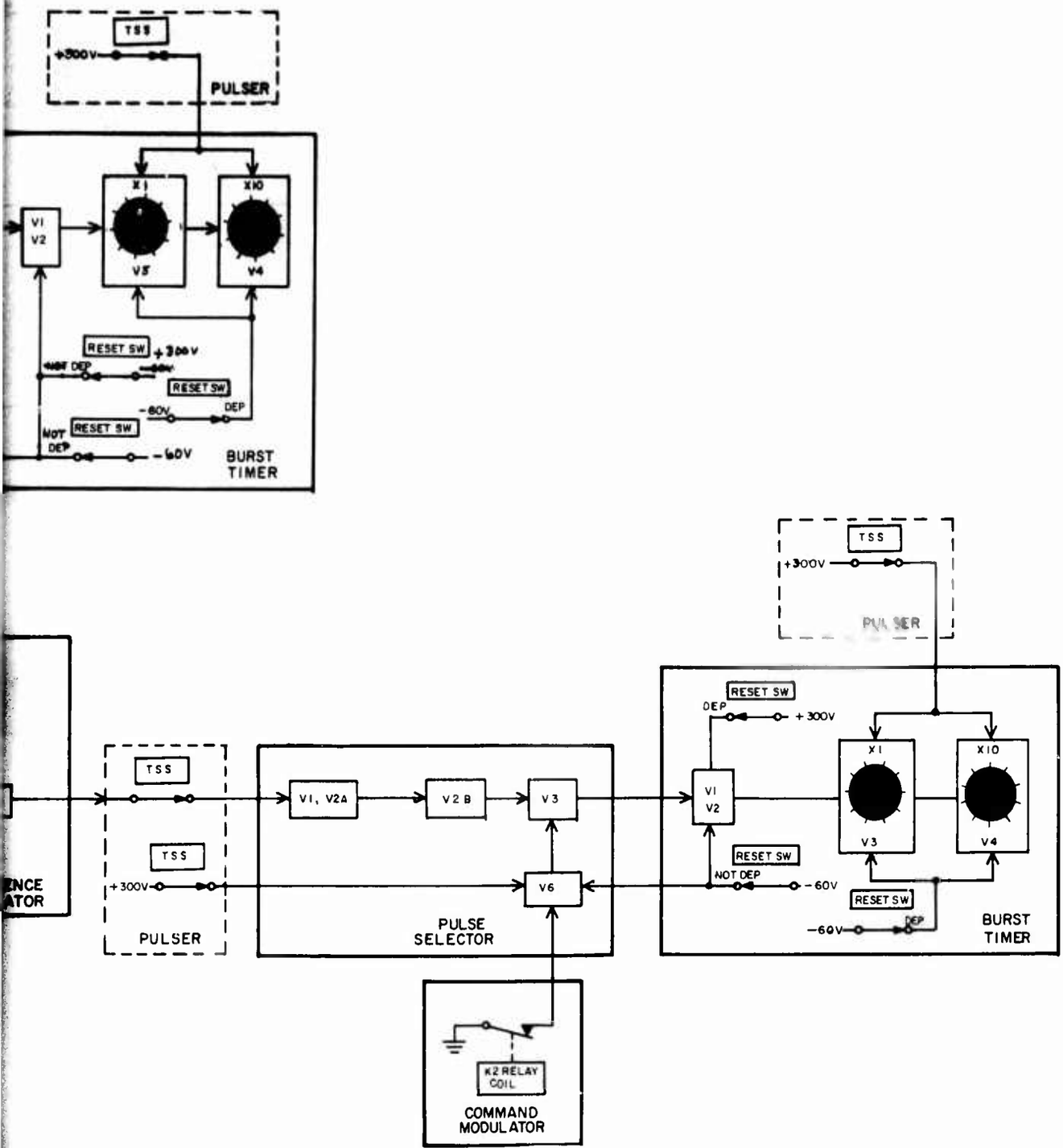


27



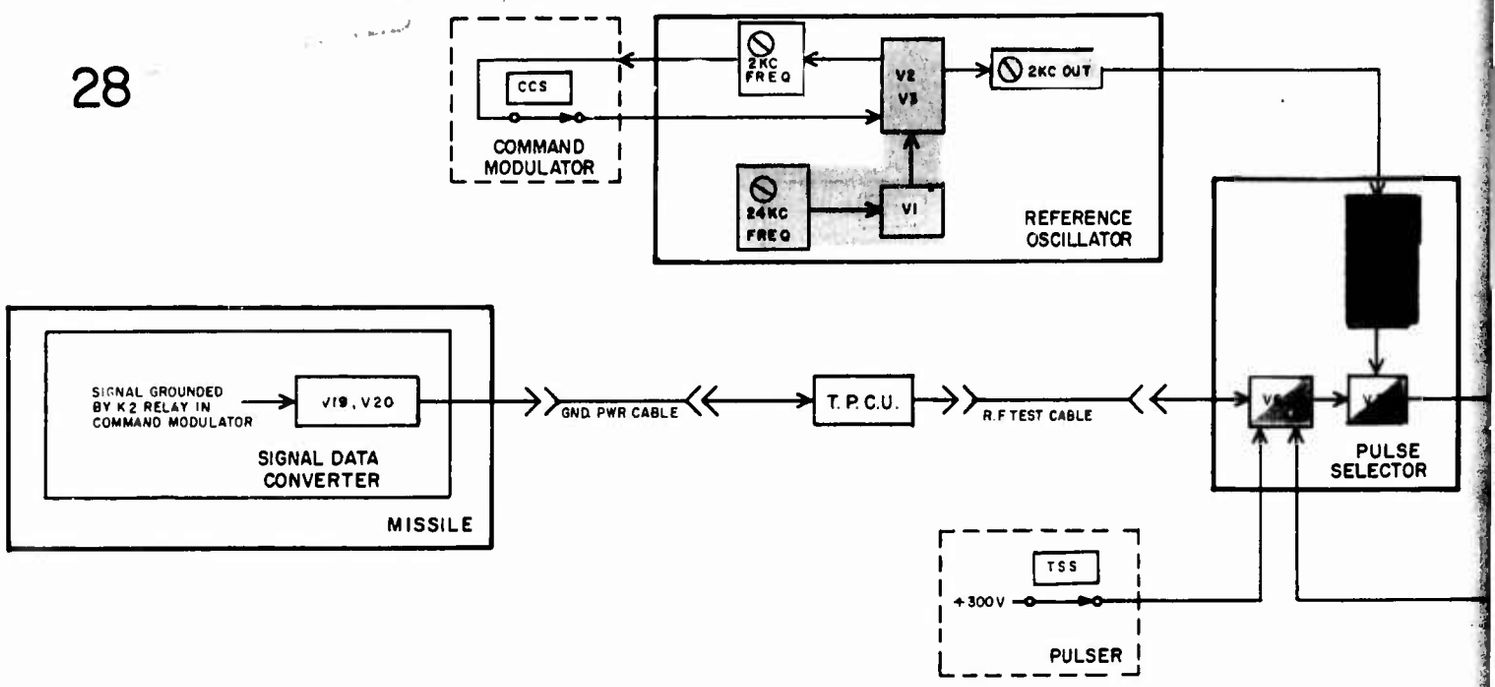
CONFIDENTIAL

CONFIDENTIAL

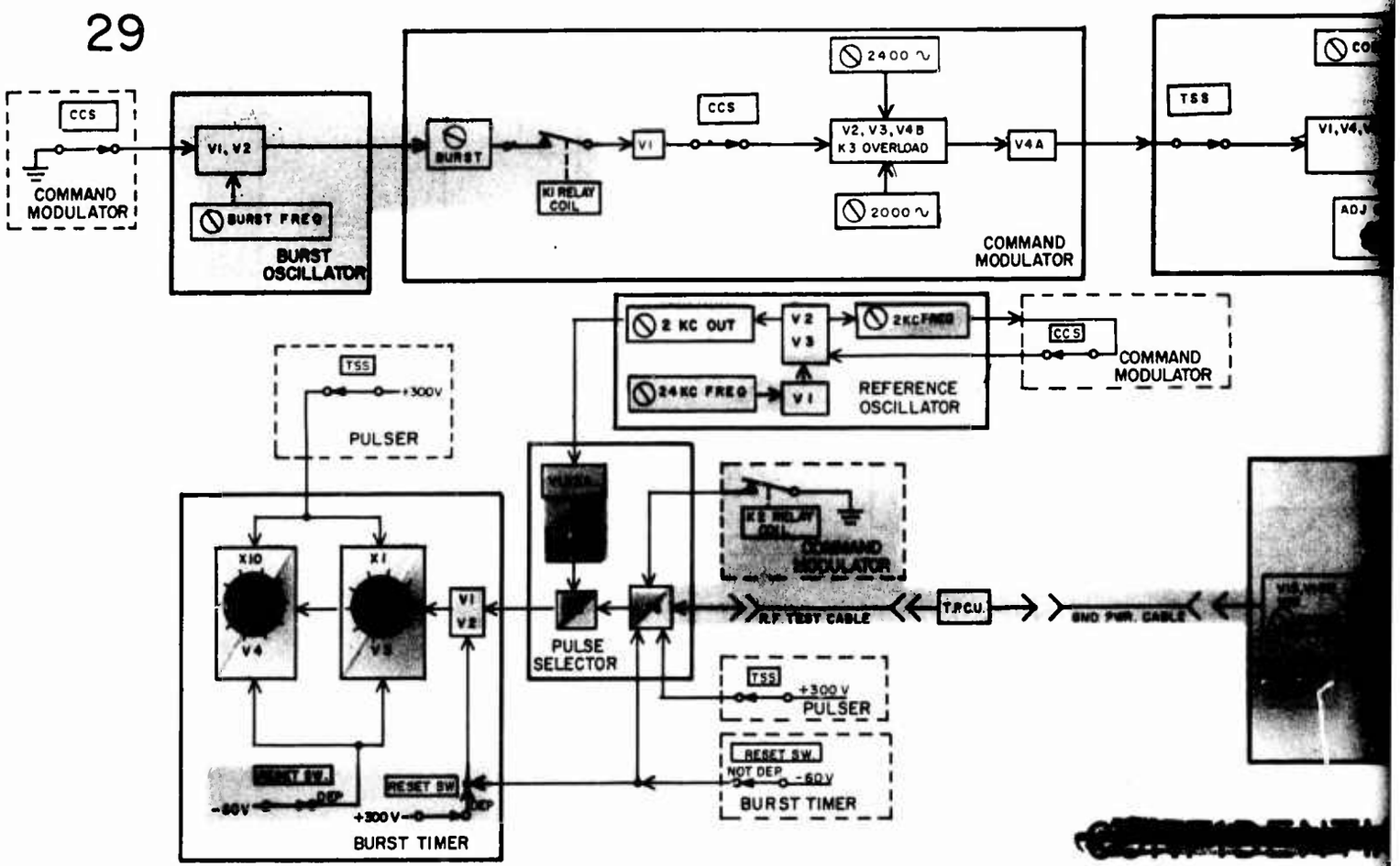


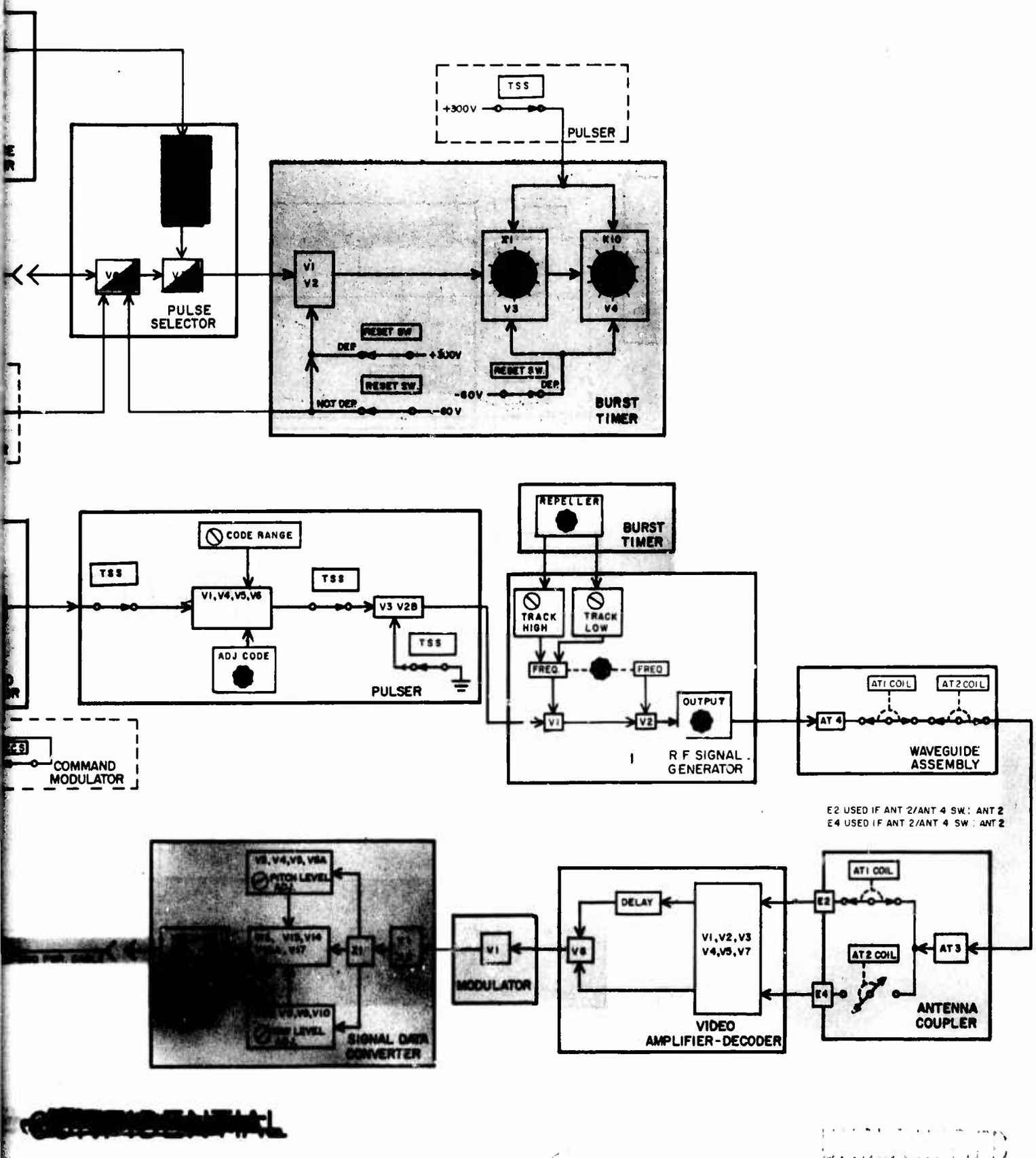
CONFIDENTIAL

28


CCS
COMMAND MODULATOR
2KC FREQ
V2
V3
2KC OUT
24KC FREQ
V1
REFERENCE OSCILLATOR
SIGNAL GROUNDED BY K2 RELAY IN COMMAND MODULATOR
V19, V20
SIGNAL DATA CONVERTER
MISSILE
GND PWR CABLE
T. P. C. U.
R.F TEST CABLE
PULSE SELECTOR
TSS
+300 V
PULSER

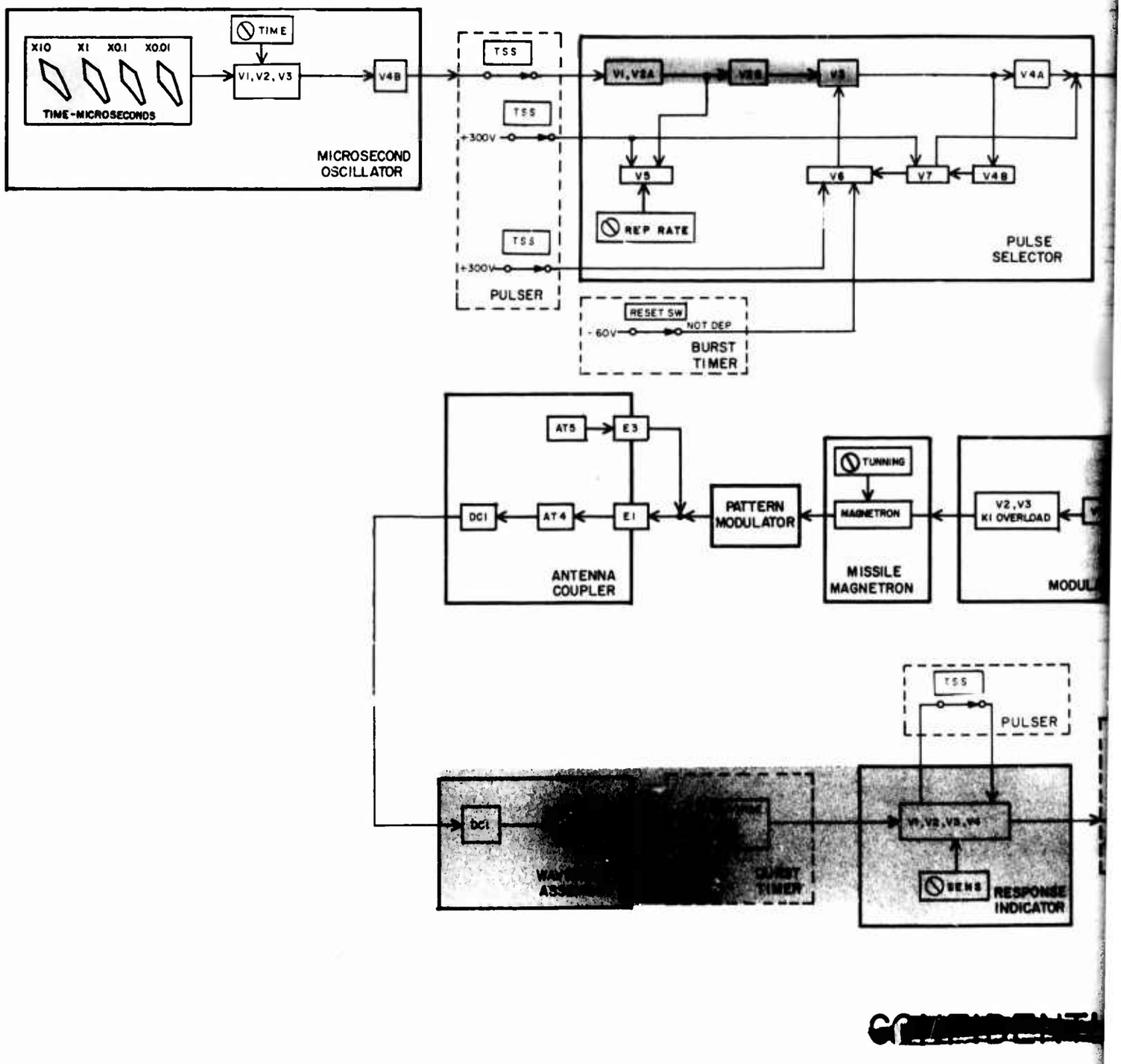
29


CCS
COMMAND MODULATOR
V1, V2
BURST FREQ
BURST OSCILLATOR
BURST
K1 RELAY COIL
V1
CCS
2400 ∿
V2, V3, V4B
K3 OVERLOAD
2000 ∿
V4A
COMMAND MODULATOR
TSS
ADJ
2 KC OUT
V2
V3
2KC FREQ
CCS
COMMAND MODULATOR
24KC FREQ
V1
REFERENCE OSCILLATOR
TSS
+300V
PULSER
X10
X1
V4
V3
V1
V2
PULSE SELECTOR
K3 RELAY COIL
COMMAND MODULATOR
R.F. TEST CABLE
T.P.C.U.
GND PWR. CABLE
TSS
+300 V
PULSER
RESET SW.
NOT DEP.
-60 V
BURST TIMER
RESET SW.
-60 V
DEP
RESET SW.
+300 V
DEP
BURST TIMER


TSS
+300V
PULSER
PULSE SELECTOR
V1
V2
X1
X10
V3
V4
RESET SW
DEP
+300V
RESET SW
RESET SW
DEP
NOT DEP
-60V
-60V
BURST TIMER
REPELLER
BURST TIMER
CODE RANGE
TSS
V1, V4, V5, V6
TSS
V3 V28
TSS
ADJ CODE
PULSER
TRACK HIGH
TRACK LOW
FREQ
FREQ
V1
V2
OUTPUT
R F SIGNAL GENERATOR
AT1 COIL
AT2 COIL
AT 4
WAVEGUIDE ASSEMBLY
COMMAND MODULATOR
E2 USED IF ANT 2/ANT 4 SW.: ANT 2
E4 USED IF ANT 2/ANT 4 SW.: ANT 2
V1
MODULATOR
V6
DELAY
V1, V2, V3
V4, V5, V7
VIDEO AMPLIFIER-DECODER
E2
E4
AT1 COIL
AT2 COIL
AT3
ANTENNA COUPLER
SIGNAL DATA CONVERTER

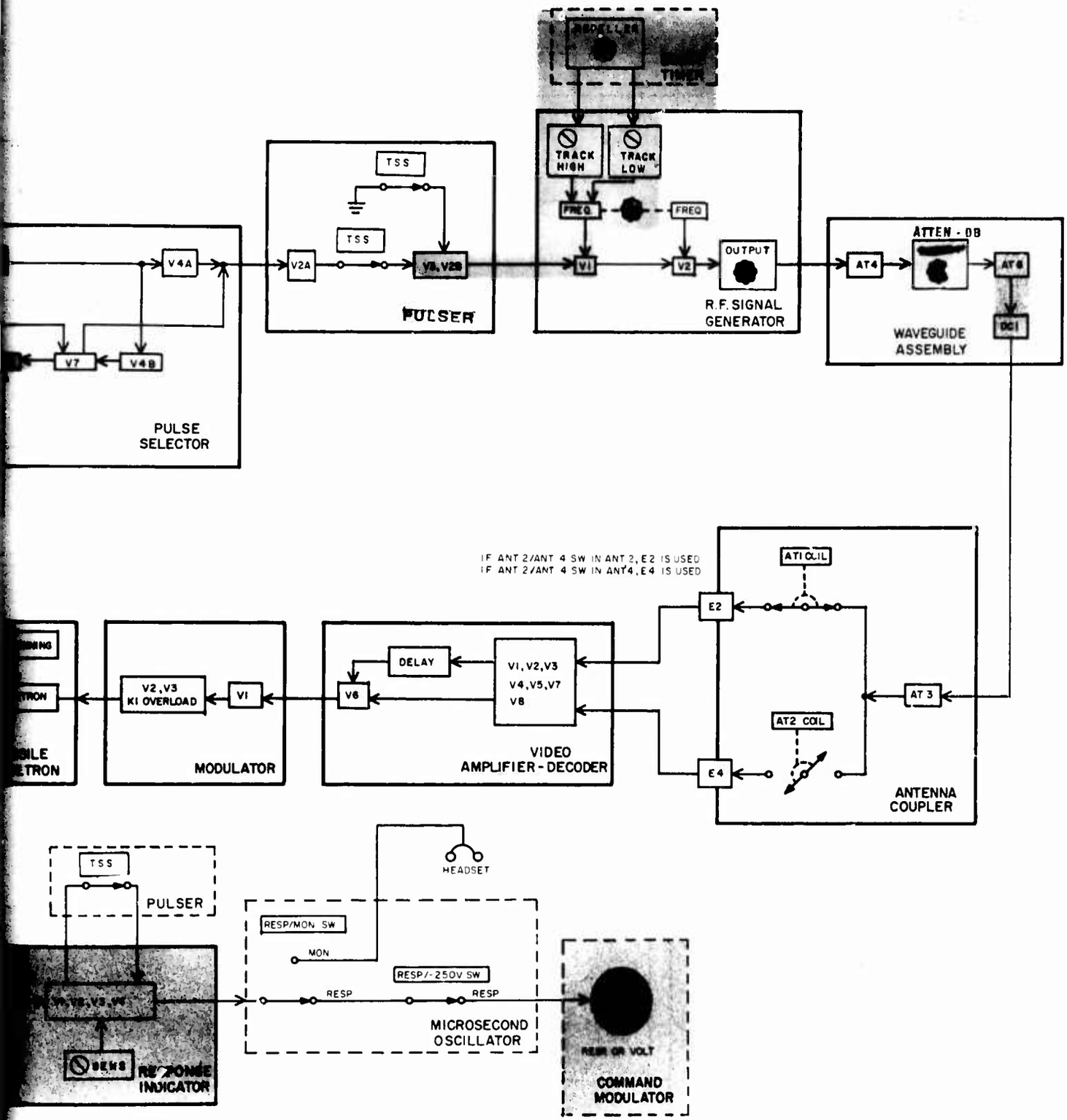
UNCLASSIFIED

30



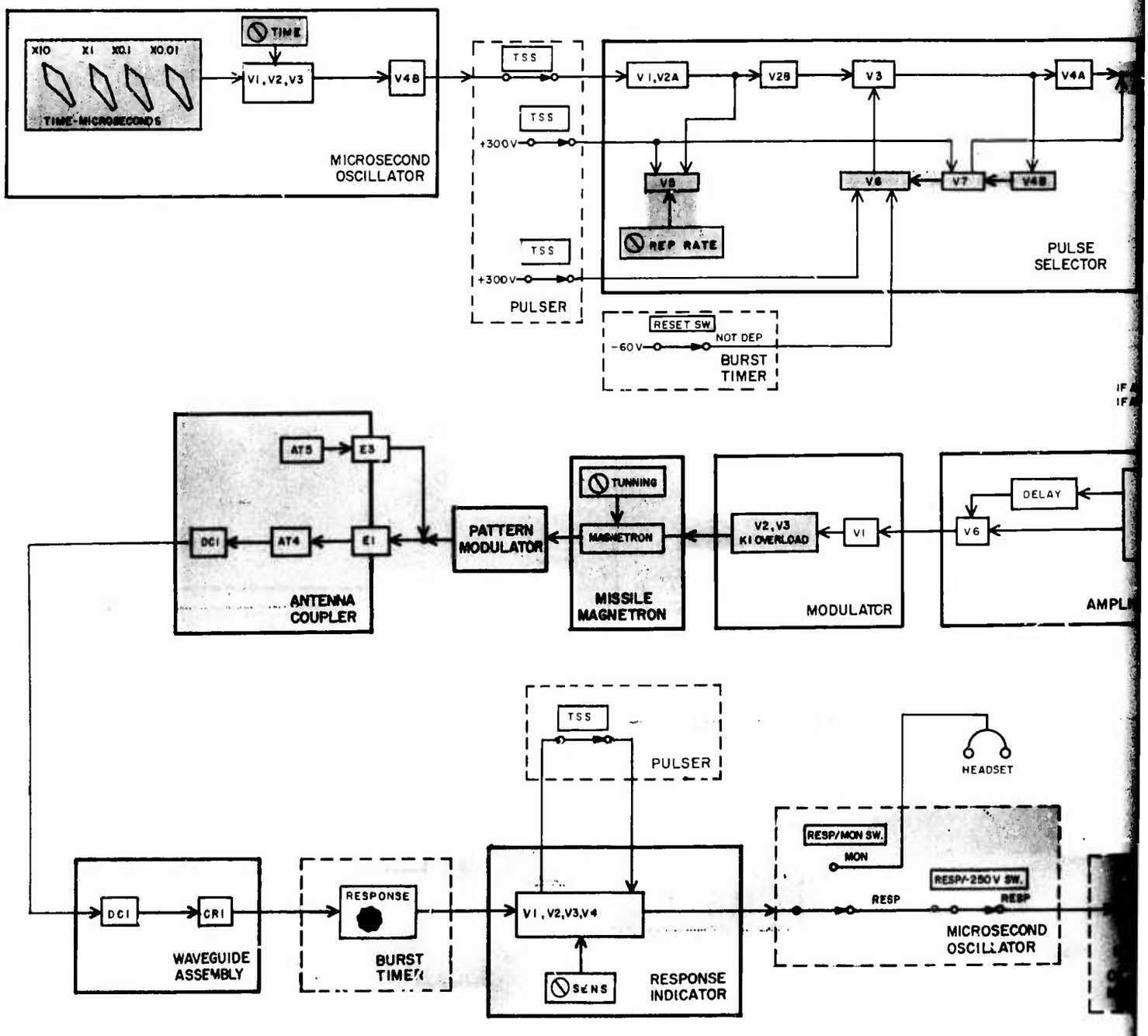
CONFIDENTIAL

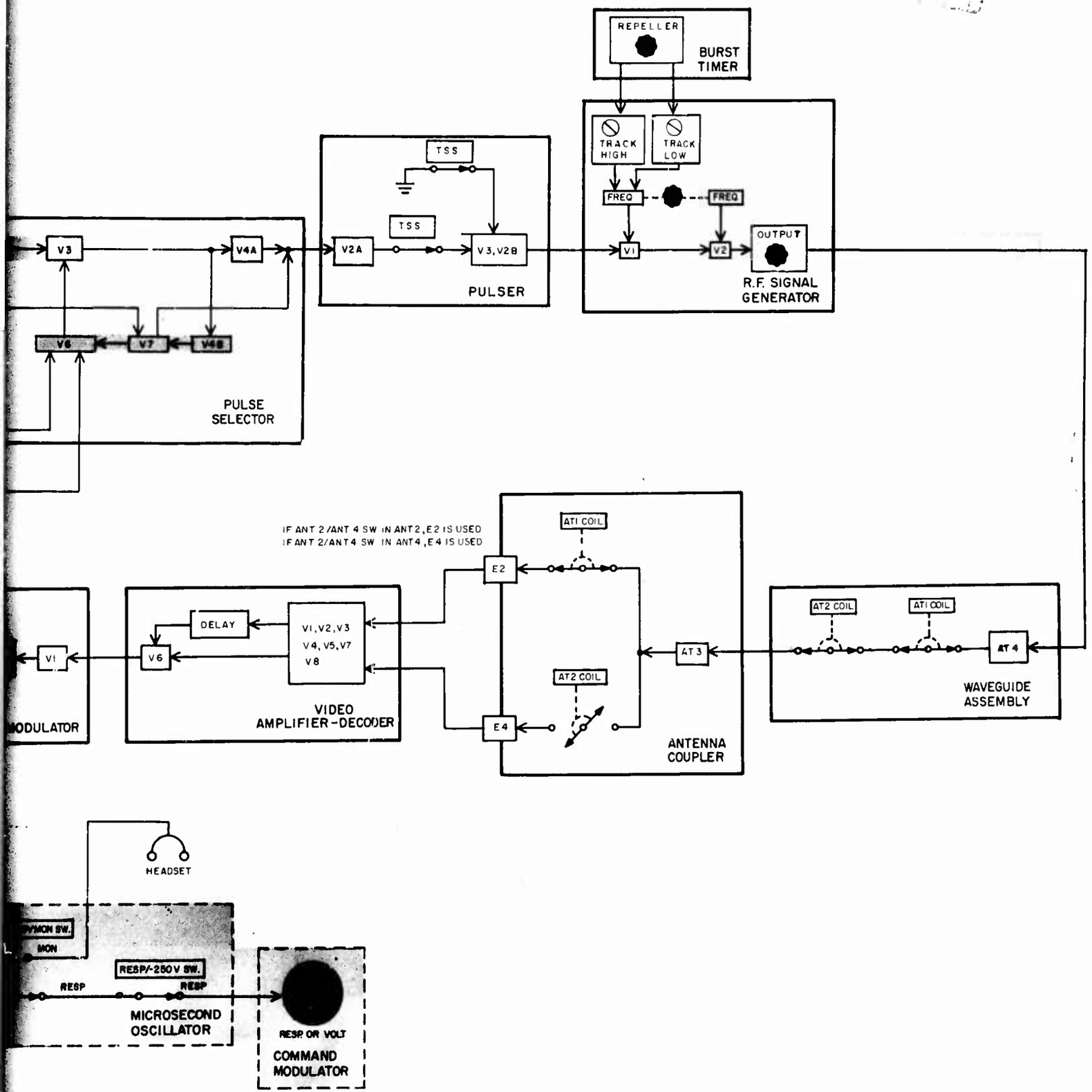
[redacted]AL



[redacted]AL

31


X10
X1
X0.1
X0.01
TIME-MICROSECONDS
TIME
V1, V2, V3
V4B
MICROSECOND OSCILLATOR
TSS
+300V
PULSER
V1, V2A
V2B
V3
V4A
V5
REP RATE
V6
V7
V4B
PULSE SELECTOR
RESET SW
-60V
NOT DEP
BURST TIMER
AT5
E3
DC1
AT4
E1
ANTENNA COUPLER
PATTERN MODULATOR
TUNNING
MAGNETRON
MISSILE MAGNETRON
V2, V3 KI OVERLOAD
V1
MODULATOR
DELAY
V6
AMPLI
TSS
PULSER
HEADSET
RESP/MON SW.
MON
RESP-250V SW.
RESP
RESP
MICROSECOND OSCILLATOR
DC1
CR1
WAVEGUIDE ASSEMBLY
RESPONSE
BURST TIMER
V1, V2, V3, V4
SENS
RESPONSE INDICATOR



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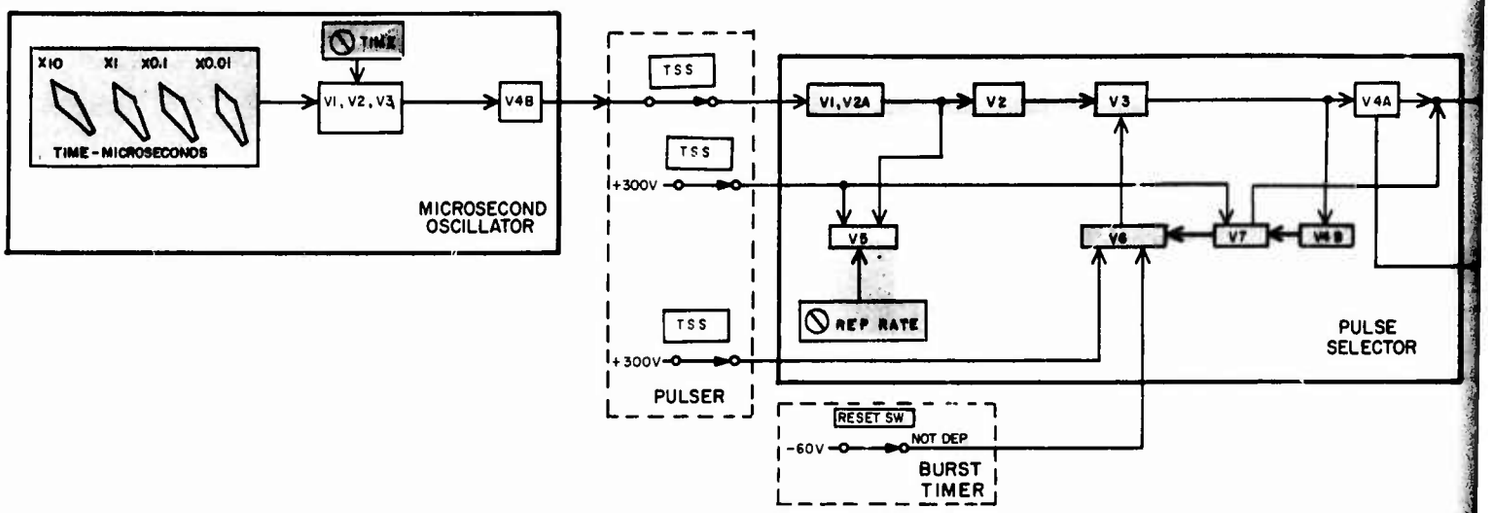
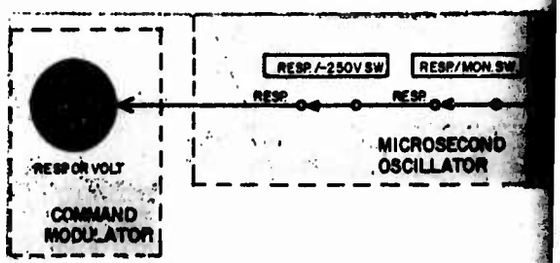
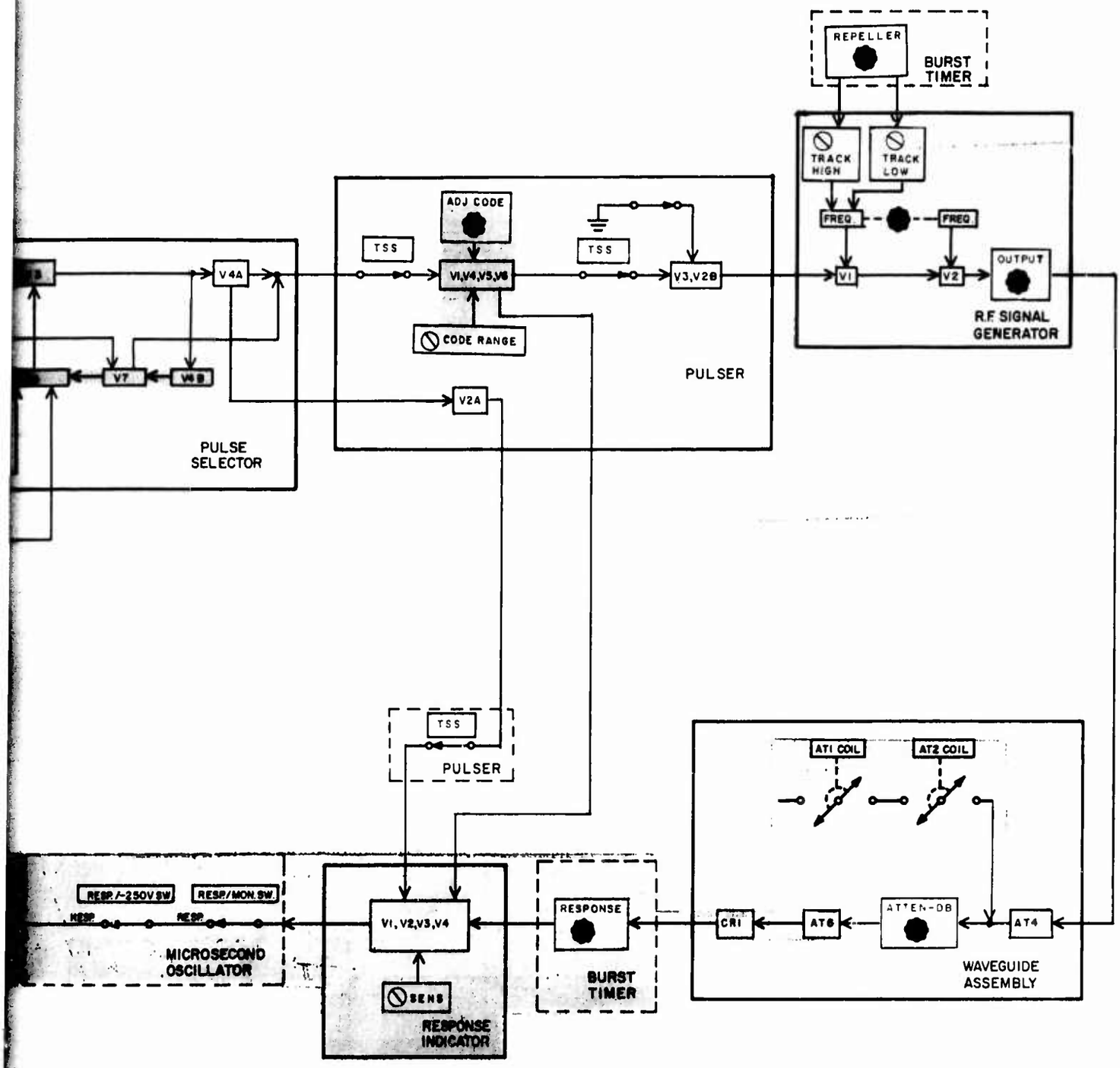
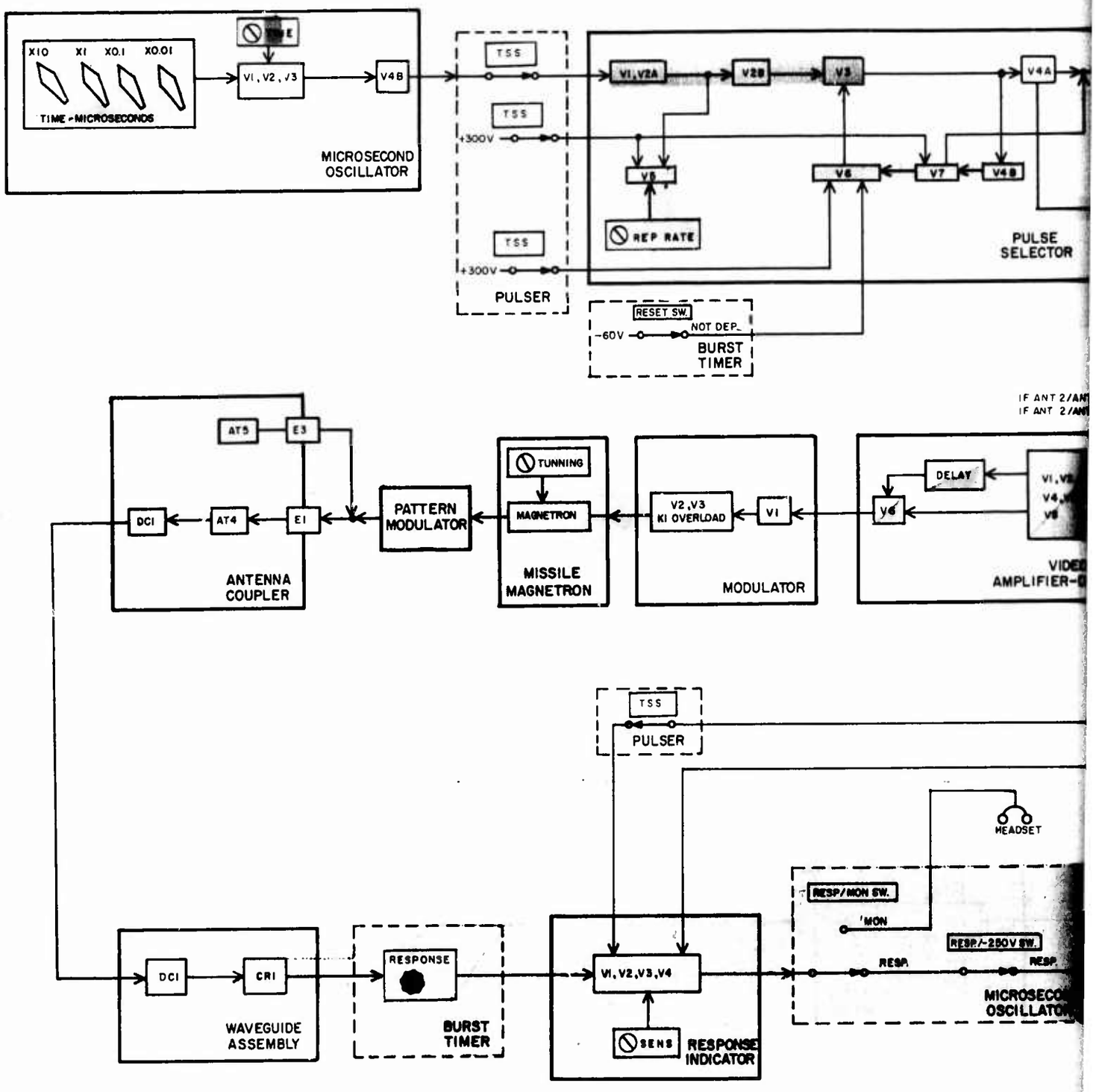
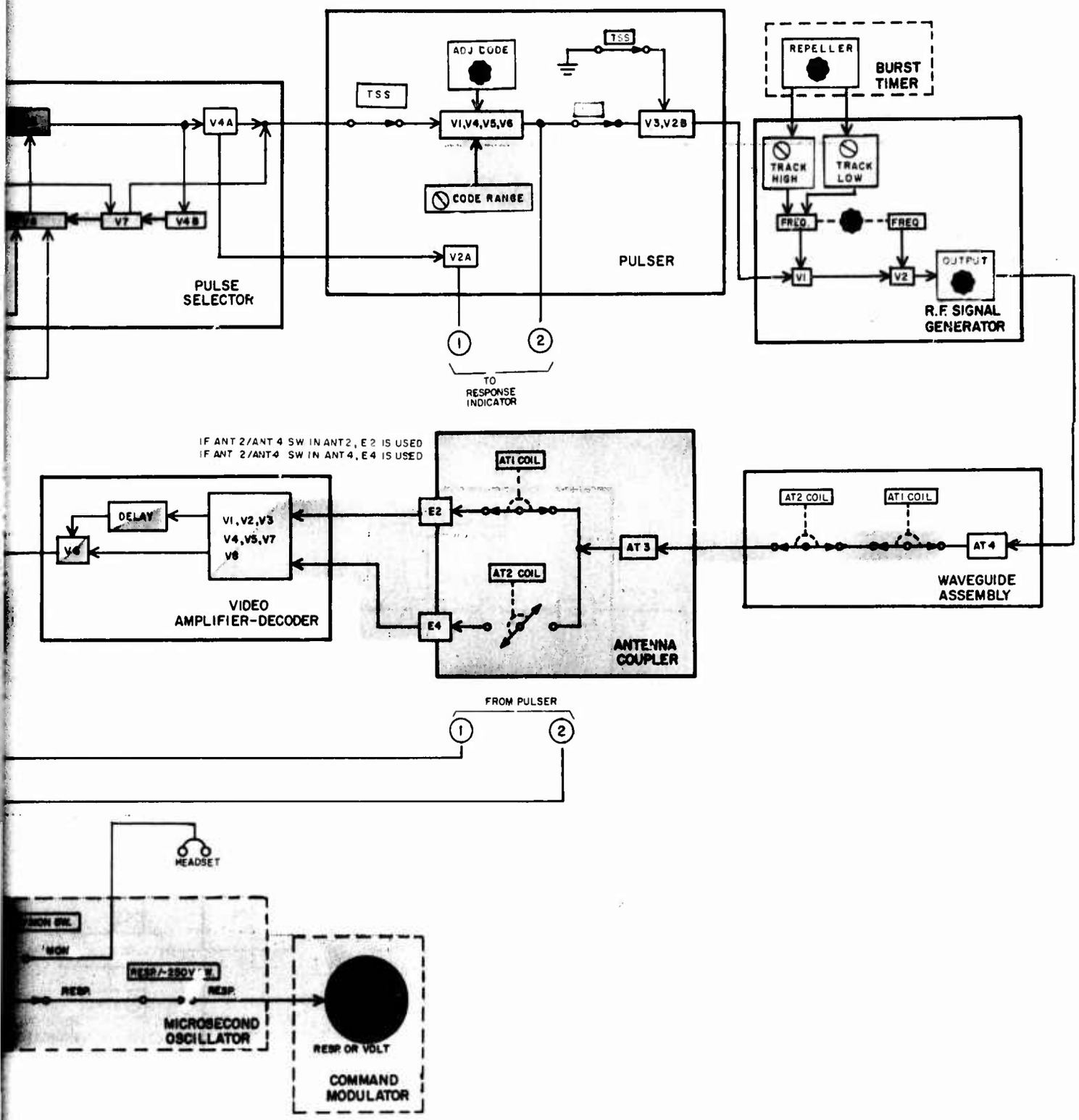
32


X10
X1
X0.1
X0.01
TIME - MICROSECONDS
TIME
V1, V2, V3
V4B
MICROSECOND OSCILLATOR
TSS
TSS
+300V
TSS
+300V
PULSER
V1, V2A
V2
V3
V4A
V5
V6
V7
V4B
REP RATE
PULSE SELECTOR
RESET SW
-60V
NOT DEP
BURST TIMER


RESP OR VOLT
COMMAND MODULATOR
RESP./-250V SW
RESP/MON.SW.
RESP.
RESP.
MICROSECOND OSCILLATOR

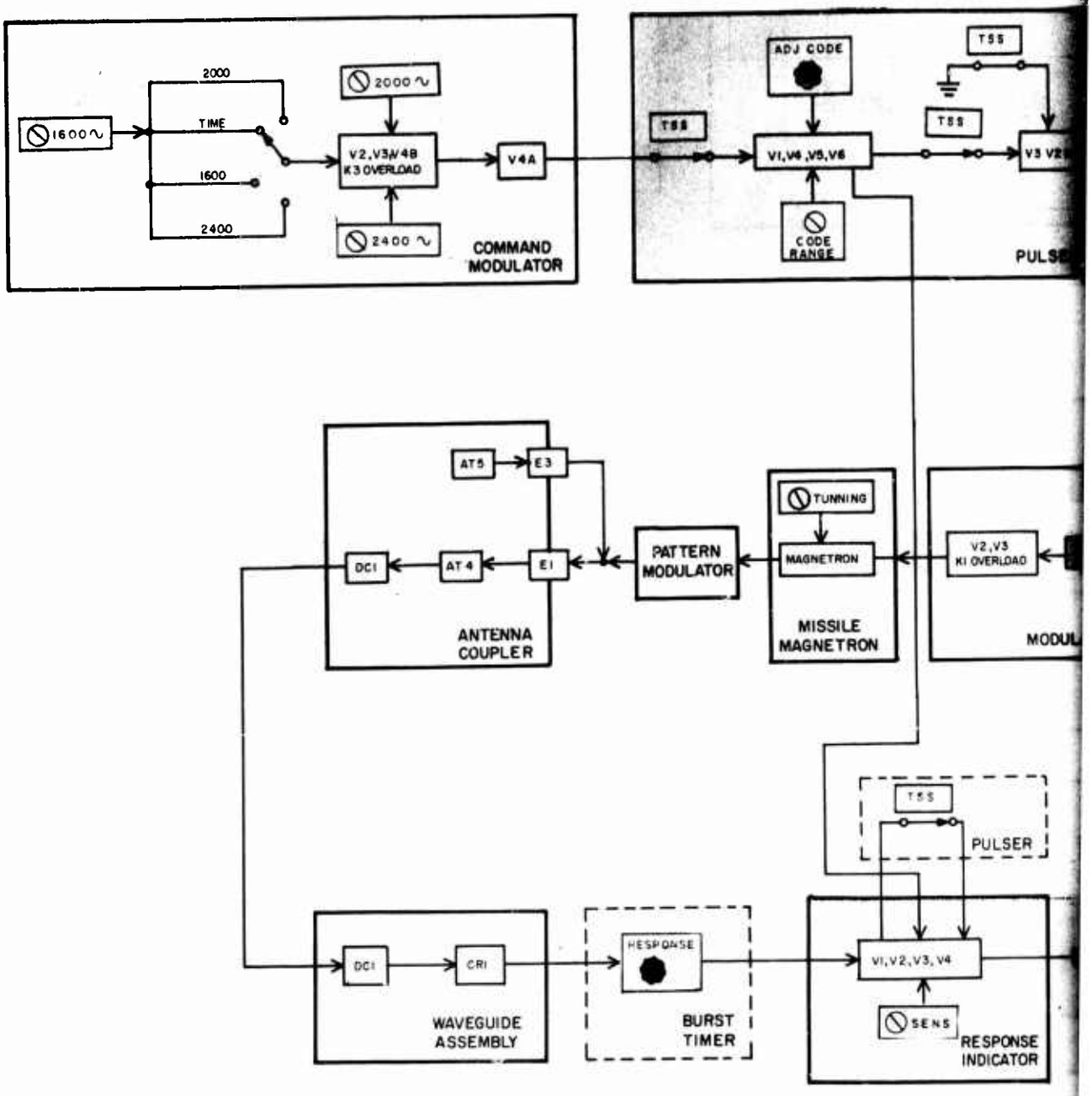

REPELLER
BURST TIMER
TRACK HIGH
TRACK LOW
FREQ.
FREQ.
OUTPUT
V1
V2
R.F SIGNAL GENERATOR
ADJ CODE
TSS
TSS
V4A
V1,V4,V5,V6
V3,V2B
CODE RANGE
PULSER
V7
V2A
PULSE SELECTOR
TSS
PULSER
ATI COIL
AT2 COIL
RESP./-250V SW
RESP./MON. SW.
RESP.
RESP.
MICROSECOND OSCILLATOR
V1, V2,V3,V4
SENS
RESPONSE INDICATOR
RESPONSE
BURST TIMER
CR1
AT6
ATTEN-DB
AT4
WAVEGUIDE ASSEMBLY

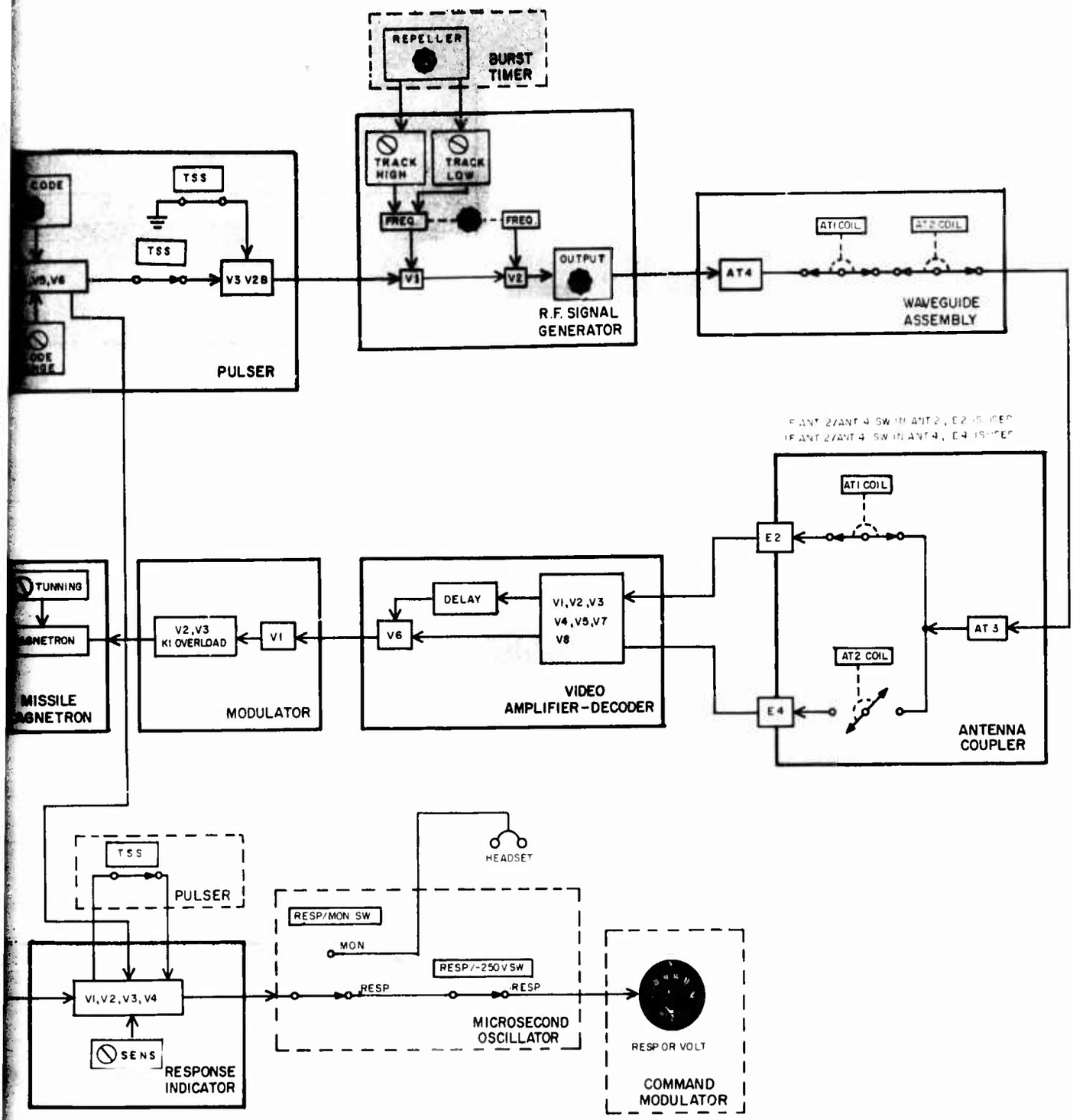

X10
X1
X0.1
X0.01
TIME - MICROSECONDS
V1, V2, V3
V4B
MICROSECOND OSCILLATOR
TSS
+300V
PULSER
V1, V2A
V2B
V3
V4A
V5
V6
V7
V4B
REP RATE
PULSE SELECTOR
RESET SW.
-60V
NOT DEP.
BURST TIMER
AT5
E3
DCI
AT4
E1
ANTENNA COUPLER
PATTERN MODULATOR
TUNNING
MAGNETRON
MISSILE MAGNETRON
V2, V3
K1 OVERLOAD
V1
MODULATOR
DELAY
V6
TSS
PULSER
HEADSET
RESP/MON SW.
MON
RESP/-250V SW.
RESP
RESP
MICROSECOND OSCILLATOR
DCI
CR1
WAVEGUIDE ASSEMBLY
RESPONSE
BURST TIMER
V1, V2, V3, V4
SENS
RESPONSE INDICATOR


V4A
V7
V4B
PULSE SELECTOR
TSS
ADJ CODE
TSS
V1,V4,V5,V6
V3,V2B
CODE RANGE
V2A
PULSER
REPELLER
BURST TIMER
TRACK HIGH
TRACK LOW
FREQ
FREQ
V1
V2
OUTPUT
R.F SIGNAL GENERATOR
1
2
TO RESPONSE INDICATOR
IF ANT 2/ANT 4 SW IN ANT 2, E2 IS USED
IF ANT 2/ANT 4 SW IN ANT 4, E4 IS USED
ATI COIL
DELAY
V1, V2, V3
V4, V5, V7
V8
V6
E2
AT3
AT2 COIL
E4
VIDEO AMPLIFIER-DECODER
ANTENNA COUPLER
AT2 COIL
ATI COIL
AT4
WAVEGUIDE ASSEMBLY
FROM PULSER
1
2
HEADSET
MON
RESP
RESP
MICROSECOND OSCILLATOR
RESP OR VOLT
COMMAND MODULATOR

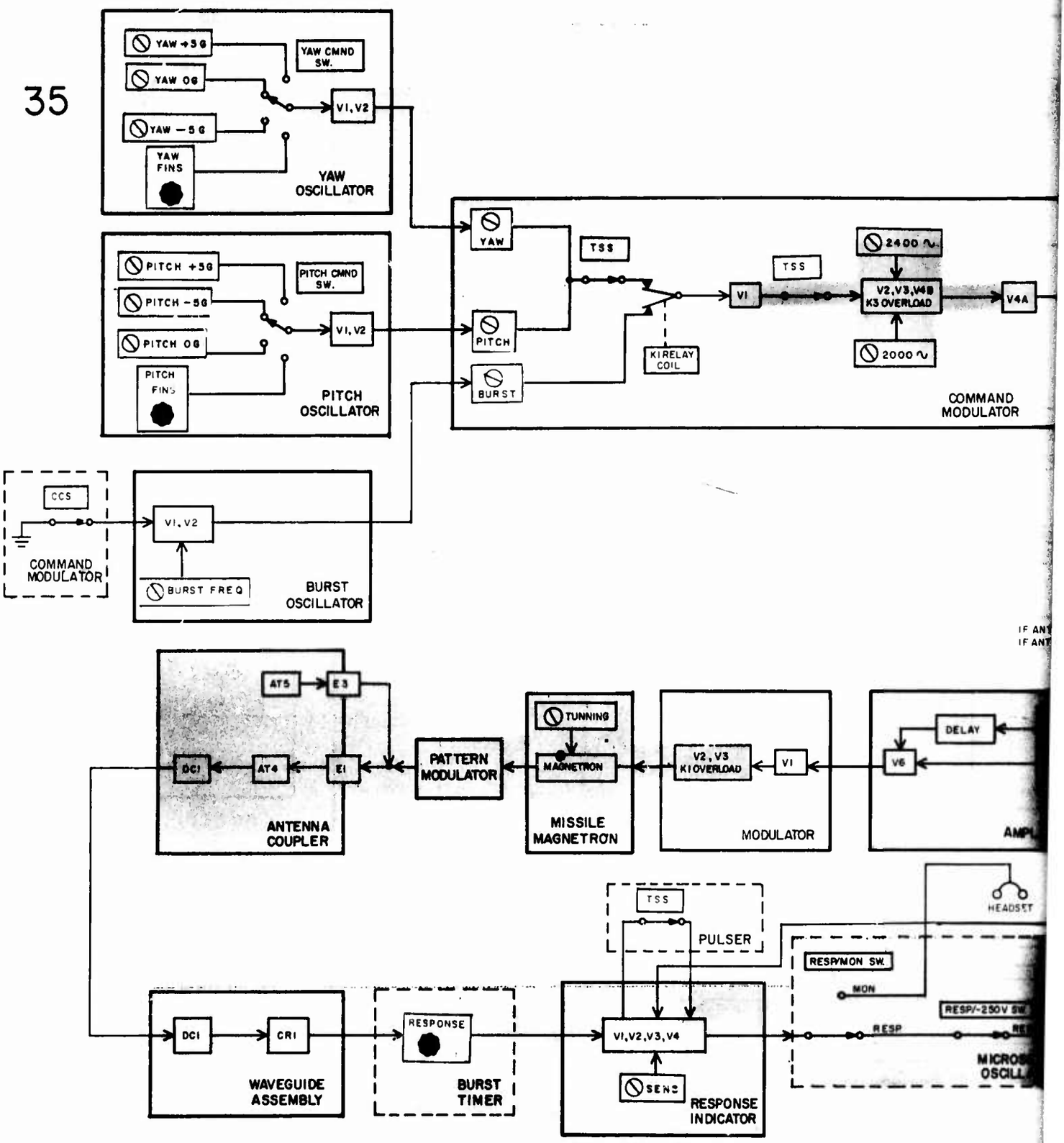
UNCLASSIFIED

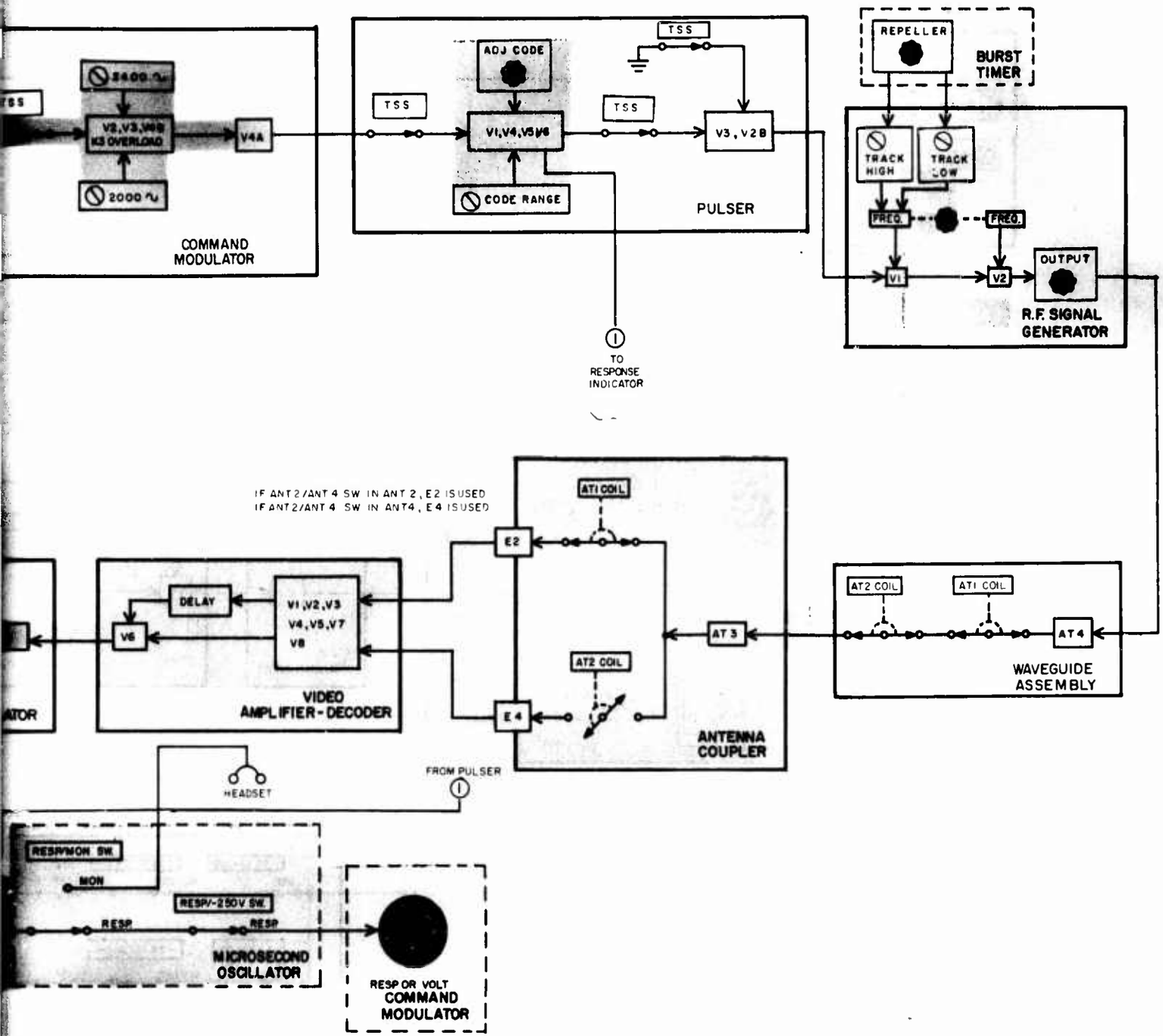
34



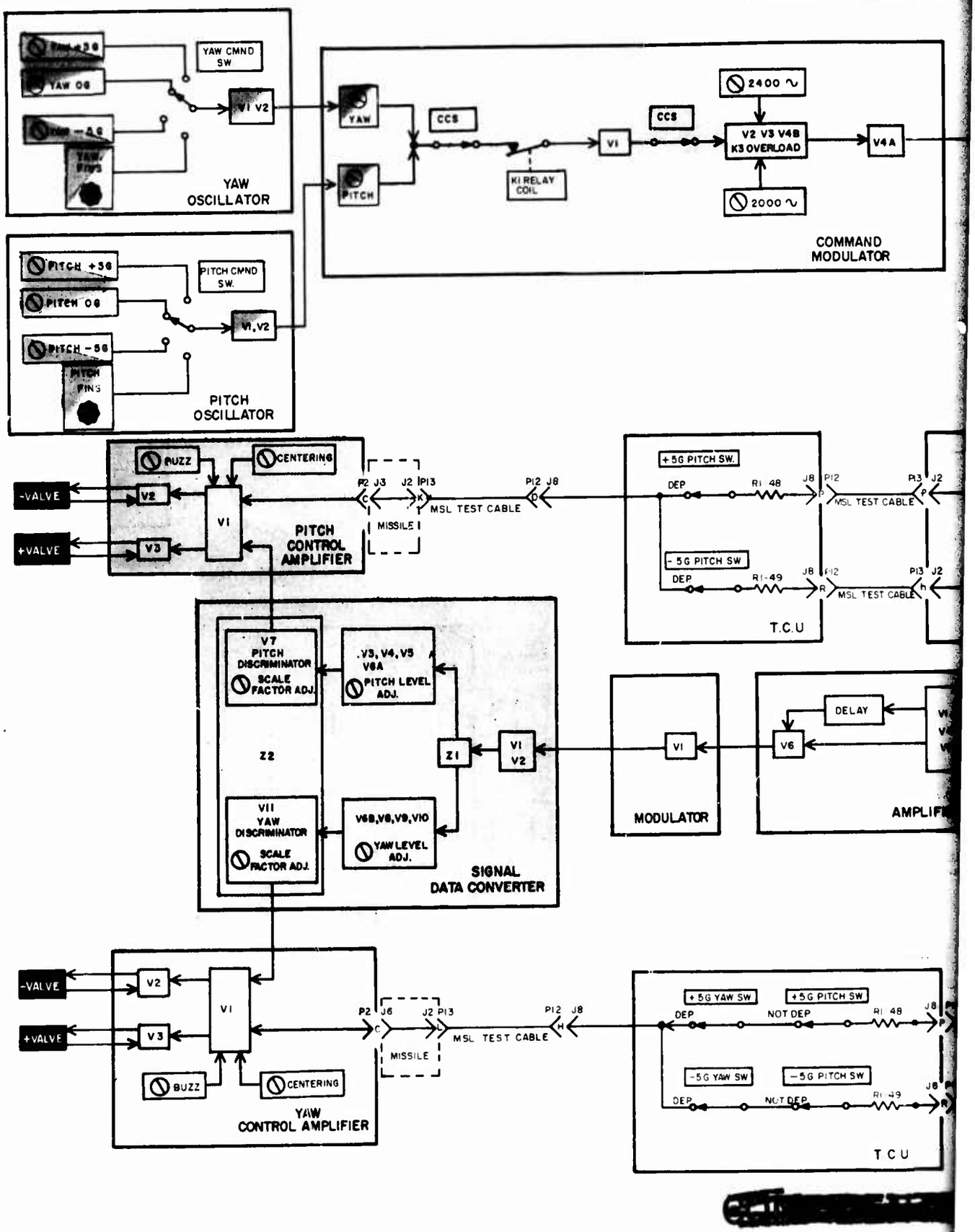

REPELLER
BURST TIMER
TRACK HIGH
TRACK LOW
FREQ
FREQ
V1
V2
OUTPUT
R.F. SIGNAL GENERATOR
TSS
TSS
V3 V2B
PULSER
AT4
AT1 COIL
AT2 COIL
WAVEGUIDE ASSEMBLY
AT1 COIL
E2
AT 3
AT2 COIL
E4
ANTENNA COUPLER
DELAY
V6
V1,V2,V3
V4,V5,V7
V8
VIDEO AMPLIFIER-DECODER
V2,V3
K1 OVERLOAD
V1
MODULATOR
TUNNING
MISSILE
TSS
PULSER
HEADSET
RESP/MON SW
MON
RESP/-250V SW
RESP
RESP
MICROSECOND OSCILLATOR
V1,V2,V3,V4
SENS
RESPONSE INDICATOR
RESP OR VOLT
COMMAND MODULATOR

UNCLASSIFIED

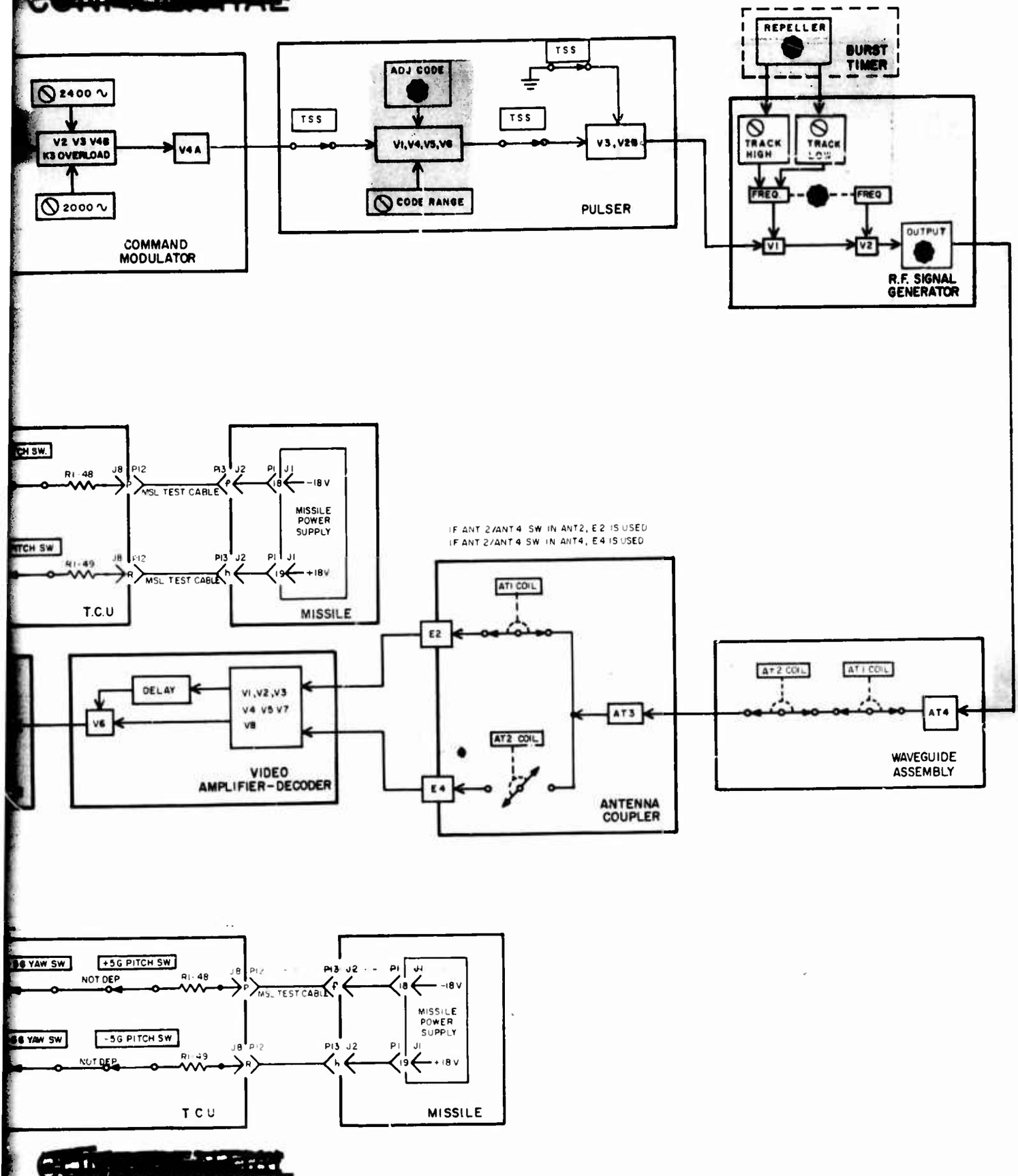



TSS
V2,V3,V8B
K3 OVERLOAD
V4A
2000 Ω
COMMAND
MODULATOR
TSS
ADJ CODE
TSS
TSS
V1,V4,V5,V6
V3, V2B
CODE RANGE
PULSER
TO
RESPONSE
INDICATOR
REPELLER
BURST
TIMER
TRACK
HIGH
TRACK
LOW
FREQ.
FREQ.
V1
V2
OUTPUT
R.F. SIGNAL
GENERATOR
IF ANT 2/ANT 4 SW IN ANT 2, E2 IS USED
IF ANT 2/ANT 4 SW IN ANT 4, E4 IS USED
ATI COIL
E2
DELAY
V1,V2,V3
V4,V5,V7
V8
V6
VIDEO
AMPLIFIER-DECODER
AT2 COIL
AT3
E4
ANTENNA
COUPLER
AT2 COIL
ATI COIL
AT4
WAVEGUIDE
ASSEMBLY
HEADSET
FROM PULSER
RESP/MON SW.
MON
RESP/-250V SW.
RESP
RESP
MICROSECOND
OSCILLATOR
RESP OR VOLT
COMMAND
MODULATOR

36


YAW CMND SW
V1 V2
YAW OS
YAW OSCILLATOR
YAW
PITCH
CCS
CCS
K1 RELAY COIL
V1
2400 ∿
V2 V3 V4B K3 OVERLOAD
2000 ∿
V4A
COMMAND MODULATOR
PITCH +5G
PITCH CMND SW.
PITCH OS
PITCH -5G
V1, V2
PITCH OSCILLATOR
BUZZ
CENTERING
-VALVE
+VALVE
V2
V3
V1
PITCH CONTROL AMPLIFIER
P2 J3 J2 P13
MISSILE
MSL TEST CABLE
P12 J8
+5G PITCH SW.
DEP
R1 48
J8 P12
MSL TEST CABLE
P13 J2
-5G PITCH SW
R1-49
T.C.U
V7 PITCH DISCRIMINATOR
SCALE FACTOR ADJ.
Z2
V3, V4, V5 V6A
PITCH LEVEL ADJ.
Z1
V1 V2
V11 YAW DISCRIMINATOR
SCALE FACTOR ADJ.
V6B, V8, V9, V10
YAW LEVEL ADJ.
SIGNAL DATA CONVERTER
V1
MODULATOR
DELAY
V6
AMPLIFI
-VALVE
+VALVE
V2
V3
V1
BUZZ
CENTERING
YAW CONTROL AMPLIFIER
P2 J6 J2 P13
MISSILE
MSL TEST CABLE
P12 J8
+5G YAW SW
+5G PITCH SW
DEP
NOT DEP
R1 48
-5G YAW SW
-5G PITCH SW
R1 49
T C U

[redacted]



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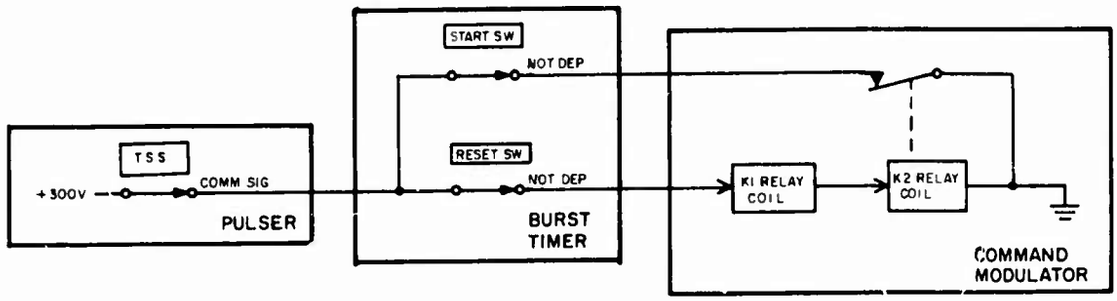
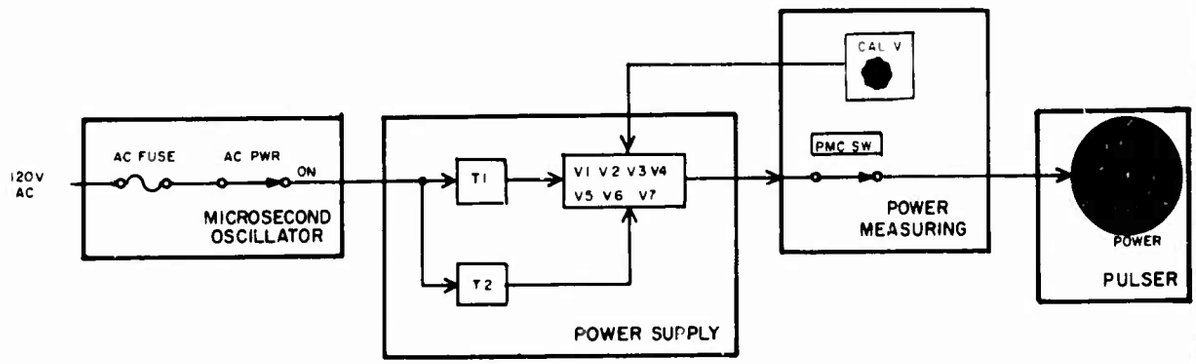
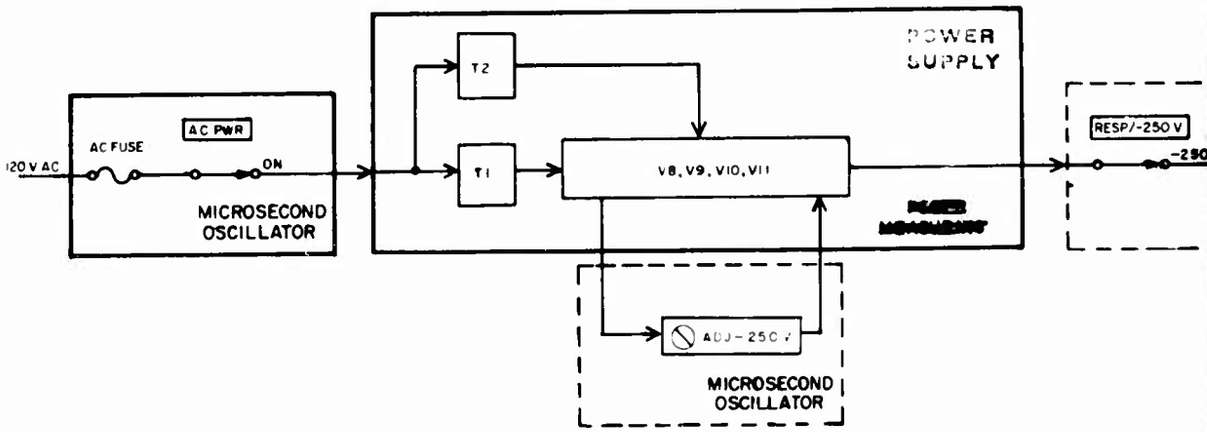
37

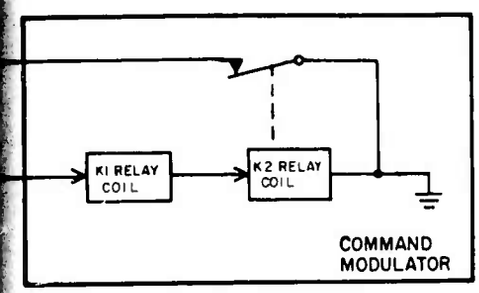

TSS
+300V
COMM SIG
PULSER
START SW
NOT DEP
RESET SW
NOT DEP
BURST TIMER
K1 RELAY COIL
K2 RELAY COIL
COMMAND MODULATOR

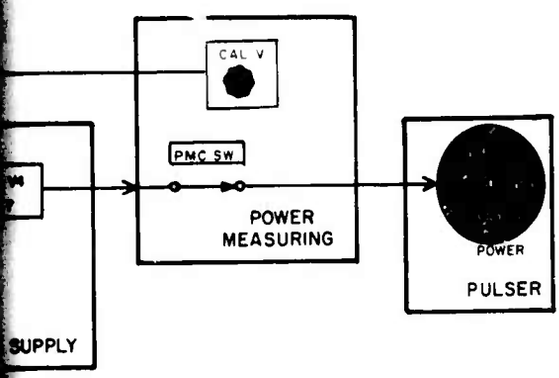
38

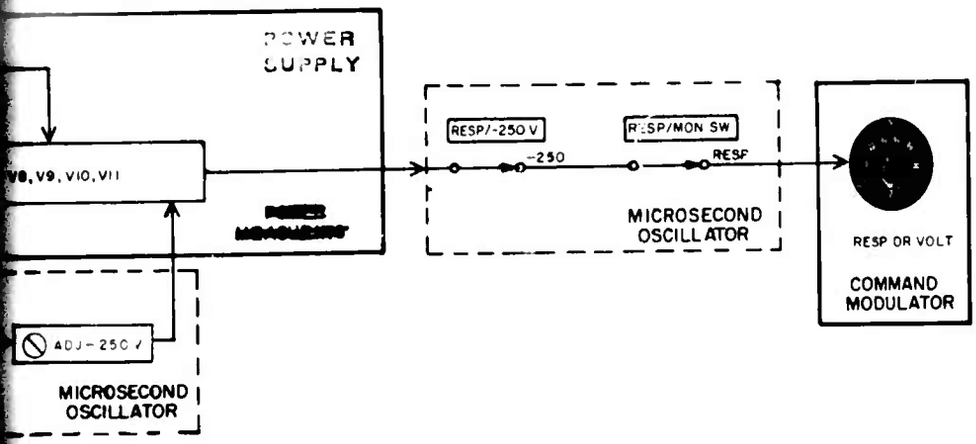

120V AC
AC FUSE
AC PWR
ON
MICROSECOND OSCILLATOR
T1
T2
V1 V2 V3 V4 V5 V6 V7
POWER SUPPLY
CAL V
PMC SW
POWER MEASURING
POWER
PULSER

39


120V AC
AC FUSE
AC PWR
ON
MICROSECOND OSCILLATOR
T2
T1
V8, V9, V10, V11
POWER SUPPLY
RESP/-250V
-250
ADJ-250V
MICROSECOND OSCILLATOR


K1 RELAY COIL
K2 RELAY COIL
COMMAND MODULATOR

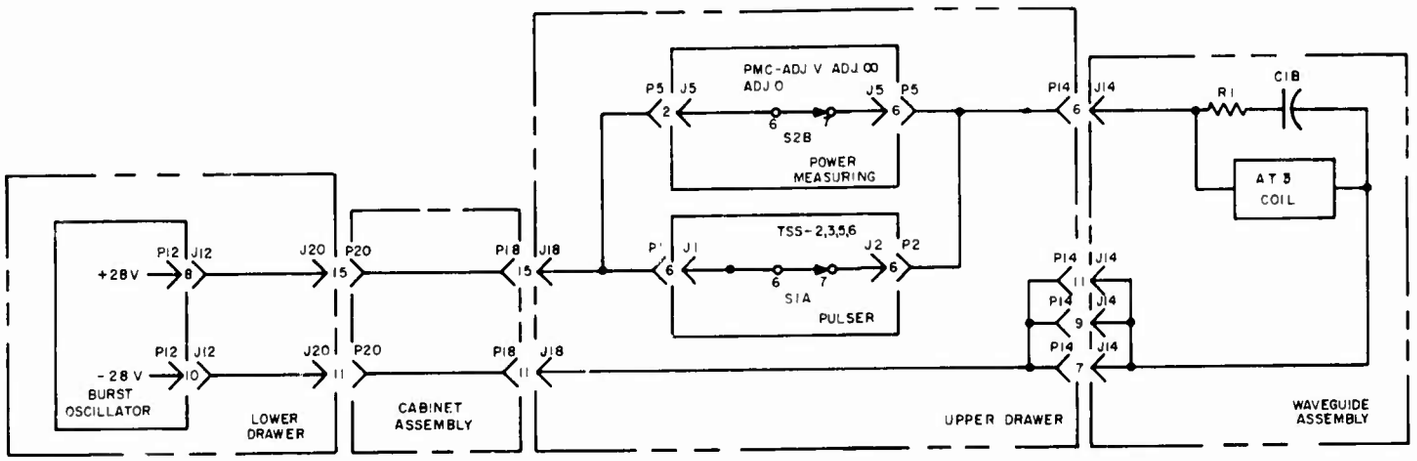

CAL V
PMC SW
POWER MEASURING
POWER
PULSER
SUPPLY


POWER SUPPLY
V8, V9, V10, V11
RESP/-250 V
RESP/MON SW
-250
RESP
MICROSECOND OSCILLATOR
RESP OR VOLT
COMMAND MODULATOR
ADJ-250 V
MICROSECOND OSCILLATOR

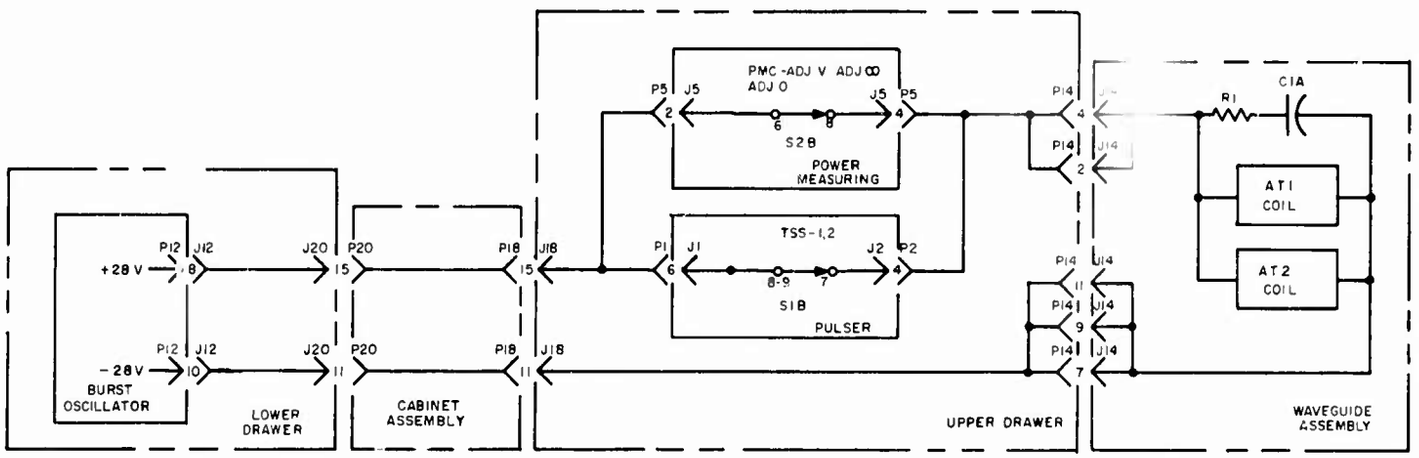
[redacted]

UNCLASSIFIED

40



41



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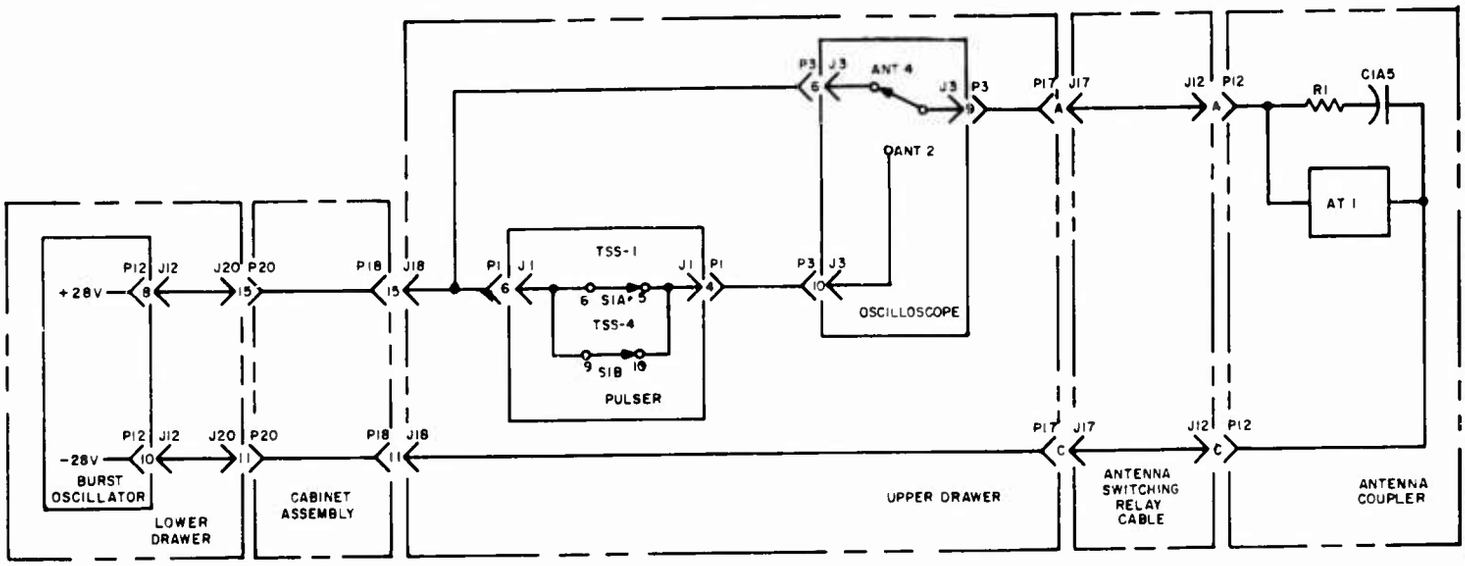
42



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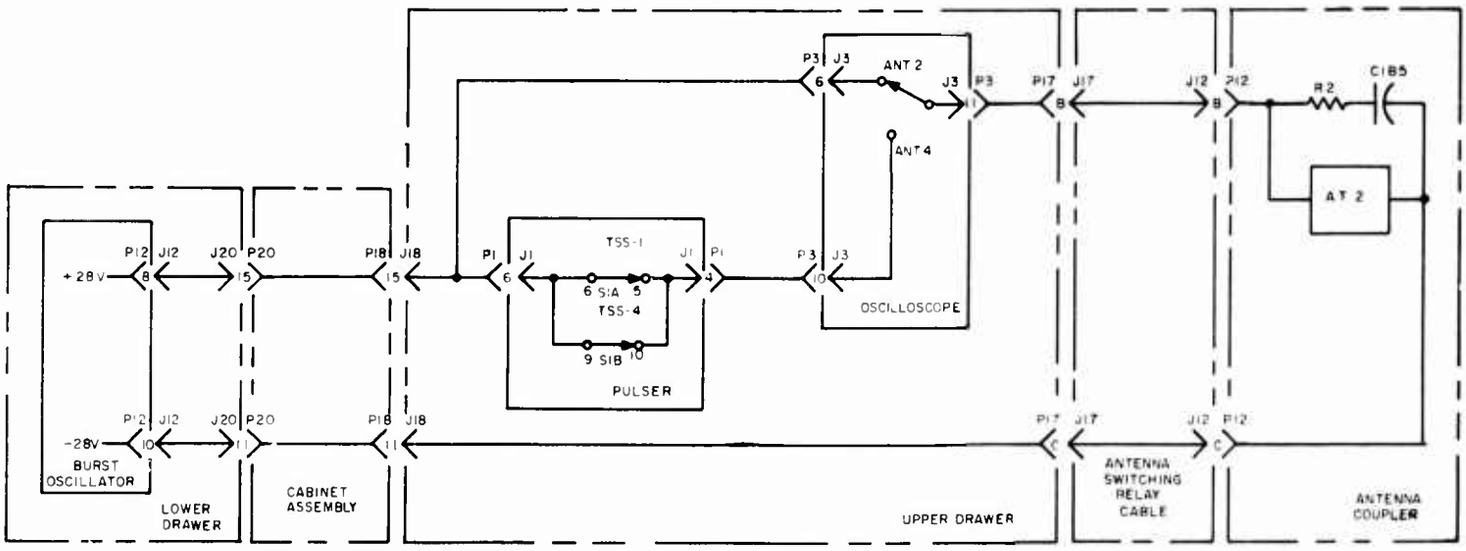

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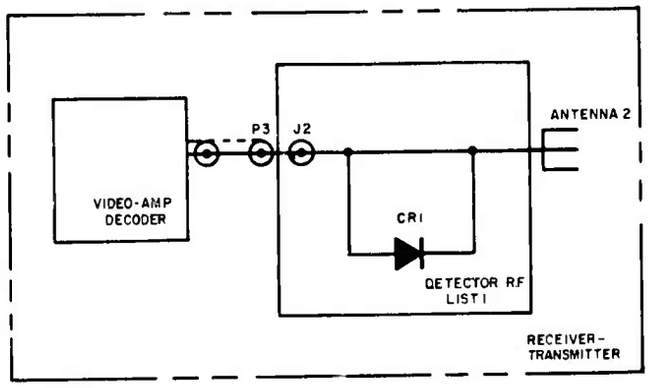
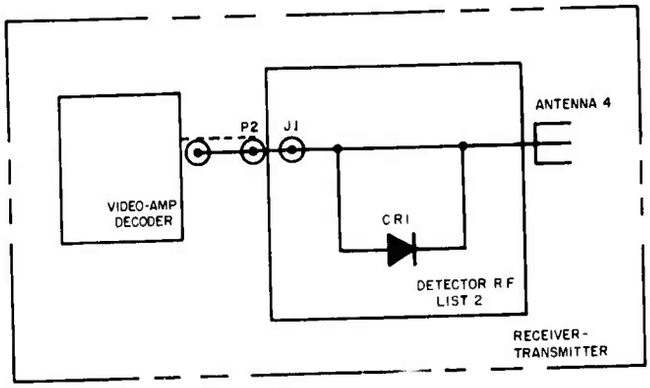
CONFIDENTIAL

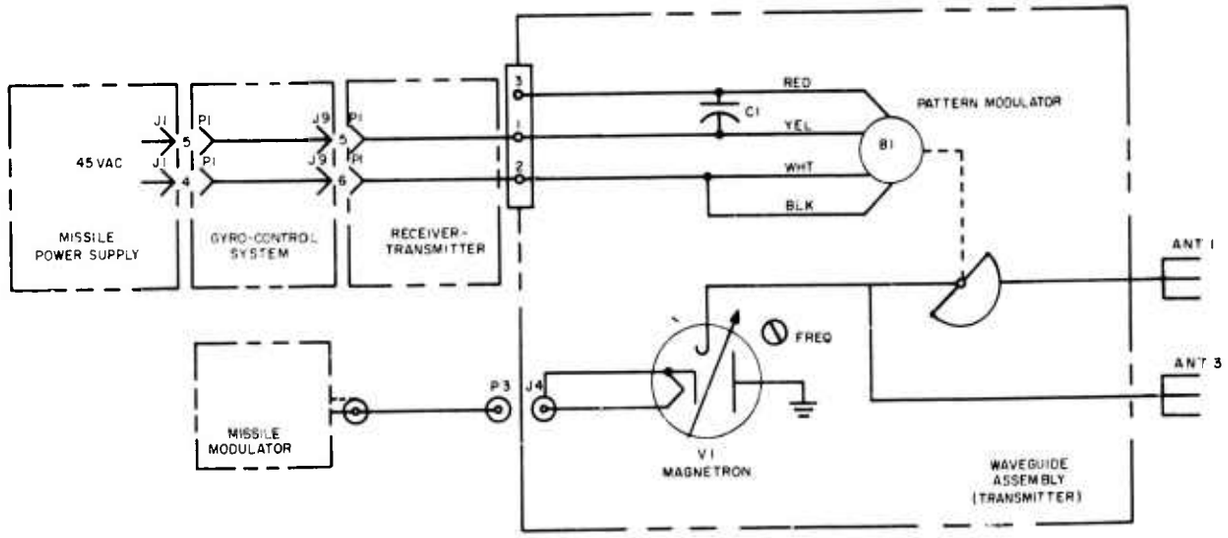
44



45

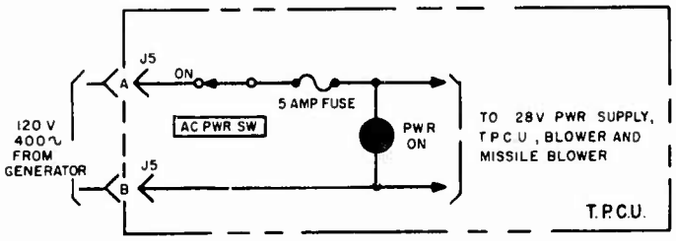


46

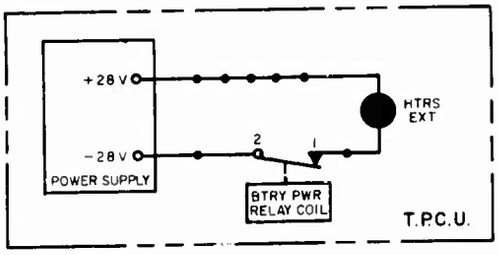


CONFIDENTIAL

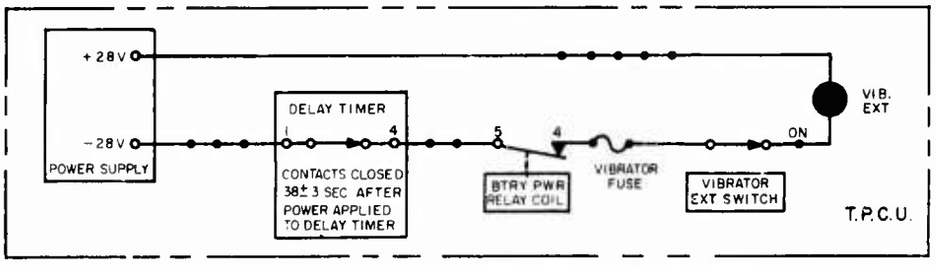
47


J5
A
ON
5 AMP FUSE
AC PWR SW
PWR ON
120 V 400~ FROM GENERATOR
J5
B
TO 28V PWR SUPPLY, T.P.C.U., BLOWER AND MISSILE BLOWER
T.P.C.U.

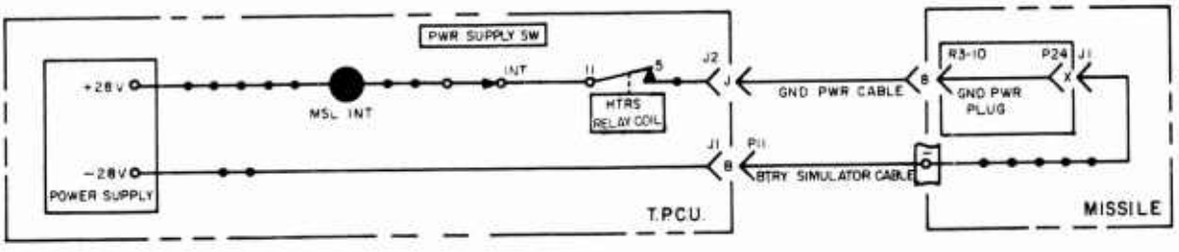
48


+28 V
-28 V
POWER SUPPLY
HTRS EXT
2
1
BTRY PWR RELAY COIL
T.P.C.U.

49


+28 V
-28 V
POWER SUPPLY
DELAY TIMER
1
4
CONTACTS CLOSED 38± 3 SEC AFTER POWER APPLIED TO DELAY TIMER
5
4
BTRY PWR RELAY COIL
VIBRATOR FUSE
VIBRATOR EXT SWITCH
ON
VIB. EXT
T.P.C.U.

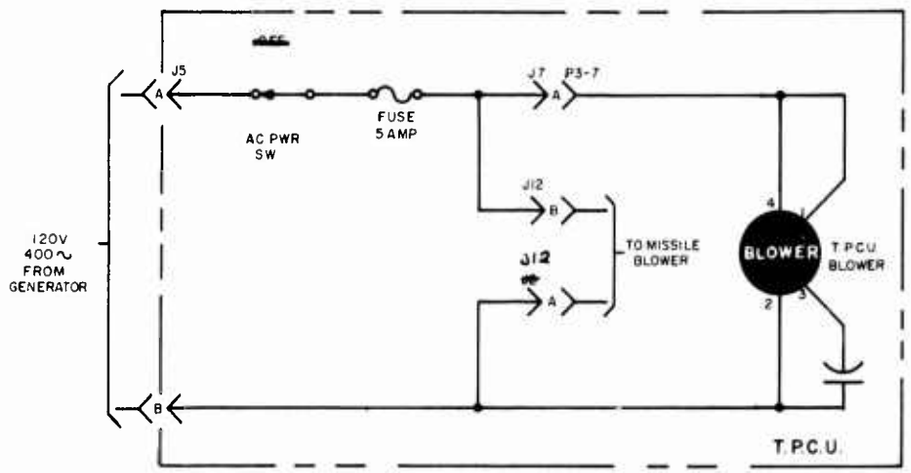
50


PWR SUPPLY SW
+28 V
MSL INT
INT
11
5
J2
J
HTRS RELAY COIL
GND PWR CABLE
B
R3-10
P24
J1
X
GND PWR PLUG
-28 V
POWER SUPPLY
J1
B
P11
BTRY SIMULATOR CABLE
T.P.C.U.
MISSILE

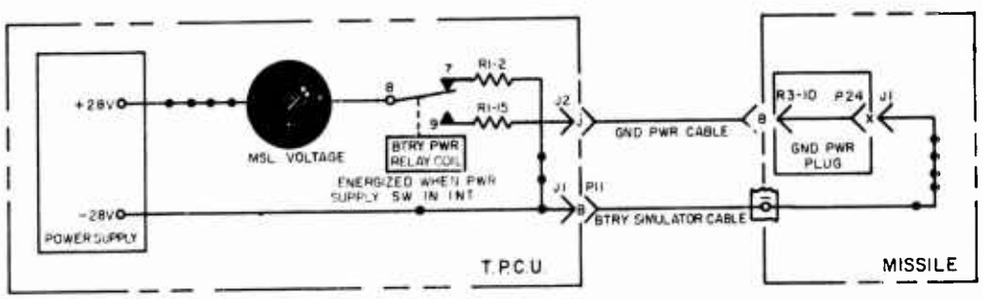
UNCLASSIFIED

CONFIDENTIAL

51



52



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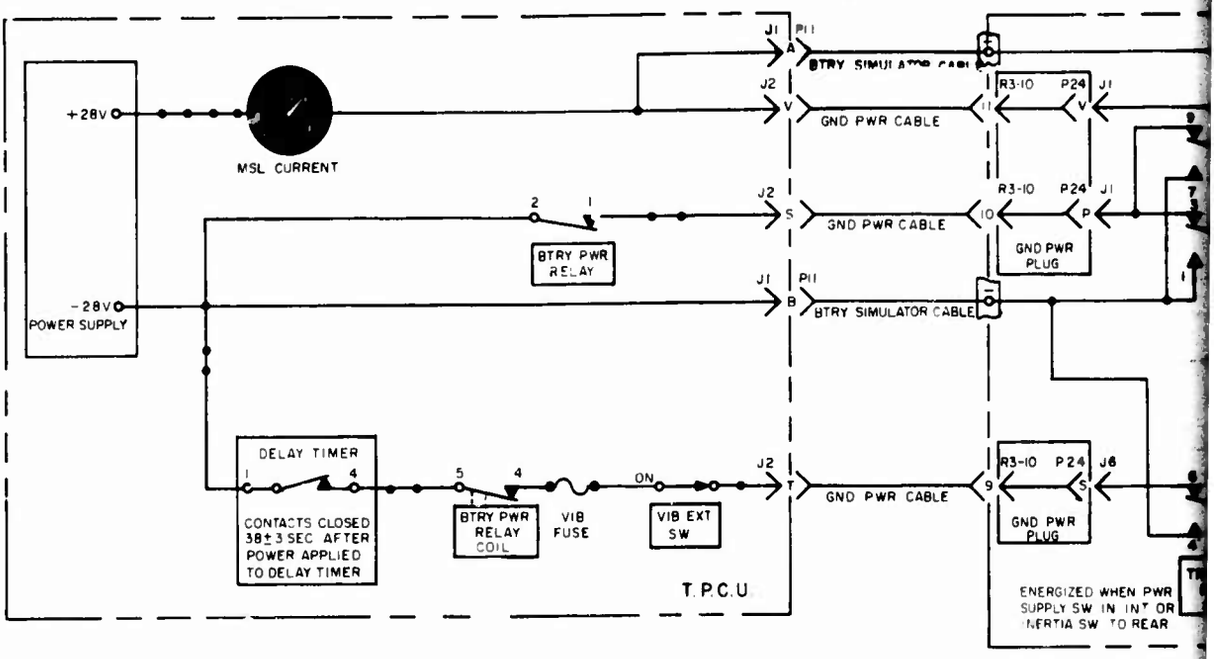
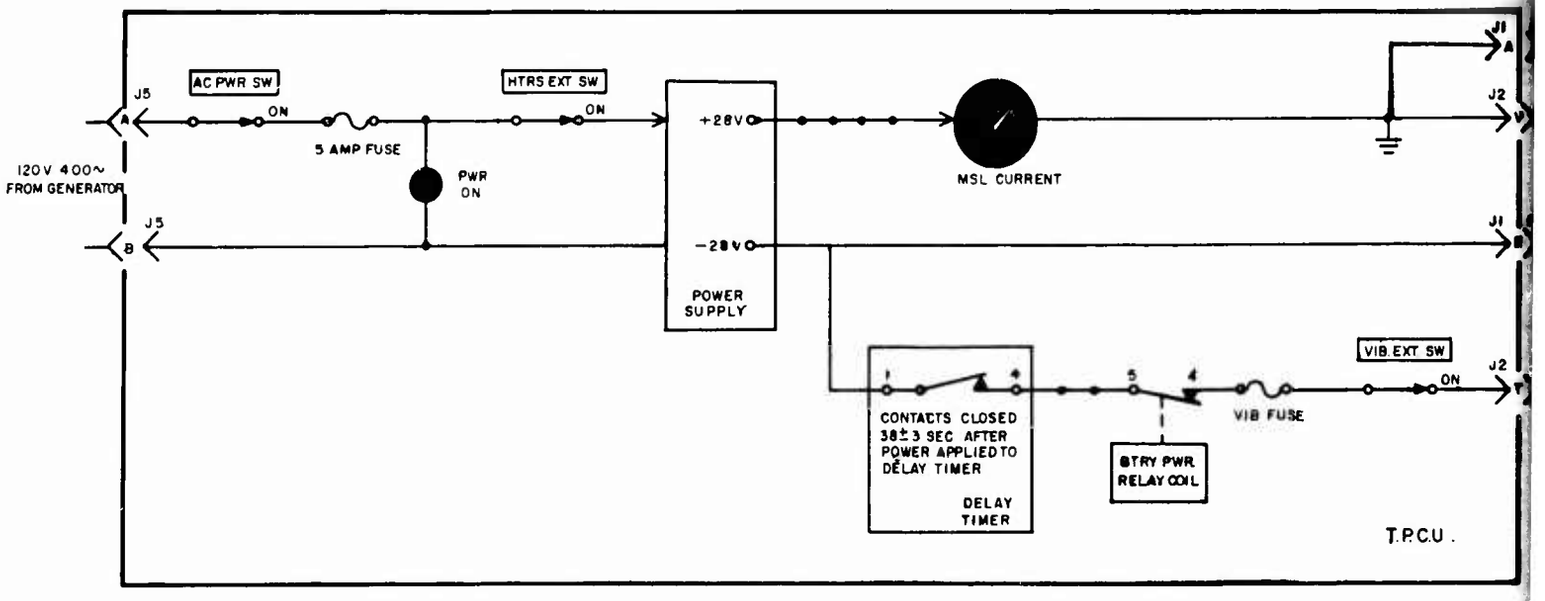
UNCLASSIFIED

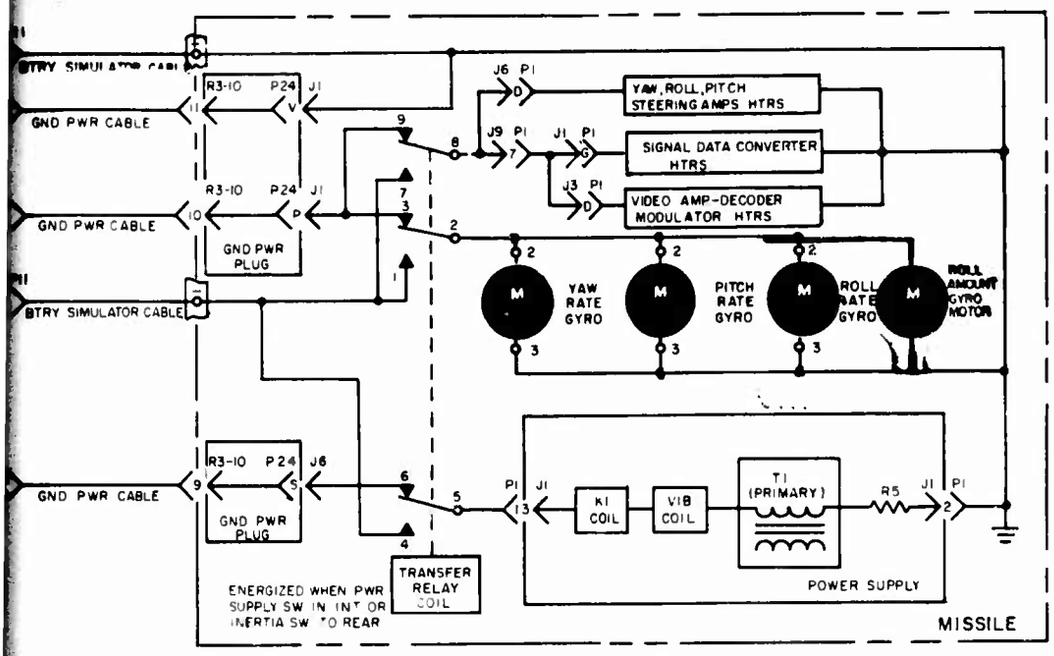
53

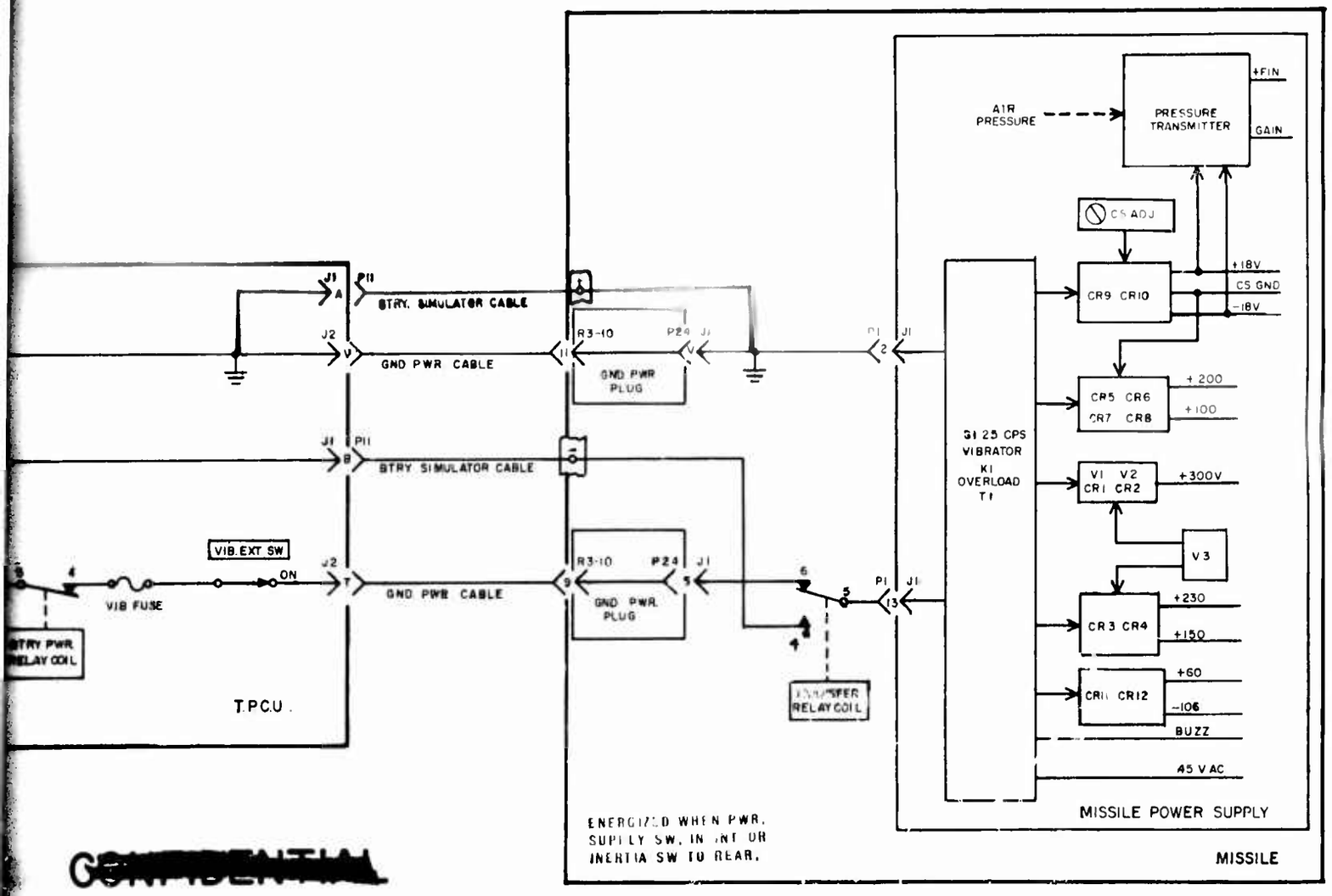


54

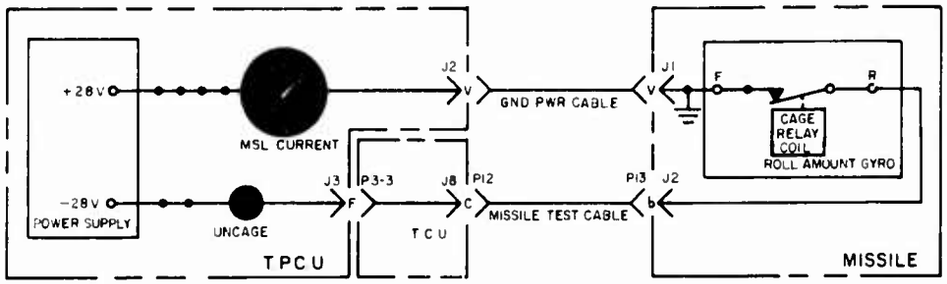


CONFIDENTIAL

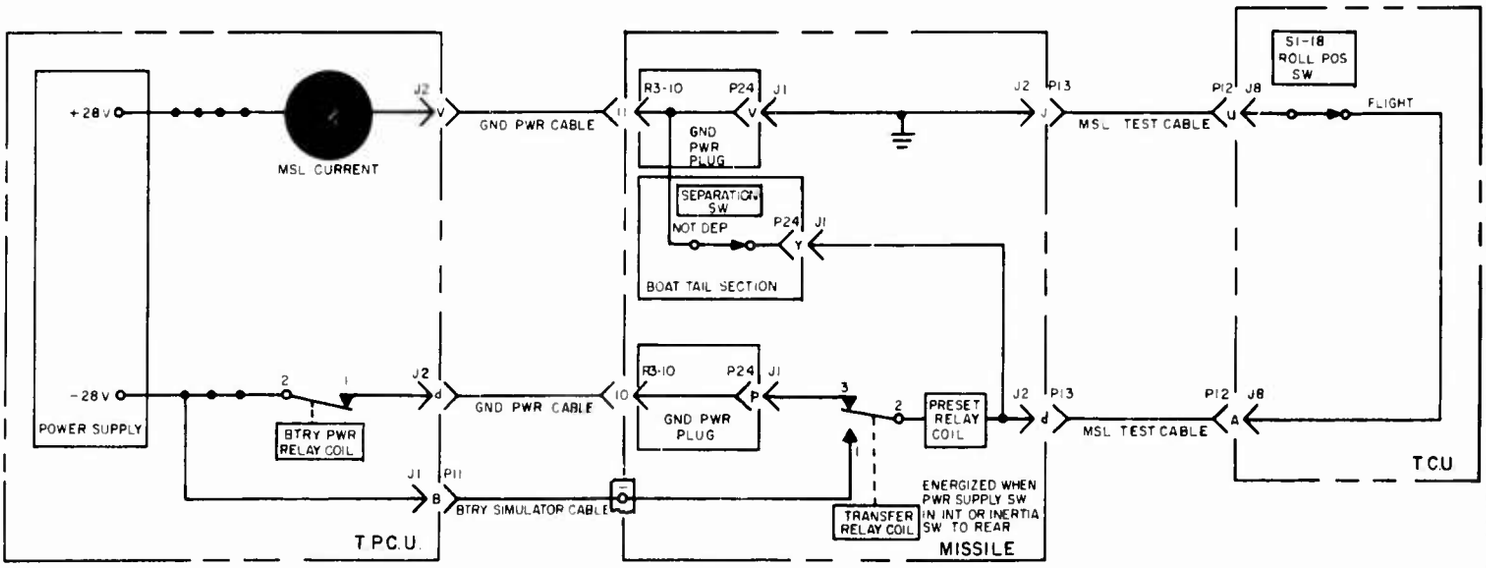

BTRY SIMULATOR CABLE
GND PWR CABLE
R3-10
P24
J1
J6 P1
YAW, ROLL, PITCH STEERING AMPS HTRS
J9 P1
J1 P1
SIGNAL DATA CONVERTER HTRS
J3 P1
VIDEO AMP-DECODER MODULATOR HTRS
GND PWR PLUG
YAW RATE GYRO
PITCH RATE GYRO
ROLL RATE GYRO
ROLL AMOUNT GYRO MOTOR
J6
K1 COIL
VIB COIL
T1 (PRIMARY)
R5
POWER SUPPLY
TRANSFER RELAY COIL
ENERGIZED WHEN PWR SUPPLY SW IN INT OR INERTIA SW TO REAR
MISSILE


AIR PRESSURE
PRESSURE TRANSMITTER
+FIN
GAIN
CS ADJ
+18V
CS GND
-18V
CR9 CR10
CR5 CR6
CR7 CR8
+200
+100
VI V2
CR1 CR2
+300V
V3
CR3 CR4
+230
+150
CR11 CR12
+60
-106
BUZZ
45 V AC
400 CPS VIBRATOR K1 OVERLOAD T1
MISSILE POWER SUPPLY
BTRY. SIMULATOR CABLE
GND PWR CABLE
GND PWR PLUG
VIB. EXT SW
ON
VIB FUSE
BTRY PWR RELAY COIL
T.P.C.U.
TRANSFER RELAY COIL
ENERGIZED WHEN PWR. SUPPLY SW. IN INT OR INERTIA SW TO REAR.
MISSILE

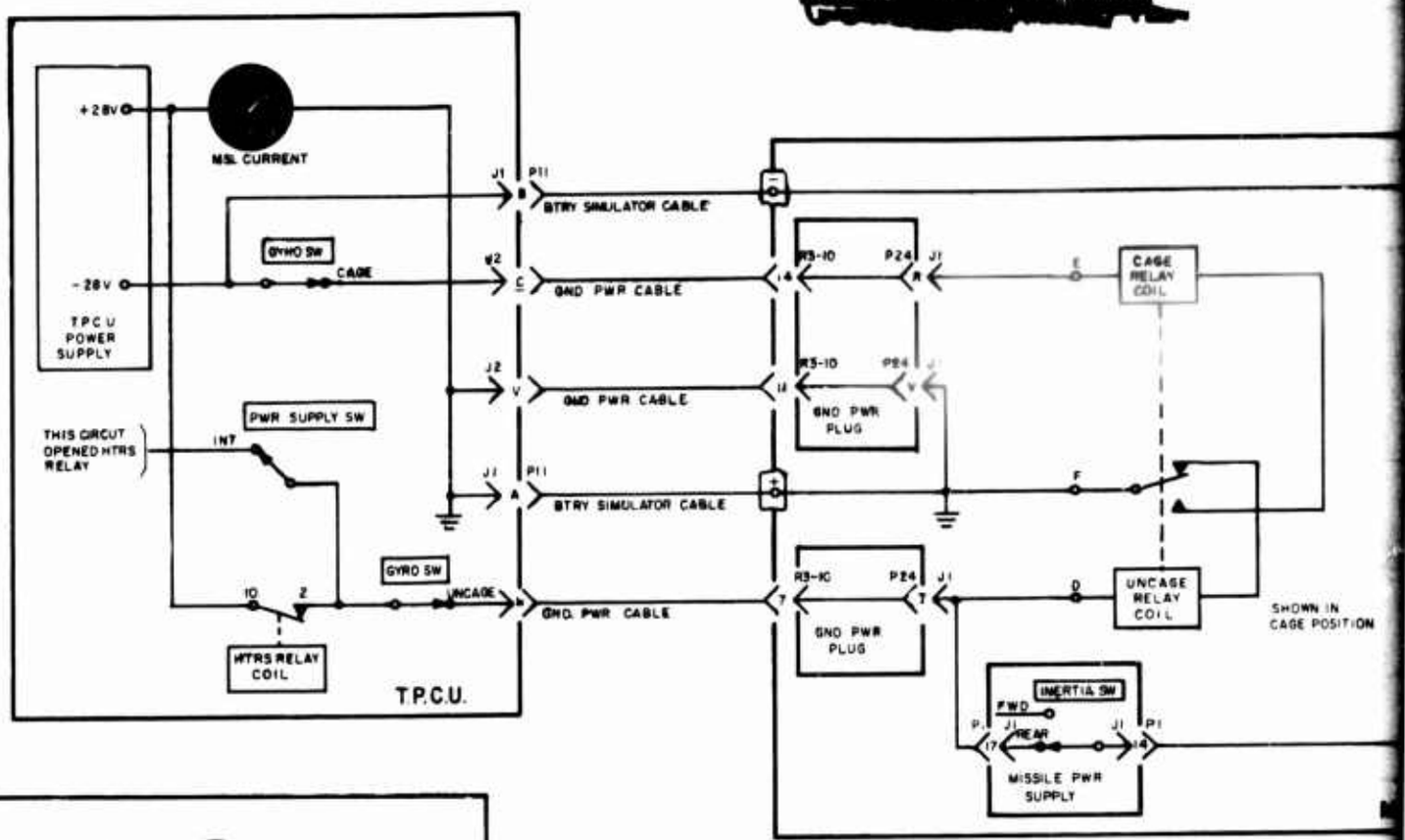
55


+28V
MSL CURRENT
J2
V
GND PWR CABLE
J1
V
F
R
CAGE RELAY COIL
ROLL AMOUNT GYRO
-28V
POWER SUPPLY
UNCAGE
J3
F
P3-3
J8
C
P12
TCU
MISSILE TEST CABLE
P13
J2
b
TPCU
MISSILE

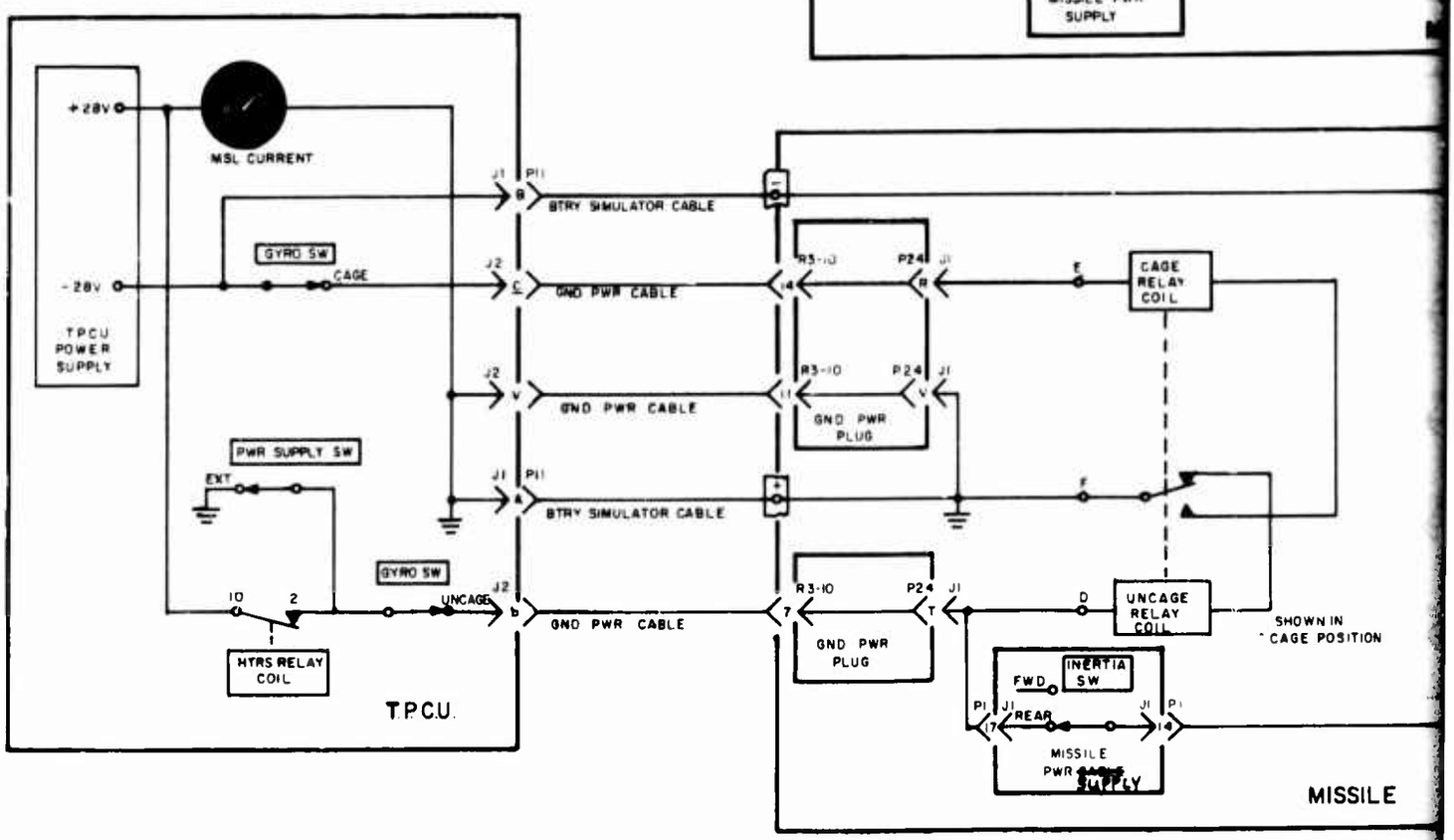
56

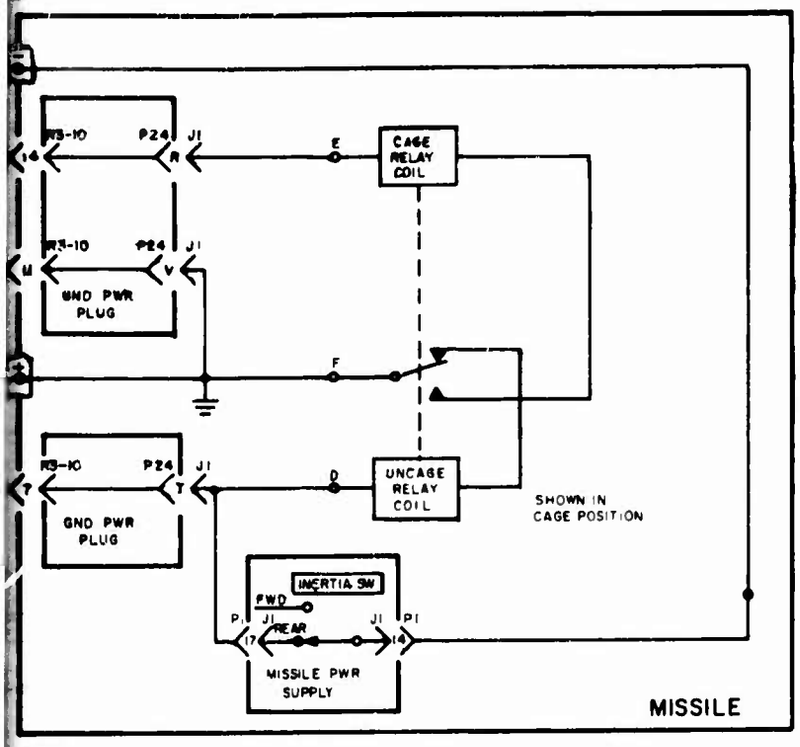

+28V
MSL CURRENT
J2
V
GND PWR CABLE
R3-10
P24
J1
V
GND PWR PLUG
J2
P13
MSL TEST CABLE
P12
J8
U
S1-18 ROLL POS SW
FLIGHT
SEPARATION SW
NOT DEP
P24
J1
Y
BOAT TAIL SECTION
-28V
POWER SUPPLY
2
1
J2
d
BTRY PWR RELAY COIL
GND PWR CABLE
10
R3-10
P24
J1
P
GND PWR PLUG
3
2
1
PRESET RELAY COIL
J2
P13
d
MSL TEST CABLE
P12
J8
A
TCU
J1
P11
B
BTRY SIMULATOR CABLE
TRANSFER RELAY COIL
ENERGIZED WHEN PWR SUPPLY SW IN INT OR INERTIA SW TO REAR
TPCU
MISSILE

57


+28V
MSL CURRENT
-28V
TPCU POWER SUPPLY
THIS CIRCUT OPENED HTRS RELAY
PWR SUPPLY SW
INT
GYRO SW
CAGE
UNCAGE
10
2
HTRS RELAY COIL
T.P.C.U.
J1 P11 B BTRY SIMULATOR CABLE
J2 C GND PWR CABLE
J2 V GND PWR CABLE
J1 A BTRY SIMULATOR CABLE
J2 b GND. PWR CABLE
R3-10 P24 J1 14 R E CAGE RELAY COIL
R3-10 P24 J1 11 V GND PWR PLUG
R3-10 P24 J1 7 T GND PWR PLUG
F
D UNCAGE RELAY COIL
SHOWN IN CAGE POSITION
INERTIA SW
FWD
REAR
P1 J1 17
J1 P1 14
MISSILE PWR SUPPLY

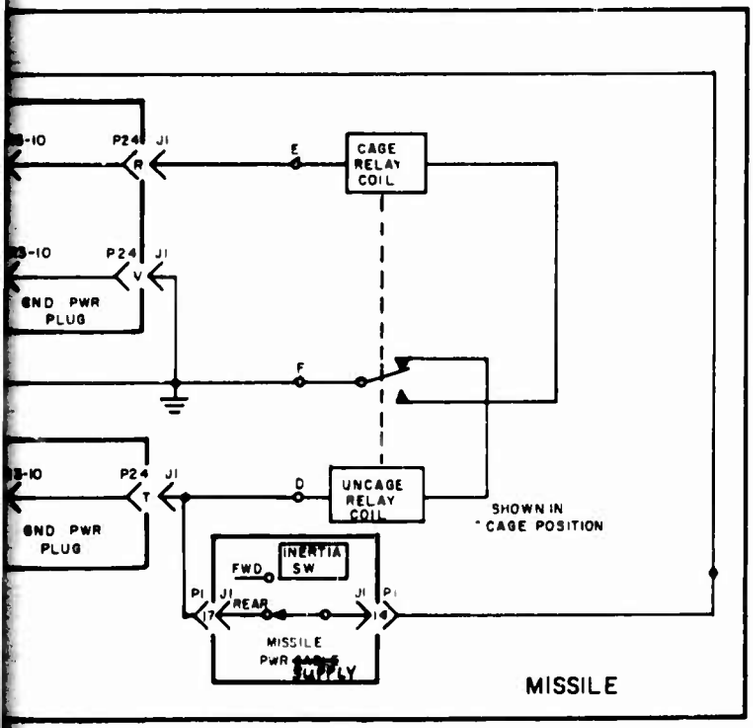
58


+28V
MSL CURRENT
-28V
TPCU POWER SUPPLY
PWR SUPPLY SW
EXT
GYRO SW
CAGE
UNCAGE
10
2
HTRS RELAY COIL
T.P.C.U.
J1 P11 B BTRY SIMULATOR CABLE
J2 C GND PWR CABLE
J2 V GND PWR CABLE
J1 P11 A BTRY SIMULATOR CABLE
J2 b GND PWR CABLE
R3-10 P24 J1 14 R E CAGE RELAY COIL
R3-10 P24 J1 11 V GND PWR PLUG
R3-10 P24 J1 7 T GND PWR PLUG
F
D UNCAGE RELAY COIL
SHOWN IN CAGE POSITION
INERTIA SW
FWD
REAR
P1 J1 17
J1 P1 14
MISSILE PWR SUPPLY
MISSILE



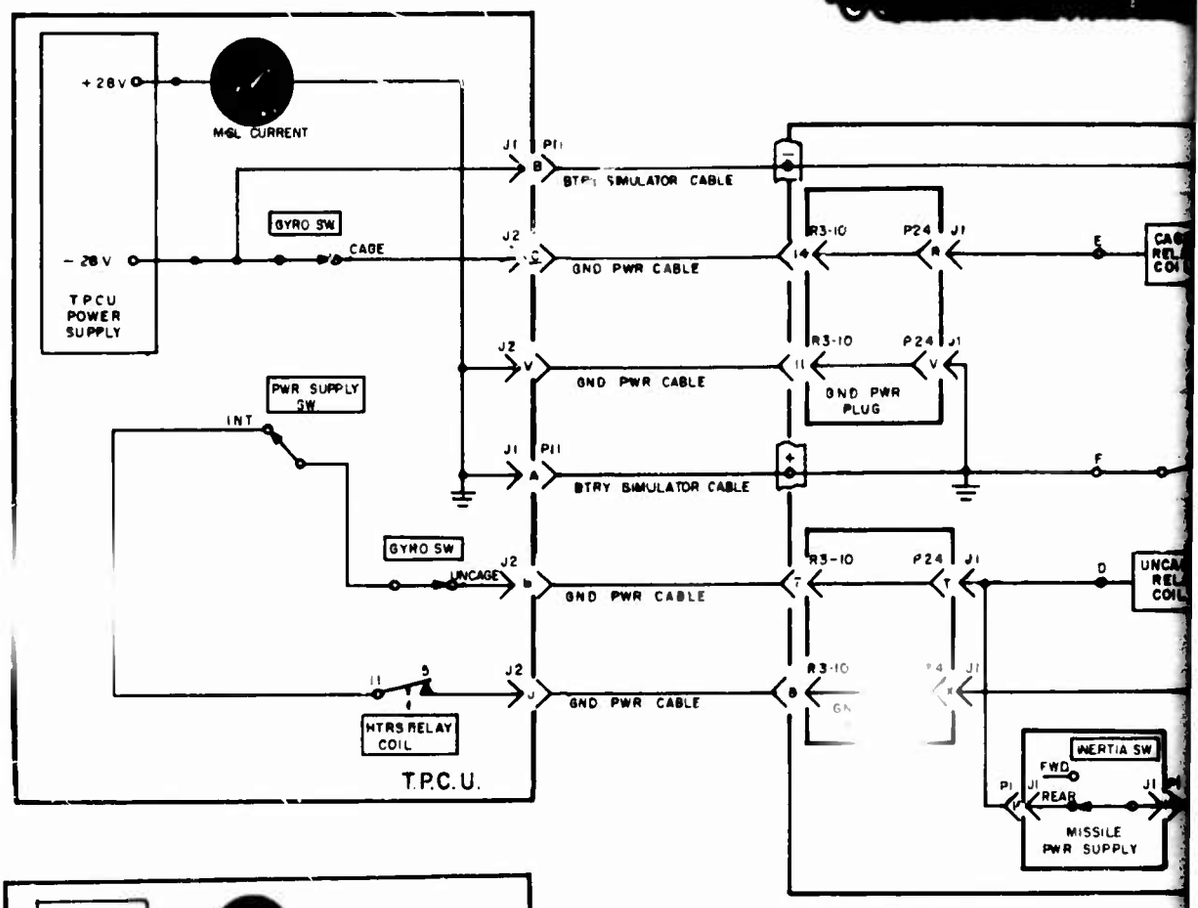
NOTE

SHOWN IN CAGE POSITION. CAGE RELAY MECHANICALY LOCKED WHEN ENERGIZED, ENERGIZING UNCAGE RELAY RELEASES LOCK AND ALLOWS CAGE RELAY TO RETURN TO DE ENERGIZED POSITION.

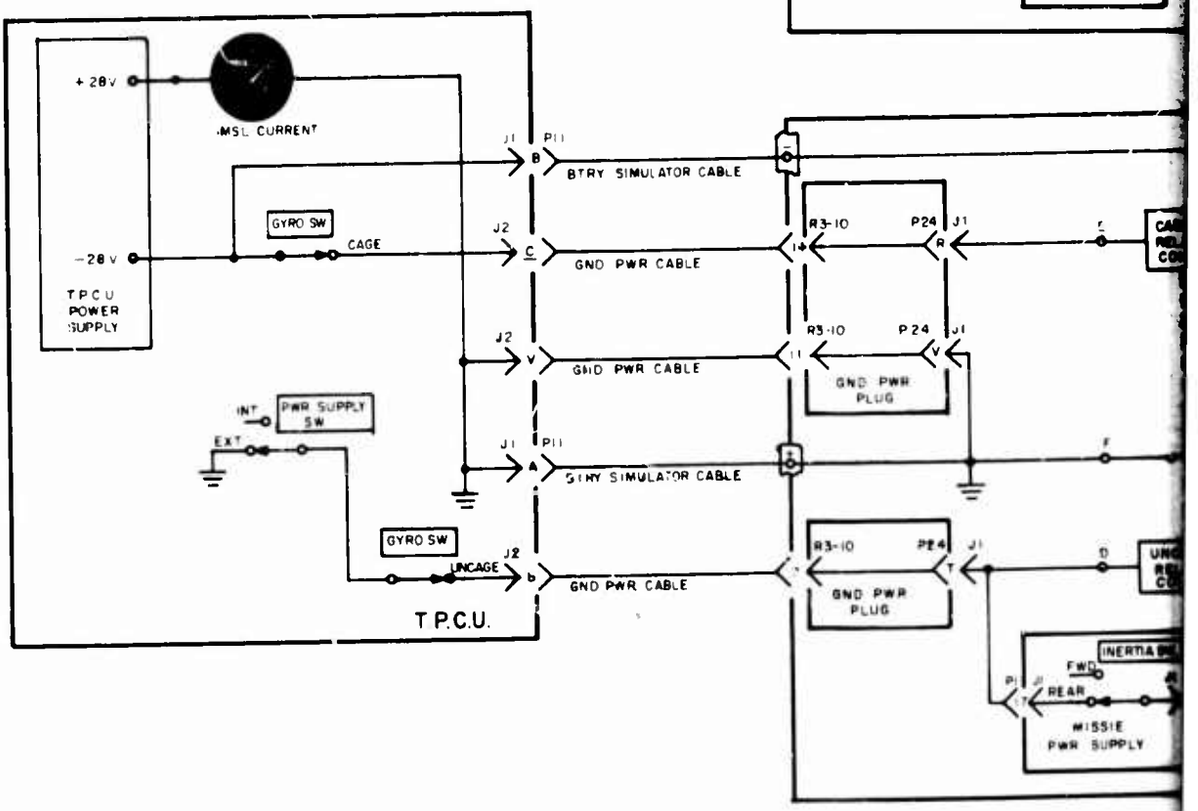


NOTE

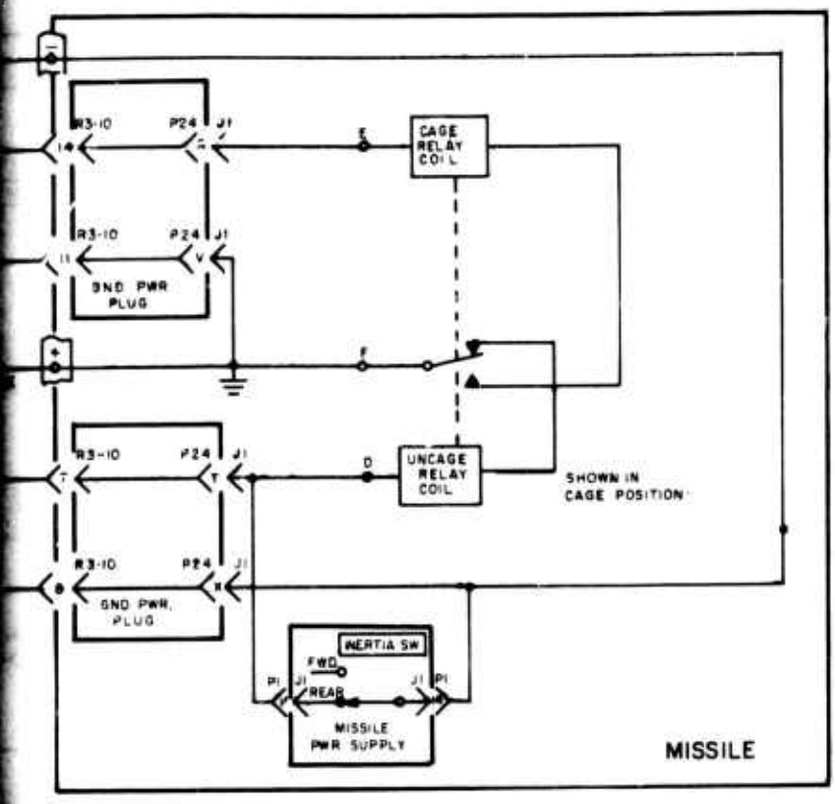
59


+28V
MSL CURRENT
-28V
T.P.C.U. POWER SUPPLY
GYRO SW
CAGE
PWR SUPPLY SW
INT
GYRO SW
UNCAGE
HTRS RELAY COIL
T.P.C.U.
J1 P11 B
BTRY SIMULATOR CABLE
J2 C
GND PWR CABLE
J2 V
GND PWR CABLE
J1 P11 A
BTRY SIMULATOR CABLE
J2 b
GND PWR CABLE
J2 J
GND PWR CABLE
R3-10 P24 J1
GND PWR PLUG
INERTIA SW
FWD
REAR
MISSILE PWR SUPPLY

60

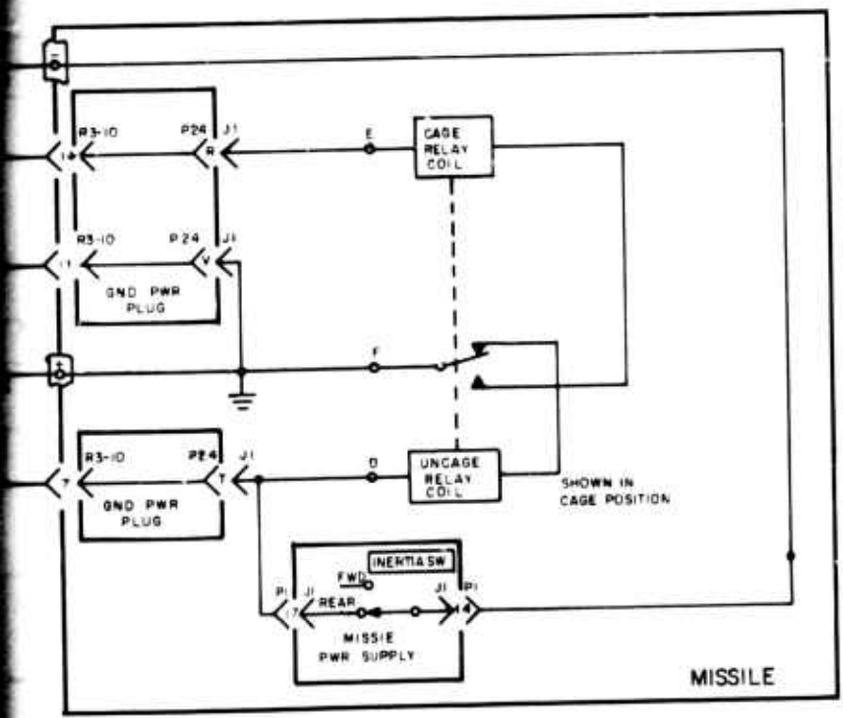

+28V
MSL CURRENT
-28V
T.P.C.U. POWER SUPPLY
GYRO SW
CAGE
INT
EXT
PWR SUPPLY SW
GYRO SW
UNCAGE
T.P.C.U.
J1 P11 B
BTRY SIMULATOR CABLE
J2 C
GND PWR CABLE
J2 V
GND PWR CABLE
J1 P11 A
BTRY SIMULATOR CABLE
J2 b
GND PWR CABLE
R3-10 P24 J1
GND PWR PLUG
FWD
REAR
MISSILE PWR SUPPLY

[redacted]



NOTE:

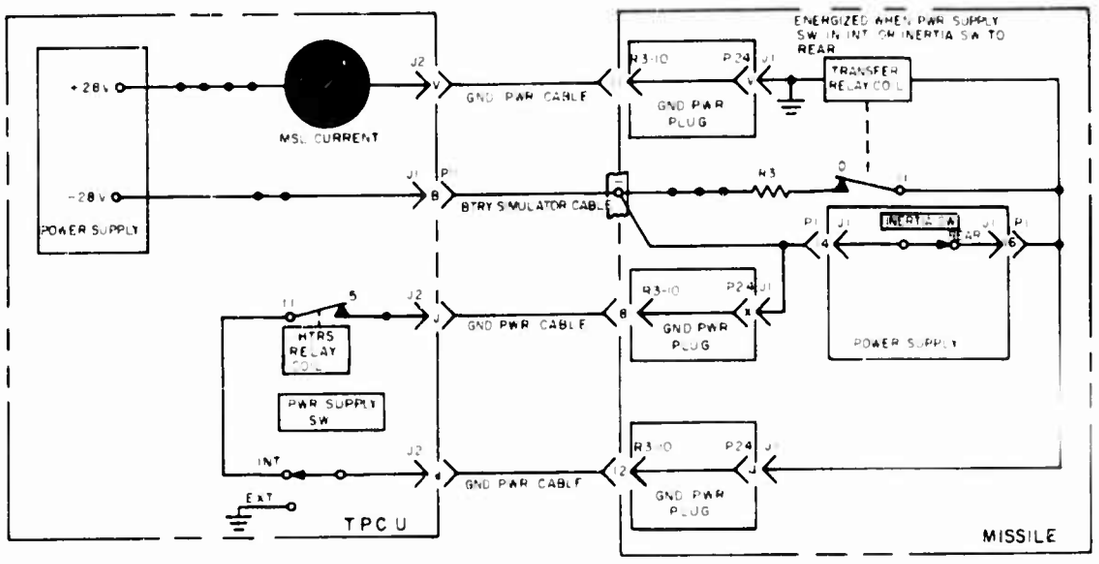
SHOWN IN CAGE POSITION. CAGE RELAY MECHANICALLY LOCKED WHEN ENERGIZED. ENERGIZING UNCAGE RELAY RELEASES LOCK AND ALLOWS CAGE RELAY TO RETURN TO DE ENERGIZED POSITION.



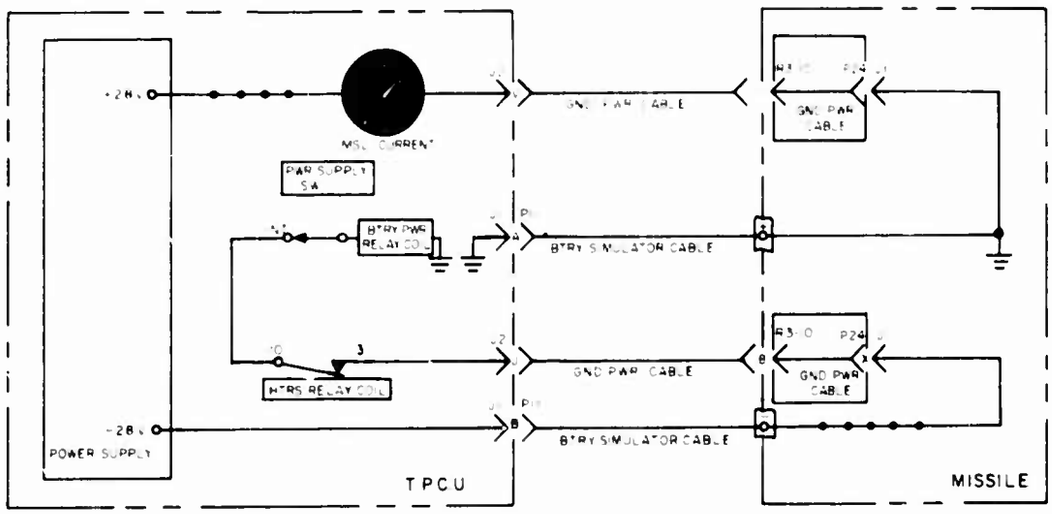
NOTE

[redacted]

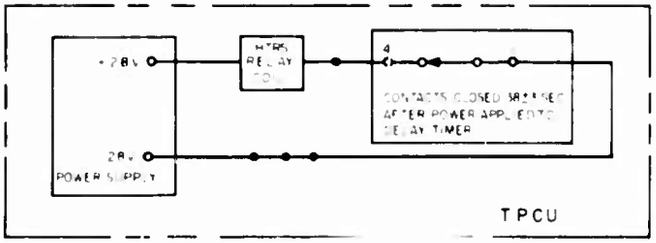
61

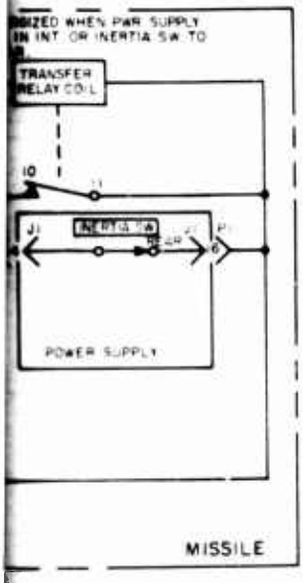

+28 V
-28 V
POWER SUPPLY
MSL CURRENT
J2
J1
P1
GND PWR CABLE
BTRY SIMULATOR CABLE
R3-10
P24
GND PWR PLUG
TRANSFER RELAY COIL
R3
INERTIA SW
REAR
MTRS RELAY COIL
PWR SUPPLY SW
INT
EXT
TPCU
ENERGIZED WHEN PWR SUPPLY SW IN INT OR INERTIA SW TO REAR
MISSILE

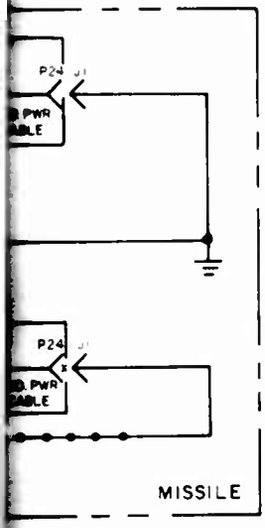
62


+28 V
-28 V
POWER SUPPLY
MSL CURRENT
PWR SUPPLY SW
BTRY PWR RELAY COIL
MTRS RELAY COIL
GND PWR CABLE
BTRY SIMULATOR CABLE
TPCU
MISSILE

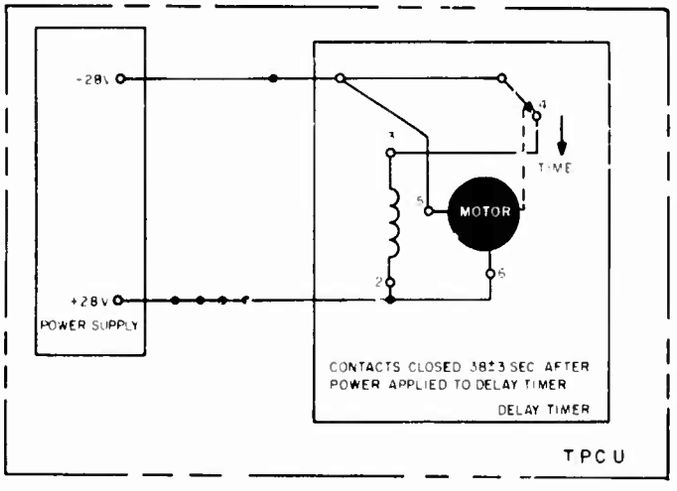
63


+28 V
28 V
POWER SUPPLY
MTRS RELAY COIL
CONTACTS CLOSED 382 MSEC AFTER POWER APPLIED TO RELAY TIMER
TPCU


TRANSFER RELAY COIL
10
11
POWER SUPPLY
MISSILE

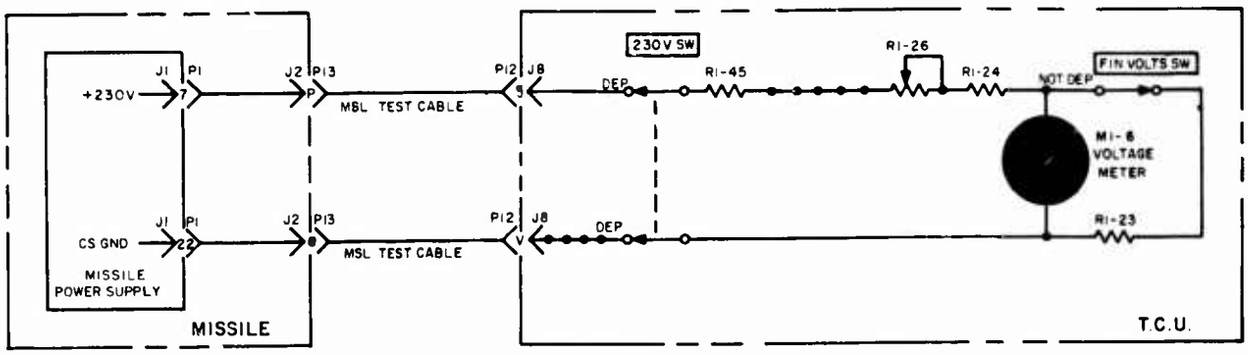

P24
P24
MISSILE

64


-28V
+28V
POWER SUPPLY
MOTOR
TIME
CONTACTS CLOSED 38±3 SEC AFTER POWER APPLIED TO DELAY TIMER
DELAY TIMER
TPCU

[redacted]

65



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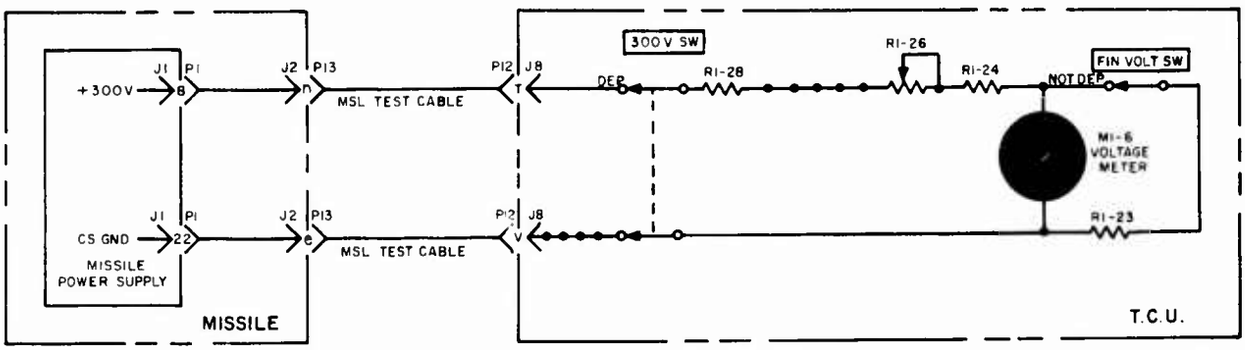
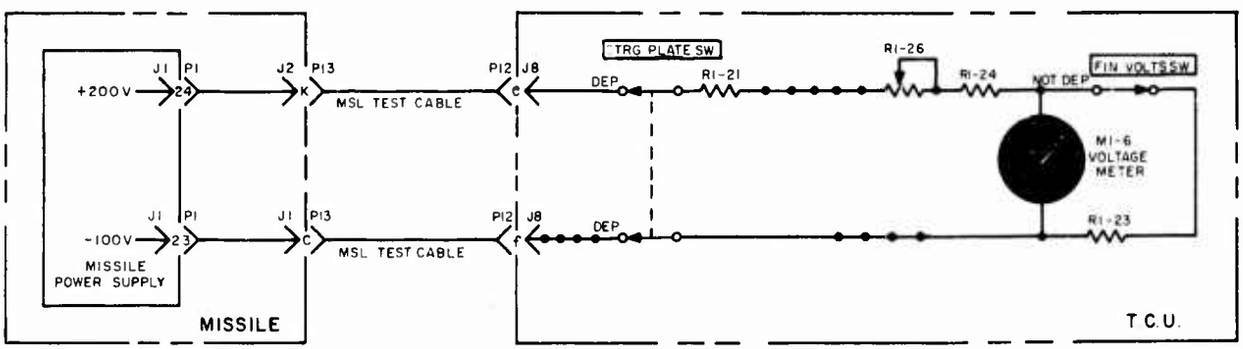


67



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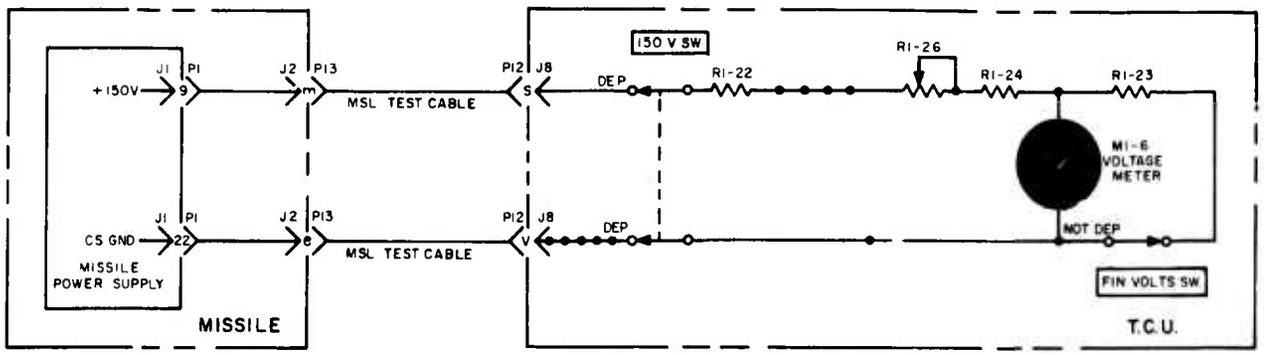
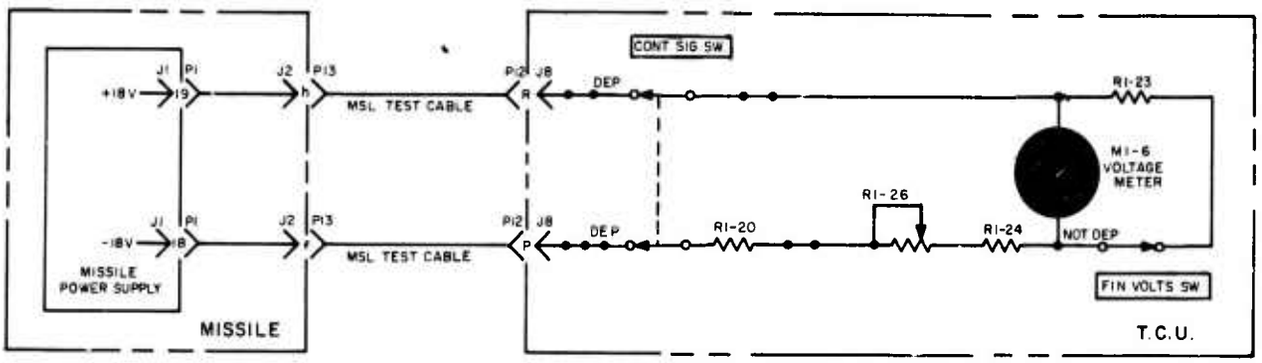
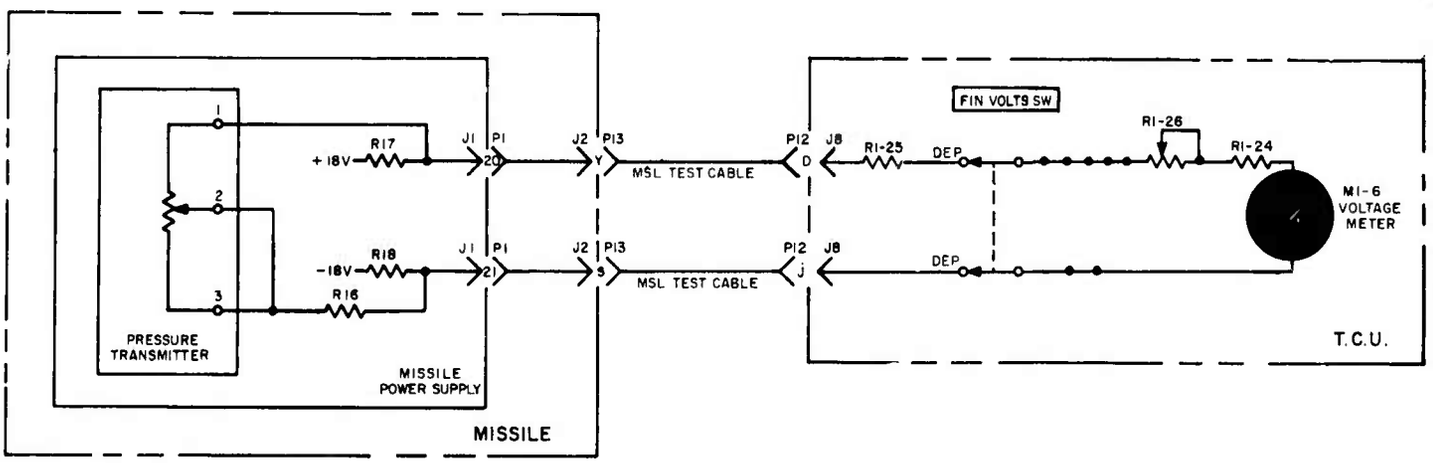
68


150 V SW
RI-26
J1 P1 J2 P13 P12 J8
+150V 9 m MSL TEST CABLE S DEP RI-22 RI-24 RI-23
MI-6 VOLTAGE METER
J1 P1 J2 P13 P12 J8
CS GND 22 e MSL TEST CABLE V DEP NOT DEP
MISSILE POWER SUPPLY
FIN VOLTS SW
MISSILE
T.C.U.

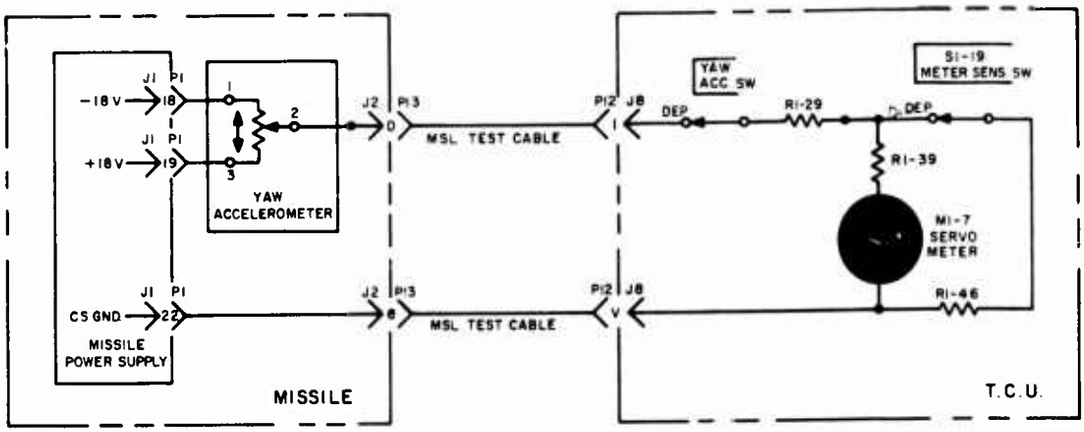
69


CONT SIG SW
J1 P1 J2 P13 P12 J8
+18V 19 h MSL TEST CABLE R DEP RI-23
MI-6 VOLTAGE METER
RI-26
J1 P1 J2 P13 P12 J8
-18V 18 f MSL TEST CABLE P DEP RI-20 RI-24 NOT DEP
MISSILE POWER SUPPLY
FIN VOLTS SW
MISSILE
T.C.U.

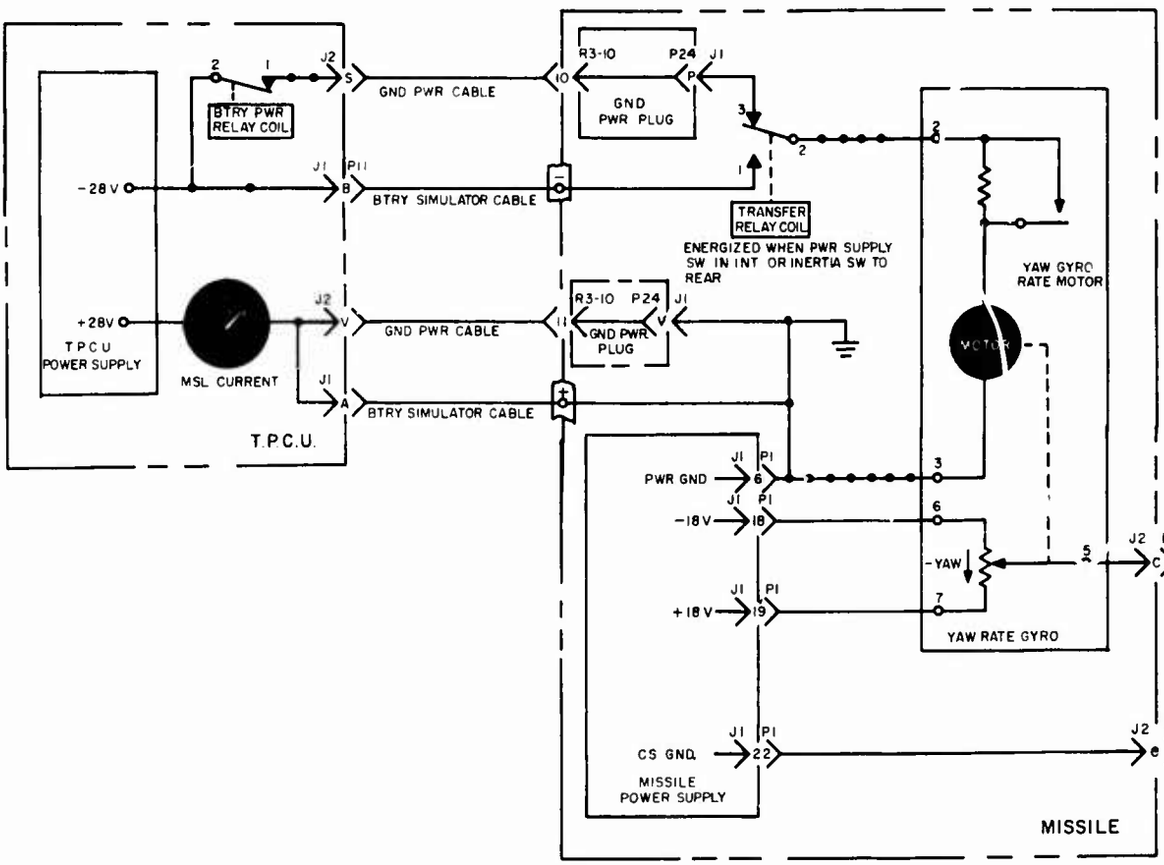
70


FIN VOLTS SW
RI-26
1
R17
+18V
J1 P1 J2 P13 P12 J8
20 Y MSL TEST CABLE D RI-25 DEP RI-24
MI-6 VOLTAGE METER
2
R18
-18V
J1 P1 J2 P13 P12 J8
21 S MSL TEST CABLE j DEP
3
R16
PRESSURE TRANSMITTER
MISSILE POWER SUPPLY
MISSILE
T.C.U.

71



72



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A

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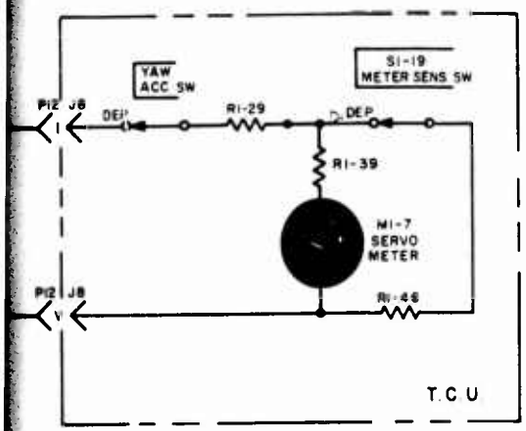

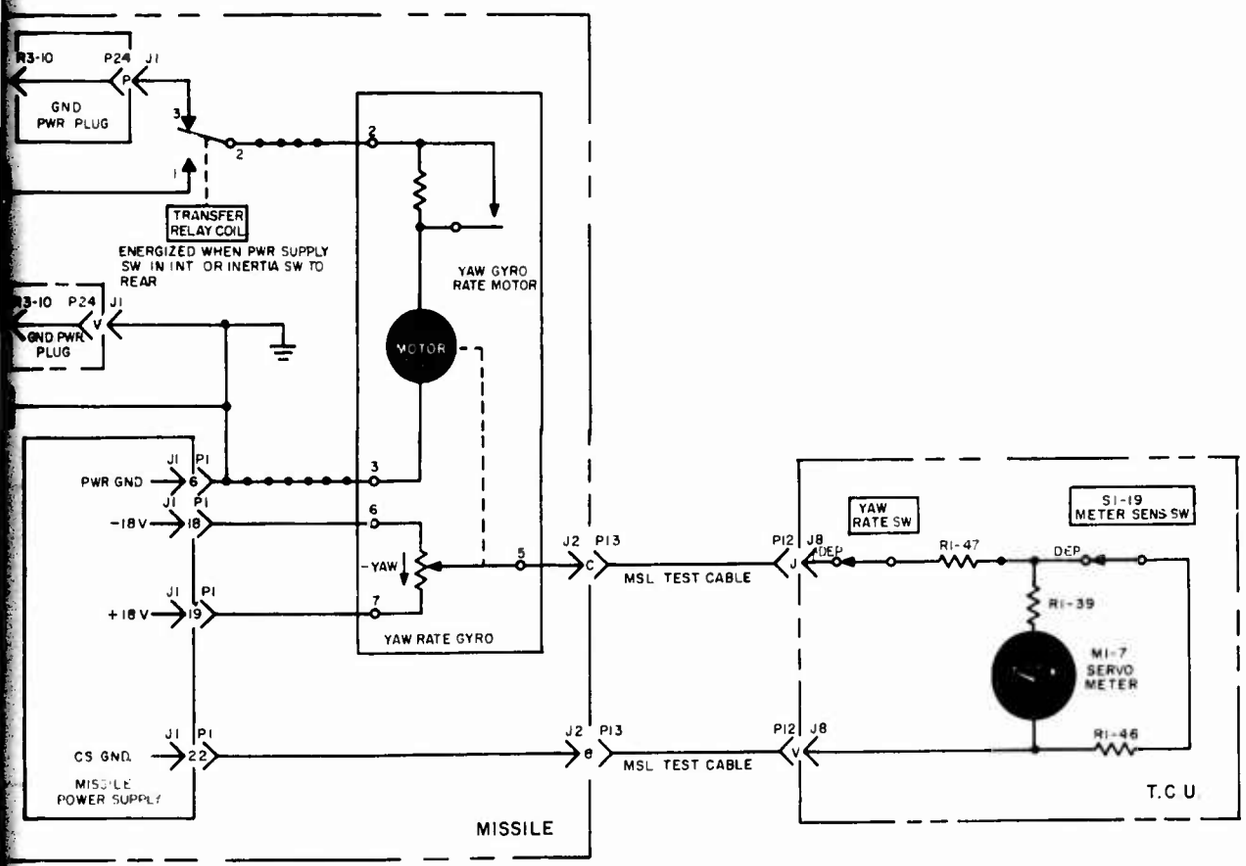

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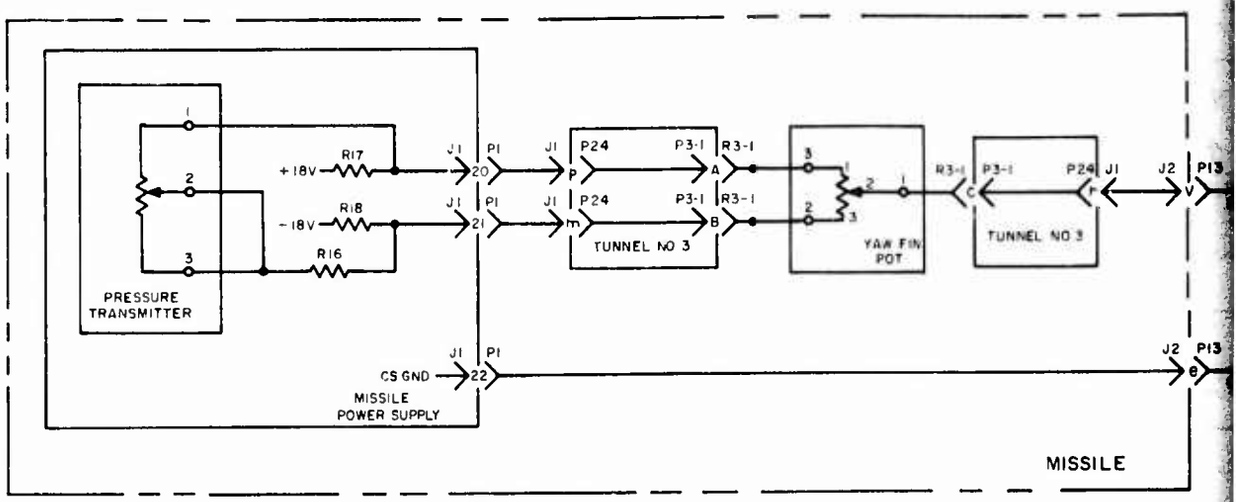
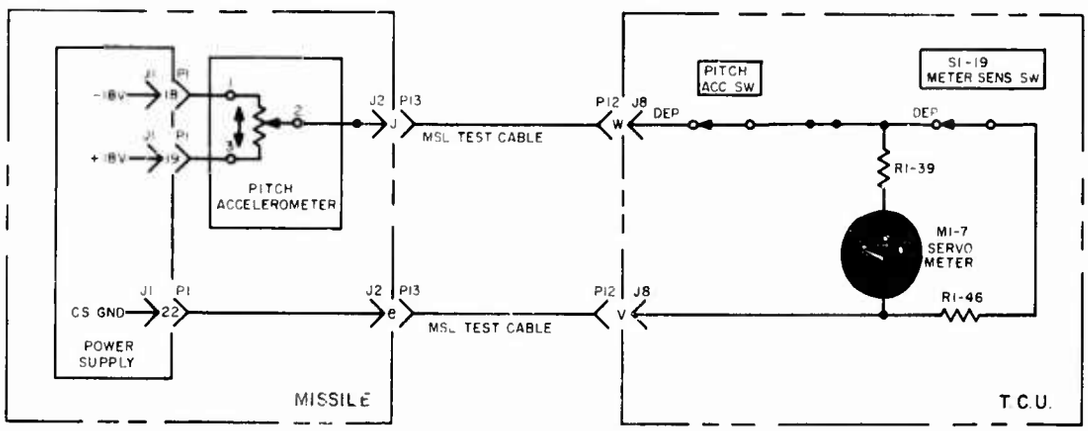
UNCLASSIFIED

73



74



UNCLASSIFIED
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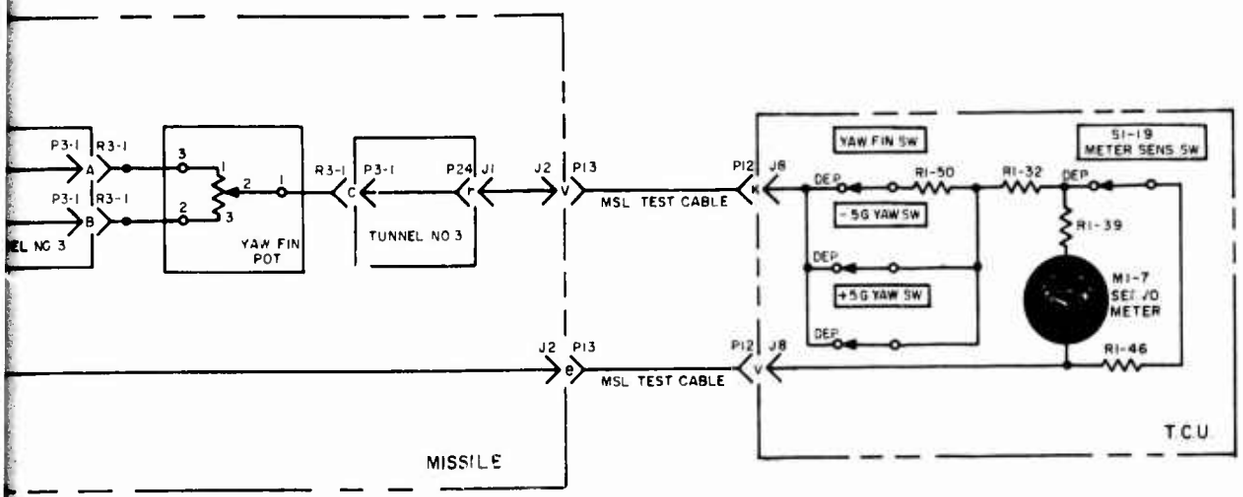

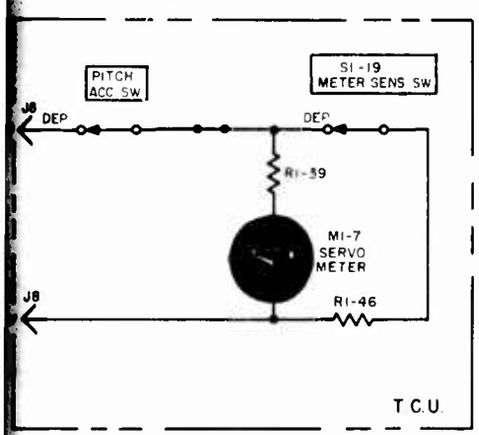

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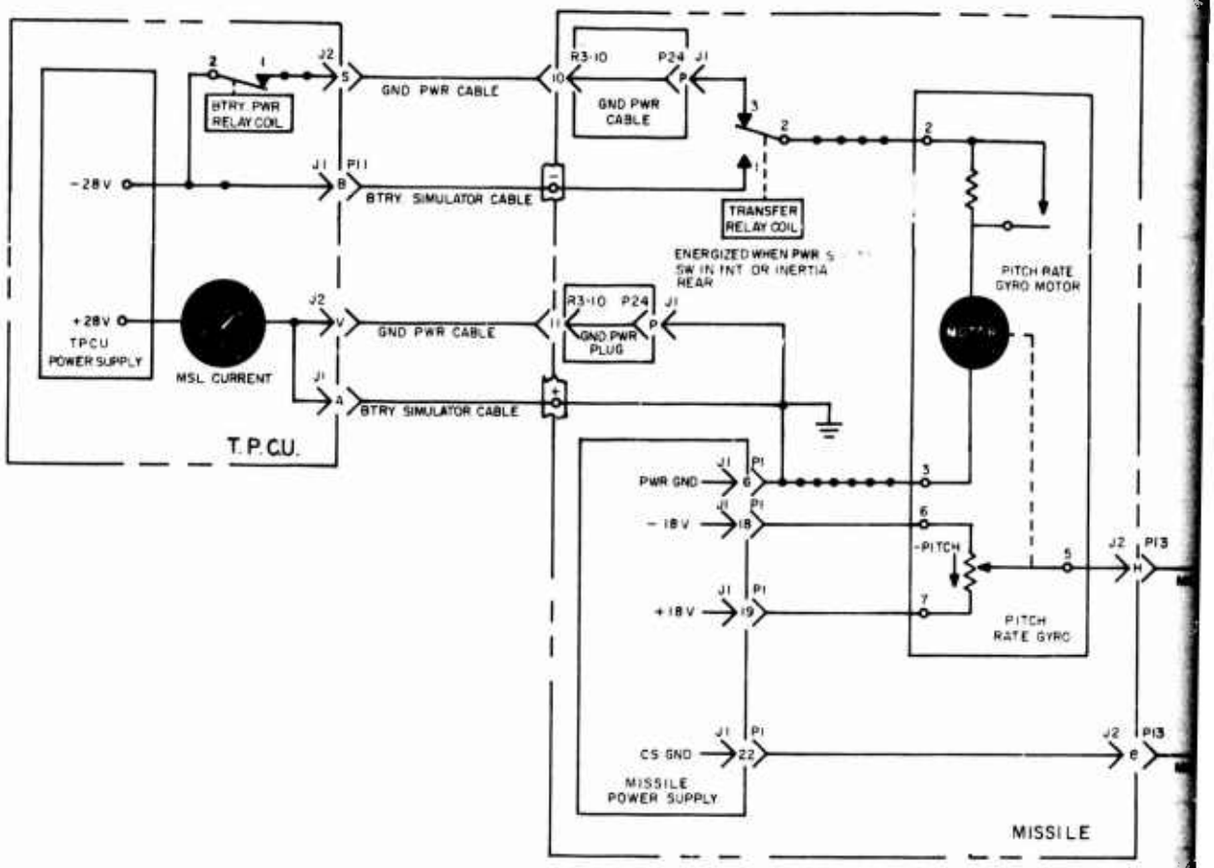
75



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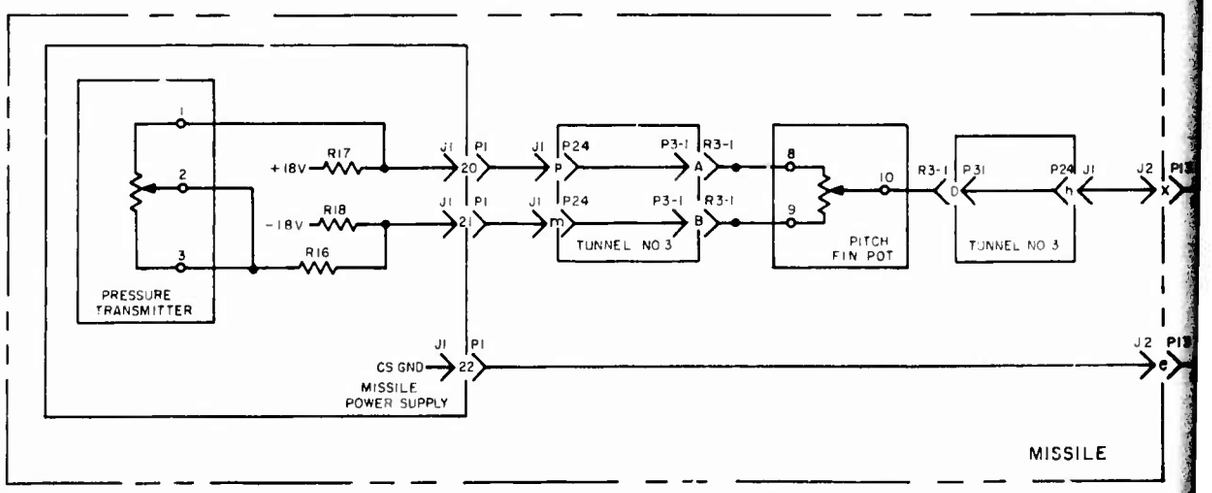

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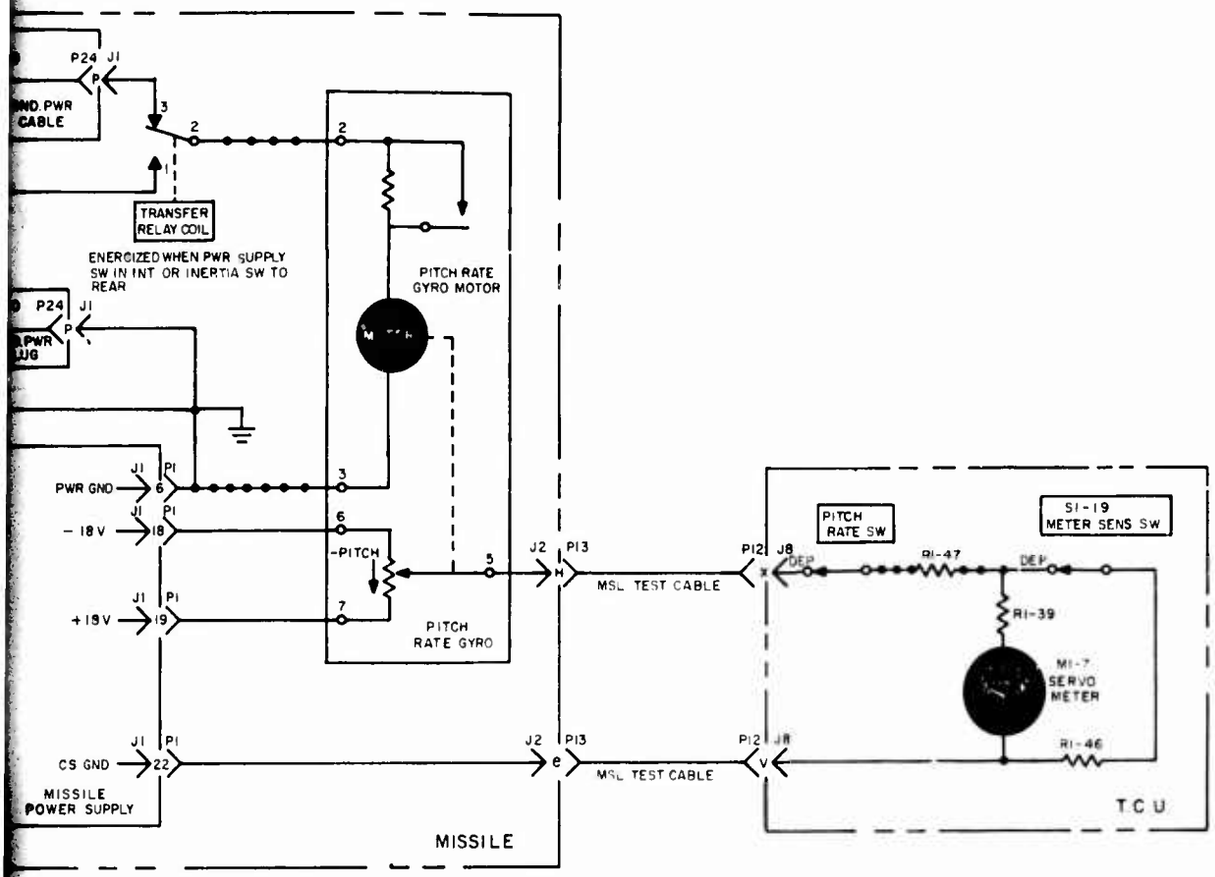

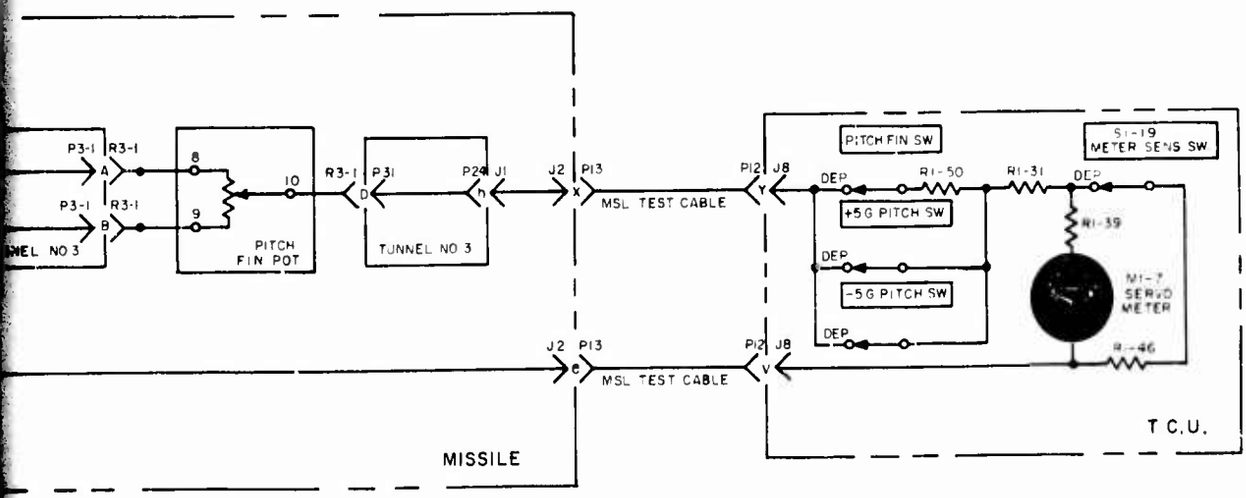

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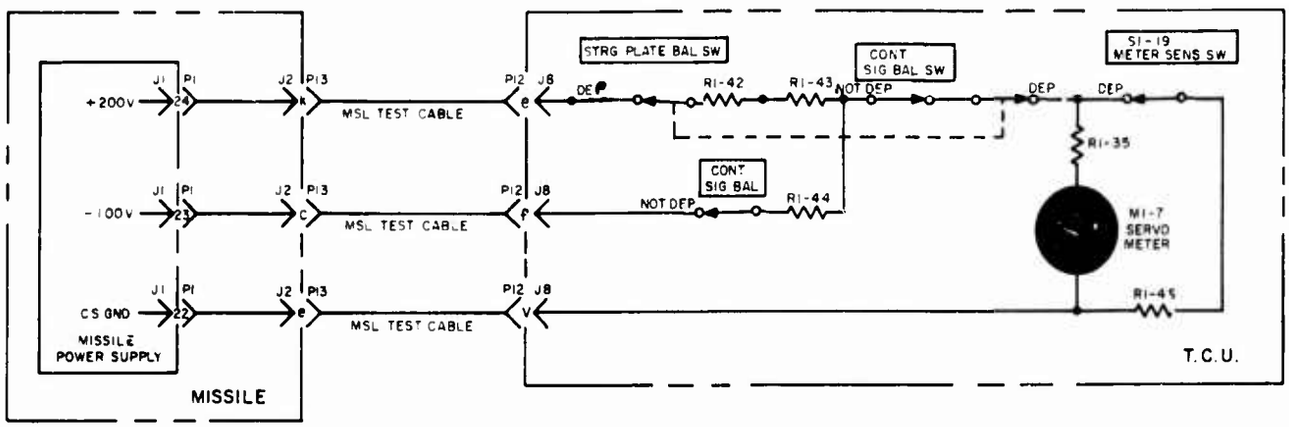
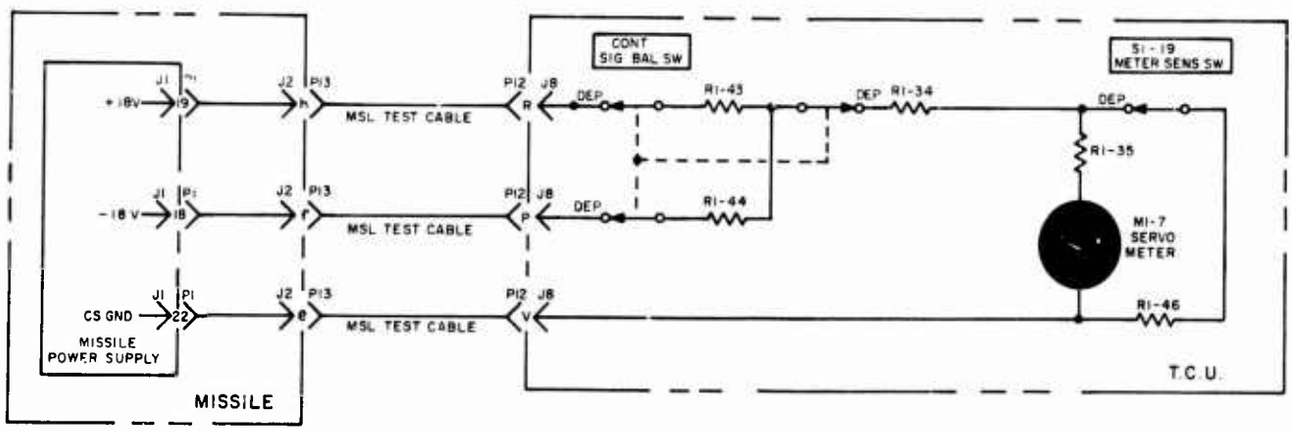
77



78



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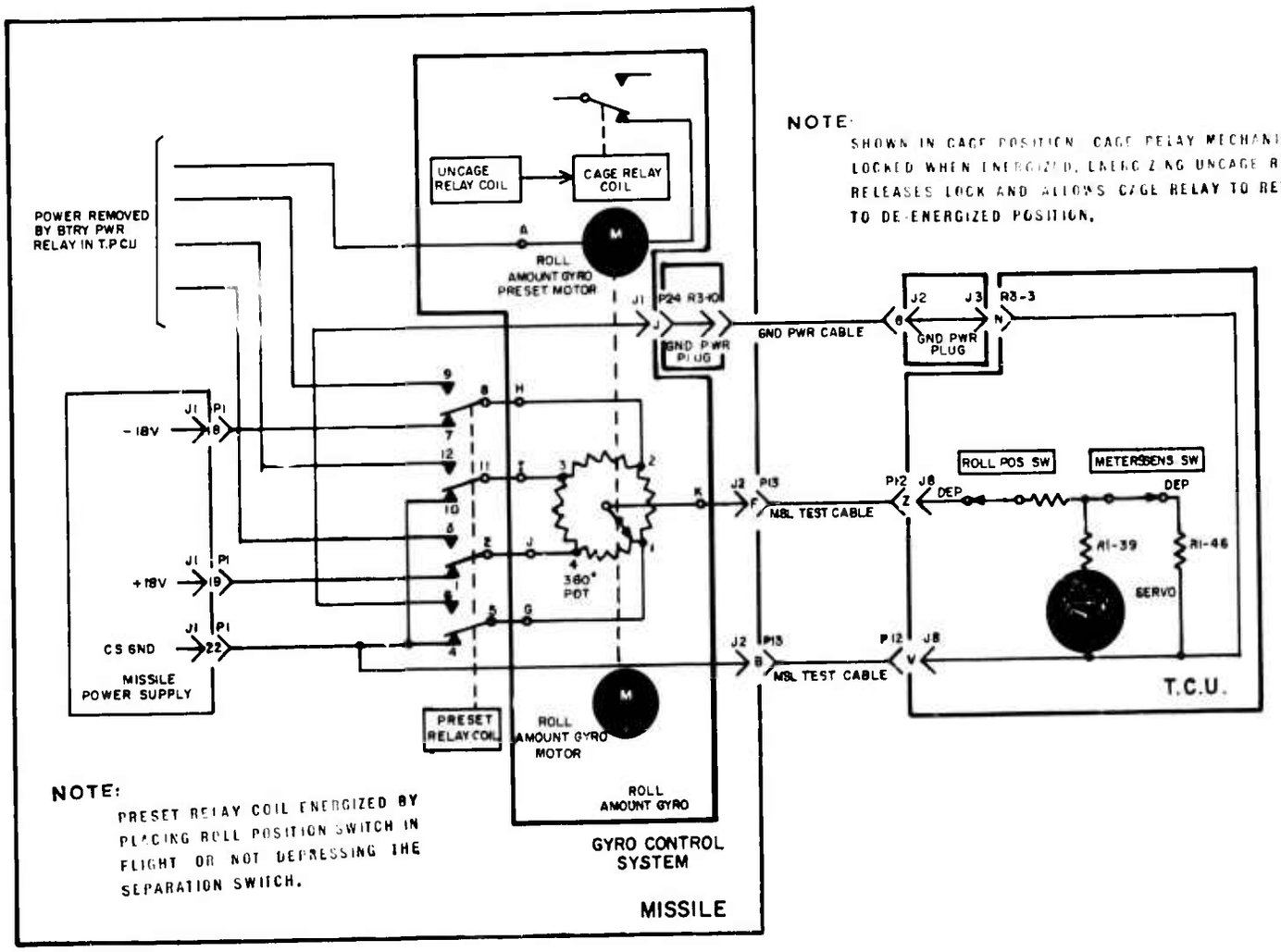
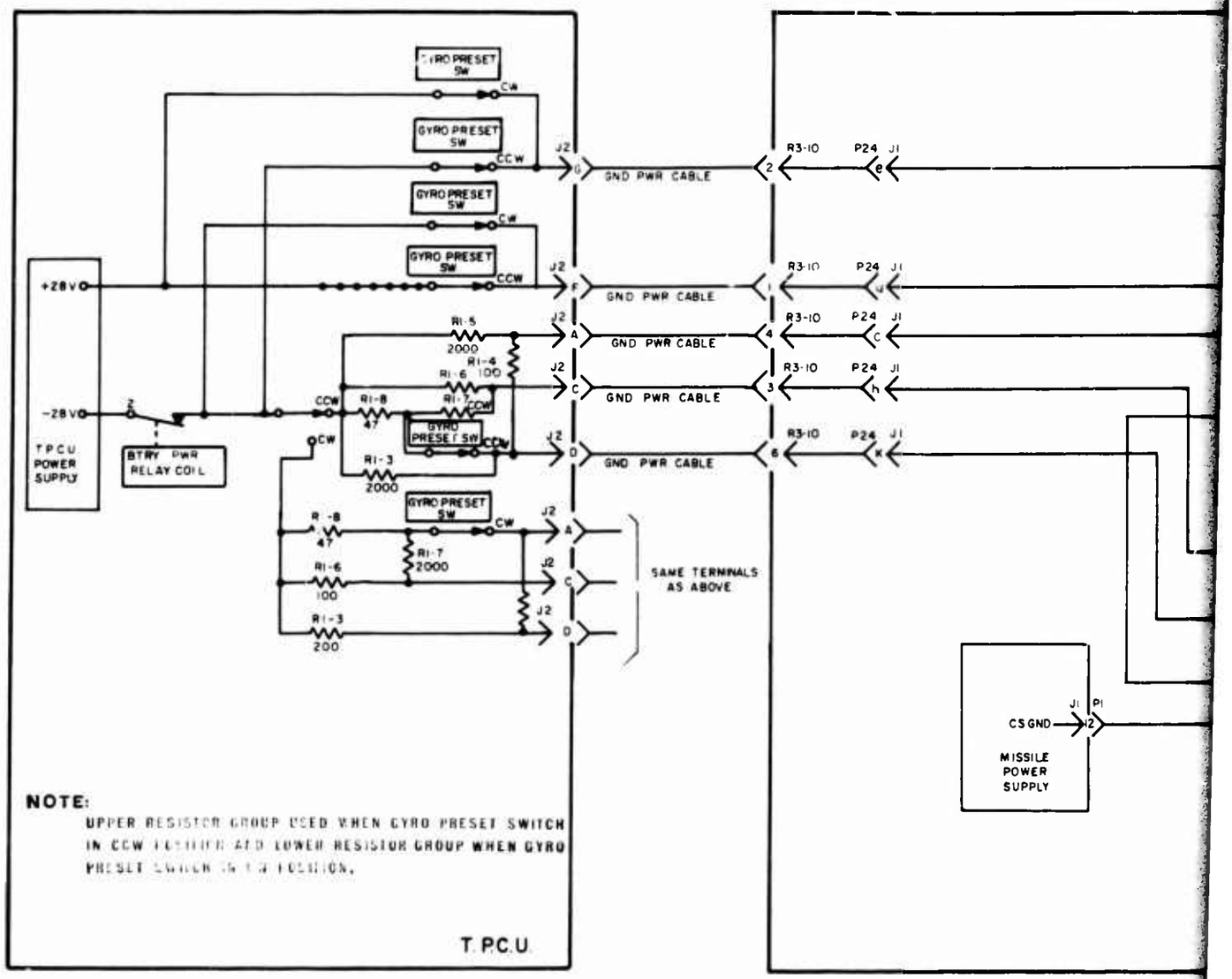
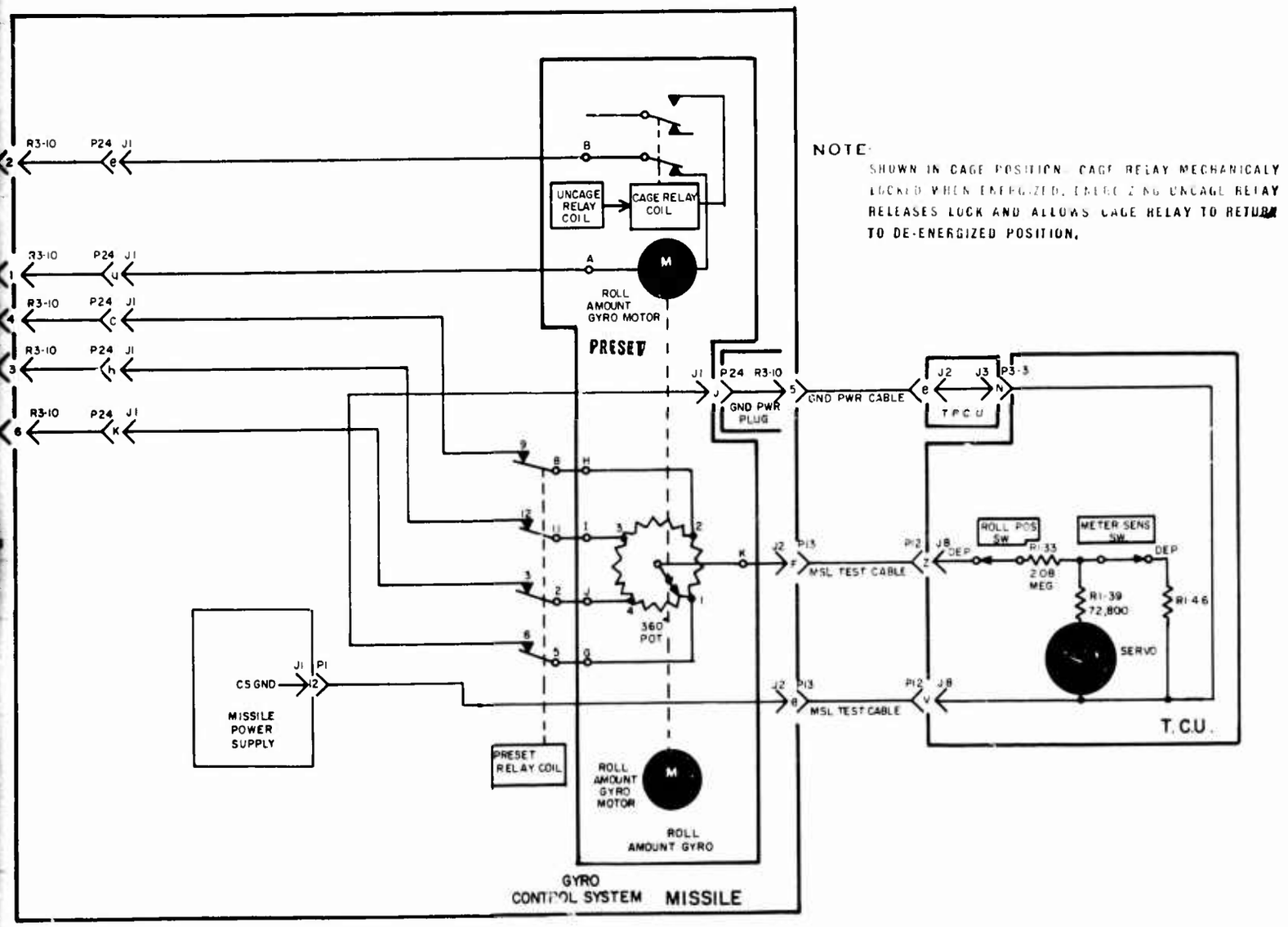
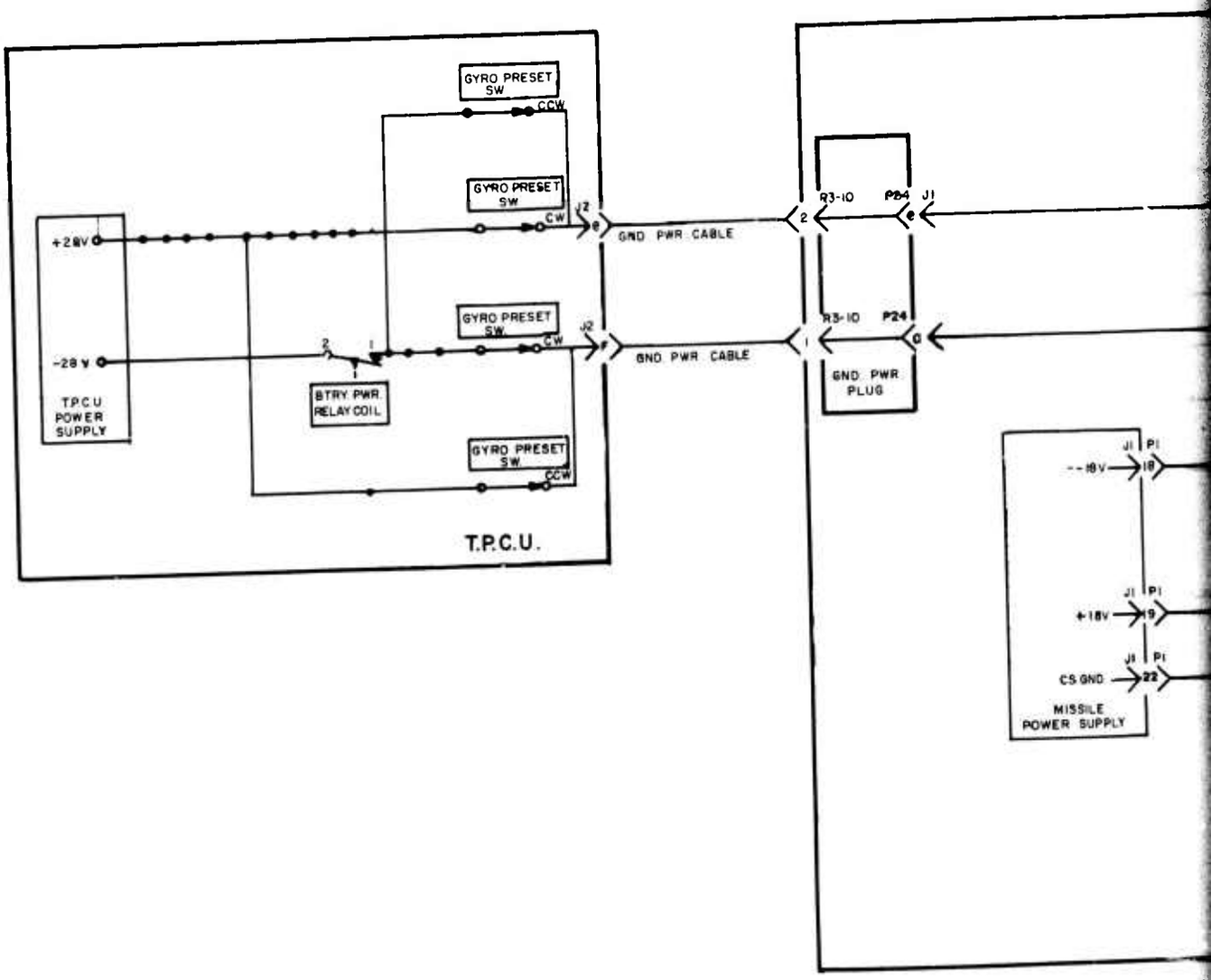

NOTE:
SHOWN IN CAGE POSITION. CAGE RELAY MECHANICALLY LOCKED WHEN ENERGIZED. ENERGIZING UNCAGE RELAY RELEASES LOCK AND ALLOWS CAGE RELAY TO RETURN TO DE-ENERGIZED POSITION.
UNCAGE RELAY COIL
CAGE RELAY COIL
POWER REMOVED BY BTRY PWR RELAY IN T.P.C.U.
ROLL AMOUNT GYRO PRESET MOTOR
J1 P24 R3-40
GND PWR PLUG
GND PWR CABLE
J2 J3 R3-3
GND PWR PLUG
-18V
+18V
CS GND
J1 P1
MISSILE POWER SUPPLY
360° POT
ROLL POS SW
METER SENS SW
DEP
RI-39
RI-46
SERVO
J2 P13
MSL TEST CABLE
P12 J8
T.C.U.
PRESET RELAY COIL
ROLL AMOUNT GYRO MOTOR
ROLL AMOUNT GYRO
GYRO CONTROL SYSTEM
MISSILE
NOTE:
PRESET RELAY COIL ENERGIZED BY PLACING ROLL POSITION SWITCH IN FLIGHT OR NOT DEPRESSING THE SEPARATION SWITCH.

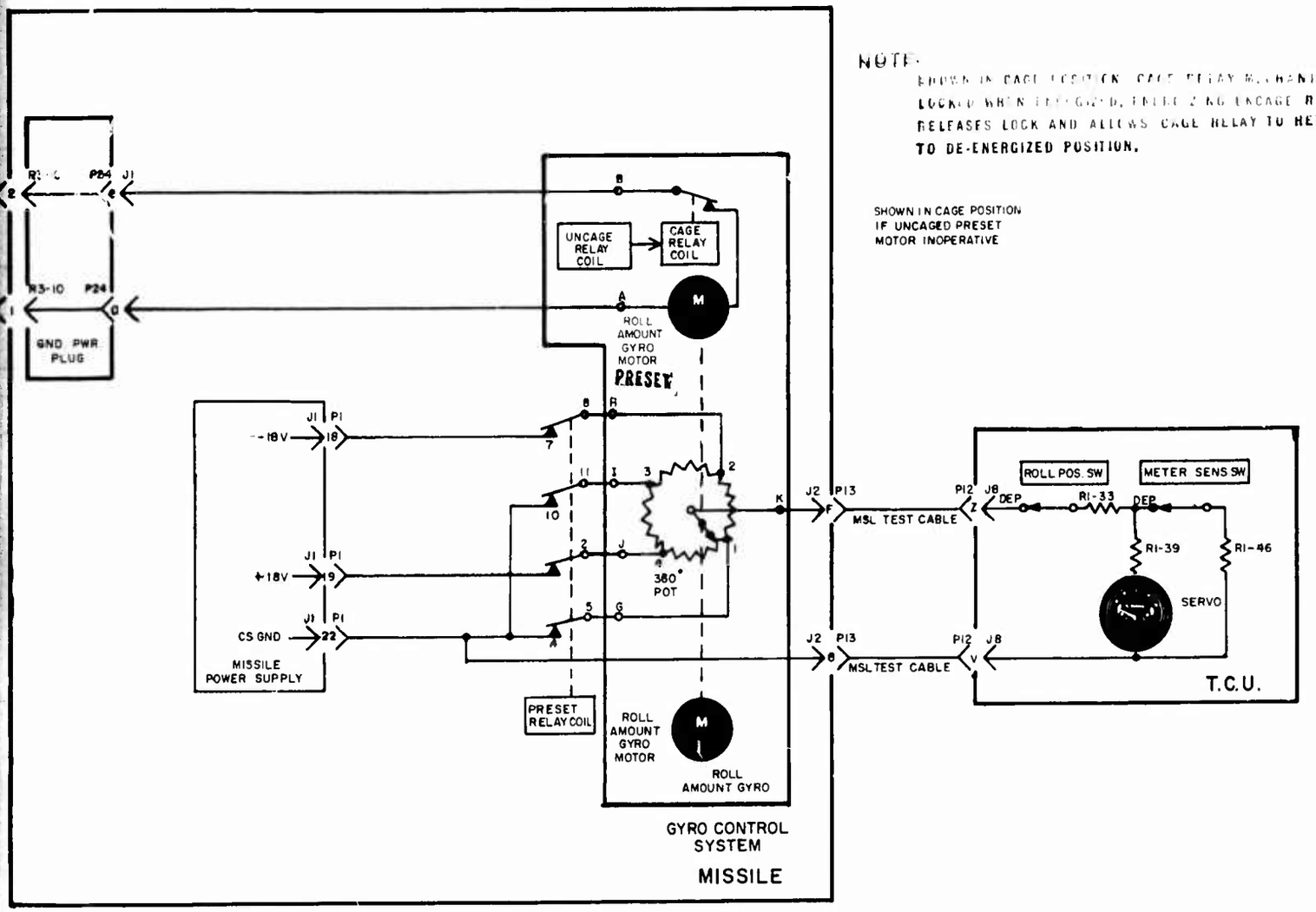
79


GYRO PRESET SW
CW
CCW
+28 V
-28 V
T.P.C.U. POWER SUPPLY
BTRY PWR RELAY COIL
R1-5 2000
R1-4
R1-6 100
R1-8 47
R1-7
R1-3 2000
R-8 47
R1-7 2000
R1-6 100
R1-3 200
J2
GND PWR CABLE
R3-10
P24
J1
SAME TERMINALS AS ABOVE
CS GND
P1
MISSILE POWER SUPPLY
NOTE:
UPPER RESISTOR GROUP USED WHEN GYRO PRESET SWITCH IN CCW POSITION AND LOWER RESISTOR GROUP WHEN GYRO PRESET SWITCH IN CW POSITION.
T.P.C.U.

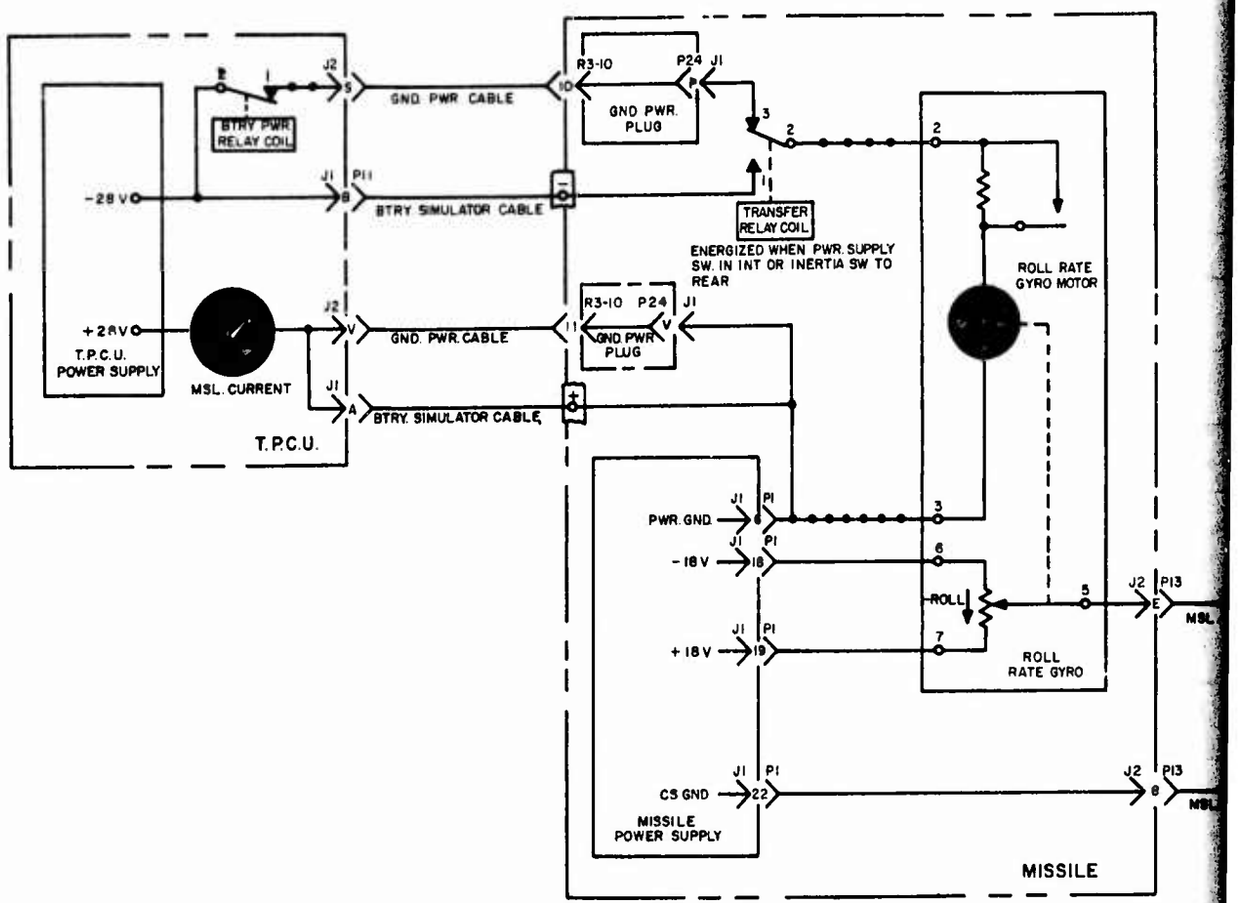

NOTE:
SHOWN IN CAGE POSITION. CAGE RELAY MECHANICALY LOCKED WHEN ENERGIZED. ENERGIZING UNCAGE RELAY RELEASES LOCK AND ALLOWS CAGE RELAY TO RETURN TO DE-ENERGIZED POSITION.
R3-10
P24 J1
UNCAGE RELAY COIL
CAGE RELAY COIL
ROLL AMOUNT GYRO MOTOR
PRESET
GND PWR PLUG
GND PWR CABLE
J2 J3 P3-3
T.P.C.U.
ROLL POS SW
METER SENS SW
R1-33 208 MEG
R1-39 72,800
R1-46
SERVO
360° POT
MSL TEST CABLE
CS GND
MISSILE POWER SUPPLY
PRESET RELAY COIL
ROLL AMOUNT GYRO MOTOR
ROLL AMOUNT GYRO
T.C.U.
GYRO CONTROL SYSTEM
MISSILE

81

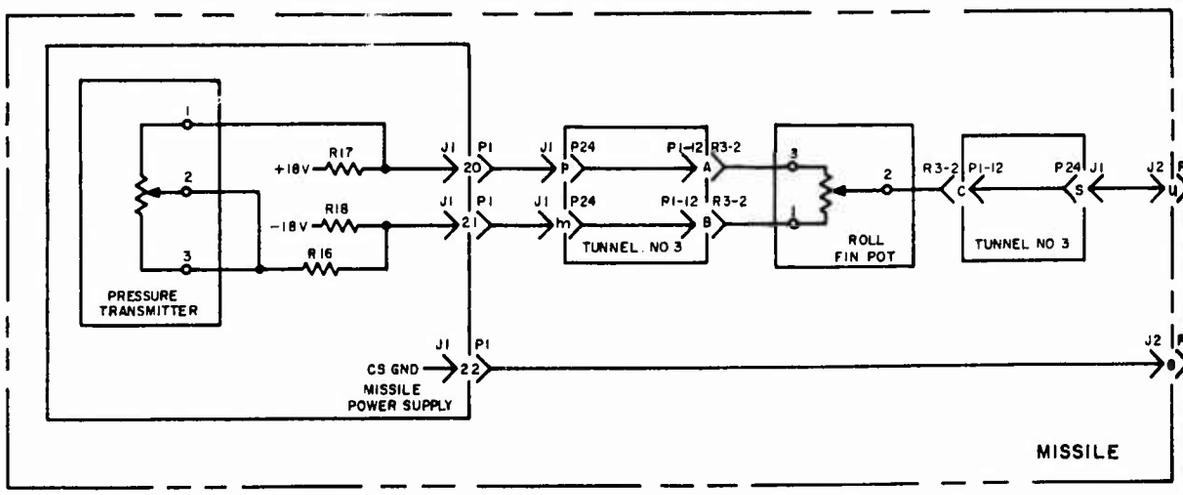

GYRO PRESET SW
CCW
GYRO PRESET SW
CW
J2
P
GND PWR CABLE
+28V
-28 V
TPCU POWER SUPPLY
2
1
BTRY PWR RELAY COIL
GYRO PRESET SW
CW
J2
P
GND PWR CABLE
GYRO PRESET SW
CCW
T.P.C.U.
R3-10
P24
J1
2
P
R3-10
P24
1
D
GND PWR PLUG
J1
P1
--18V
18
J1
P1
+18V
19
J1
P1
CS GND
22
MISSILE POWER SUPPLY

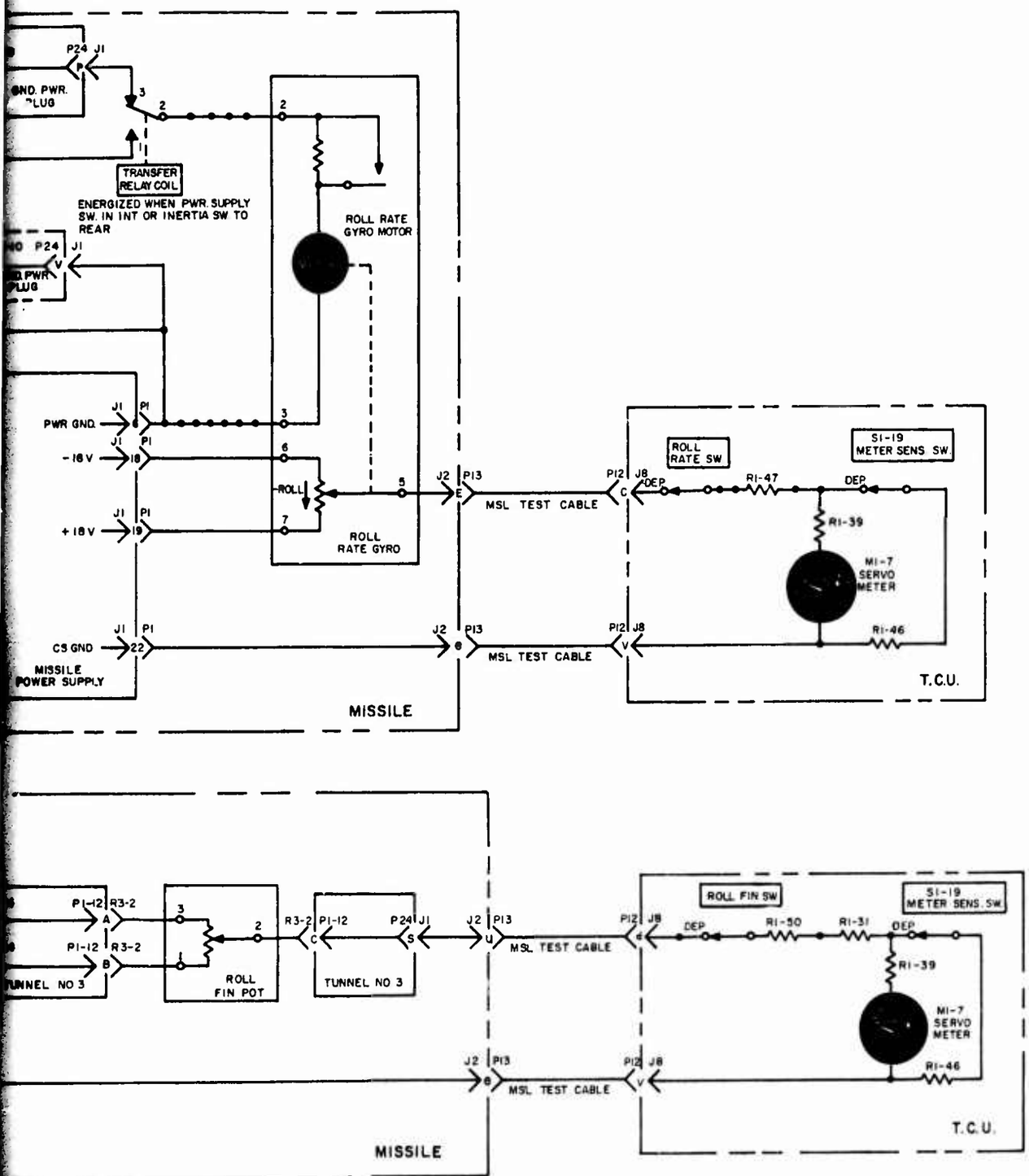

NOTE:
SHOWN IN CAGE POSITION. CAGE RELAY MECHANICALLY LOCKED WHEN ENERGIZED. ENERGIZING UNCAGE RELAY RELEASES LOCK AND ALLOWS CAGE RELAY TO RETURN TO DE-ENERGIZED POSITION.
SHOWN IN CAGE POSITION IF UNCAGED PRESET MOTOR INOPERATIVE
UNCAGE RELAY COIL
CAGE RELAY COIL
ROLL AMOUNT GYRO MOTOR
PRESET
GND PWR PLUG
R3-10 P24
J1 P1
+18V
CS GND
MISSILE POWER SUPPLY
360° POT
PRESET RELAY COIL
ROLL AMOUNT GYRO MOTOR
ROLL AMOUNT GYRO
GYRO CONTROL SYSTEM
MISSILE
J2 P13
MSL TEST CABLE
P12 J8
ROLL POS. SW
METER SENS SW
DEP
RI-33
RI-39
RI-46
SERVO
T.C.U.

82


BTRY PWR RELAY COIL
GND PWR CABLE
R3-10
P24 J1
GND PWR PLUG
-28 V
BTRY SIMULATOR CABLE
TRANSFER RELAY COIL
ENERGIZED WHEN PWR SUPPLY SW IN INT OR INERTIA SW TO REAR
ROLL RATE GYRO MOTOR
+28V
T.P.C.U. POWER SUPPLY
MSL. CURRENT
GND PWR CABLE
BTRY SIMULATOR CABLE
T.P.C.U.
PWR GND
-18 V
+18 V
ROLL
ROLL RATE GYRO
CS GND
MISSILE POWER SUPPLY
MISSILE

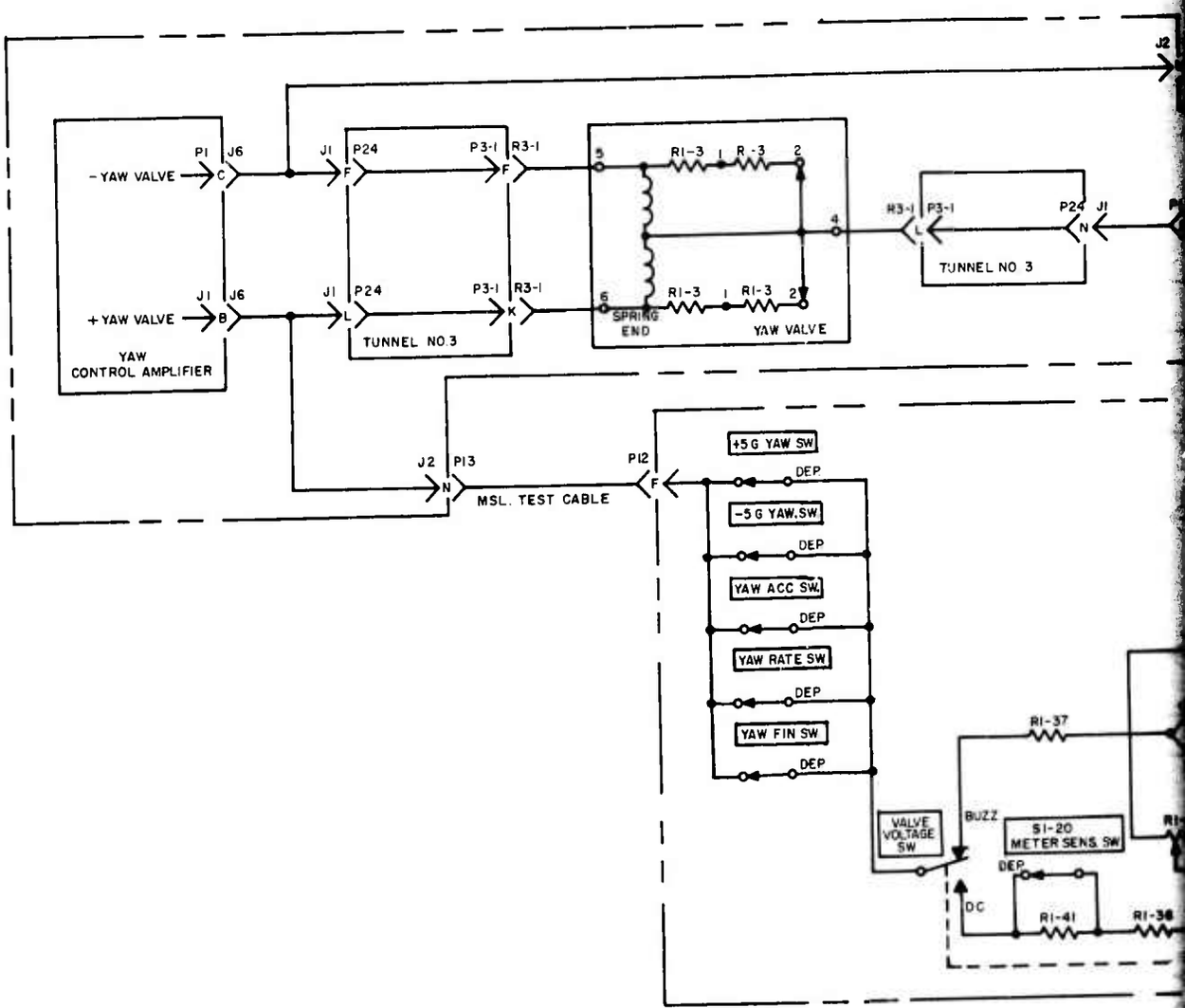
83


R17
+18V
R18
-18V
R16
PRESSURE TRANSMITTER
TUNNEL NO 3
ROLL FIN POT
TUNNEL NO 3
CS GND
MISSILE POWER SUPPLY
MISSILE


P24 J1
GND. PWR. PLUG
3
2
1
TRANSFER RELAY COIL
ENERGIZED WHEN PWR. SUPPLY SW. IN INT OR INERTIA SW TO REAR
ROLL RATE GYRO MOTOR
PWR GND.
J1 P1
-18 V
+18 V
ROLL
ROLL RATE GYRO
MSL TEST CABLE
ROLL RATE SW.
SI-19 METER SENS. SW.
DEP
RI-47
RI-39
MI-7 SERVO METER
RI-46
CS GND
MISSILE POWER SUPPLY
MISSILE
T.C.U.

P1-12 R3-2
P1-12 R3-2
TUNNEL NO 3
ROLL FIN POT
R3-2 P1-12 P24 J1
TUNNEL NO 3
J2 P13
MSL TEST CABLE
ROLL FIN SW.
SI-19 METER SENS. SW.
DEP
RI-50
RI-31
RI-39
MI-7 SERVO METER
RI-46
MISSILE
T.C.U.

84


J2
P1
J6
J1
P24
P3-1
R3-1
-YAW VALVE
C
F
F
5
R1-3
1
R-3
2
4
R3-1
P3-1
P24
J1
L
N
TUNNEL NO 3
J1
J6
J1
P24
P3-1
R3-1
+YAW VALVE
B
L
K
6
SPRING END
R1-3
1
R1-3
2
YAW VALVE
YAW CONTROL AMPLIFIER
TUNNEL NO.3
J2
P13
P12
N
F
MSL. TEST CABLE
+5G YAW SW
DEP
-5G YAW.SW
DEP
YAW ACC SW.
DEP
YAW RATE SW.
DEP
YAW FIN SW
DEP
R1-37
VALVE VOLTAGE SW
BUZZ
S1-20 METER SENS. SW
DEP
DC
R1-41
R1-38

A

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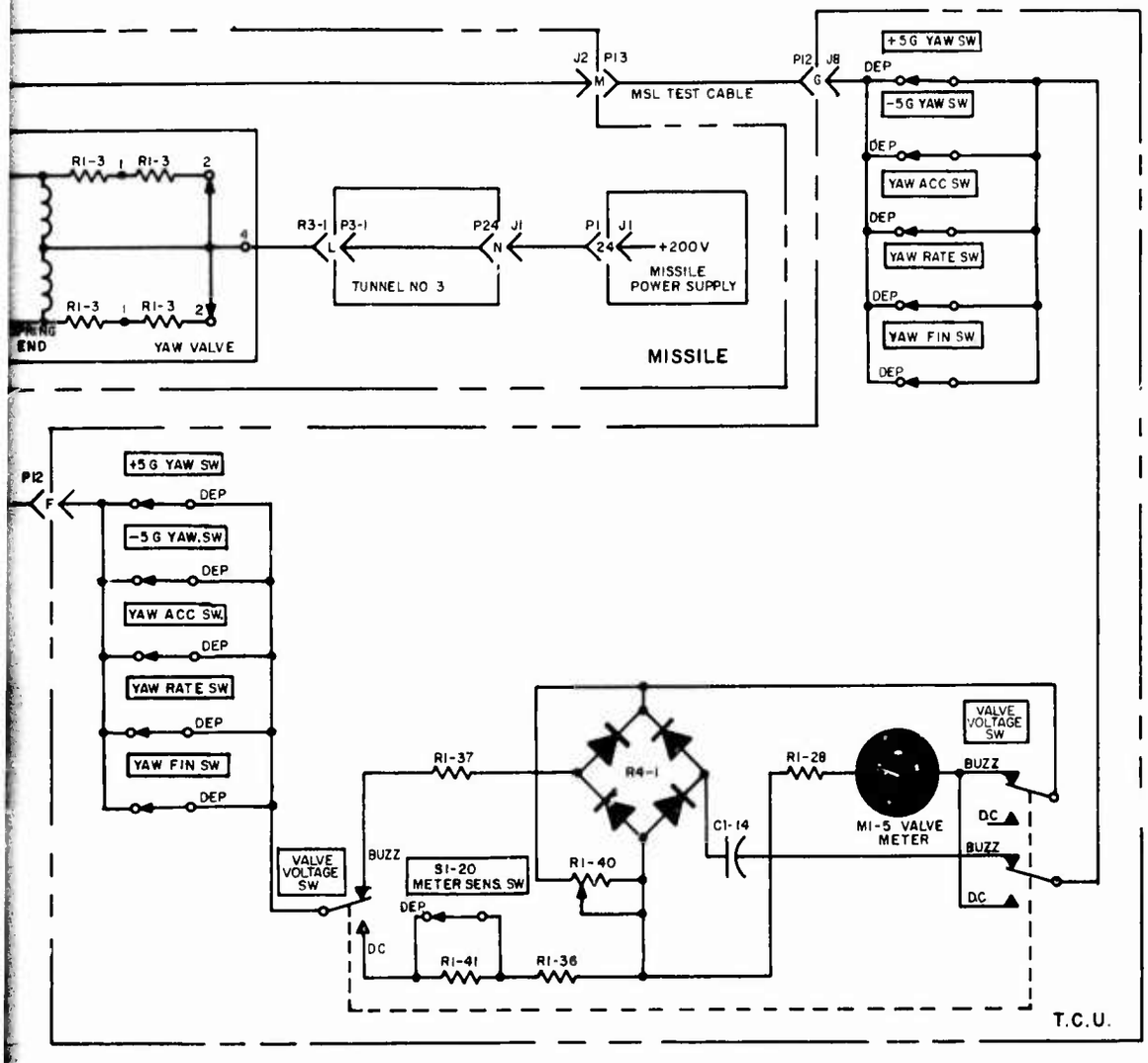

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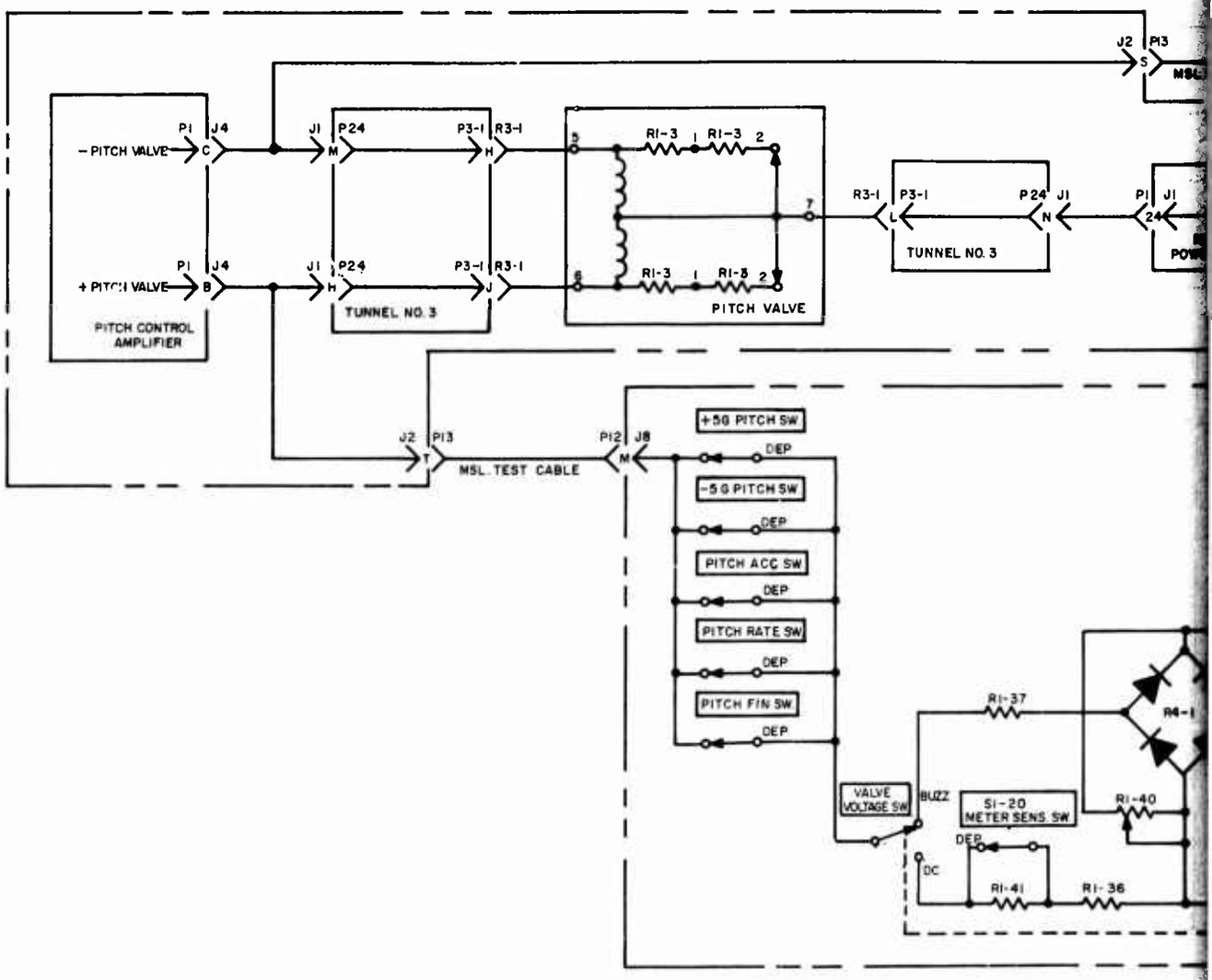
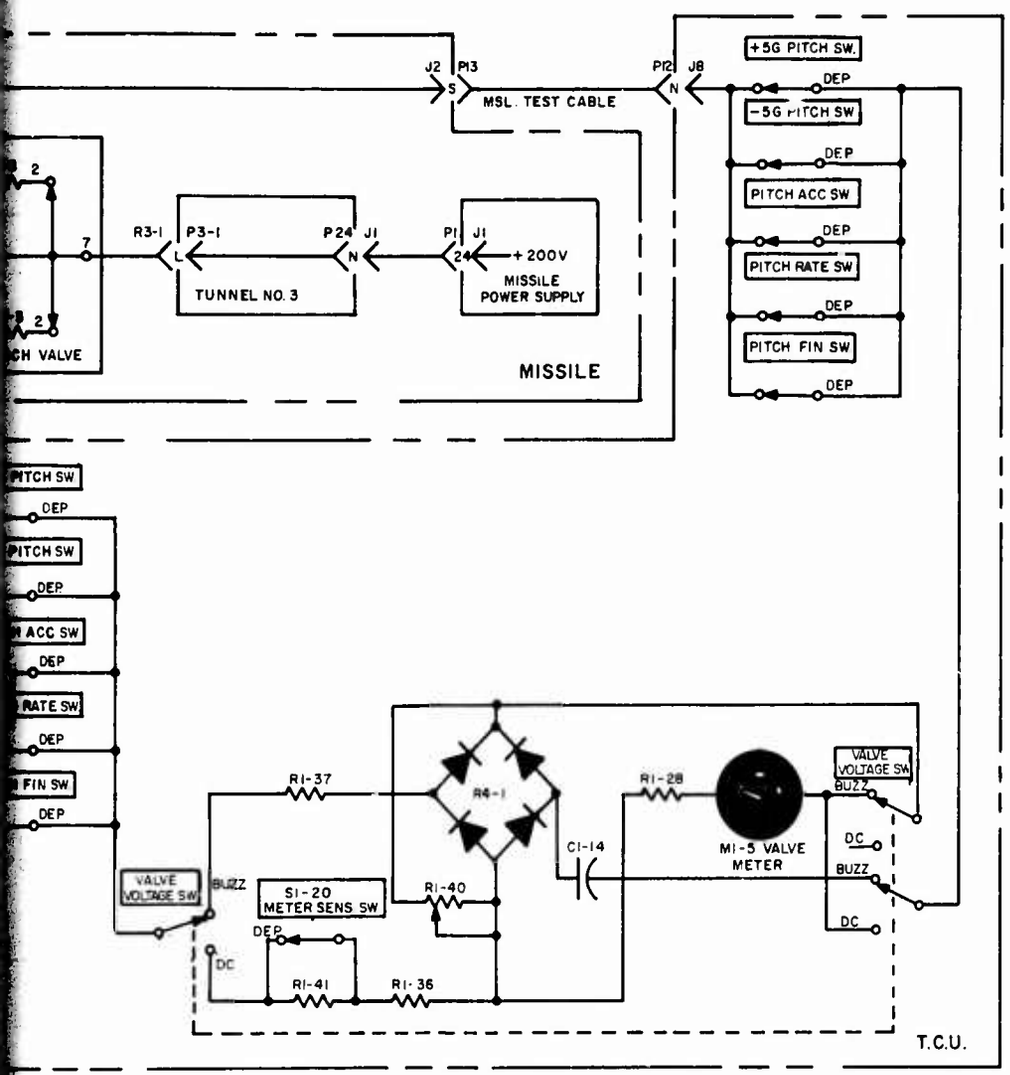
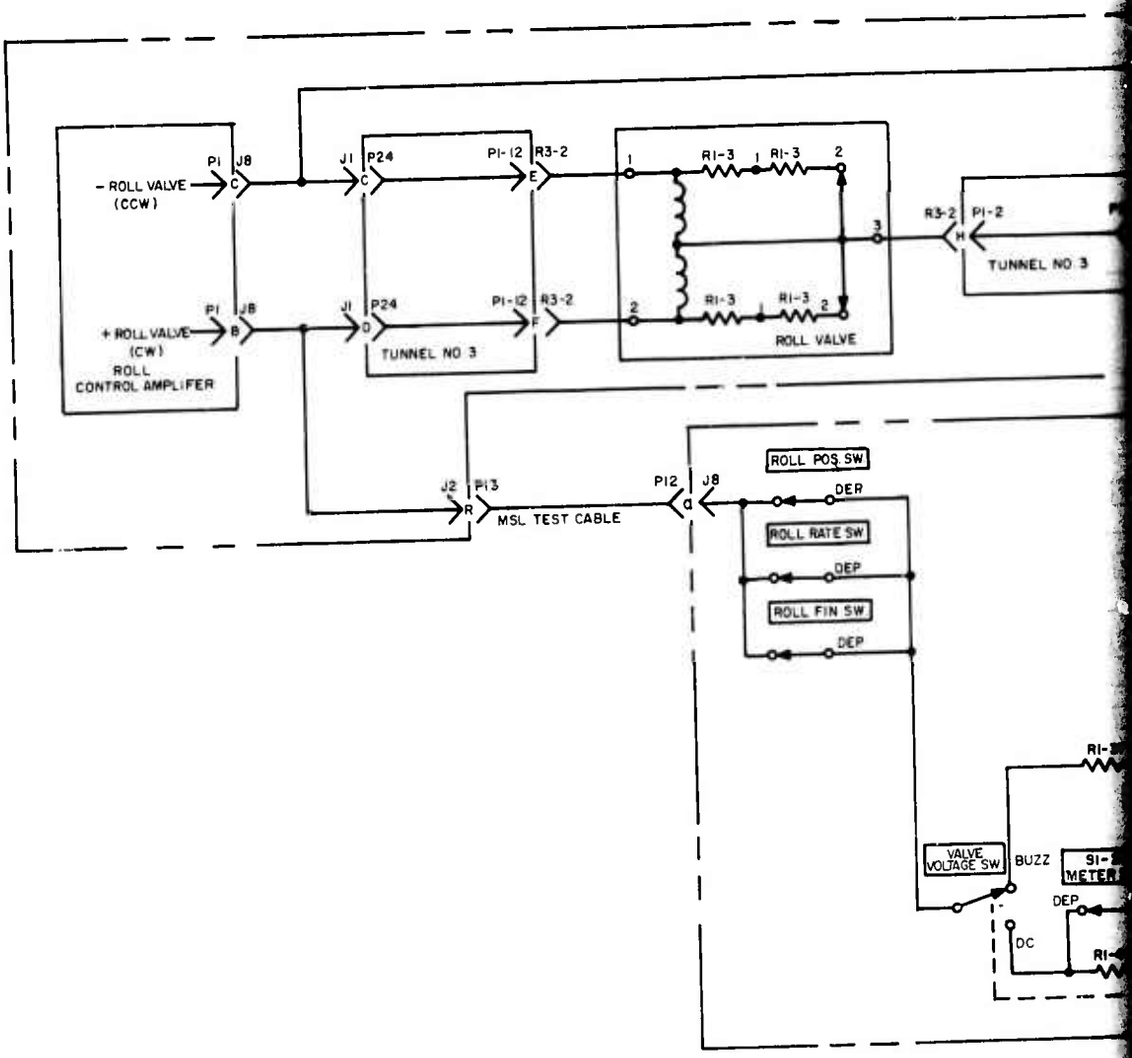

J2 P13
S
P1 J4
- PITCH VALVE
C
J1 P24
M
P3-1 R3-1
H
5
RI-3 1 RI-3 2
7
R3-1 P3-1 P24 J1
L N
TUNNEL NO. 3
P1 J1
24
P1 J4
+ PITCH VALVE
B
J1 P24
H
P3-1 R3-1
J
TUNNEL NO. 3
6
RI-3 1 RI-3 2
PITCH VALVE
PITCH CONTROL AMPLIFIER
J2 P13
T
MSL. TEST CABLE
P12 J8
M
+5G PITCH SW
DEP
-5G PITCH SW
DEP
PITCH ACC SW
DEP
PITCH RATE SW
DEP
PITCH FIN SW
DEP
RI-37
R4-1
VALVE VOLTAGE SW
BUZZ
SI-20 METER SENS SW
RI-40
DEP
DC
RI-41
RI-36


J2
P13
S
MSL. TEST CABLE
P12
J8
N
+5G PITCH SW.
DEP
-5G PITCH SW
PITCH ACC SW
PITCH RATE SW
PITCH FIN SW
R3-1
P3-1
L
P24
J1
N
P1
J1
24
+200V
MISSILE POWER SUPPLY
TUNNEL NO. 3
MISSILE
R1-37
R4-1
R1-28
VALVE VOLTAGE SW
BUZZ
DC
M1-5 VALVE METER
C1-14
VALVE VOLTAGE SW
BUZZ
S1-20 METER SENS SW
R1-40
DEP
DC
R1-41
R1-36
T.C.U.

86


- ROLL VALVE (CCW)
+ ROLL VALVE (CW)
ROLL CONTROL AMPLIFER
P1
J8
C
B
J1
P24
C
D
TUNNEL NO 3
P1-12
R3-2
E
F
1
2
3
R1-3
R1-3
R1-3
R1-3
ROLL VALVE
R3-2
P1-2
H
TUNNEL NO 3
J2
P13
R
MSL TEST CABLE
P12
d
ROLL POS SW
ROLL RATE SW
ROLL FIN SW
DEP
VALVE VOLTAGE SW
BUZZ
DC

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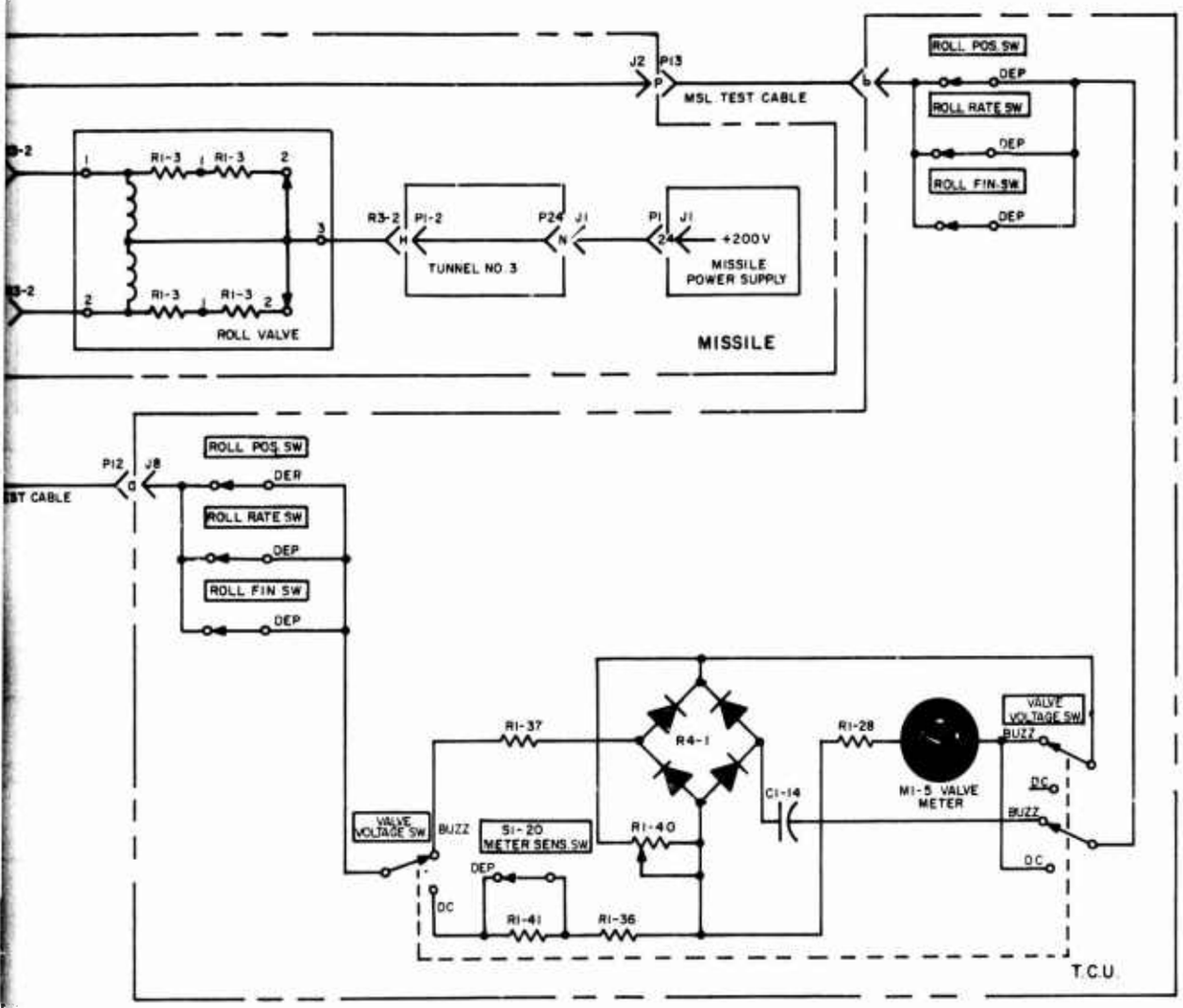

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B

INDEX TO SCHEMATIC DIAG

RF TEST SET

Page

Yaw Oscillator
- Simplified Schematic 201
- Detailed Schematic 203

Pitch Oscillator
- Simplified Schematic..... 205
- Detailed Schematic 207

Burst Oscillator
- Simplified Schematic 209
- Detailed Schematic 211

Reference Oscillator
- Simplified Schematic 213
- Detailed Schematic 215

Command Modulator
- Simplified Schematics
  - CCS: 2000 217
  - CCS: 1600 219
  - CCS: 2400 221
  - CCS: BAL 223
  - CCS: YAW 225
  - CCS: PITCH 227
  - CCS: BURST 229
  - CCS: TIME 231
  - CCS: MEAS 233
- Detailed Schematic 235

Oscilloscope
- Simplified Schematic 237
- Detailed Schematic 239

Microsecond Oscillator
- Simplified Schematic 241
- Detailed Schematic 243

Pulse Selector
- Simplified Schematics
  - TSS: TEST SIG 245
  - TSS: REC SENS & TRANS TEST 247
  - TSS: RESP TIME A & B 249
  - TSS: COMM SIG 251
- Detailed Schematic 253

Pulser
- Simplified Schematics
  - TSS: TEST SIG 255
  - TSS: REC SENS 257
  - TSS: TRANS TEST 259
  - TSS: RESP TIME A 261
  - TSS: RESP TIME B 263
  - TSS: COMM SIG 265
- Detailed Schematic 267

Signal Generator 269

Power Measuring
- Simplified Schematic 271
- Detailed Schematic 273

Response Indicator
- Simplified Schematic 275
- Detailed Schematic 277

Page

..... 201
..... 203
..... 205
..... 207
..... 209
..... 211
..... 213
..... 215
..... 217
..... 219
..... 221
..... 223
..... 225
..... 227
..... 229
..... 231
..... 233
..... 235
..... 237
..... 239
..... 241
..... 243
..... 245
..... 247
..... 249
..... 251
..... 253
..... 255
..... 257
..... 259
..... 261
..... 263
..... 265
..... 267
..... 269
..... 271
..... 273
..... 275
..... 277

Page

Burst Timer
Simplified Schematic 279
Detailed Schematic 281
Power Supply 283
Filament I 284
Filament II 285
Waveguide Assembly 287
Cabinet Assembly 289
Upper Drawer 290
Lower Drawer 291

ANTENNA COUPLER

Schematic 287

MISSILE

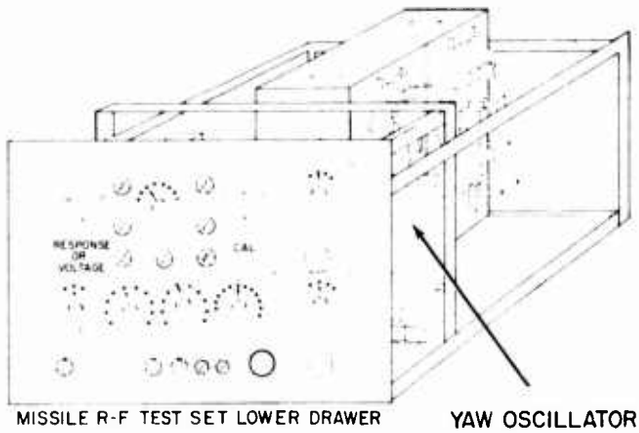
AGC Video Amplifier Decoder
Simplified Schematic 293
Detailed Schematic 295
Modulator, Missile
Simplified Schematic 297
Detailed Schematic 299
Signal Data Converter
Simplified Schematics
Yaw 301
Pitch 303
Burst 305
Detailed Schematic 307
Yaw Control Amplifier
Simplified Schematic 309
Detailed Schematic 311
Pitch Control Amplifier
Simplified Schematic 313
Detailed Schematic 315
Roll Control Amplifier
Simplified Schematic 317
Detailed Schematic 319
Power Supply Missile 321
Receiver Transmitter 322
Guidance Section Interconnecting Schematic I 322
Gyro Control System 323
Guidance Section Interconnecting Schematic II 323
Steering Fin Control Section 324
Roll Control Surface Section 324
Missile Wiring Diagram 324

T P C U

Wiring Diagram 325

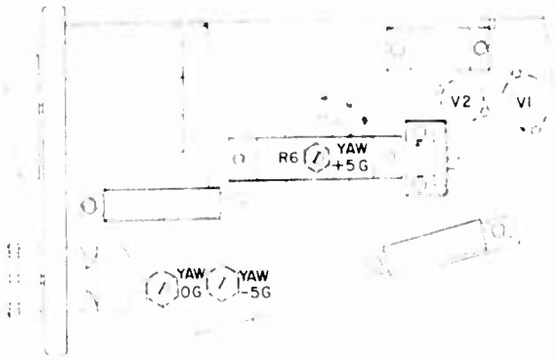
T C U

Panel Wiring Diagram 326-7

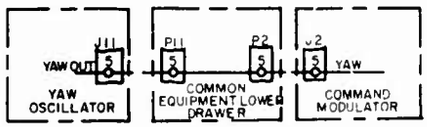


MISSILE R-F TEST SET LOWER DRAWER

YAW OSCILLATOR



YAW OSCILLATOR SIDE VIEW



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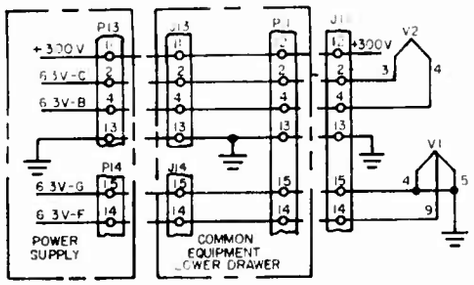
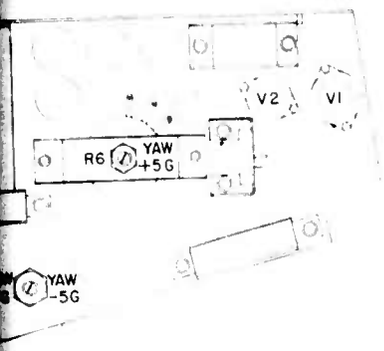


POWER DISTRIBUTION

GS-15739 R-F TEST SET YAW OSCILLATOR , NOTES



OSCILLATOR SIDE VIEW

NOTE:

1. TERMINALS 1, 3, 6, 7, 8, 9, 10 AND 11 ON J11 ARE NOT USED.

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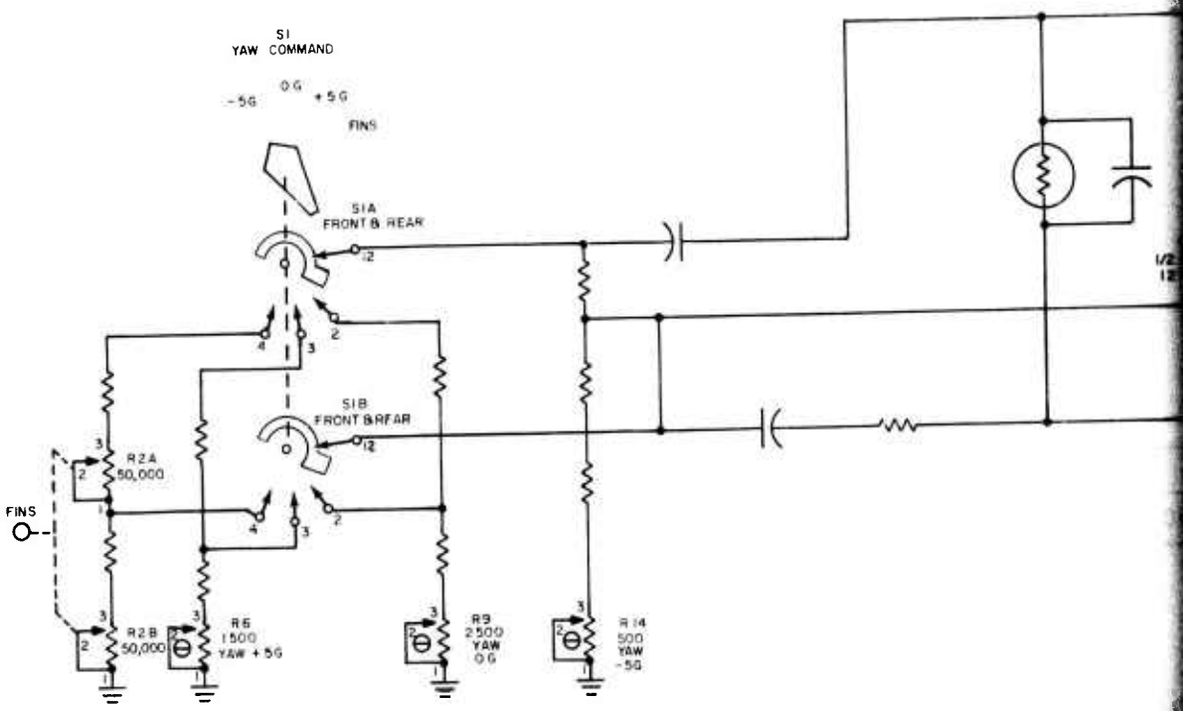

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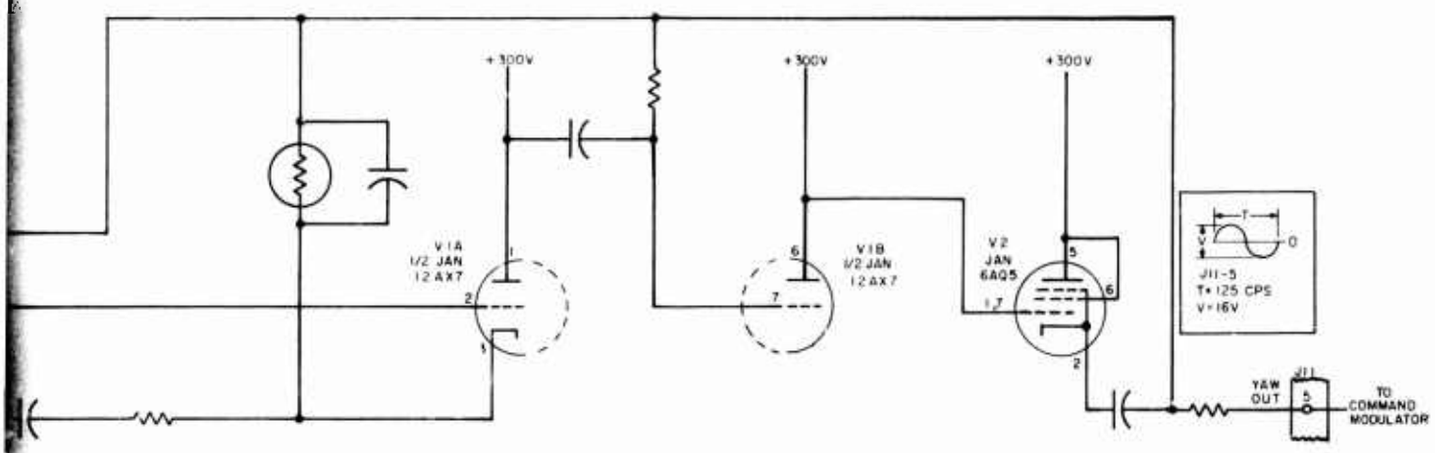

R-F TEST SET YAW OSCILLATOR SIMPLIFIED SCHEMATIC

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UNCLASSIFIED

MEASUREMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN			CONTROL		
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OH

THIS DATA NOT AVAILABLE

R-F TEST SET YAW OSCILLATOR, NOTES

[redacted]

A

[redacted]

SSIFIED

NOTES:
1. TERMINALS 1,3,6,7,8,9,10 AND 11 ON J11 ARE NOT USED.

SCREEN			CONTROL			CATHODE			FILAMENT		
PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

OT AVAILABLE

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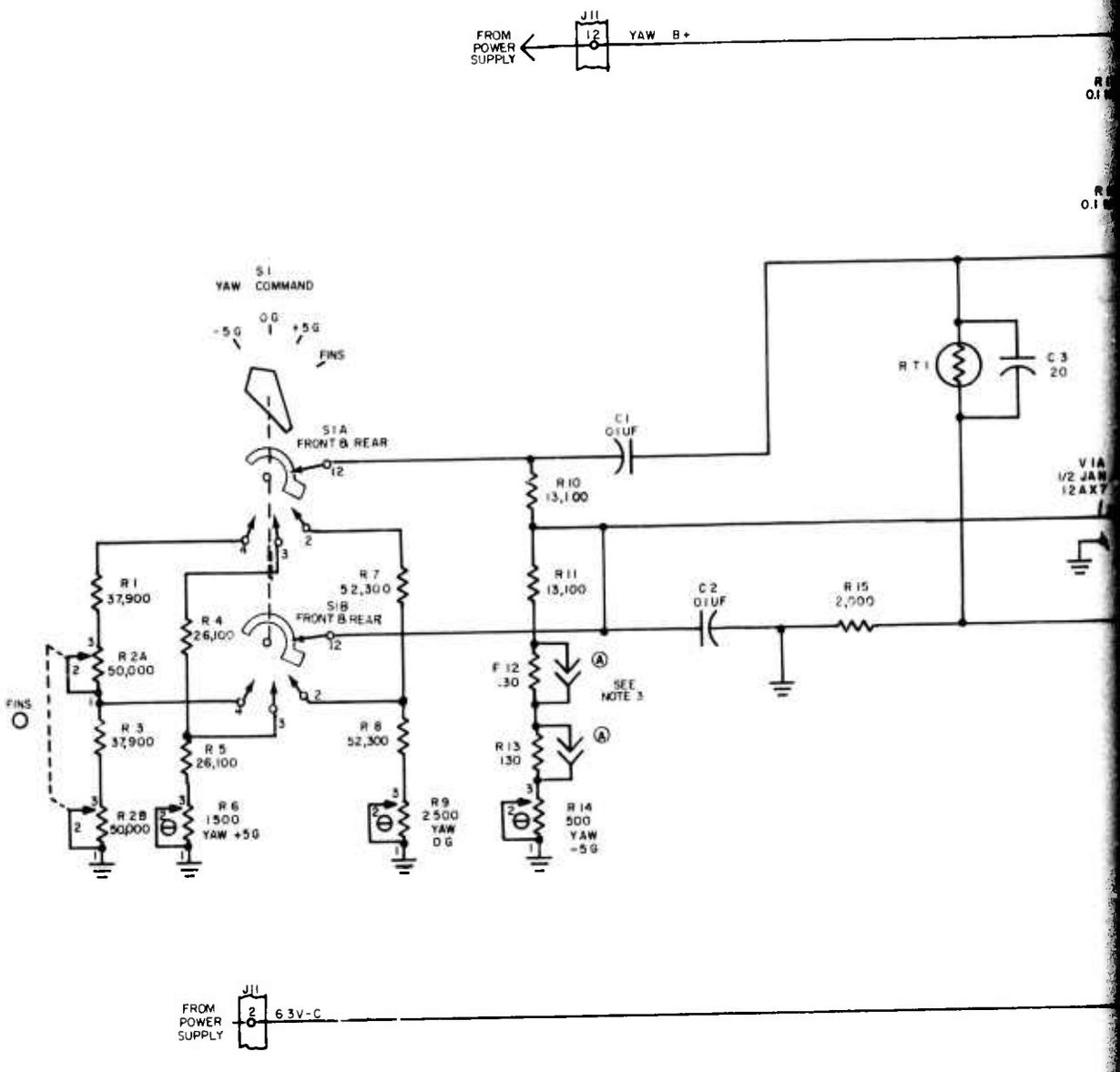

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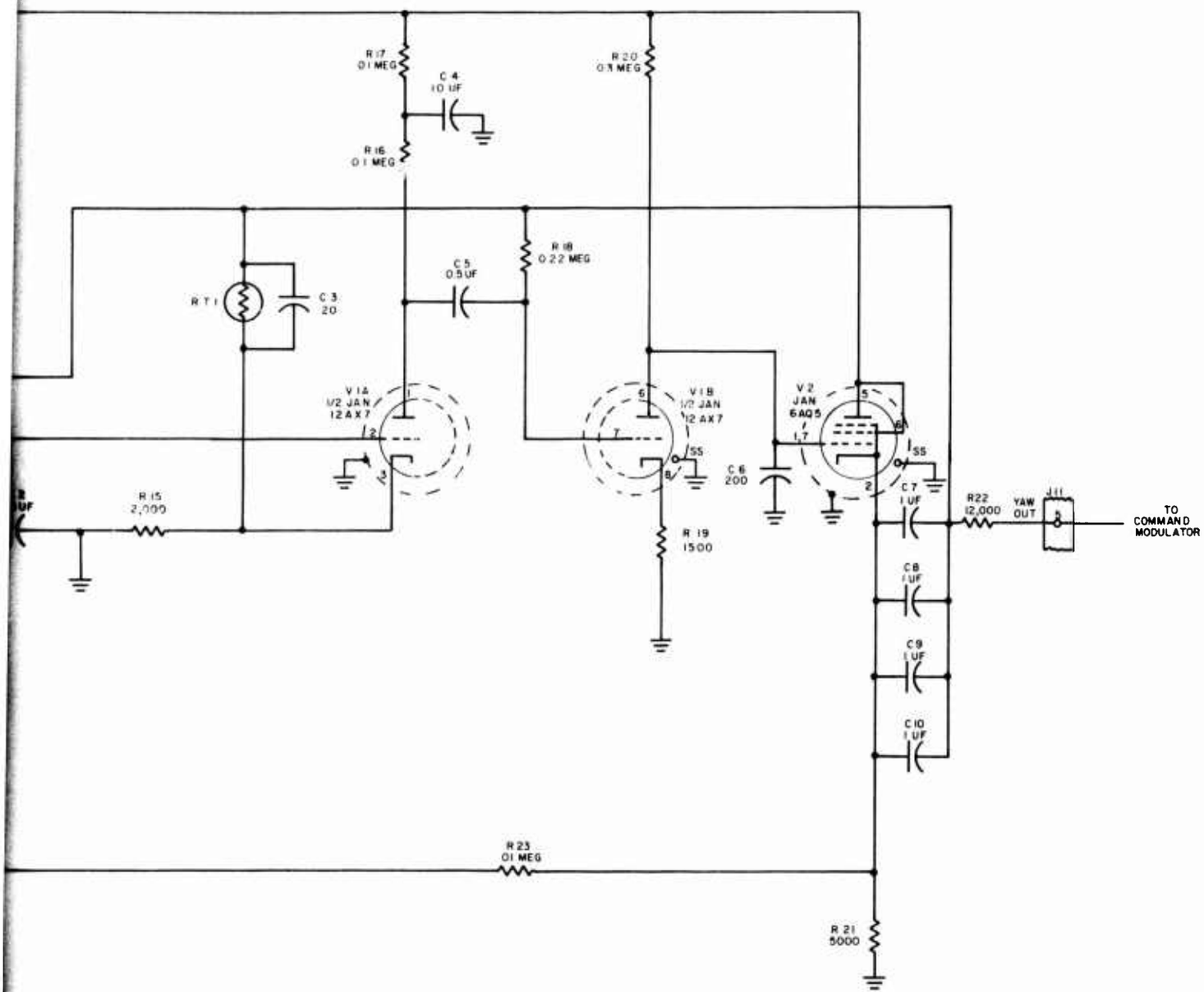
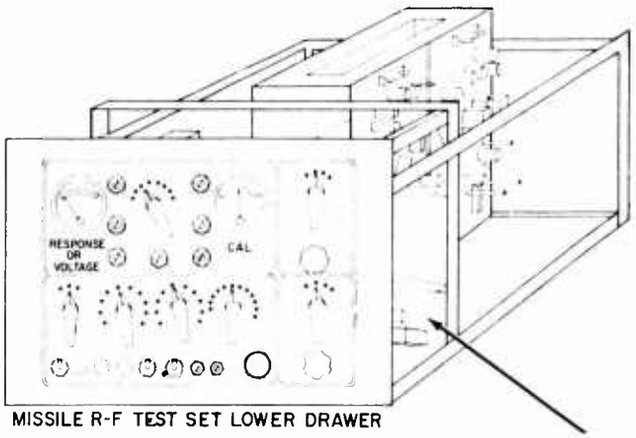
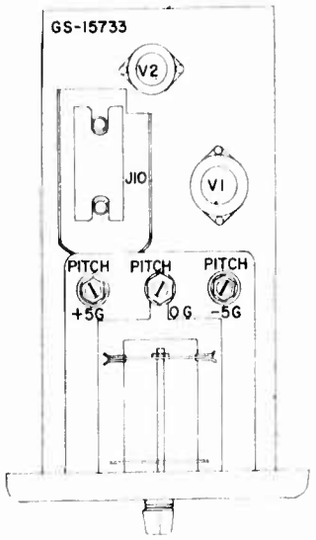


GS-15739 R-F TEST SET YAW OSCILLATOR

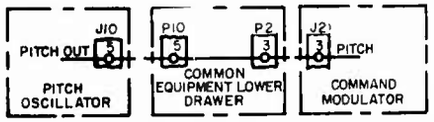


MISSILE R-F TEST SET LOWER DRAWER

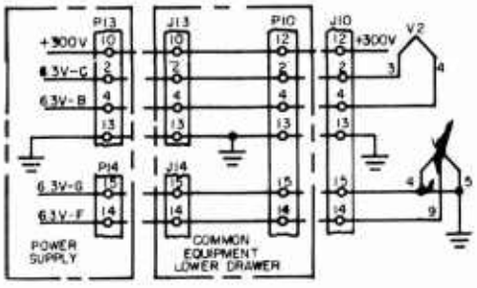
PITCH OSCILLATOR



PITCH OSCILLATOR TOP VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION

GS-15738 R-F TEST SET PITCH OSCILLATOR, NOTES

A

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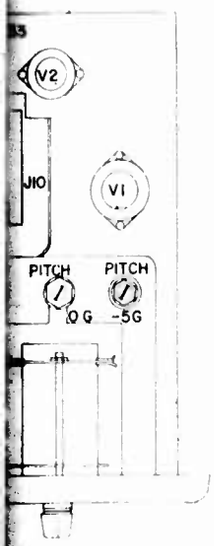
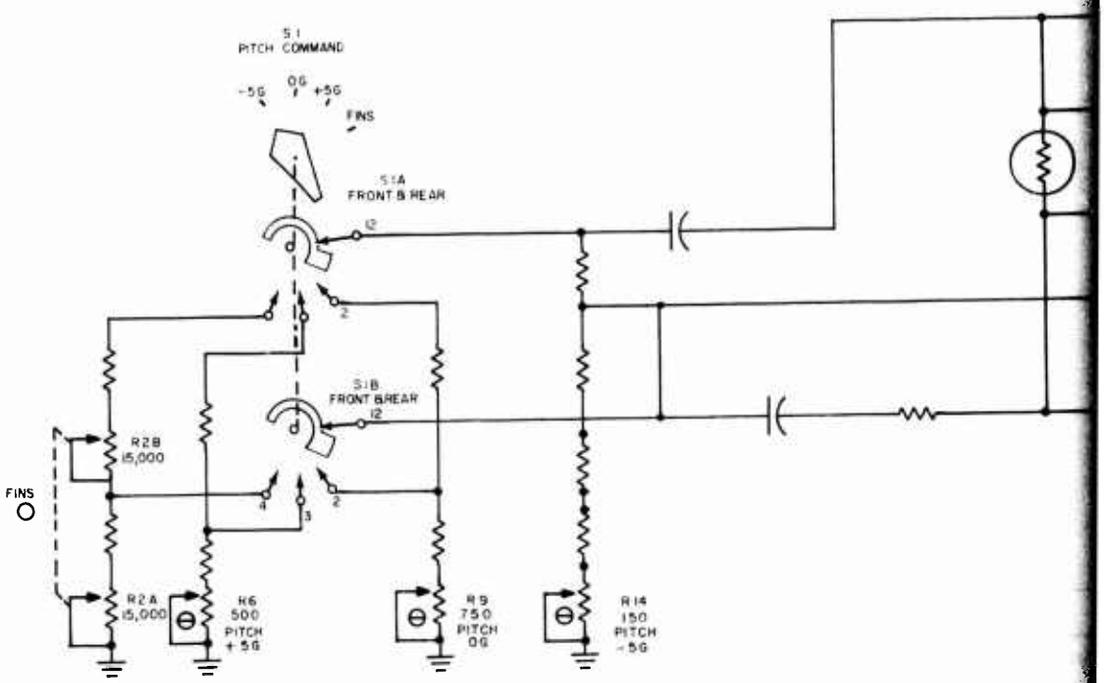


ILLATOR TOP VIEW

NOTE:
1. TERMINALS 1,3,6,7,8,9,10, AND 11 ON J10 ARE NOT USED.

[redacted]

[redacted]
UNCLASSIFIED



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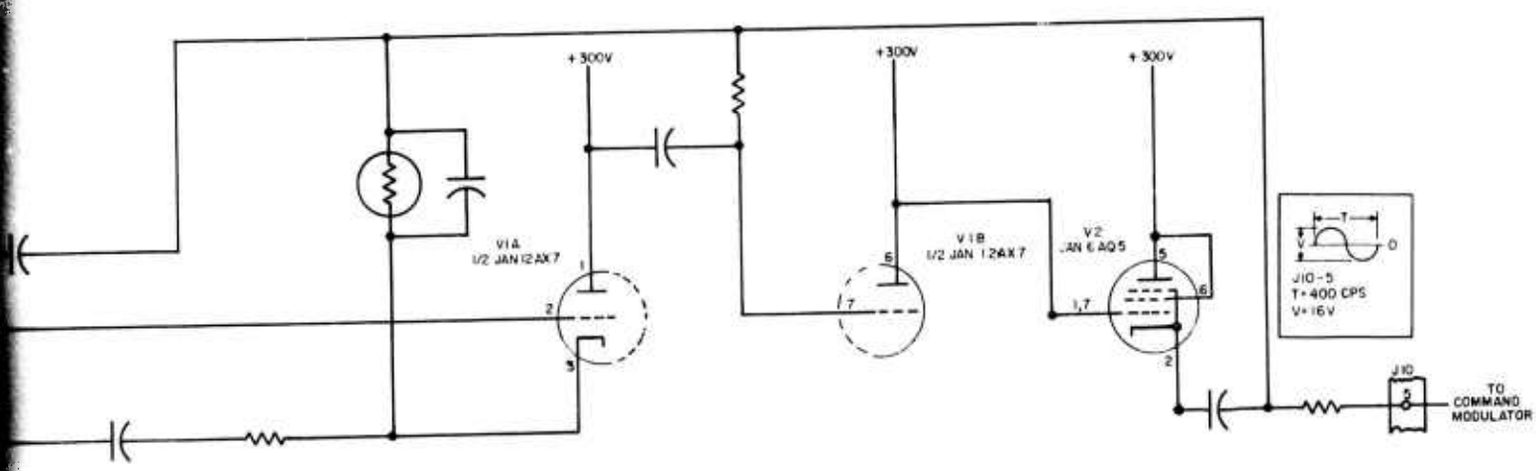


R-F TEST SET PITCH OSCILLATOR SIMPLIFIED SCHEMATIC

[redacted]

UNCLASSIFIED

MEASUREMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN			CONTROL		
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	

THIS DATA NOT AVAILABLE

R-F TEST SET PITCH OSCILLATOR, NOTES

[redacted]

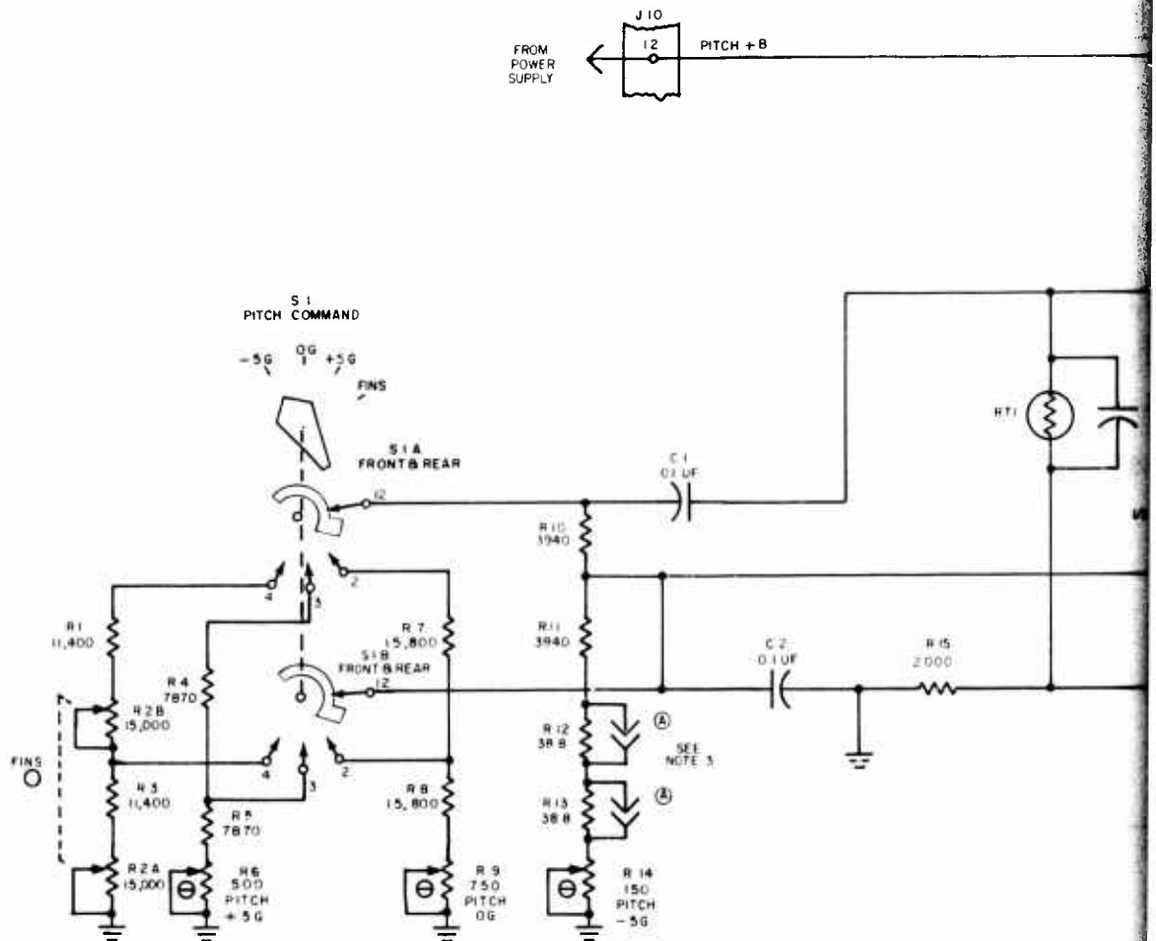
A

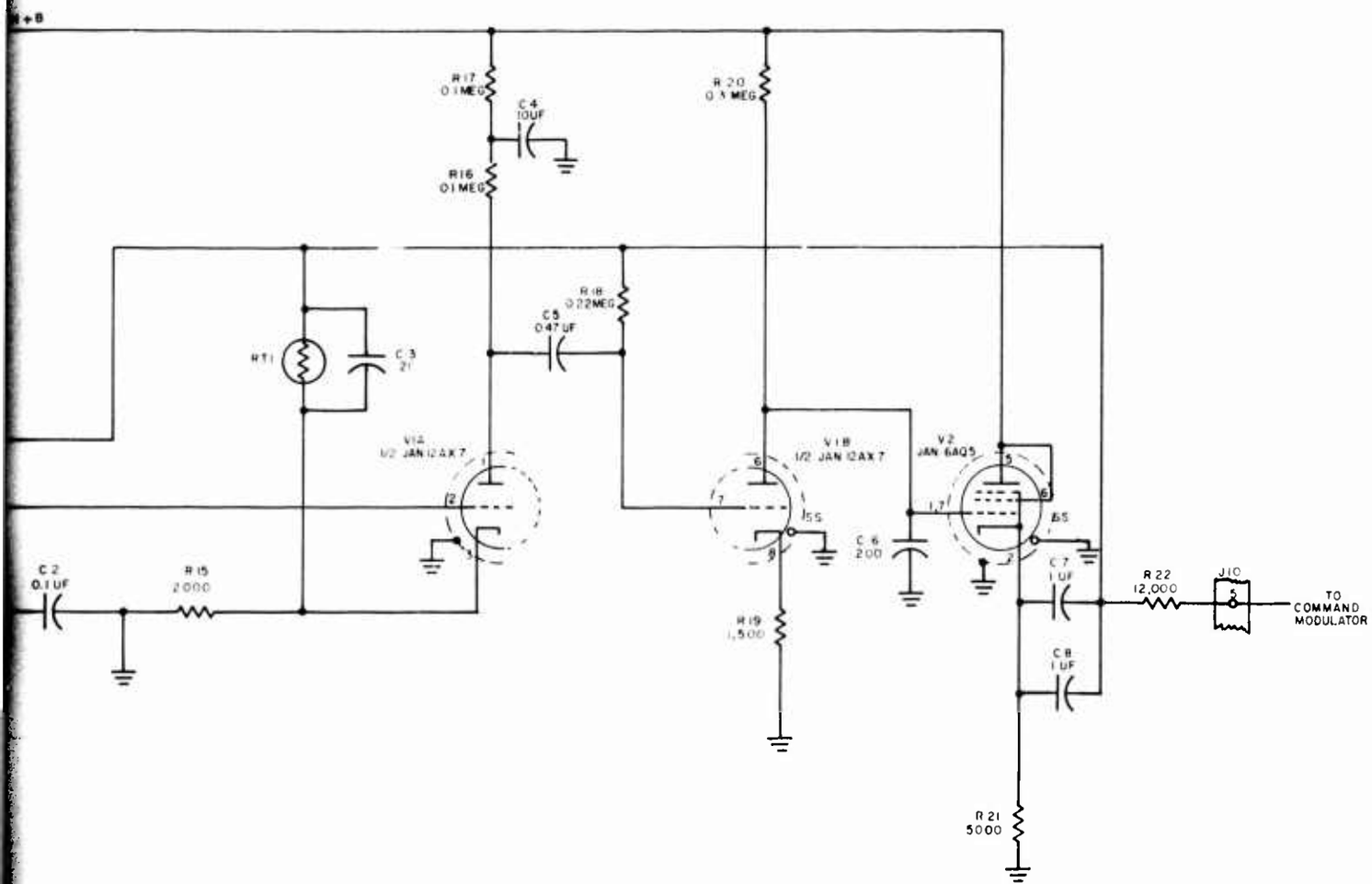
NOTES:

1. TERMINALS 1 3 6 7 8 9 10 AND 11 ON J10 ARE NOT USED.

SCREEN		CONTROL			CATHODE			FILAMENT		
LTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

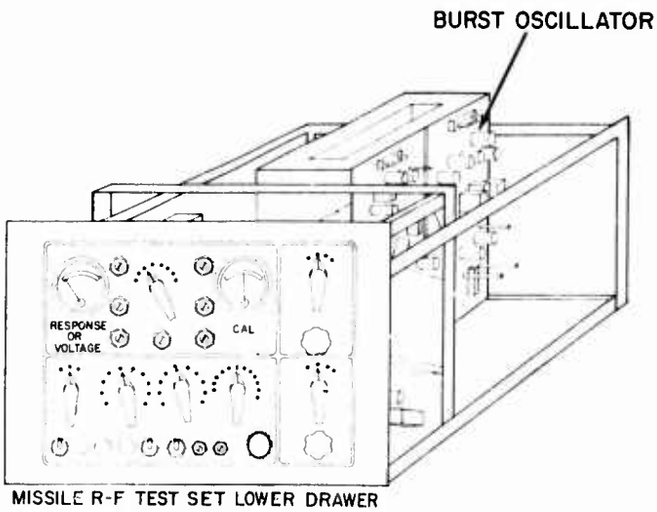
AVAILABLE


J 10
12
PITCH +8
FROM POWER SUPPLY
S 1
PITCH COMMAND
-5G
0G
+5G
FINS
S 1 A
FRONT & REAR
S 1 B
FRONT & REAR
C 1
0.1 UF
C 2
0.1 UF
R 1
11,400
R 2 A
15,000
R 2 B
15,000
R 3
11,400
R 4
7870
R 5
7870
R 6
500
PITCH
+5G
R 7
15,800
R 8
15,800
R 9
750
PITCH
0G
R 10
3940
R 11
3940
R 12
388
R 13
388
R 14
150
PITCH
-5G
R 15
2000
SEE NOTE 3
RT 1

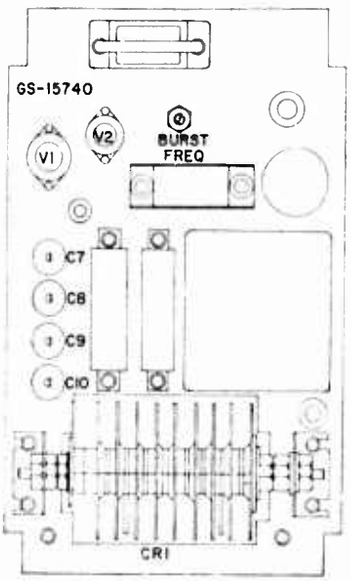


GS-15738 R-F TEST SET PITCH OSCILLATOR

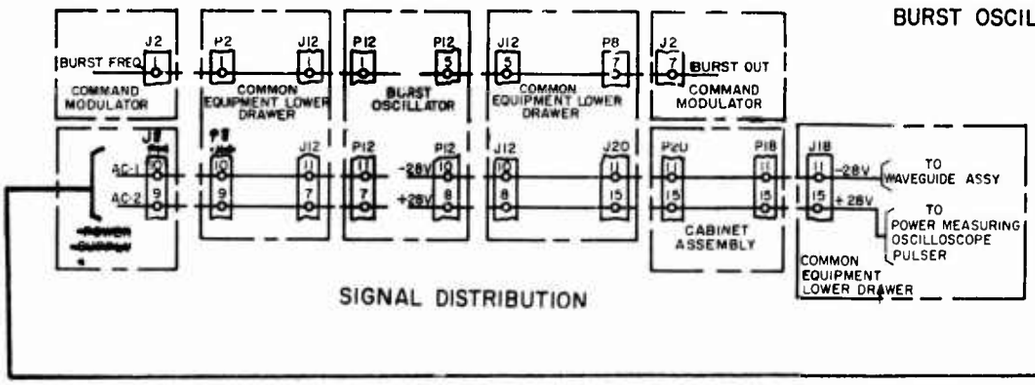
CONFIDENTIAL UNCLASSIFIED



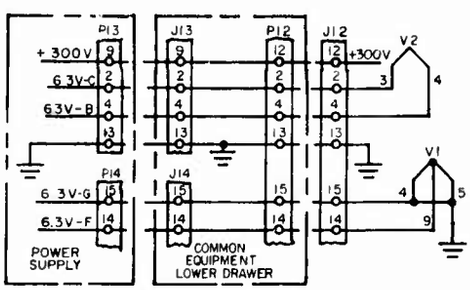
MISSILE R-F TEST SET LOWER DRAWER



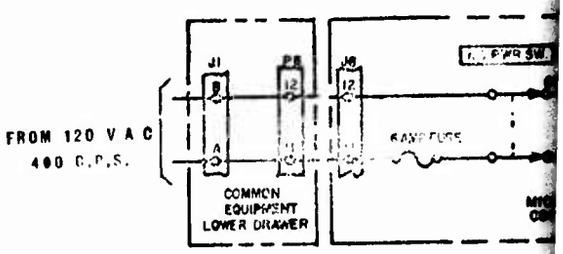
BURST OSCILLATOR SIDE VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION



GS-15740 R-F TEST SET BURST OSCILLATOR, NOTES

CONFIDENTIAL

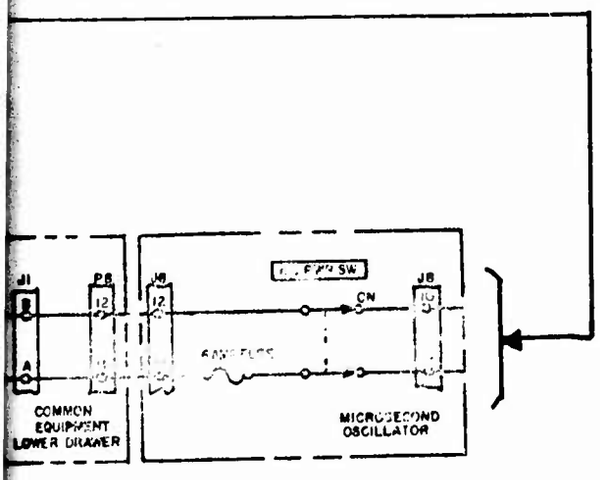
A

UNCLASSIFIED

NOTE:

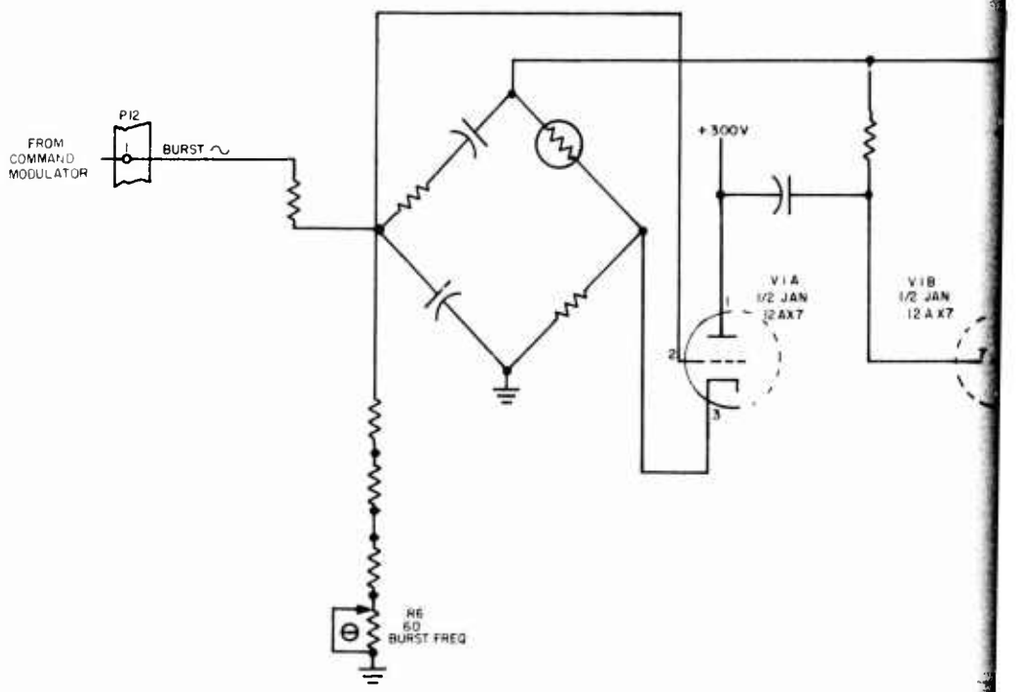
1. TERMINALS 3,6, AND 9 ON P12 ARE NOT USED.

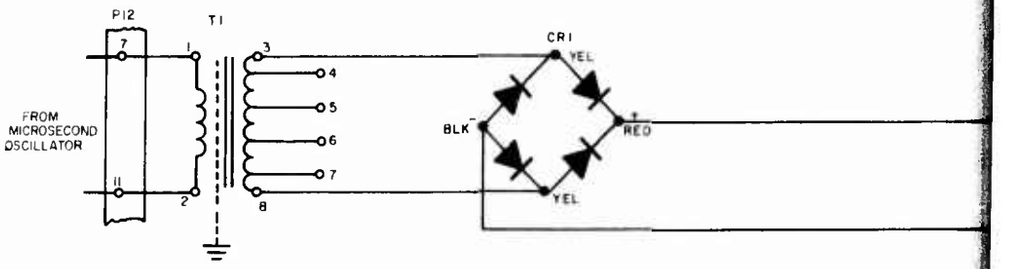
E VIEW

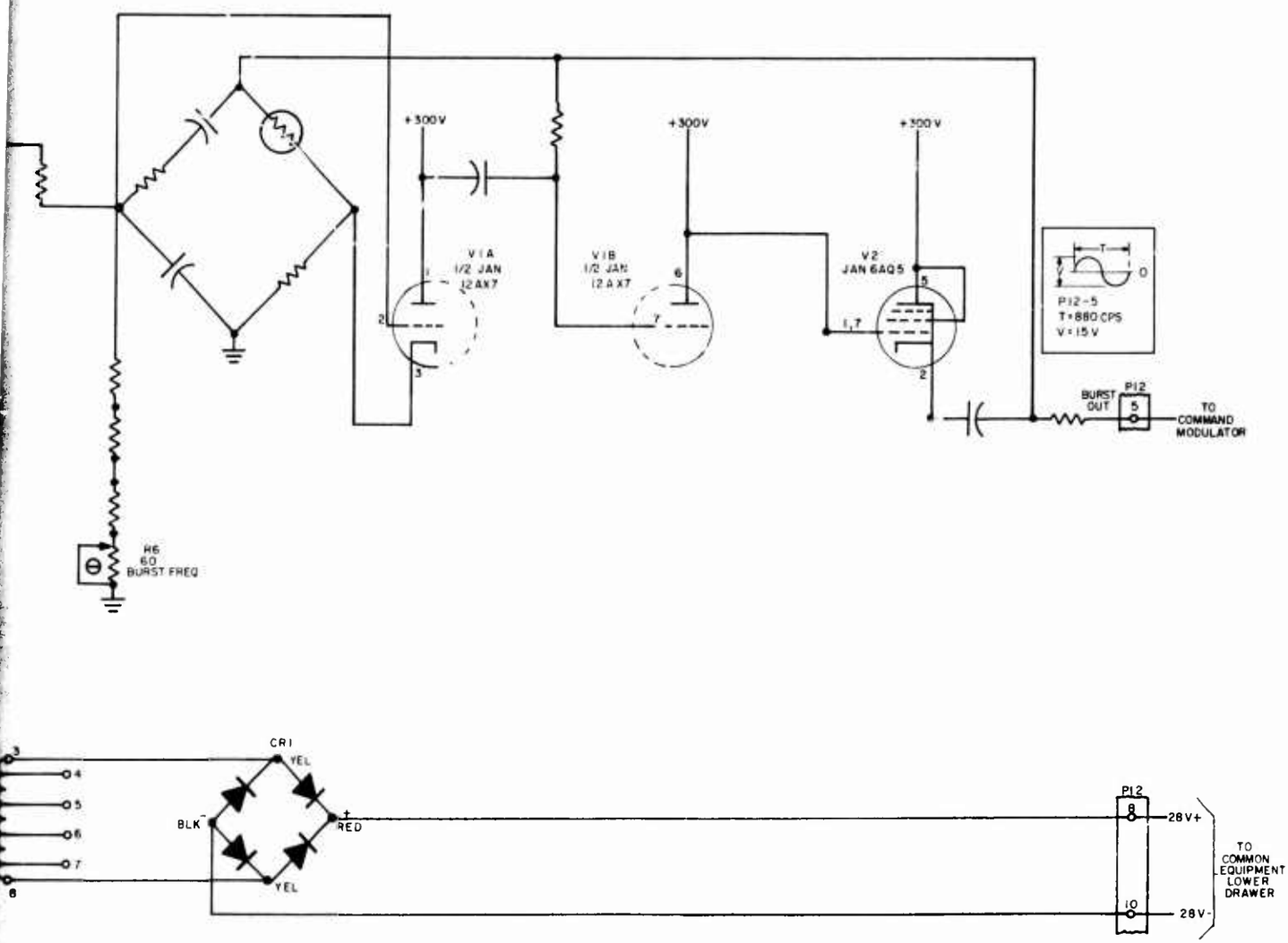


[redacted]

B


P12
FROM COMMAND MODULATOR
BURST
+300V
V1A 1/2 JAN 12AX7
V1B 1/2 JAN 12AX7
R6 60 BURST FREQ


P12
T1
FROM MICROSECOND OSCILLATOR
CR1
YEL
BLK
RED
YEL



R-F TEST SET BURST OSCILLATOR SIMPLIFIED SCHEMATIC

UNCLASSIFIED
[redacted]

MEASUREMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN			CONTROL		
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHM

THIS DATA NOT AVAILABLE

R-F TEST SET BURST OSCILLATOR, NOTES

[redacted]

A

[redacted]

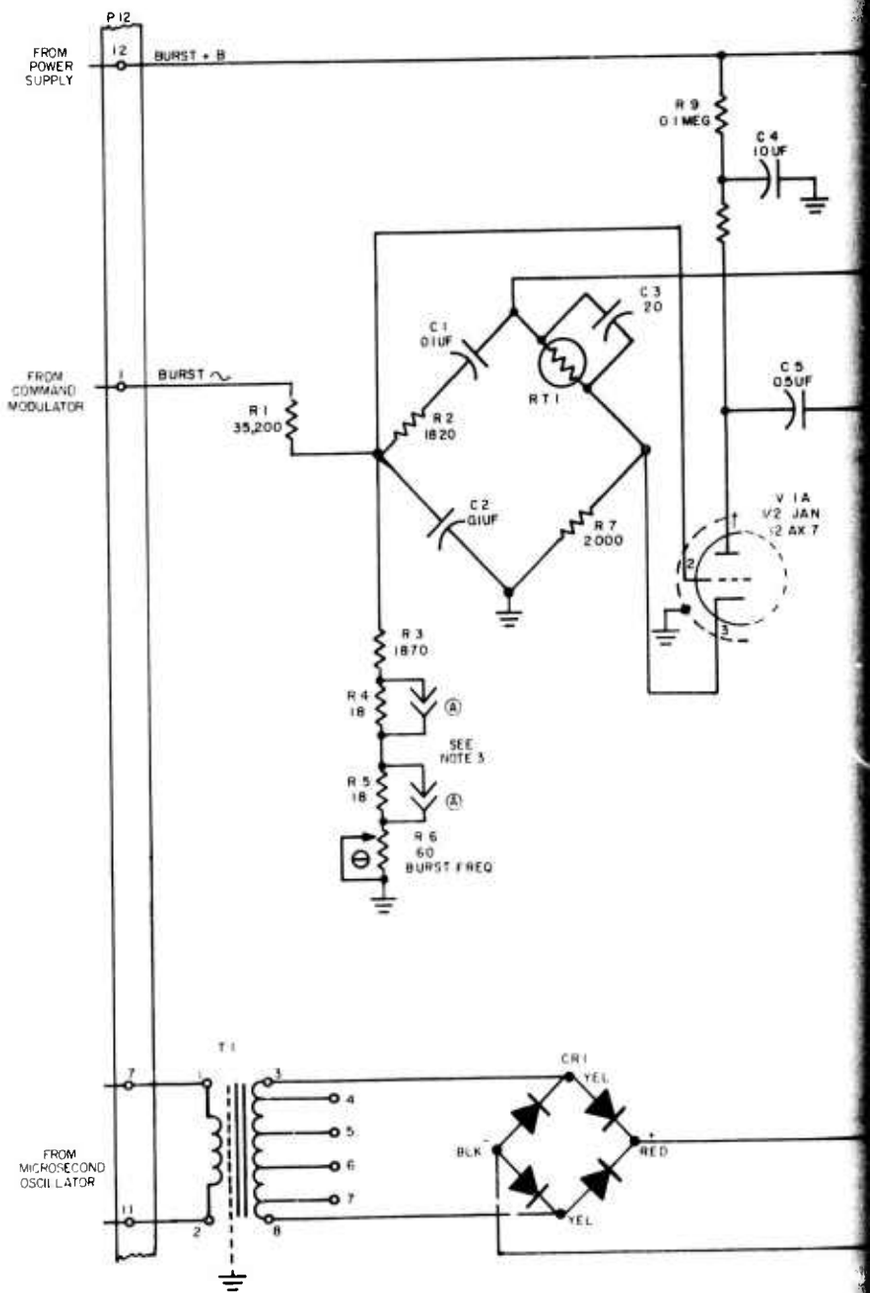
NOTES:
1. TERMINALS 3689 ON P12 ARE NOT USED.

	SCREEN			CONTROL			CATHODE			FILAMENT		
	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

A NOT AVAILABLE

[redacted]

[redacted]



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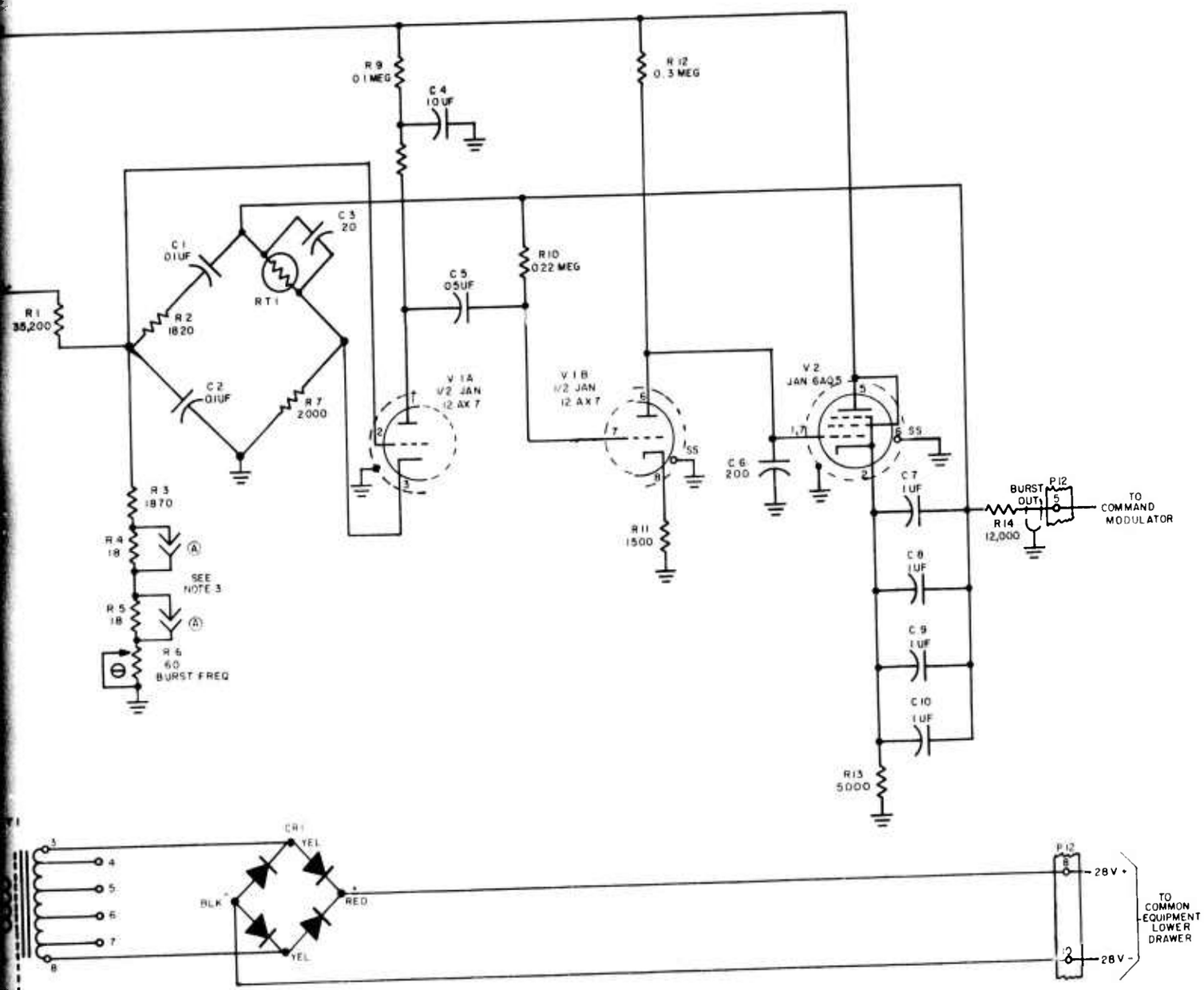
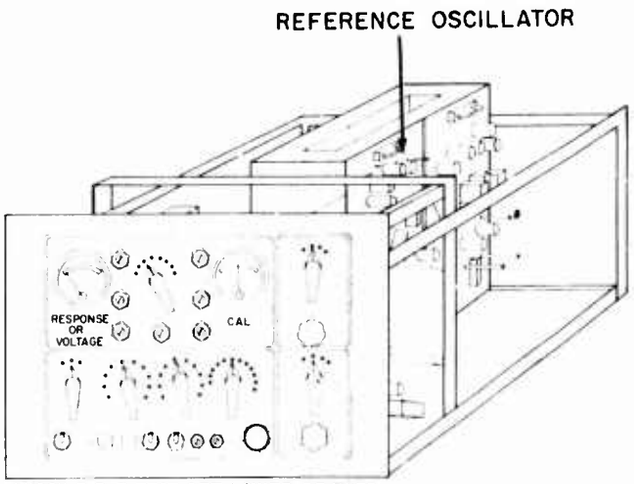
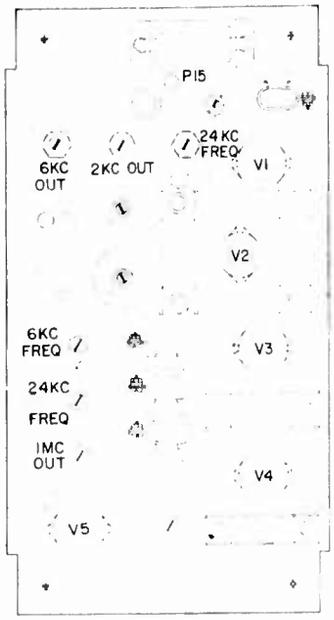


GS-15740 R-F TEST SET BURST OSCILLATOR

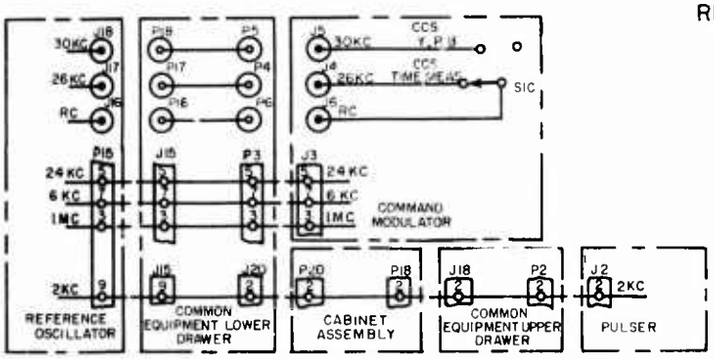
UNCLASSIFIED
[redacted]



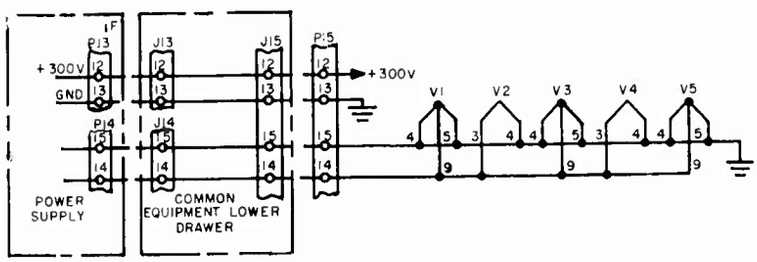
MISSILE R-F TEST SET LOWER DRAWER



REFERENCE OSCILLATOR SIDE VIEW



SIGNAL DISTRIBUTION



GS-15742 R-F TEST SET REFERENCE OSCILLATOR, NOTES

[redacted]

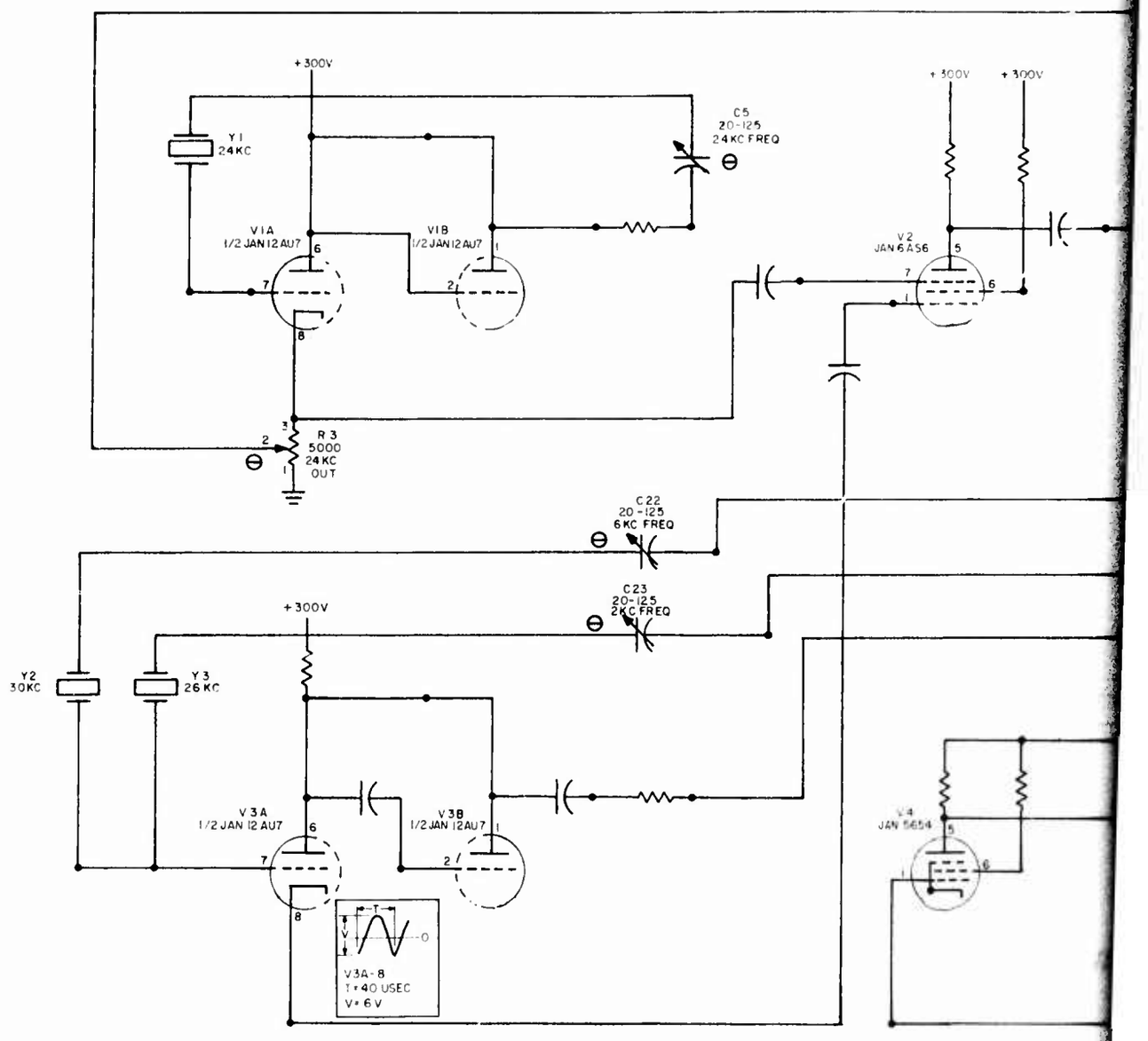
A

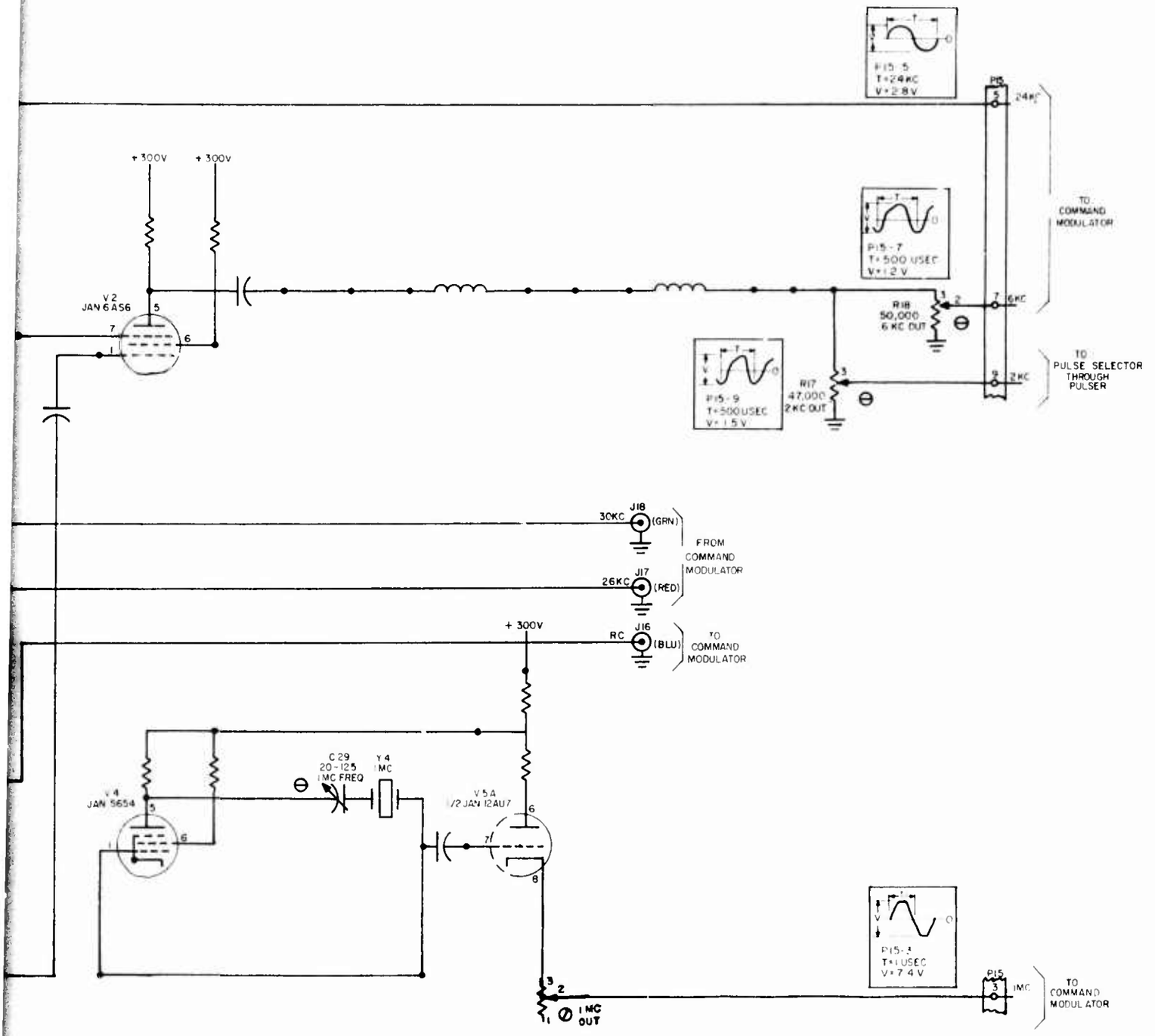
OR SIDE VIEW

NOTE:

1. TERMINALS 1,2,4,6,8,10 AND 11 ON P15 ARE NOT USED.
2. WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS.

SWITCH	POSITION
COMMAND CAL	MEAS


+300V
Y1
24KC
C5
20-125
24KC FREQ
V1A
1/2 JAN 12AU7
V1B
1/2 JAN 12AU7
+300V
+300V
V2
JAN 6AS6
R3
5000
24KC
OUT
C22
20-125
6KC FREQ
C23
20-125
2KC FREQ
+300V
Y2
30KC
Y3
26KC
V3A
1/2 JAN 12AU7
V3B
1/2 JAN 12AU7
V4
JAN 5654
V3A-8
T=40 USEC
V=6V



R-F TEST SET REFERENCE OSCILLATOR SIMPLIFIED SCHEMATIC

CONFIDENTIAL

MEASUREMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN			CONTROL		
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OH

THIS DATA NOT AVAILABLE

R-F TEST SET REFERENCE OSCILLATOR, NOTES

CONFIDENTIAL

NOTES

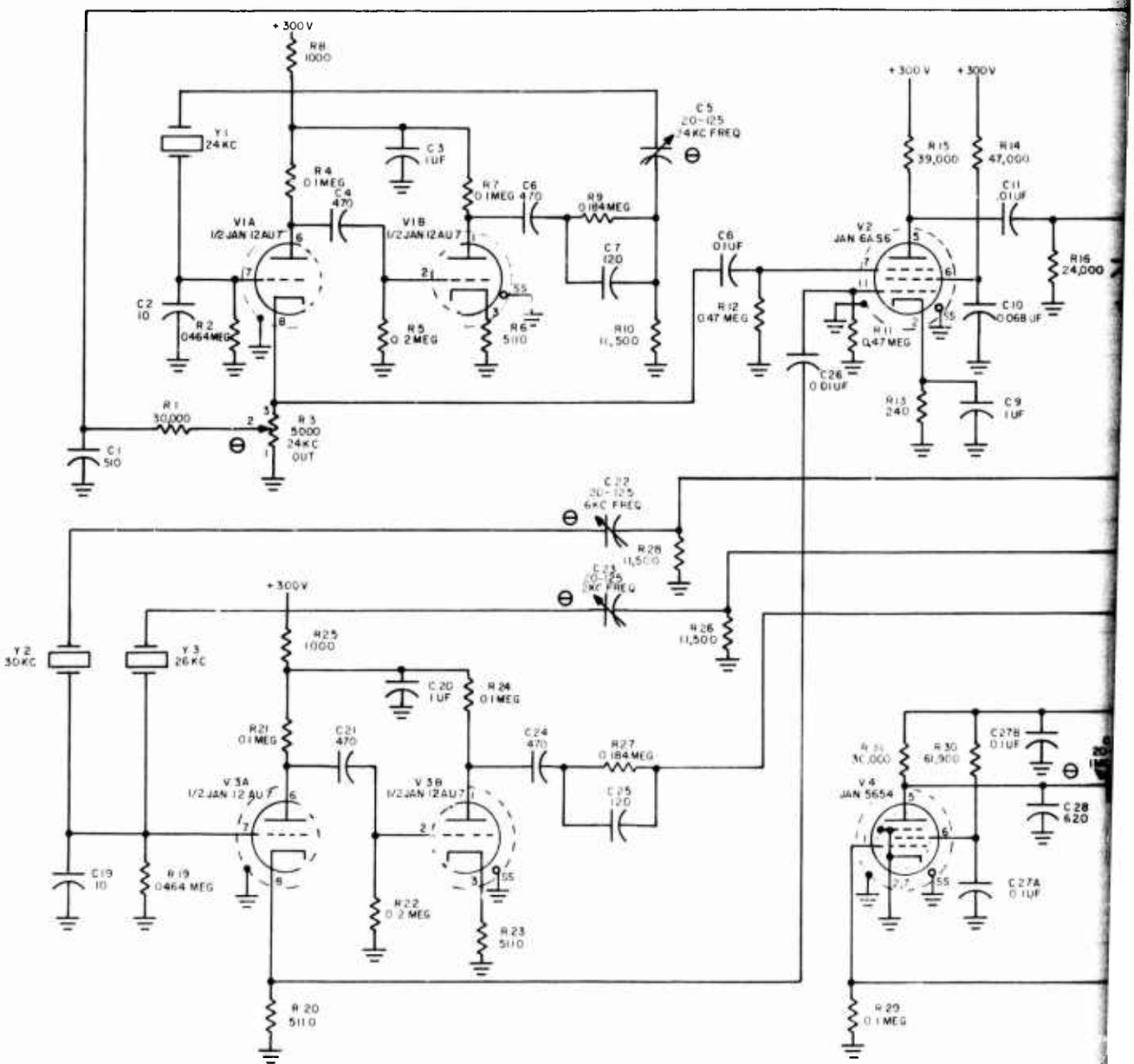
1 TERMINALS 1 2 4 6 8 10 AND 11 ON P15 ARE NOT USED.

SCREEN		CONTROL			CATHODE			FILAMENT		
VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

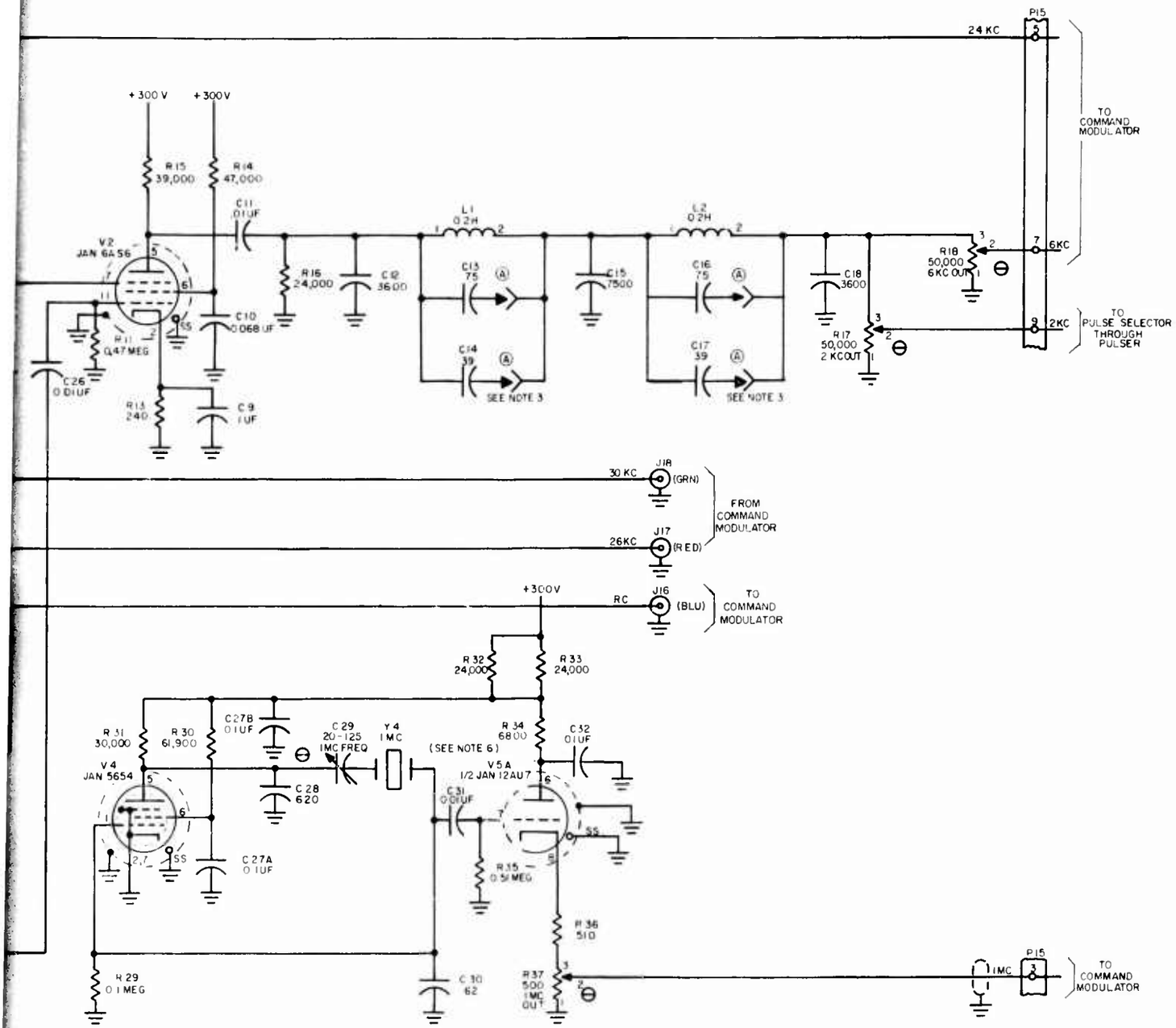
AVAILABLE

[redacted]

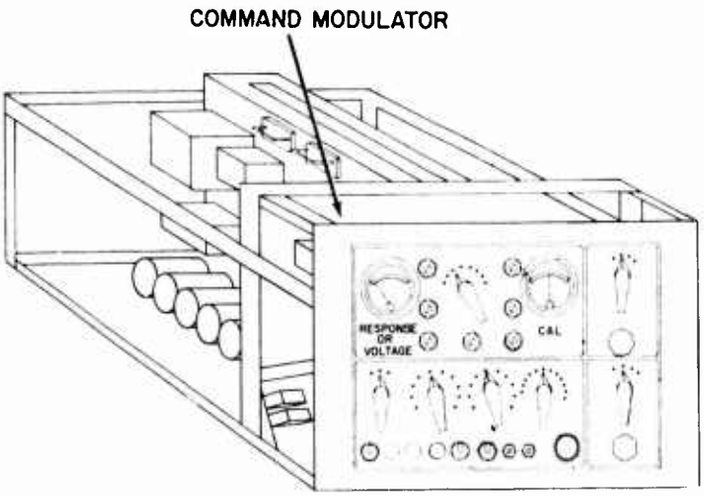
UNCLASSIFIED



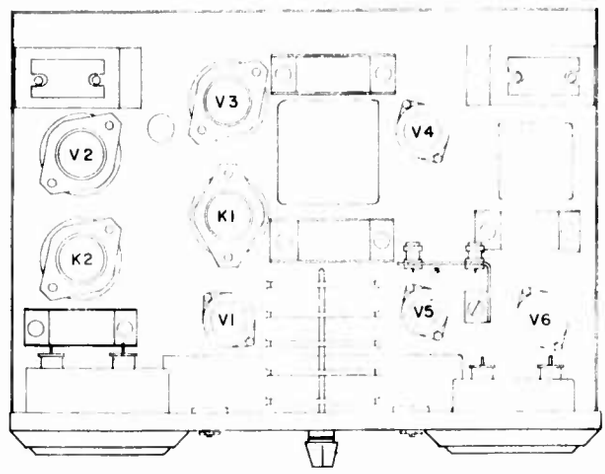
[redacted]



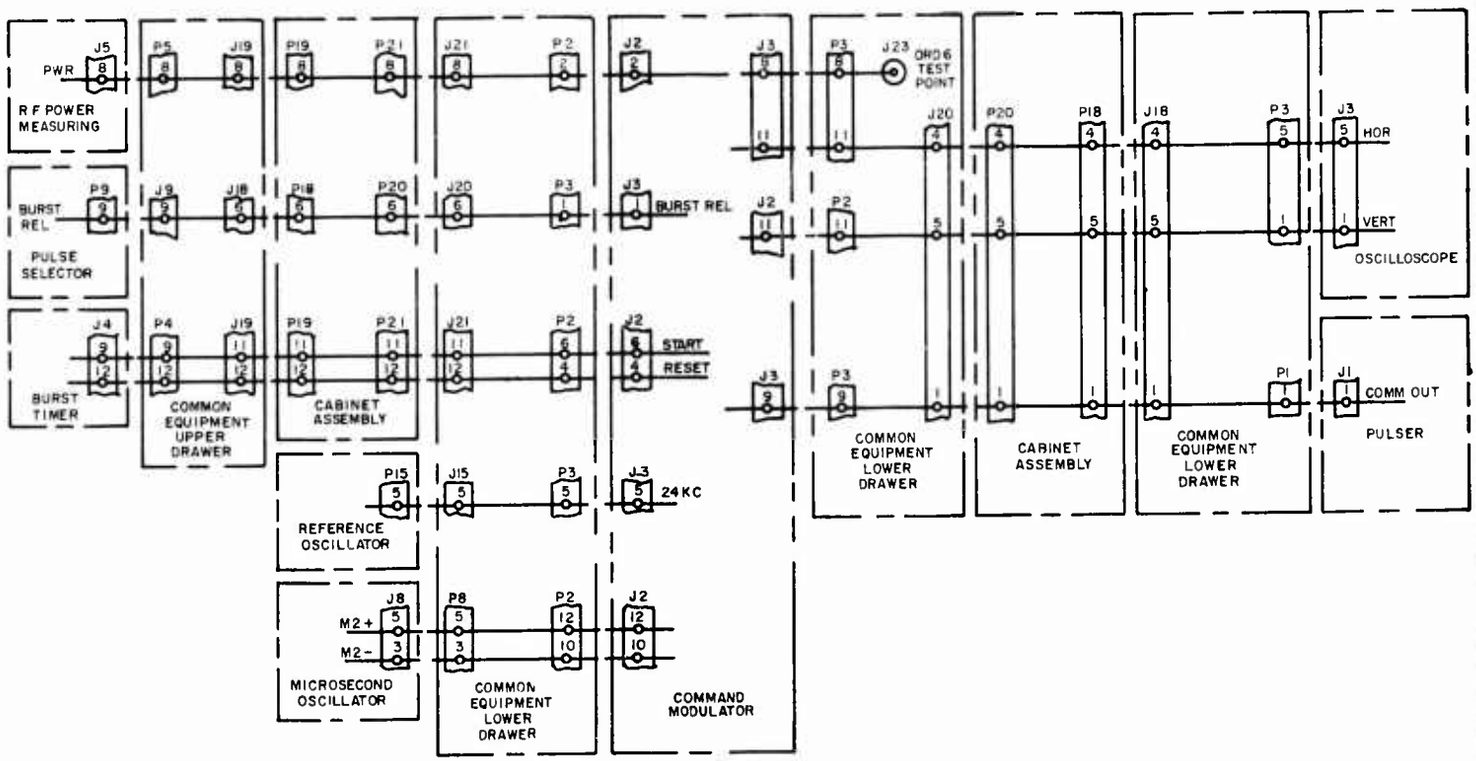
GS-15742 R-F TEST SET REFERENCE OSCILLATOR



MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW



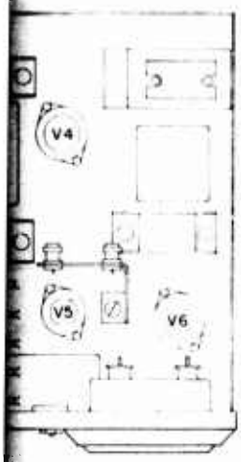
SIGNAL DISTRIBUTION

R-F TEST SET COMMAND MODULATOR ,NOTES (2000)

CONFIDENTIAL

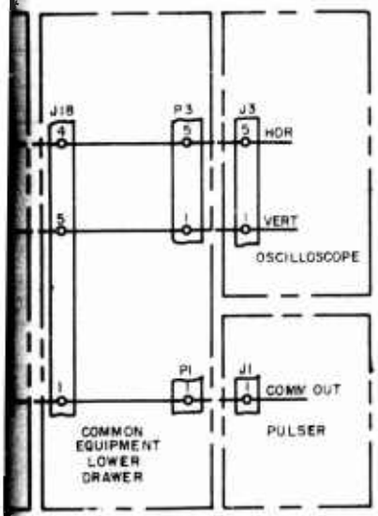
NOTES:

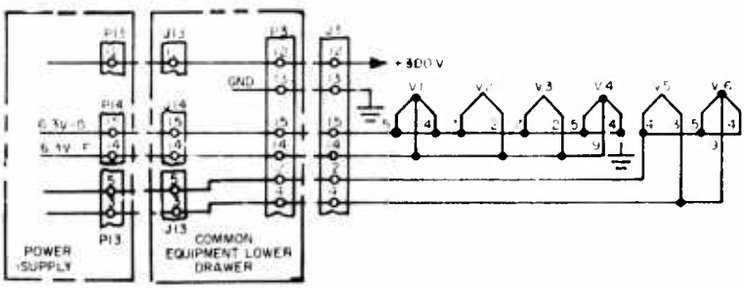
1. TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED.
2. TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY.



TOP VIEW

S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-18	2-4, 11-13	5-19, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6, 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-12	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-8, 12-13	11-17	5-9, 14-16-17		1-3-18, 9-10





POWER DISTRIBUTION

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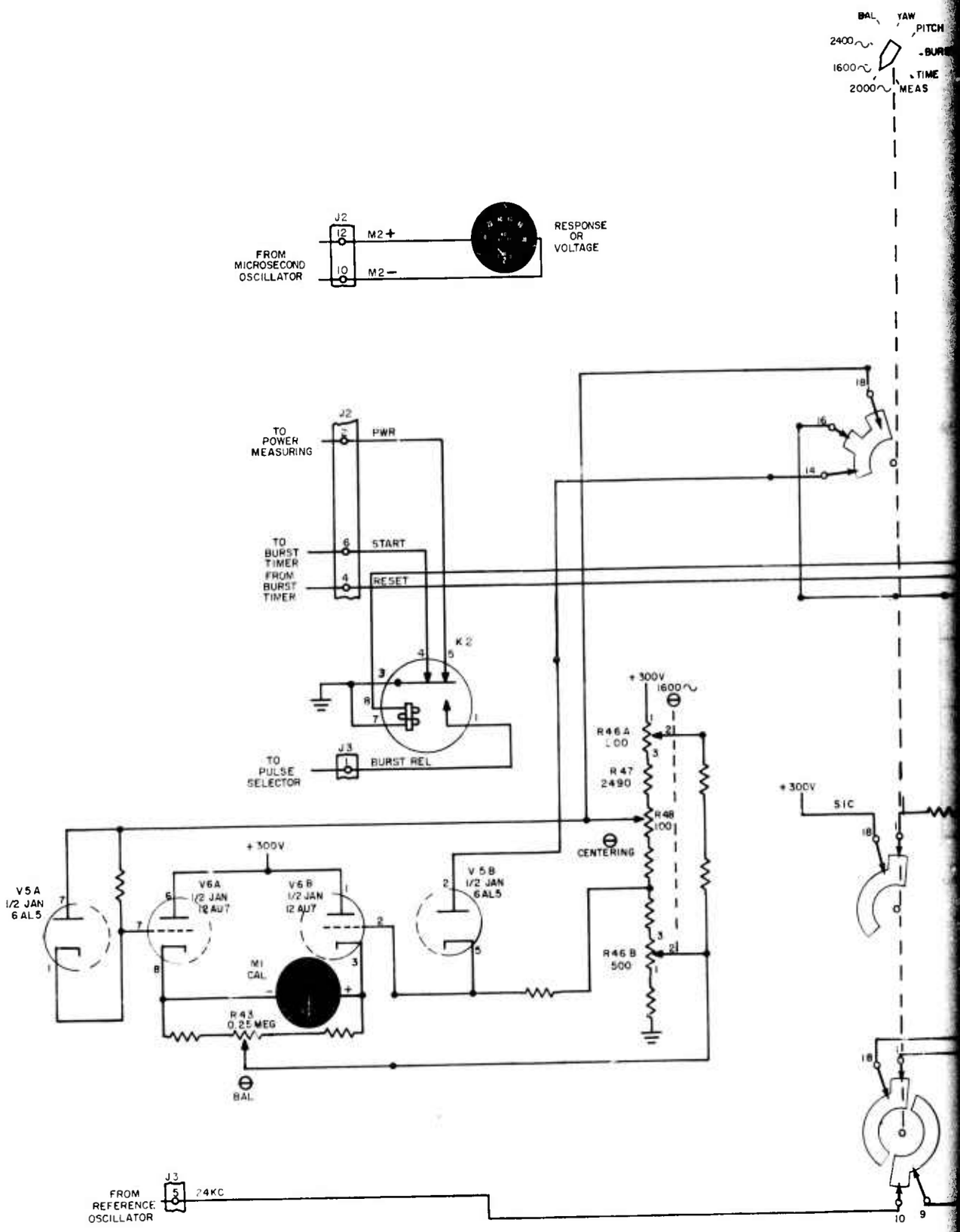

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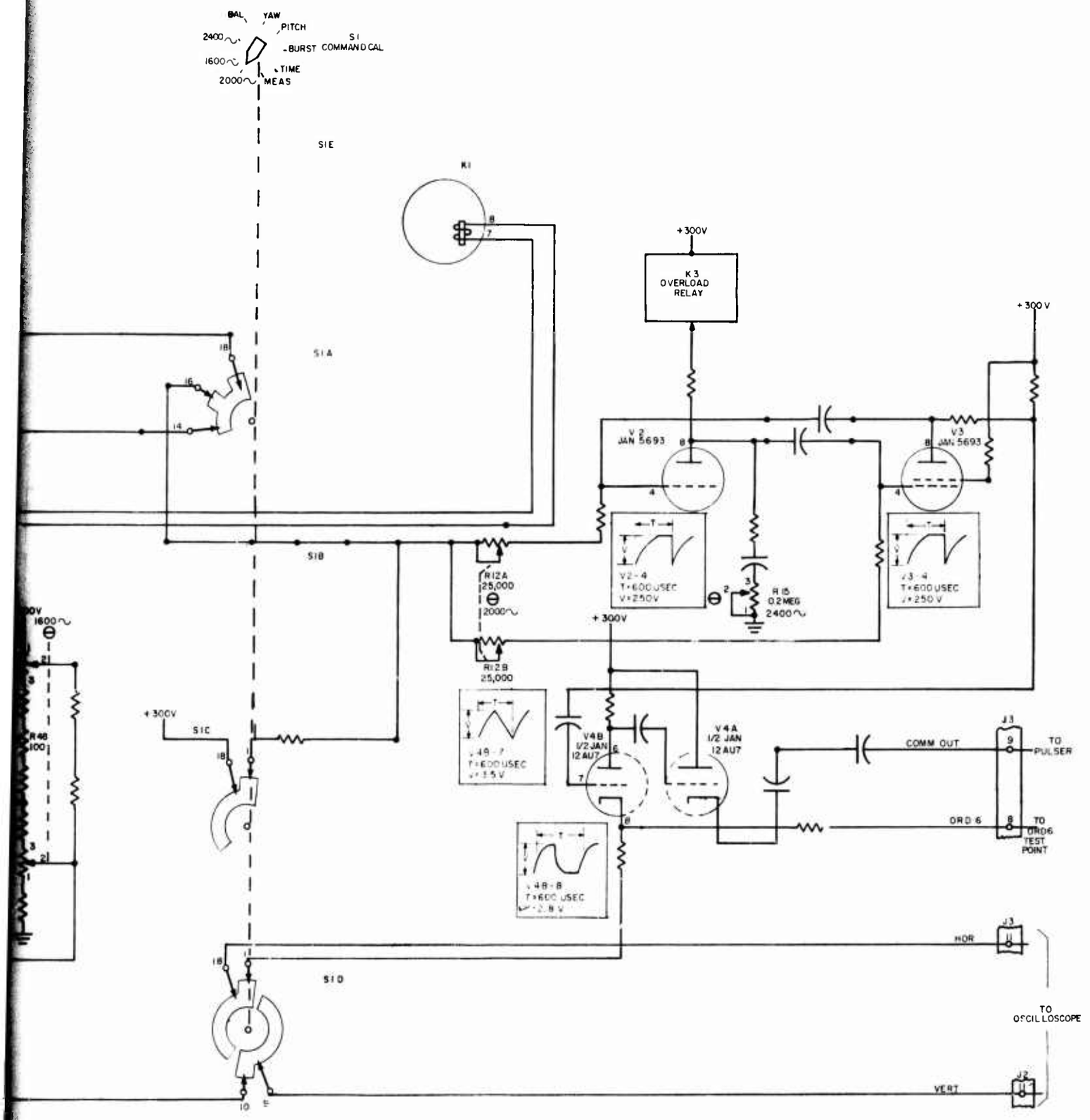
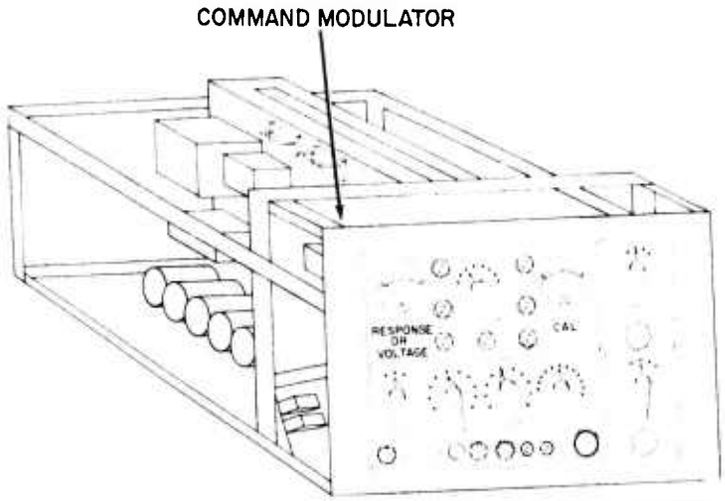
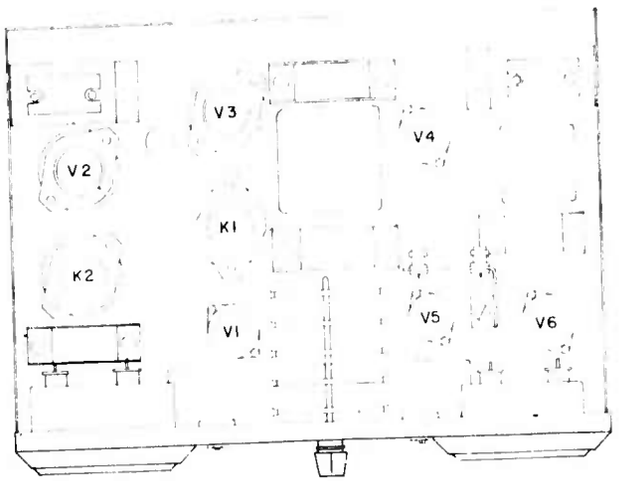
A



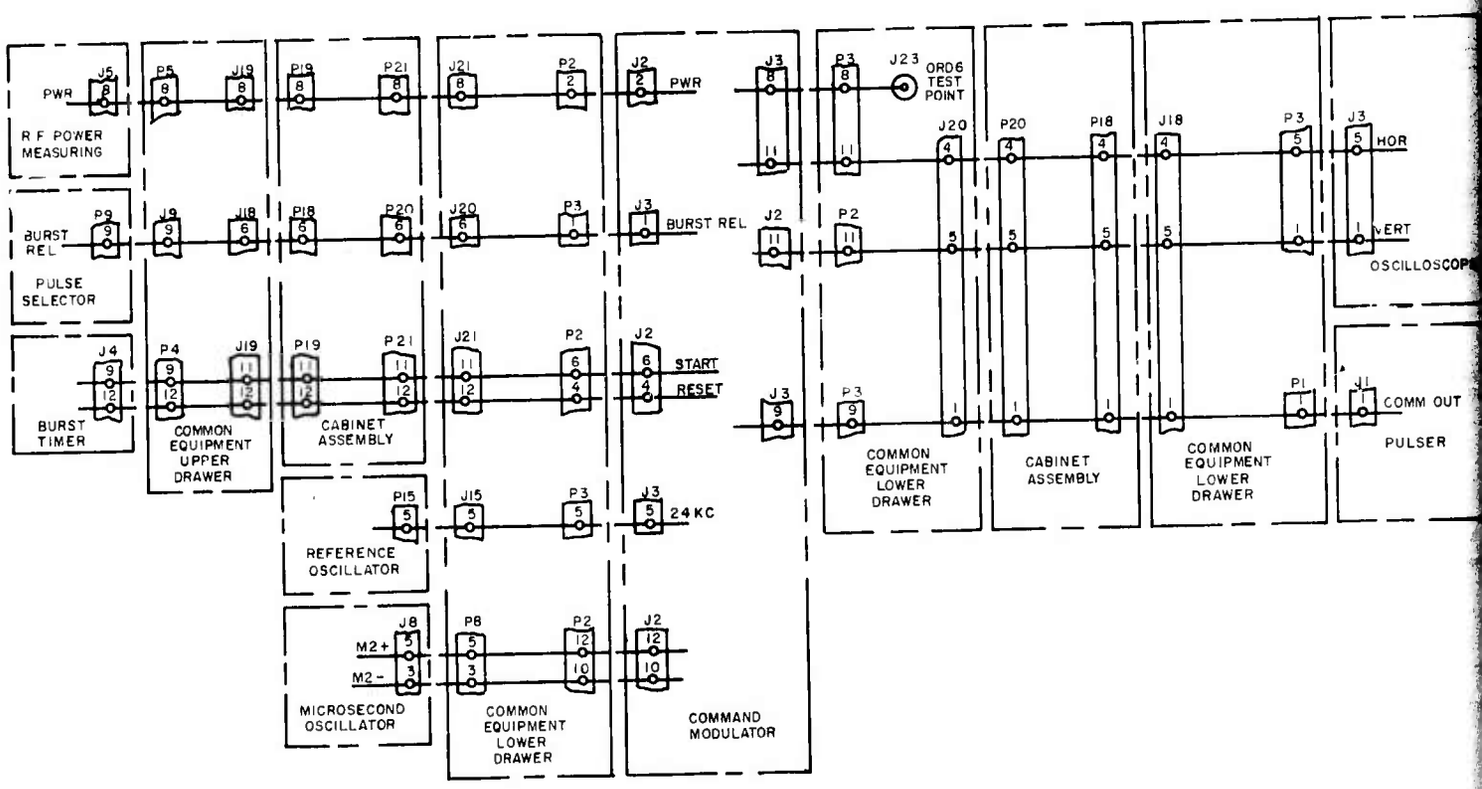
R-F TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC (2000~)



MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW



SIGNAL DISTRIBUTION

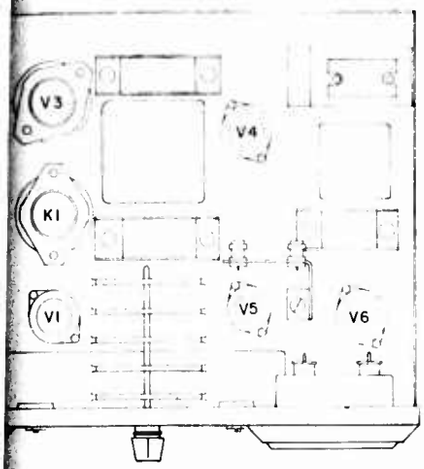
R-F TEST SET COMMAND MODULATOR NOTES, (1600)

[redacted]

4

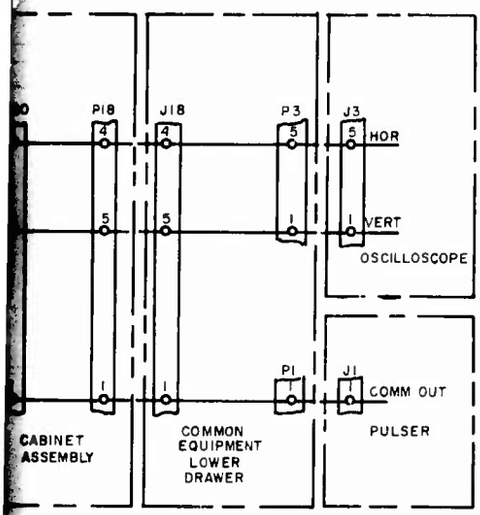
NOTES:

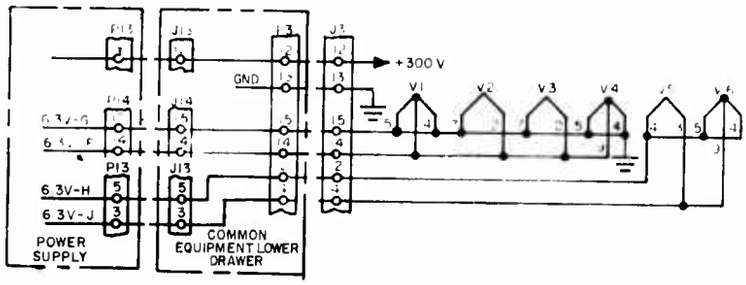
1. TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED.
2. TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY.



AND MODULATOR TOP VIEW

S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-18	2-4, 11-13	5-15, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6, 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-17	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-9, 12-13	11-17	5-9, 14-16-17		3-18, 9-10





POWER DISTRIBUTION

UNCLASSIFIED

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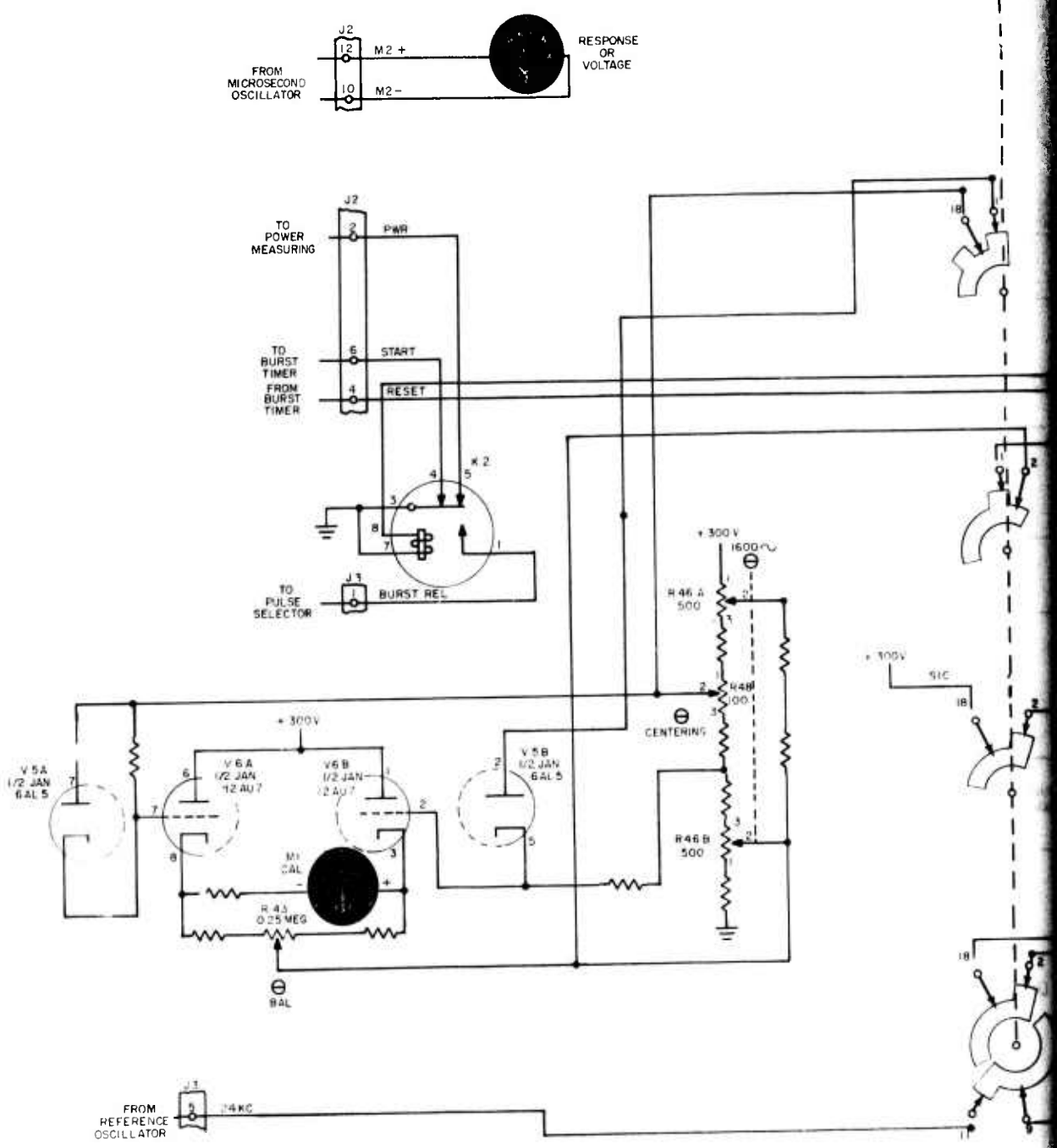
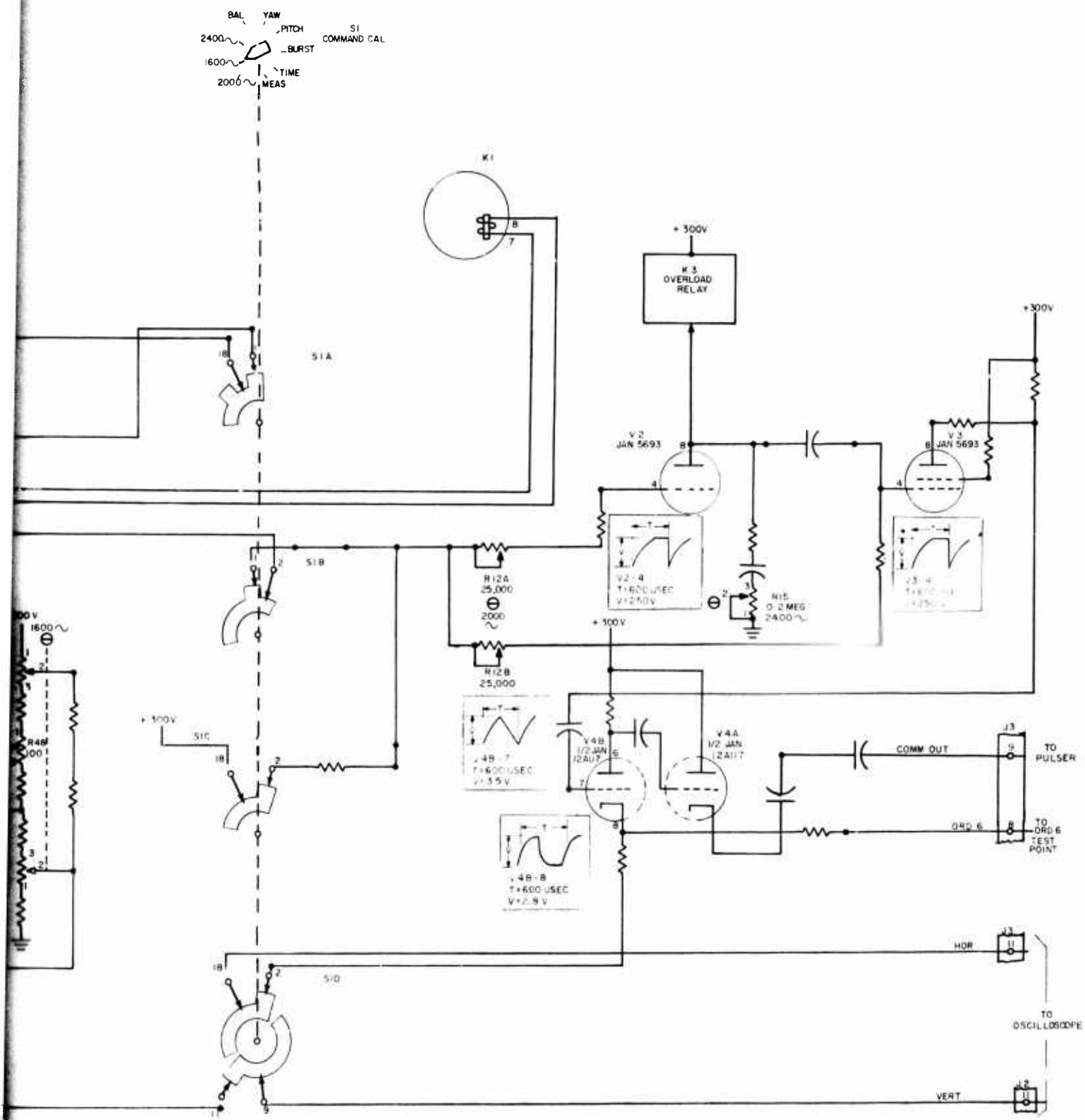


[redacted]

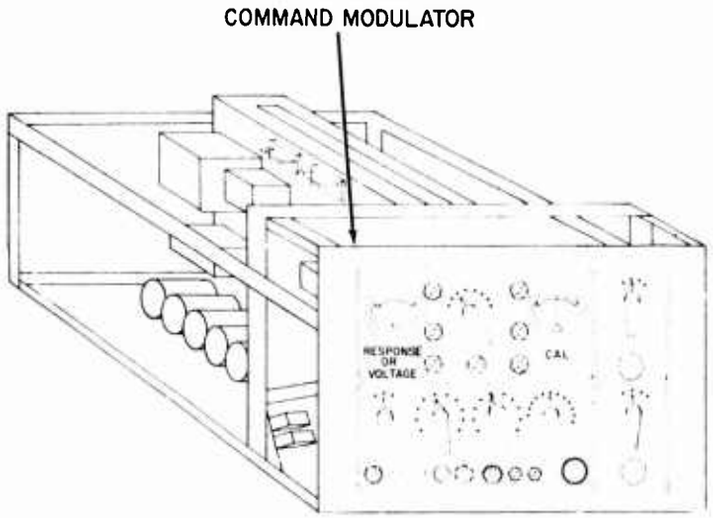
A



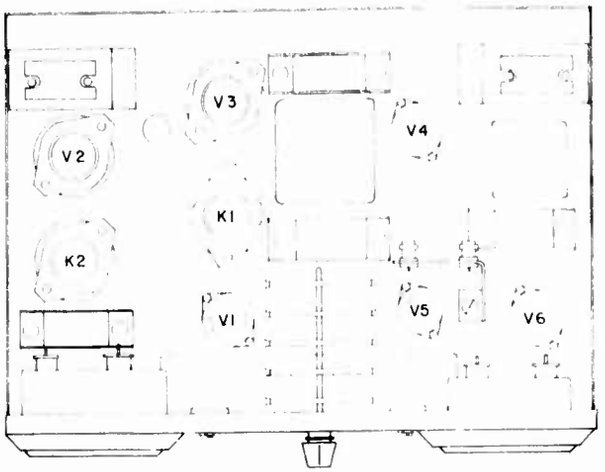
R-F TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC
(1600~)

[redacted]

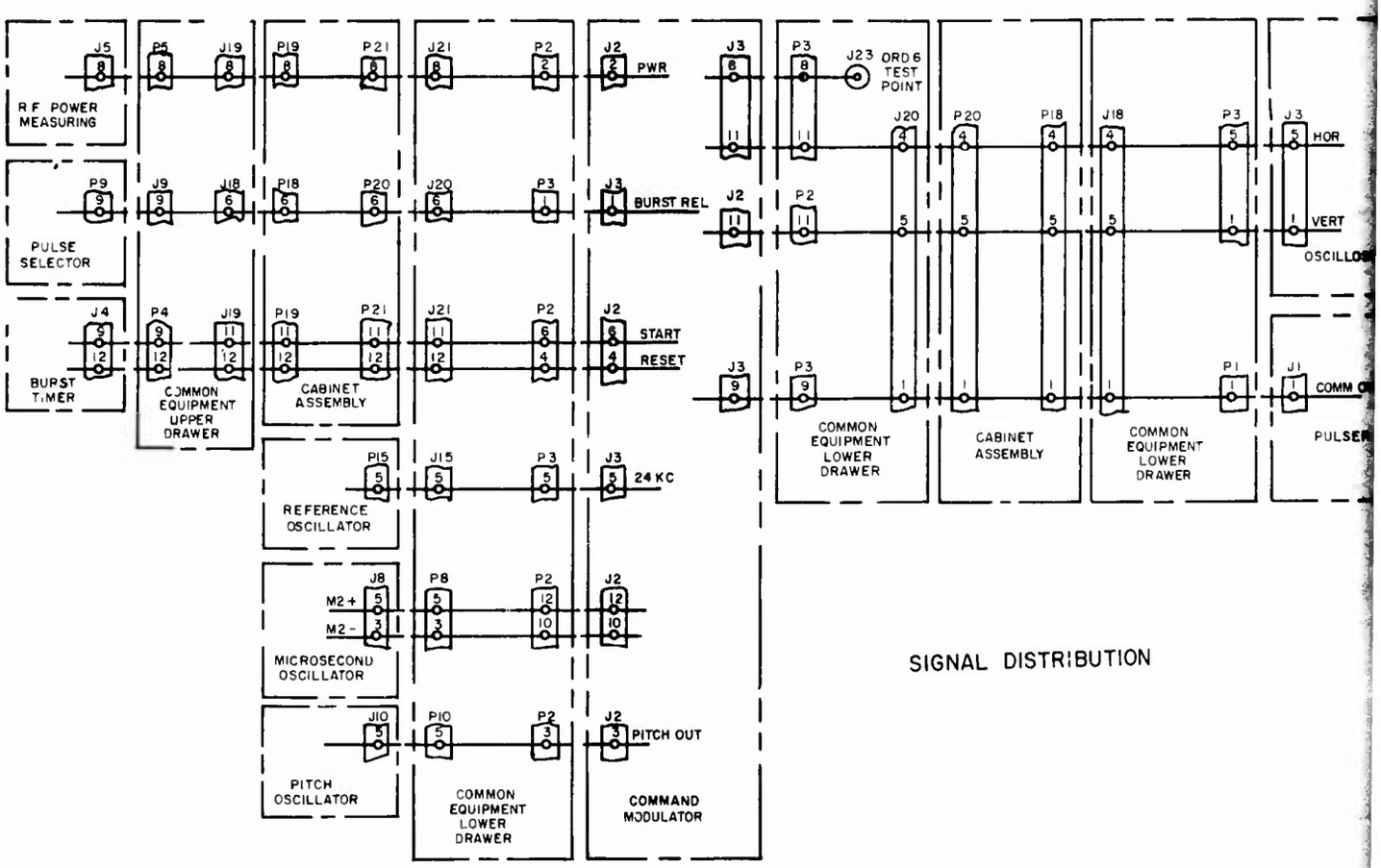
UNCLASSIFIED



MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW



SIGNAL DISTRIBUTION

R-F TEST SET COMMAND MODULATOR , NOTES (2400)

[redacted]

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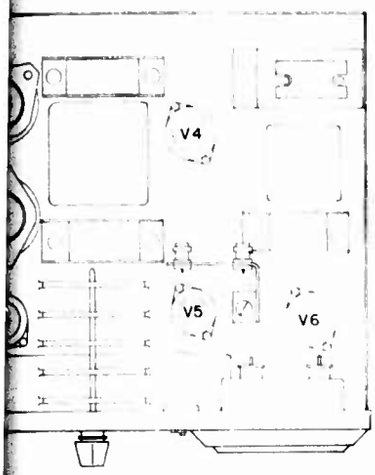
SIFIED

NOTES:

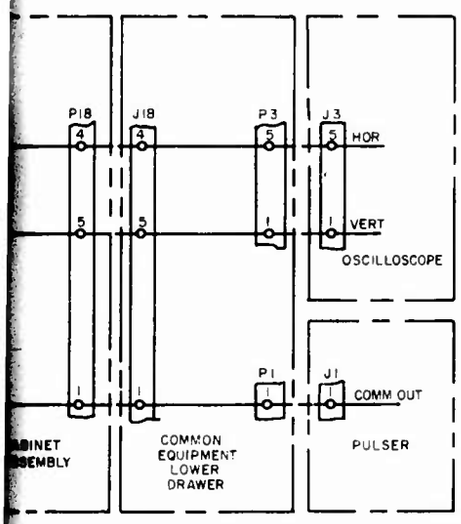
1. TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED.
2. TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY



MODULATOR TOP VIEW

S1 SWITCH CONNECTION

POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-18	2-4, 11-13	5-18, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-13	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-9, 12-13	11-17	5-9, 14-16-17		3-18, 9-10



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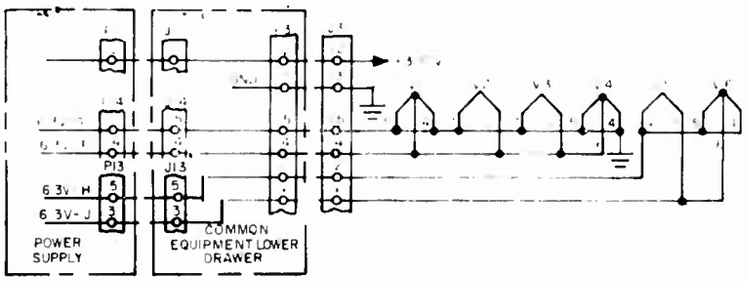

POWER DISTRIBUTION

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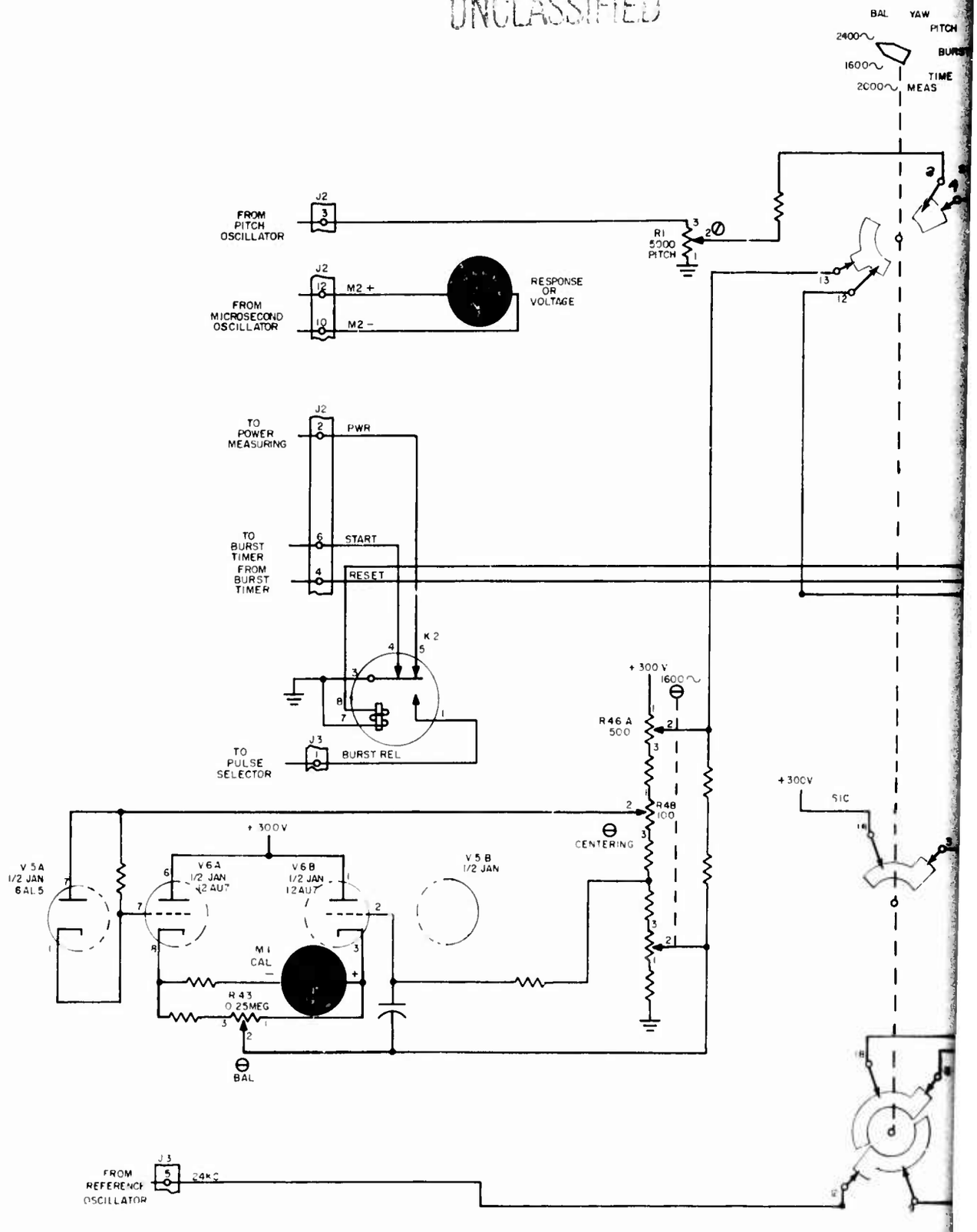

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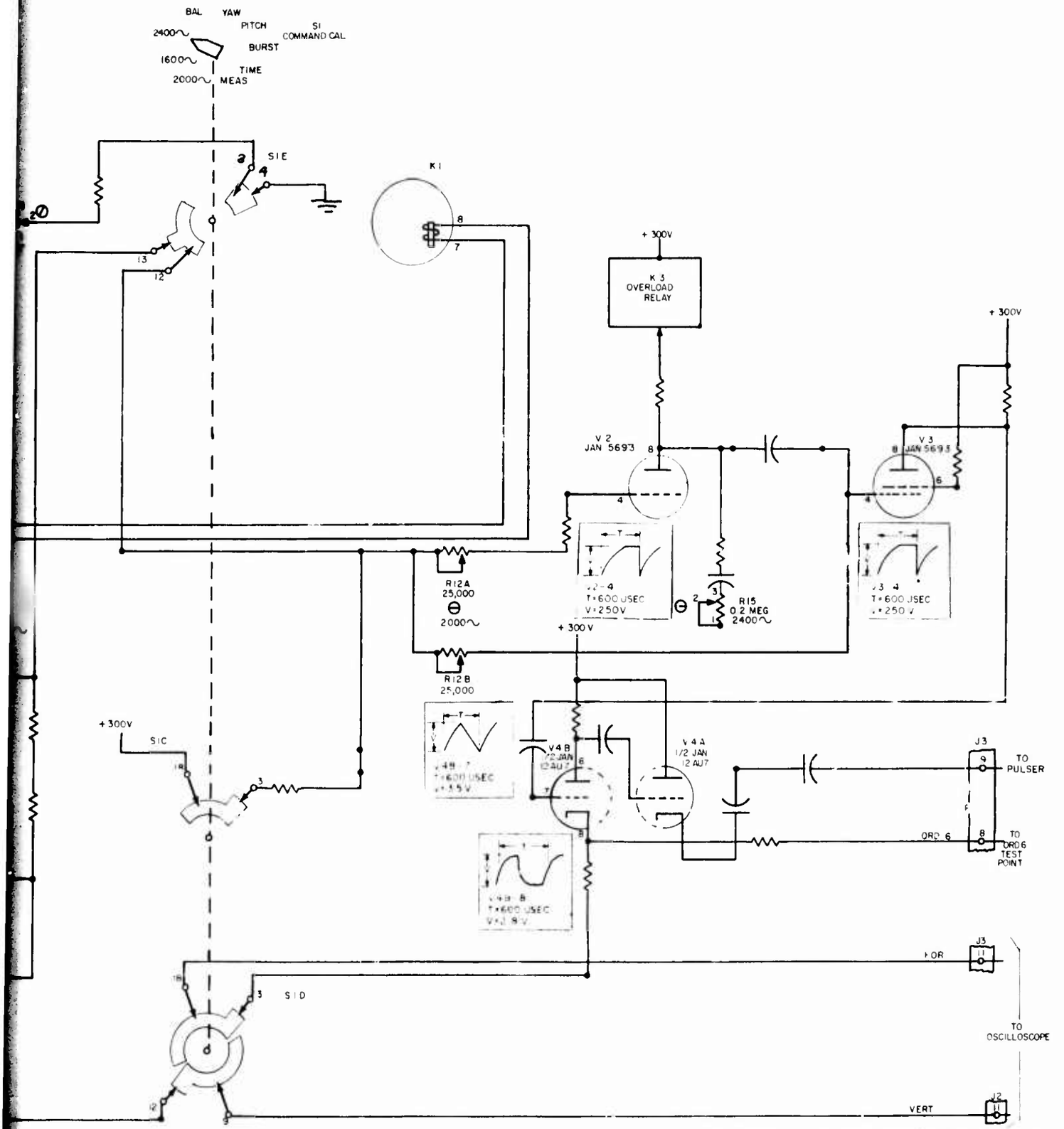

R-F TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC (2400~)

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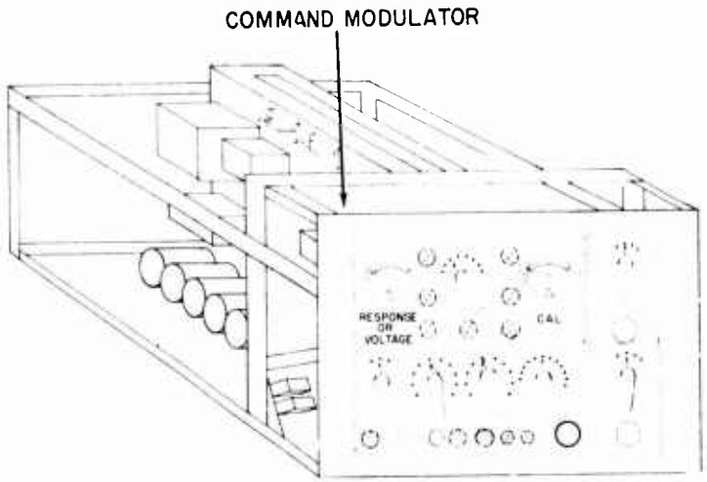
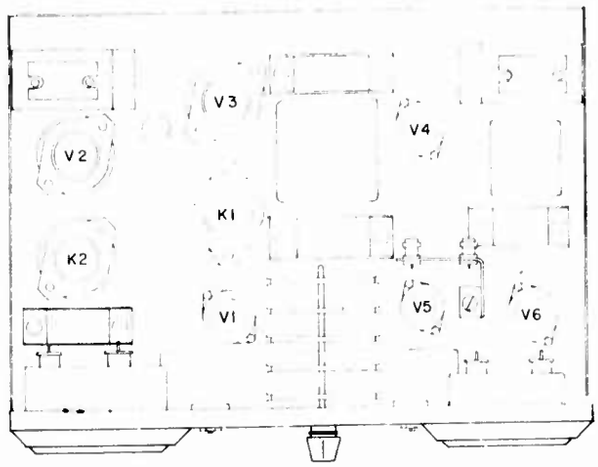
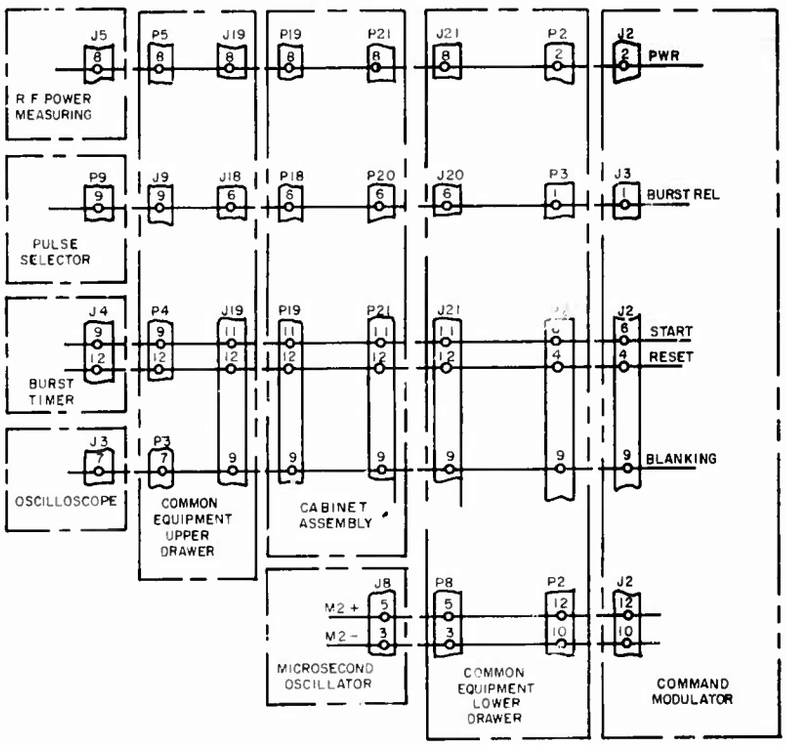


MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW



R-F TEST SET COMMAND MODULATOR, NOTES (BAL)

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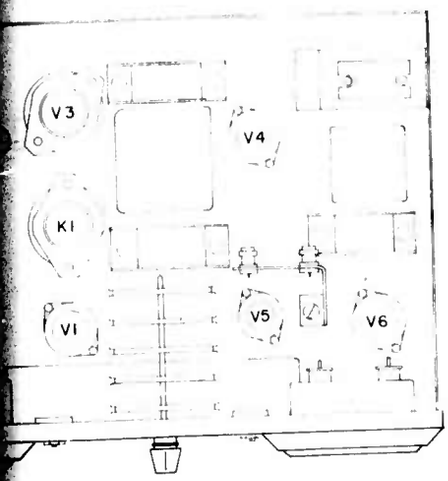
SSIFIED

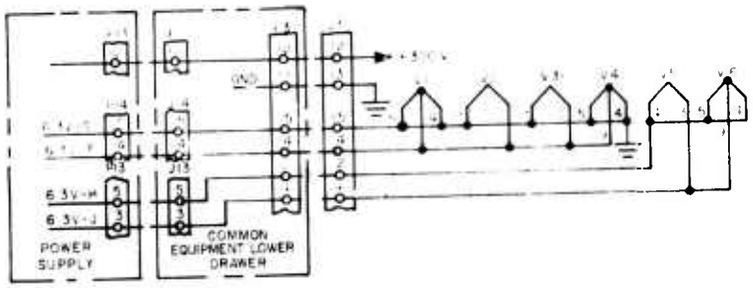
NOTES.

1. TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED.
2. TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY.



MMAND MODULATOR TOP VIEW

S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-18	2-4, 11-13	5-18, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6, 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-12	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-8, 12-13	11-17	5-9, 14-16-17		1-3-18, 9-10



POWER DISTRIBUTION

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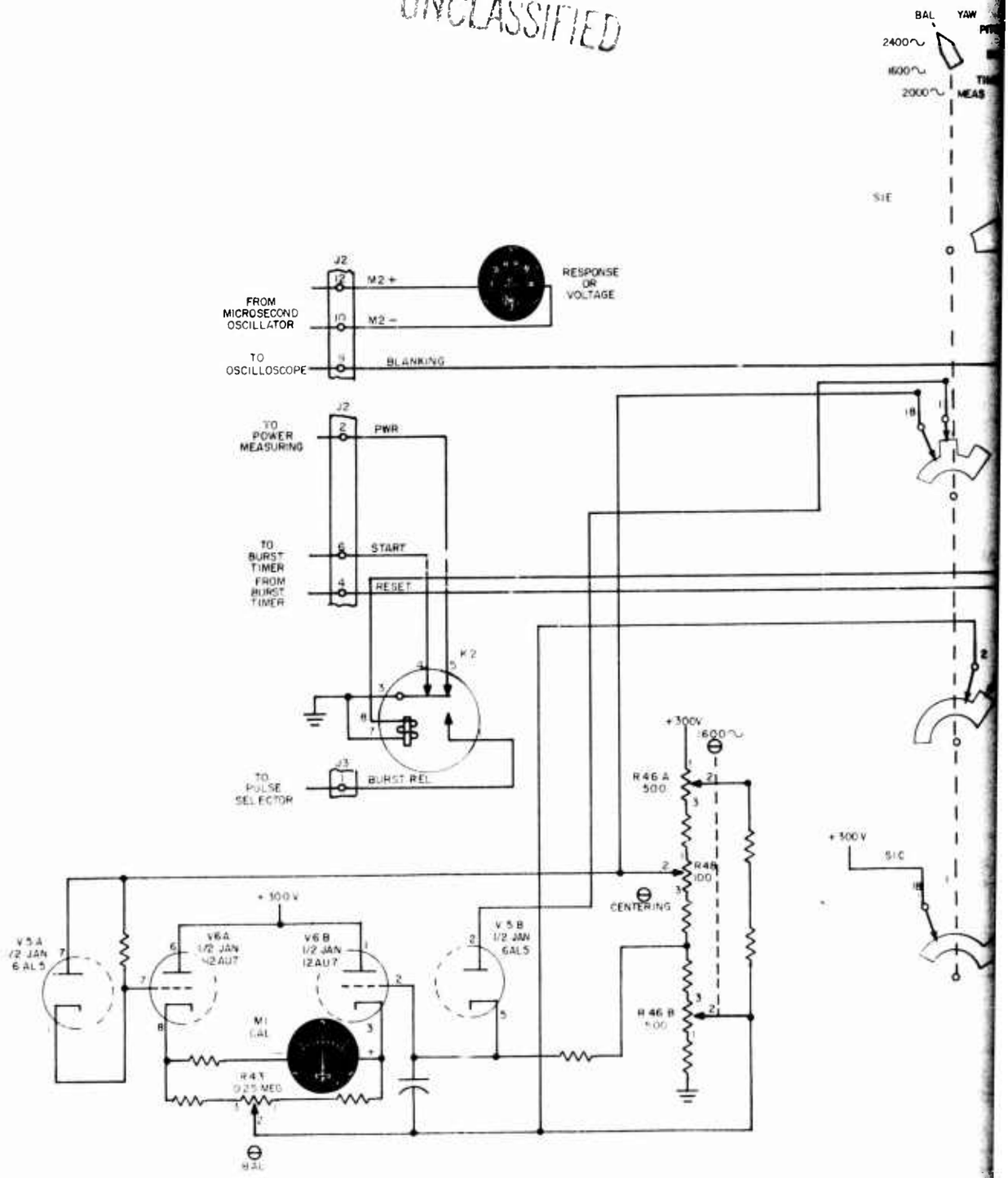
UNCLASSIFIED



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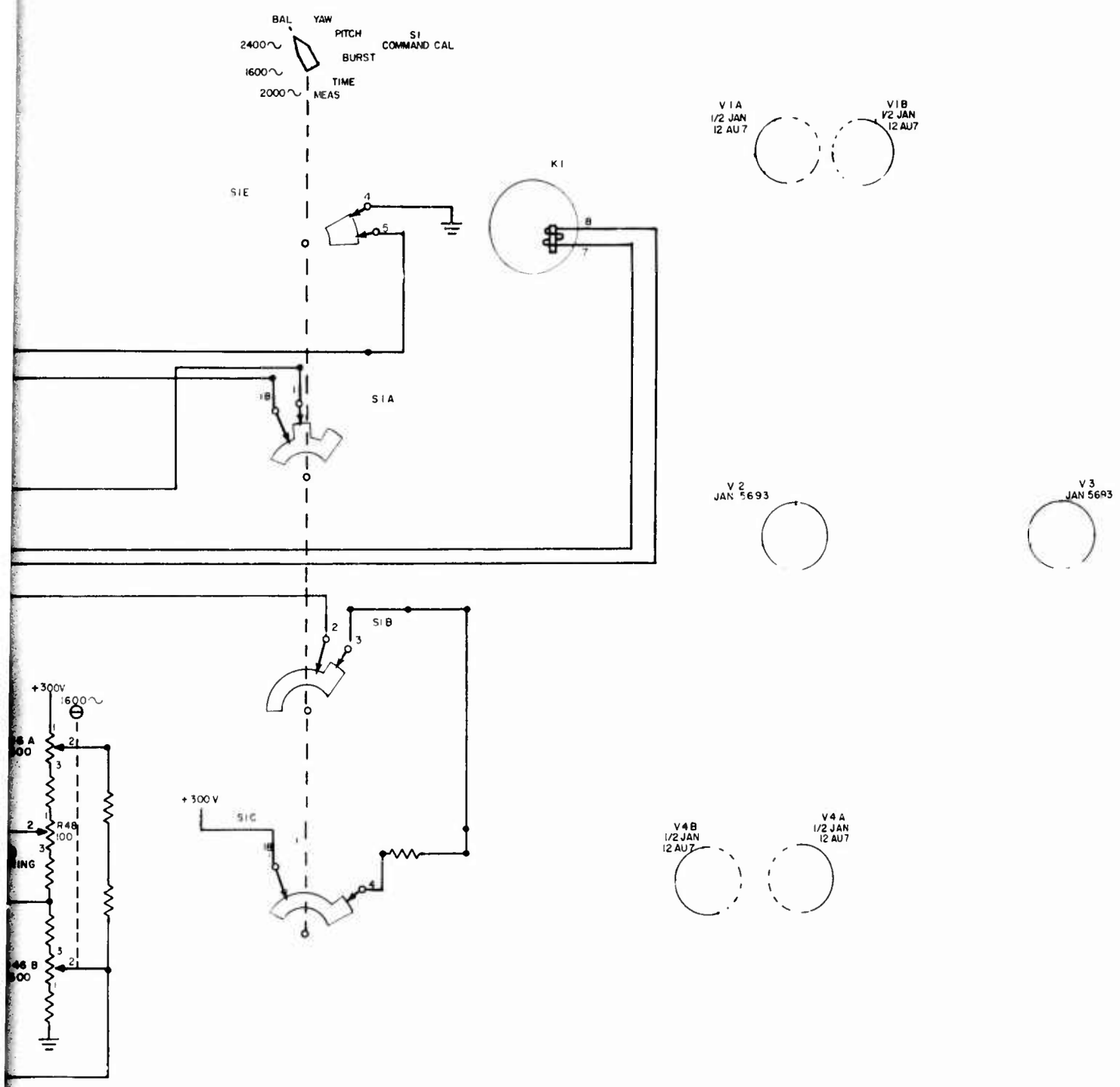

R.F. TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC (BALANCE)

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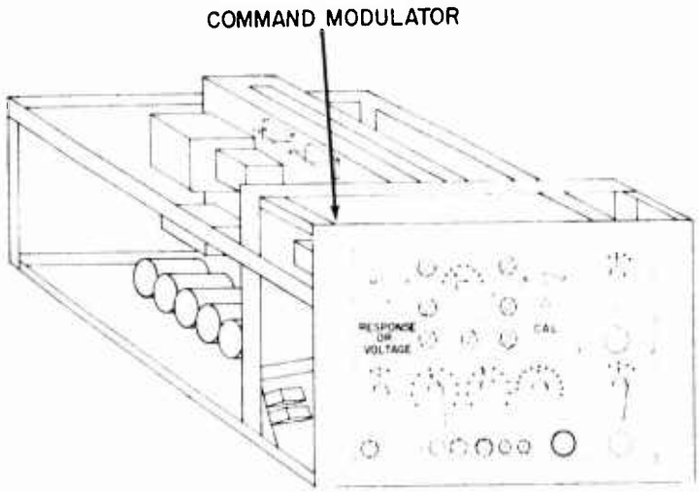
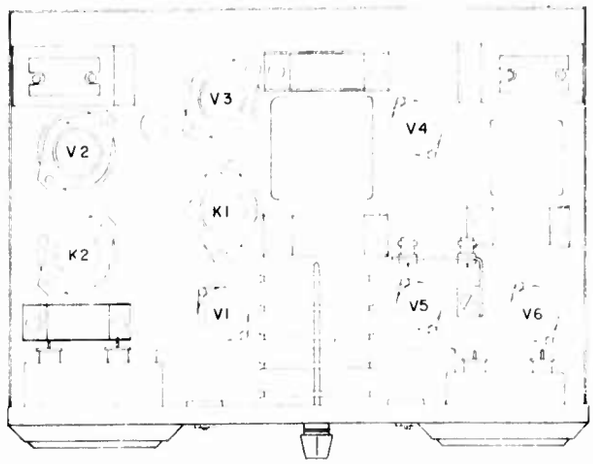
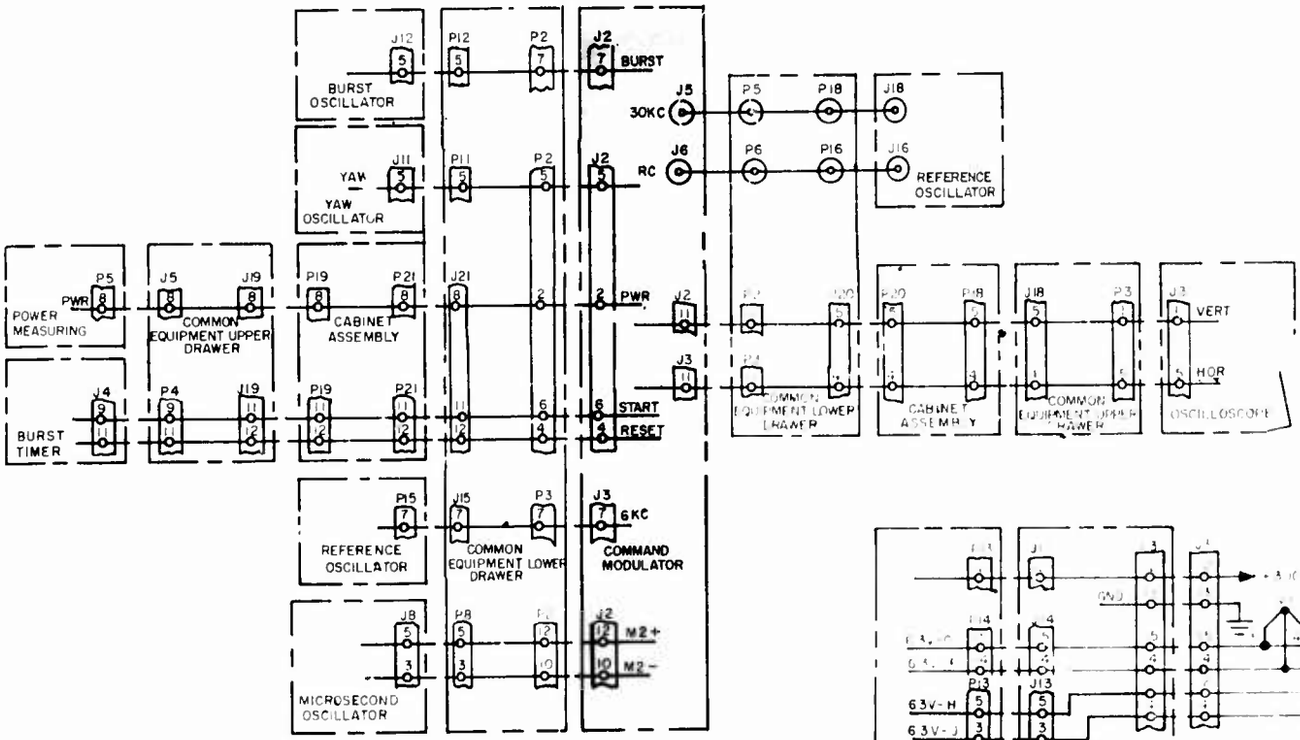
UNCLASSIFIED



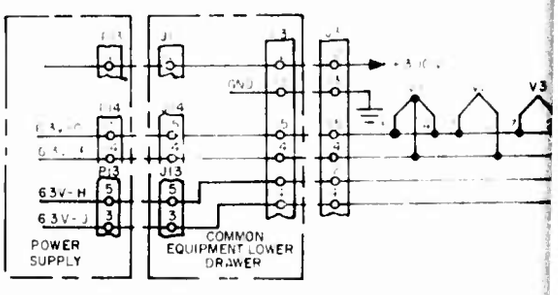
MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION

R-F TEST SET COMMAND MODULATOR ,NOTES (YAW)

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CLASSIFIED

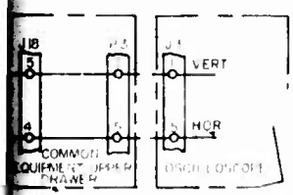
NOTES:

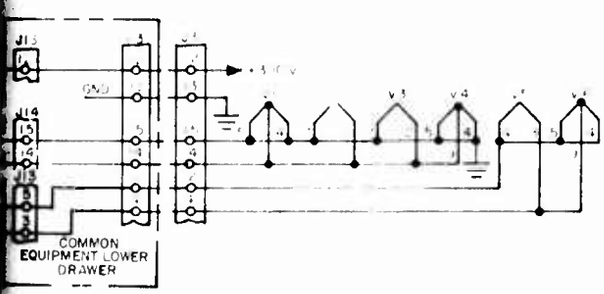
1. TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED.
2. TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY
3. WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS:

SWITCH	POSITION
YAW COMMAND	OG

MODULATOR TOP VIEW

S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-18	2-4, 11-13	5-18, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6, 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-12	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-8, 12-13	11-17	5-9, 14-16-17		1-3-18, 9-10





POWER DISTRIBUTION

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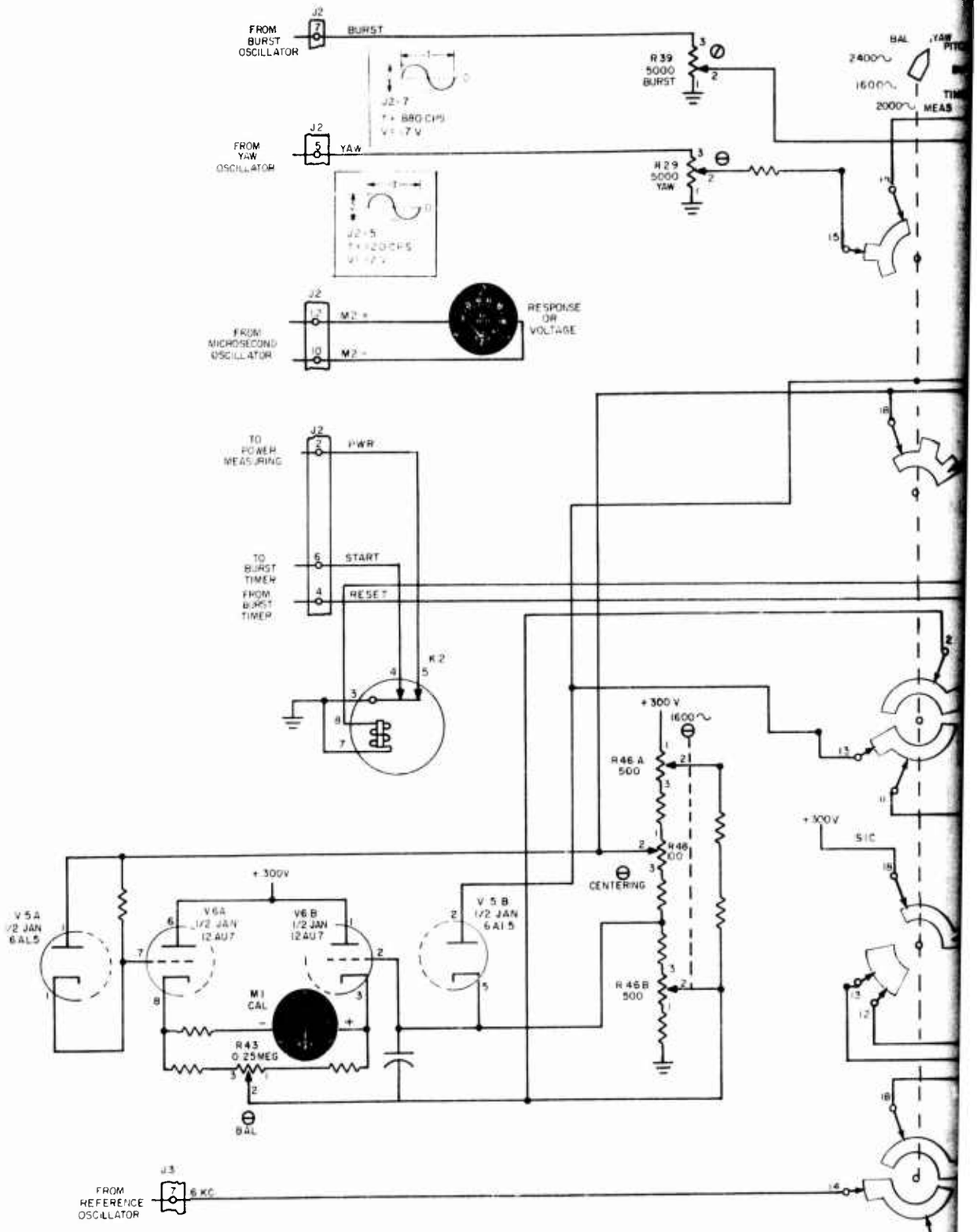
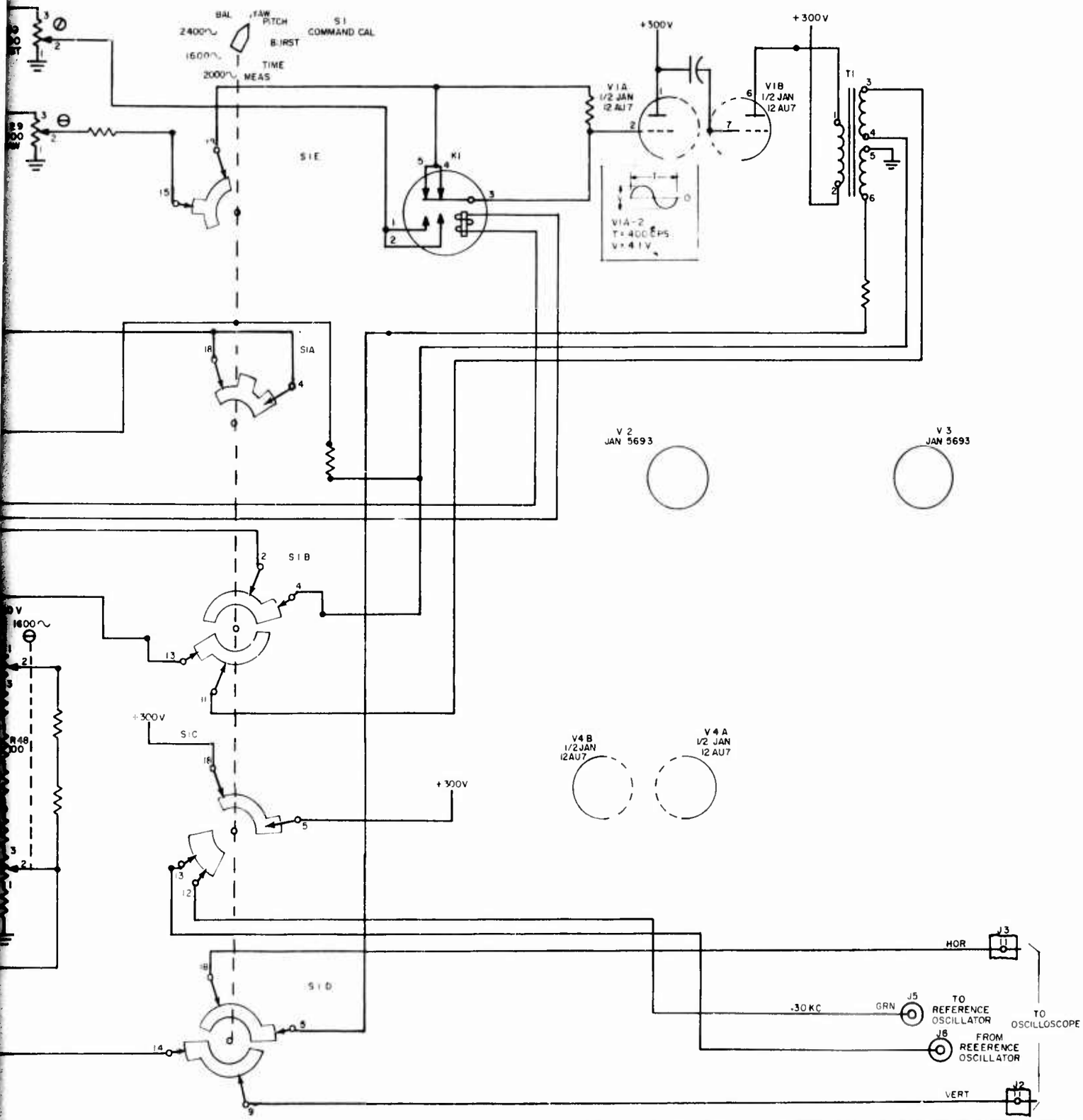
CONFIDENTIAL



CONFIDENTIAL

UNCLASSIFIED



R.F. TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC (YAW)

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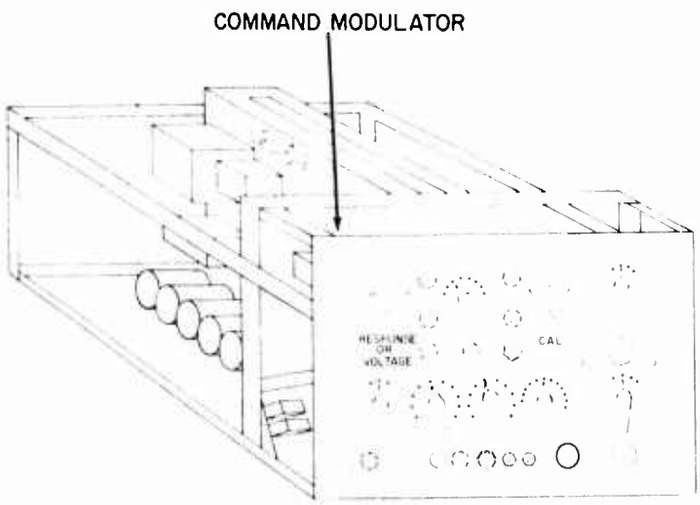
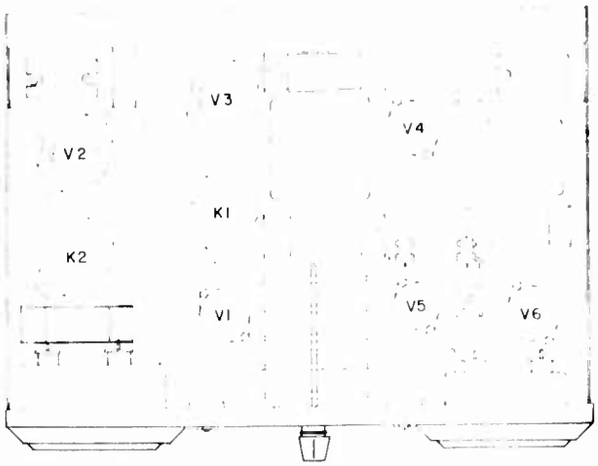
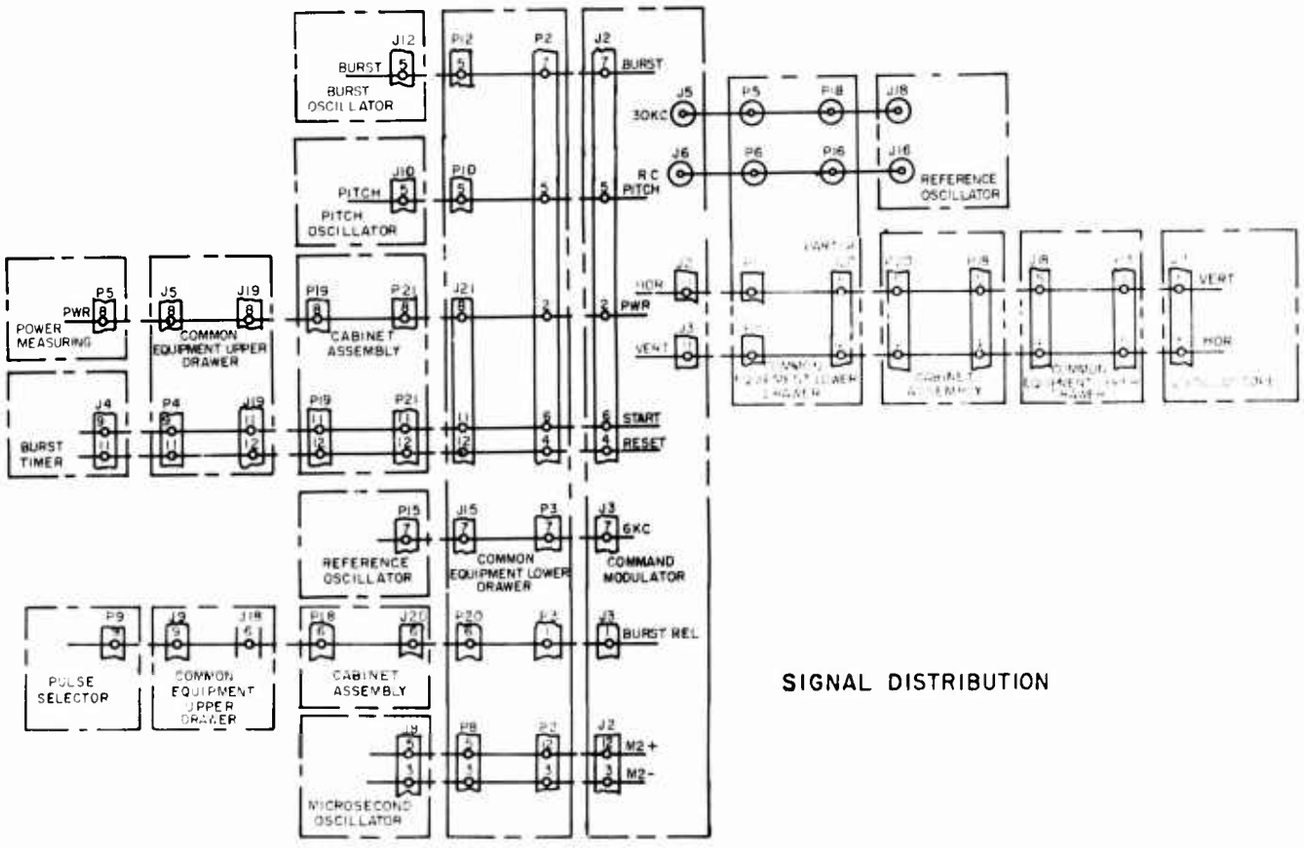


MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW



R-F TEST SET COMMAND MODULATOR, NOTES (PITCH)

SIGNAL DISTRIBUTION

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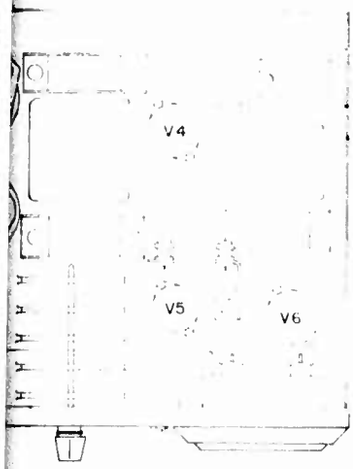


ULATOR TOP VIEW

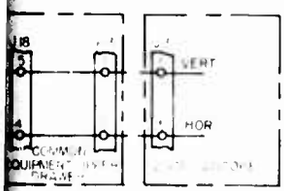
NOTES

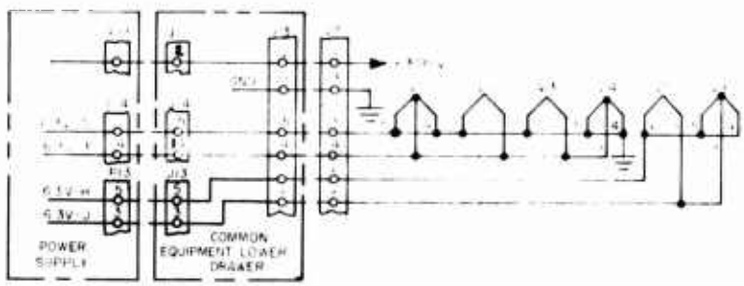
1 TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10. ON J3 ARE NOT USED.
2 TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY
3 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

SWITCH	POSITION
PITCH COMMAND	0 G

S1 SWITCH CONNECTION

POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-18	2-4, 11-13	5-19, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6, 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-12	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-9, 12-13	11-17	5-9, 14-16-17		1-3-18, 9-10





POWER DISTRIBUTION

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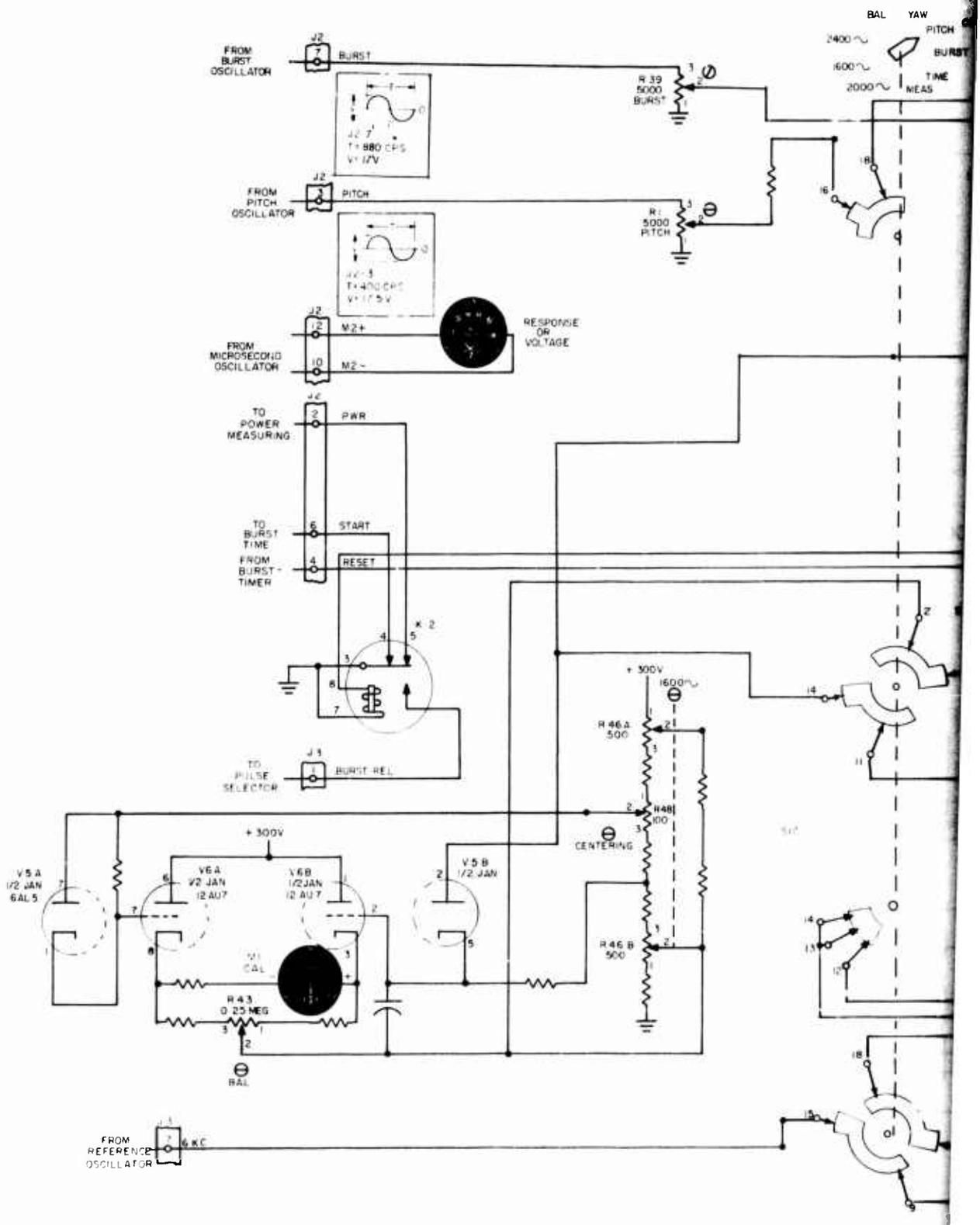

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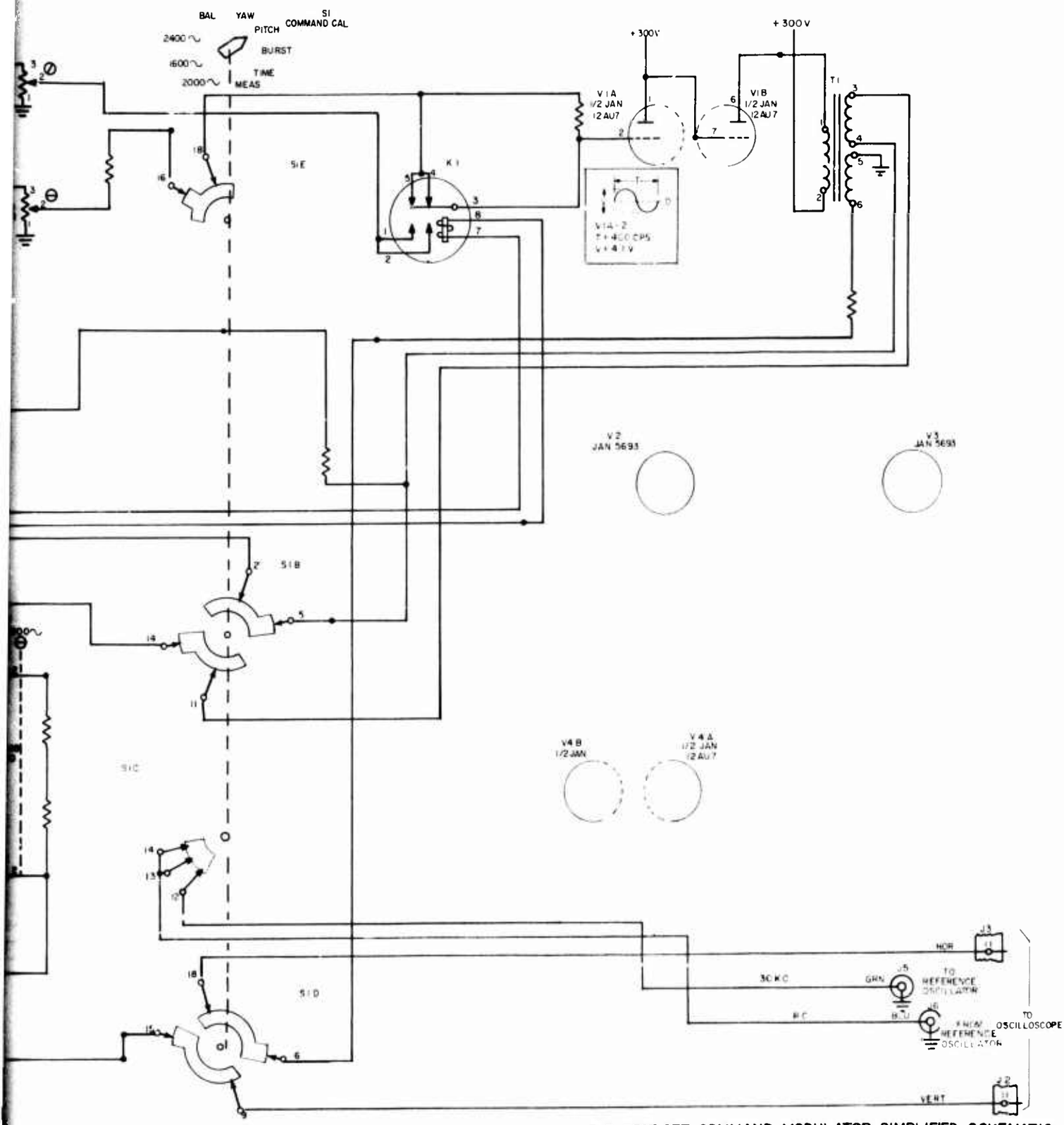

R.F. TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC (PITCH)

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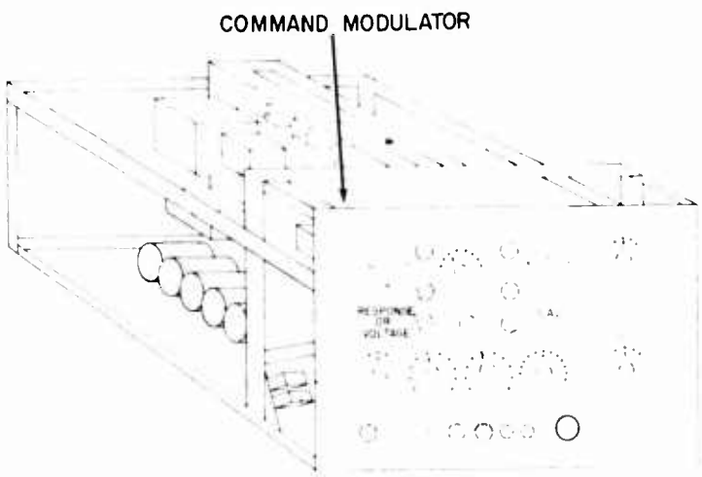
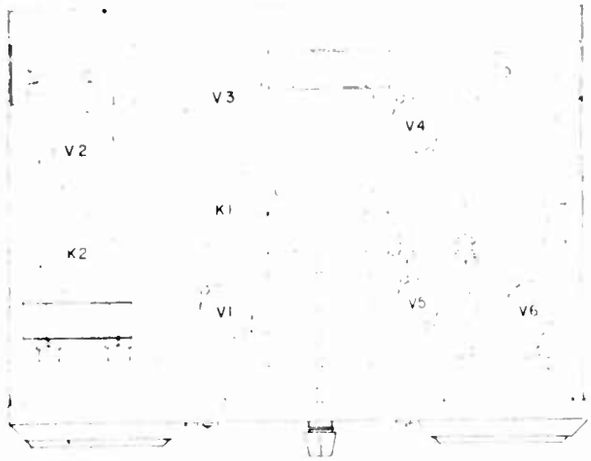
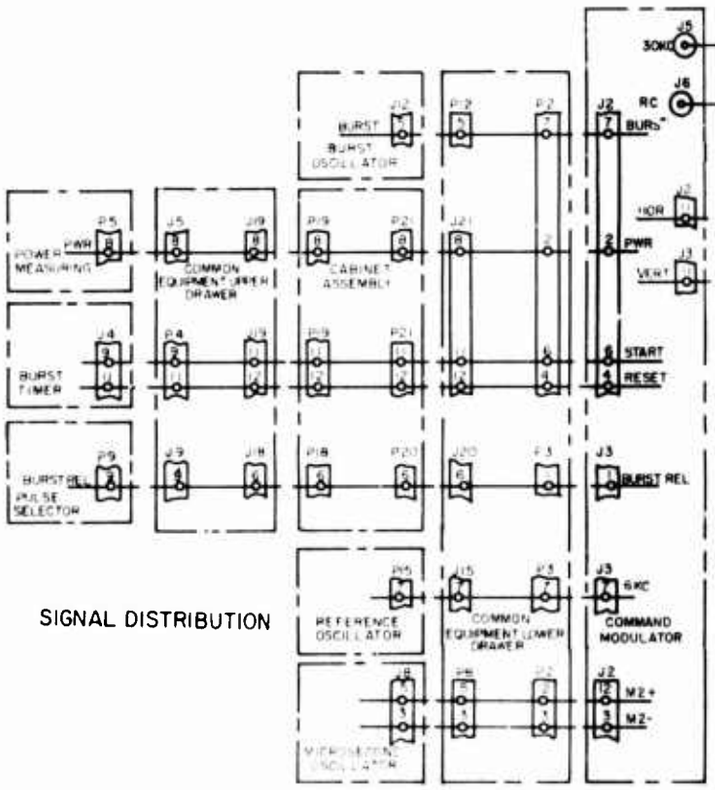


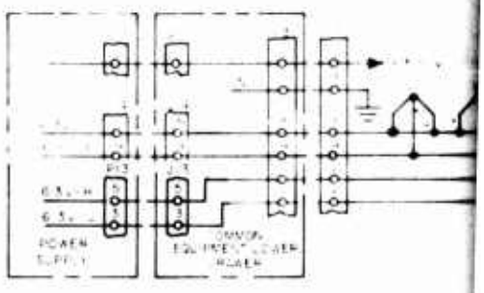
MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION

R-F TEST SET COMMAND MODULATOR, NOTES (BURST)

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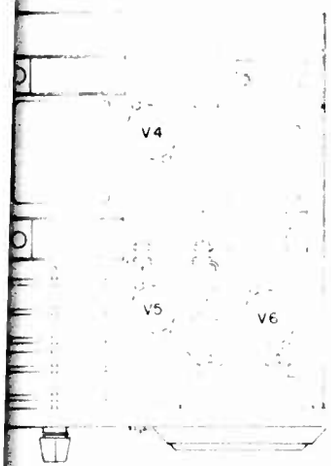
TIAL

ASSIFIED

NOTES:

1 TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED.

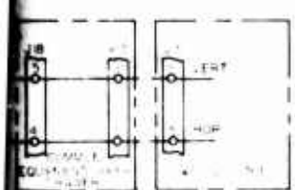
2 TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY

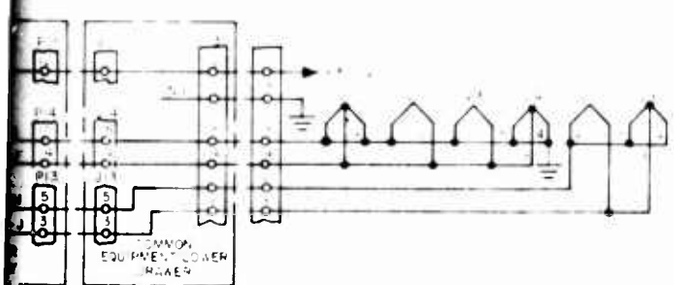


ULATOR TOP VIEW

S1 SWITCH CONNECTION

POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-18	2-4, 11-13	5-18, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6, 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-12	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-8, 12-13	11-17	5-9, 14-16-17		1-3-18, 9-10





POWER DISTRIBUTION

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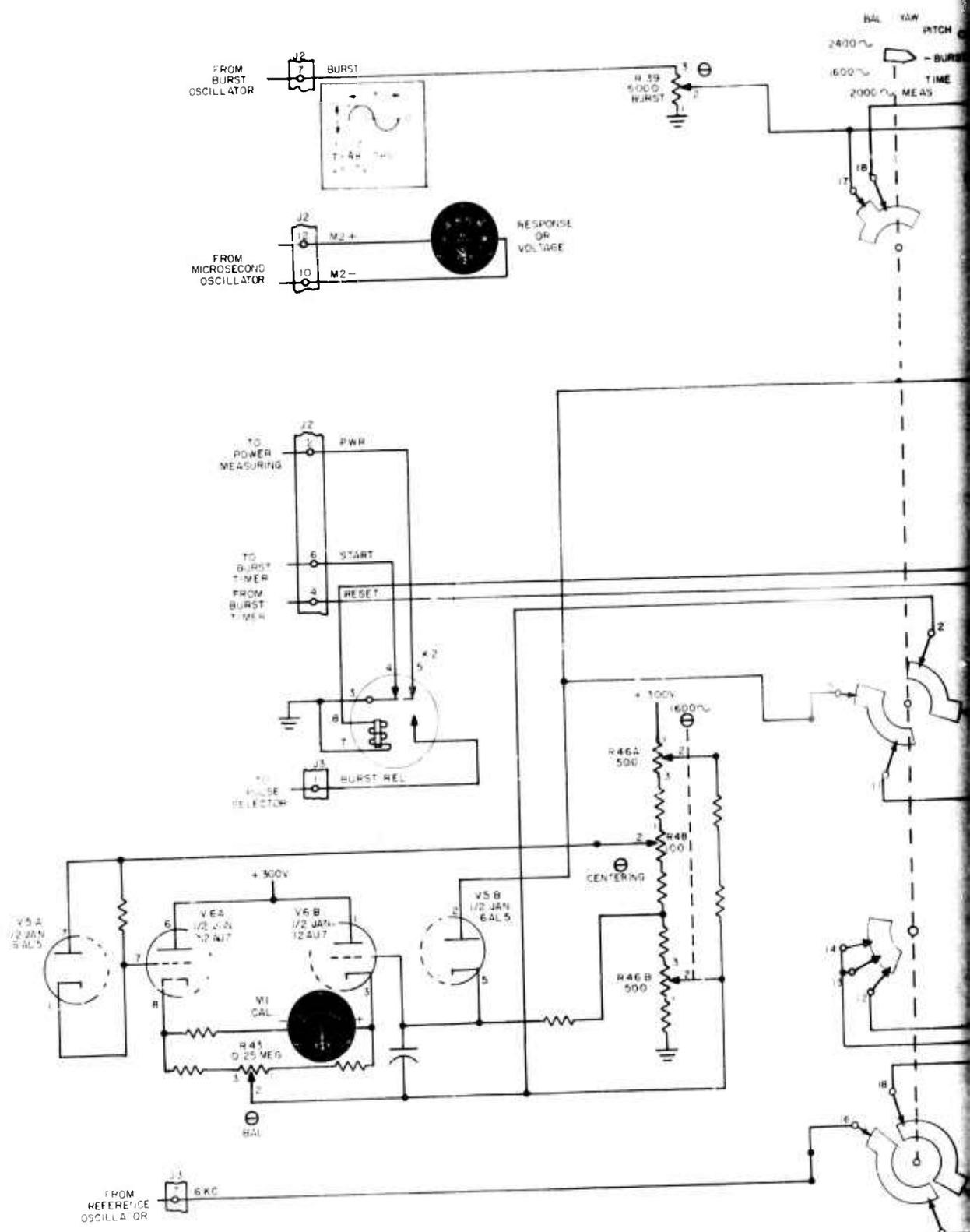
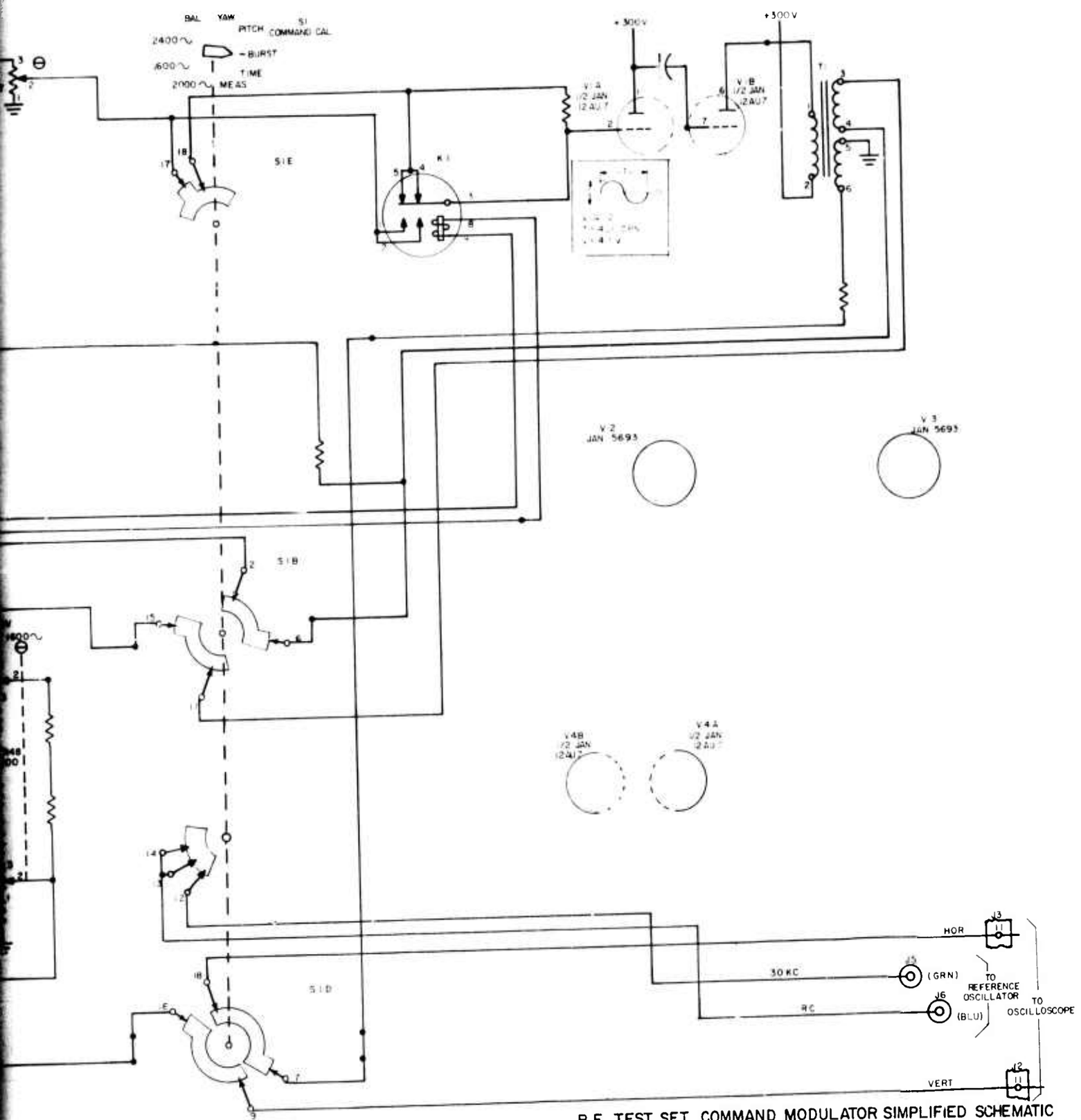
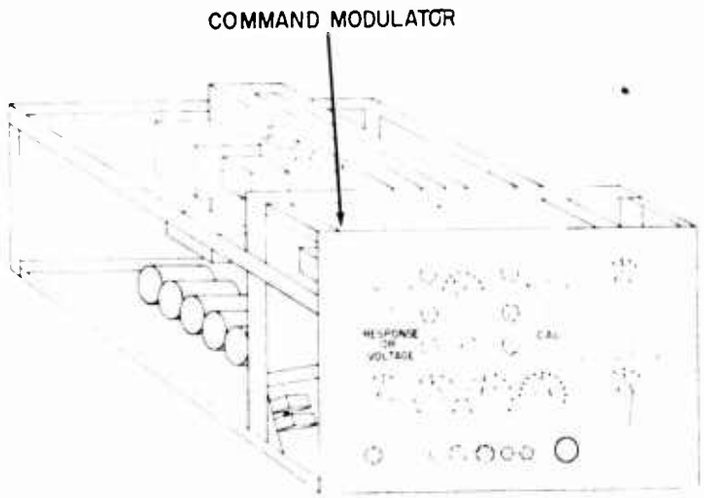
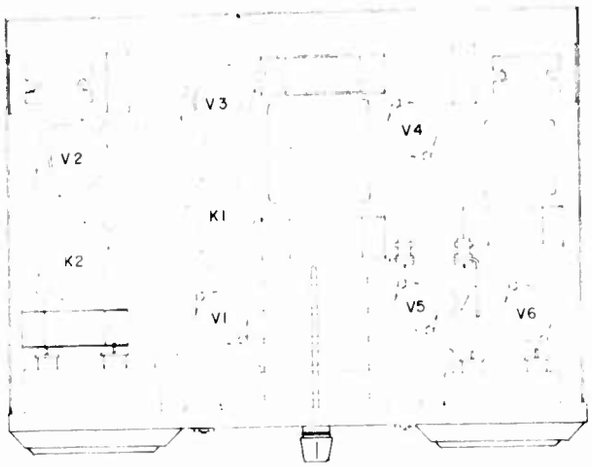

FROM BURST OSCILLATOR
J2
BURST
R 39 5000 BURST
BAL
YAW
PITCH
2400~
1600~
2000~
MEAS
TIME
J2
M2+
M2-
FROM MICROSECOND OSCILLATOR
RESPONSE OR VOLTAGE
TO POWER MEASURING
PWR
TO BURST TIMER
START
FROM BURST TIMER
RESET
J3
BURST REL
TO PULSE SELECTOR
+300V
+100V
1600~
R46A 500
R46 500
CENTERING
V5A 1/2 JAN 6AL5
V6A 1/2 JAN 12AU7
V6B 1/2 JAN 12AU7
V5B 1/2 JAN 6AL5
V1 CAL
R45 0.25 MEG
BAL
FROM REFERENCE OSCILLATOR
J1
6KC



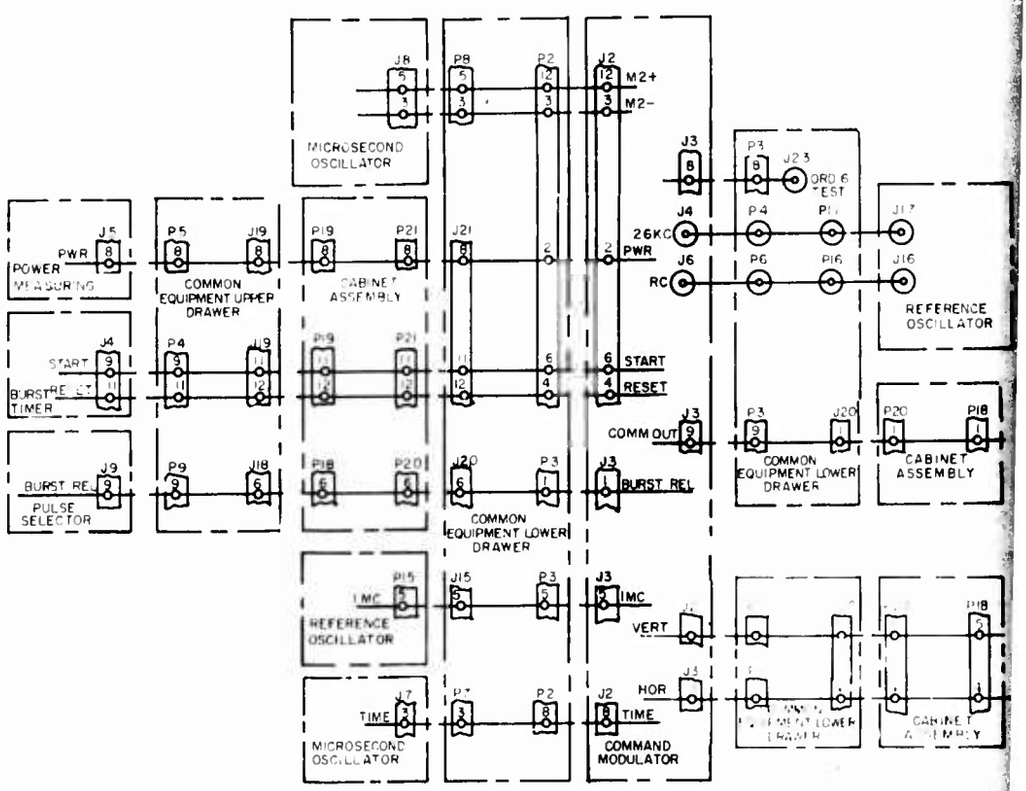
R.F. TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC
(BURST)



MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW

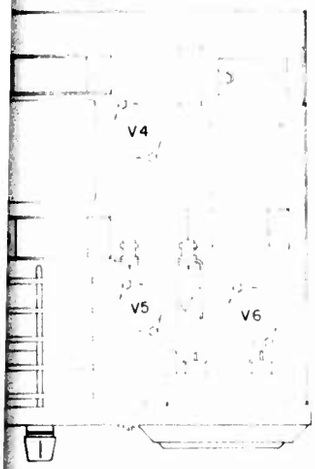


SIGNAL DISTRIBUTION

R-F TEST SET COMMAND MODULATOR, NOTES (TIME)

NOTES:

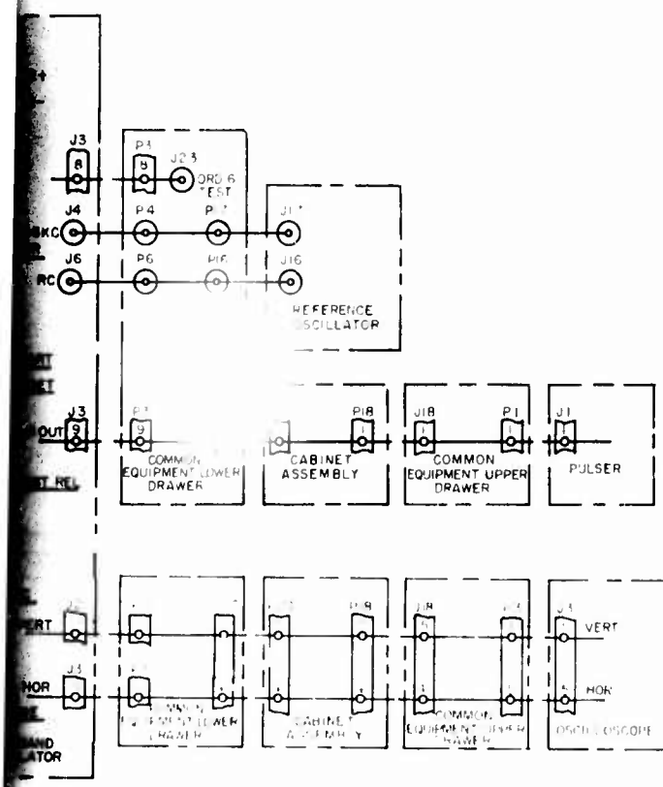
1. TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED.
2. TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY.



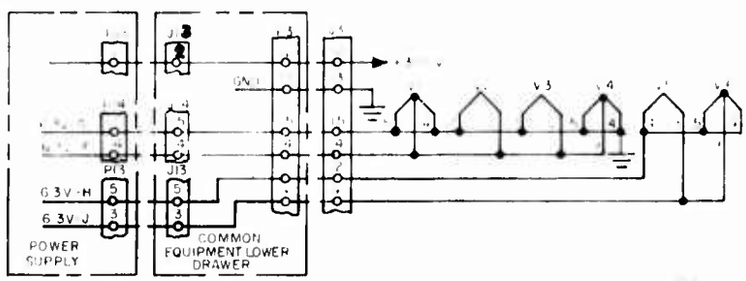
LATOR TOP VIEW

S1 SWITCH CONNECTION

POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-13	2-4, 11-13	5-18, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6, 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-12	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-9, 12-13	11-17	5-9, 14-16-17		1-3-18, 9-10

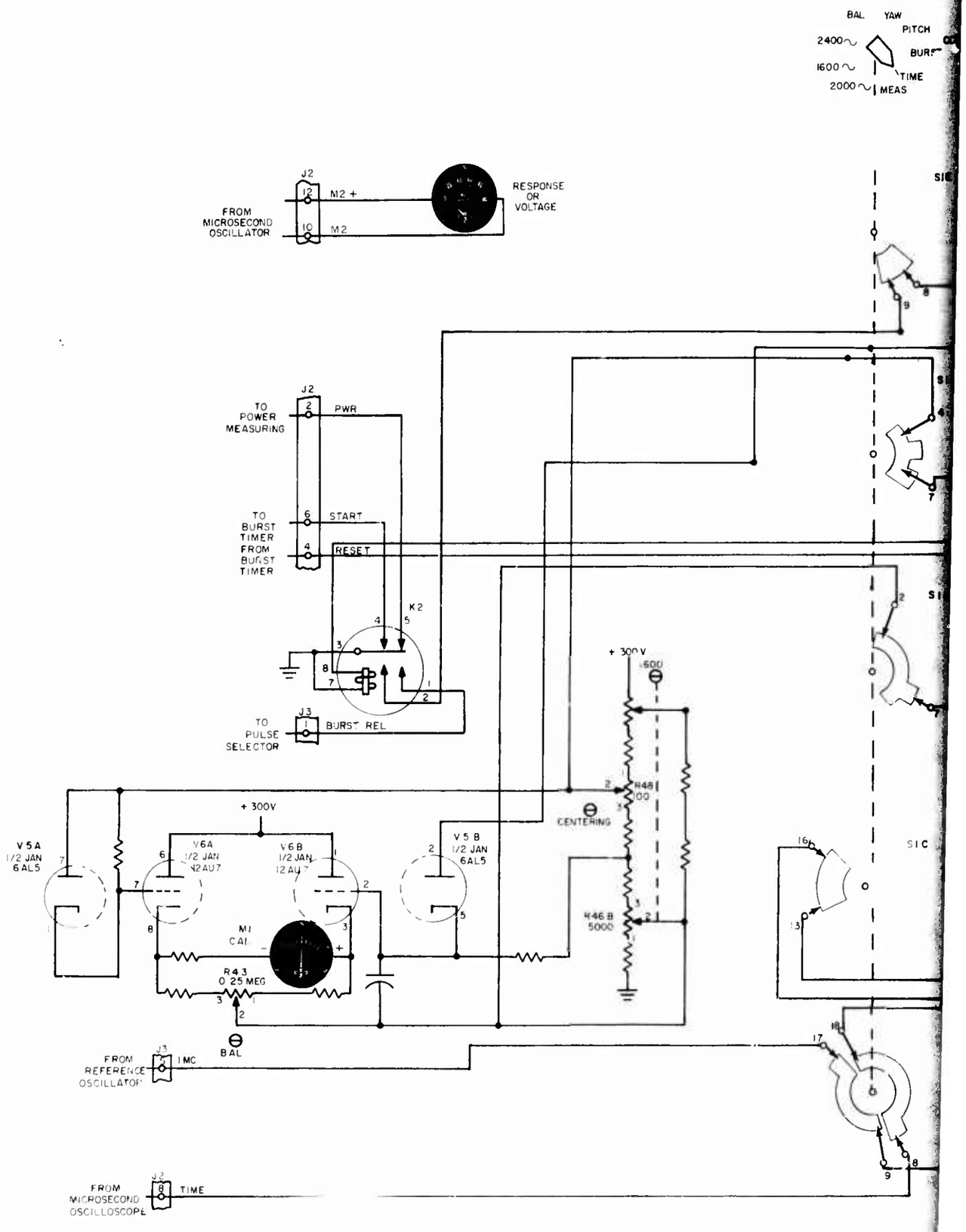


DISTRIBUTION

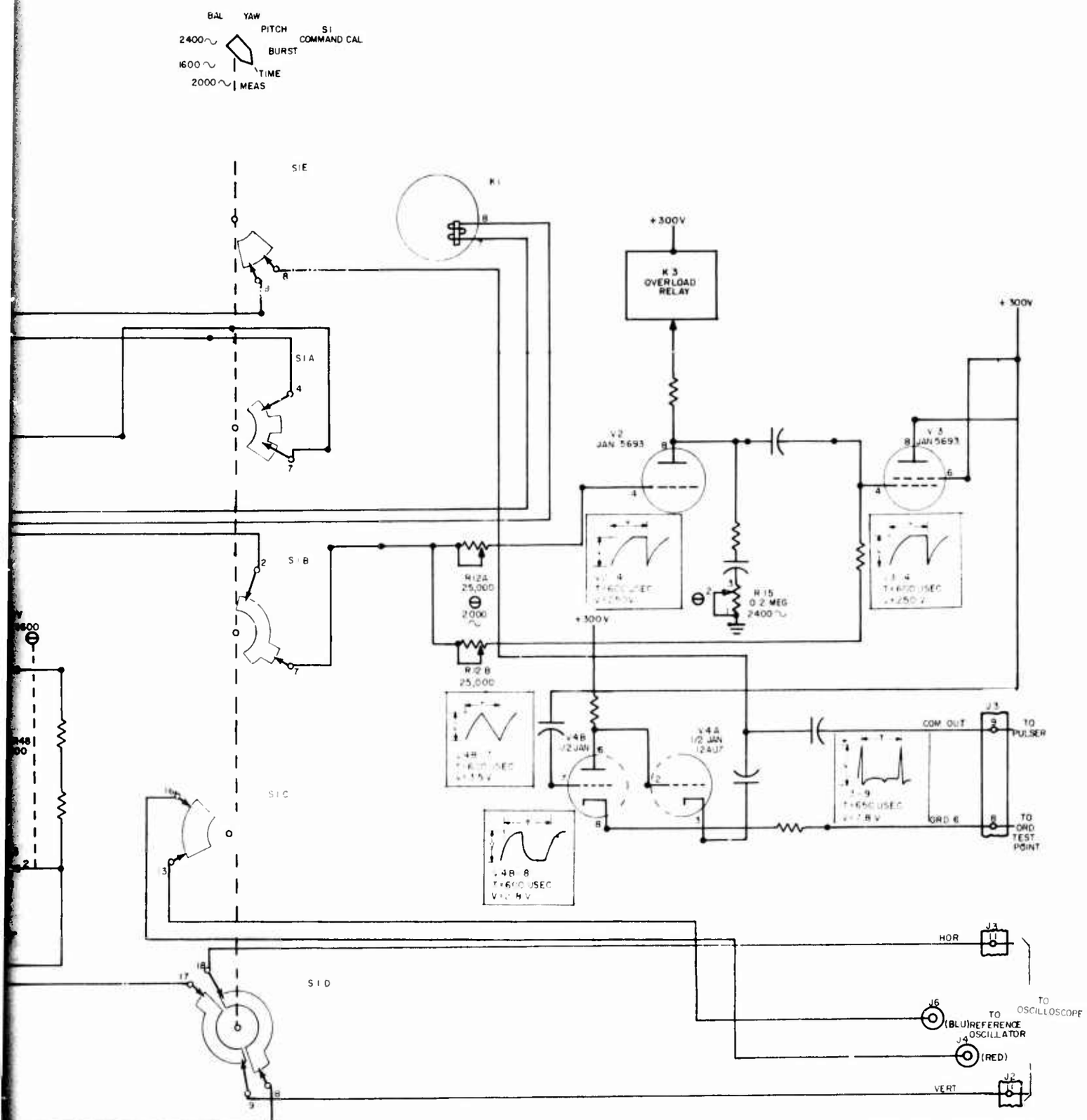


POWER DISTRIBUTION

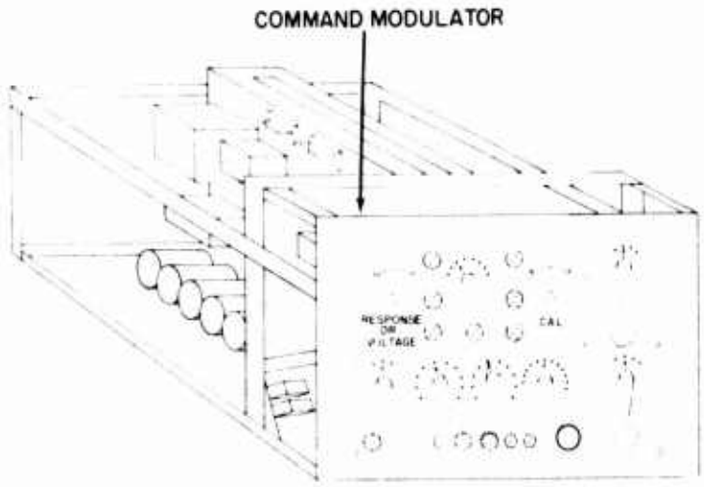
UNCLASSIFIED



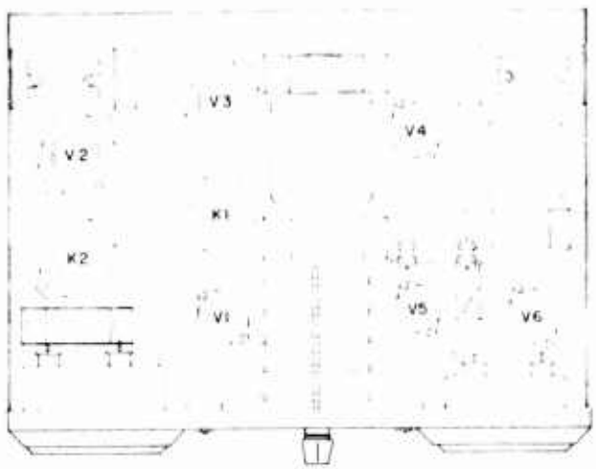
UNCLASSIFIED



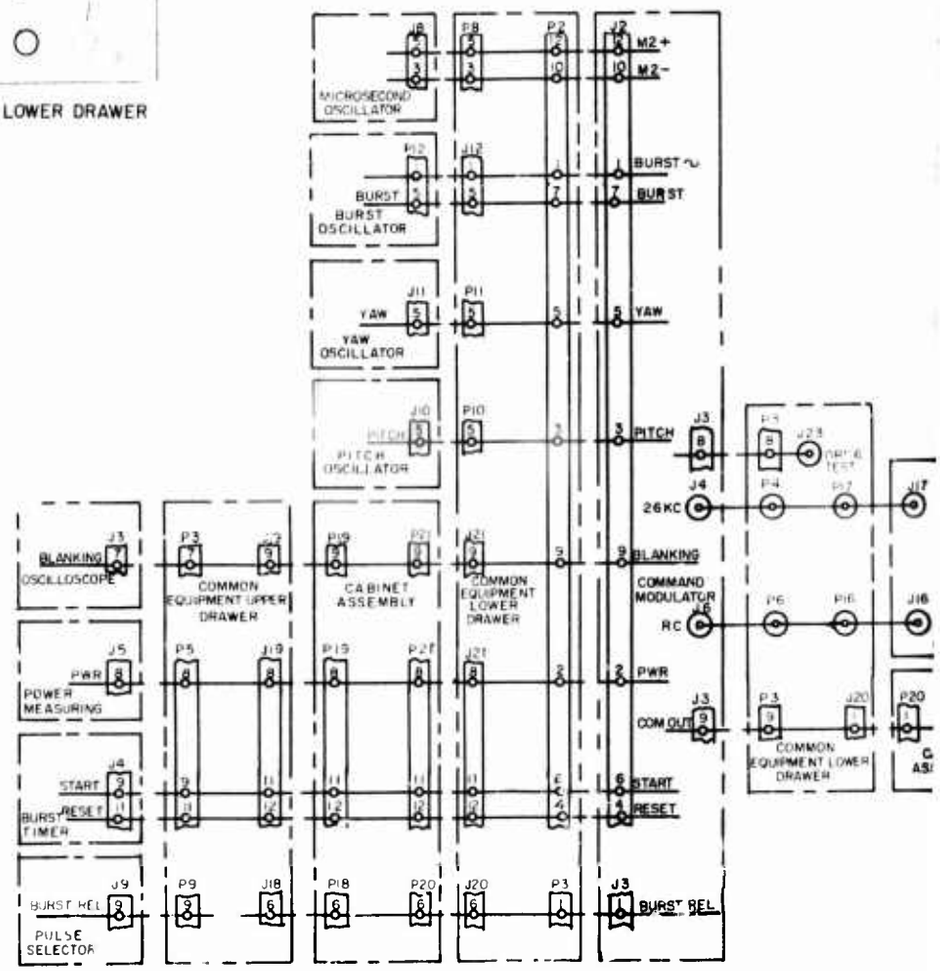
R.F. TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC
(TIME)



MISSILE R-F TEST SET LOWER DRAWER



COMMAND MODULATOR TOP VIEW



SIGNAL DISTRIBUTION

R-F TEST SET COMMAND MODULATOR, NOTES (MEAS)

[redacted]

NOTES

1 TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED.

2 TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY.

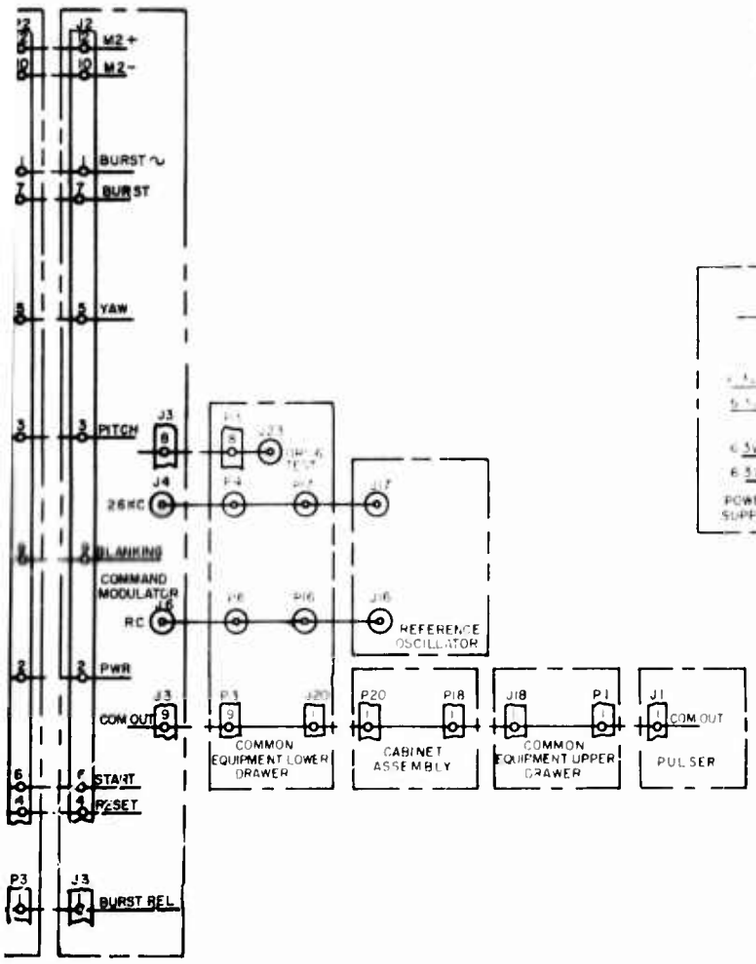
3 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

SWITCH	POSITION
PITCH COMMAND	0 G
YAW COMMAND	0 G

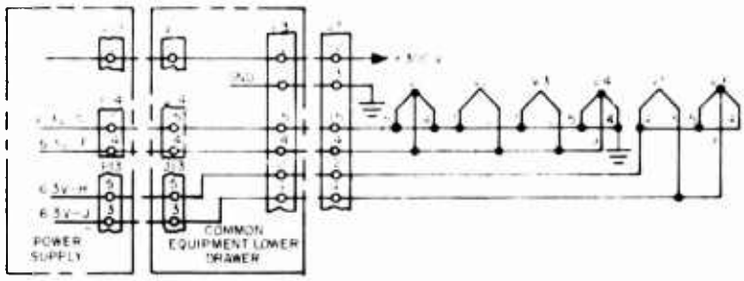
ATOR TOP VIEW

S1 SWITCH CONNECTION

POSITION	S1A	S1B	S1C	S1D	S1E
2000	14-16-18		1-18	1-18, 9-10	
1600	1-18	2-1	2-18	2-18, 9-11	
2400			3-18	3-18, 9-12	3-4, 12-13
BAL	1-18	2-3	4-18, 9-12		4-5
YAW	4-18	2-4, 11-13	5-18, 12-13	5-18, 9-14	15-18
PITCH		2-5, 11-14	12-13-14	6-18, 9-15	16-18
BURST		2-6, 11-15	12-13-14	7-18, 9-16	17-18
TIME	4-7, 11-12	2-7	13-14-16	8-18, 9-17	3-18, 8-9
MEAS	4-7-8, 12-13	11-17	5-9, 14-16-17		1-3-18, 9-10

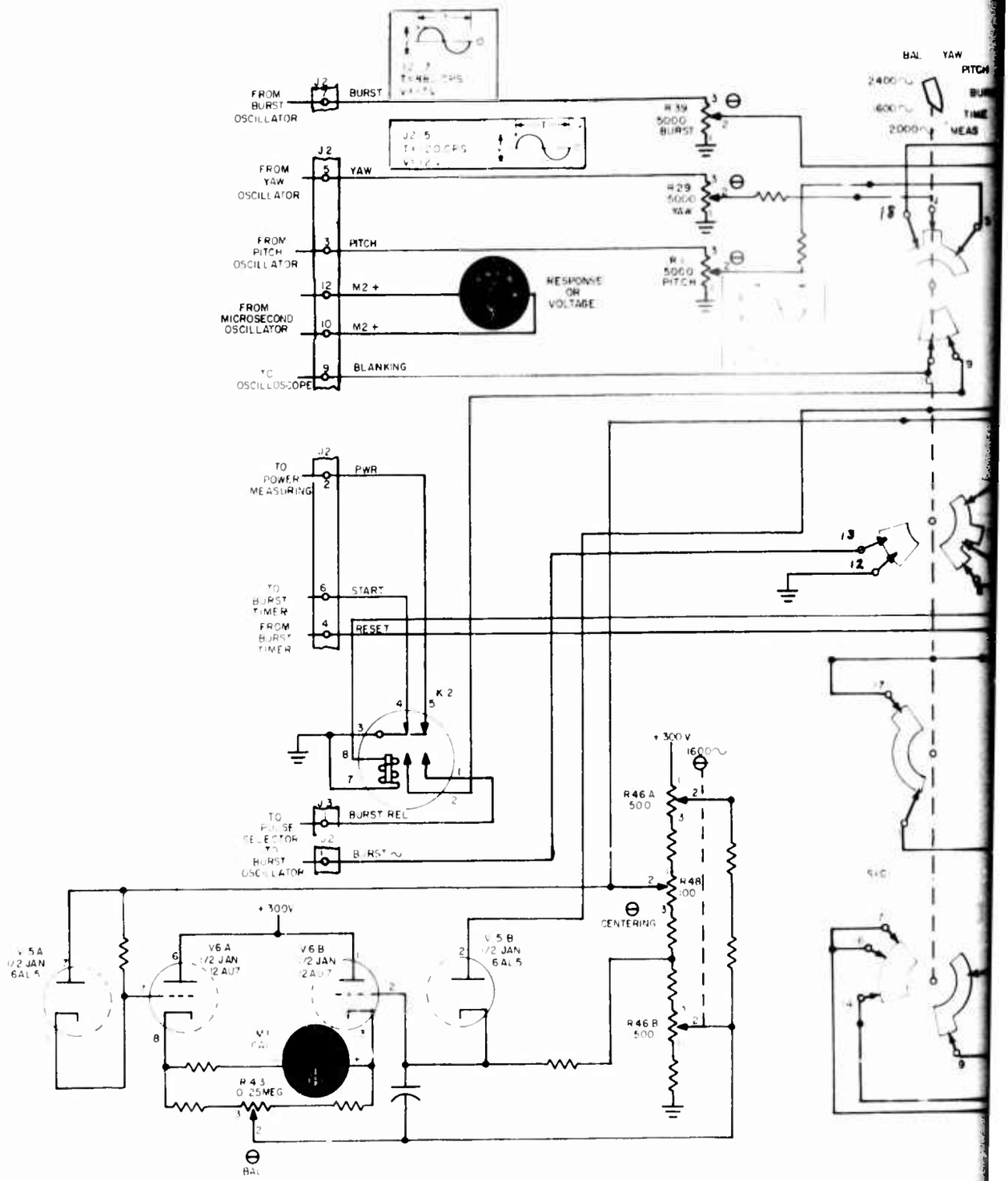


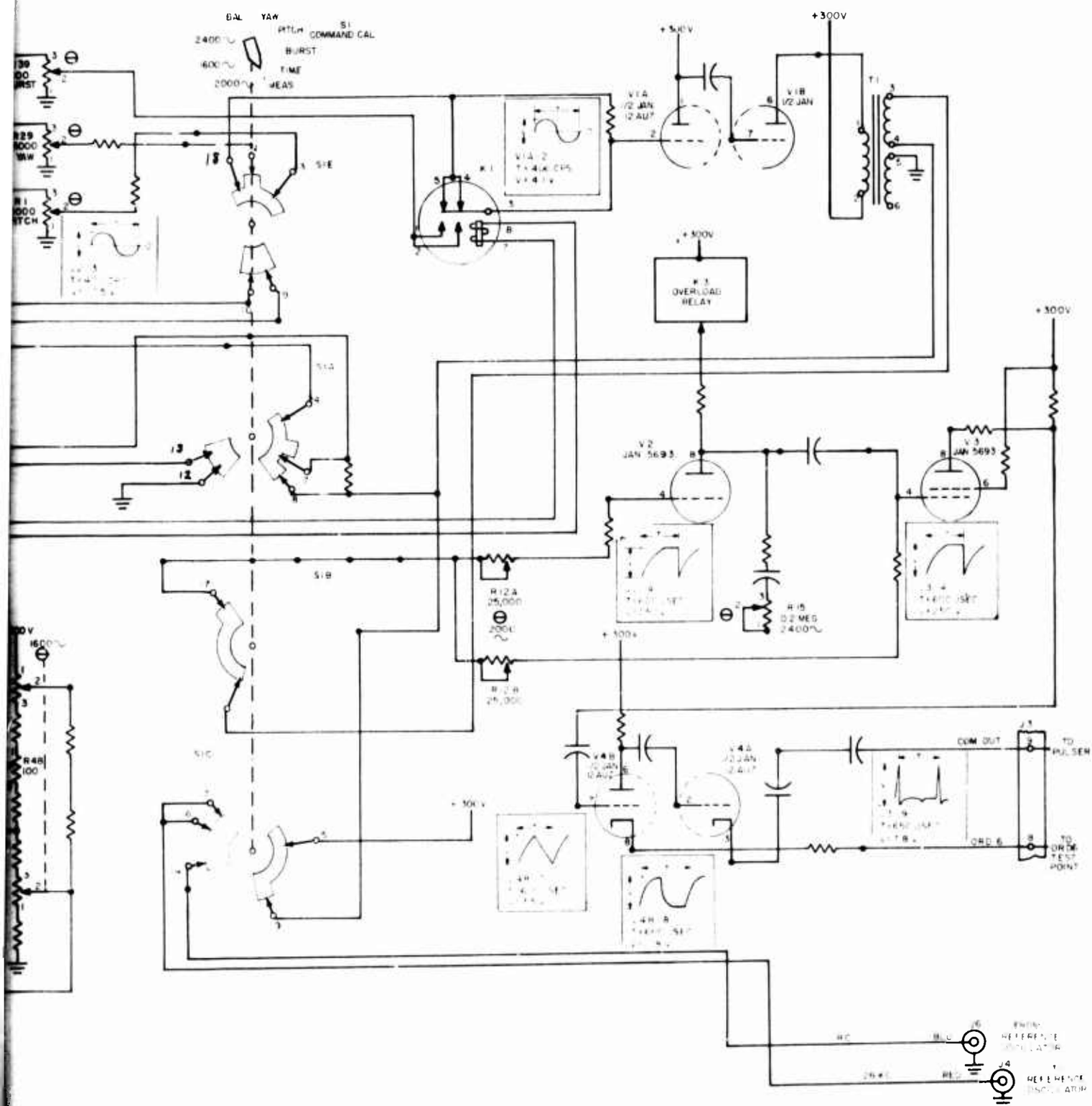
TRIBUTION



POWER DISTRIBUTION

[redacted]


FROM BURST OSCILLATOR
J2
BURST
FROM YAW OSCILLATOR
YAW
FROM PITCH OSCILLATOR
PITCH
M2 +
FROM MICROSECOND OSCILLATOR
M2 +
TO OSCILLOSCOPE
BLANKING
RESPONSE OR VOLTAGE
R 39 5000 BURST
R 29 5000 YAW
R 5000 PITCH
BAL
YAW
PITCH
TIME MEAS
TO POWER MEASURING
PWR
TO BURST TIMER
START
FROM BURST TIMER
RESET
K 2
TO PULSE SELECTOR
BURST REL
TO BURST OSCILLATOR
BURST
+ 300 V
R46A 500
R46B 500
CENTERING
+ 300V
V6A 1/2 JAN 12AU7
V6B 1/2 JAN 12AU7
V5A 1/2 JAN 6AL5
V5B 1/2 JAN 6AL5
R43 0.25MEG
BAL



R.F. TEST SET COMMAND MODULATOR SIMPLIFIED SCHEMATIC (MEAS)

[redacted]

SOCKET NO.	TUBE NO	TUBE TYPE	F	PLATE			SUPPESSOR			SCREEN			
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN

THIS DATA NOT AVAILABLE

R-F TEST SET COMMAND MODULATOR, NOTES

[redacted]

NOTES

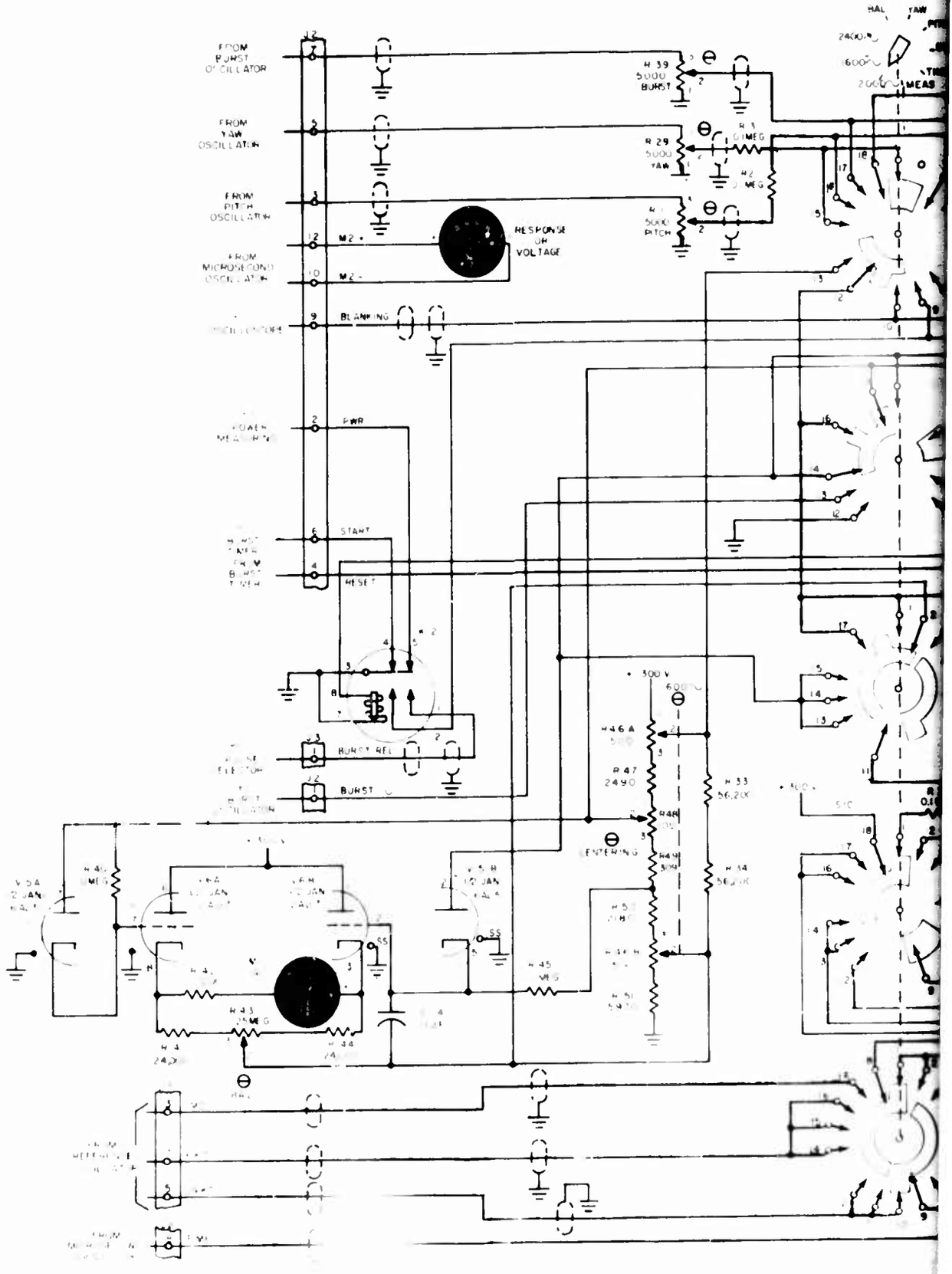
1 TERMINALS 14 AND 15 ON J2 AND TERMINALS 6 AND 10 ON J3 ARE NOT USED

2 TERMINALS 2,3,5,6,9,10,15, AND 16 ON S1A AND 8 AND 18 ON S1B ARE PROVIDED FOR MECHANICAL ALIGNMENT BUT ARE NOT USED ELECTRICALLY

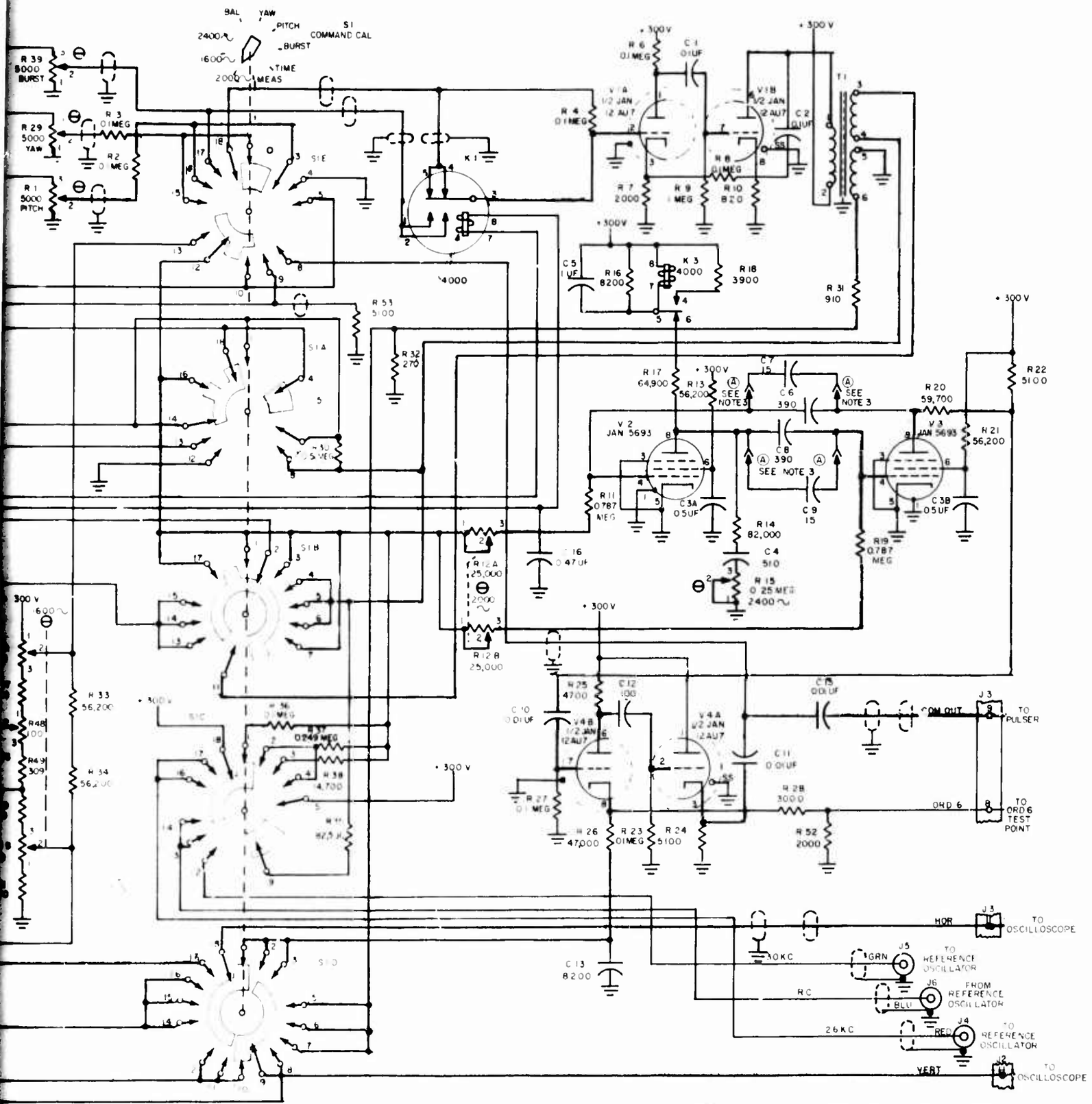
	SCREEN			CONTROL			CATHODE			FILAMENT		
	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

ATA NOT AVAILABLE

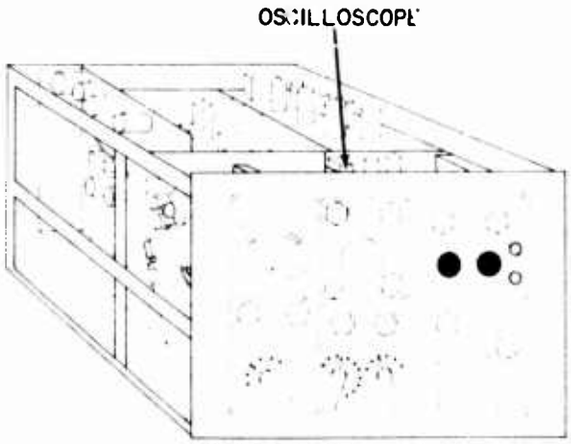
CONFIDENTIAL UNCLASSIFIED



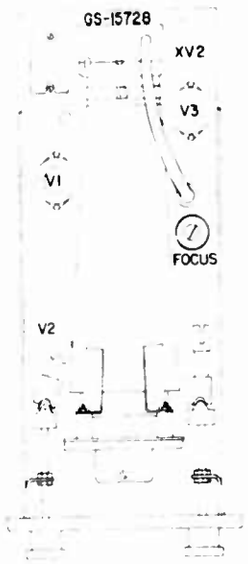
CONFIDENTIAL



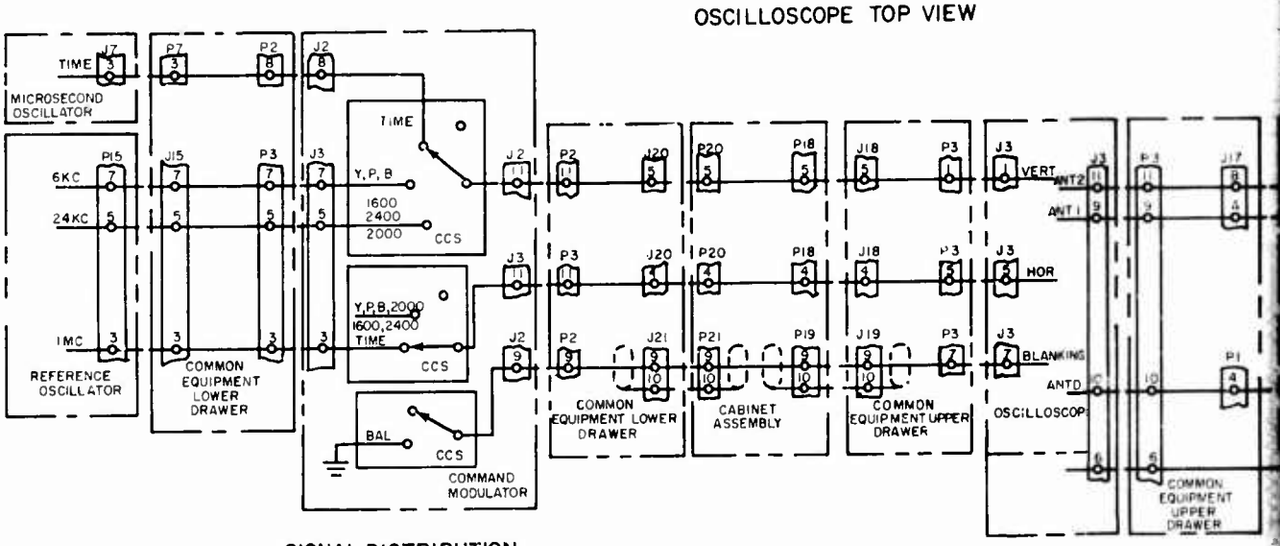
GS-15736 R-F TEST SET COMMAND MODULATOR



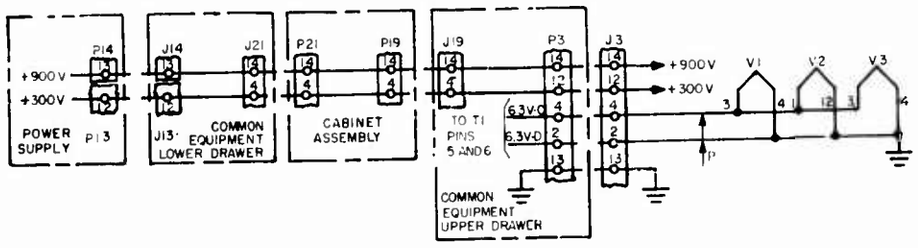
MISSILE R-F TEST SET UPPER DRAWER



OSCILLOSCOPE TOP VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION

R-F TEST SET OSCILLOSCOPE, NOTES

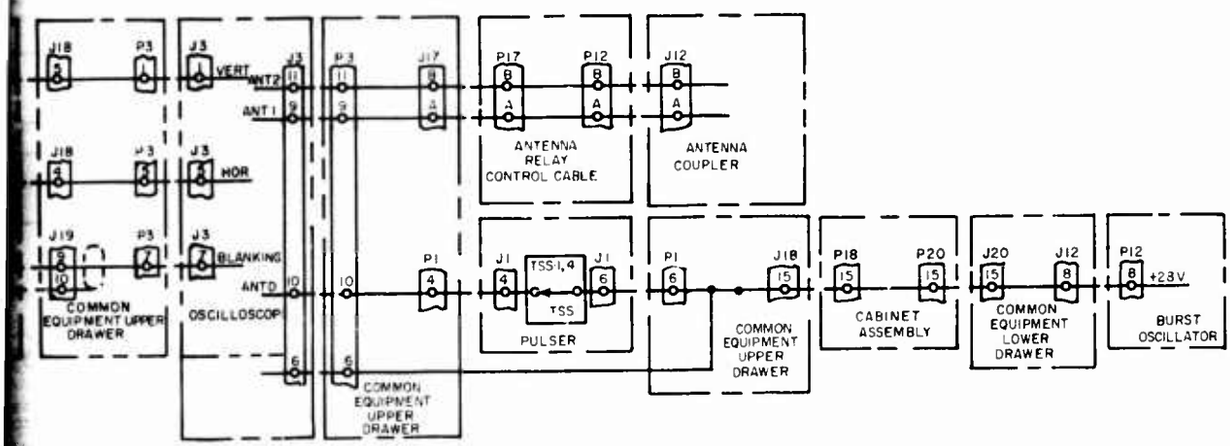
[redacted]

NOTES:

1. TERMINALS 3,8 AND 15 ON J3 ARE NOT USED.
2. WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS:

SWITCH	POSITION
COMMAND CAL	YAW

PE TOP VIEW



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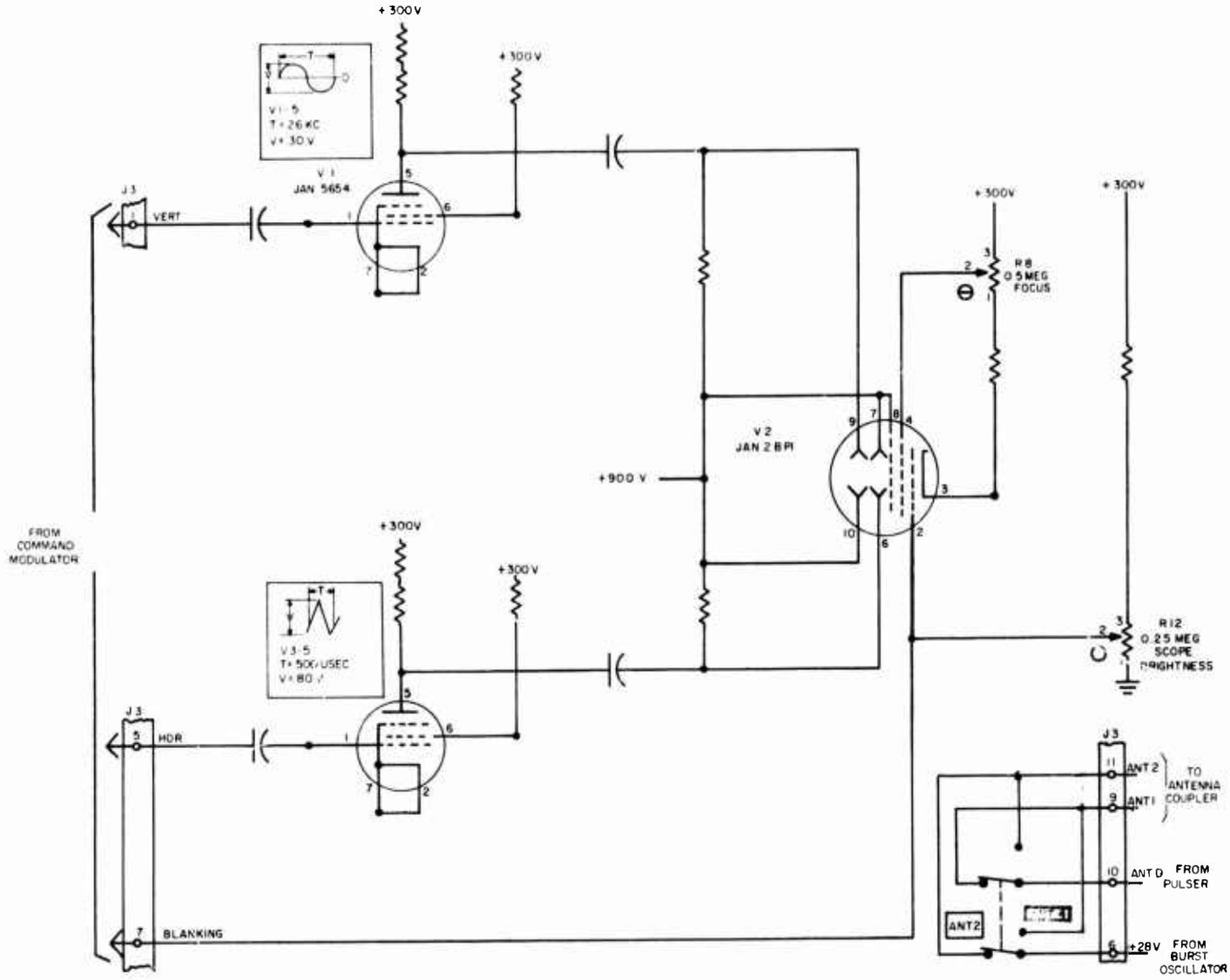


R-F TEST SET OSCILLOSCOPE SIMPLIFIED SCHEMATIC

[redacted]

MEASUREMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN			CONT	
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS

THIS DATA NOT AVAILABLE

R-F TEST SET OSCILLOSCOPE, NOTES

[redacted]

A

[redacted]

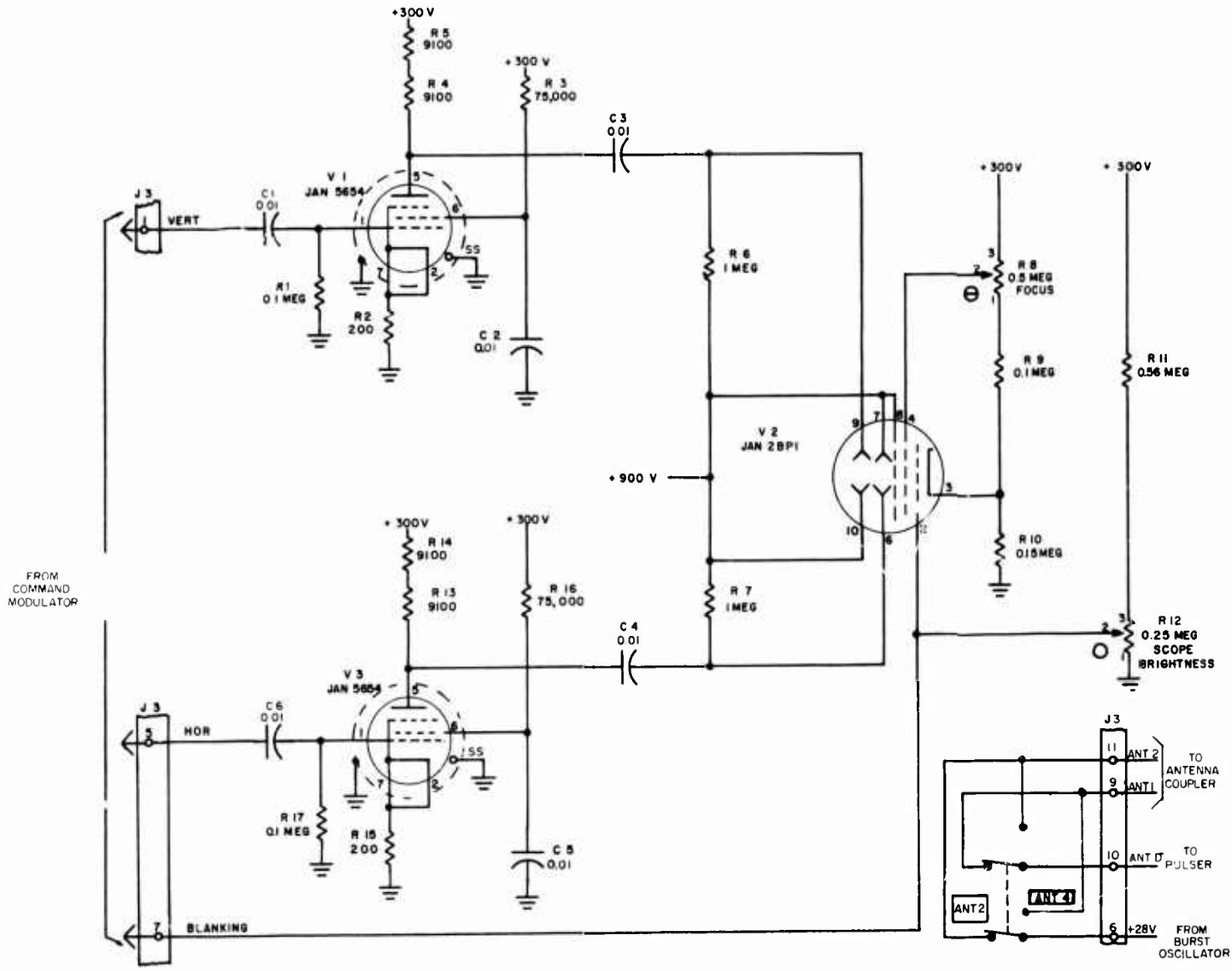
CLASSIFIED

NOTES:

1. TERMINALS 3, 8 AND 15 ON J3 ARE NOT USED.

	SCREEN			CONTROL			CATHODE			FILAMENT		
	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS
ATA NOT AVAILABLE												

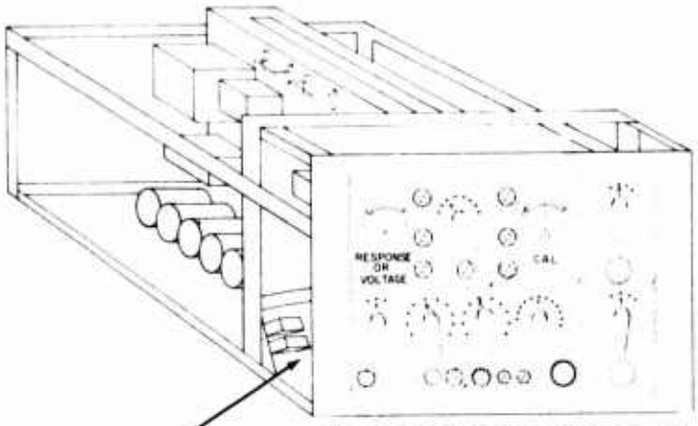
[redacted]



GS-15728 R-F TEST SET OSCILLOSCOPE

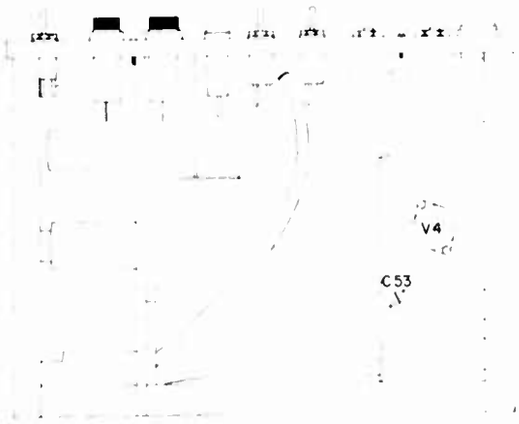
[redacted]

UNCLASSIFIED

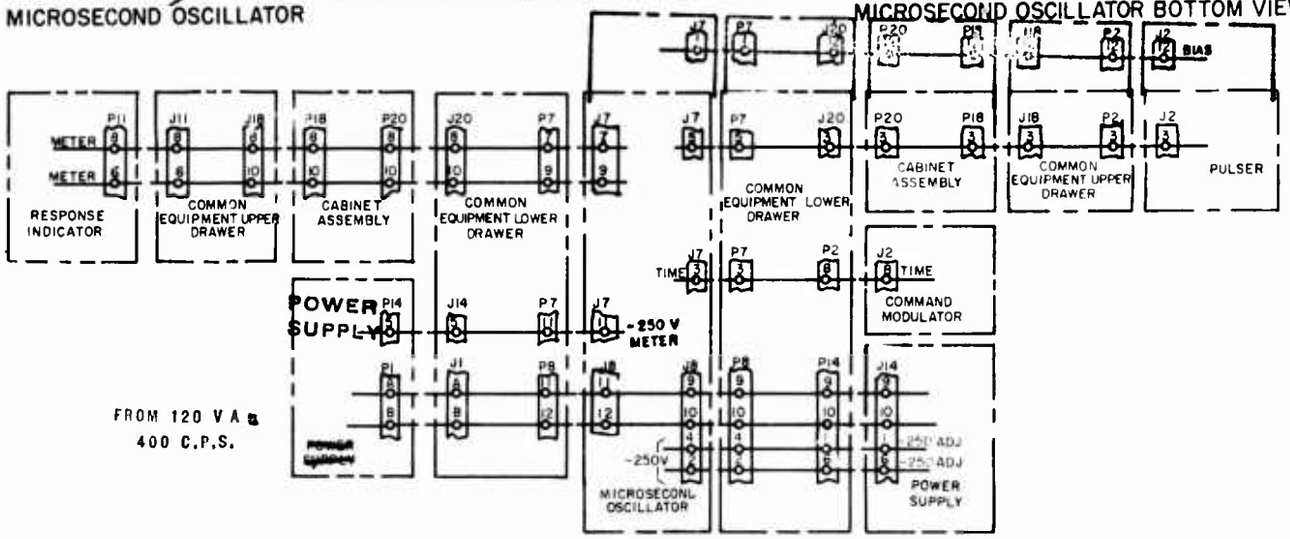


MISSILE R-F TEST SET LOWER DRAWER

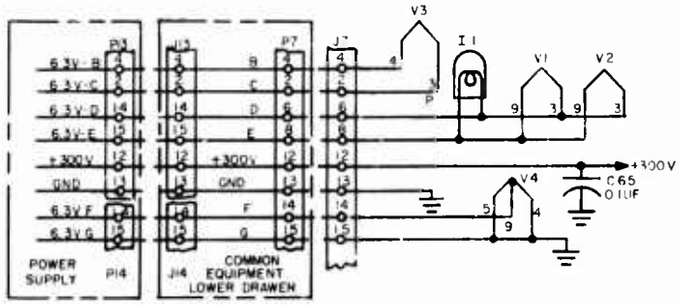
MICROSECOND OSCILLATOR



MICROSECOND OSCILLATOR BOTTOM VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION

R-F TEST SET MICROSECOND OSCILLATOR, NOTES

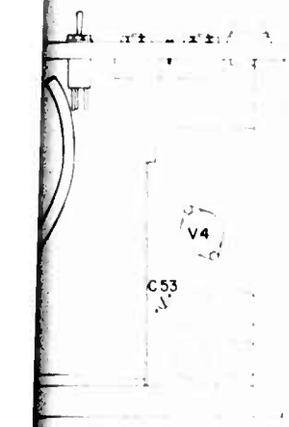
[redacted]

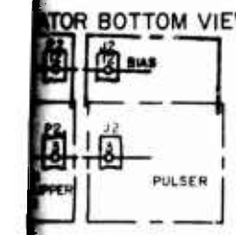
A

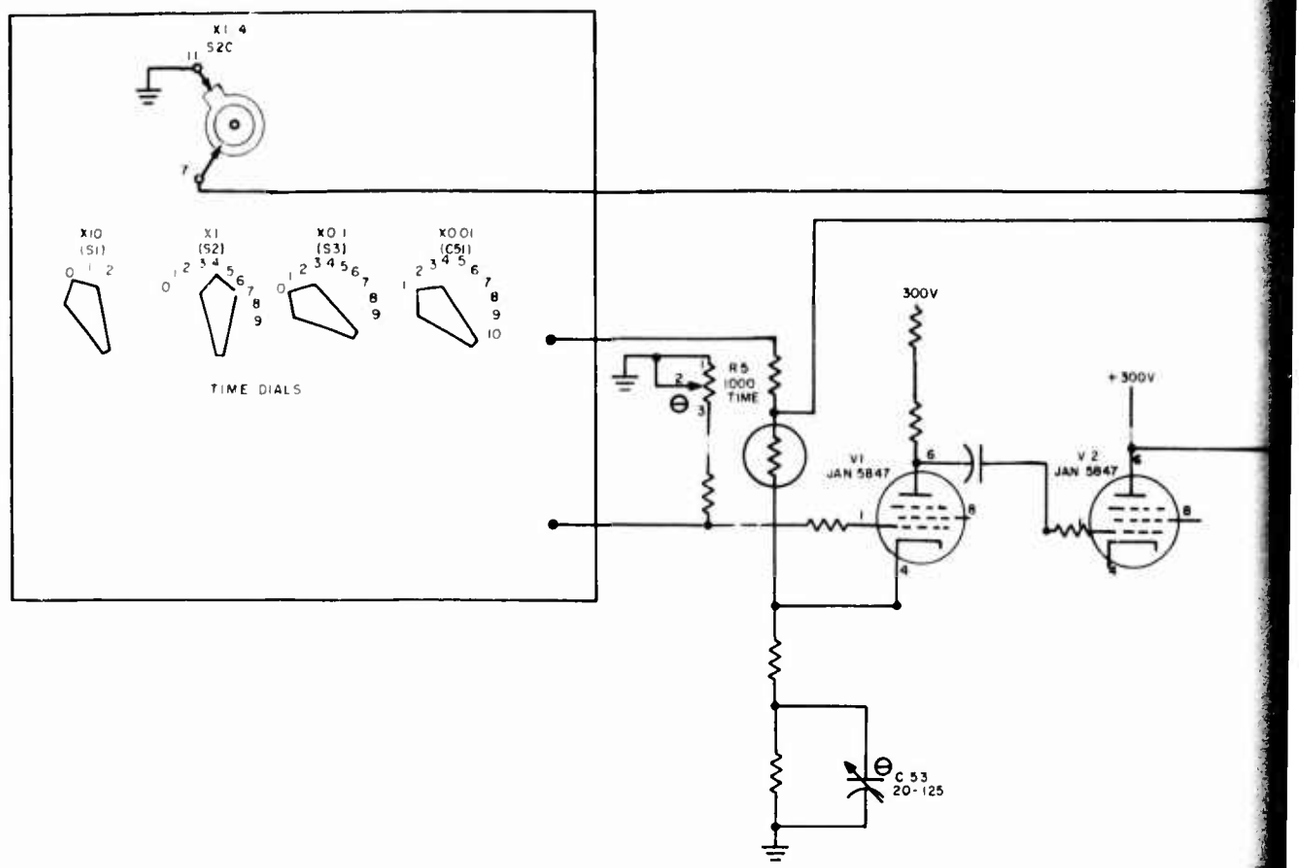
NOTES:

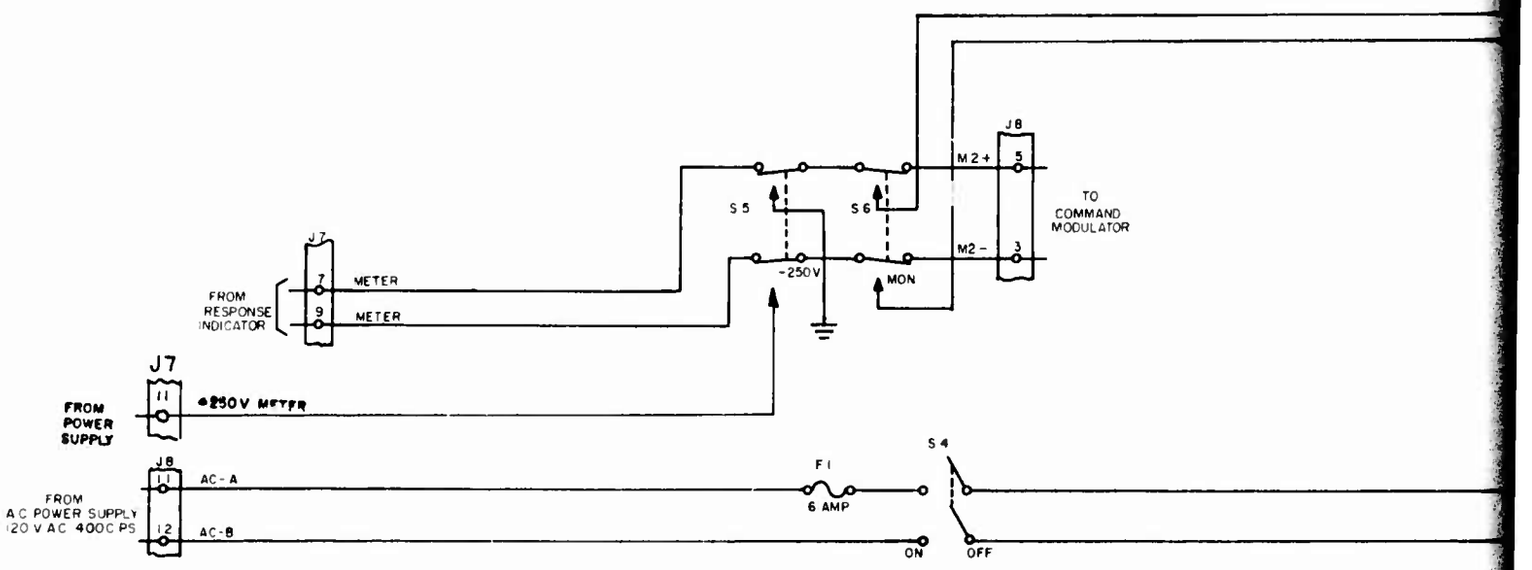
1. TERMINAL 10 ON J7, TERMINALS 1,6,7,8,13,14, AND 15 ON J8 AND TERMINALS C TO L ON J9 ARE NOT USED
2. FOR CONNECTING TO RECEIVER IN TELEPHONE SETS SUCH AS HG1/U HEADSET HANDSET DURING PATTERN MODULATOR MOTOR TEST.
3. UNUSED TERMINALS 2,5, AND 7 ON V1 AND V2 ARE GROUNDED

	SWITCH CONNECTION				
POSITION	S1A & S1B	S2A & S2B	S2C	S3A	S3B
0					
1	12-4-7	8-5		12-3	
2	12-5-8-6	8-9-5-6		12-3	12-3
3		9-10-5-6		12-5	12-3
4		10-11-5-6	7-11	12-5	12-5
5		11-12-5-6		12-7	12-5
6		12-1-5-6		12-7	12-7
7		1-2-5-6		12-9	12-7
8		2-3-5-6		12-9	12-9
9		3-4-5-6		12-11	12-9



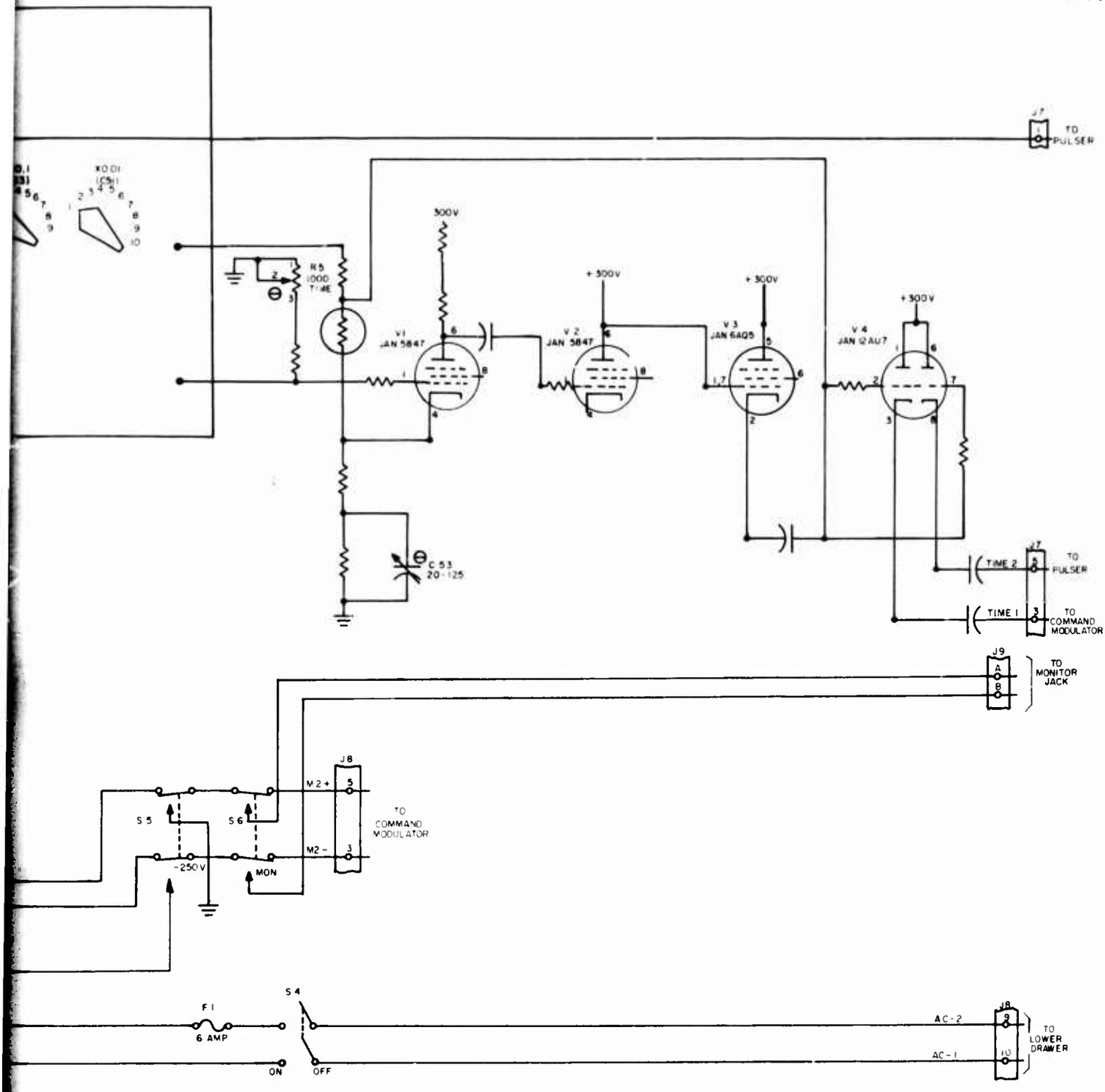






R-F TEST SET

[redacted] A [redacted]



R-F TEST SET MICROSECOND OSCILLATOR SIMPLIFIED SCHEMATIC

[redacted]

UNCLASSIFIED

MEASUREMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN		
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

THIS DATA NOT AVAILABLE

R-F TEST SET MICROSECOND OSCILLATOR, NOTES

[redacted]

A

NOTES:

1 TERMINAL 10 ON J7, TERMINALS 1,6,7,8,13,14, AND 15 ON J8 AND TERMINALS C TO L ON J9 ARE NOT USED

2 FOR CONNECTING TO RECEIVER IN TELEPHONE SETS SUCH AS HG1/U HEADSET HANDSET DURING PATTERN MODULATOR MOTOR TEST

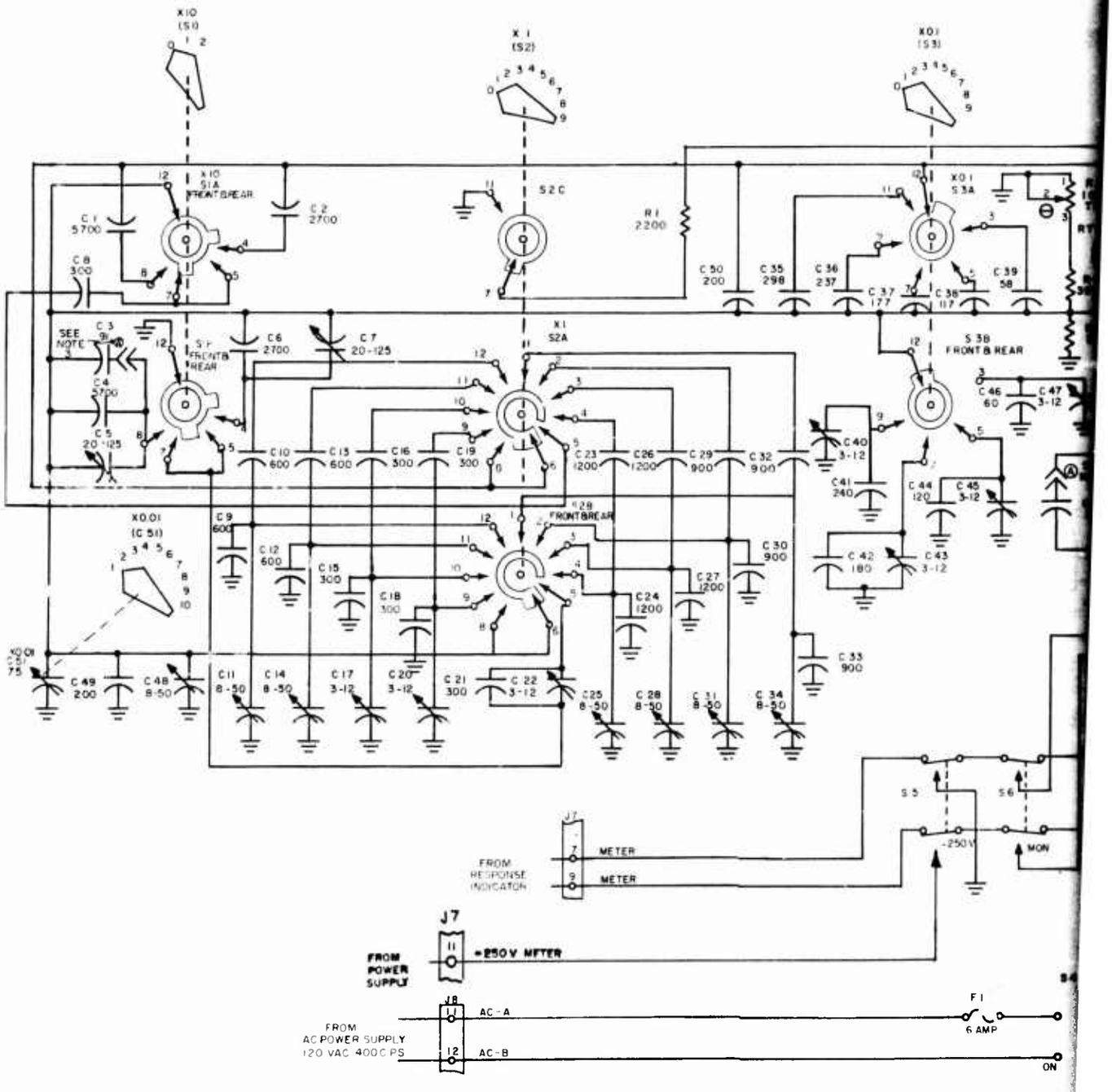
3 UNUSED TERMINALS 2,5, AND 7 ON V1 AND V2 ARE GROUNDED

SOR	SCREEN			CONTROL			CATHODE			FILAMENT		
OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

S DATA NOT AVAILABLE

[redacted]

UNCLASSIFIED



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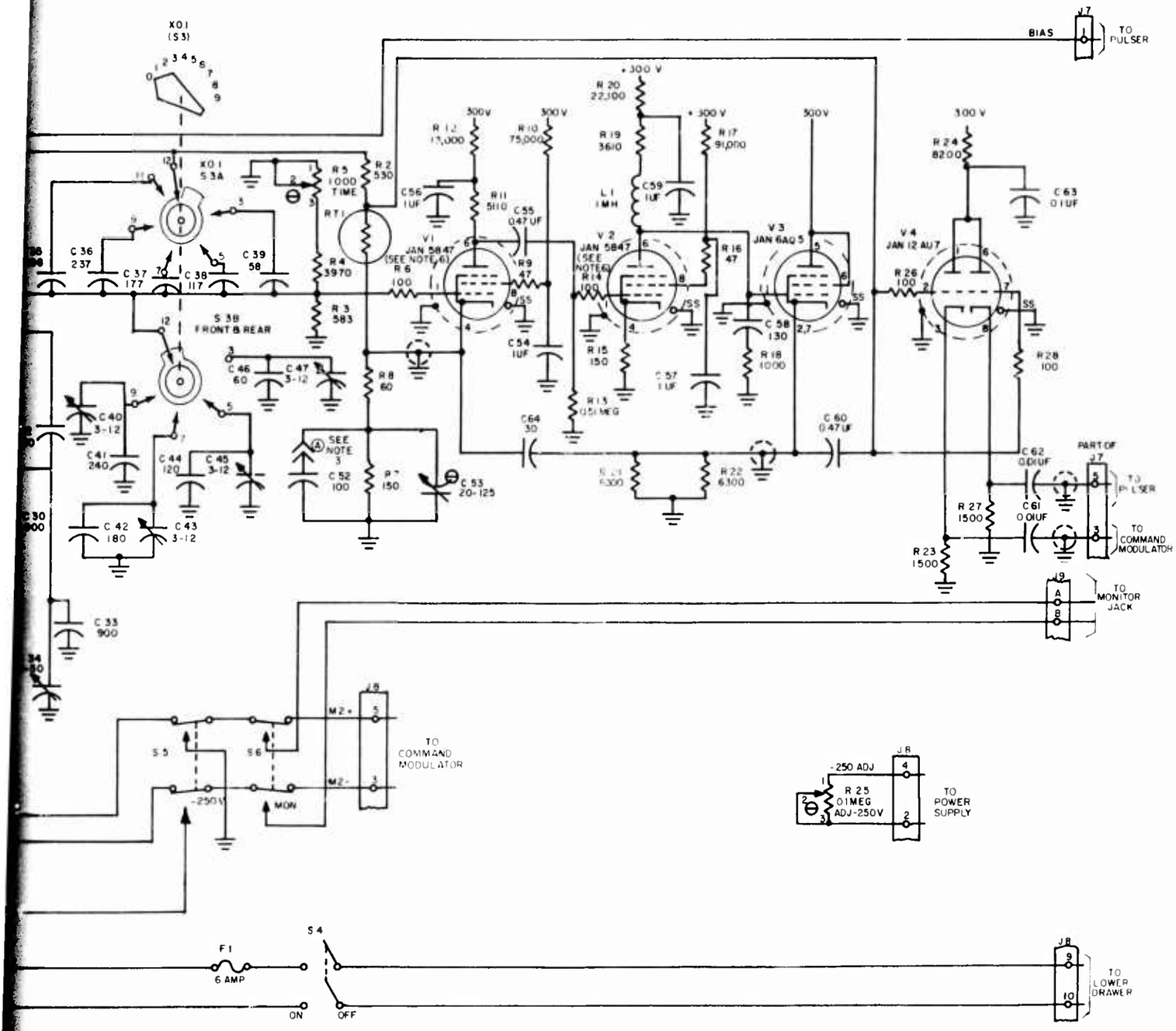

GS-15737 R.F TEST SET MICROSECOND OSCILLATOR

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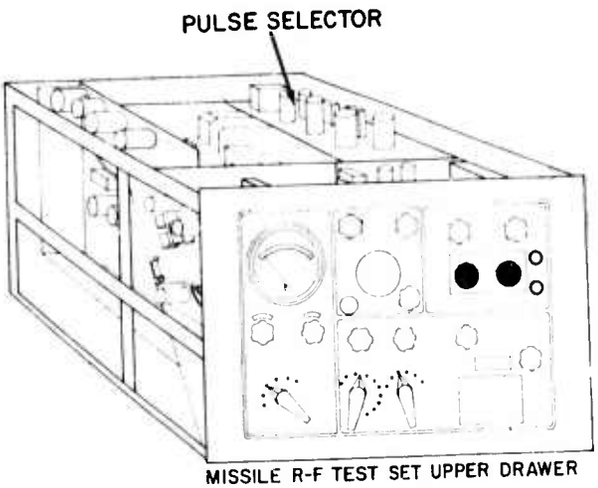
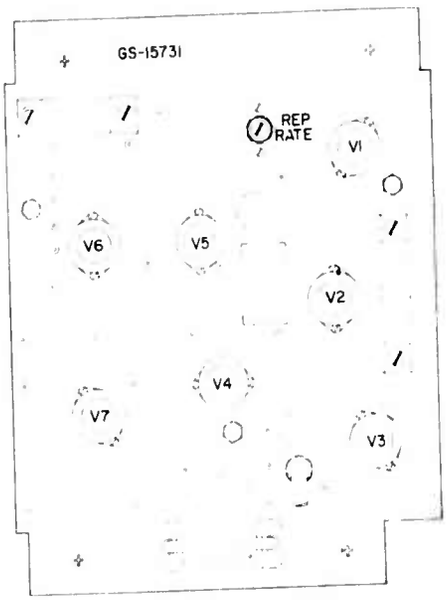
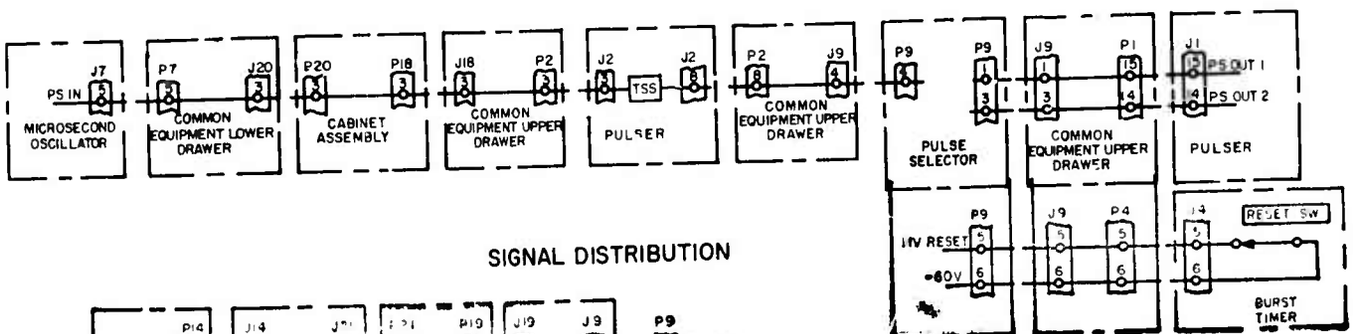


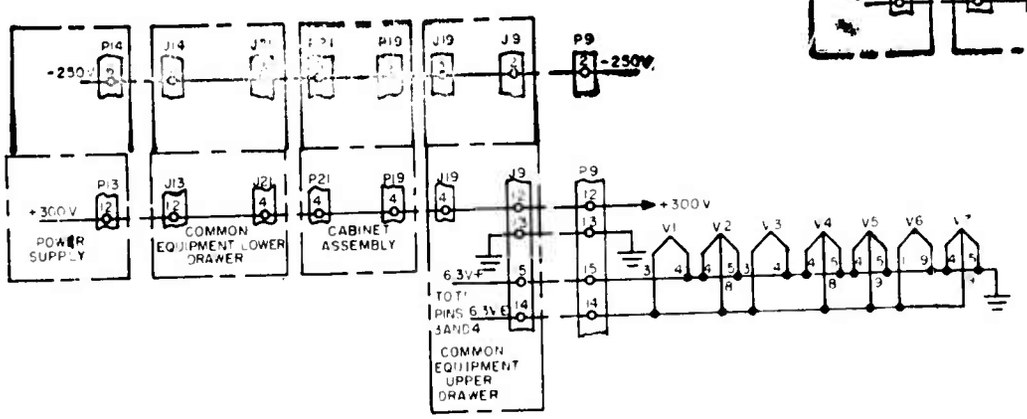
MISSILE R-F TEST SET UPPER DRAWER



PULSE SELECTOR TOP VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION

UNCLASSIFIED

R-F TEST SET PULSE SELECTOR, NOTES (TEST SIG)

[redacted]

A

[redacted]

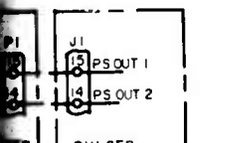
FIED

NOTES:

1 TERMINAL 7 ON P9 IS NOT USED.
2 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

SWITCH	POSITION
TIME	4.00

EW



ER

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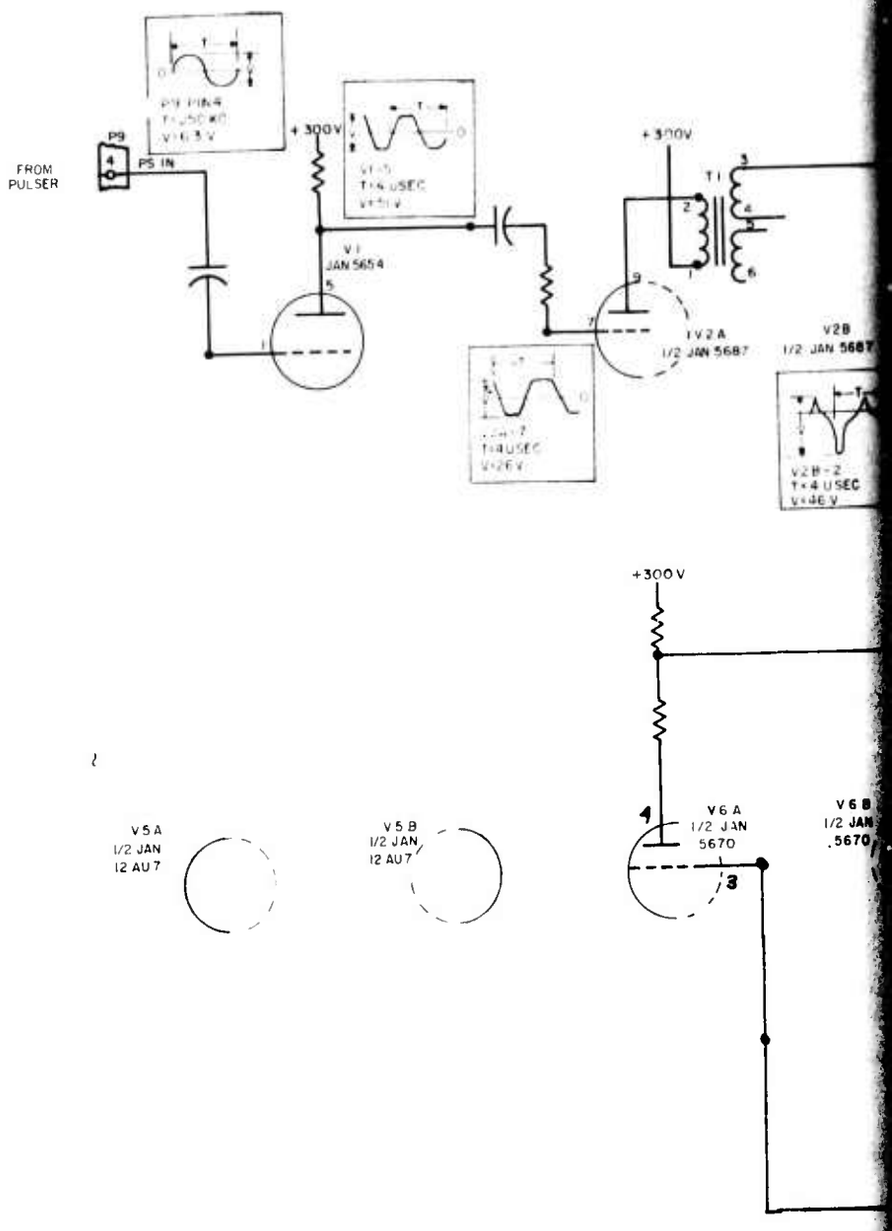
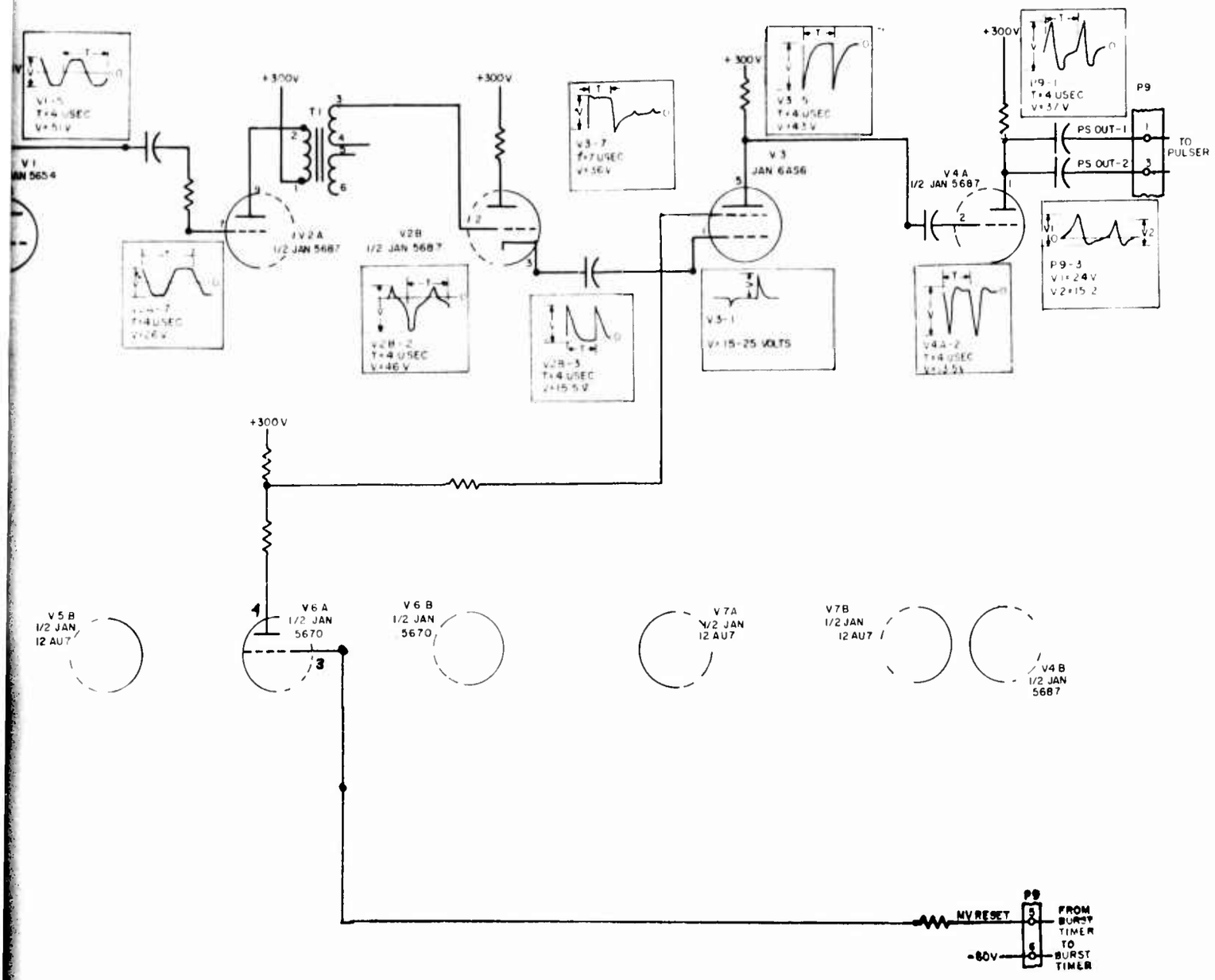
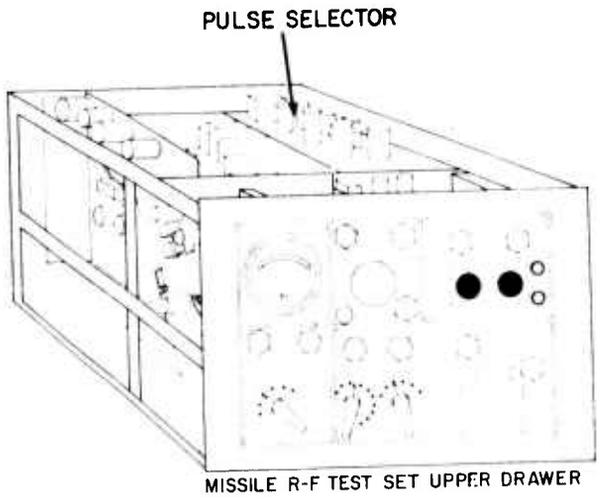

P9
P9 PIN 4
T=50 KC
V=63 V
FROM
PULSER
P9 IN
+300V
V1
JAN 5654
T=4 USEC
V=51 V
+300V
T1
V2 A
1/2 JAN 5687
V2B
1/2 JAN 5687
V2B-2
T=4 USEC
V=46 V
+300V
V5 A
1/2 JAN
12 AU 7
V5 B
1/2 JAN
12 AU 7
V6 A
1/2 JAN
5670
V6 B
1/2 JAN
5670

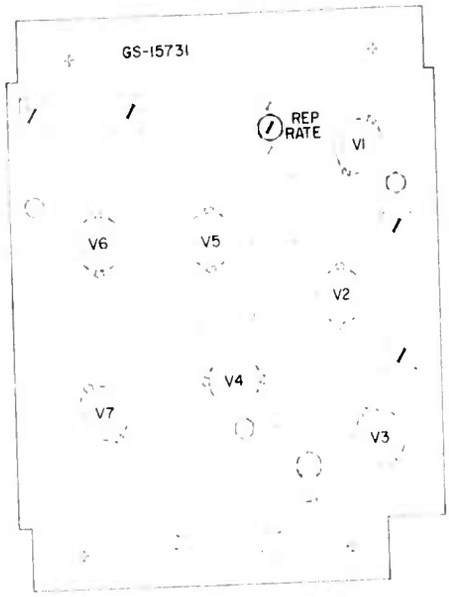


R-F TEST SET PULSE SELECTOR SIMPLIFIED SCHEMATIC
(TSS I-TEST SIG)

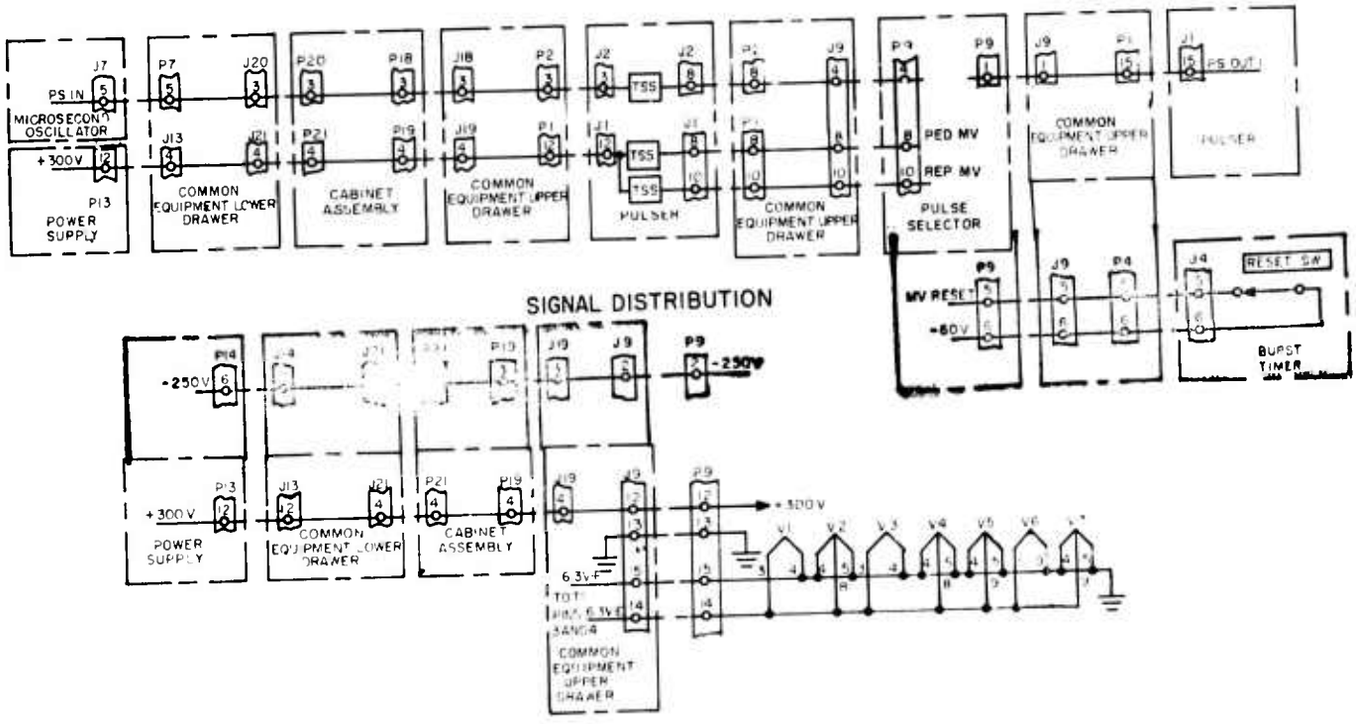
UNCLASSIFIED



MISSILE R-F TEST SET UPPER DRAWER



PULSE SELECTOR TOP VIEW



POWER DISTRIBUTION

R-F TEST SET PULSE SELECTOR, NOTES (REC. SENS & TRANS TEST)

A

[redacted]

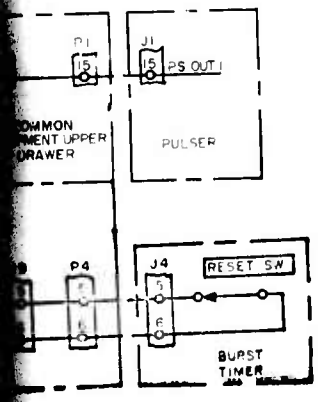
SIFIED

NOTES:

1 TERMINAL 7 ON P9 IS NOT USED.
2 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

SWITCH	POSITION
TIME	4.00

W



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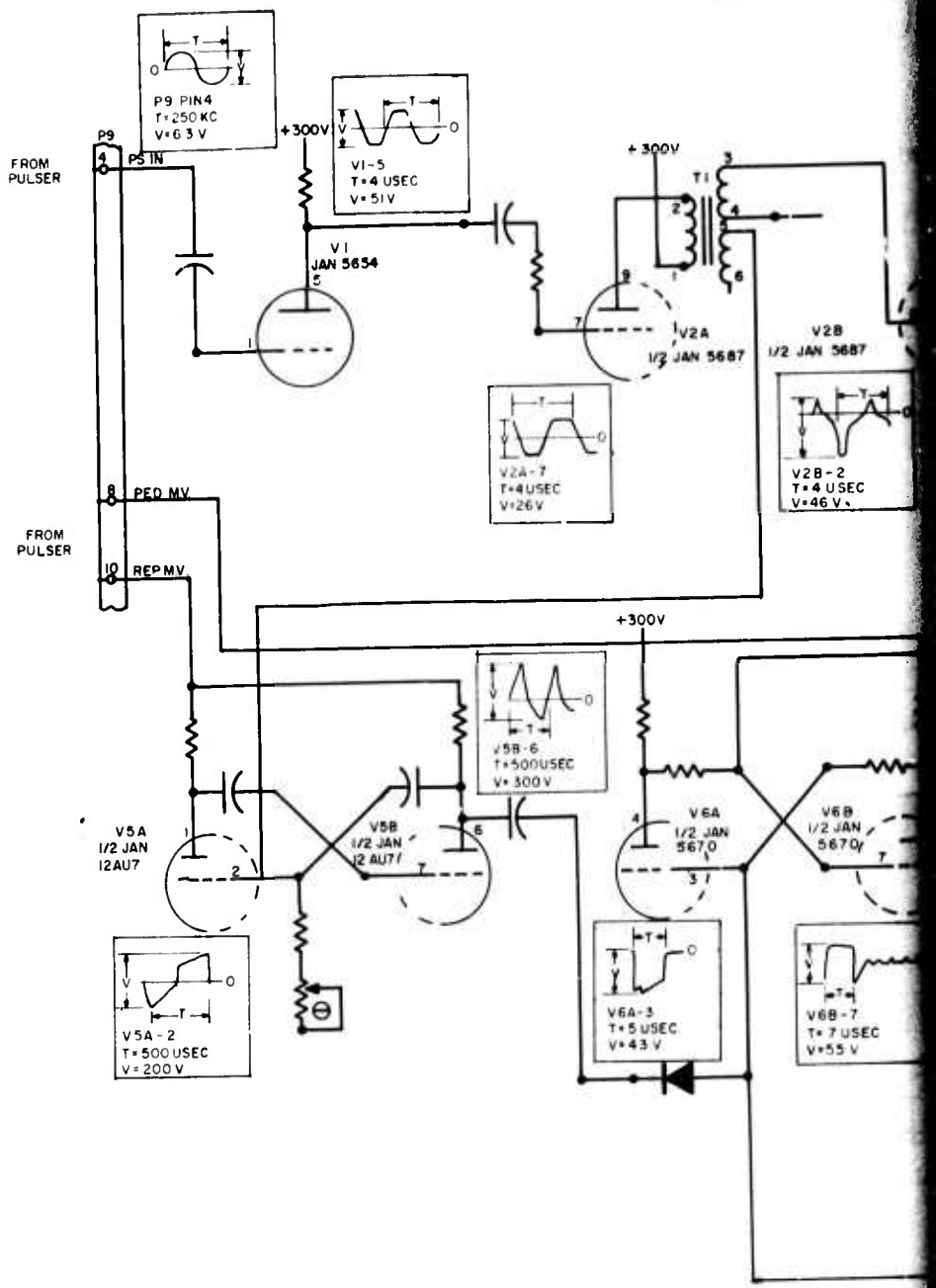
CONFIDENTIAL

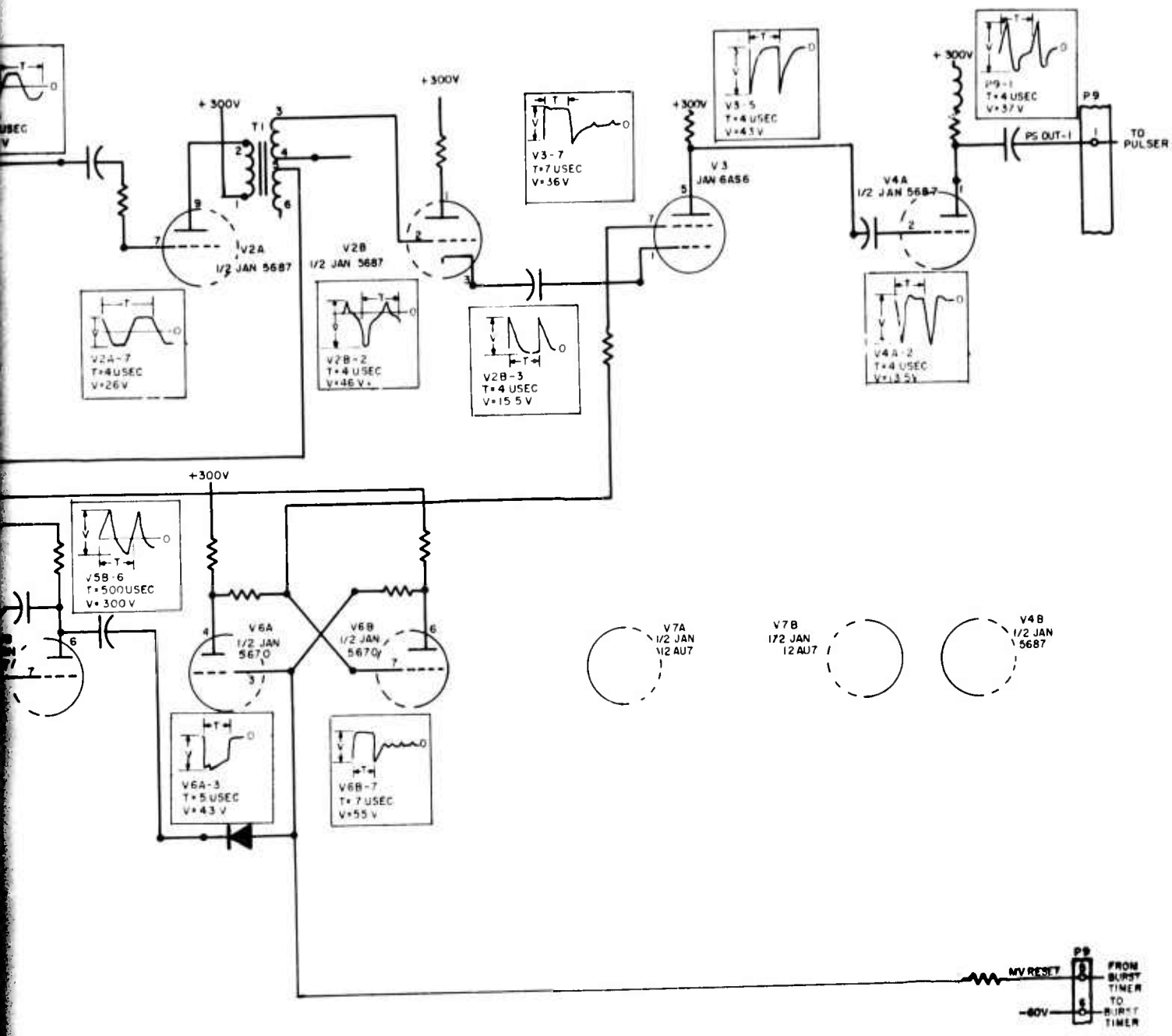
UNCLASSIFIED



UNCLASSIFIED

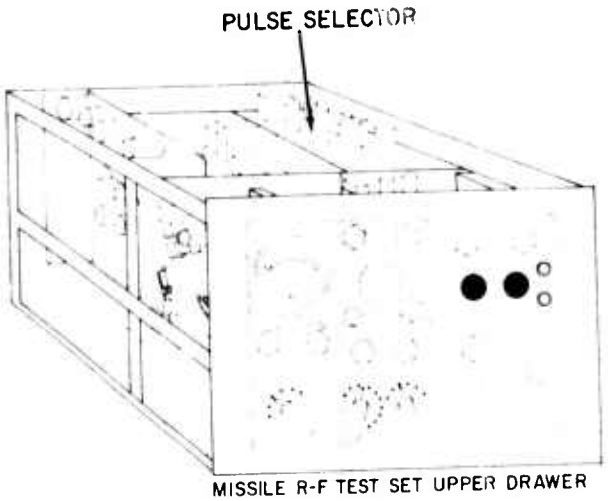
CONFIDENTIAL

A

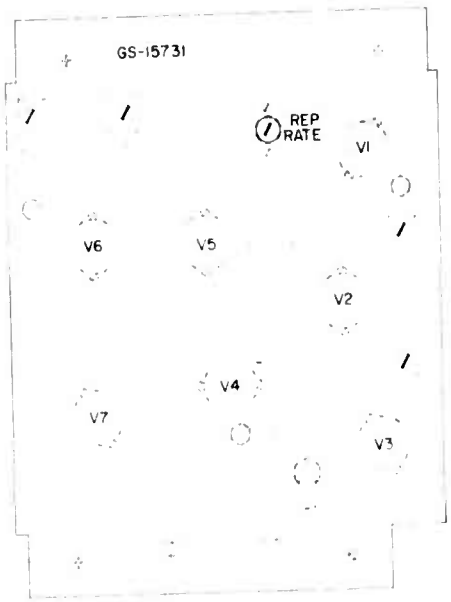


R-F TEST SET PULSE SELECTOR SIMPLIFIED SCHEMATIC
(REC SENS & TRANS TEST TSS 2 AND 3)

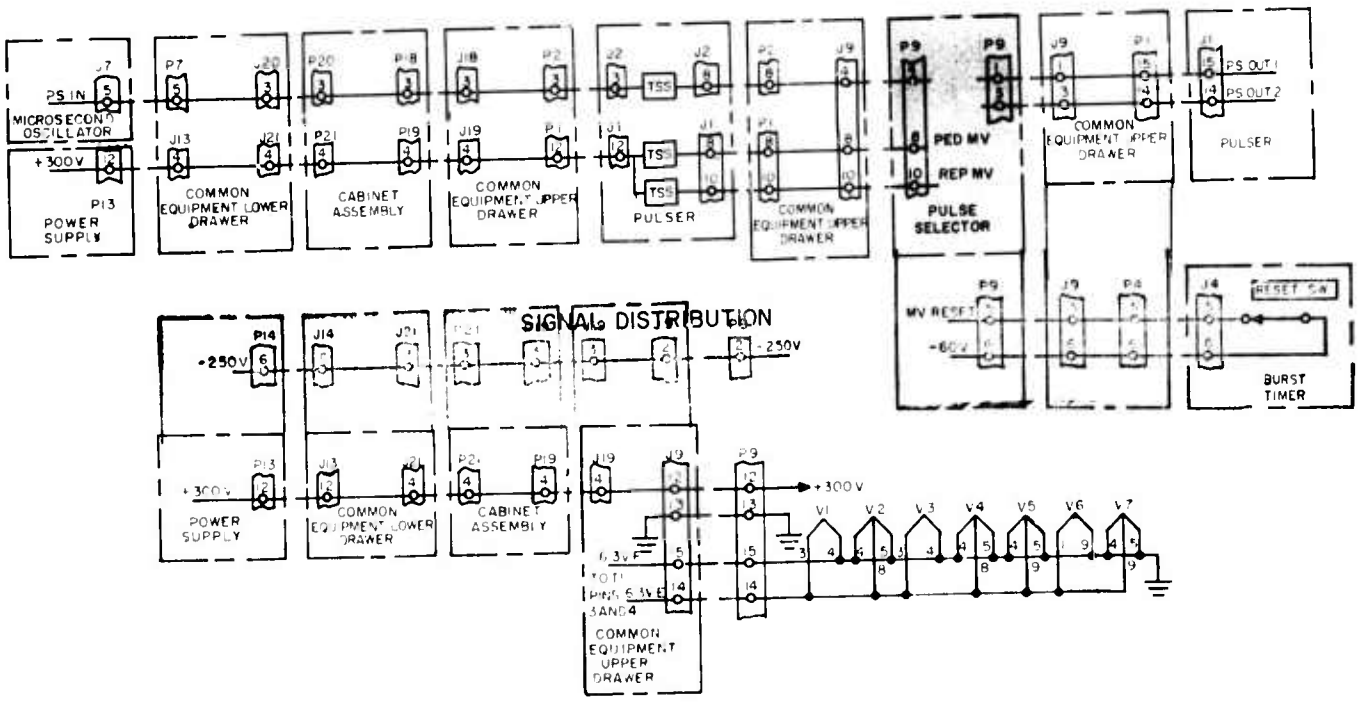
UNCLASSIFIED



MISSILE R-F TEST SET UPPER DRAWER



PULSE SELECTOR TOP VIEW



POWER DISTRIBUTION

R-F TEST SET PULSE SELECTOR, NOTES (RESP TIME A & B)

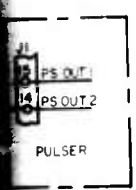
CONFIDENTIAL

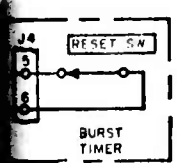
A

NOTES:

1 TERMINAL 7 ON P9 IS NOT USED.
2 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

SWITCH	POSITION
TIME	4.00





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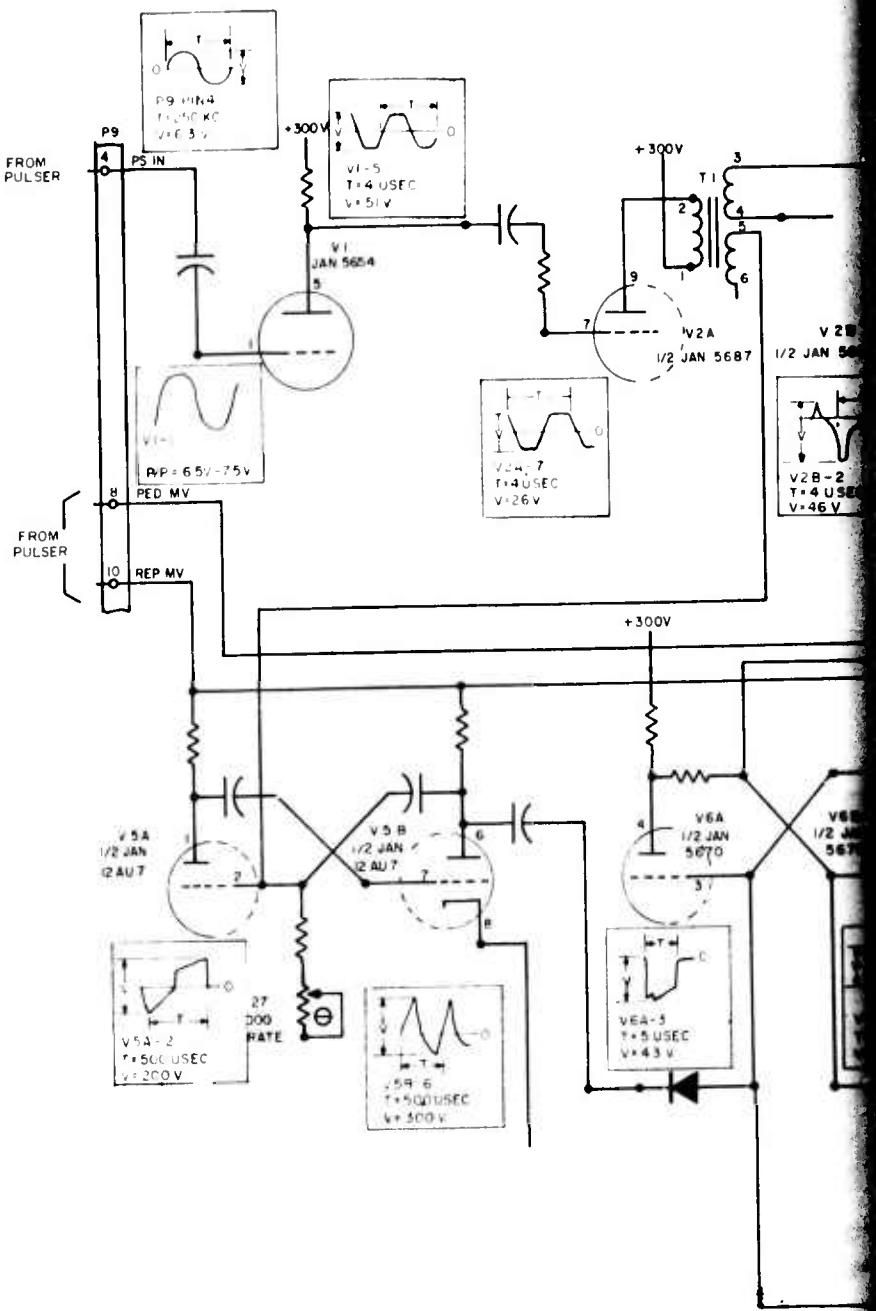
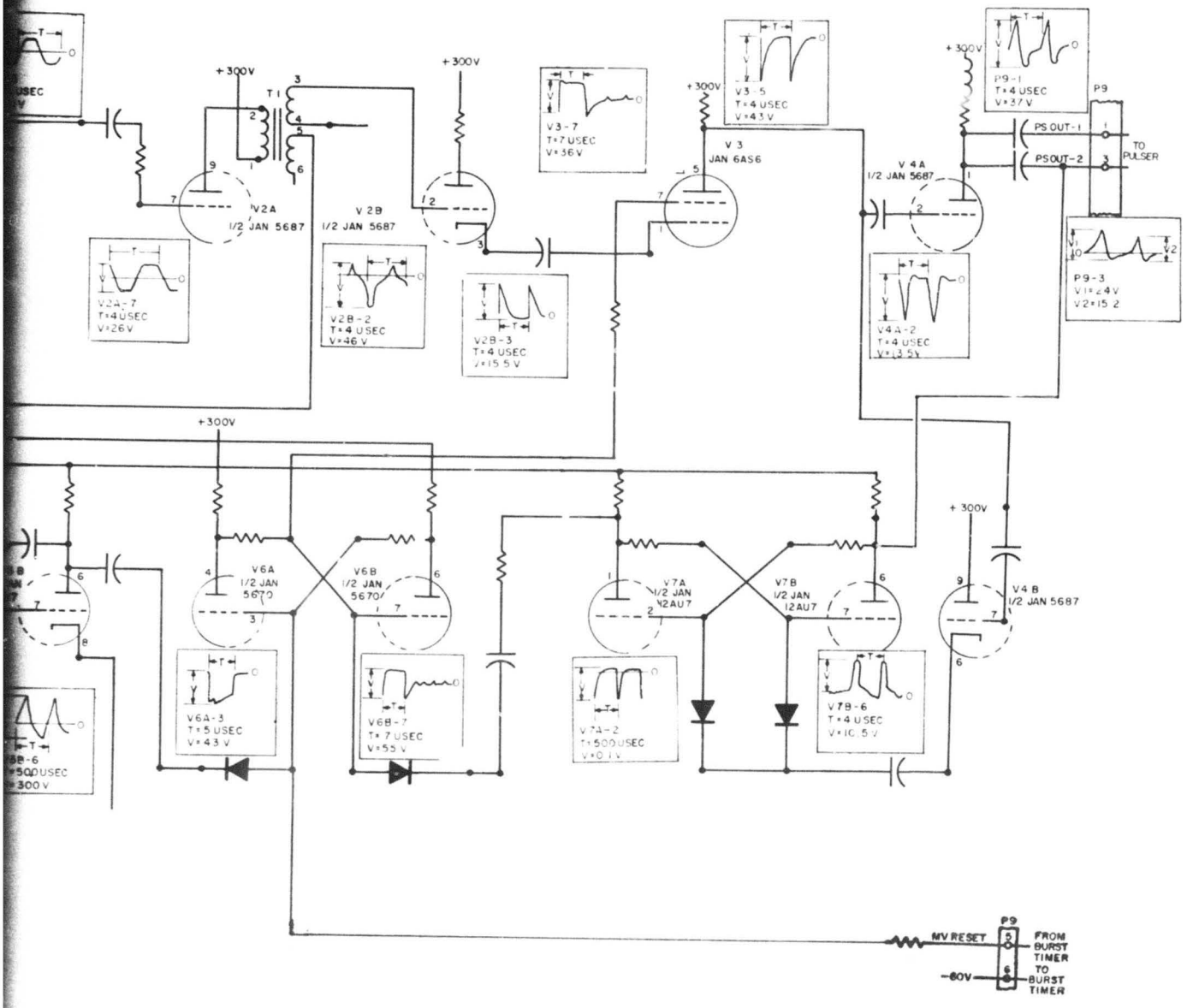


NULL

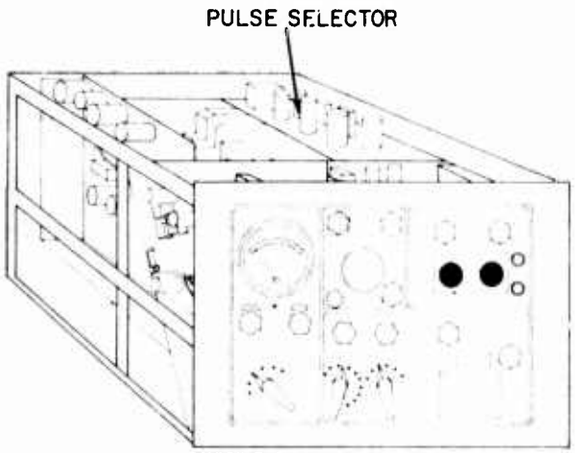
CONFIDENTIAL

A

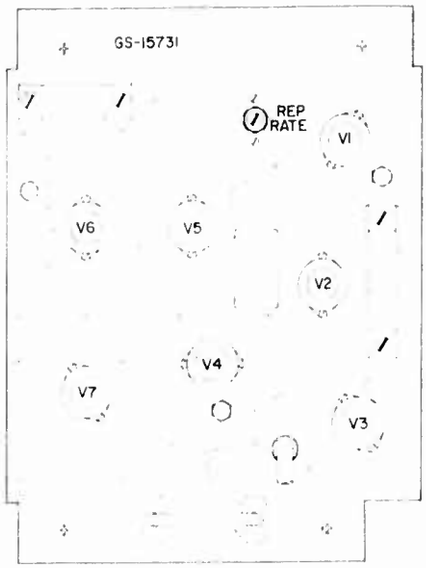


R-F TEST SET PULSE SELECTOR SIMPLIFIED SCHEMATIC
(RESP TIME A & B TSS 4 AND 5)

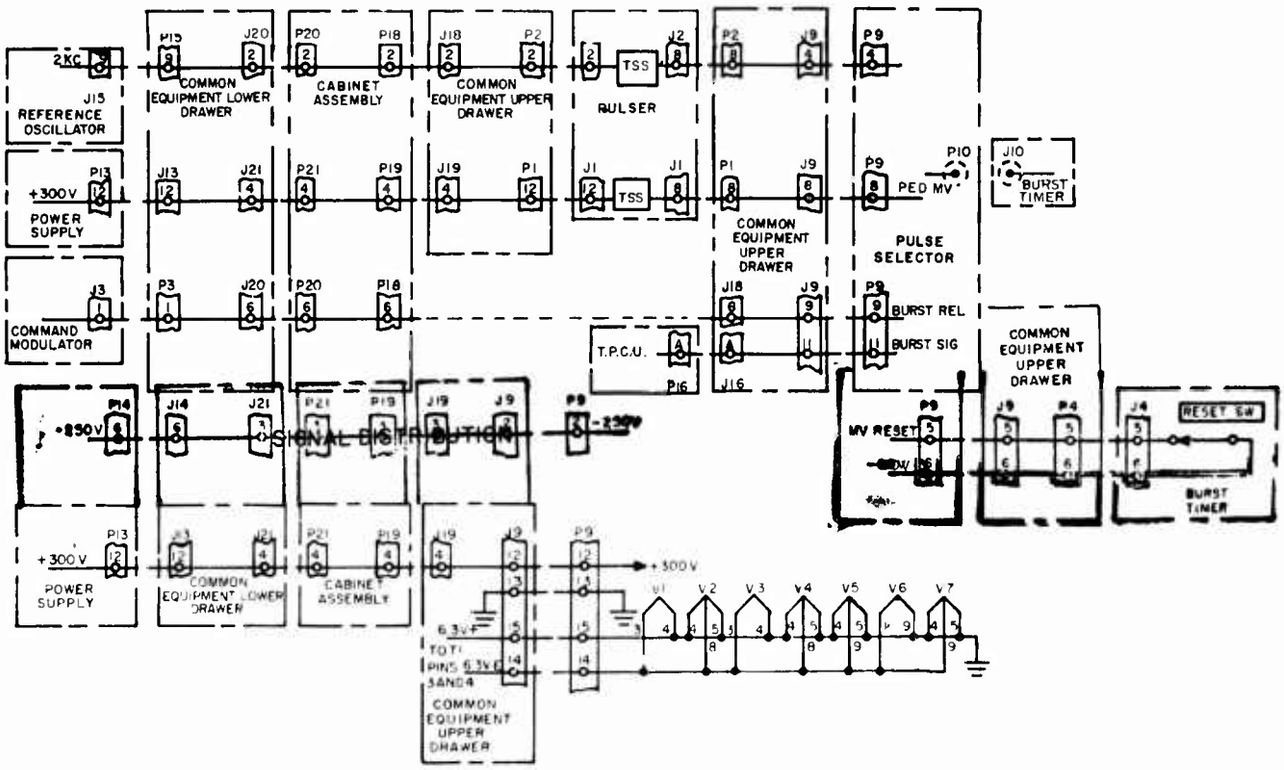
B



MISSILE R-F TEST SET UPPER DRAWER



PULSE SELECTOR TOP VIEW

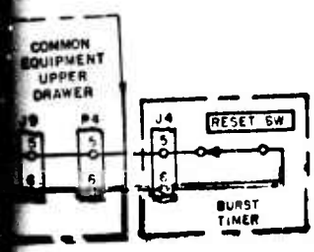


POWER DISTRIBUTION

R-F TEST SET PULSE SELECTOR, NOTES (COM SIG)

NOTES:

1 TERMINAL 7 ON P9 IS NOT USED.



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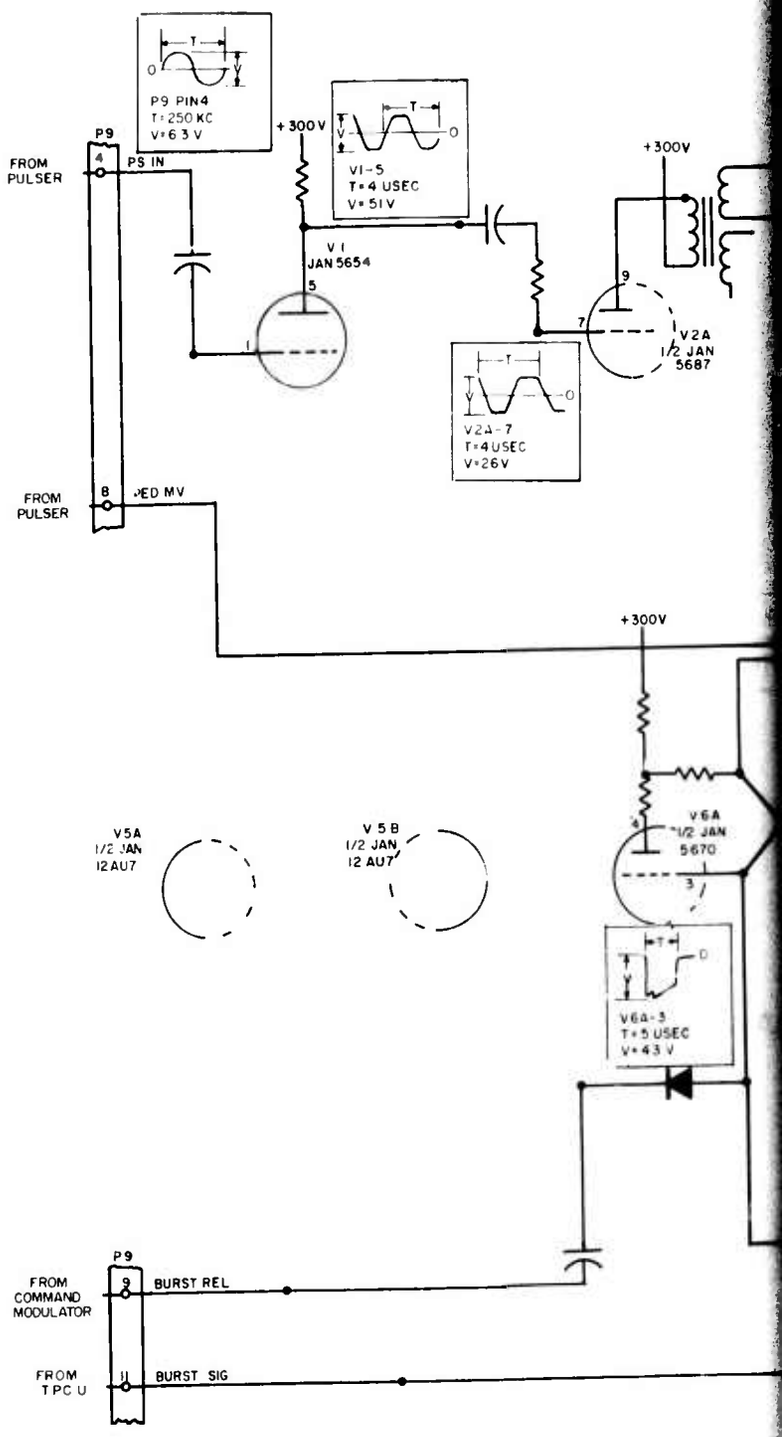
UNCLASSIFIED



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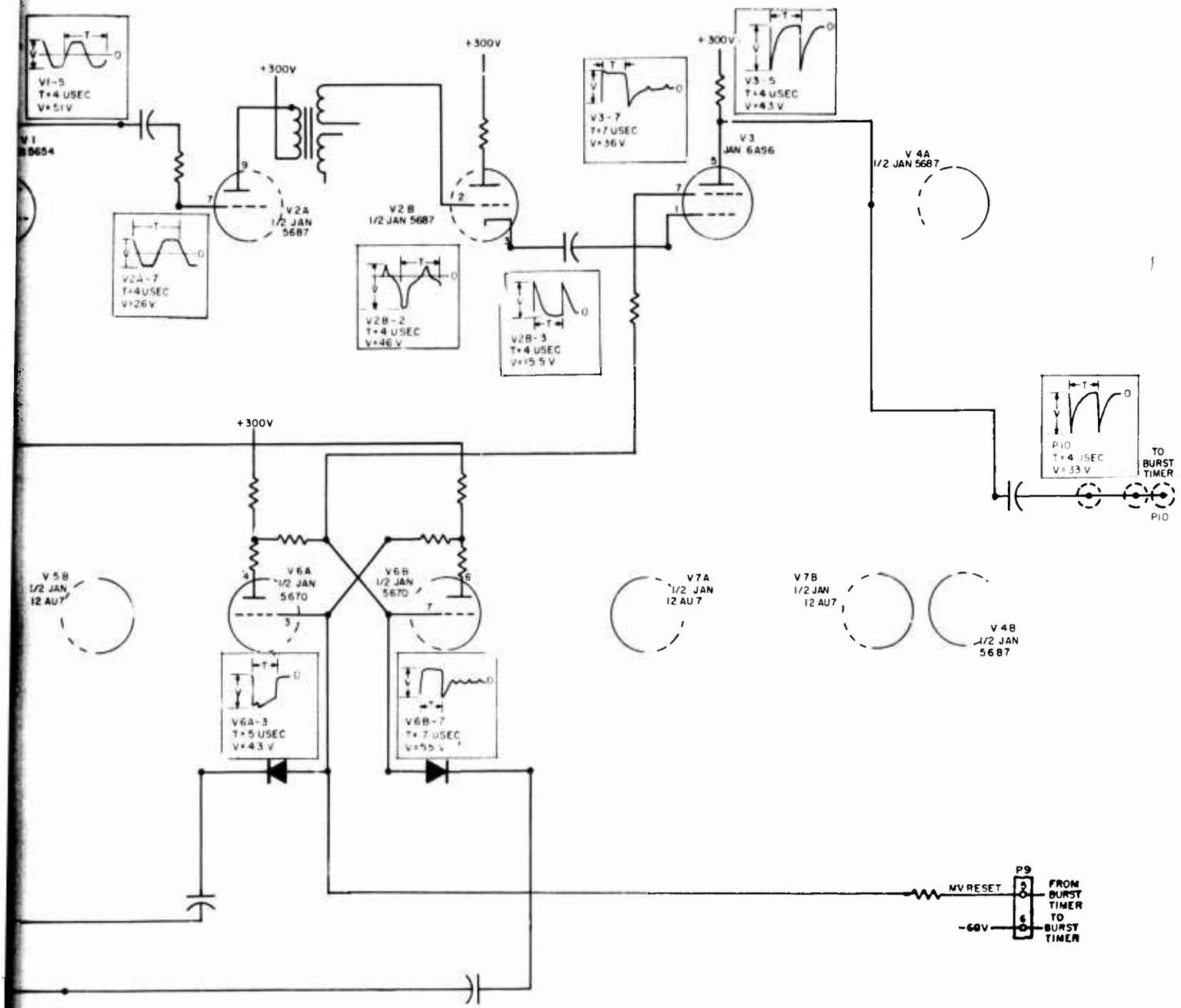


R-F TEST SET PULSE SELECTOR SIMPLIFIED SCHEMATIC
(TSS 6-COMM SIG)

[redacted]

MEASUREMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN				
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	V

THIS DATA NOT AVAILABLE

R-F TEST SET PULSE SELECTOR, NOTES

[redacted]

A

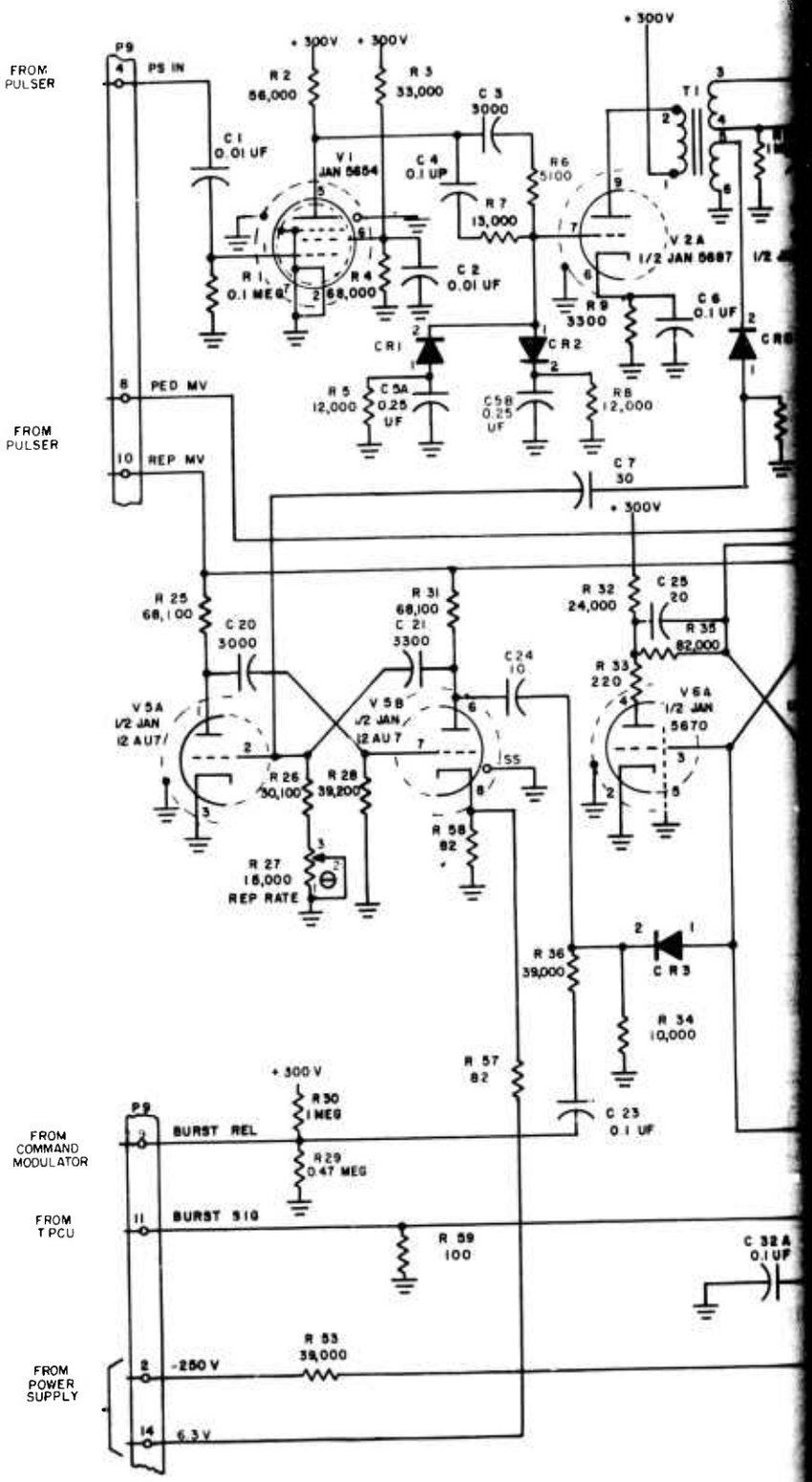
NOTES:

1 TERMINAL 7 ON P9 IS NOT USED

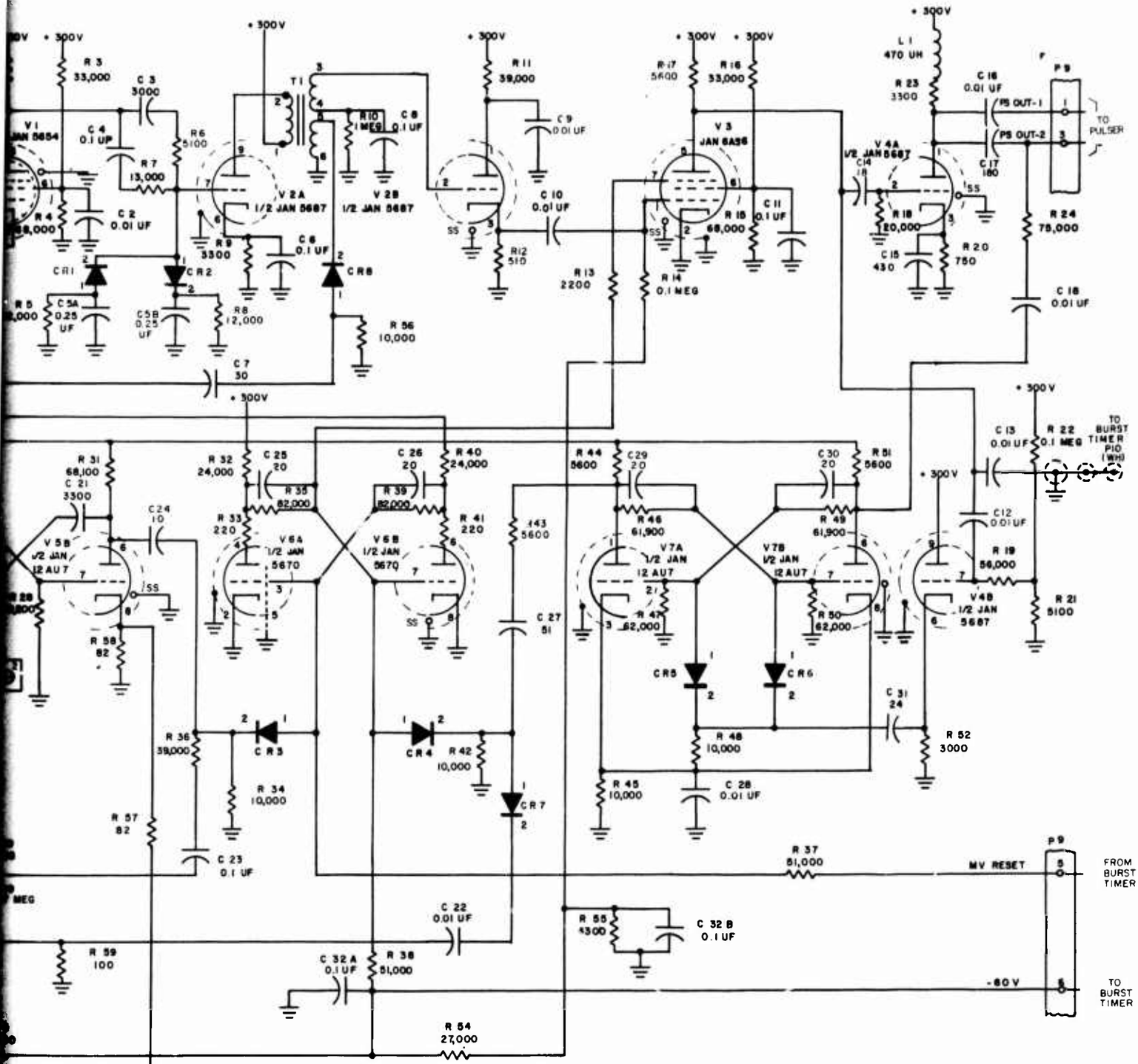
SOR	SCREEN			CONTROL			CATHODE			FILAMENT		
OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

DATA NOT AVAILABLE

CONFIDENTIAL

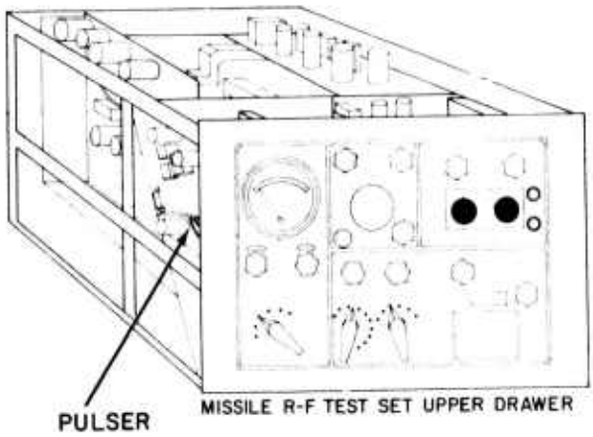


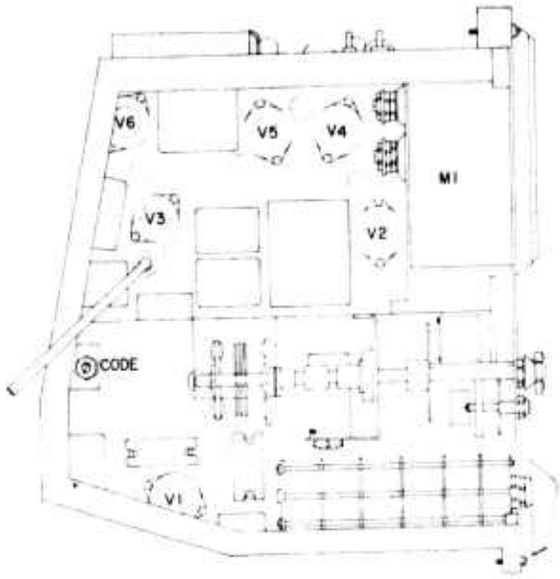
UNCLASSIFIED



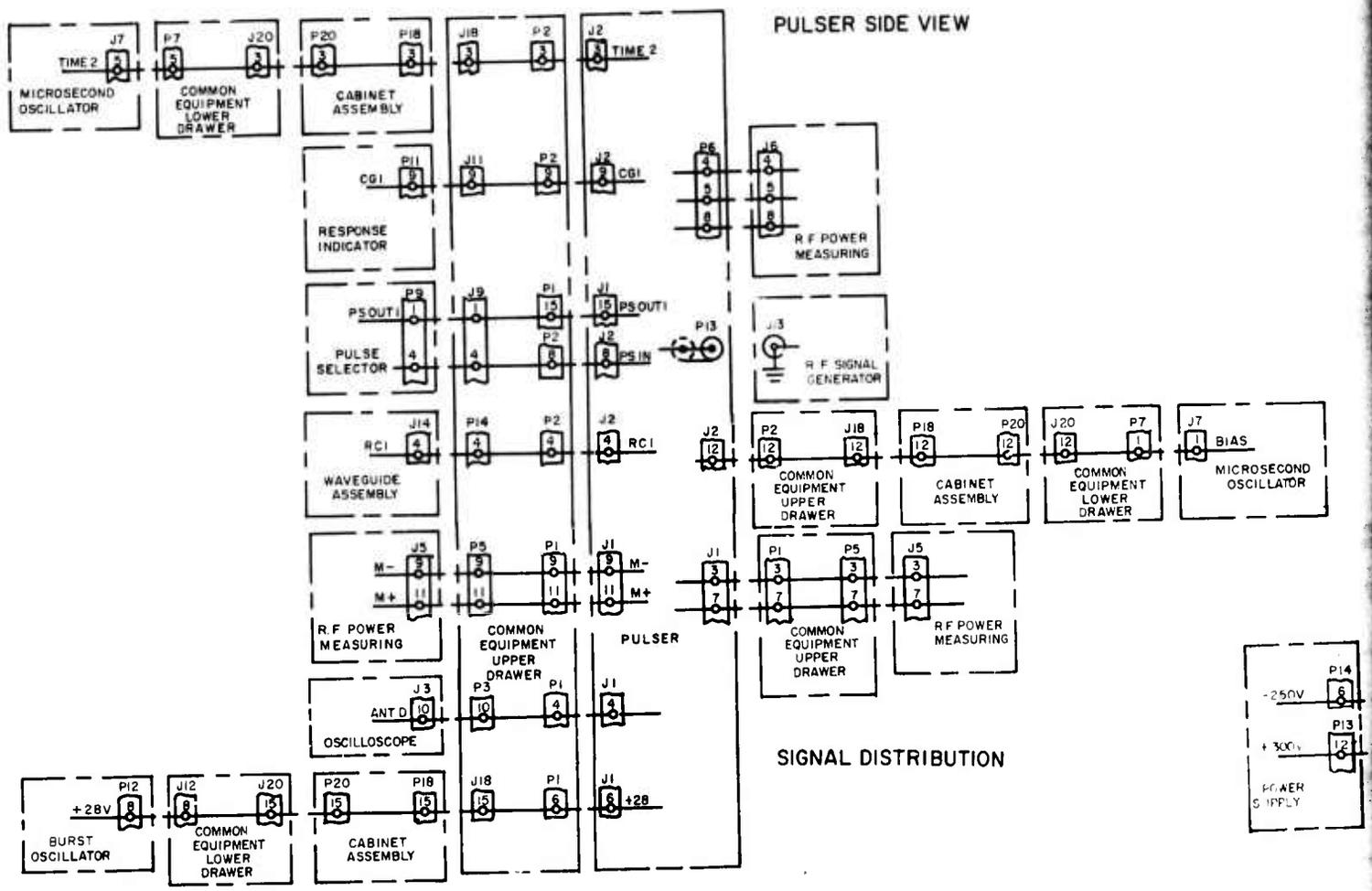
GS-15731 R-F TEST SET PULSE SELECTOR

UNCLASSIFIED





PULSER SIDE VIEW



SIGNAL DISTRIBUTION

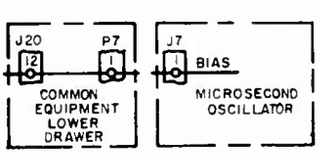
R-F TEST SET PULSER, NOTES (R-F TEST SIG)

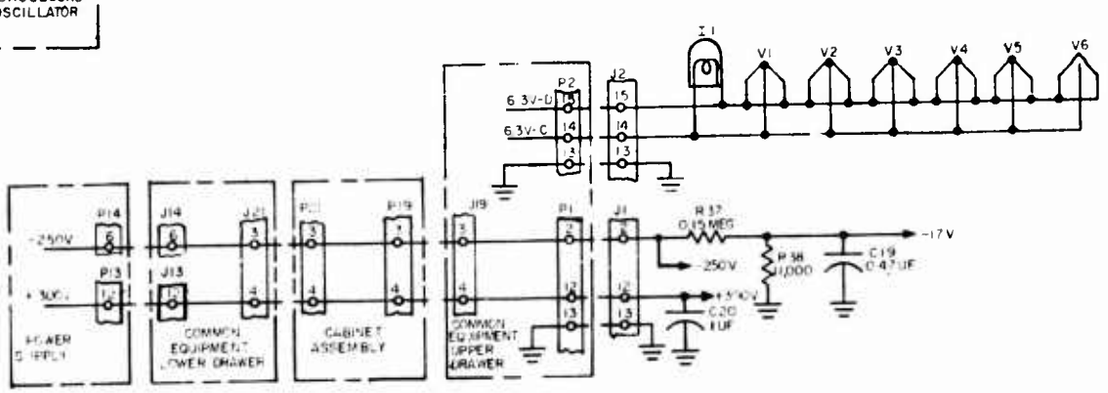
NOTES:

1. TERMINALS 5 AND 7 ON J2 AND TERMINALS 1,2,6,9,10,11,12,14 AND 15 ON P6 ARE NOT USED.
2. WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

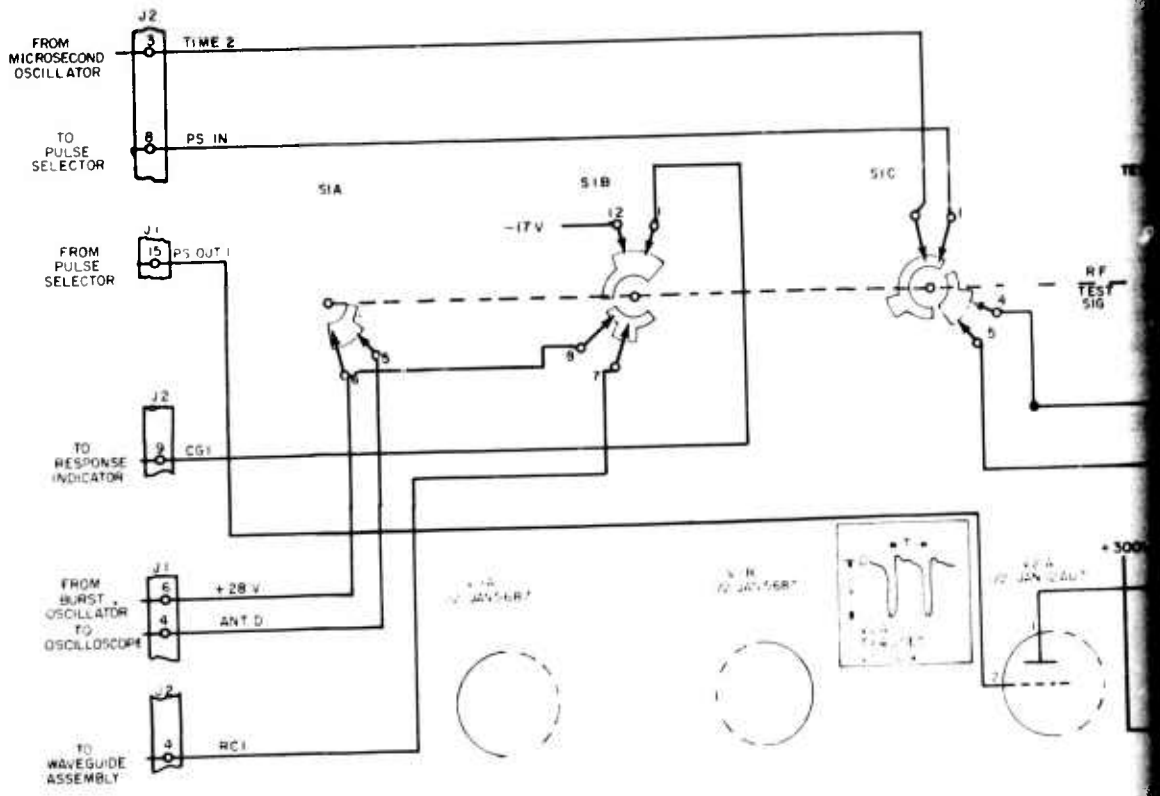
SWITCH	POSITION
PWR METER CAL	MEAS
TIME	4.00
CODE RANGE	C
ADJ. CODE	APROX. MID POINT

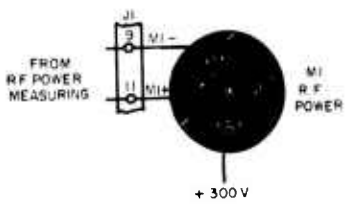
	S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E	S1F
1 R-F TEST SIG	5-6	12-1, 7-8	12-1, 4-5	6-7	6-7	11-12, 6-7
2 REC SENS	6-7	1-2, 7-8-9	12-1, 4-5	12-1, 7-8	12-1, 7-8	11-12, 7-9
3 TRANS TEST	6-7	2-3, 8-9	12-1, 5-7	12-1-2, 7-8	12-1-2, 78	12-2, 7-9
4 RESP TIME A	12-1	3-4, 9-10	12-1, 7-8	12-1-2, 7-8	12-1-2, 7-8	2-3
5 RESP TIME B	12-1, 6-7	3-4	12-1, 7-8	1-2, 7-8	1-2, 7-8	2-3
6 COMM SIG	1-3, 6-7	3-6	1-2, 7-8	2-5, 7-8	2-5, 7-8	3-5

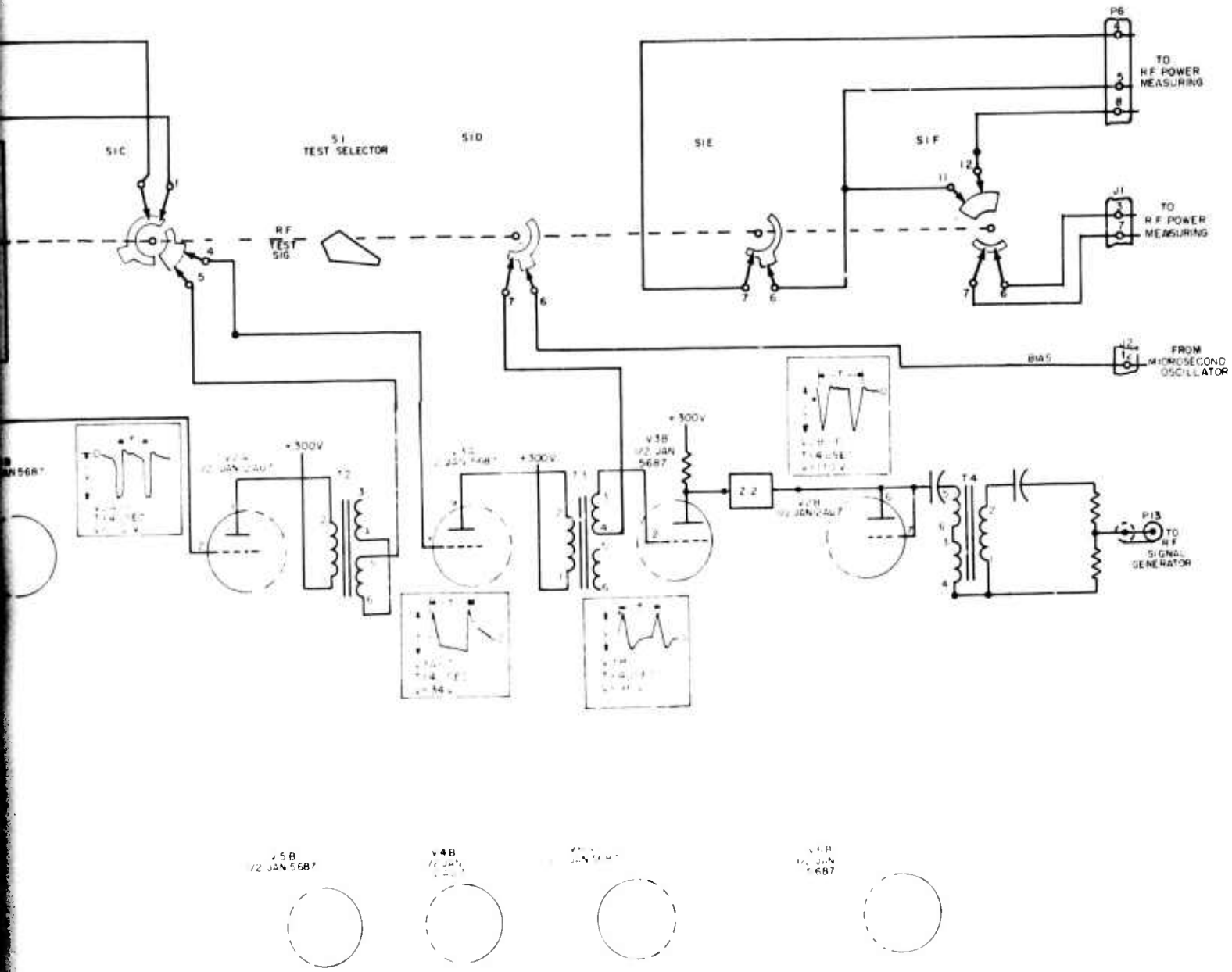




POWER DISTRIBUTION

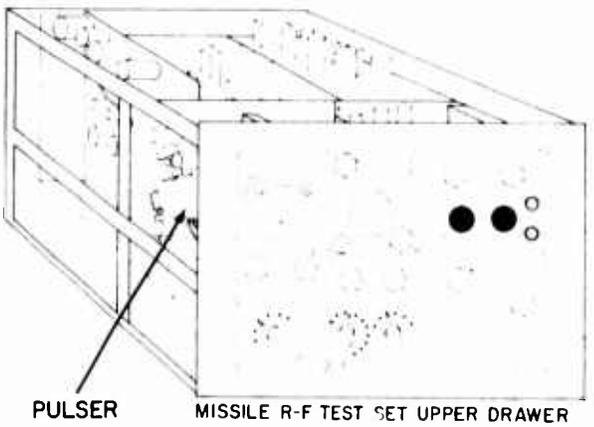

J2
FROM MICROSECOND OSCILLATOR
3
TIME 2
TO PULSE SELECTOR
8
PS IN
S1A
S1B
S1C
-17 V
J1
FROM PULSE SELECTOR
15
PS OUT 1
RF TEST SIG
J2
TO RESPONSE INDICATOR
9
CG1
J1
FROM BURST OSCILLATOR
6
+28 V
TO OSCILLOSCOPE
4
ANT D
J2
TO WAVEGUIDE ASSEMBLY
4
RC1
+300


J1
FROM RF POWER MEASURING
3
VI -
11
MI+
M1
R F POWER
+300 V



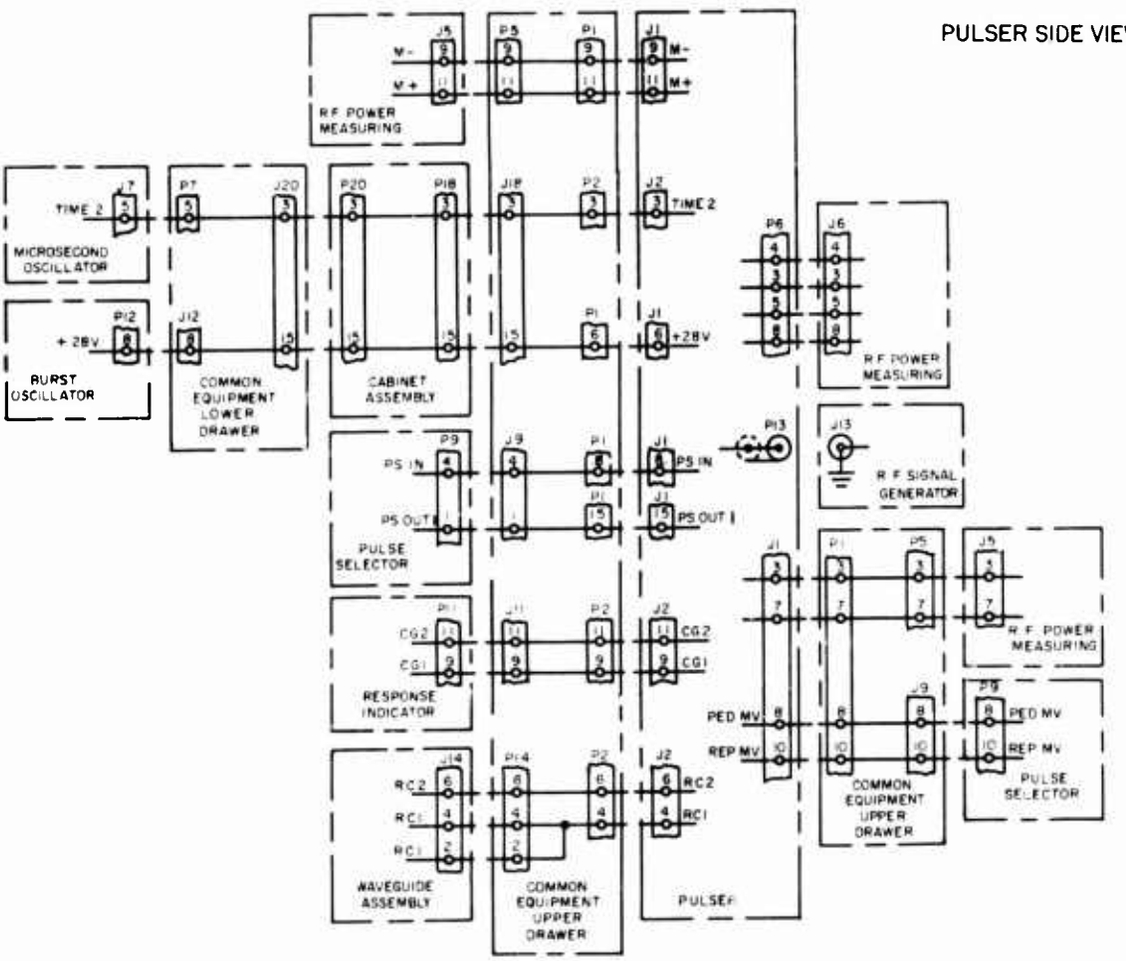
R-F TEST SET PULSER SIMPLIFIED SCHEMATIC
(R-F TEST SIG TSS-1)

UNCLASSIFIED



MISSILE R-F TEST SET UPPER DRAWER

PULSER SIDE VIEW



SIGNAL DISTRIBUTION

R-F TEST PULSER, NOTES (REC SENS)

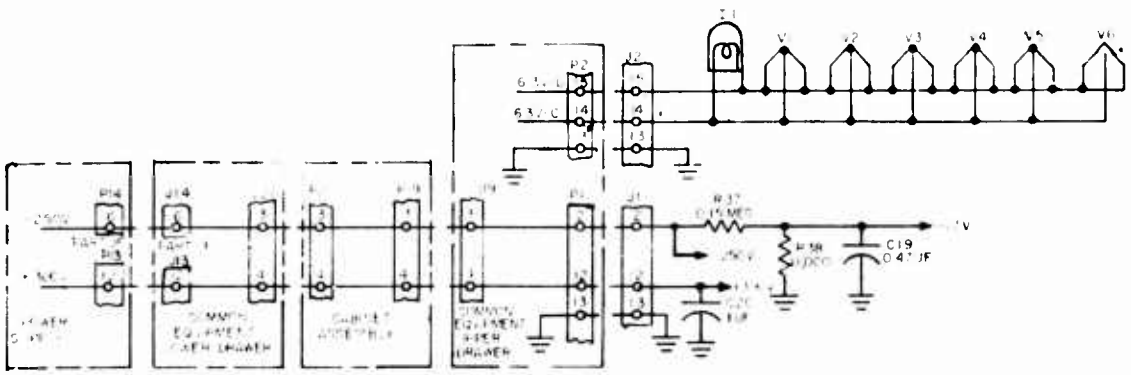
UNCLASSIFIED

NOTES:

1. TERMINALS 5 AND 7 ON J2 AND TERMINALS 1,2,6,9,10,11,12,14 AND 15 ON P6 ARE NOT USED
2. WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

SWITCH	POSITION
PWR METER CAL	MEAS
TIME	4.00
CODE RANGE	C
ADJ CODE	APROX. MID POINT

	S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E	S1F
1 R-F TEST SIG	5-6	12-1, 7-8	12-1, 4-5	6-7	6-7	11-12, 6-7
2 REC SENS	6-7	1-2, 7-8-9	12-1, 4-5	12-1, 7-8	12-1, 7-8	11-12, 7-9
3 TRANS TEST	6-7	2-3, 8-9	12-1, 5-7	12-1-2, 7-8	12-1-2, 7-8	12-2, 7-9
4 RESP TIME A	12-1	3-4, 9-10	12-1, 7-8	12-1-2, 7-8	12-1-2, 7-8	2-3
5 RESP TIME B	12-1, 6-7	3-4	12-1, 7-8	1-2, 7-8	1-2, 7-8	2-3
6 COMM SIG	1-3, 6-7	3-6	1-2, 7-8	2-5, 7-8	2-5, 7-8	3-5



POWER DISTRIBUTION

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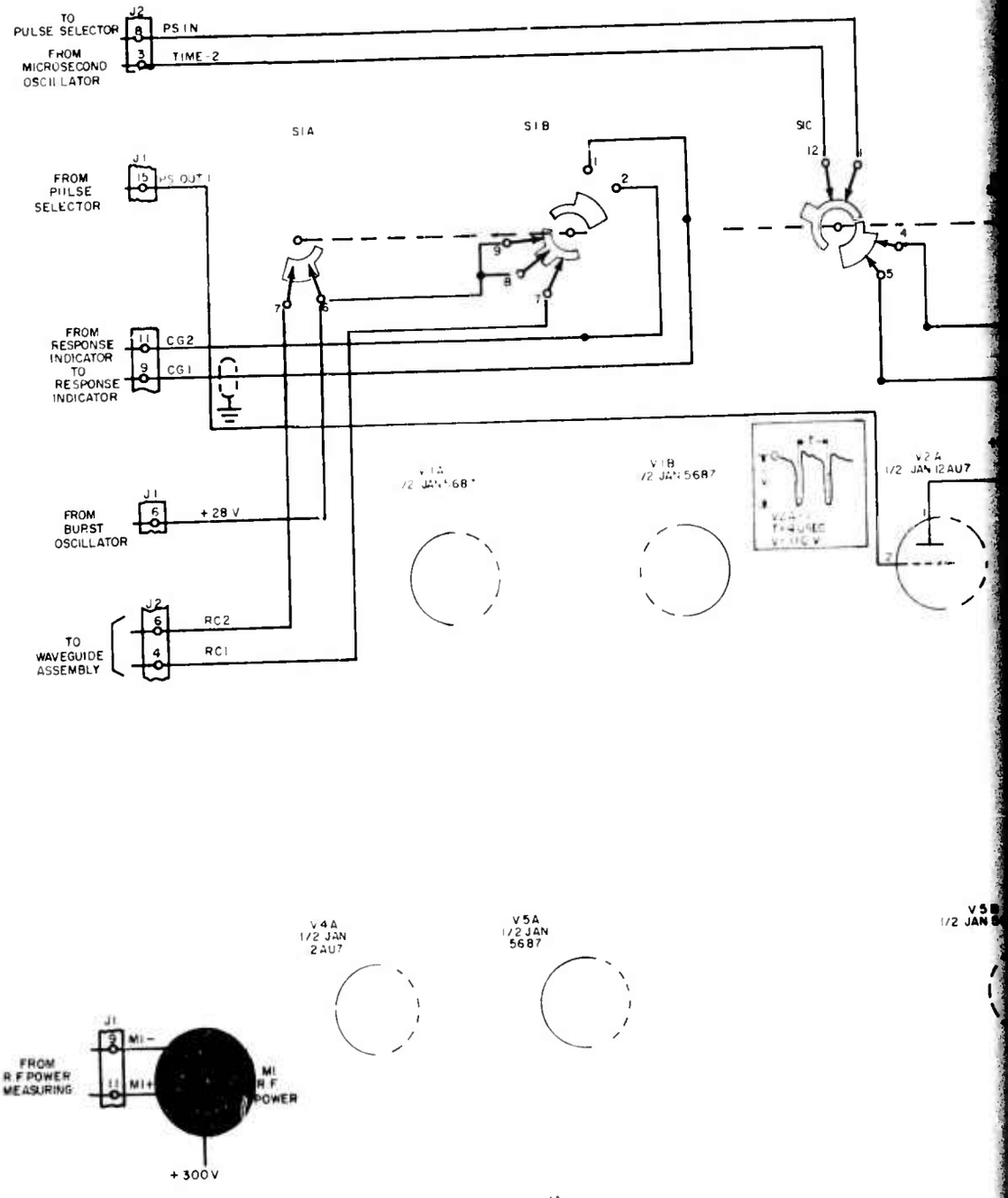

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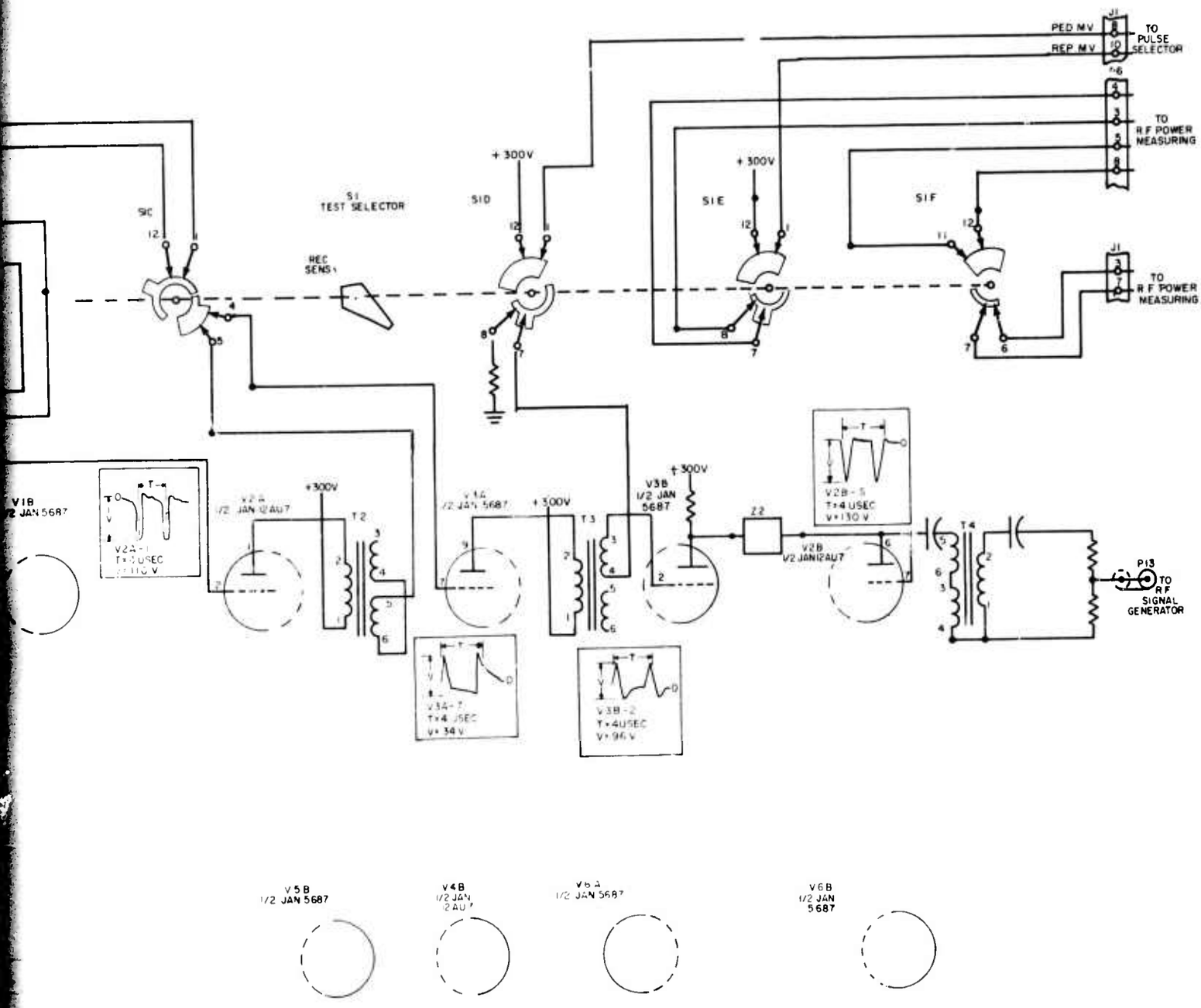
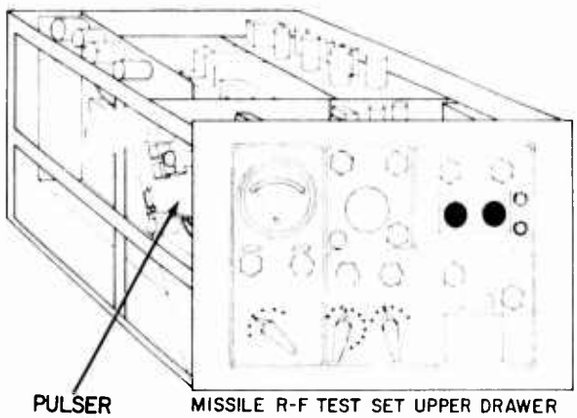
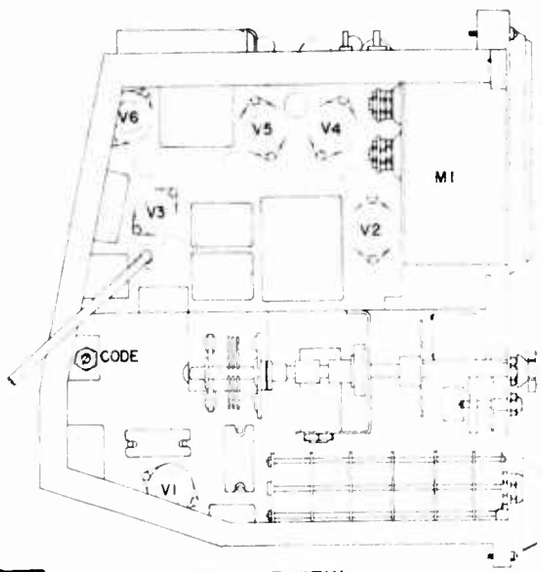
A



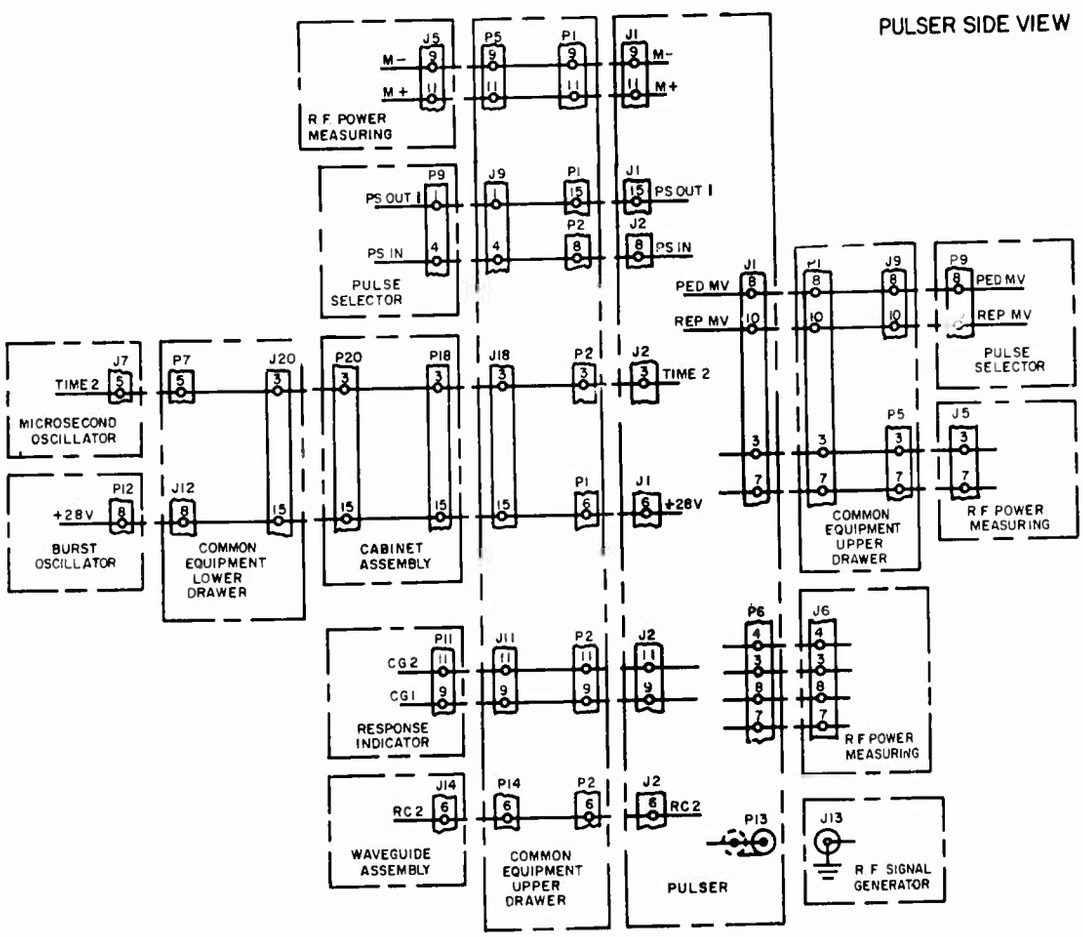
R-F TEST SET PULSER SIMPLIFIED SCHEMATIC
(REC SENS TSS-2)



MISSILE R-F TEST SET UPPER DRAWER



PULSER SIDE VIEW



R-F TEST SET SET PULSER, NOTES (TRANS TEST)

SIGNAL DISTRIBUTION

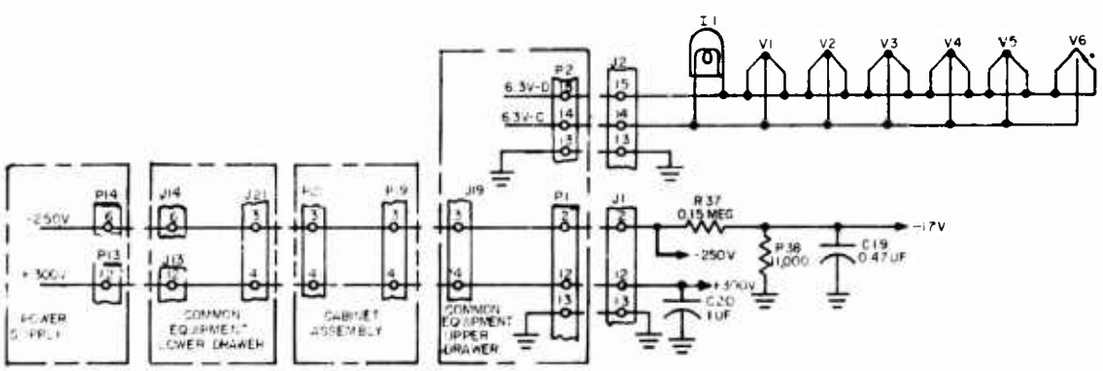
A

NOTES:

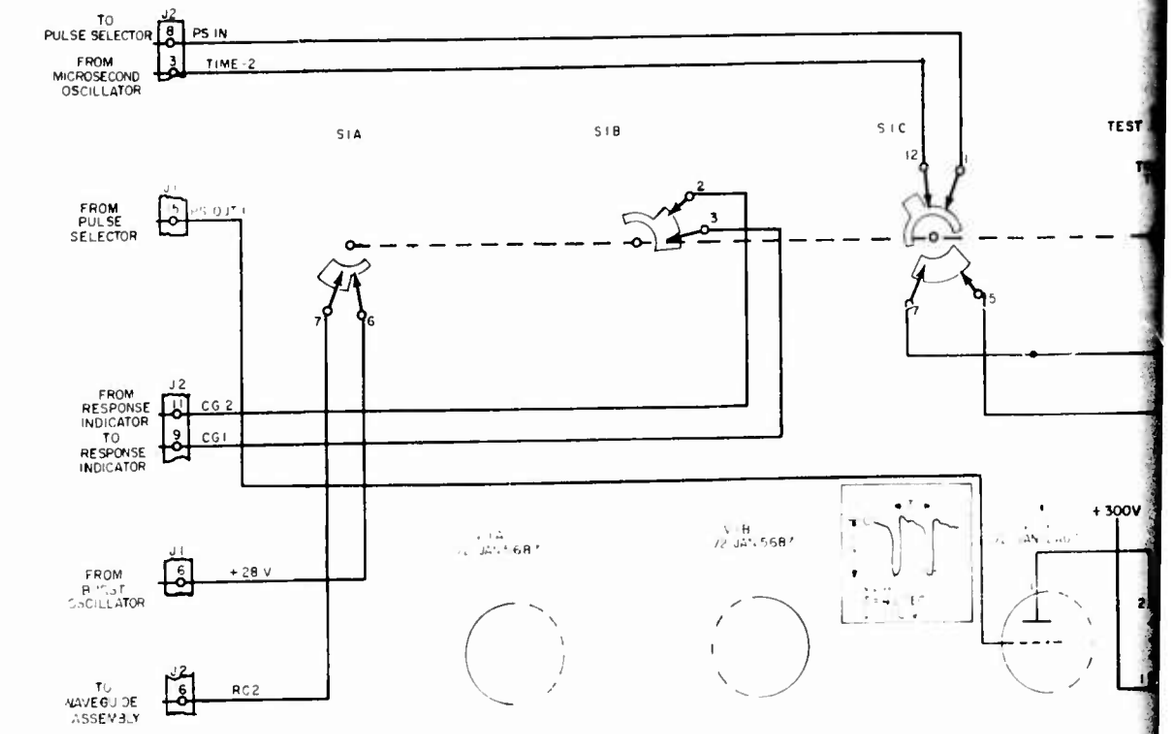
1. TERMINALS 5 AND 7 ON J2 AND TERMINALS 1,2,6,9,10,11,12,14 AND 15 ON P6 ARE NOT USED
2. WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS.

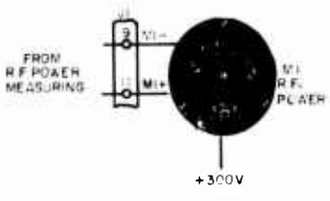
SWITCH	POSITION
PWR METER CAL	MEAS
TIME	4.00
CODE RANGE	C
ADJ. CODE	APROX. MID POINT

	S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E	S1F
1 R-F TEST SIG	5-6	12-1, 7-8	12-1, 4-5	6-7	6-7	11-12, 6-7
2 REC SENS	6-7	1-2, 7-8-9	12-1, 4-5	12-1, 7-8	12-1, 7-8	11-12, 7-9
3 TRANS TEST	6-7	2-3, 8-9	12-1, 5-7	12-1-2, 7-8	12-1-2, 78	12-2, 7-9
4 RESP TIME A	12-1	3-4, 9-10	12-1, 7-8	12-1-2, 7-8	12-1-2, 7-8	2-3
5 RESP TIME B	12-1, 6-7	3-4	12-1, 7-8	1-2, 7-8	1-2, 7-8	2-3
6 COMM SIG	1-3, 6-7	3-6	1-2, 7-8	2-5, 7-8	2-5, 7-8	3-5

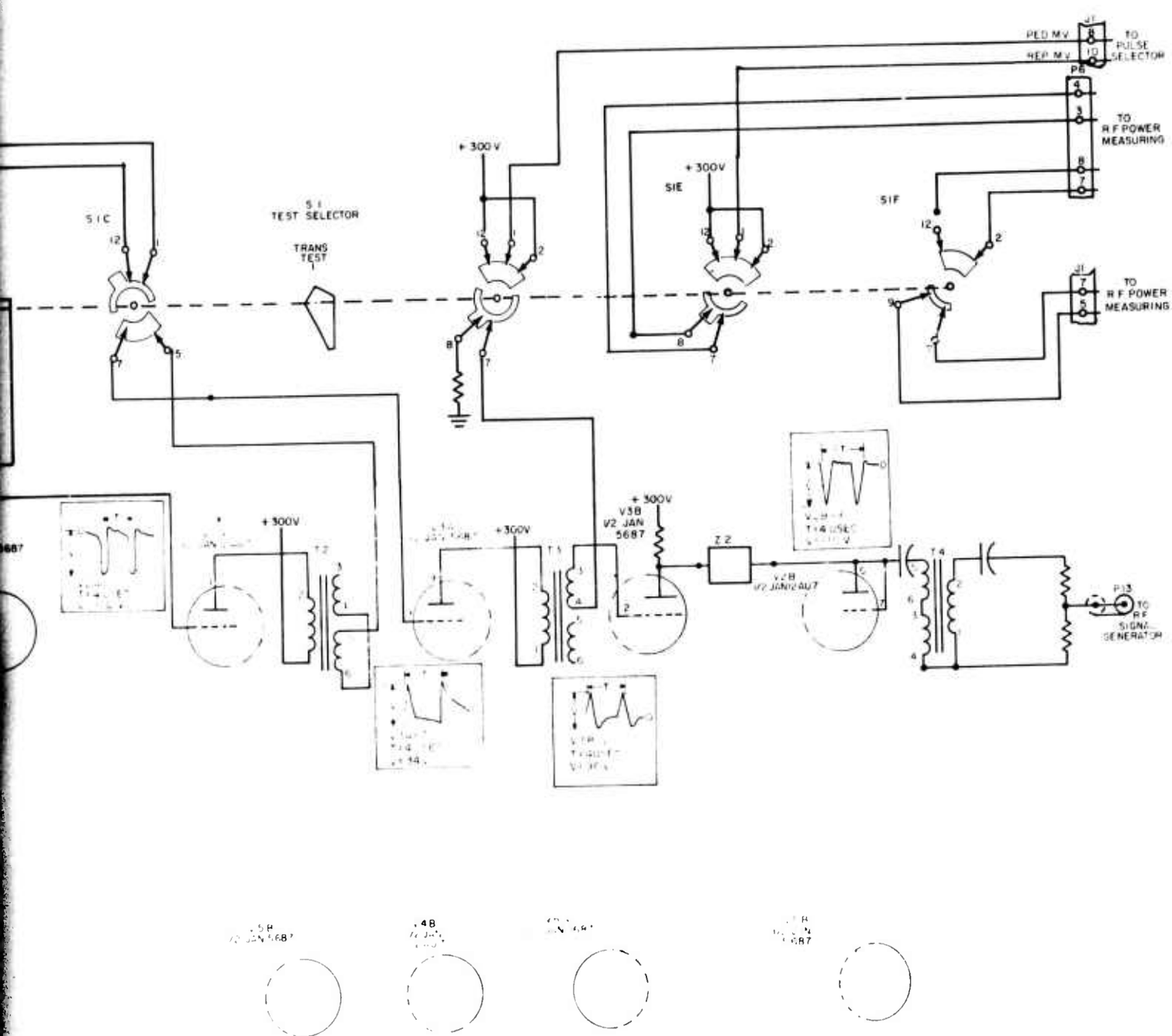


POWER DISTRIBUTION


TO PULSE SELECTOR
J2
8
PS IN
FROM MICROSECOND OSCILLATOR
3
TIME -2
S1A
S1B
S1C
TEST
12
1
2
3
FROM PULSE SELECTOR
J1
5
7
6
FROM RESPONSE INDICATOR
J2
11
CG 2
TO RESPONSE INDICATOR
9
CG1
FROM
J1
6
+28 V
TO WAVEGUIDE ASSEMBLY
J2
6
RG2
+300V


FROM R F POWER MEASURING
J1
3
M1-
11
M1+
M1
R.F. POWER
+300V

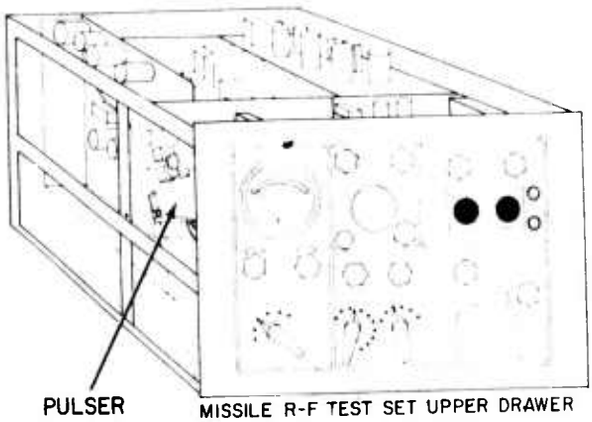
A



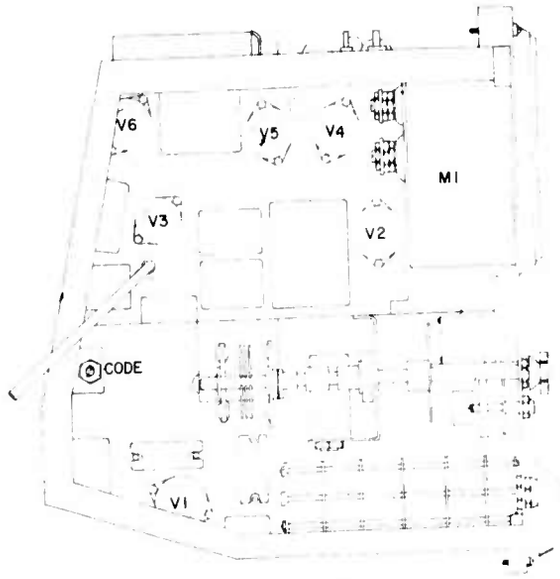
R-F TEST SET PULSER SIMPLIFIED SCHEMATIC
(TRANS TEST TSS-3)

[redacted]

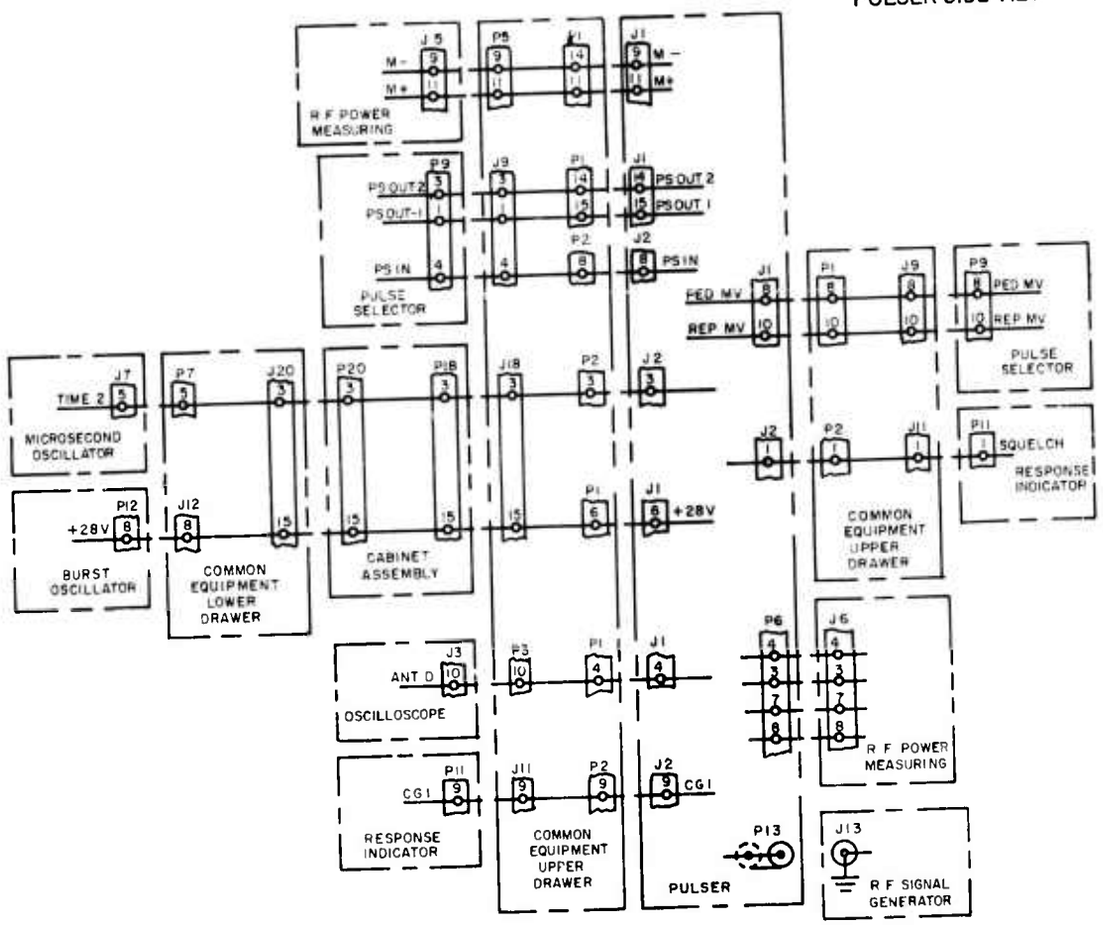
UNCLASSIFIED



MISSILE R-F TEST SET UPPER DRAWER



PULSER SIDE VIEW



SIGNAL DISTRIBUTION

R-F TEST SET PULSER, NOTES (RESP TIME A)

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A

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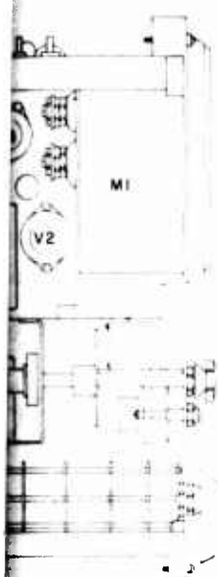


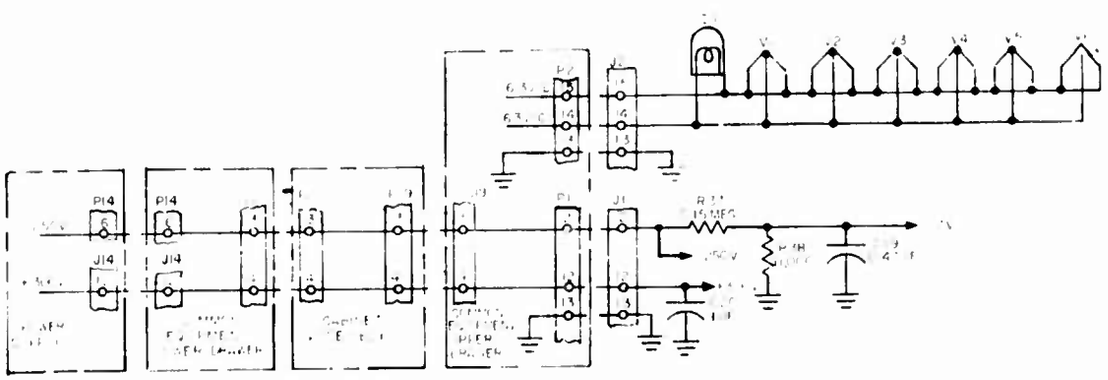
NOTES

1 TERMINALS 5 AND 7 ON J2 AND TERMINALS 1,2,6,9,10,11,12,14 AND 15 ON P6 ARE NOT USED

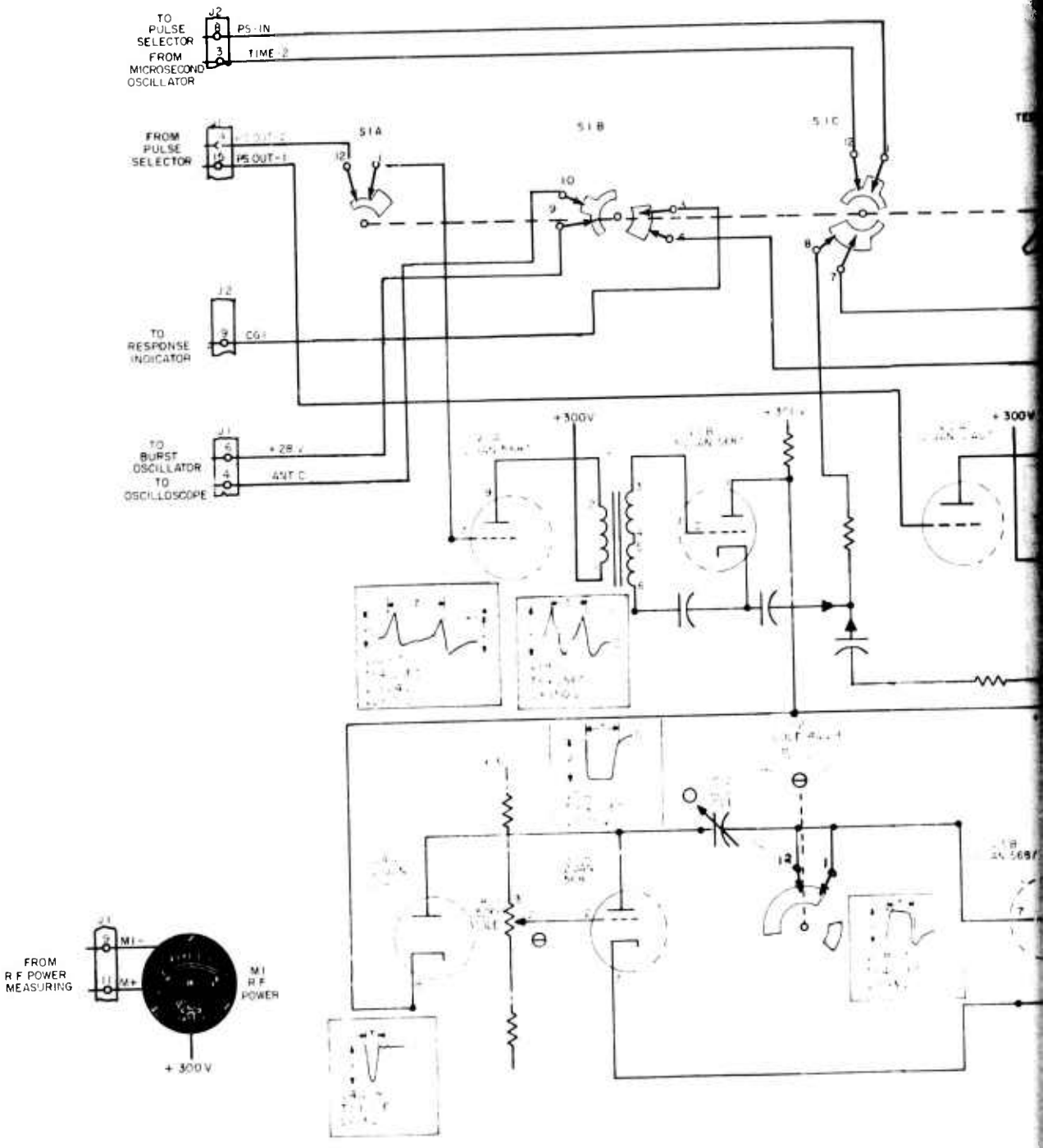
2 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

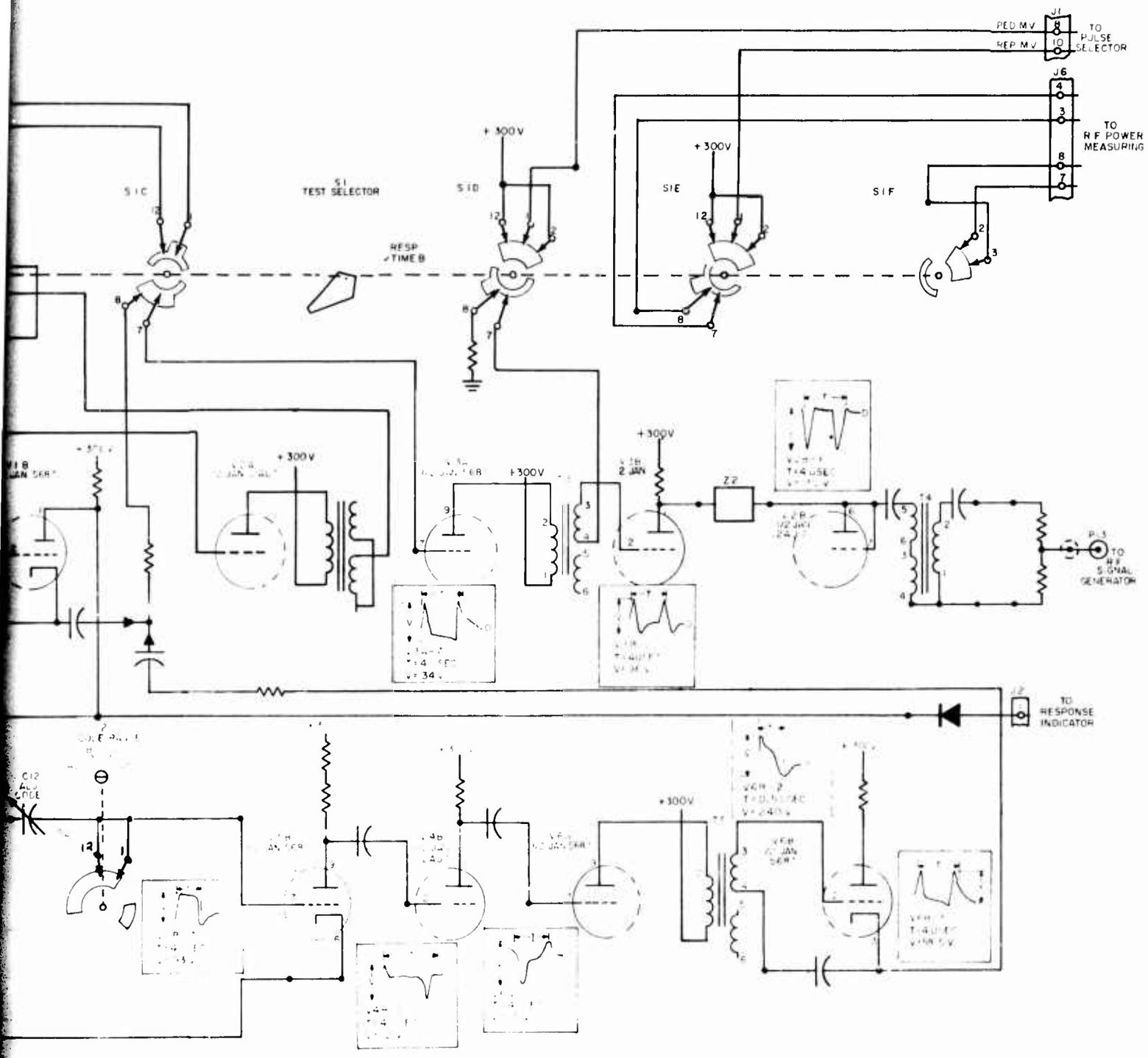
SWITCH	POSITION
PWR METER CAL	MEAS
TIME	4.00
CODE RANGE	C
ADJ CODE	APROX. MID POINT

	S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E	S1F
1 R-F TEST SIG	5-6	12-1, 7-8	12-1, 4-5	6-7	6-7	11-12, 6-7
2 REC SENS	6-7	1-2, 7-8-9	12-1, 4-5	12-1, 7-8	12-1, 7-8	11-12, 7-9
3 TRANS TEST	6-7	2-3, 8-9	12-1, 5-7	12-1-2, 7-8	12-1-2, 78	12-2, 7-9
4 RESP TIME A	12-1	3-4, 9-10	12-1, 7-8	12-1-2, 7-8	12-1-2, 7-8	2-3
5 RESP TIME B	12-1, 6-7	3-4	12-1, 7-8	1-2, 7-8	1-2, 7-8	2-3
6 COMM SIG	1-3, 6-7	3-6	1-2, 7-8	2-5, 7-8	2-5, 7-8	3-5

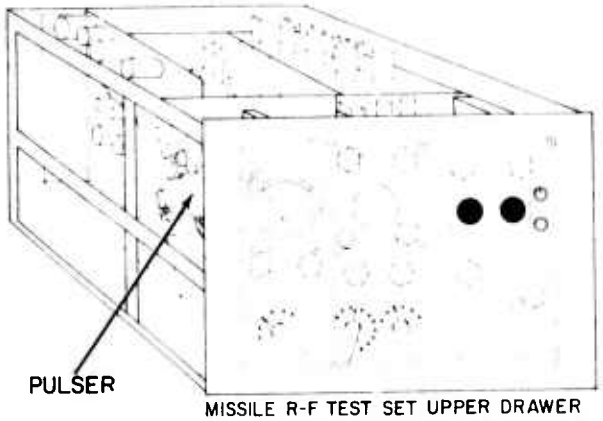


POWER DISTRIBUTION

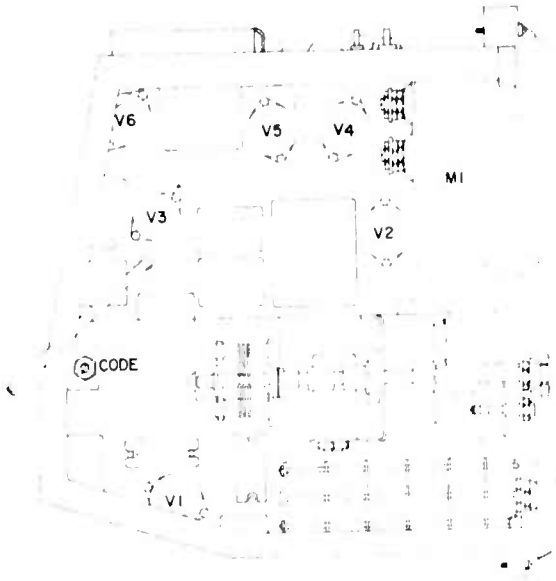

TO PULSE SELECTOR
FROM MICROSECOND OSCILLATOR
J2
PS-IN
TIME 2
FROM PULSE SELECTOR
PS OUT-1
S1A
S1B
S1C
TO RESPONSE INDICATOR
CG-1
TO BURST OSCILLATOR
TO OSCILLOSCOPE
+28 V
ANT C
+300V
FROM R F POWER MEASURING
M1-
M1+
M1 R F POWER
+ 300 V



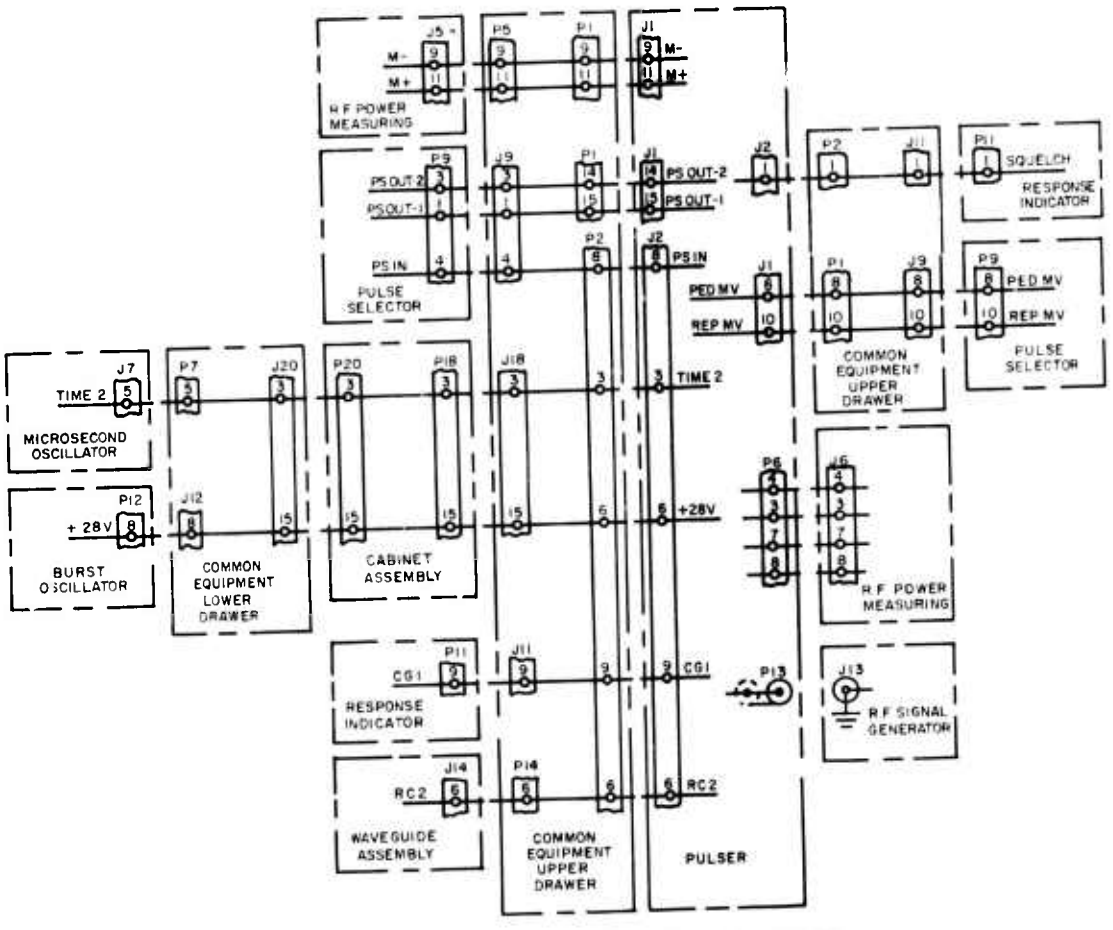
R-F TEST SET PULSER SIMPLIFIED SCHEMATIC
(RESP TIME A TSS-4)



MISSILE R-F TEST SET UPPER DRAWER



PULSER SIDE VIEW



SIGNAL DISTRIBUTION

R-F TEST SET PULSER, NOTES (RESP TIME B)

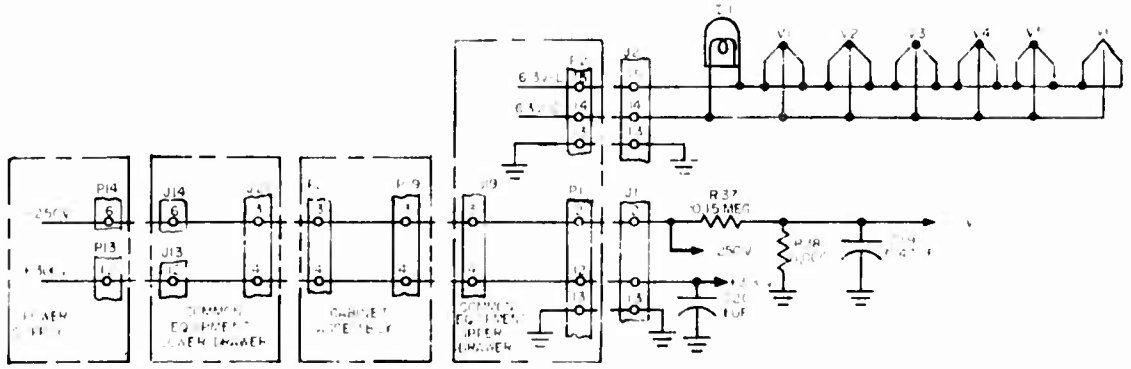
NOTES

1 TERMINALS 5 AND 7 ON J2 AND TERMINALS 1,2,6,9,10,11,12,14 AND 15 ON P6 ARE NOT USED

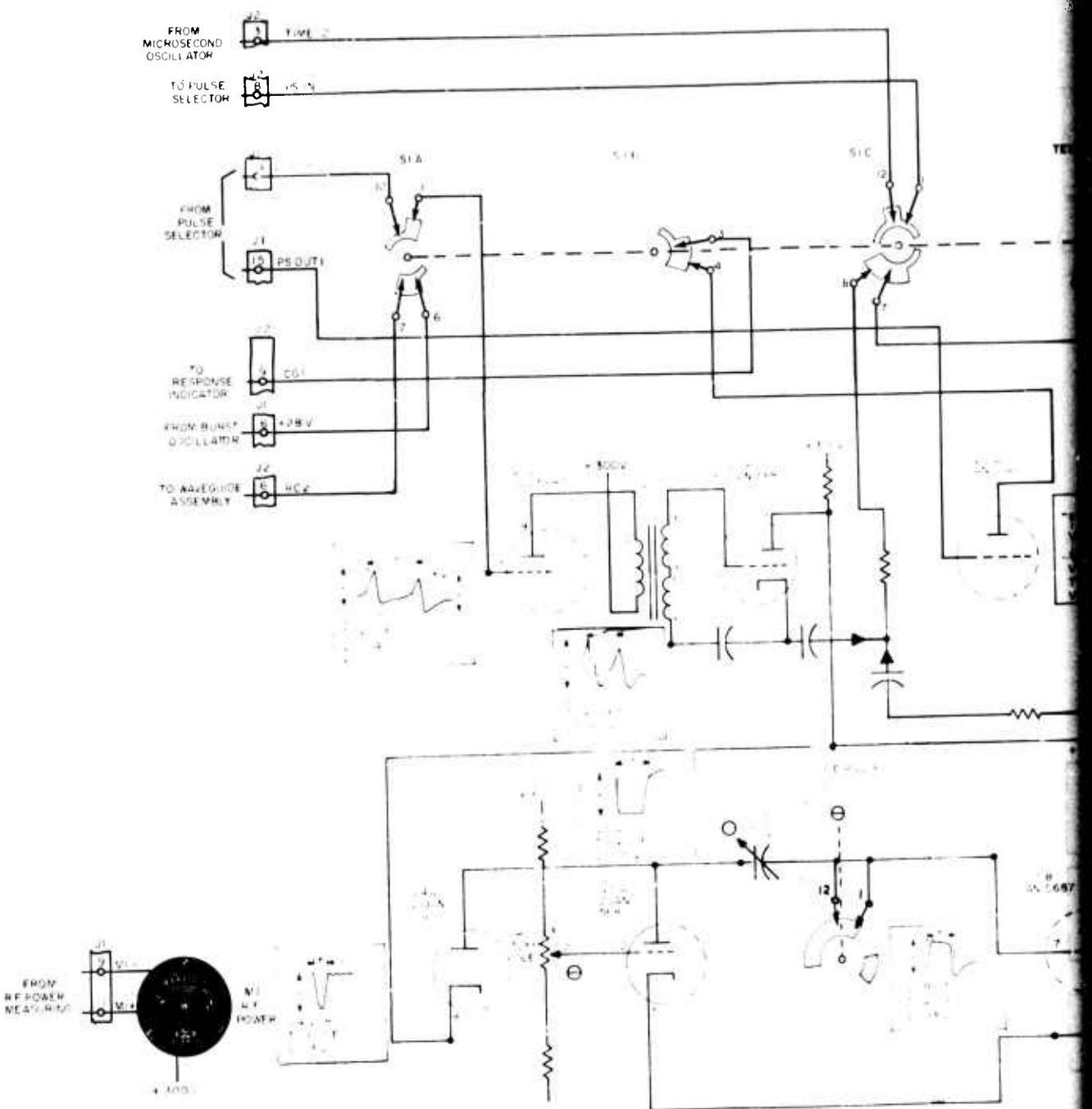
2 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

SWITCH	POSITION
PWR METER CAL	MEAS
TIME	4.00
CODE RANGE	C
ADJ CODE	APROX MID POINT

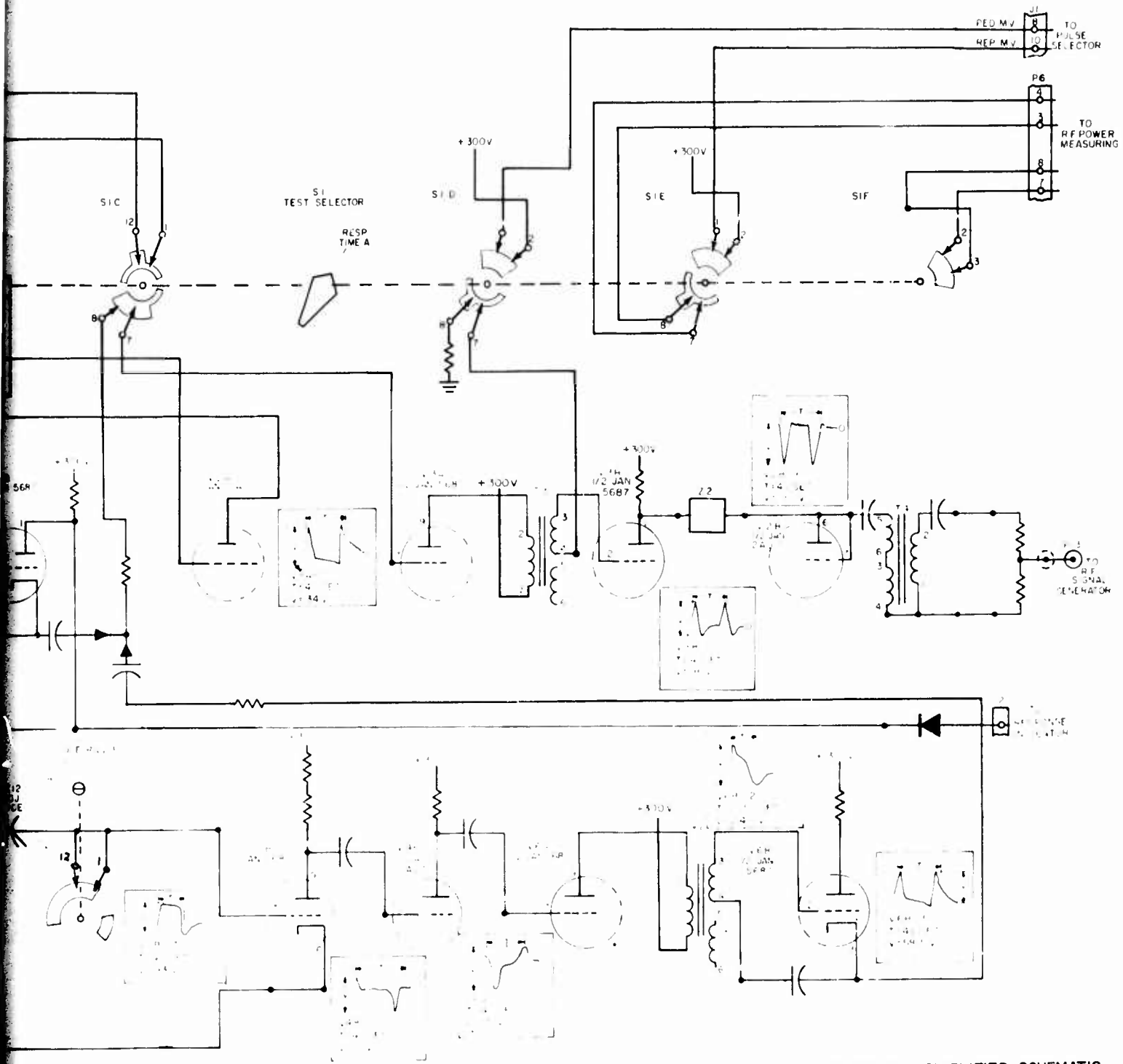
	S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E	S1F
1 R-F TEST SIG	5-6	12-1, 7-8	12-1, 4-5	6-7	6-7	11-12, 6-7
2 REC SENS	6-7	1-2, 7-8-9	12-1, 4-5	12-1, 7-8	12-1, 7-8	11-12, 7-9
3 TRANS TEST	6-7	2-3, 8-9	12-1, 5-7	12-1-2, 7-8	12-1-2, 78	12-2, 7-9
4 RESP TIME A	12-1	3-4, 9-10	12-1, 7-8	12-1-2, 7-8	12-1-2, 7-8	2-3
5 RESP TIME B	12-1, 6-7	3-4	12-1, 7-8	1-2, 7-8	1-2, 7-8	2-3
6 COMM SIG	1-3, 6-7	3-6	1-2, 7-8	2-5, 7-8	2-5, 7-8	3-5



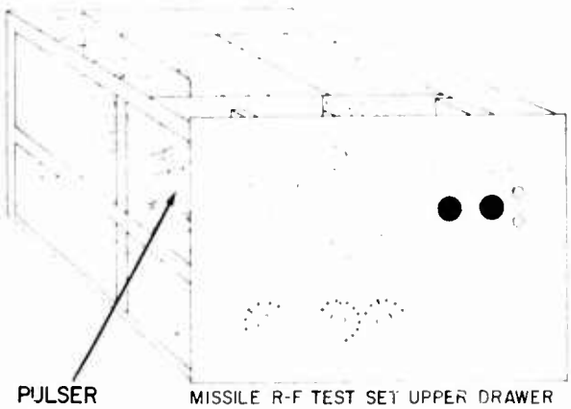
POWER DISTRIBUTION


FROM MICROSECOND OSCILLATOR
TO PULSE SELECTOR
FROM PULSE SELECTOR
PS OUT1
TO RESPONSE INDICATOR
FROM BLANK OSCILLATOR
+28 V
TO WAVEGUIDE ASSEMBLY
S1A
S1C
+300 V
FROM RF POWER MEASURING
TO RF POWER

[redacted]

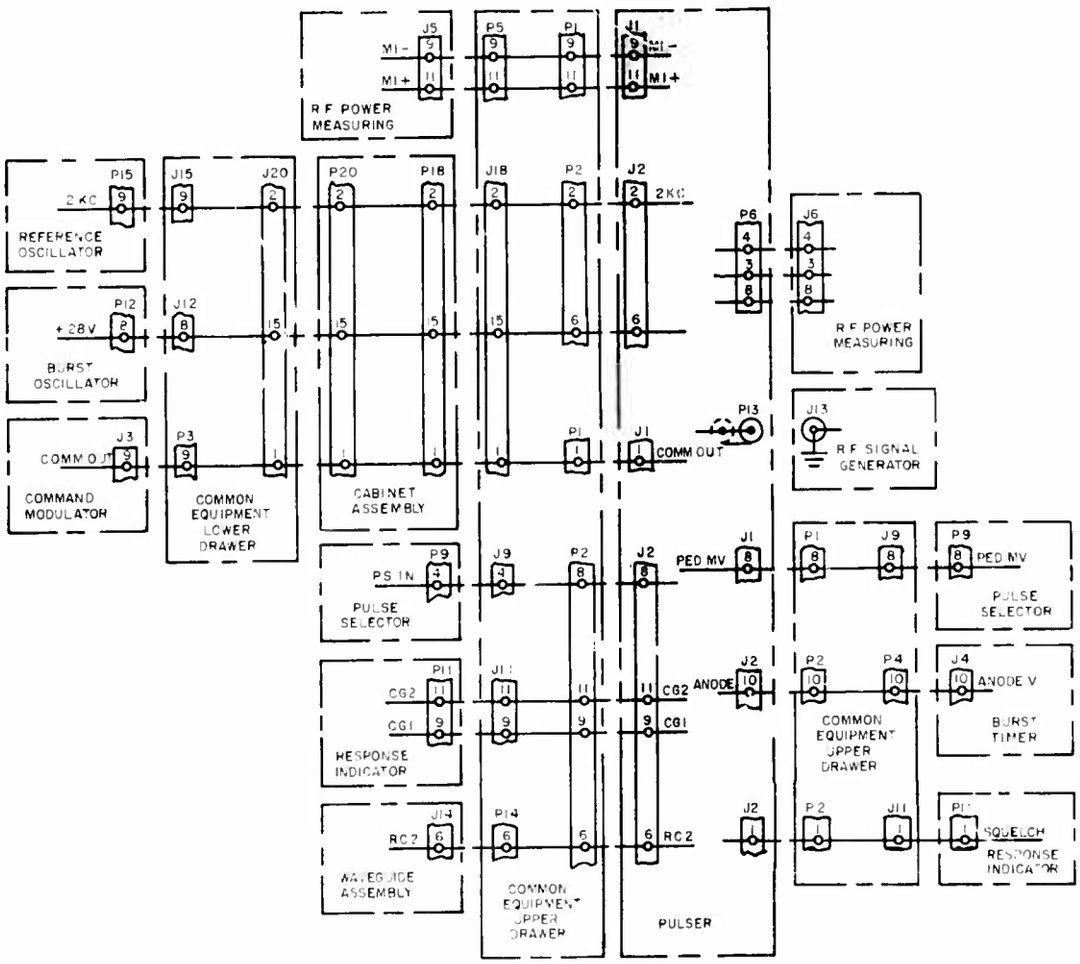


R-F TEST SET PULSER SIMPLIFIED SCHEMATIC
(RESP TIME B TSS-5)



MISSILE R-F TEST SET UPPER DRAWER

PULSER SIDE VIEW



SIGNAL DISTRIBUTION

R-F TEST SET PULSER, NOTES (COMM SIG)

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PULSER SIDE VIEW

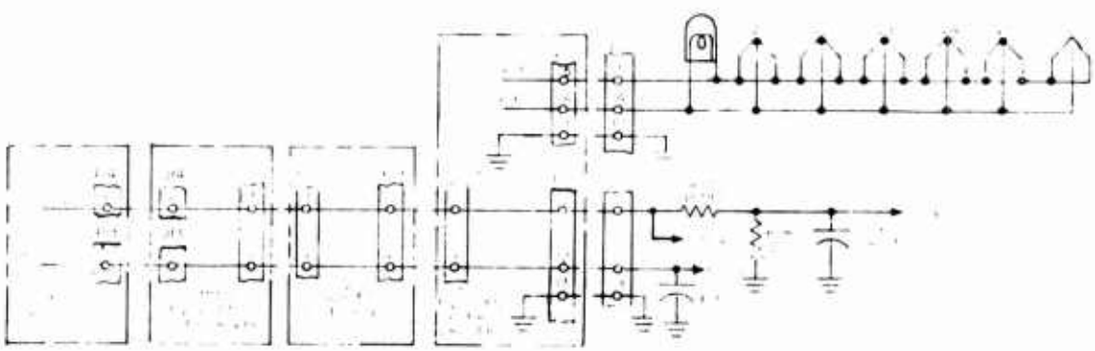
NOTES

1 TERMINALS 5 AND 7 ON J2 AND TERMINALS 1,2,6,9,10,11,12,14 AND 15 ON P6 ARE NOT USED

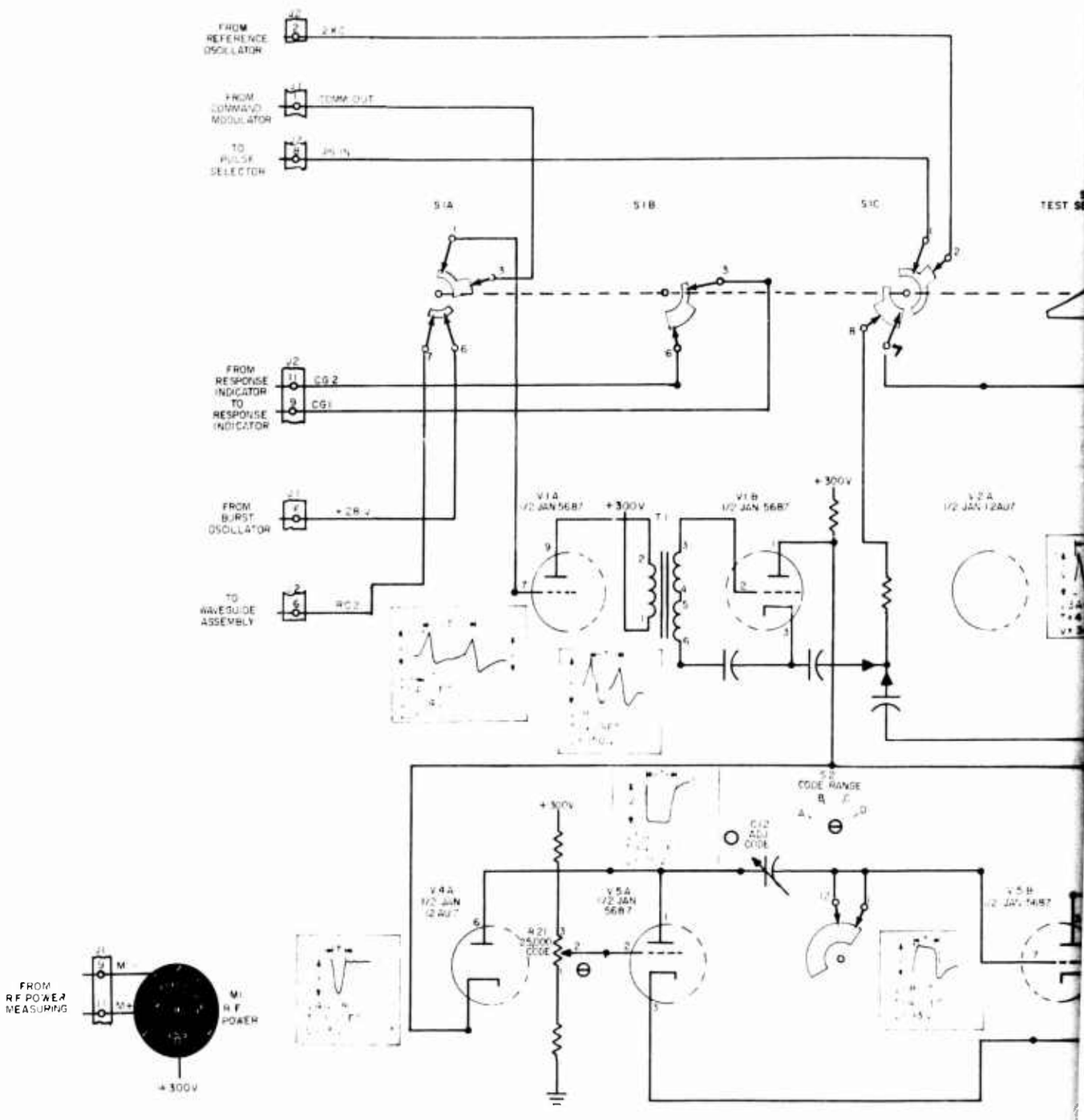
2 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

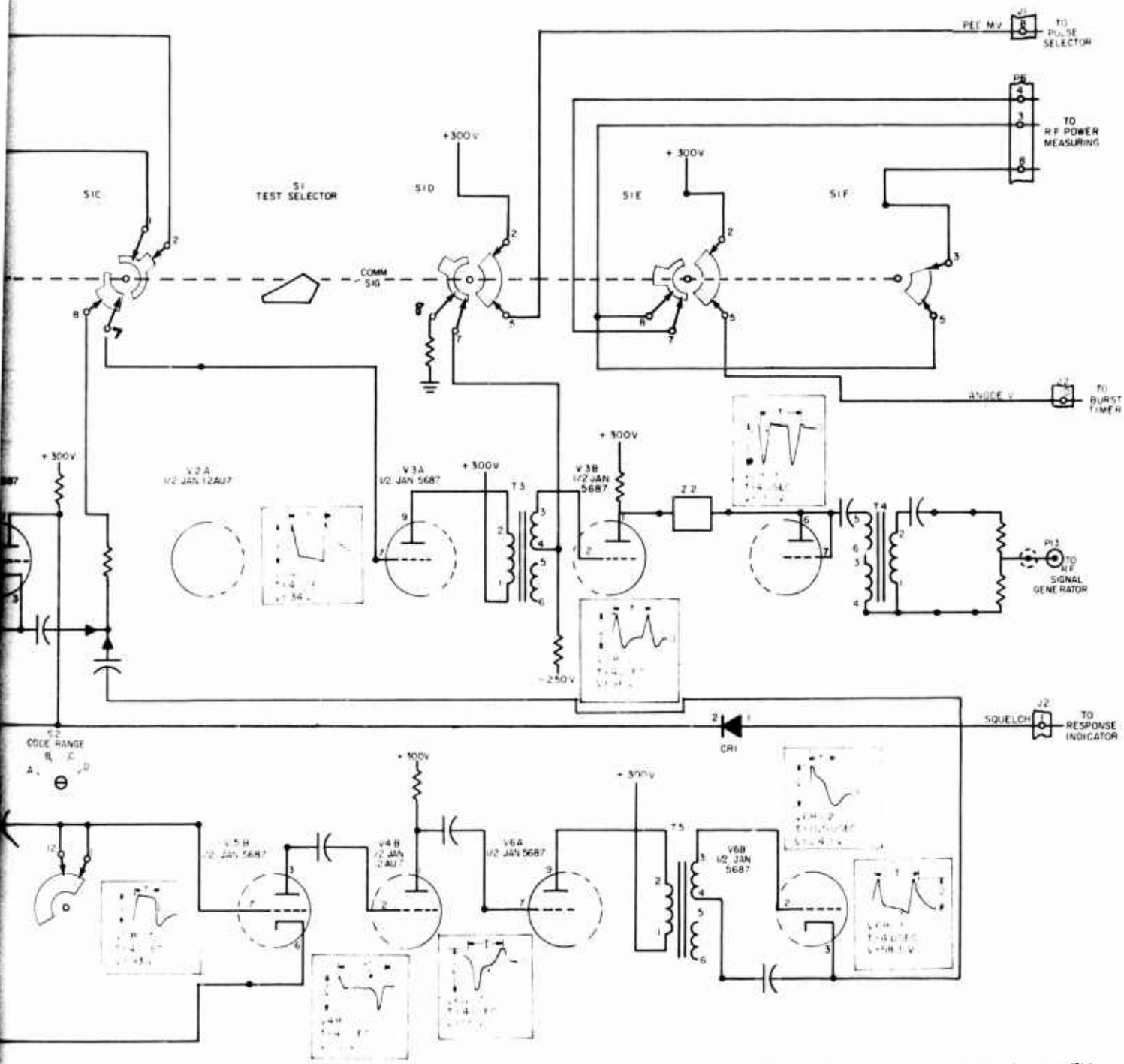
SWITCH	POSITION
PWR METER CAL	MEAS
COMMAND CAL	MEAS
TIME	4 00
CODE RANGE	C
ADJ CODE	APROX MID POINT

	S1 SWITCH CONNECTION					
POSITION	S1A	S1B	S1C	S1D	S1E	S1F
1 R-F TEST SIG	5-6	12-1, 7-8	12-1, 4-5	6-7	6-7	11-12, 6-7
2 REC SENS	6-7	1-2, 7-8-9	12-1, 4-5	12-1, 7-8	12-1, 7-8	11-12, 7-9
3 TRANS TEST	6-7	2-3, 8-9	12-1, 5-7	12-1-2, 7-8	12-1-2, 7-8	12-2, 7-9
4 RESP TIME A	12-1	3-4, 9-10	12-1, 7-8	12-1-2, 7-9	12-1-2, 7-8	2-3
5 RESP TIME B	12-1, 6-7	3-4	12-1, 7-8	1-2, 7-8	1-2, 7-8	2-3
6 COMM SIG	1-3, 6-7	3-6	1-2, 7-8	2-5, 7-8	2-5, 7-8	3-5



POWER DISTRIBUTION


FROM REFERENCE OSCILLATOR
FROM COMMAND MODULATOR
TO PULSE SELECTOR
S1A
S1B
S1C
FROM RESPONSE INDICATOR
TO RESPONSE INDICATOR
CG2
CG1
FROM BURST OSCILLATOR
+28 V
TO WAVEGUIDE ASSEMBLY
V1A 1/2 JAN 5687
+300V
T1
V1B 1/2 JAN 5687
V2A 1/2 JAN 12AU7
S2 CODE RANGE
C12 ADJ CODE
V4A 1/2 JAN 12AU7
V5A 1/2 JAN 5687
R21 24,000 CODE
FROM RF POWER MEASURING
M1 R.F. POWER
+300V



R-F TEST SET PULSER SIMPLIFIED SCHEMATIC
(COMM SIG TSS-6)

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MEASUREMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN			
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PI

THIS DATA NOT AVAILABLE

R-F TEST SET PULSER, NOTES

CONFIDENTIAL

A

NOTES:

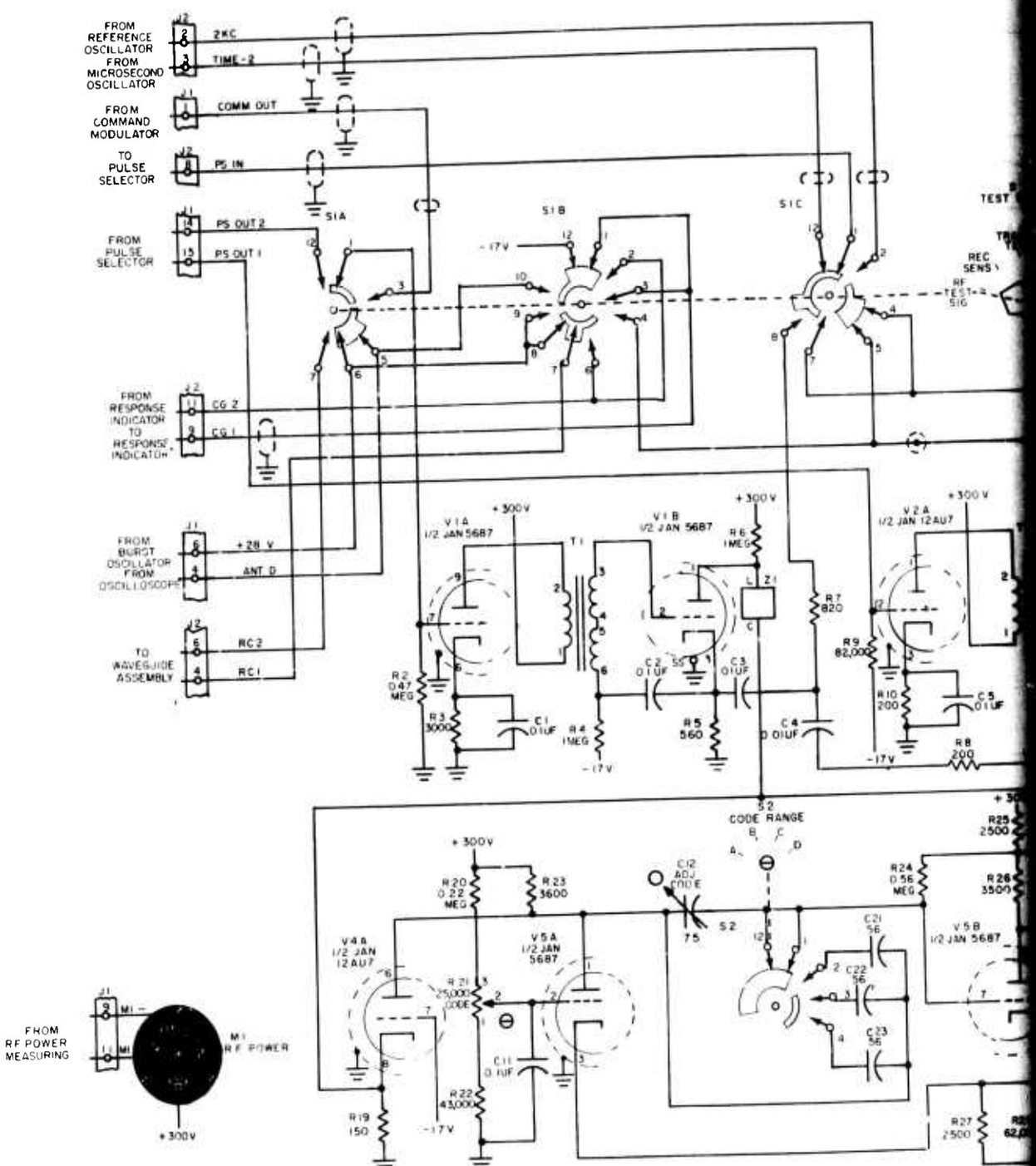
1. TERMINALS 5 AND 7 ON J2 AND TERMINALS 1,2,6,9,10,11,12,14 AND 15 ON P6 ARE NOT USED.

	SCREEN			CONTROL			CATHODE			FILAMENT		
S	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

TA NOT AVAILABLE

B

[redacted]
UNCLASSIFIED



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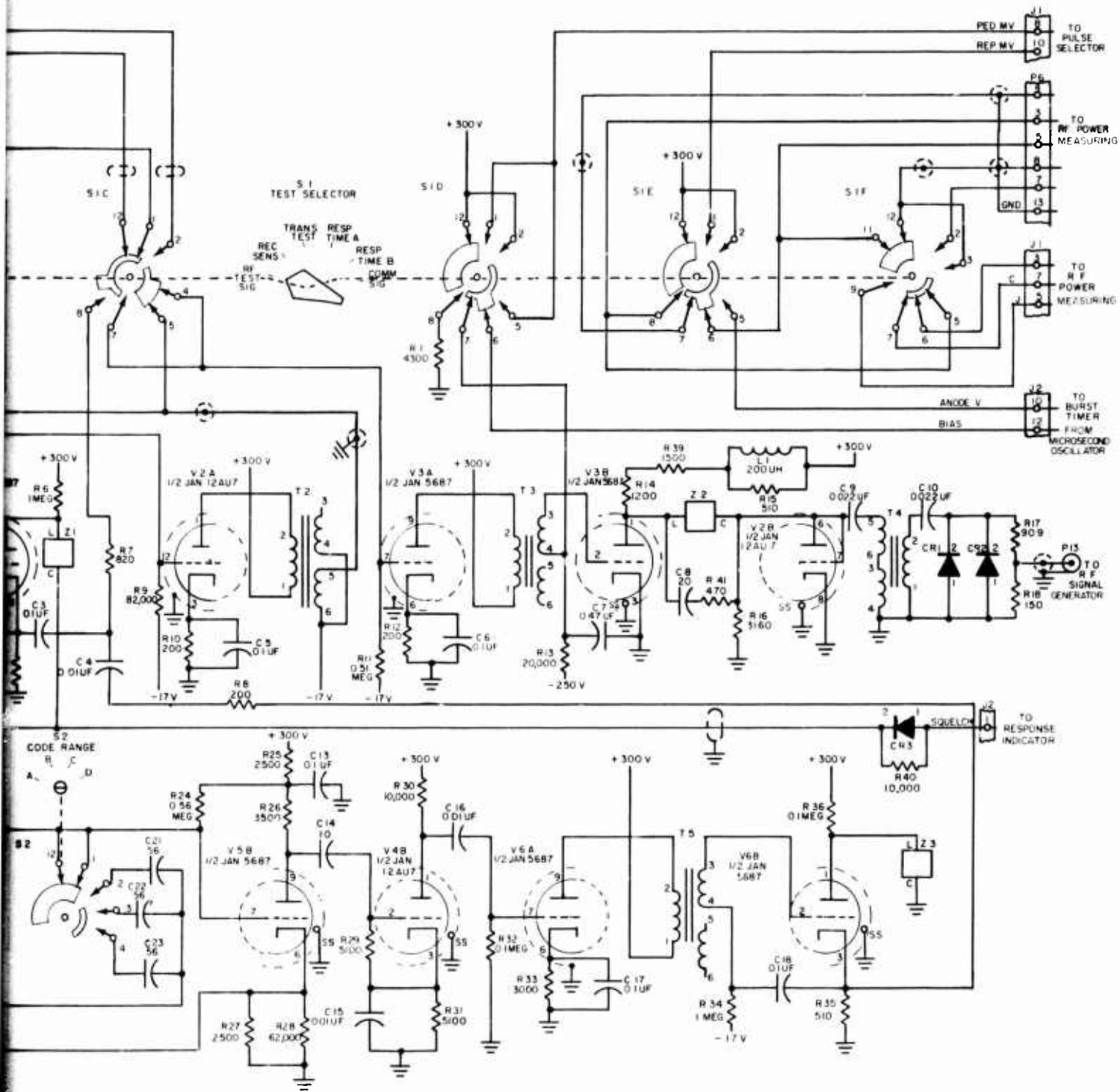
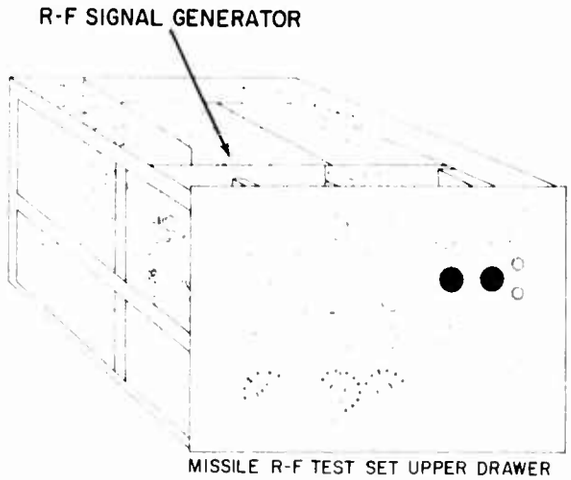
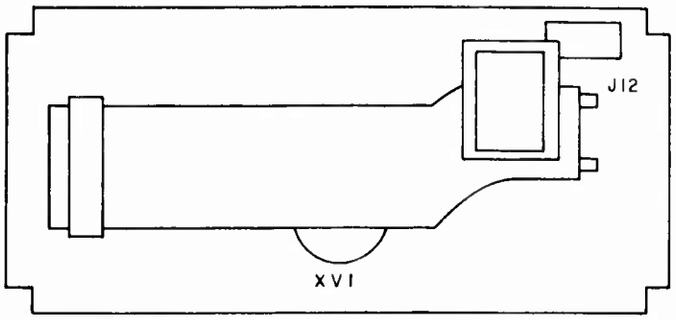


GS-15727 R-F TEST SET PULSER



MISSILE R-F TEST SET UPPER DRAWER



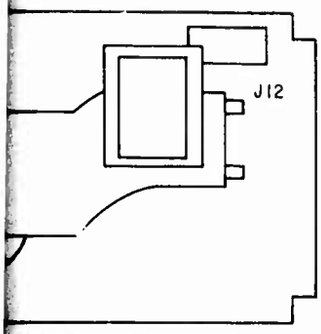
R-F SIGNAL GENERATOR BOTTOM VIEW

MEASURMENT NOTES

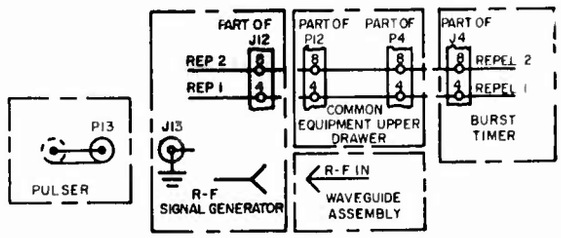
SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN			
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN

THIS DATA NOT AVAILABLE

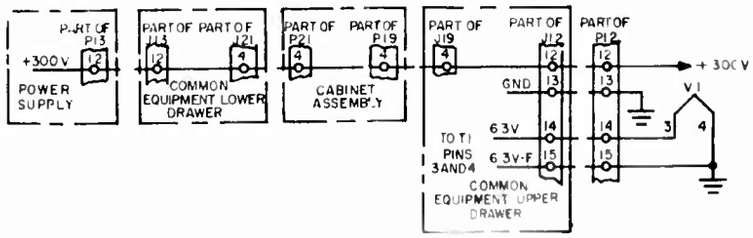
R-F TEST SET R-F SIGNAL GENERATOR, NOTES



TOR BOTTOM VIEW



SIGNAL DISTRIBUTION

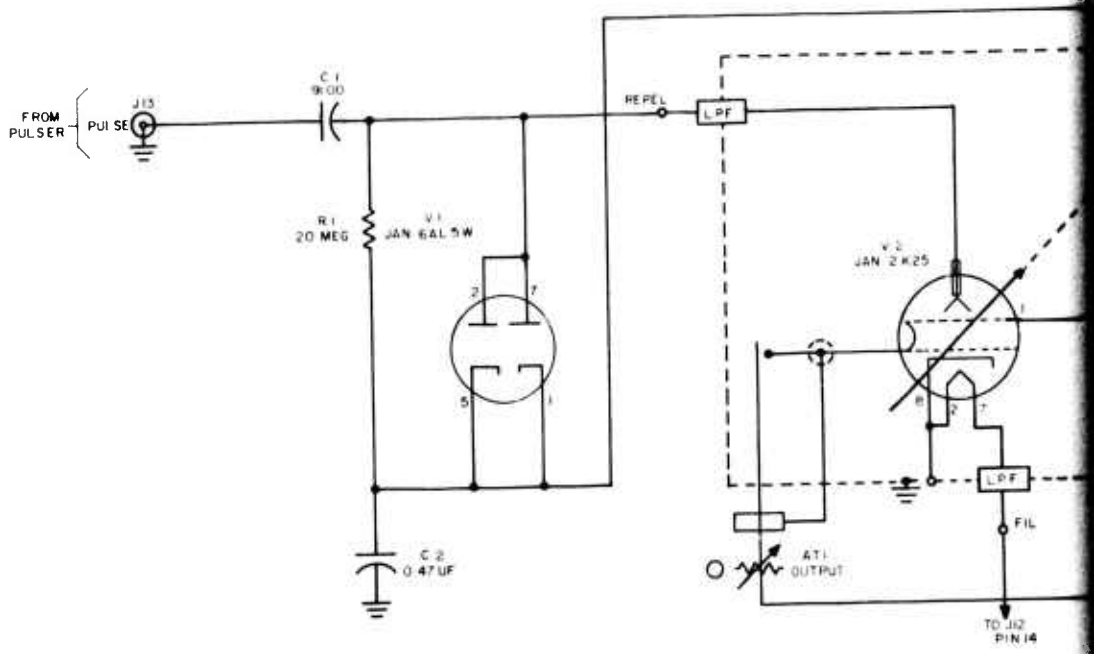


POWER DISTRIBUTION

	SCREEN			CONTROL			CATHODE			FILAMENT		
	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

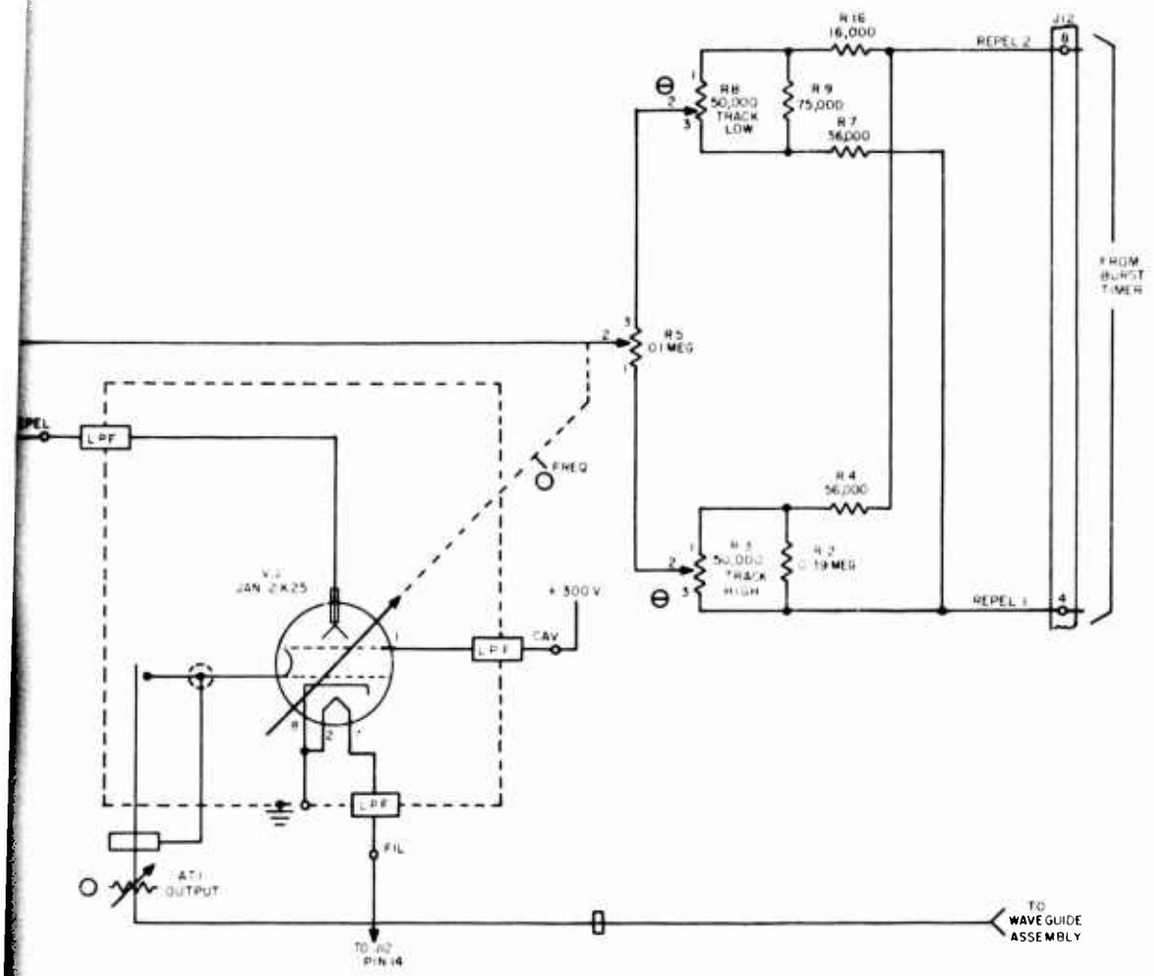
OT AVAILABLE

CONFIDENTIAL



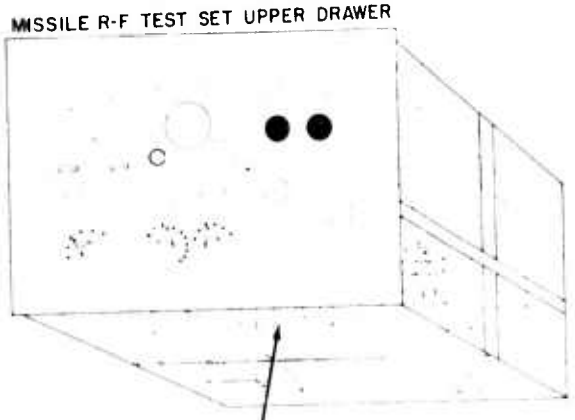
CONFIDENTIAL

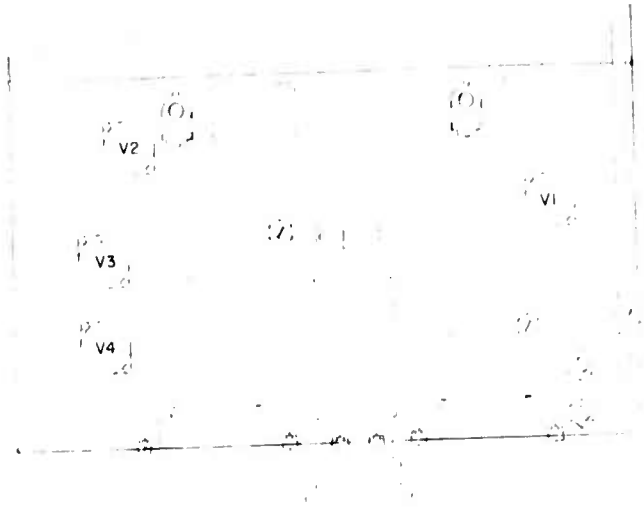
A



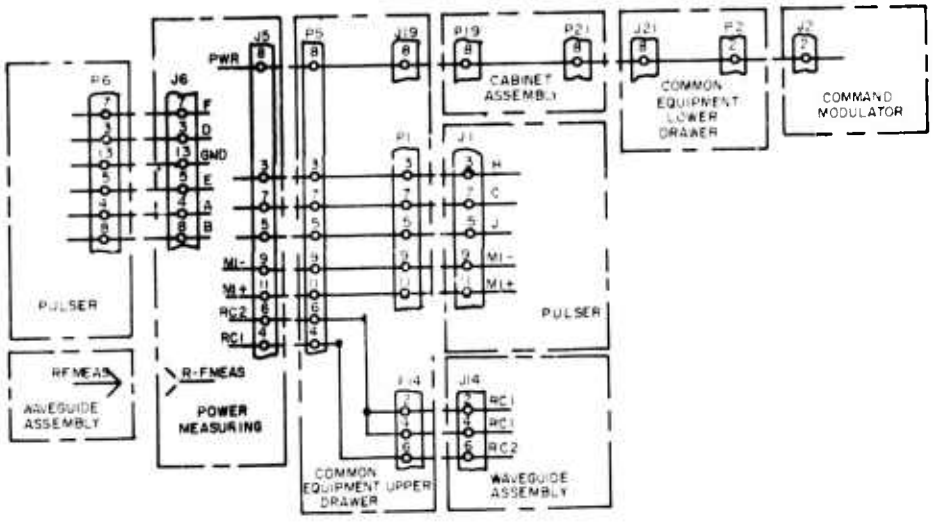
GS-15733 R-F TEST SET SIGNAL GENERATOR

UNCLASSIFIED

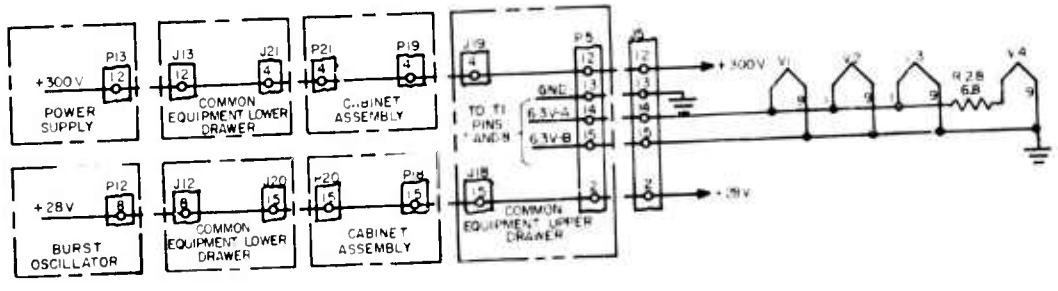




POWER MEASURING BOTTOM VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION

R-F TEST SET R-F POWER MEASURING ,NOTES

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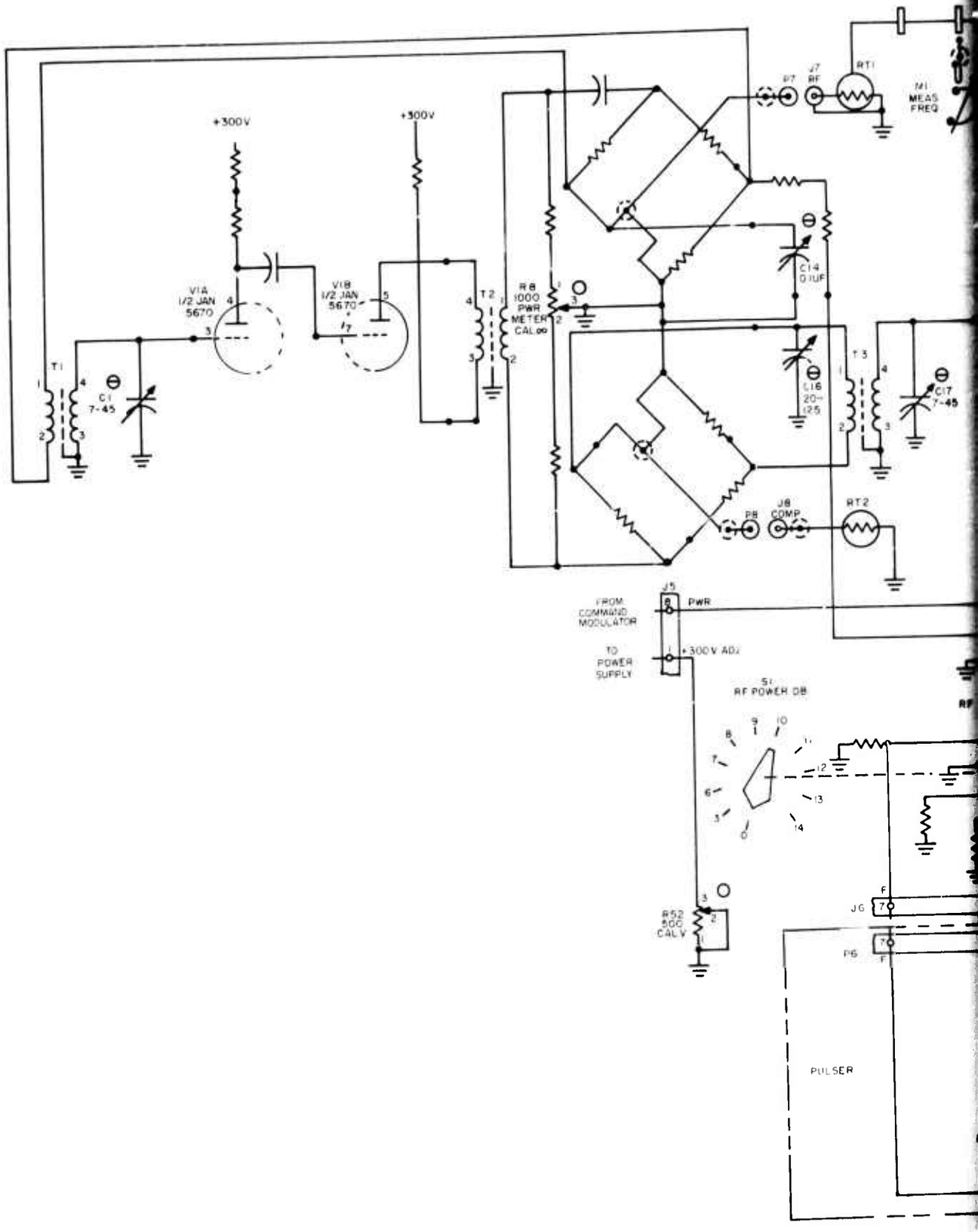
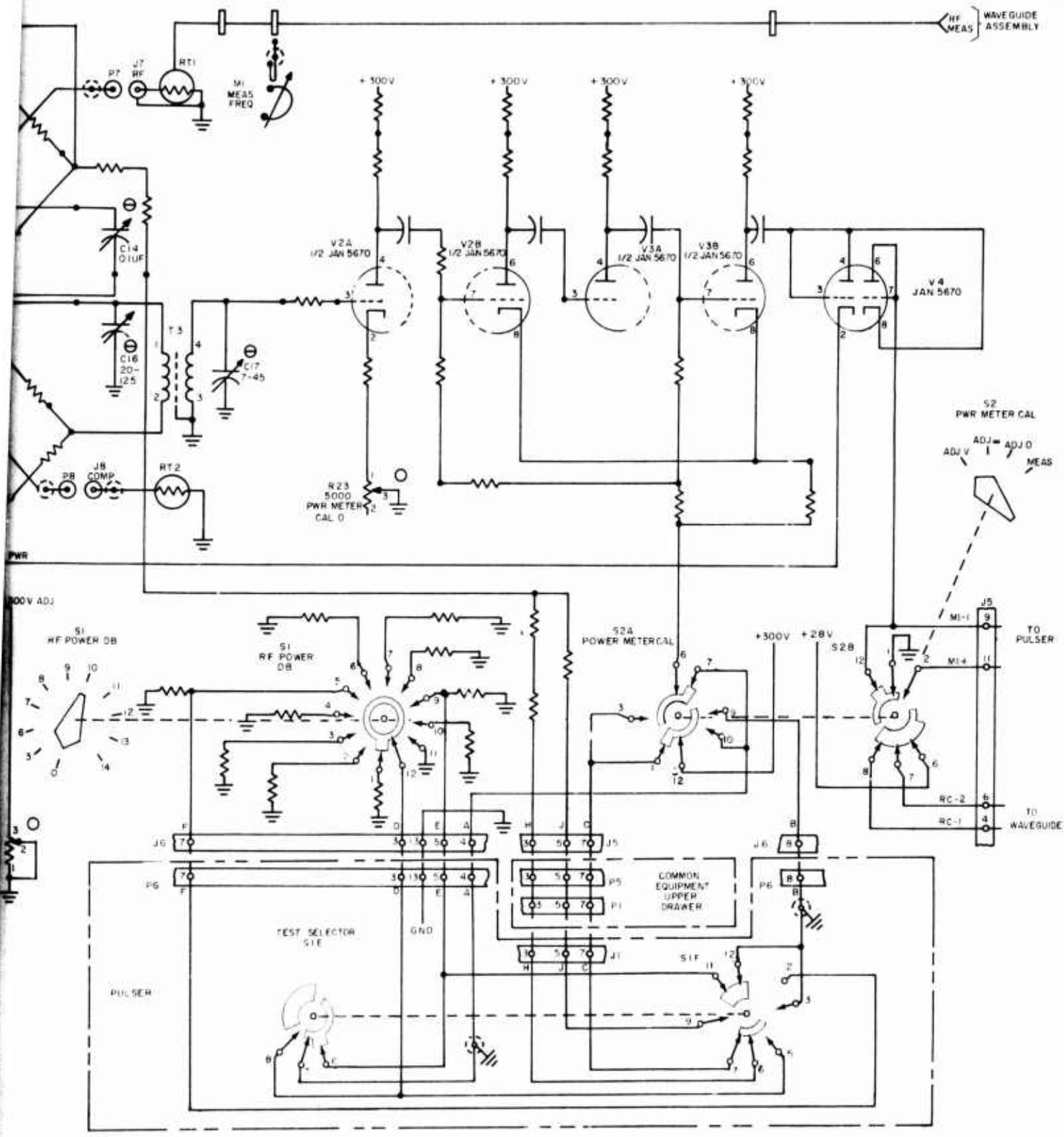
NOTES:

1. R 13 RESISTOR IS FURNISHED WITH WAVE METER AND THERMISTOR ASSEMBLY.
2. TERMINALS 1,2,6,9,10,11,12,14 AND 15 ON J6 AND J10 ON J5 ARE NOT USED.

S1 SWITCH CONNECTION	
POSITION	CONTACTS MADE
0	1 - 12
3	2 - 12
6	3 - 12
7	4 - 12
8	5 - 12
9	6 - 12
10	7 - 12
11	8 - 12
12	9 - 12
13	10 - 12
14	11 - 12

S2 SWITCH CONNECTION		
POSITION	S2A	S2B
ADJ. V	12-1, 6-7	12-1, 6-7-8
ADJ. ∞	12-1, 6-8	1-2, 6-7-8
ADJ. 0	12-3, 6-9	1-2, 6-7-8


+300V
+300V
V1A
1/2 JAN
5670
V1B
1/2 JAN
5670
T1
C1
7-45
T2
R8
1000
PWR
METER
CAL ∞
P7
J7
RF
RT1
M1
MEAS
FREQ
C14
.01UF
T3
C16
20-
125
C17
7-45
P8
J8
COMP
RT2
FROM
COMMAND
MODULATOR
J5
PWR
TO
POWER
SUPPLY
+300V ADJ
S1
RF POWER DB
R52
500
CAL V
J6
P6
PULSER



R-F TEST SET POWER MEASURING, SIMPLIFIED SCHEMATIC

NOTES:

1. R 13 IS FURNISHED WITH WAVEMETER AND THERMISTOR ASSEMBLY.
2. TERMINALS, 1,2,6,9,10,11,12,14 AND 15 ON J6 AND J10 ON J5 ARE NOT USED.

S1 SWITCH CONNECTION	
POSITION	CONTACTS MADE
0	1-12
3	2-12
6	3-12
7	4-12
8	5-12
9	6-12
10	7-12
11	8-12
12	9-12
13	10-12
14	11-12

S2 SWITCH CONNECTION		
POSITION	S2A	S2B
ADJ. V	12-1, 6-7	12-1, 6-7-8
ADJ. C	12-1, 6-8	1-2, 6-7-8
ADJ. O	12-3, 6-9	1-2, 6-7-8

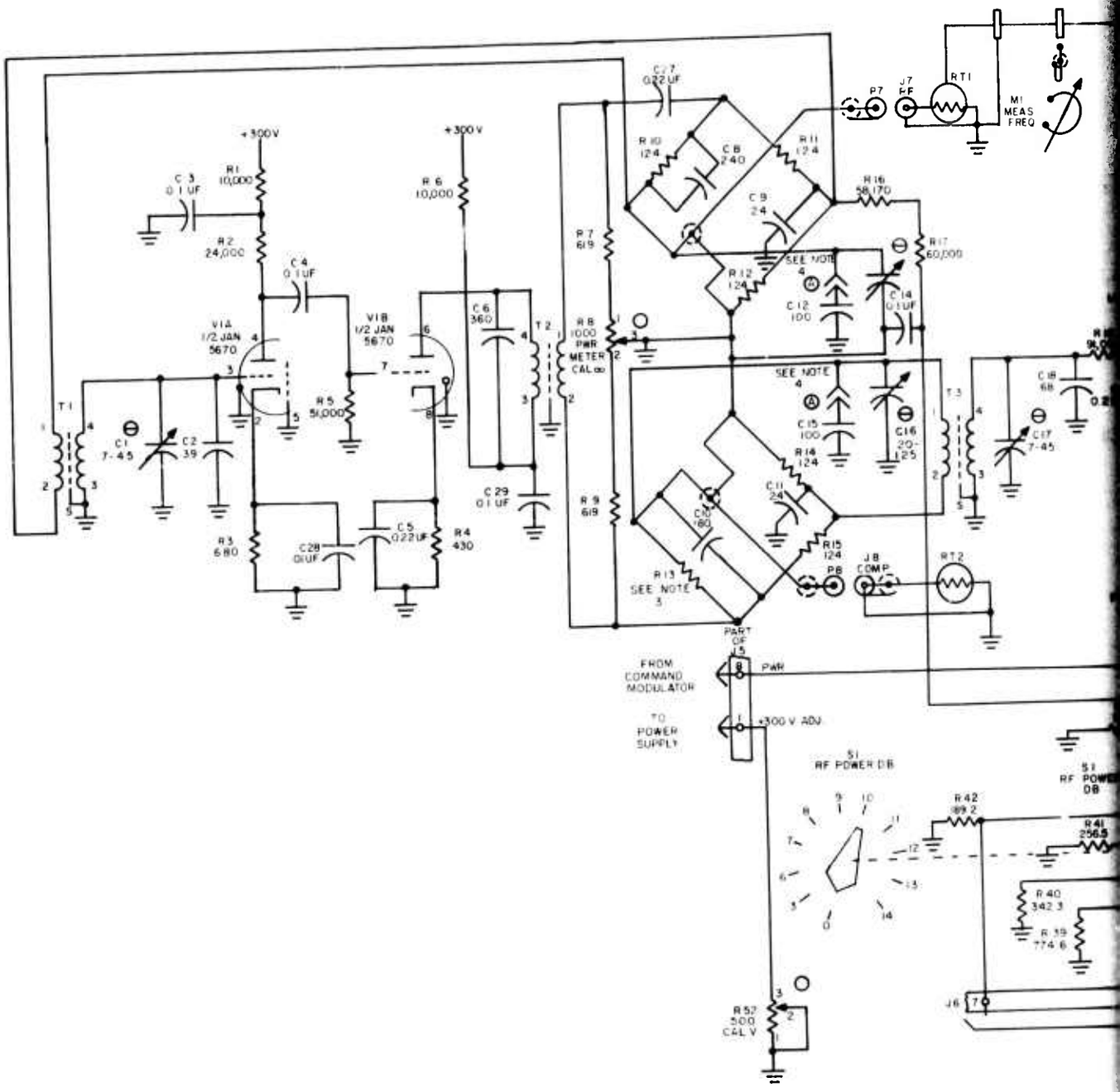
SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPRESSOR				
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	V

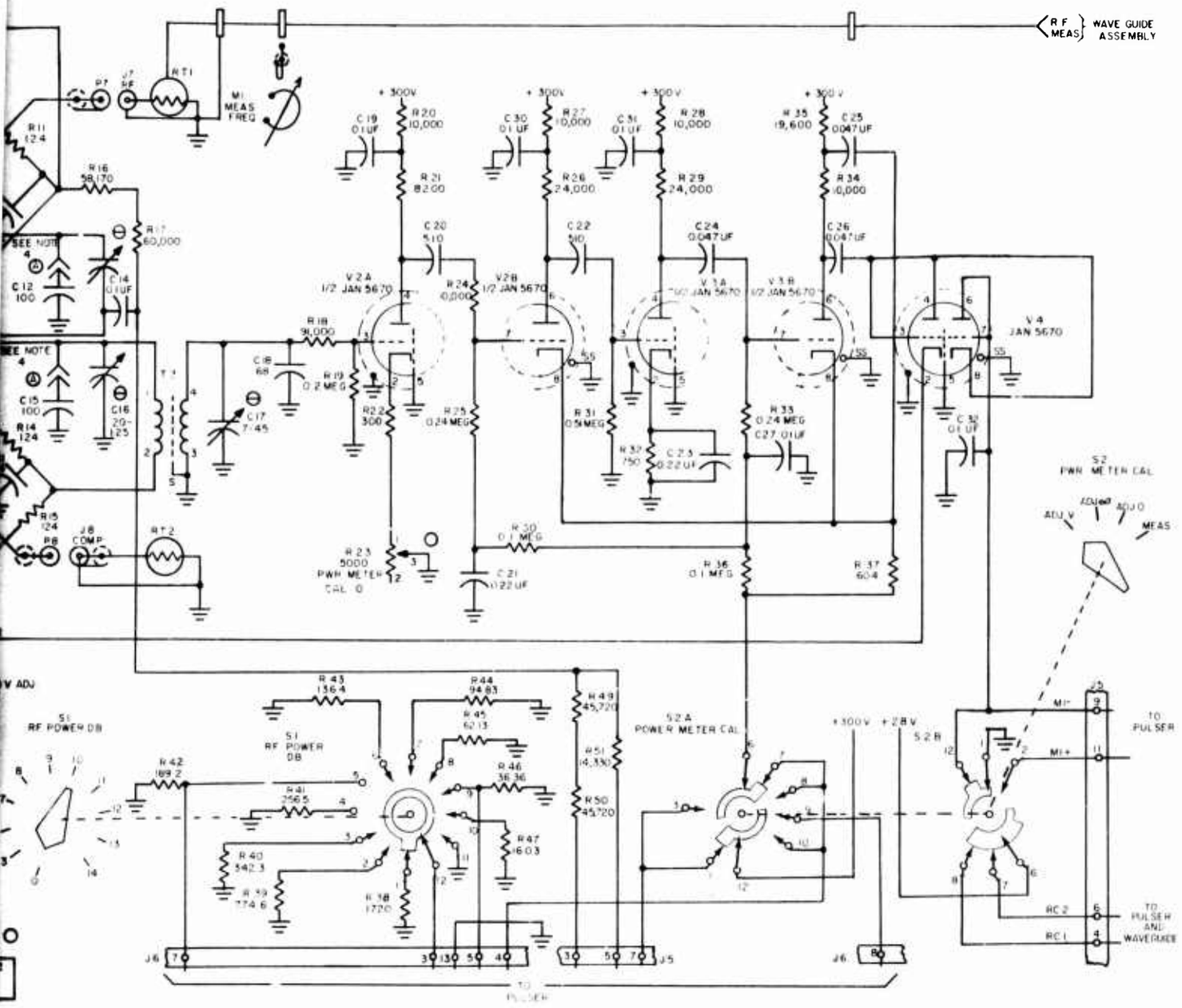
THIS DATA NOT

MEASURMENT NOTES

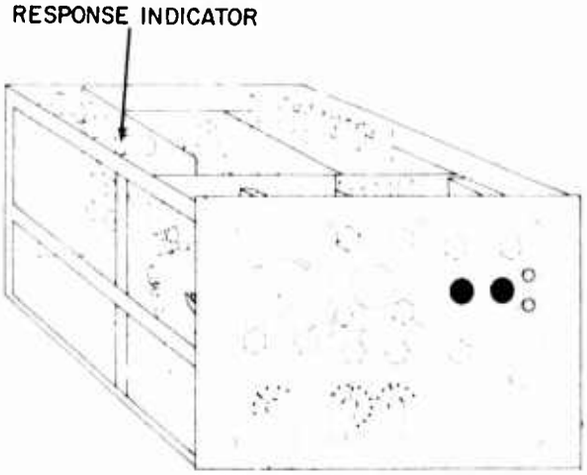
SUPPESSOR			SCREEN			CONTROL			CATHODE			FILAMENT		
PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

THIS DATA NOT AVAILABLE

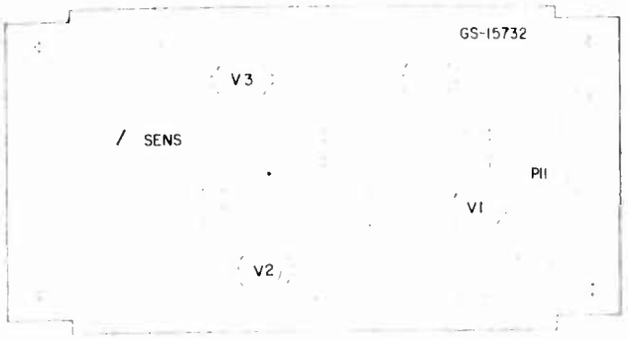

+300V
R1 10,000
C3 0.1 UF
R2 24,000
C4 0.1UF
V1A 1/2 JAN 5670
V1B 1/2 JAN 5670
T1
C1 7-45
C2 39
R5 50,000
R3 680
C28 .01UF
C5 .022UF
R4 430
+300V
R6 10,000
C6 360
T2
C29 0.1 UF
R8 1000 PWR METER CAL ∞
R7 619
R9 619
C7 .022UF
R10 124
C8 240
R11 124
C9 24
R16 59,170
R17 60,000
SEE NOTE 4
R12 124
C12 100
C14 0.1UF
C15 100
C16 20-125
R14 124
C11 24
C10 180
R15 124
R13 SEE NOTE 3
P7
J7 RF
RT1
M1 MEAS FREQ
P8
J8 COMP
RT2
C18 68
C17 7-45
T3
PART OF J5
FROM COMMAND MODULATOR
PWR
TO POWER SUPPLY
+300 V ADJ
S1 RF POWER DB
R42 89.2
R41 256.5
R40 342.3
R39 774.6
J6
R52 500 CAL V



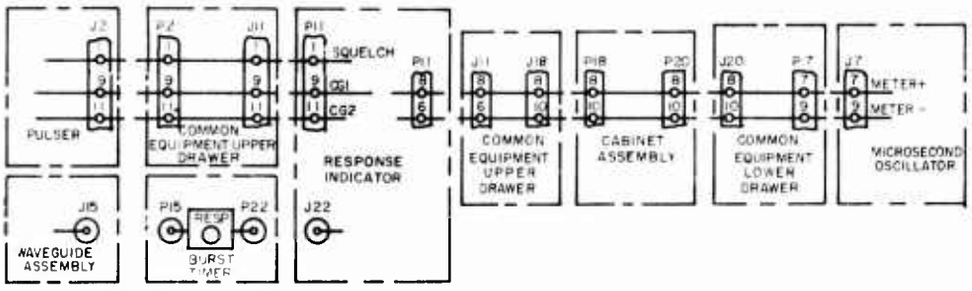
GS-15730 R-F TEST SET POWER MEASURING



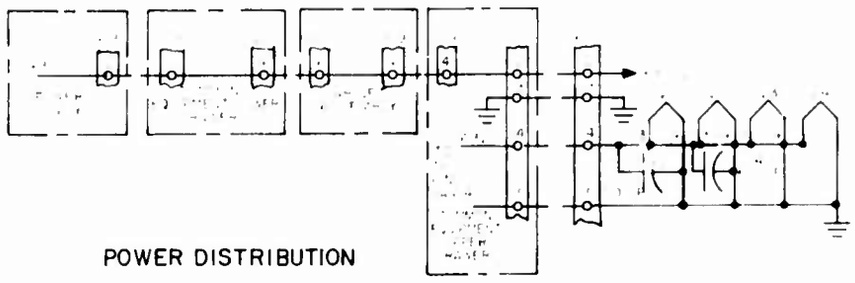
MISSILE R-F TEST SET UPPER DRAWER



RESPONSE INDICATOR SIDE VIEW



SIGNAL DISTRIBUTION



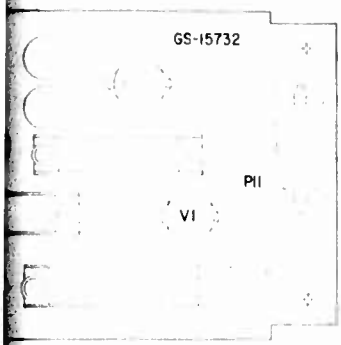
POWER DISTRIBUTION

R-F TEST SET RESPONSE INDICATOR, NOTES

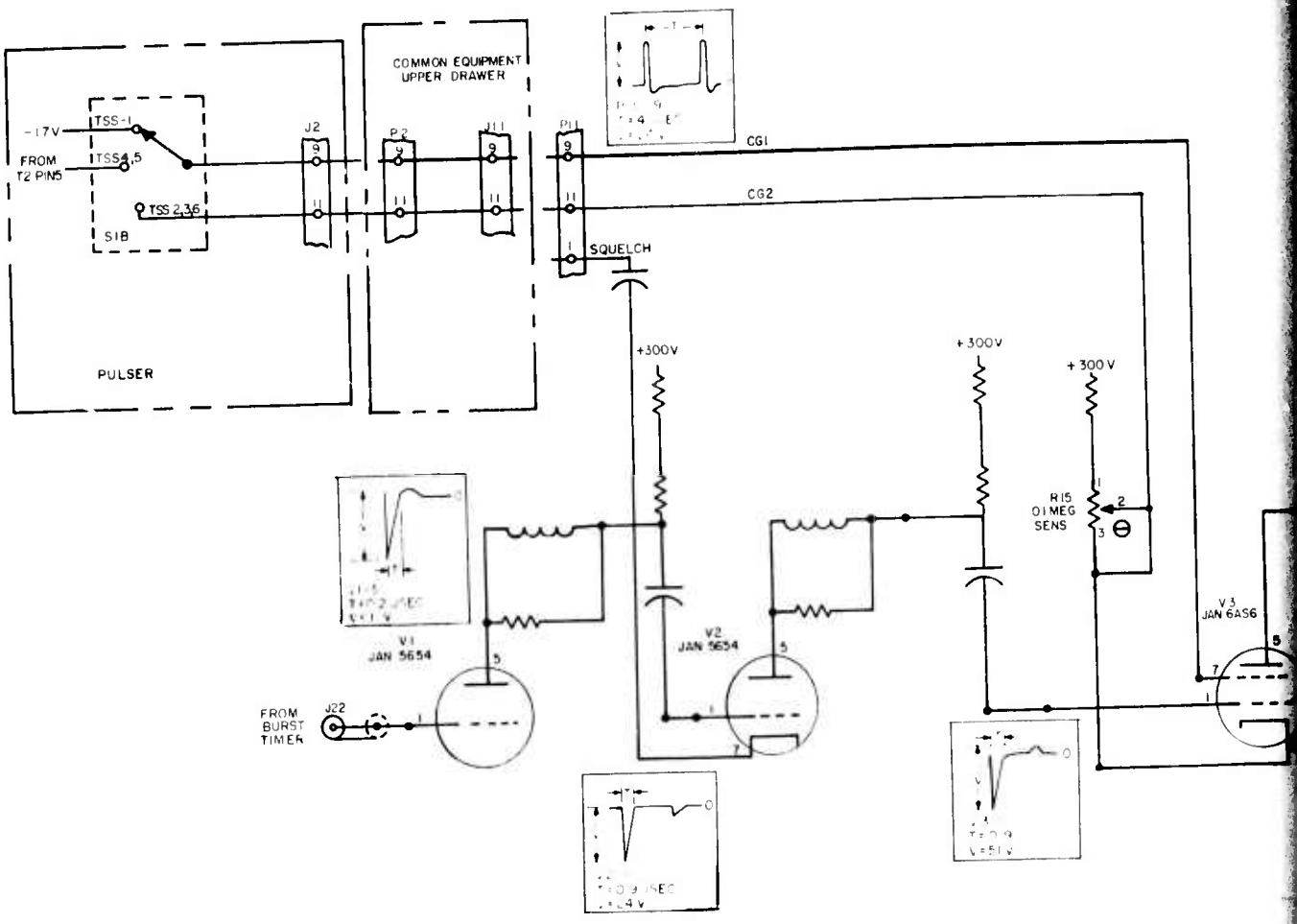
NOTES:

1 TERMINALS 2,3,4,5,7 AND 10 ON P11 ARE NOT USED
2 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

SWITCH	POSITION
TEST SELECTOR	RESPONSE TIME A
PWR METER CAL	MEAS
TIME	4 00

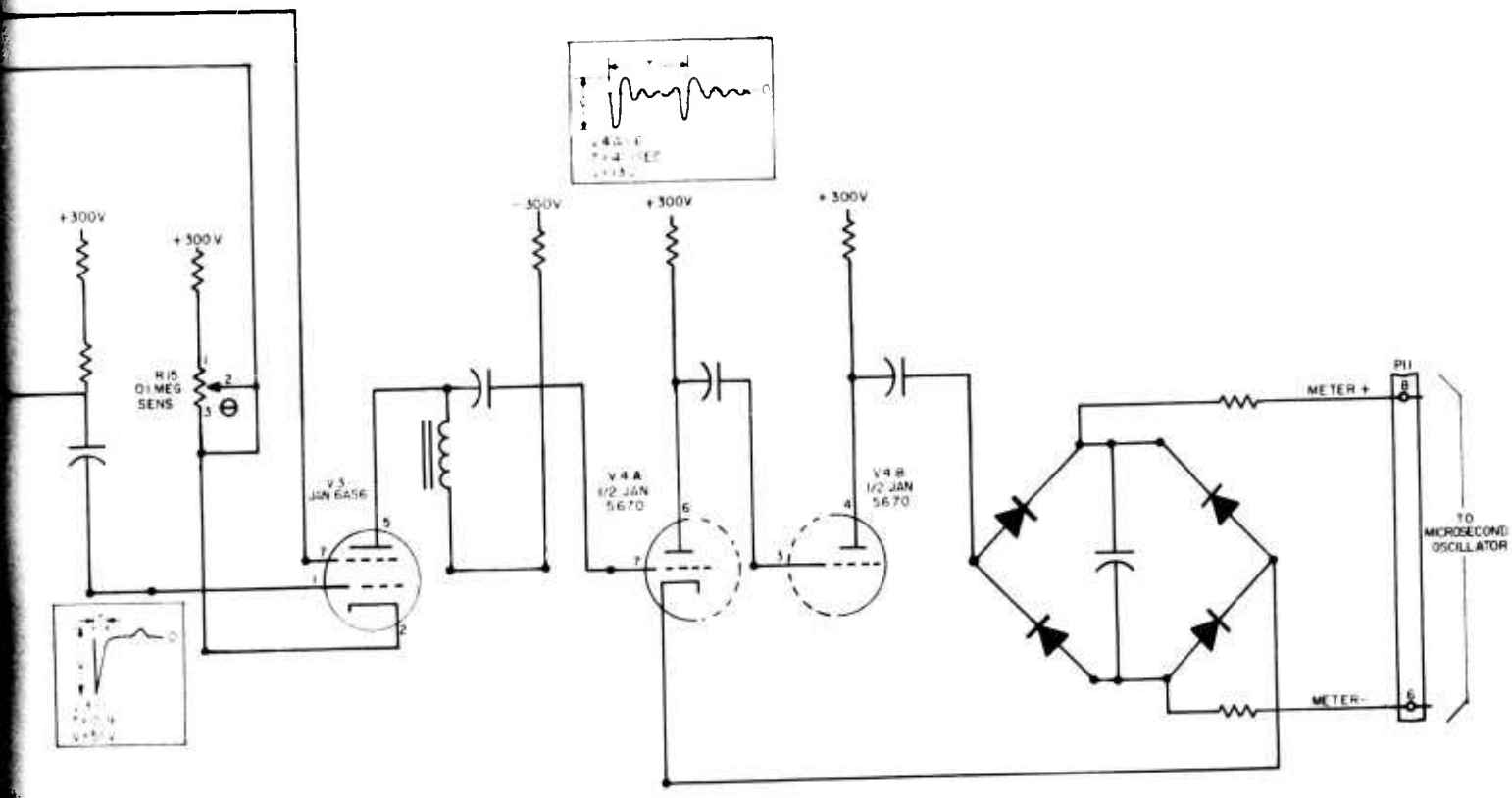


OR SIDE VIEW



CONFIDENTIAL

A



R-F TEST SET RESPONSE INDICATOR SIMPLIFIED SCHEMATIC
~~(TSS 1,2,3,4,5 AND 6)~~

MEASURMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN			
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN

THIS DATA NOT AVAILABLE

R-F TEST SET RESPONSE INDICATOR, NOTES

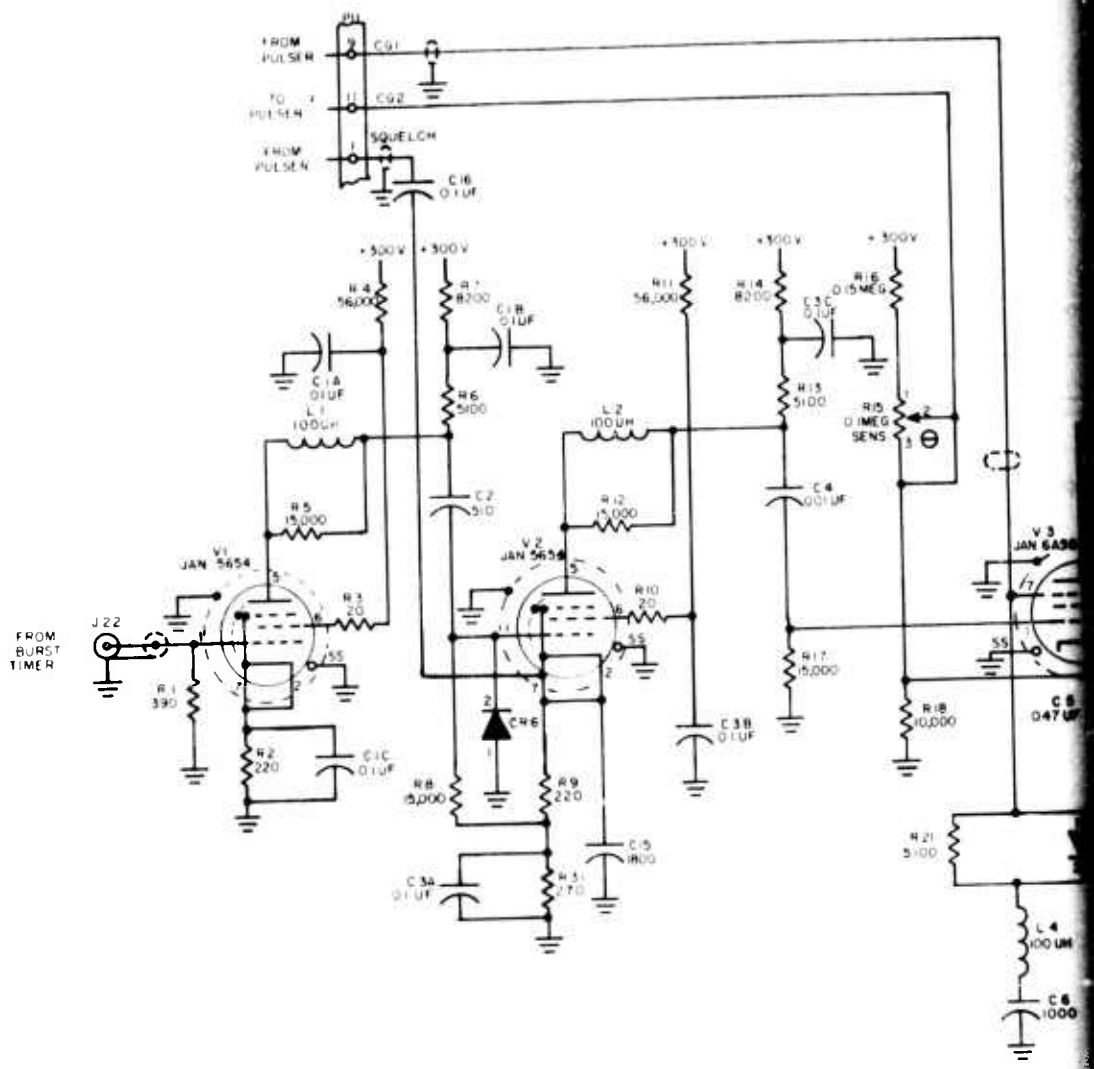
[redacted]

NOTES:

1 TERMINALS 2,3,4,5,7 AND 10 ON P11 ARE NOT USED

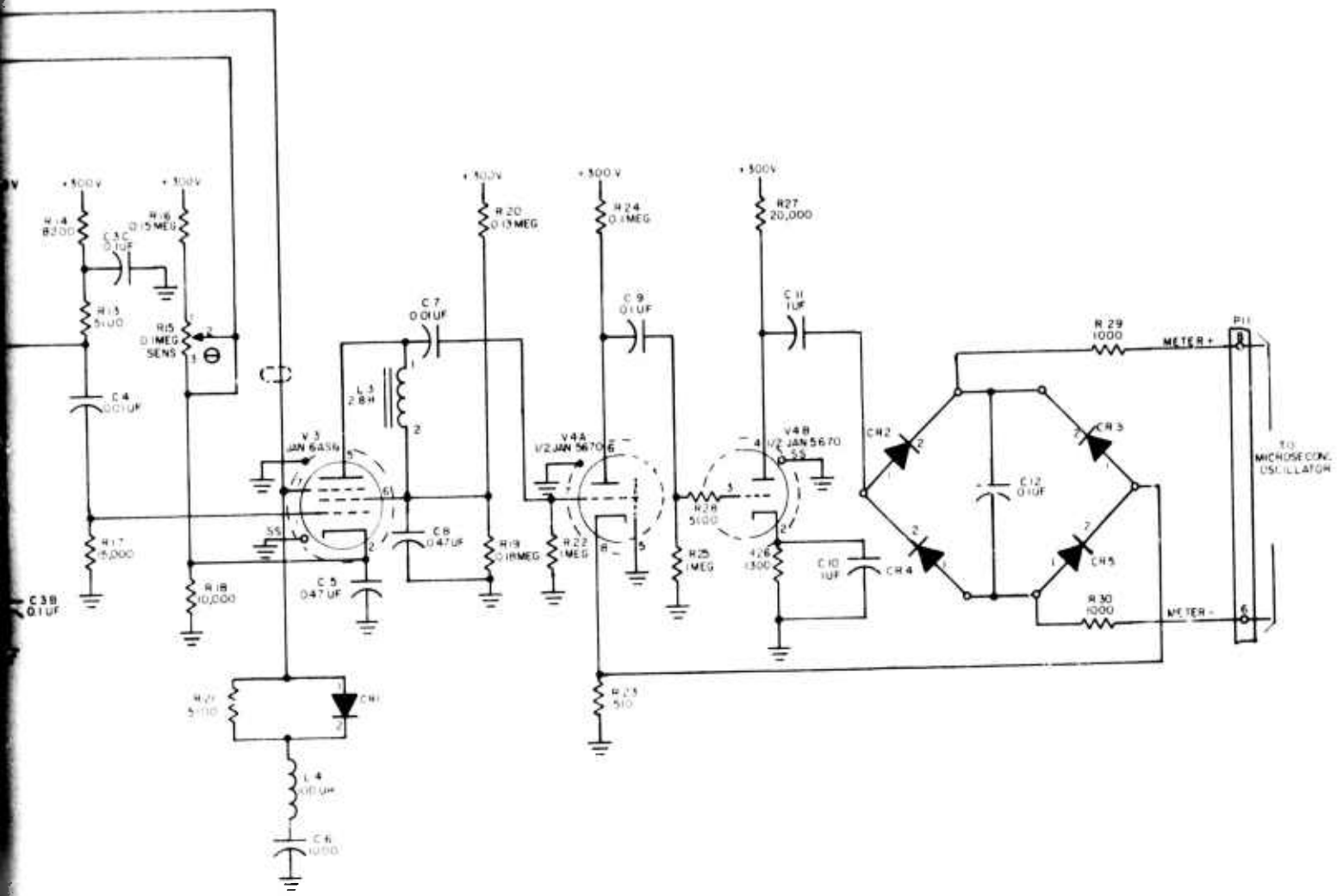
	SCREEN			CONTROL			CATHODE			FILAMENT		
	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

OT AVAILABLE

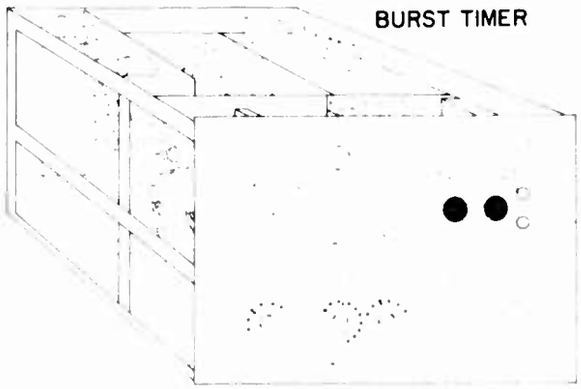

FROM PULSER
TO PULSER
FROM PULSER
SQUELCH
C16 0.1UF
+300V
R4 56,000
R7 8200
C1B 0.1UF
C1A 0.1UF
R6 5600
L1 100UH
R5 15,000
V1 JAN 5654
R3 20
FROM BURST TIMER
J22
R1 390
R2 220
C1C 0.1UF
C2 510
V2 JAN 5654
R12 5,000
R10 20
C4B 0.1UF
R8 15,000
R9 220
C4A 0.1UF
R7 270
C5 1800
R11 56,000
R14 8200
C3C 0.1UF
R13 5100
L2 100UH
R16 0.15MEG
R15 0.1MEG SENS
C4 0.01UF
R17 15,000
R18 10,000
V3 JAN 6AS6
C8 .047UF
R21 5100
L4 100 UH
C6 1000

[redacted]

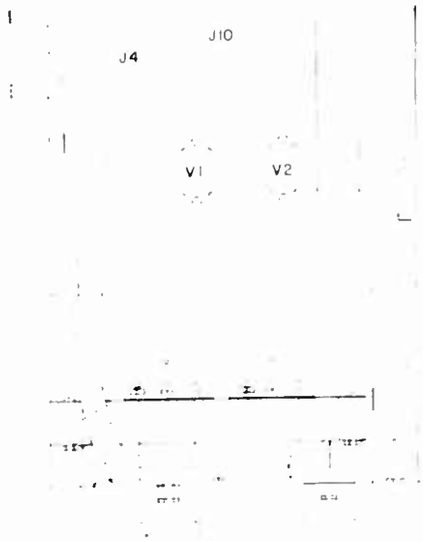
A



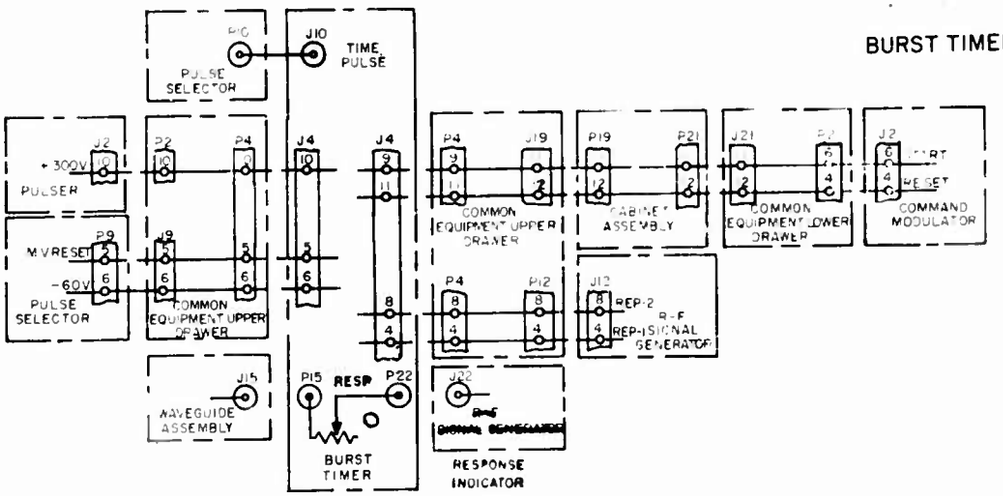
GS-15732 R-F TEST SET RESPONSE INDICATOR



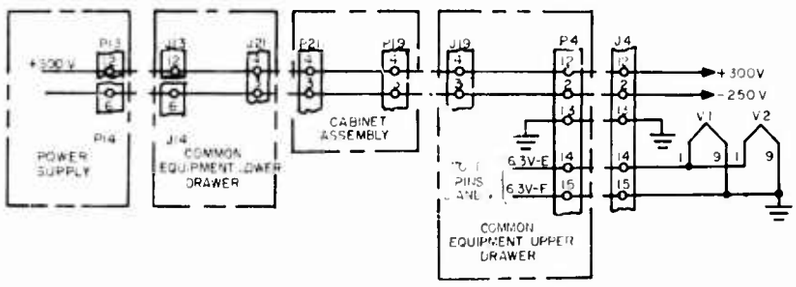
MISSILE R-F TEST SET UPPER DRAWER



BURST TIMER TOP VIEW



SIGNAL DISTRIBUTION



POWER DISTRIBUTION

R-F TEST SET BURST TIMER ,NOTES

[redacted]

TERM NO	V3 AND V4 CONNECTIONS ELEMENT
1	K3 CATHODE
2	K2 CATHODE
3	K1 CATHODE
4	K10 CATHODE
5	AUX ANODE
6	SHIELD
7	K9 CATHODE
8	K8 CATHODE
10	K6 CATHODE
11	B6-10 CATHODE
12	K5 CATHODE
13	K4 CATHODE
14	B1-5 CATHODES
16	NORM CATHODE
19	ANODE

6167 TUBE BASE
BOTTOM VIEW

NOTES

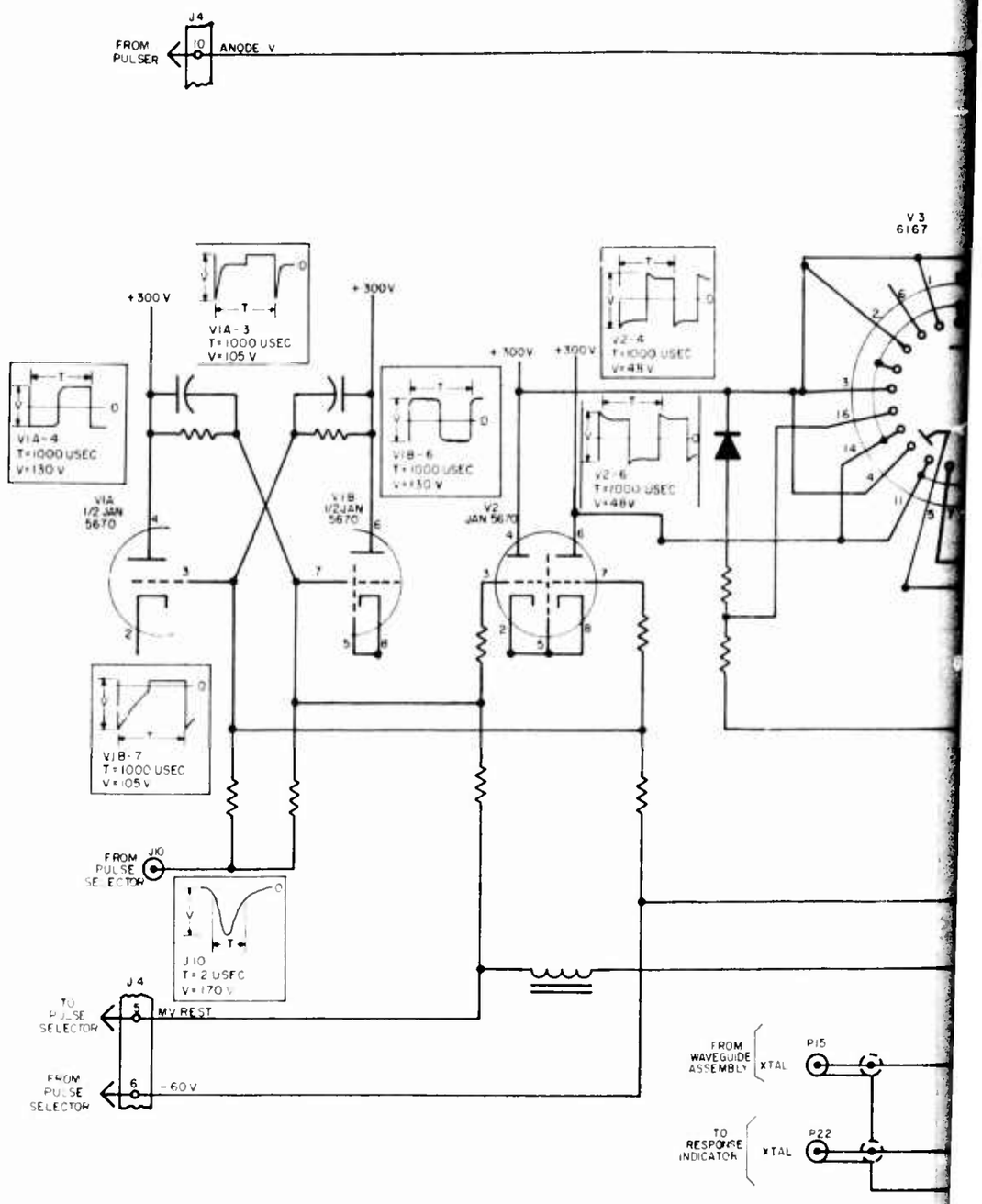
1 TERMINALS 1, 3 AND 7 ON J4 ARE NOT USED

2 WAVE SHAPES ARE SHOWN FOR THE FOLLOWING TEST CONDITIONS

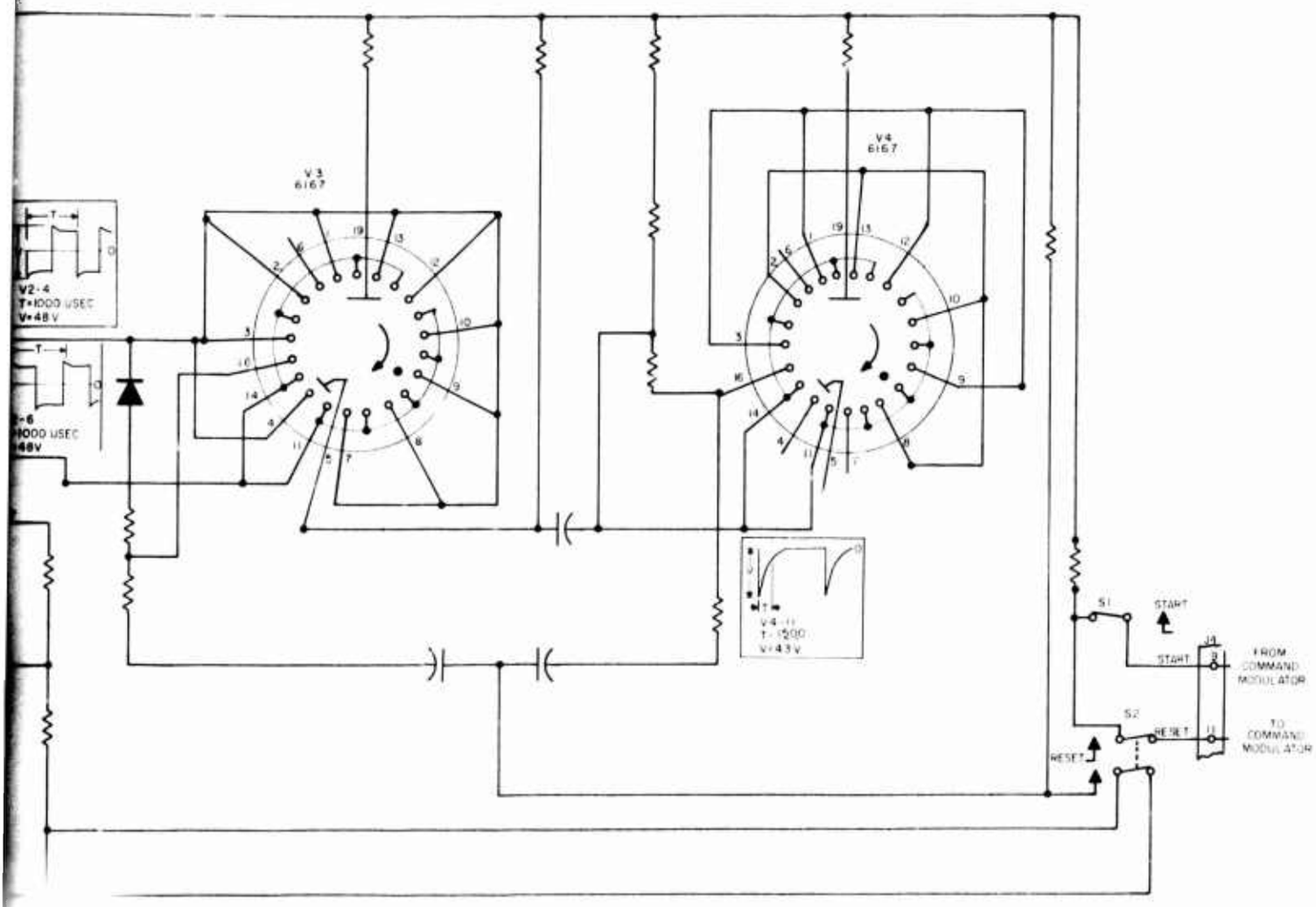
SWITCH	POSITION
TEST SELECTOR	COM SIG
PWR METER	MEAS
COMMAND CAL	MEAS
START	OPERATED

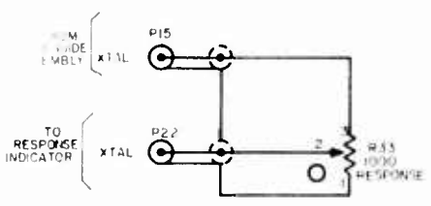
[redacted]

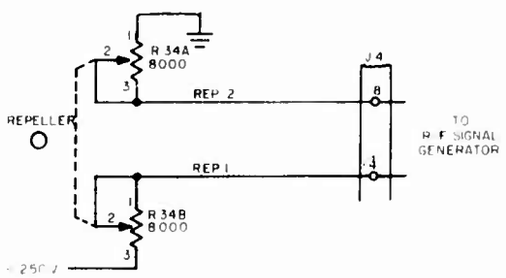
UNCLASSIFIED



CONFIDENTIAL







R-F TEST SET BURST TIMER SIMPLIFIED SCHEMATIC

[redacted]

MEASURMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			SCREEN		
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

THIS DATA NOT AVAILABLE

R.F. TEST SET BURST TIMER, NOTES

[redacted]

NOTES:

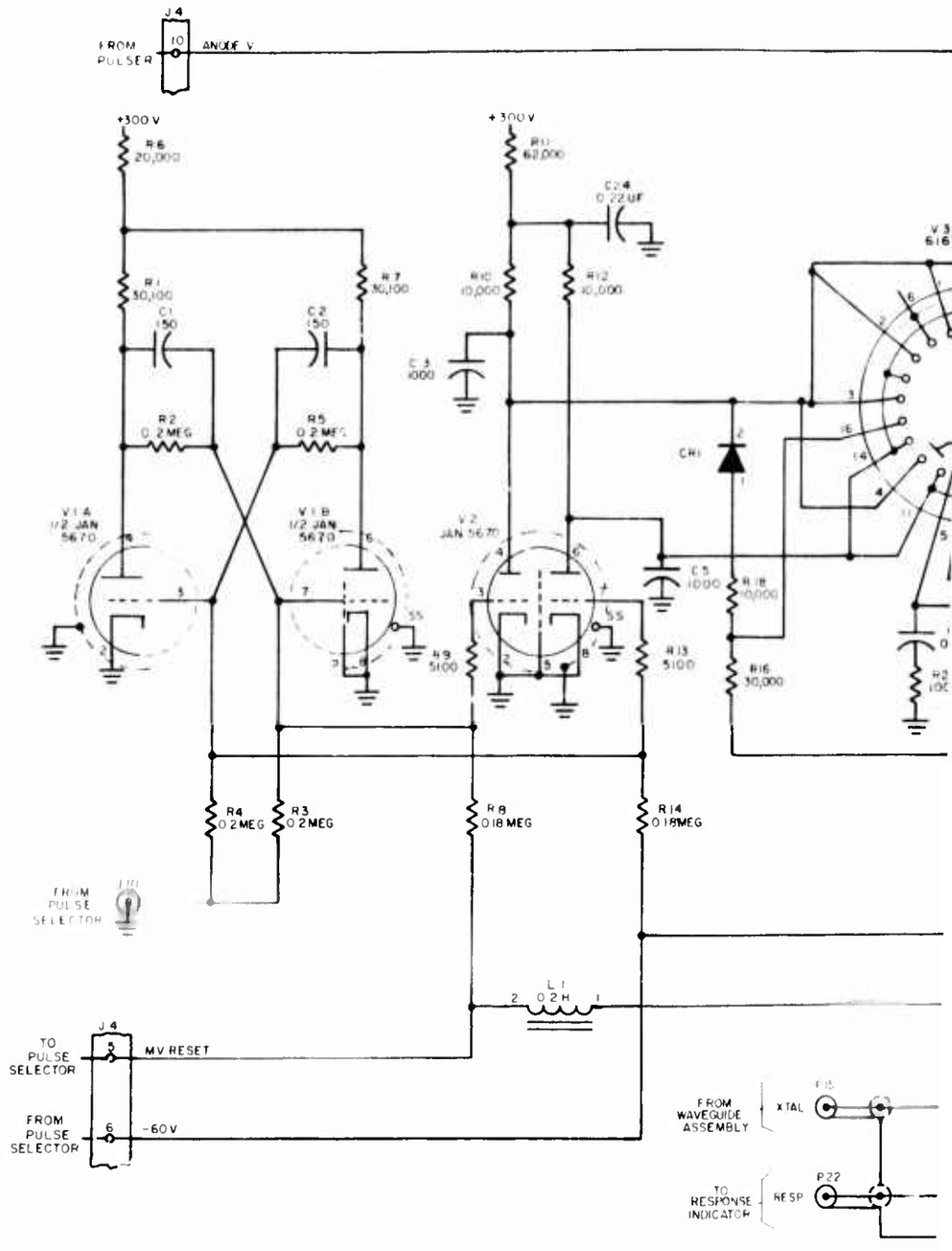
1. TERMINALS 1, 3 AND 7 ON J4 ARE NOT USED.

R	SCREEN			CONTROL			CATHODE			FILAMENT		
HMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

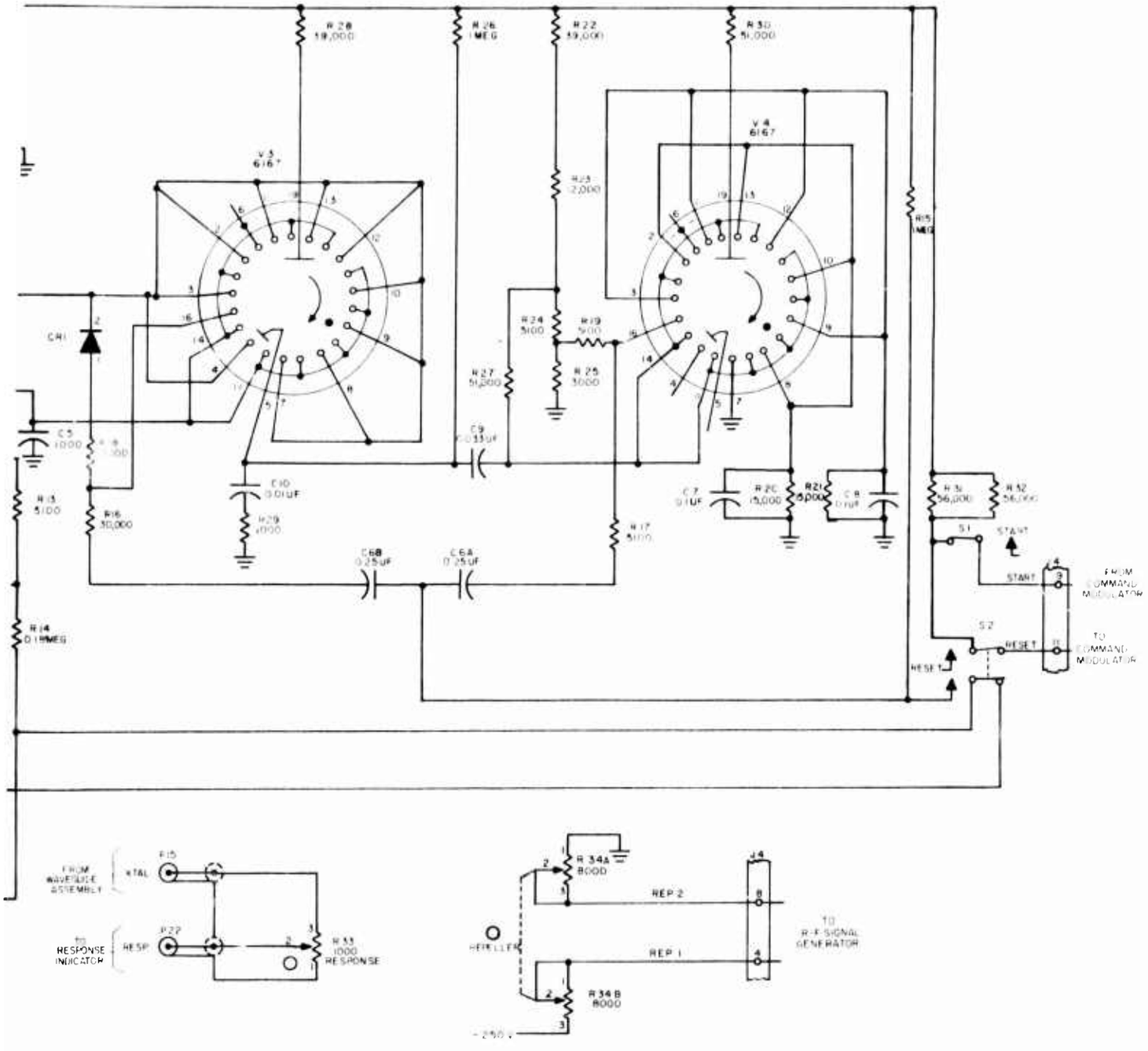
DATA NOT AVAILABLE

IAL

UNCLASSIFIED



UNCLASSIFIED



GS-15729 R-F TEST SET BURST TIMER

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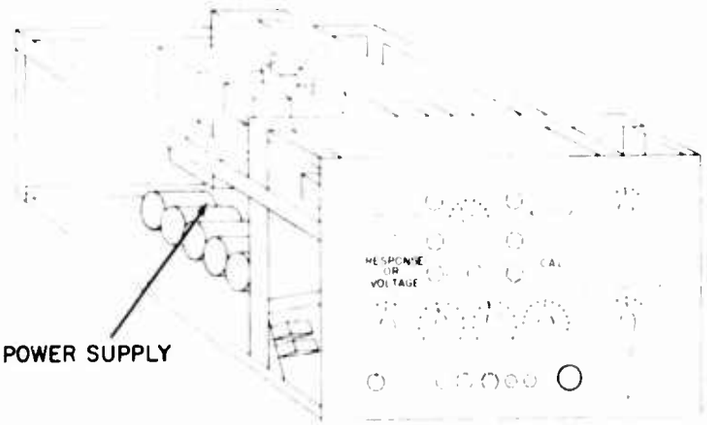
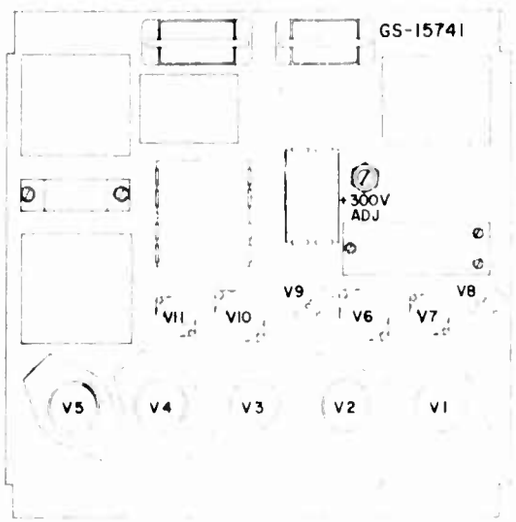
MEASURMENT NOTES

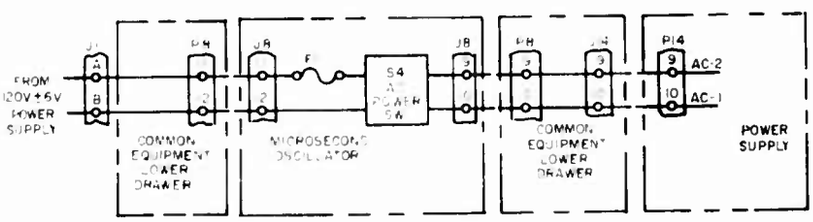


MISSILE R-F TEST SET LOWER DRAWER

SOCKET NO	TUBE NO	TUBE TYPE	TUBE FUNCTION	PL	
				PIN	VOL



POWER SUPPLY SIDE VIEW



SIGNAL DISTRIBUTION

R-F TEST SET POWER SUPPLY, NOTES

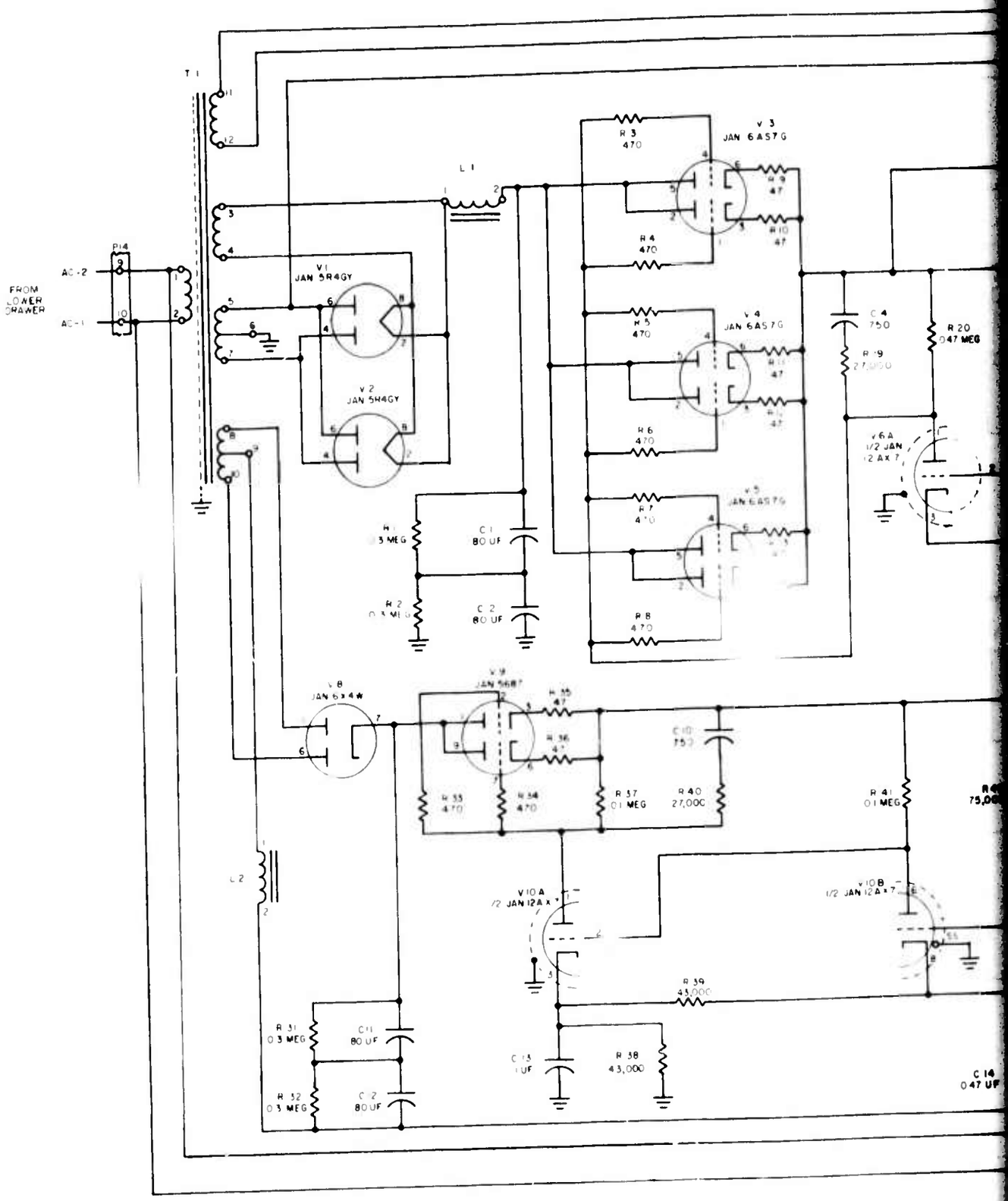
CONFIDENTIAL

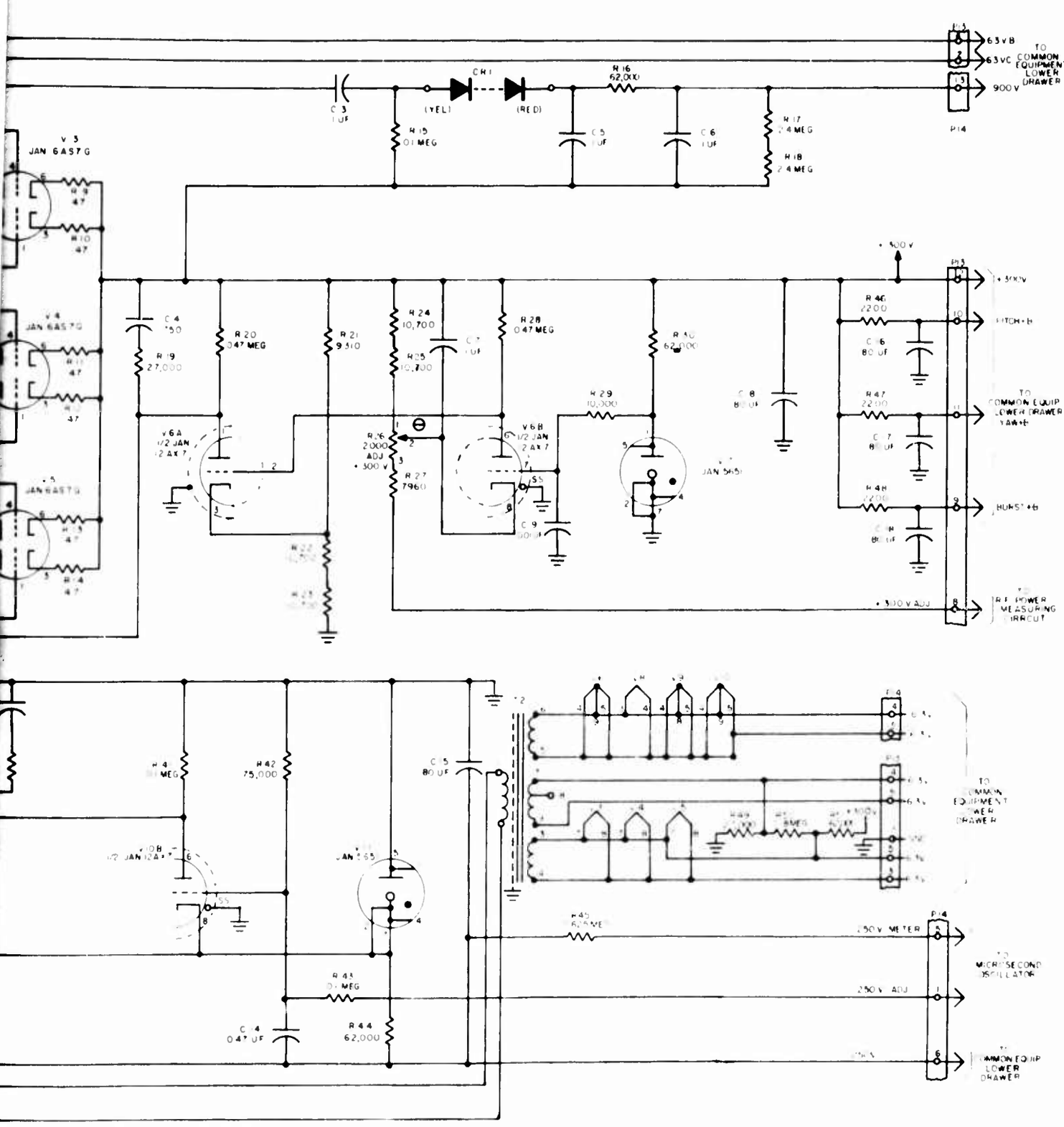
NOTES

1 ALL VALUES ARE EXPRESSED IN OHMS OR MICROFARADS UNLESS OTHERWISE INDICATED.

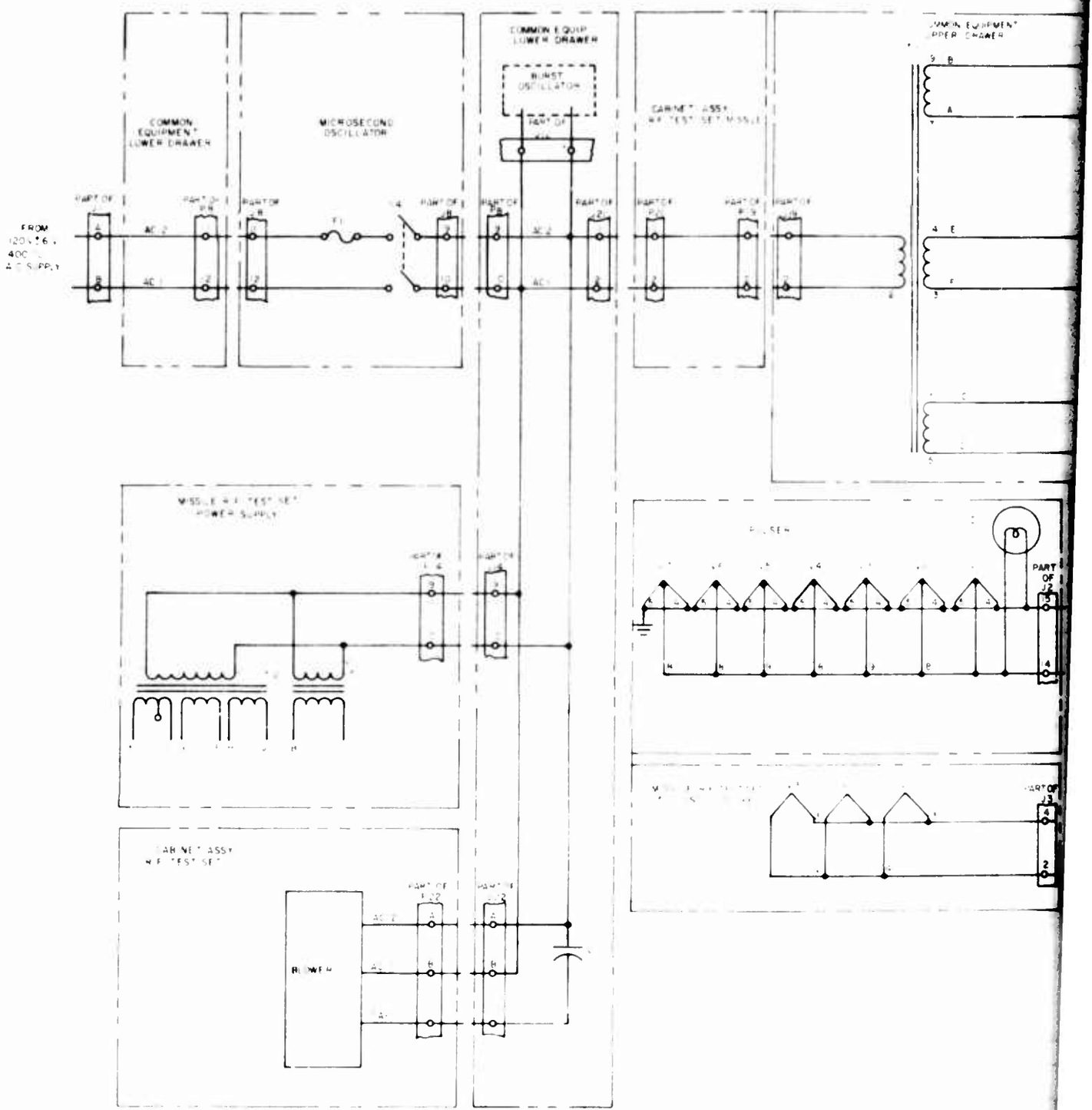
TUBE TYPE	TUBE FUNCTION	PLATE			CONTROL			CATHODE			FILAMENT		
		PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

THIS DATA NOT AVAILABLE

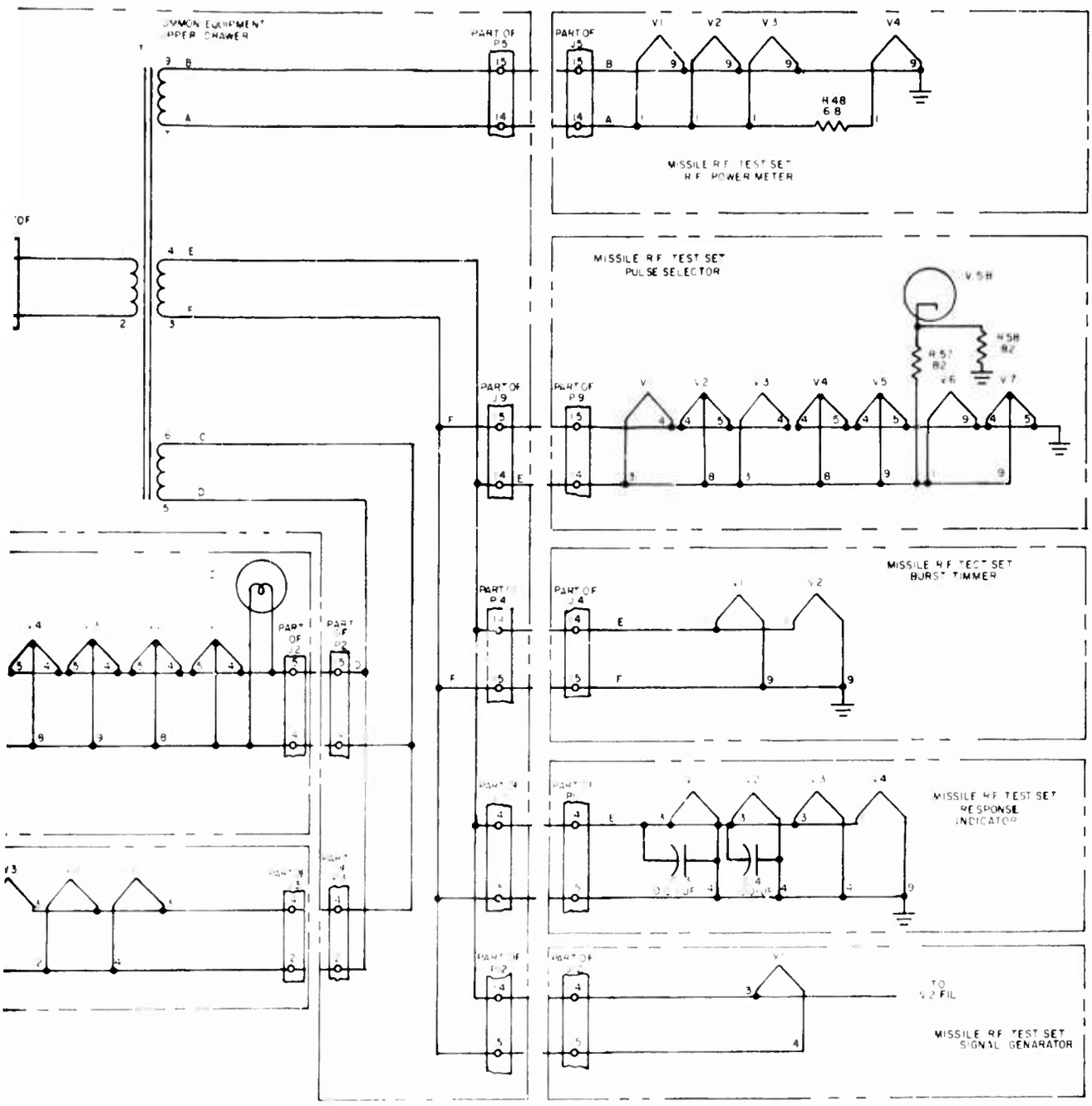

T 1
L 1
P14
AC-2
AC-1
FROM LOWER DRAWER
V 1 JAN 5R4GY
V 2 JAN 5R4GY
V 3 JAN 6AS7G
V 4 JAN 6AS7G
V 5 JAN 6AS7G
V 6A 1/2 JAN 12AX7
V 8 JAN 6SN7W
V 9 JAN 6SR7
V10A 1/2 JAN 12AX7
V10B 1/2 JAN 12AX7
R 1 3 MEG
R 2 0 3 MEG
R 3 470
R 4 470
R 5 470
R 6 470
R 7 470
R 8 470
R 9 47
R 10 47
C 1 80 UF
C 2 80 UF
C 4 750
R 19 27,000
R 20 0 47 MEG
R 31 0 3 MEG
R 32 0 3 MEG
C 11 80 UF
C 12 80 UF
R 35 47
R 36 47
R 37 0 1 MEG
R 40 27,000
R 41 0 1 MEG
R 39 43,000
R 38 43,000
C 13 1 UF
C 14 0 47 UF

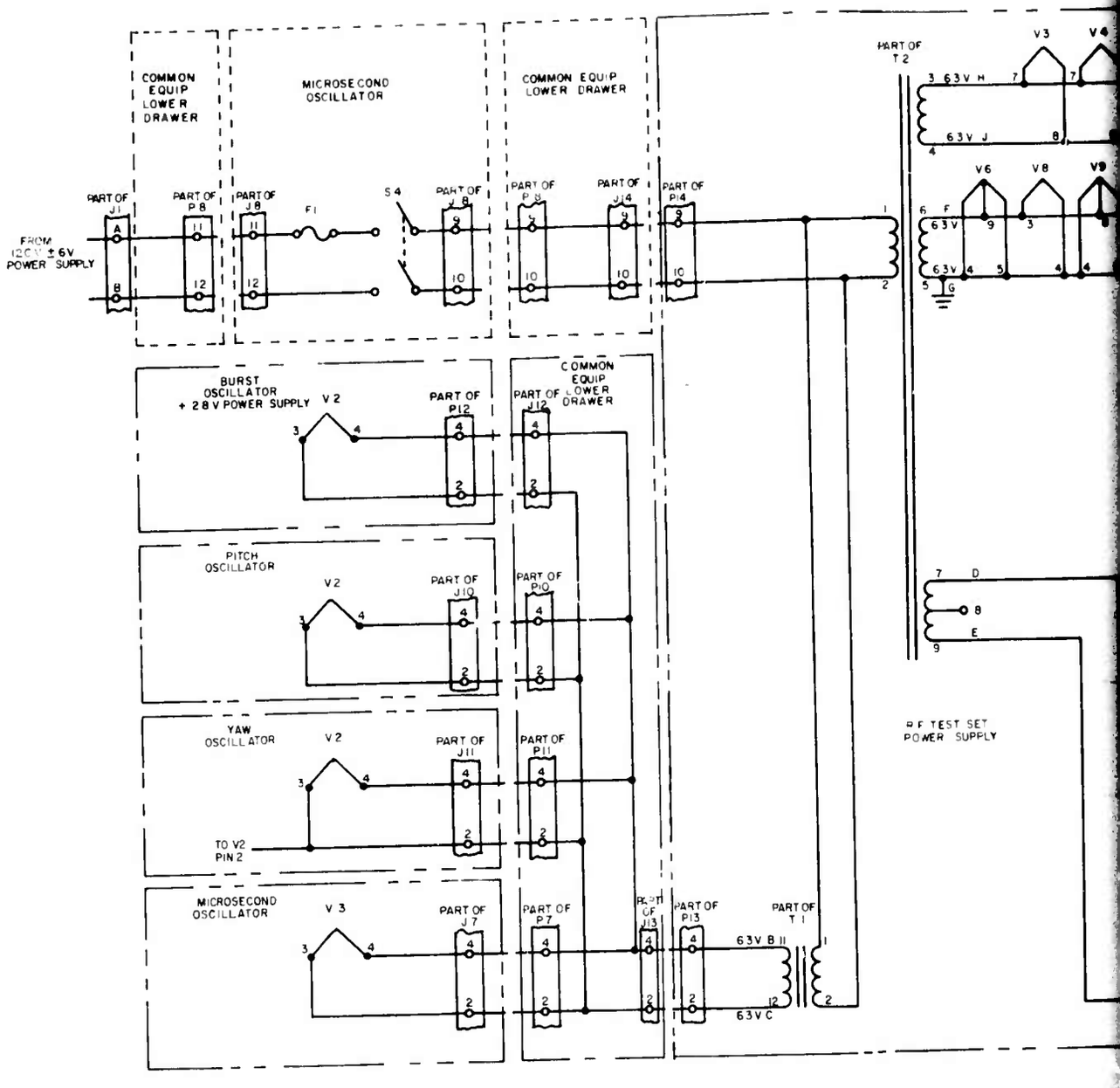


GS-15741 R-F TEST SET POWER SUPPLY

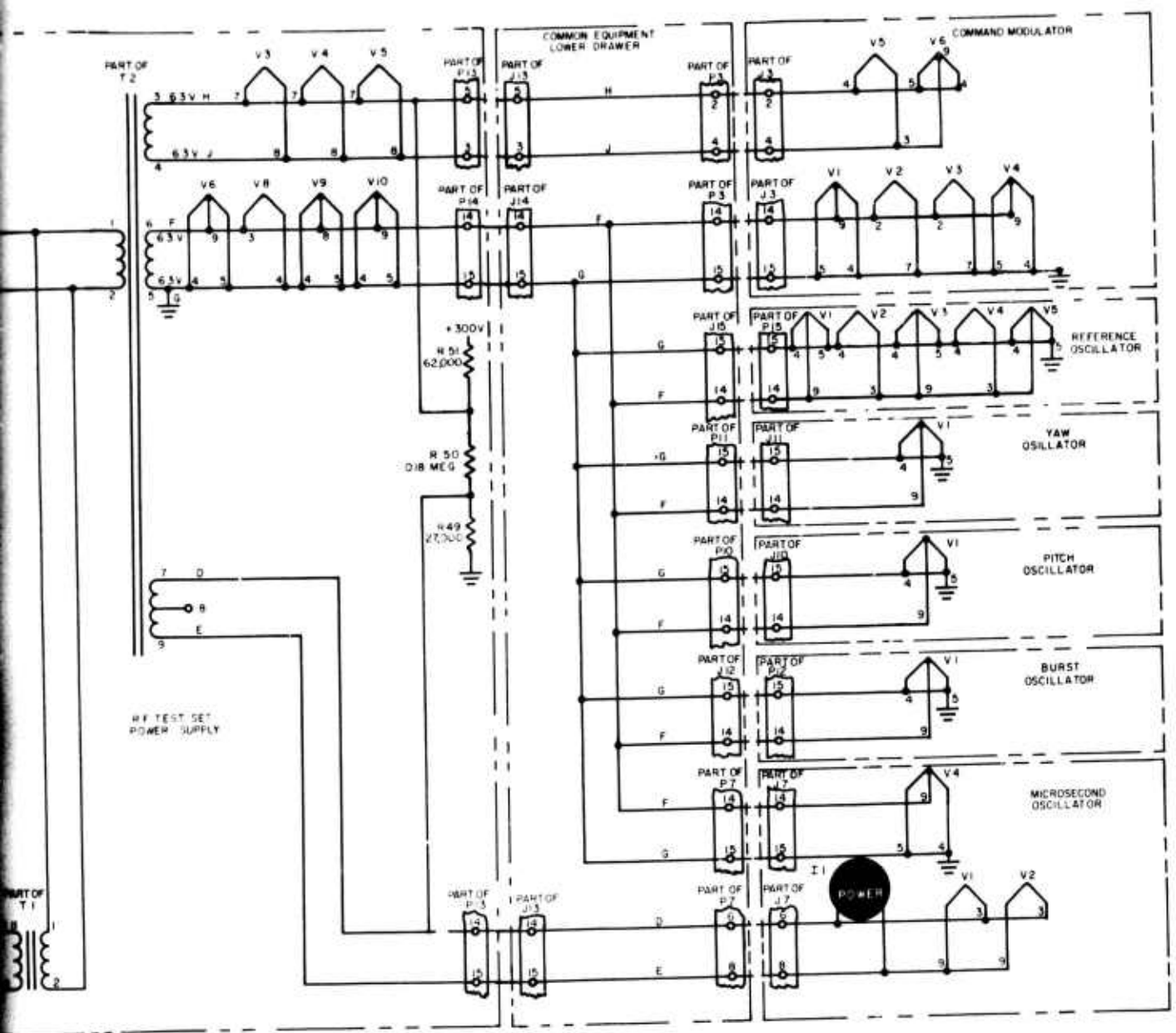


RF TEST SET FILAMENT I

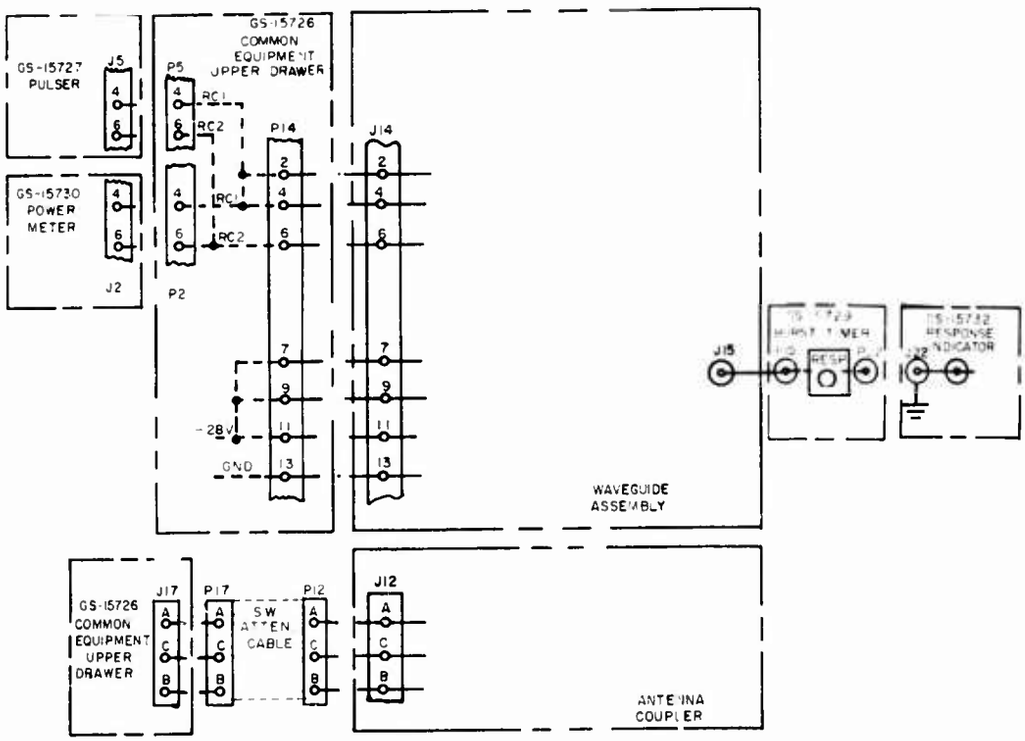

COMMON EQUIPMENT
UPPER CHASSIS
PART OF P5
PART OF J5
V1
V2
V3
V4
R48
68
MISSILE R.F. TEST SET
R.F. POWER METER
MISSILE R.F. TEST SET
PULSE SELECTOR
V5A
R57
82
R58
82
V6
V7
PART OF P9
PART OF J9
MISSILE R.F. TEST SET
BURST TIMER
PART OF J4
PART OF P4
MISSILE R.F. TEST SET
RESPONSE
INDICATOR
PART OF P1
PART OF J1
PART OF P2
PART OF J2
TO
V2 FIL
MISSILE R.F. TEST SET
SIGNAL GENARATOR



UNCLASSIFIED



R-F TEST SET FILAMENT II



SIGNAL DISTRIBUTION

WAVEGUIDE ASSEMBLY AND ANTENNA COUPLER, NOTES

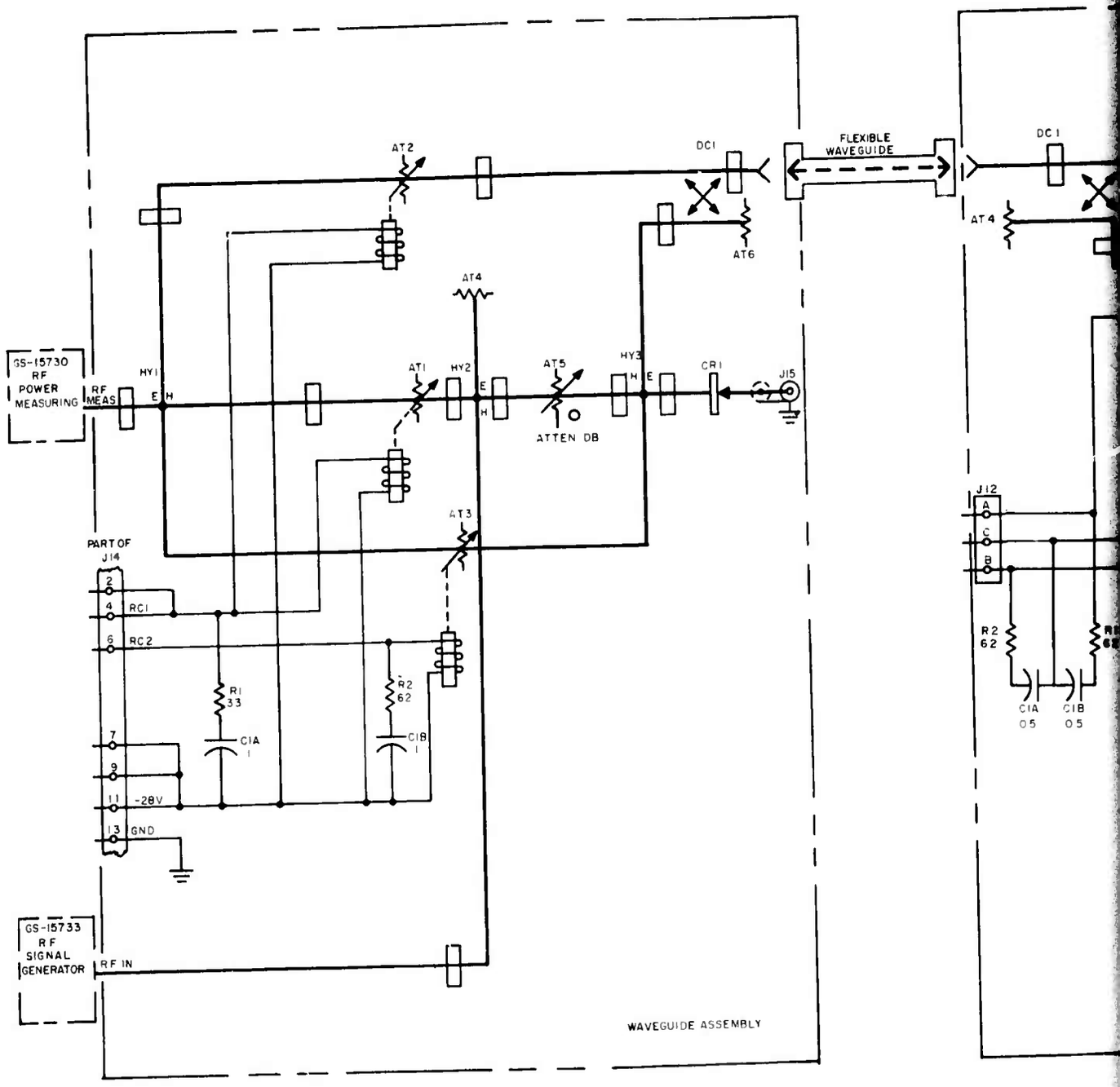
[redacted]

A

NOTES:

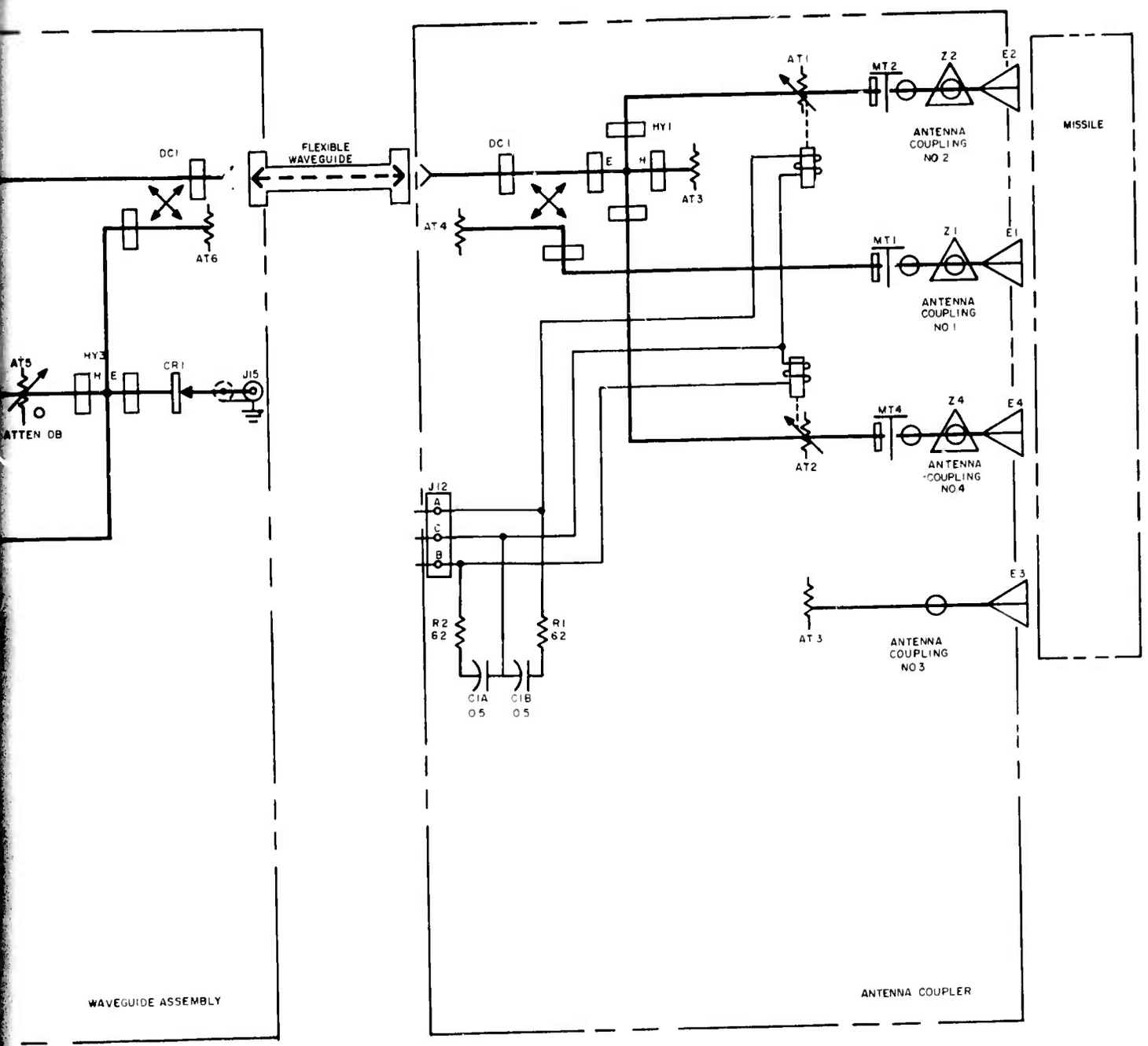
1. E1, E2, E3, AND E4 ARE PART OF MISSILE UNDER TEST

[redacted]

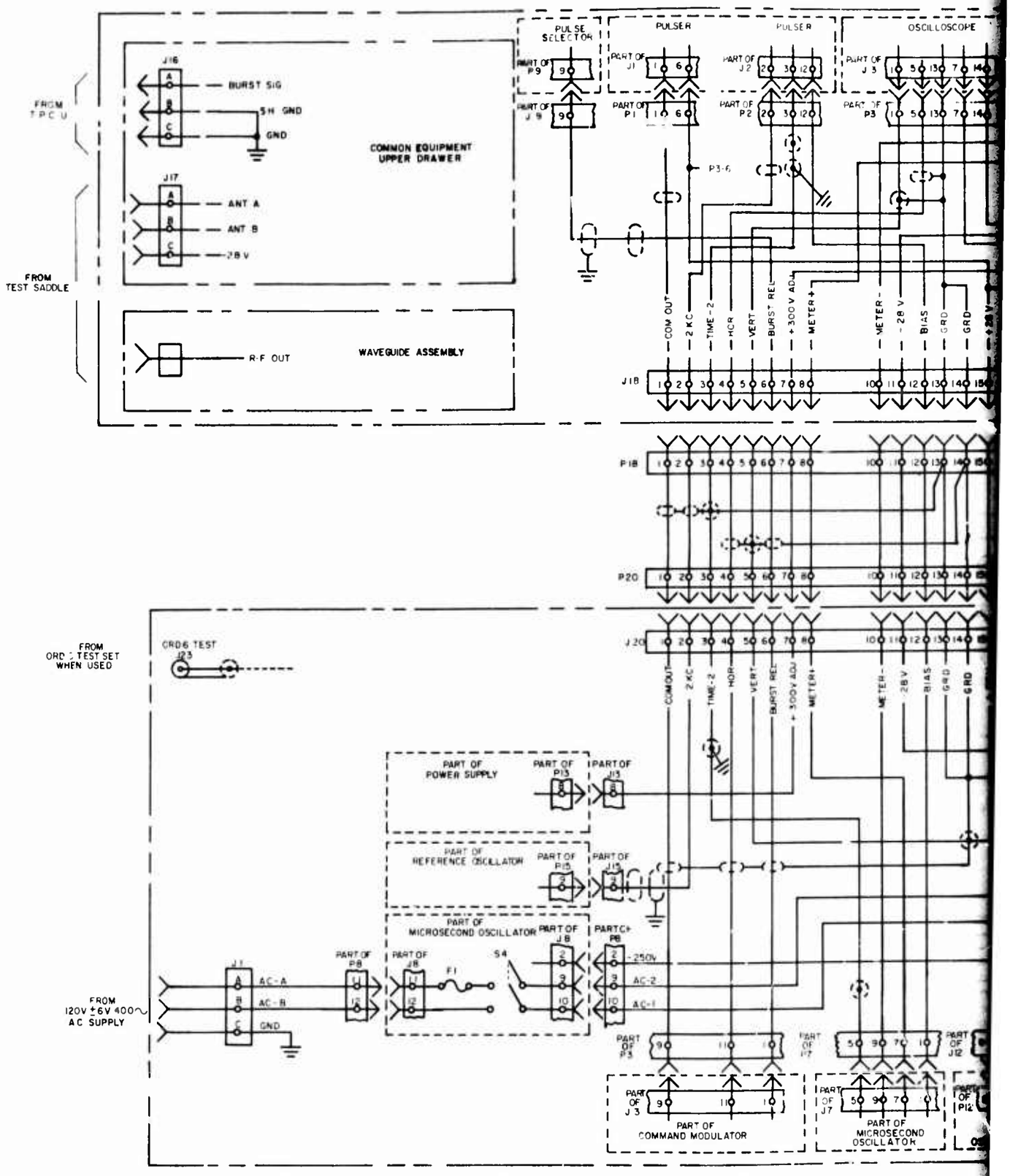


MISSILE R-F TEST SET WA

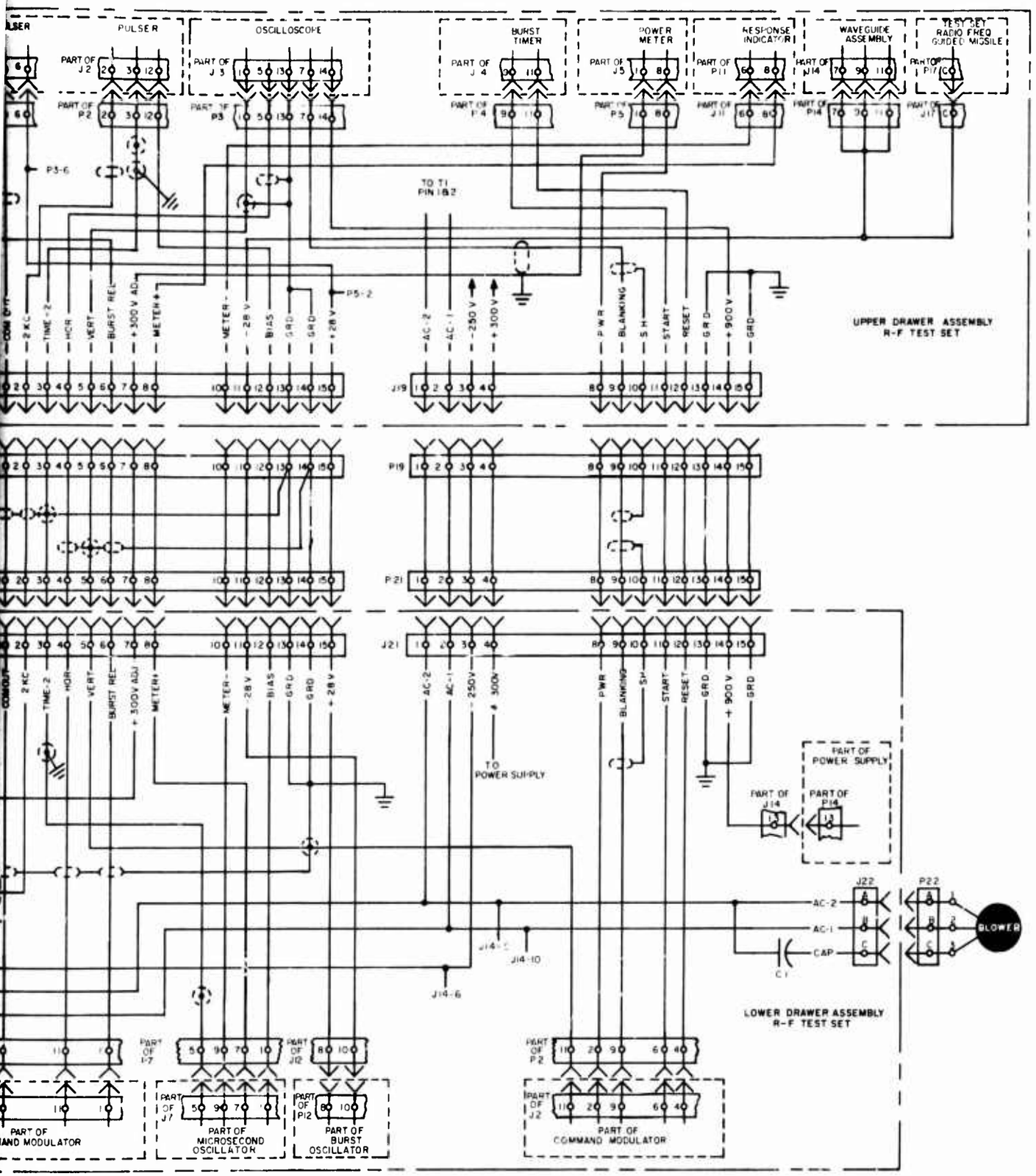
[redacted]



MISSILE R-F TEST SET WAVEGUIDE ASSEMBLY SCHEMATIC AND ANTENNA COUPLER SCHEMATIC


FROM TPCU
J16
A
B
C
BURST SIG
SH GND
GND
COMMON EQUIPMENT UPPER DRAWER
J17
ANT A
ANT B
-28 V
FROM TEST SADDLE
R-F OUT
WAVEGUIDE ASSEMBLY
PULSE SELECTOR
PULSER
PULSER
OSCILLOSCOPE
PART OF P9
PART OF J9
PART OF J1
PART OF P1
PART OF J2
PART OF P2
PART OF J3
PART OF P3
P3-6
COM OUT
2 KC
TIME -2
HOR
VERT
BURST REL
+300 V ADJ
METER +
METER -
-28 V
BIAS
GRD
GRD
J18
P18
P20
J20
FROM ORD 2 TEST SET WHEN USED
ORD6 TEST J23
PART OF POWER SUPPLY
PART OF P13
PART OF J13
PART OF REFERENCE OSCILLATOR
PART OF P15
PART OF J15
PART OF MICROSECOND OSCILLATOR
PART OF J8
PART OF P8
PART OF P9
J1
FROM 120V ±6V 400~ AC SUPPLY
AC-A
AC-B
GND
F1
S4
-250V
AC-2
AC-1
PART OF P3
PART OF P7
PART OF J12
PART OF J3
PART OF COMMAND MODULATOR
PART OF J7
PART OF MICROSECOND OSCILLATOR

A



R.F. TEST SET CABINET ASSEMBLY

ASSIFIED

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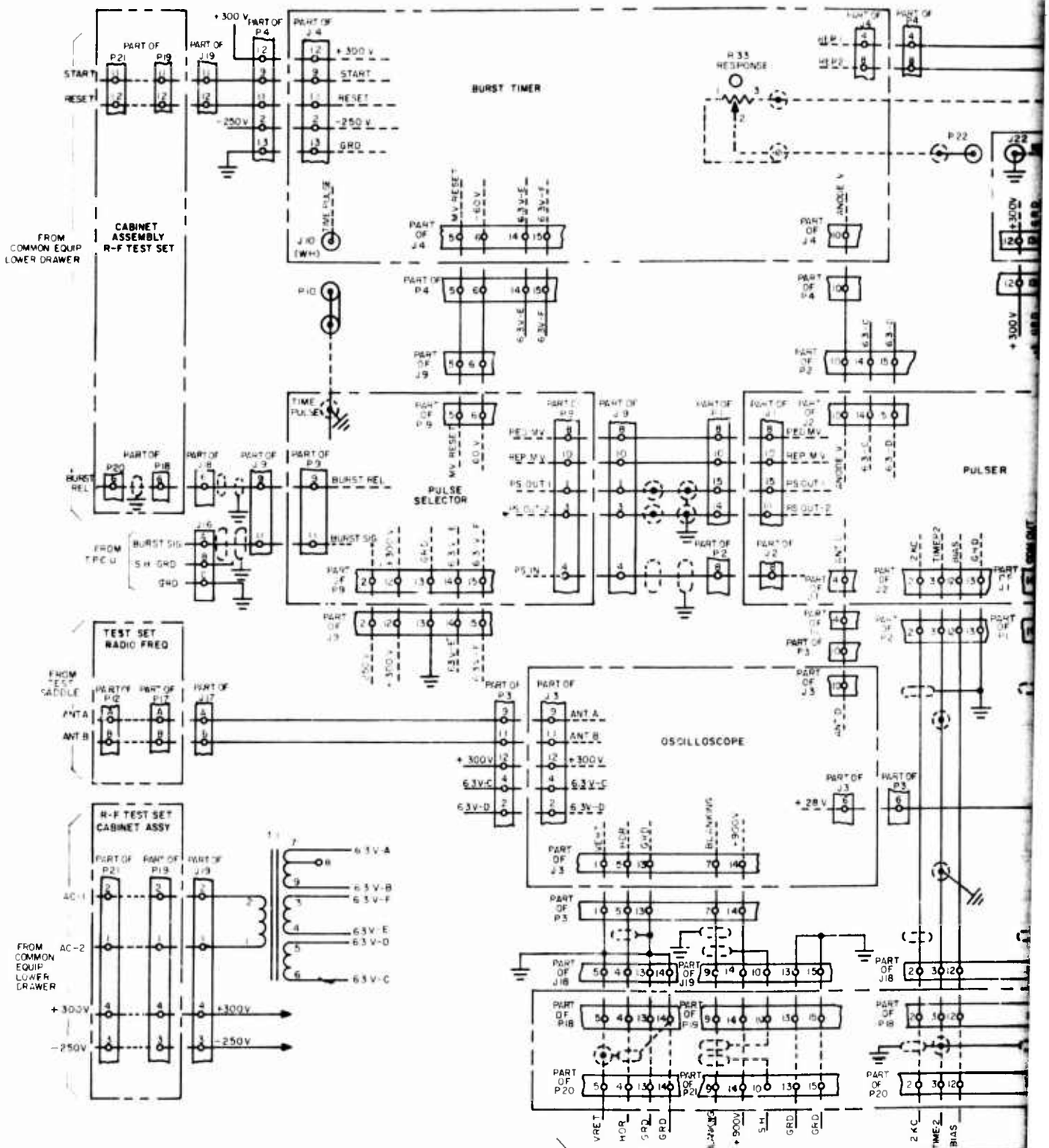
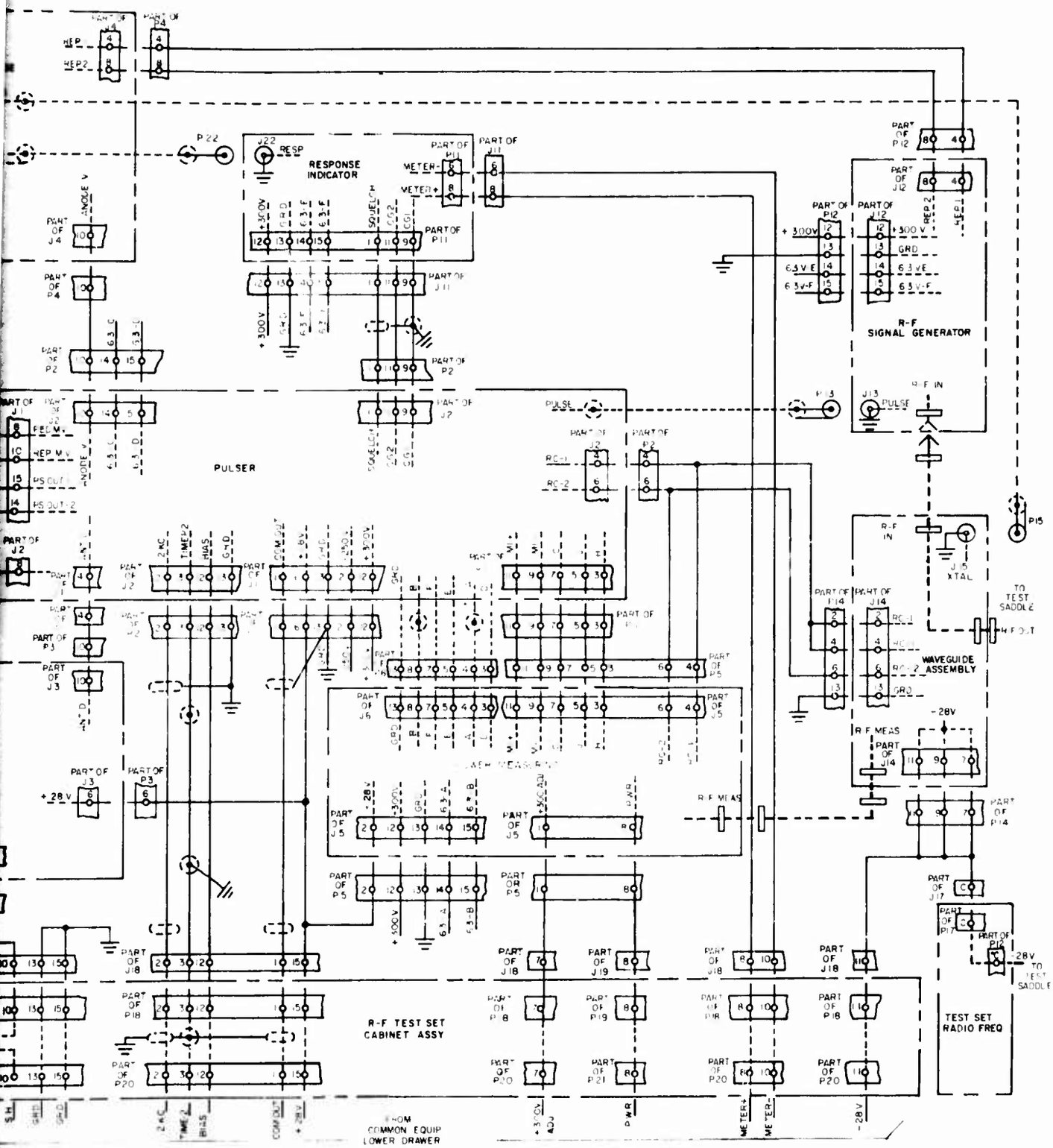
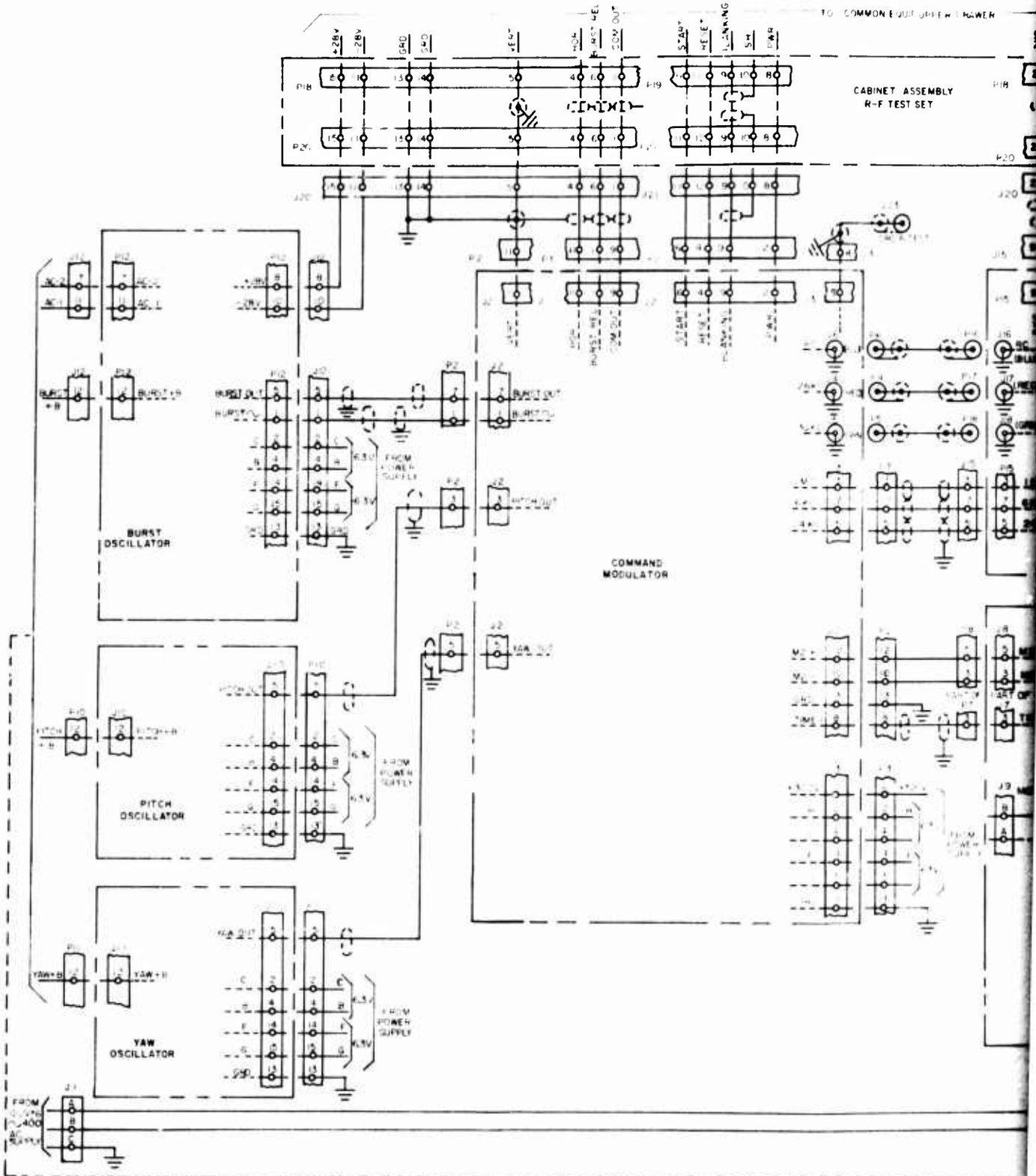


R-F TEST SET UPPER DRAWER

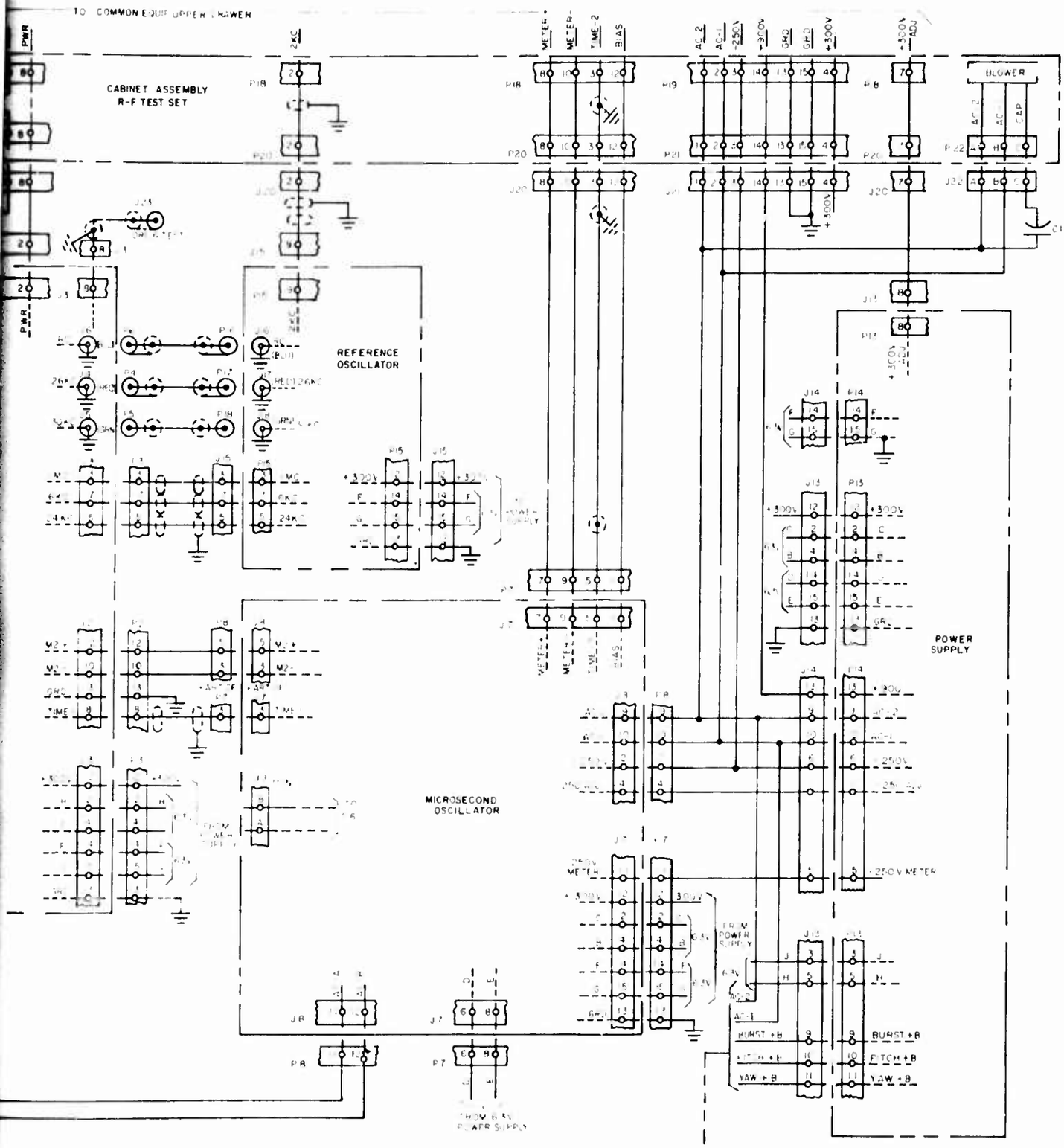
UNCLASSIFIED

A


RESPONSE INDICATOR
R-F SIGNAL GENERATOR
PULSER
WAVEGUIDE ASSEMBLY
R-F TEST SET CABINET ASSY
TEST SET RADIO FREQ
FROM COMMON EQUIP LOWER DRAWER
TO TEST SADDLE
-28V
+300V
GRD
PULSE
R-F IN
R-F OUT
R-F MEAS
XTAL


TO COMMON EQUIPMENT POWER
CABINET ASSEMBLY
R-F TEST SET
P18
P19
P20
BURST OSCILLATOR
COMMAND MODULATOR
PITCH OSCILLATOR
YAW OSCILLATOR
FROM POWER SUPPLY

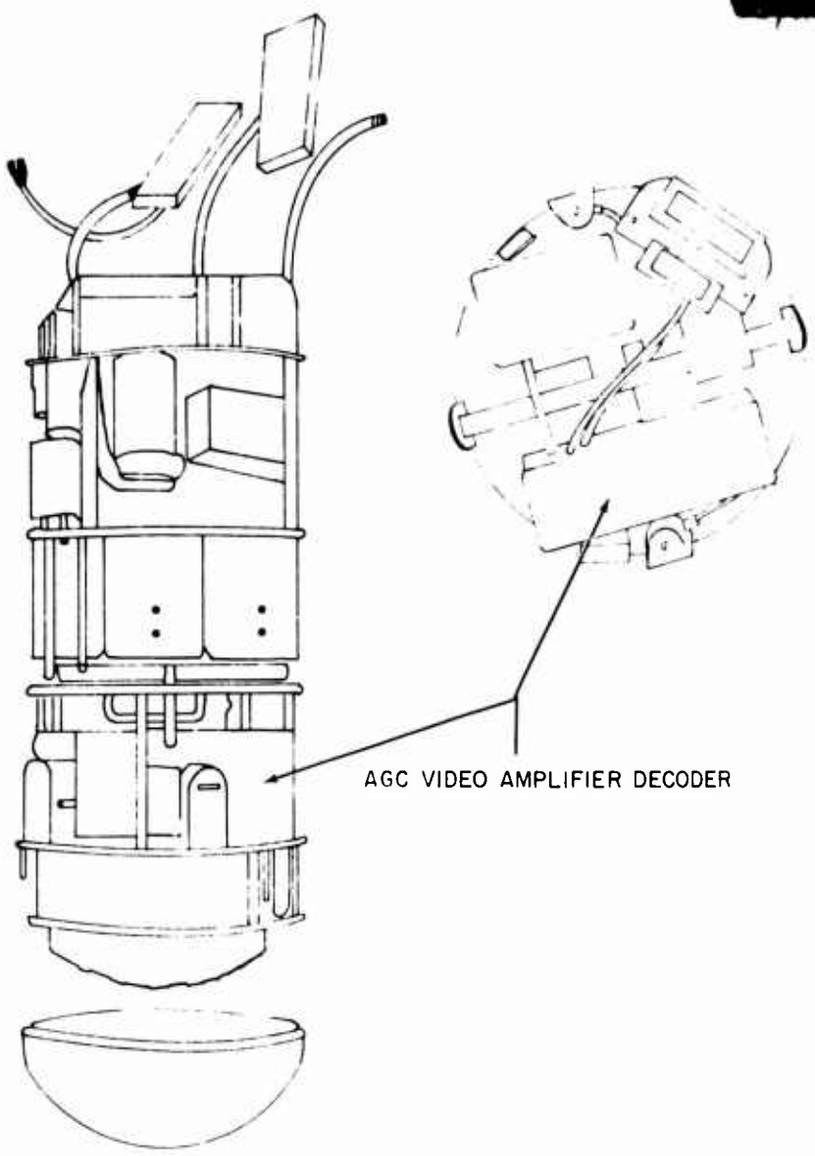
A



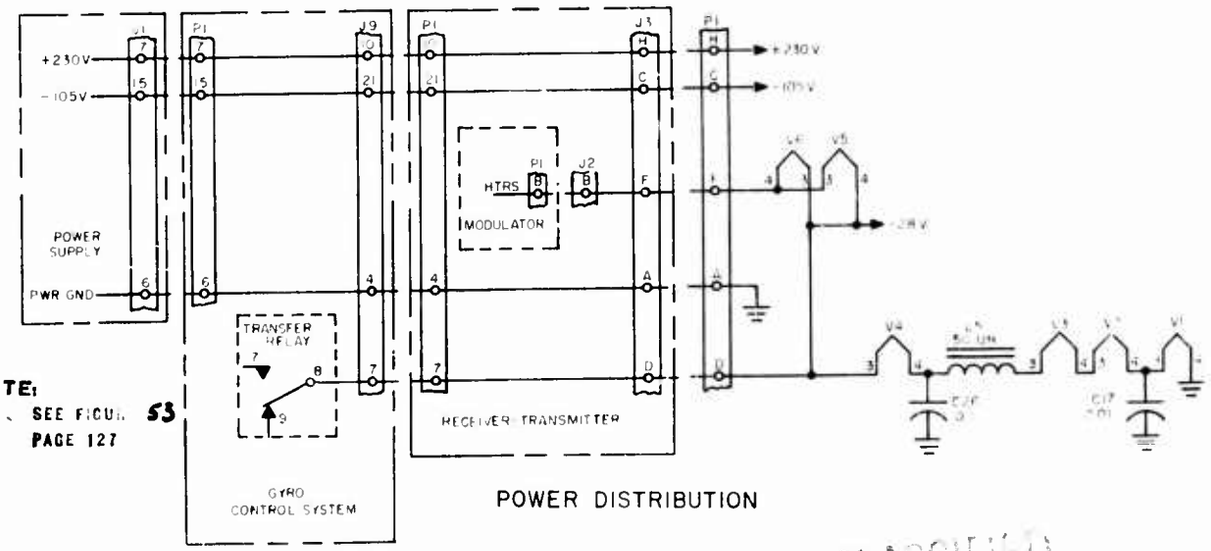
R.F. TEST SET LOWER DRAWER

[redacted] ASSIFIED

NOTES



MISSILE GUIDANCE SET



NOTE:
SEE FIGURE 53 PAGE 127

POWER DISTRIBUTION

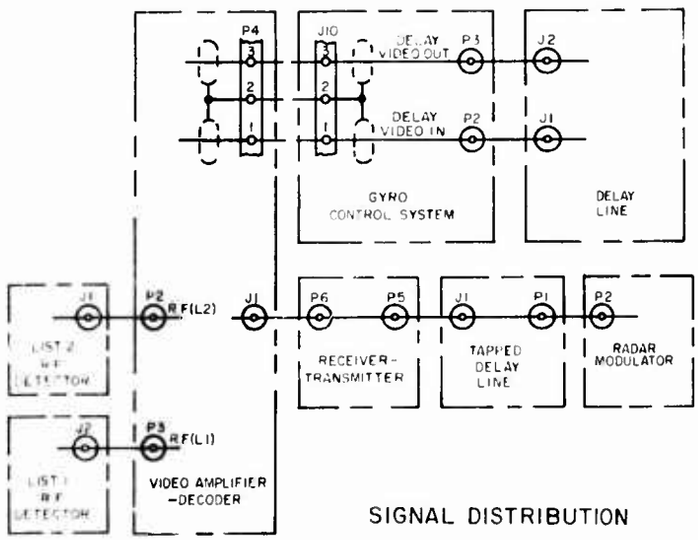
AGC VIDEO AMPLIFIER DECODER, NOTES

UNCLASSIFIED [redacted]

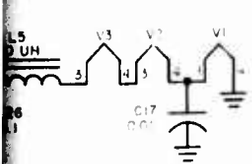
A

[redacted]

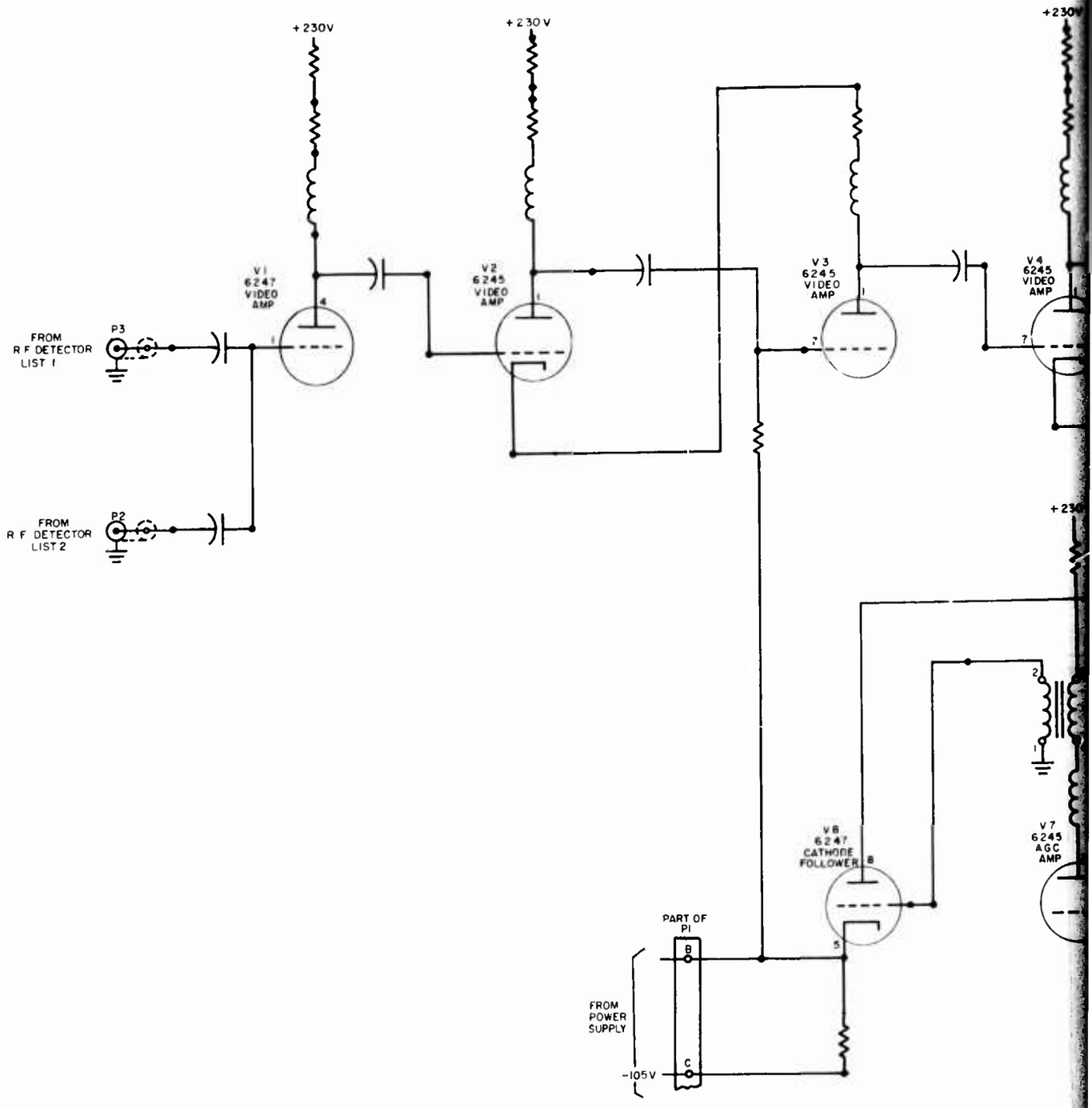
NOTES:



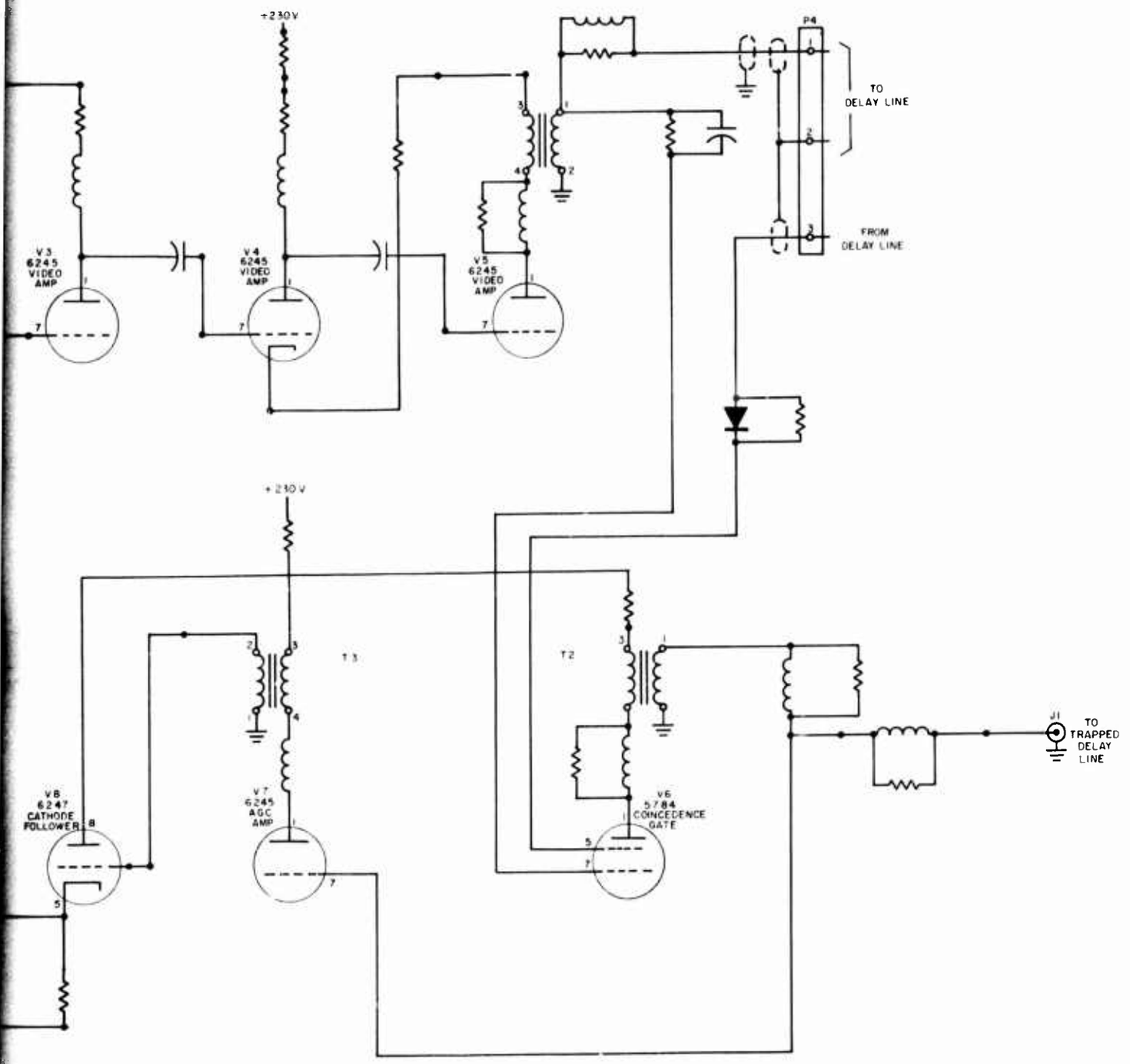
SIGNAL DISTRIBUTION



[redacted]


+230V
+230V
+230V
V1
6247
VIDEO
AMP
V2
6245
VIDEO
AMP
V3
6245
VIDEO
AMP
V4
6245
VIDEO
AMP
FROM
R F DETECTOR
LIST 1
P3
FROM
R F DETECTOR
LIST 2
P2
V8
6247
CATHODE
FOLLOWER
V7
6245
AGC
AMP
PART OF
P1
FROM
POWER
SUPPLY
-105V

A



AGC VIDEO AMPLIFIER-DECODER SIMPLIFIED SCHEMATIC

MEASURMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR		
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

[redacted]

AGC VIDEO AMPLIFIER DECODER, NOTES

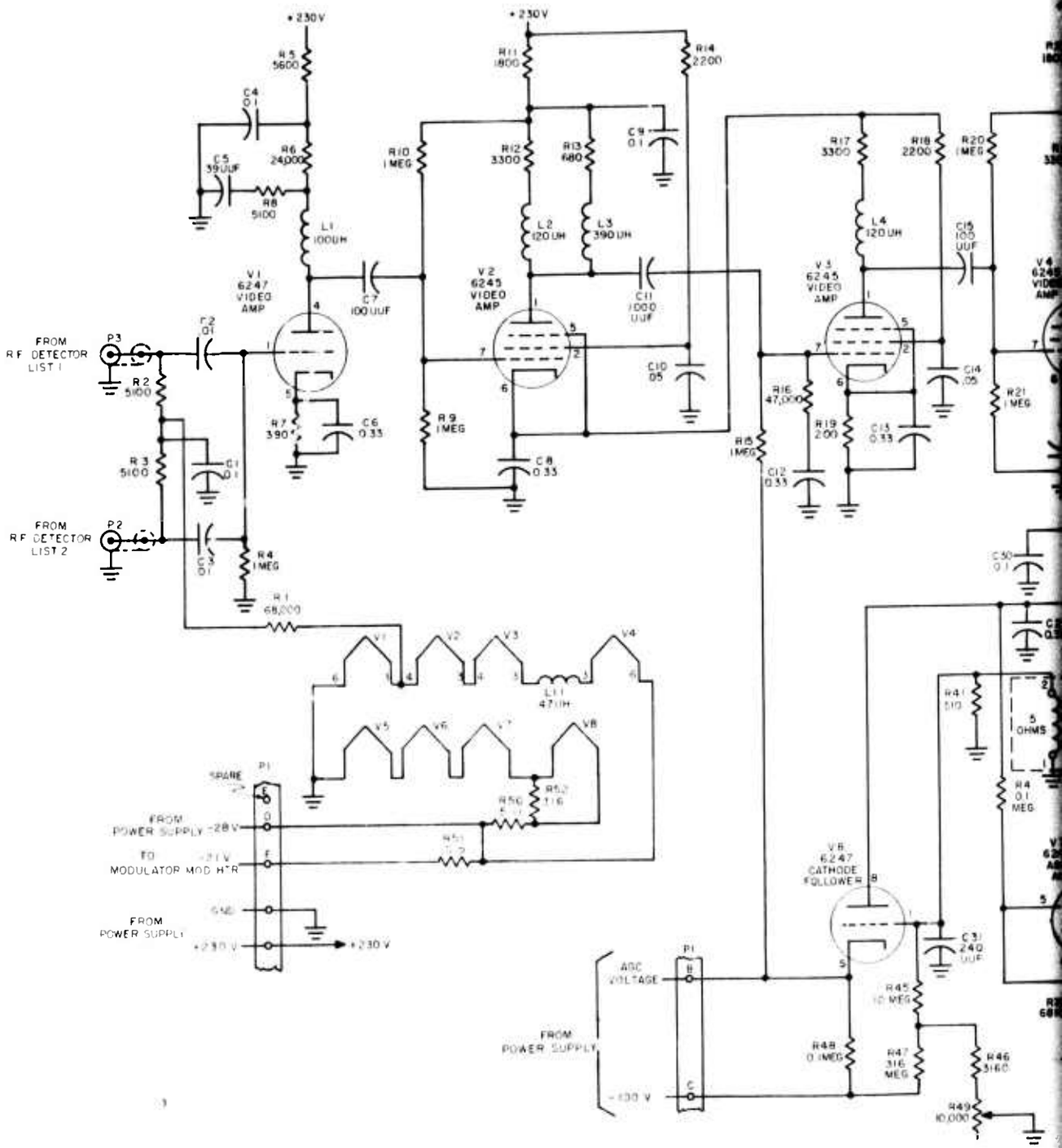
A1

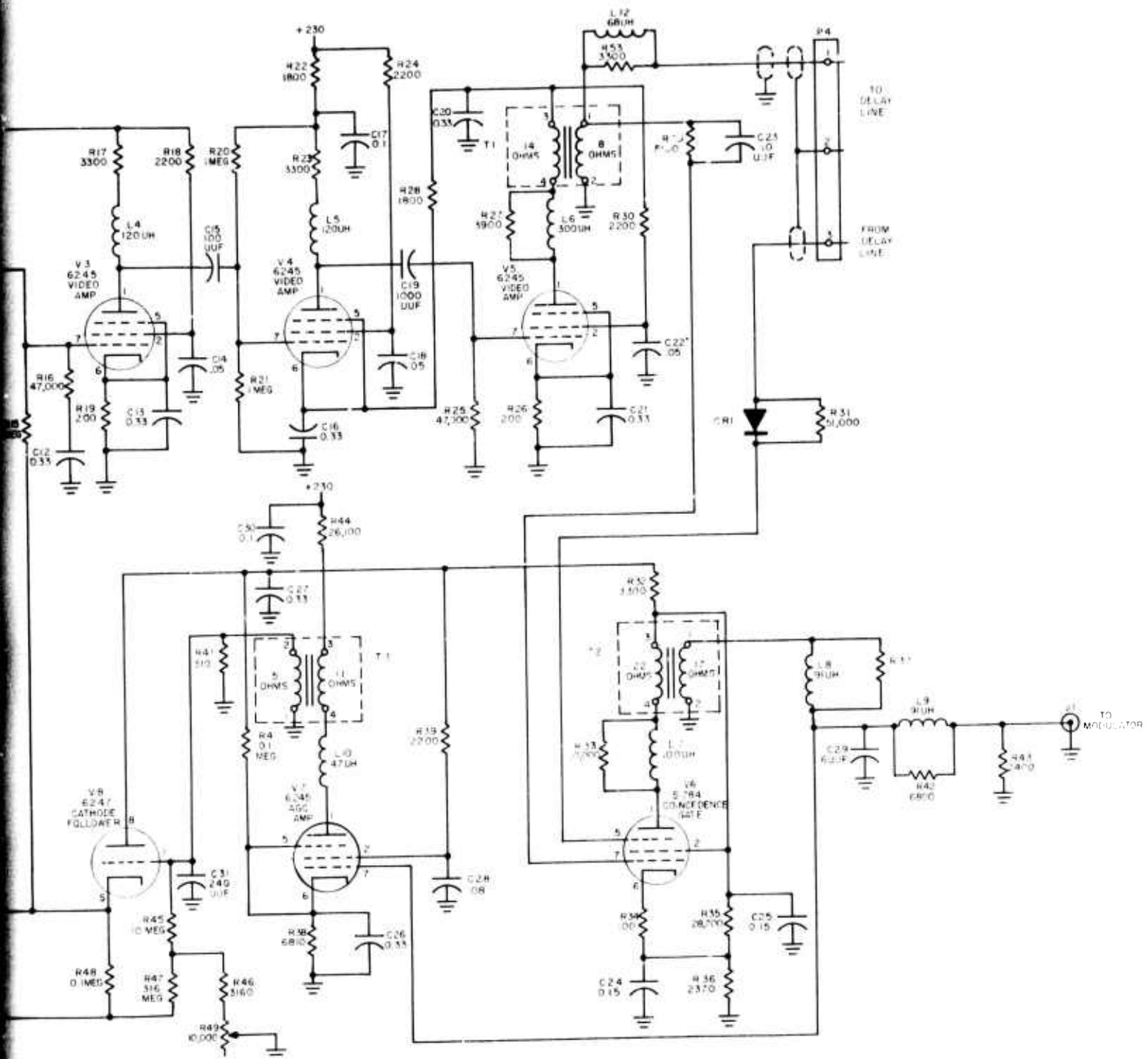
[redacted]

NOTES:

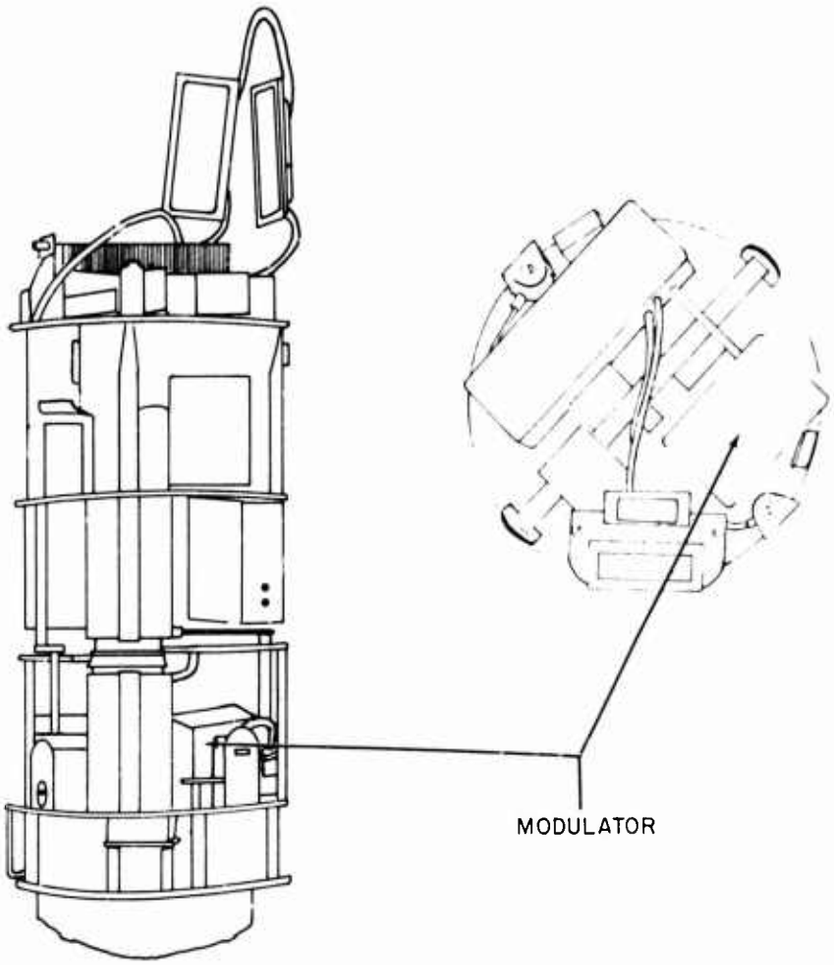
	SUPPESSOR			SCREEN			CONTROL			CATHODE			FILAMENT		
MS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

[redacted]

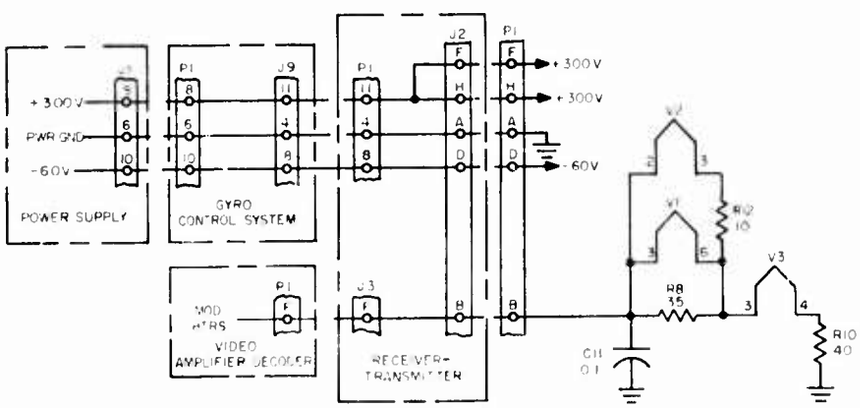

+230V
R5 5600
C4 .01
C5 39UUF
R6 24,000
R8 5100
L1 100UH
V1 6247 VIDEO AMP
C7 100UUF
C2 .01
FROM RF DETECTOR LIST 1
P3
R2 5100
R3 5100
C1 .01
FROM RF DETECTOR LIST 2
P2
C3 .01
R4 1MEG
R1 68,000
R7 390
C6 .33
R10 1MEG
R11 1800
R12 3300
R13 680
R14 2200
C9 .01
L2 120 UH
L3 390 UH
V2 6245 VIDEO AMP
C11 1000 UUF
C10 .05
R9 1MEG
C8 .33
R17 3300
R18 2200
R20 1MEG
L4 120 UH
C15 100 UUF
V3 6245 VIDEO AMP
R16 47,000
R19 200
C13 .33
C14 .05
R21 1MEG
R15 1MEG
C12 .33
V1 V2 V3 V4
L11 47UH
V5 V6 V7 V8
P1
SPARE
FROM POWER SUPPLY -28V
TO MODULATOR MOD HTR
FROM POWER SUPPLY
+230 V
R50
R52 116
R51
C50 .01
R41 510
5 OHMS
R4 .01 MEG
V8 6247 CATHODE FOLLOWER
C31 240 UUF
AGC VOLTAGE
FROM POWER SUPPLY
-100 V
R45 10 MEG
R48 0.1MEG
R47 316 MEG
R46 5160
R49 10,000



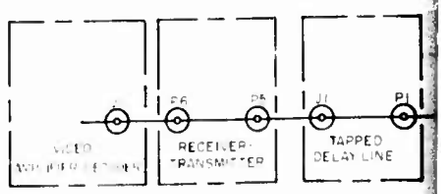
GS-17189 AGC VIDEO AMPLIFIER-DECODER



MISSILE GUIDANCE SET



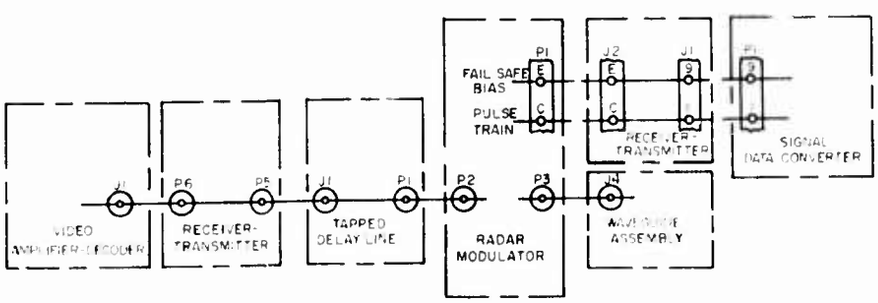
POWER DISTRIBUTION



SIGNAL DI

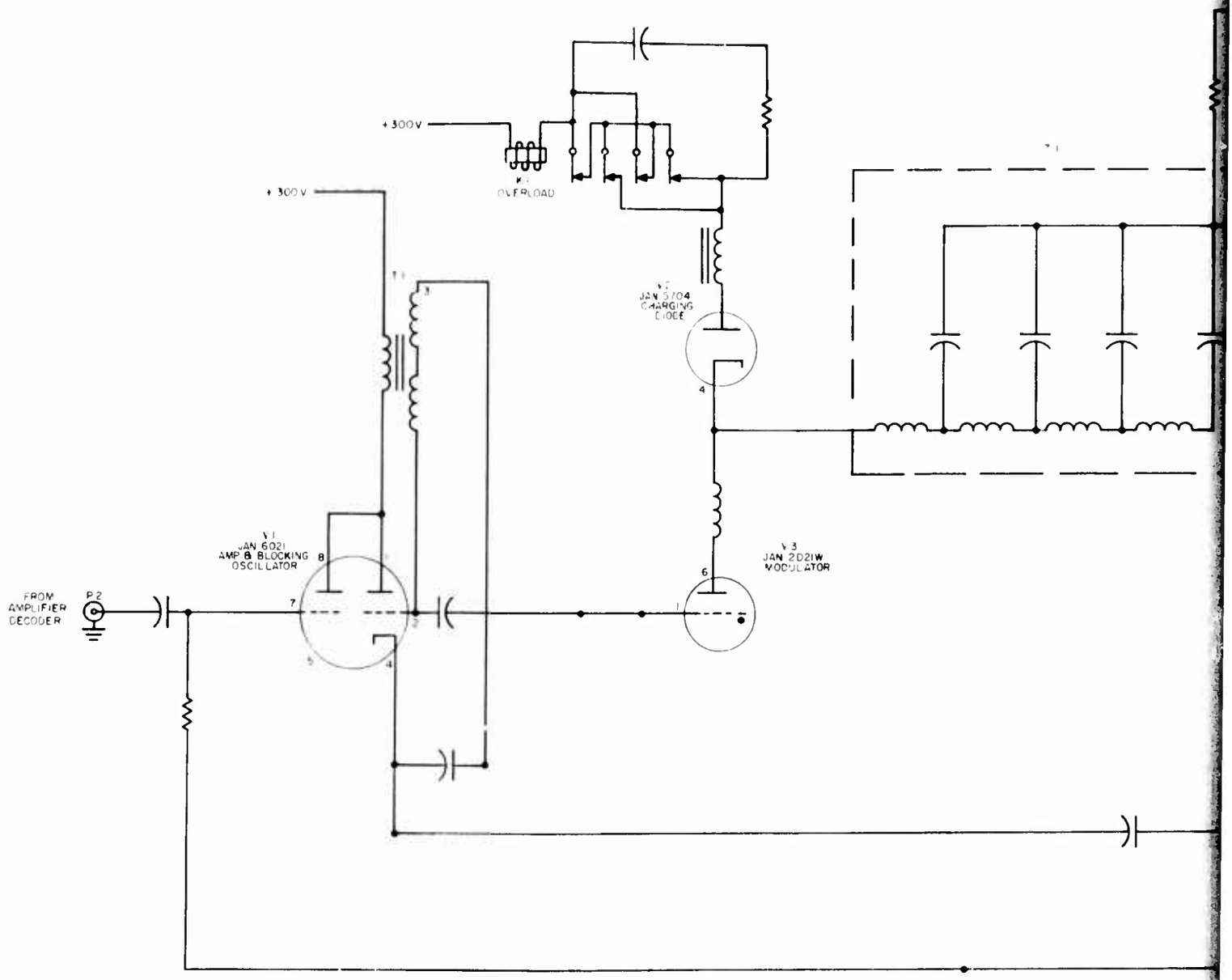
MODULATOR, MISSILE, NOTES

A



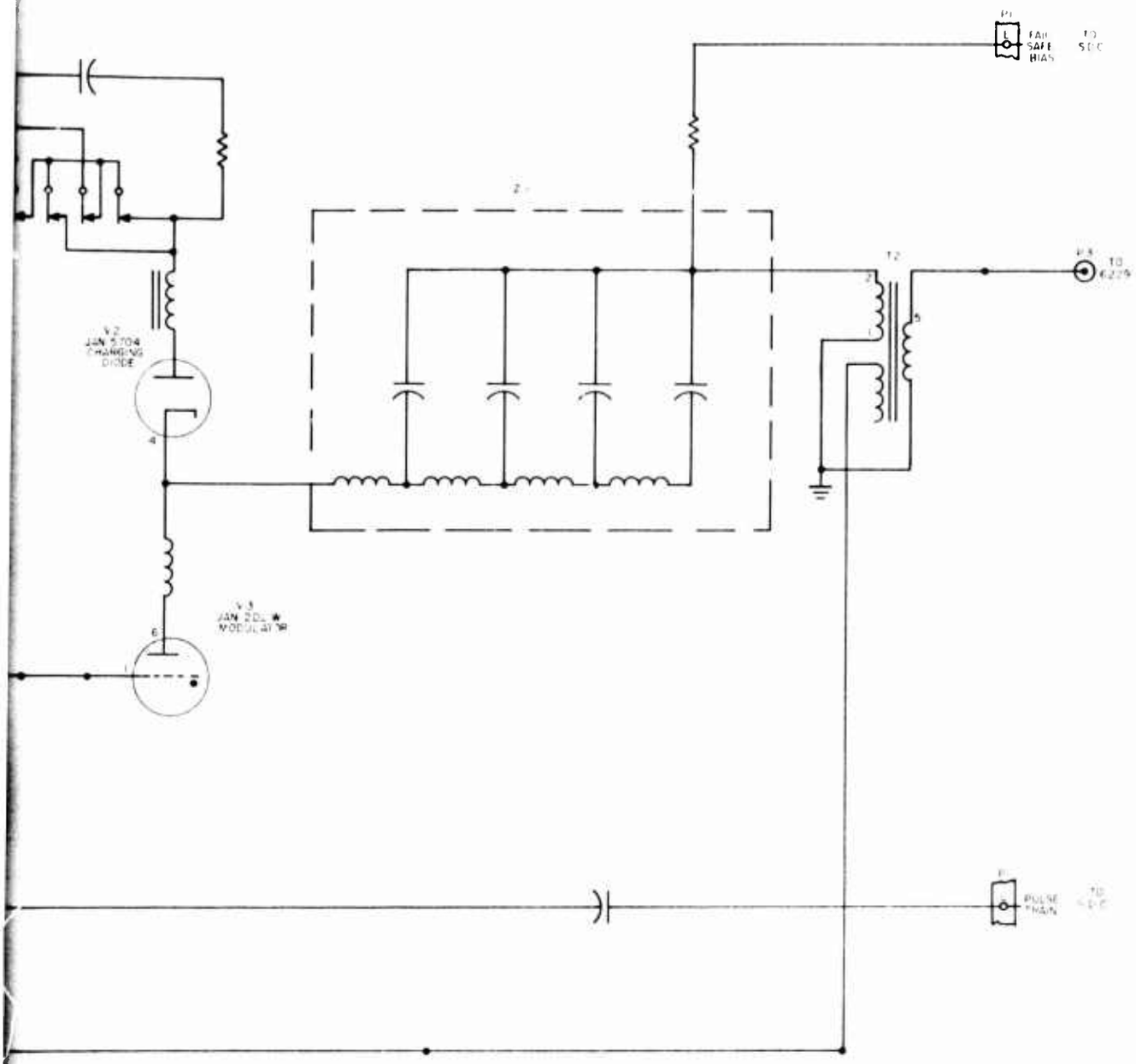
SIGNAL DISTRIBUTION

UNCLASSIFIED



UNCLASSIFIED

A



MODULATOR SIMPLIFIED SCHEMATIC

MEASURMENT NOTES

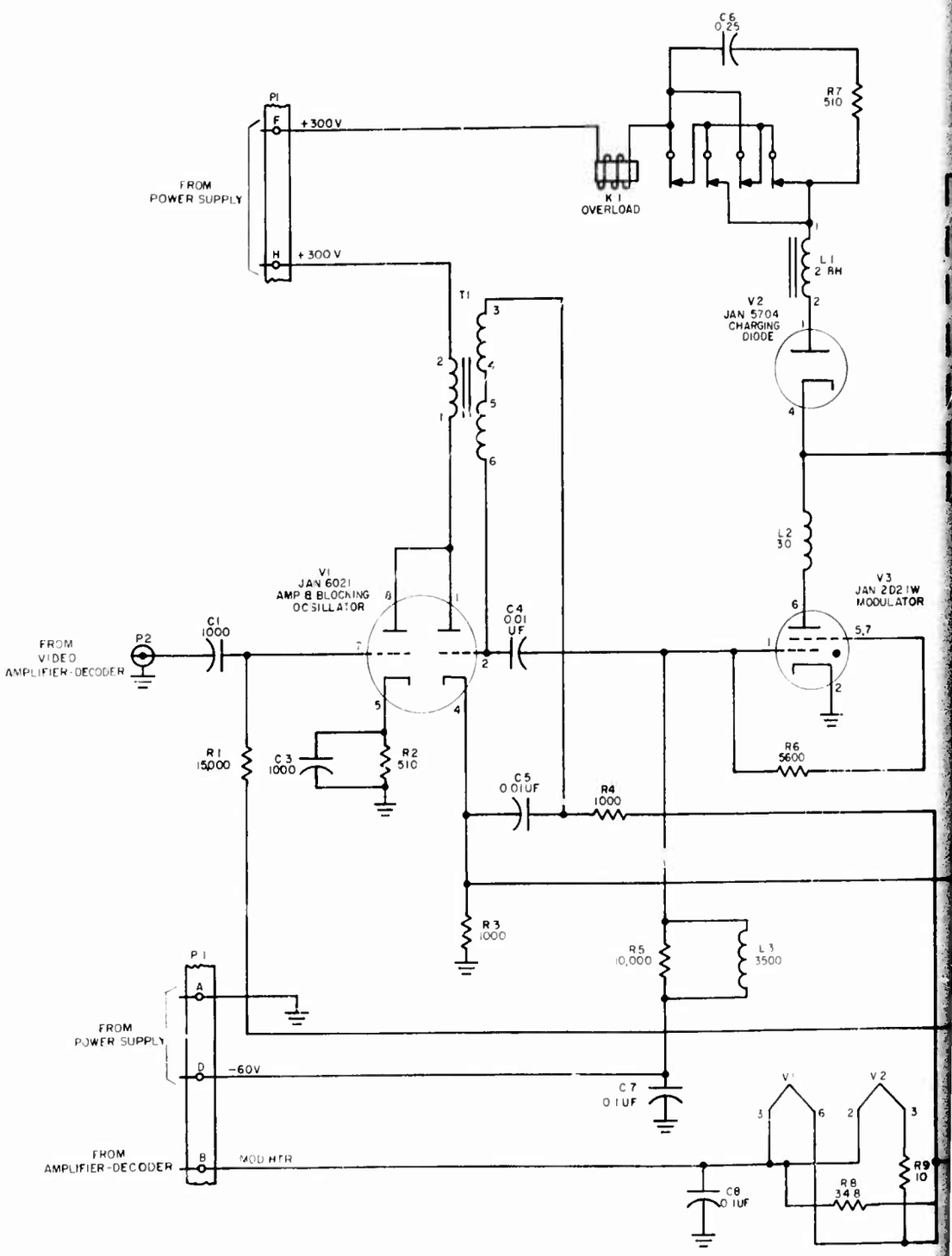
SOCKET NO	TUBE NO	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR				
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	V

THIS DATA NOT AVAILA

MODULATOR, MISSILE, NOTES

SUPPESSOR			SCREEN			CONTROL			CATHODE			FILAMENT		
PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS
THIS DATA NOT AVAILABLE														

UNCLASSIFIED



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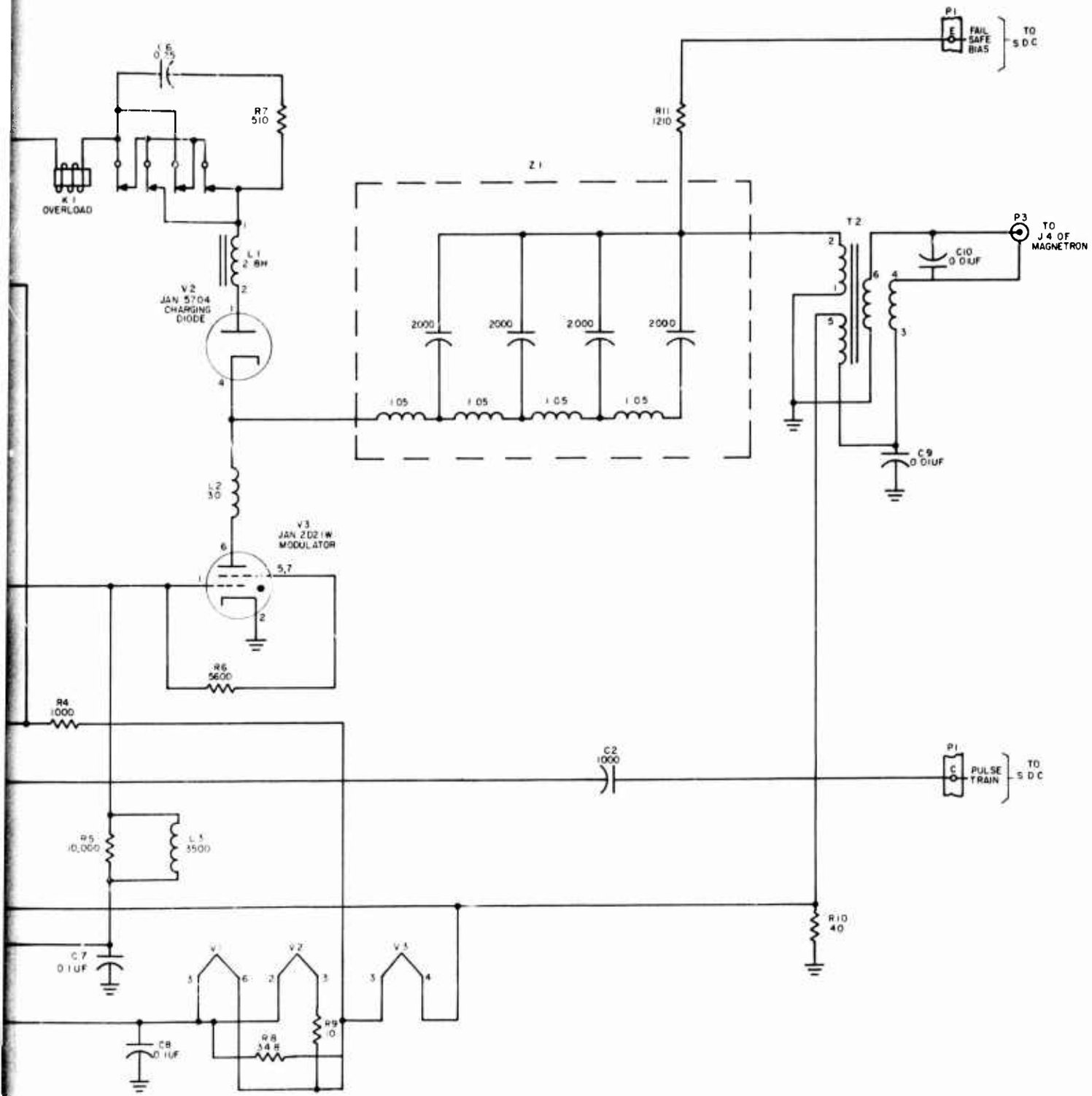
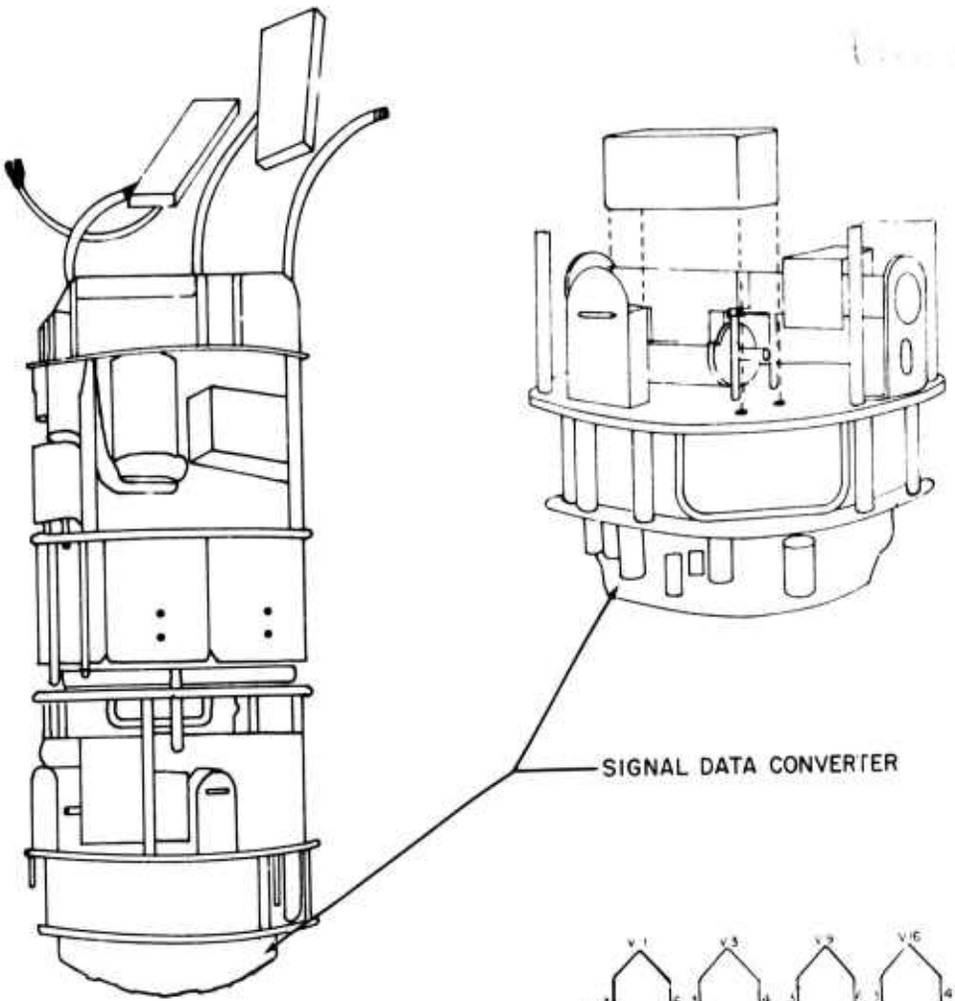
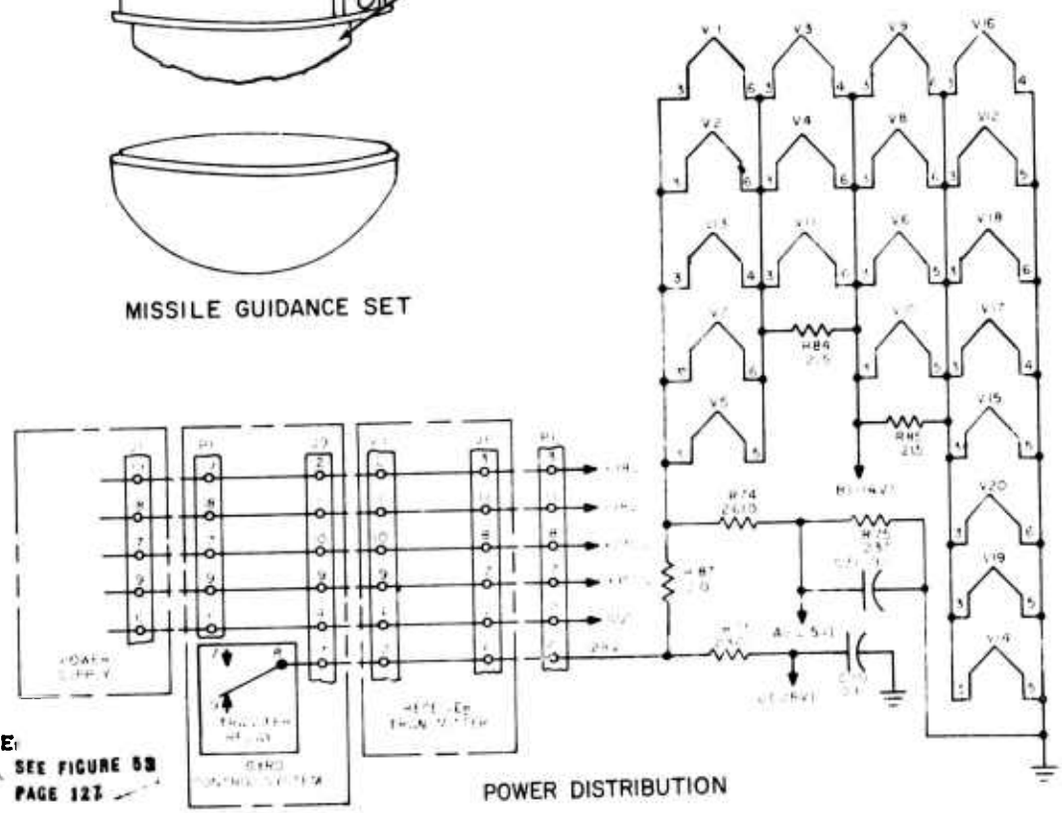
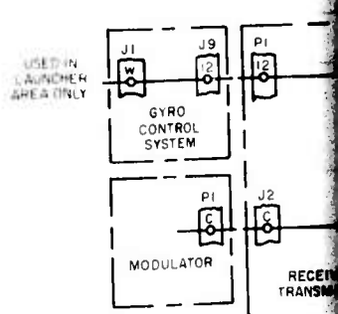


GS-16731 MODULATOR, MISSILE



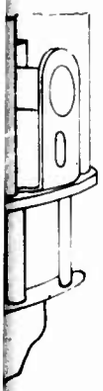
MISSILE GUIDANCE SET



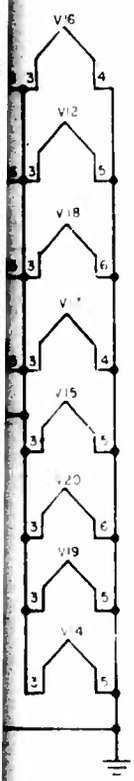


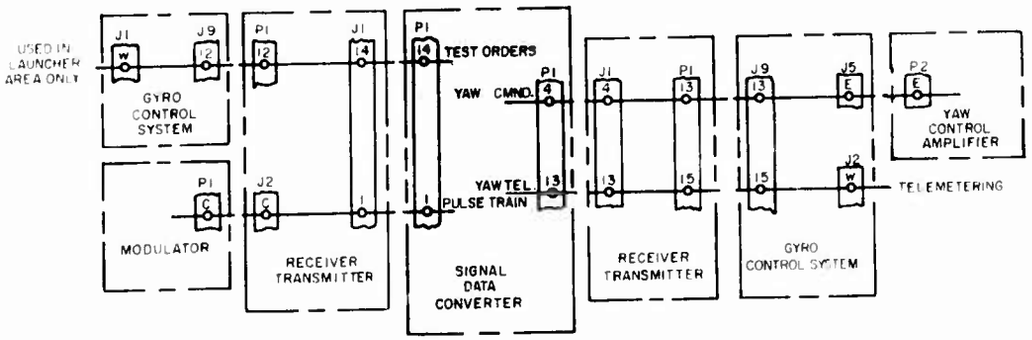
SIGNAL DATA CONVERTER, NOTES (YAW)

A

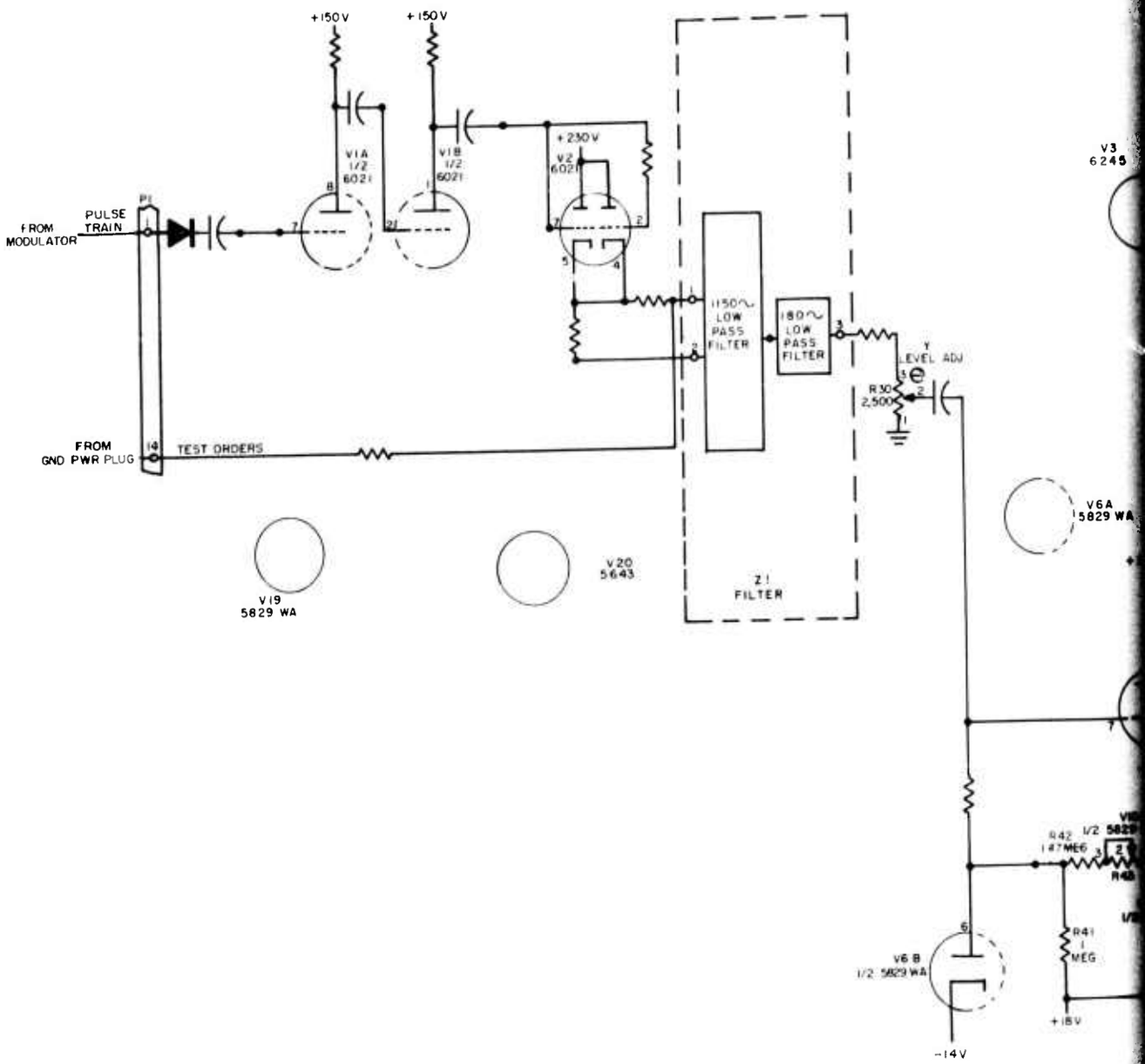


TER



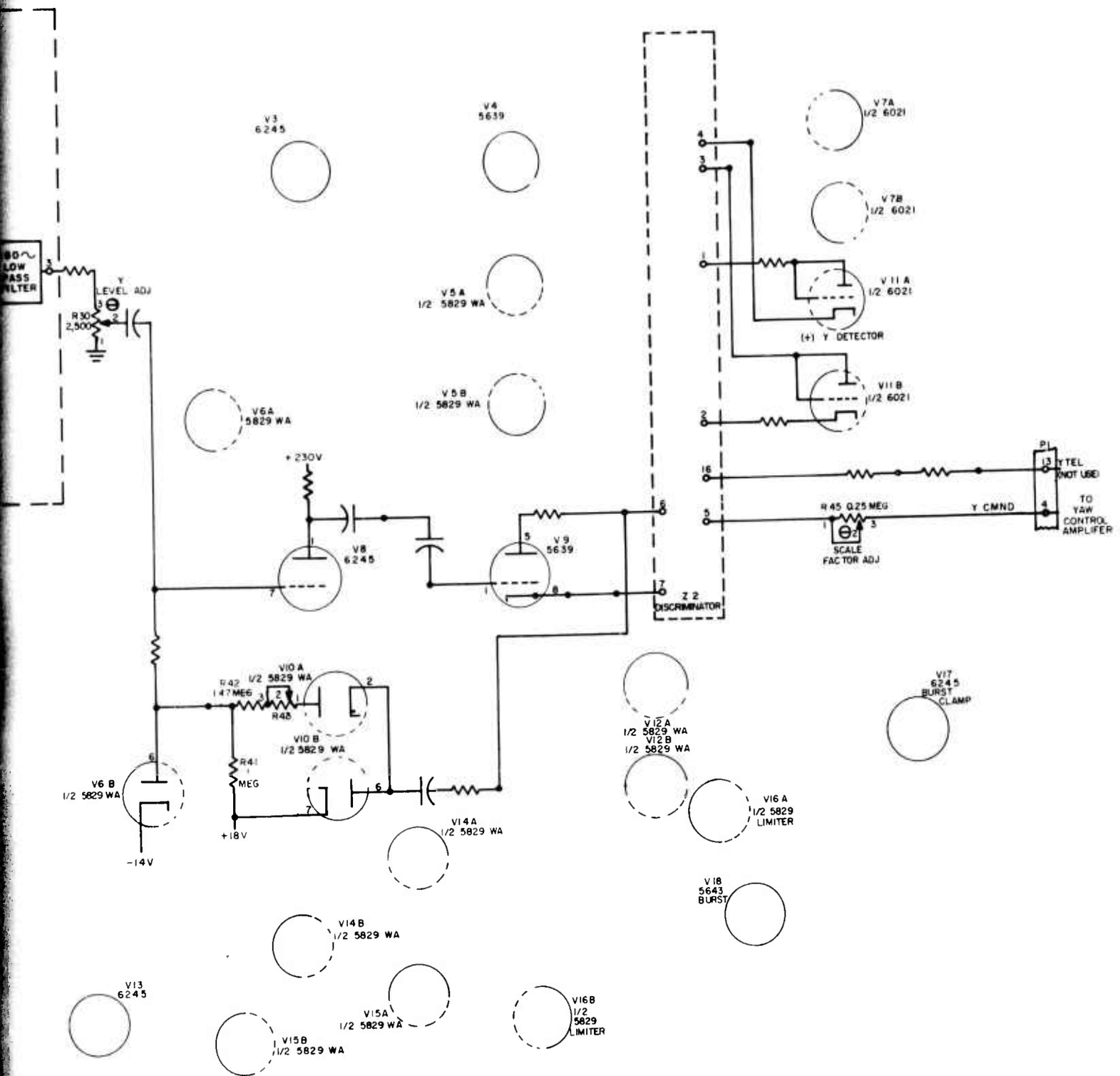


SIGNAL DISTRIBUTION

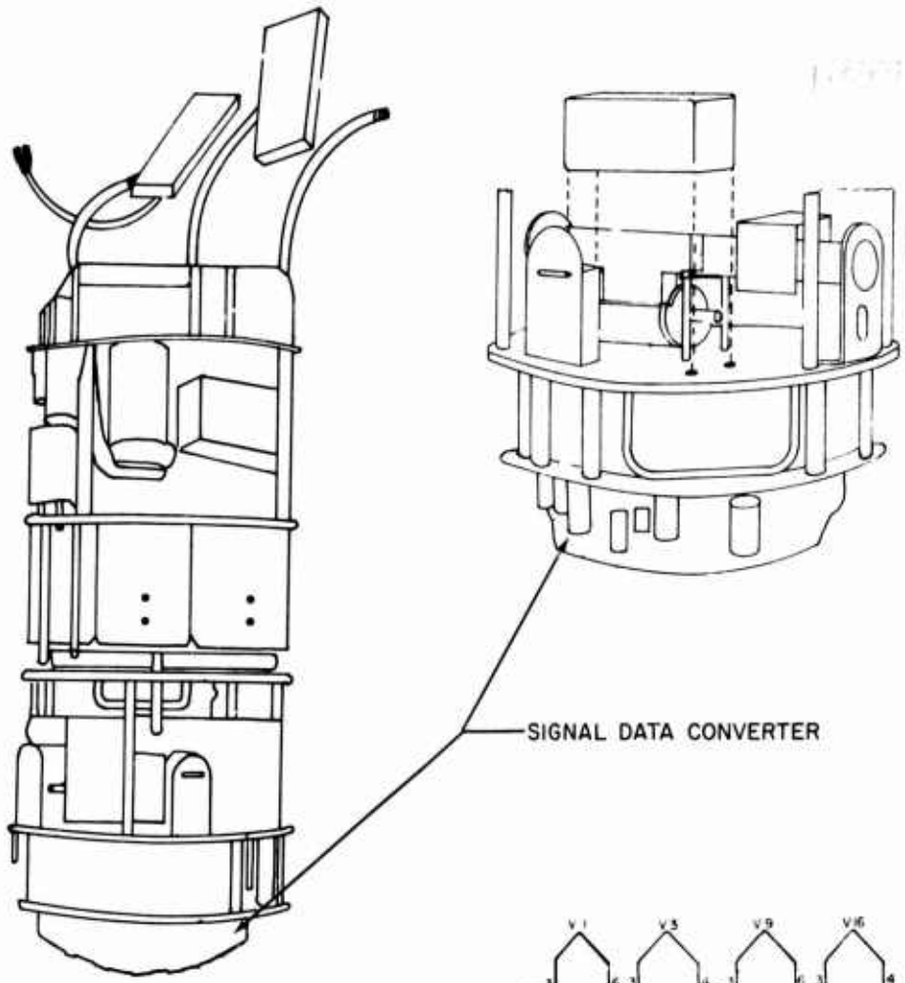


UNCLASSIFIED

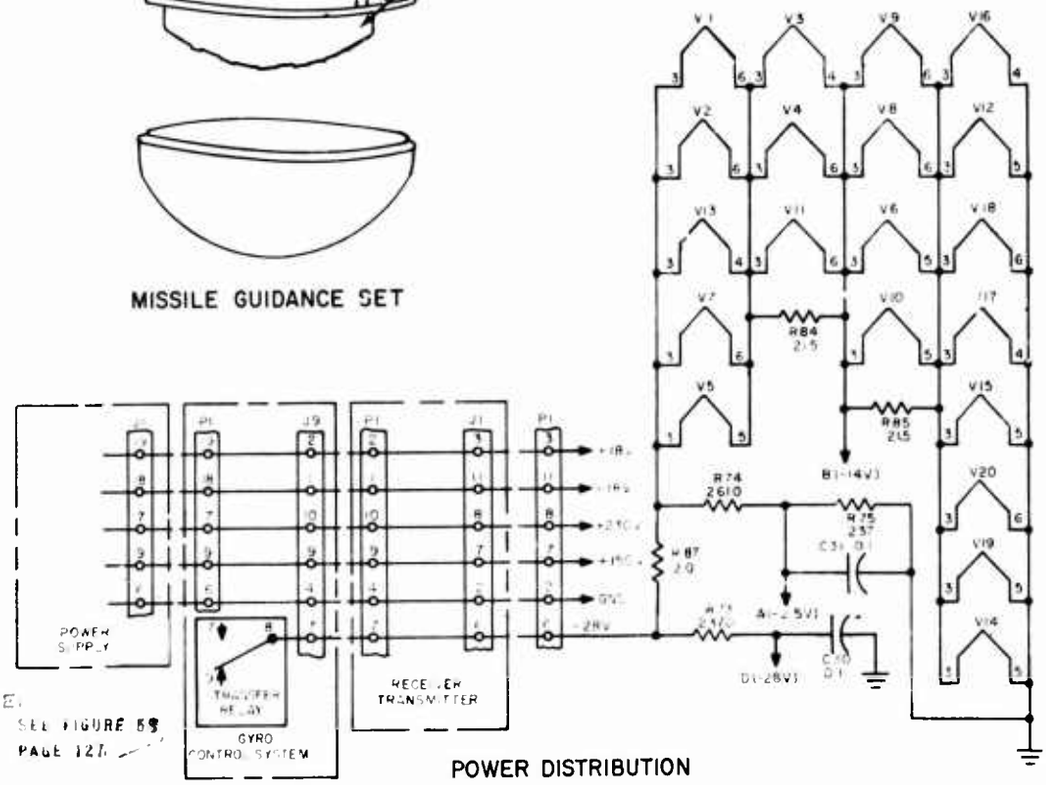
A



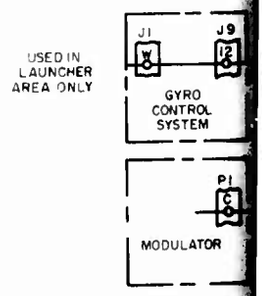
SIGNAL DATA CONVERTER, SIMPLIFIED SCHEMATIC
(YAW)



MISSILE GUIDANCE SET



POWER DISTRIBUTION

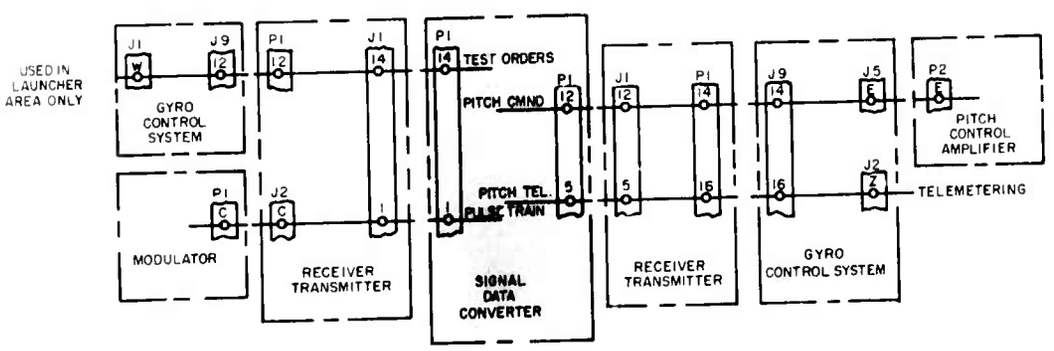


NOTE:
SEE FIGURE 55
PAGE 127

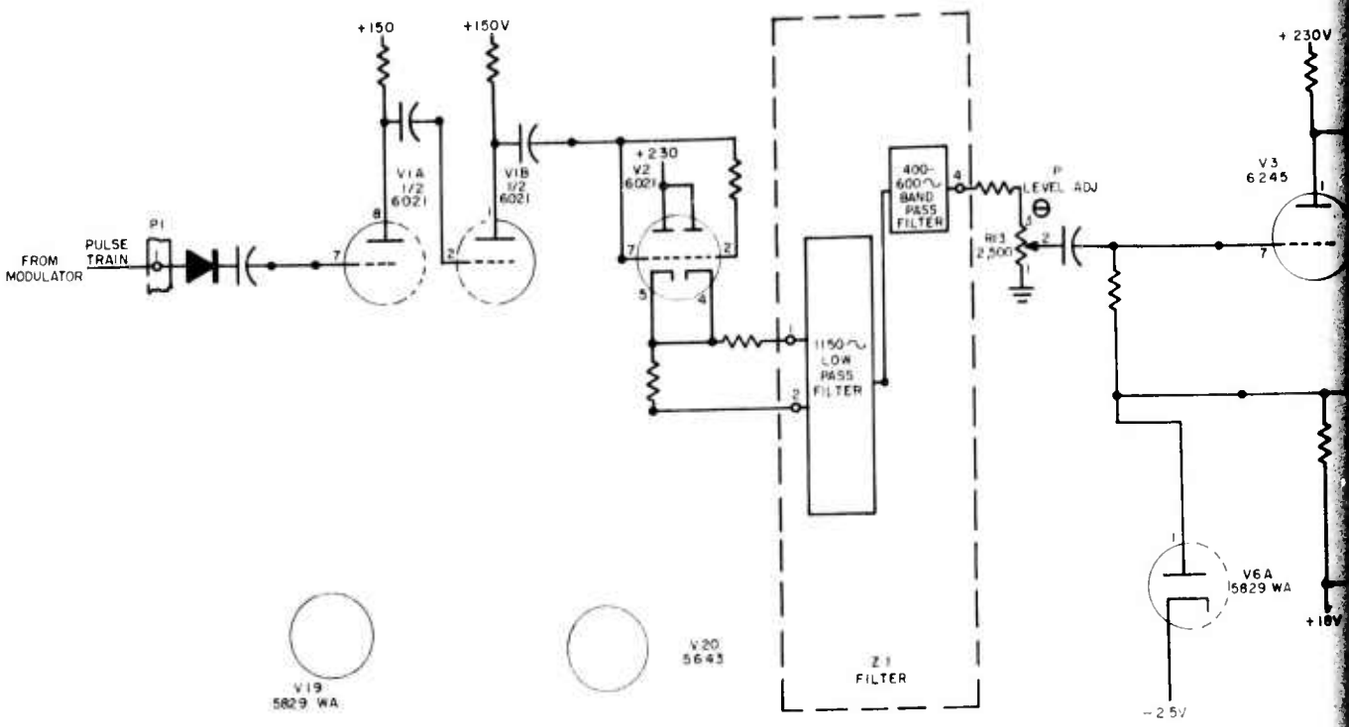
SIGNAL DATA CONVERTER, NOTES (PITCH)

A

[redacted]



SIGNAL DISTRIBUTION



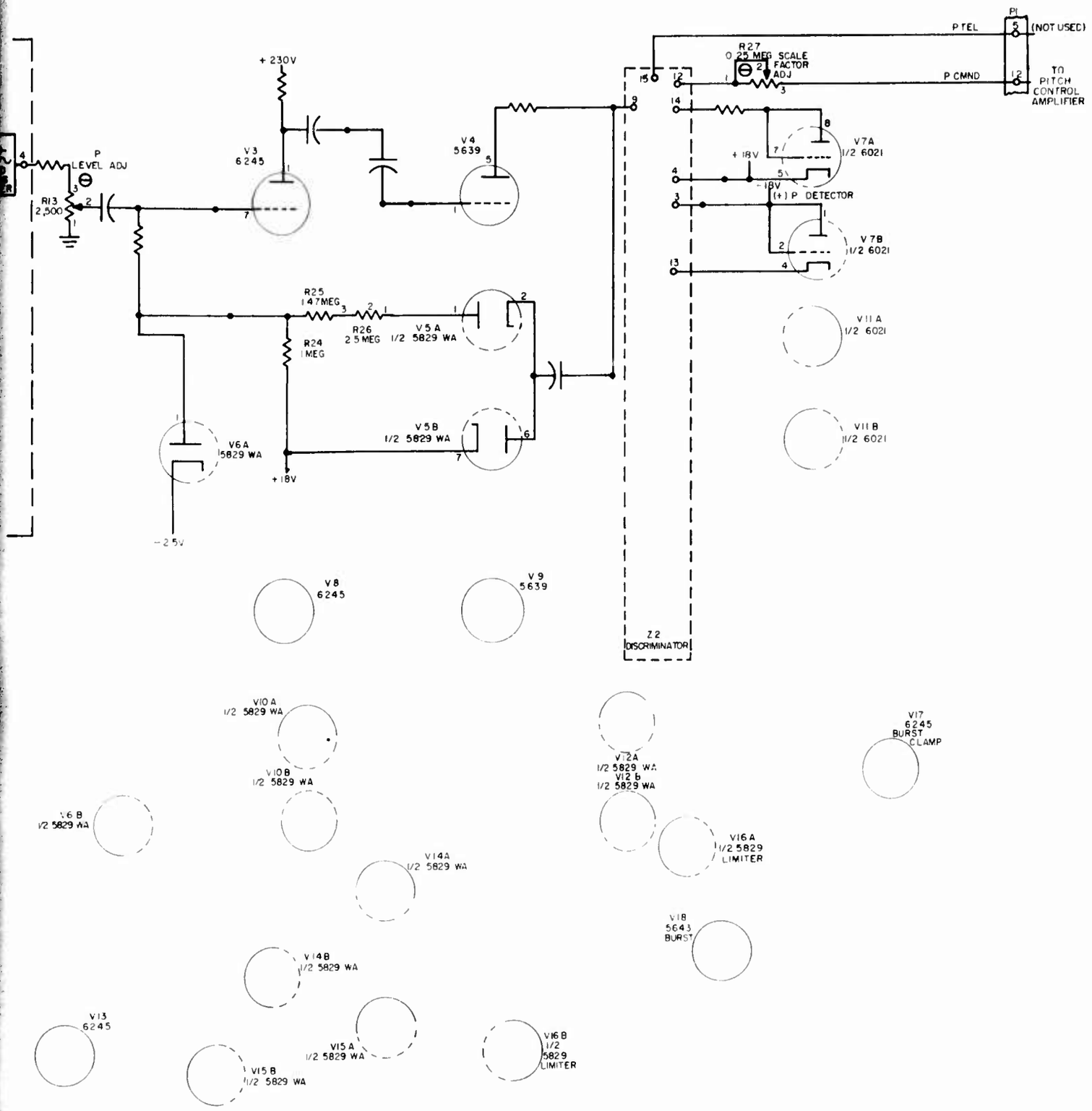
V10 A
1/2 5829 WA

V10 B
1/2 5829

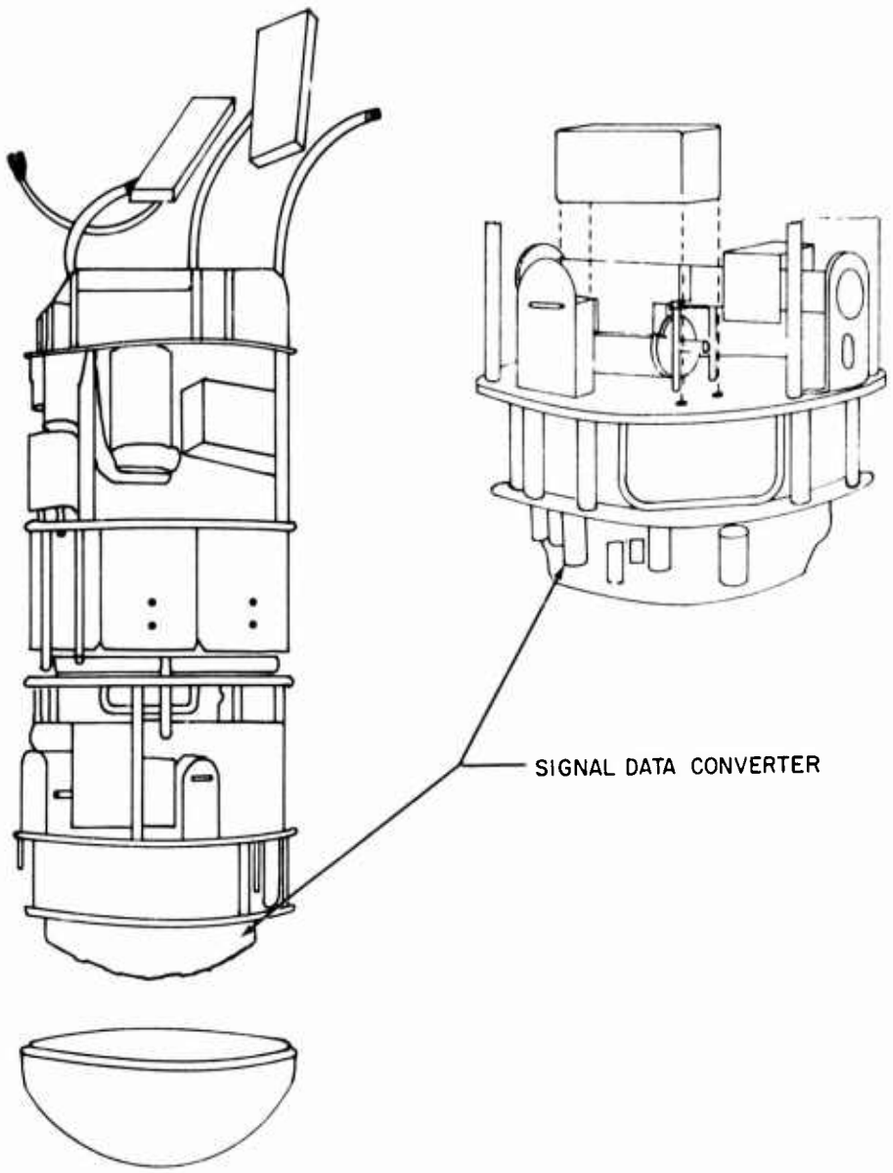
V6 B
1/2 5829 WA

V13
6245

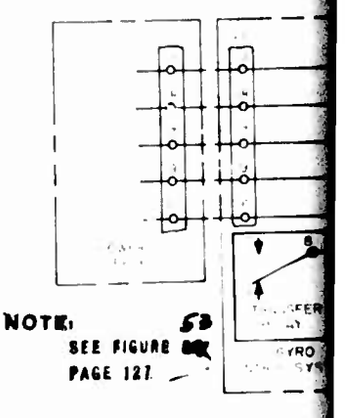
V15 B
1/2 5829



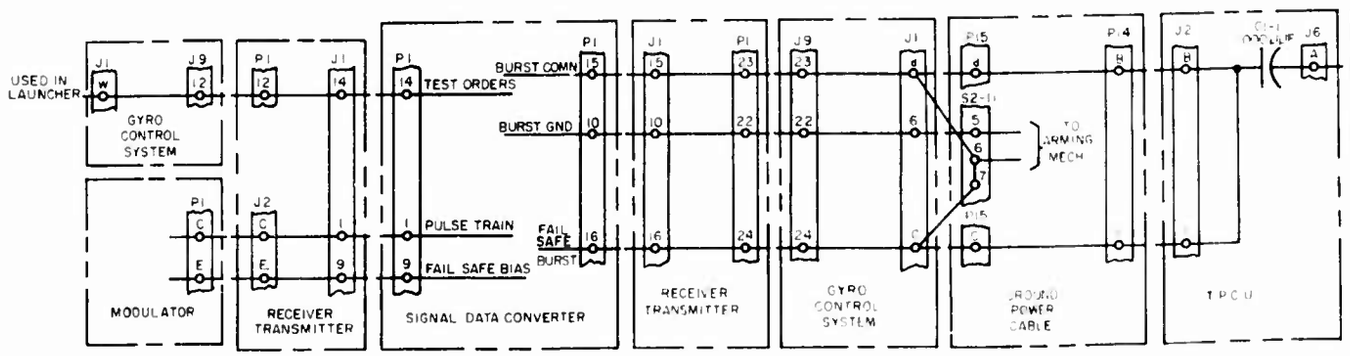
SIGNAL DATA CONVERTER, SIMPLIFIED SCHEMATIC (PITCH)



MISSILE GUIDANCE SET



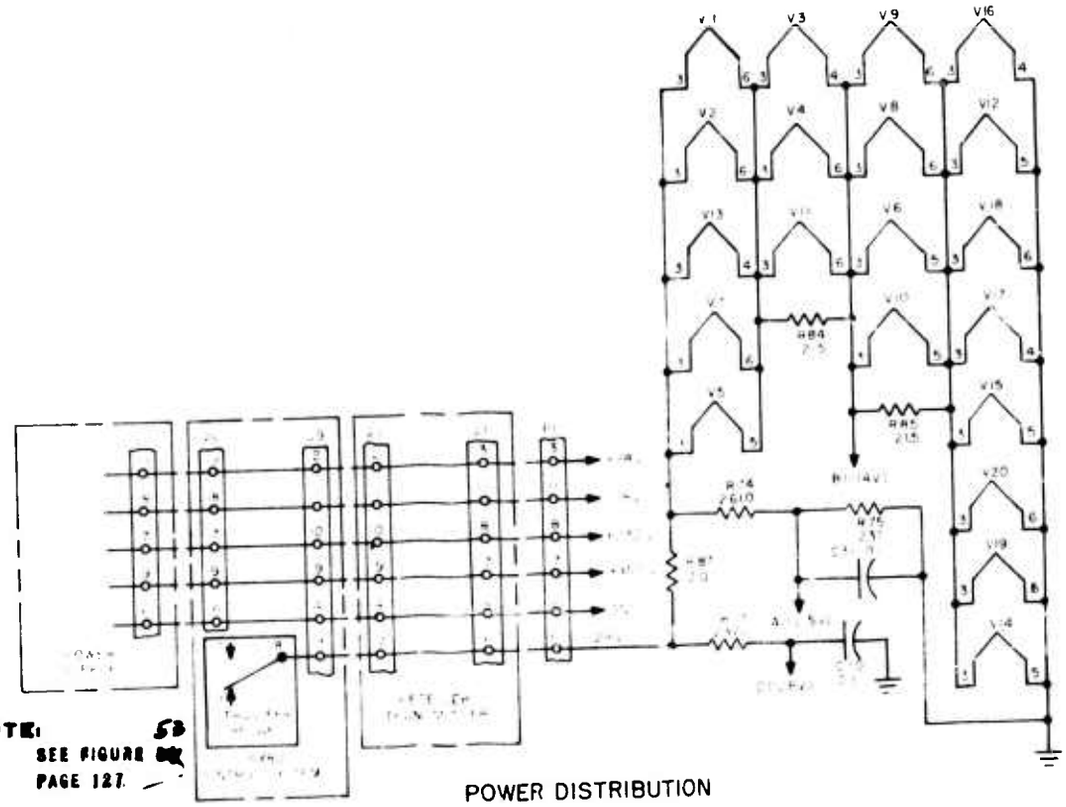
NOTE: SEE FIGURE 53 PAGE 127



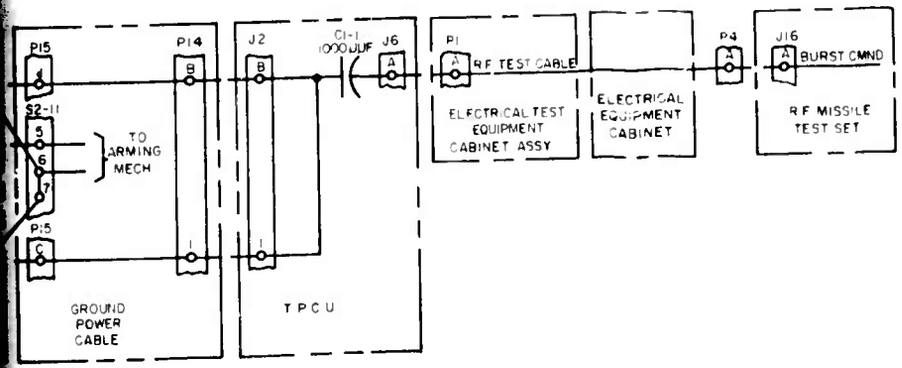
SIGNAL DISTRIBUTION

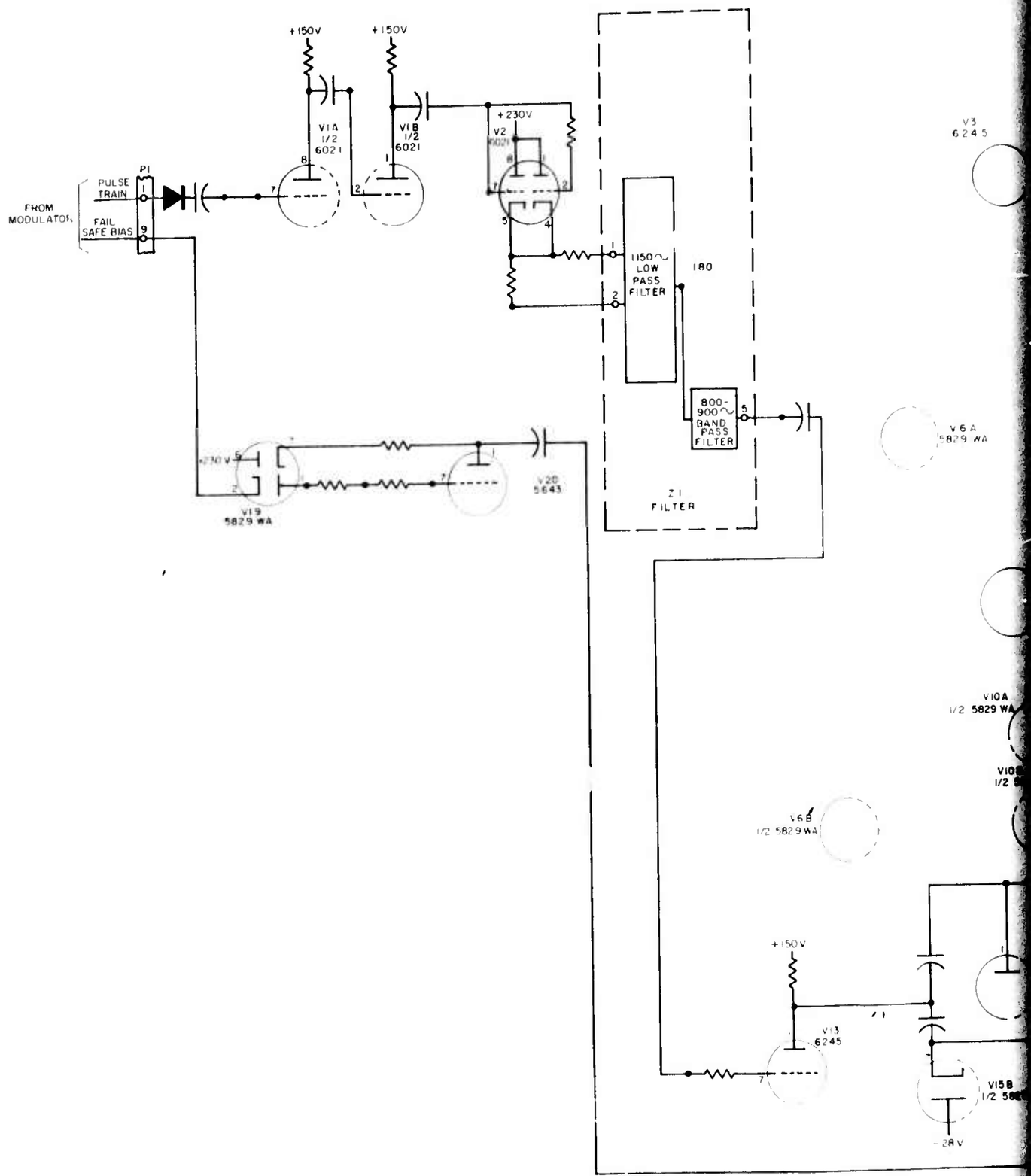
SIGNAL DATA CONVERTER, NOTES (BURST)

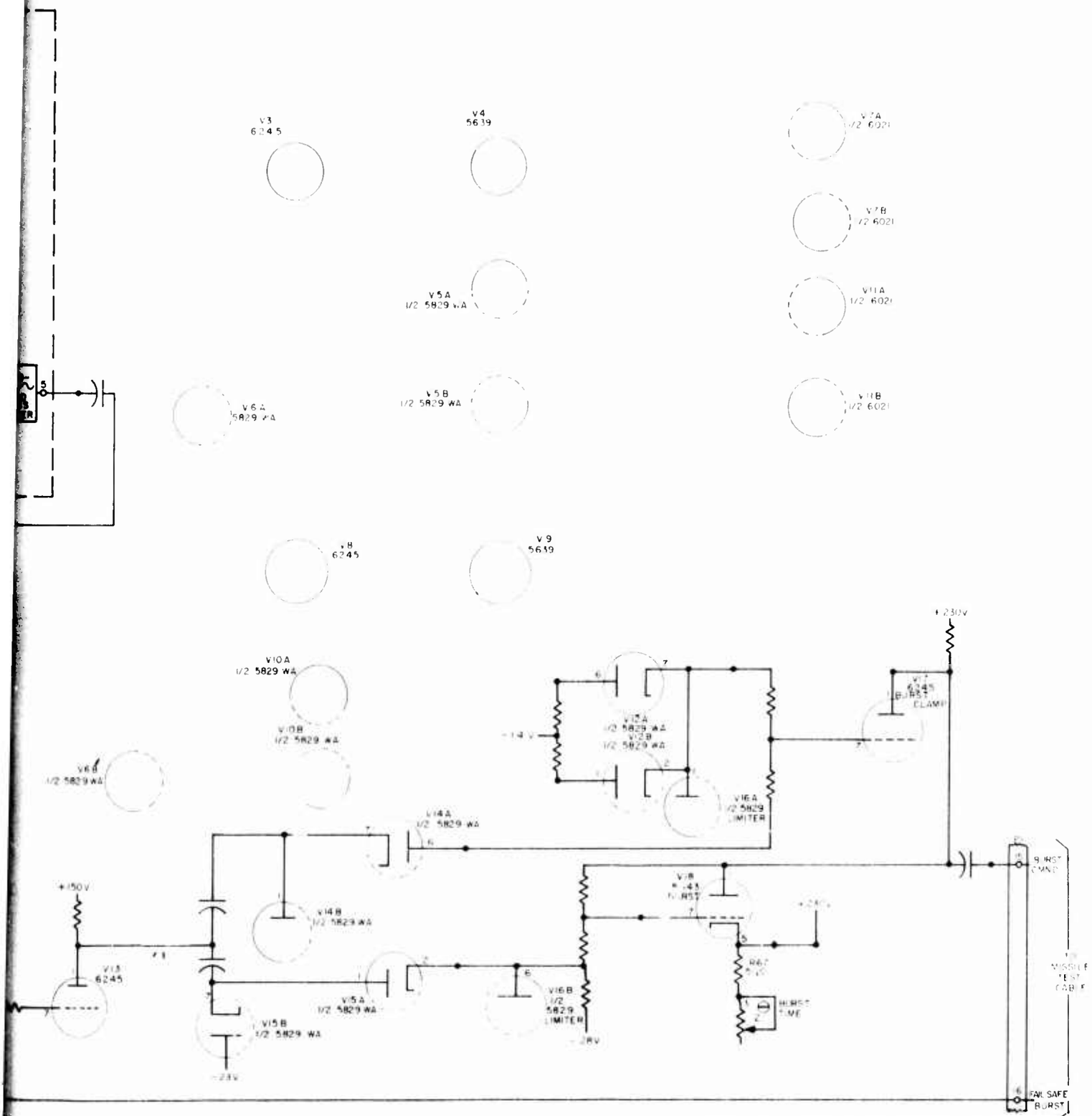
[redacted]



POWER DISTRIBUTION




+150V
+150V
V1A
1/2
6021
V1B
1/2
6021
+230V
V2
6021
P1
PULSE
TRAIN
FAIL
SAFE BIAS
FROM
MODULATOR
1150~
LOW
PASS
FILTER
180
800-
900~
BAND
PASS
FILTER
Z1
FILTER
+230V
V19
5829 WA
V20
5643
V3
6245
V6A
5829 WA
V10A
1/2 5829 WA
V6B
1/2 5829 WA
+150V
V13
6245
V15B
-28V



SIGNAL DATA CONVERTER, SIMPLIFIED SCHEMATIC (BURST)

[redacted]

UNCLASSIFIED

MEASURMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN

THIS DATA NOT AVAILA

SIGNAL DATA CONVERTER, NOTES

[redacted]

A

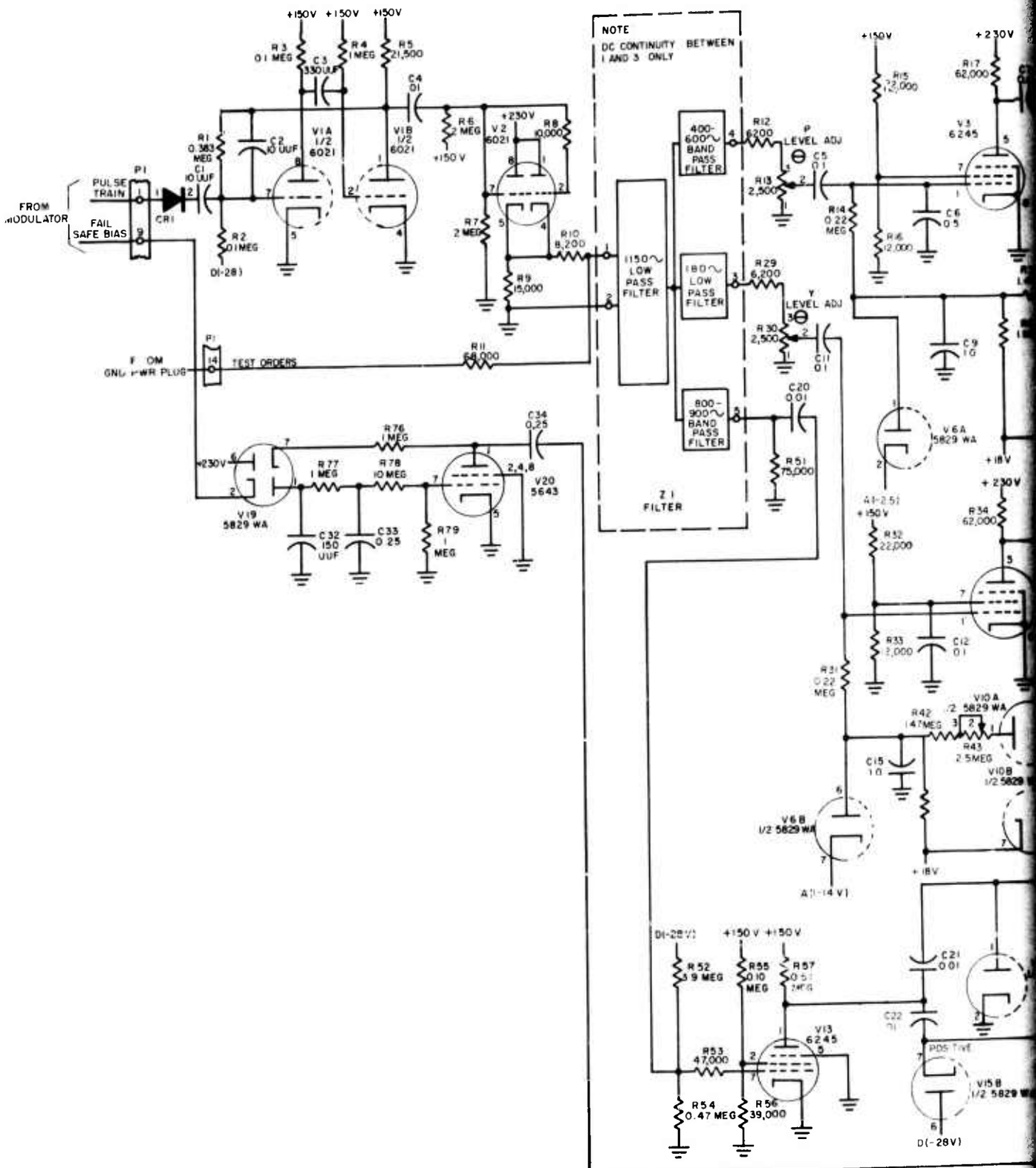
[redacted]

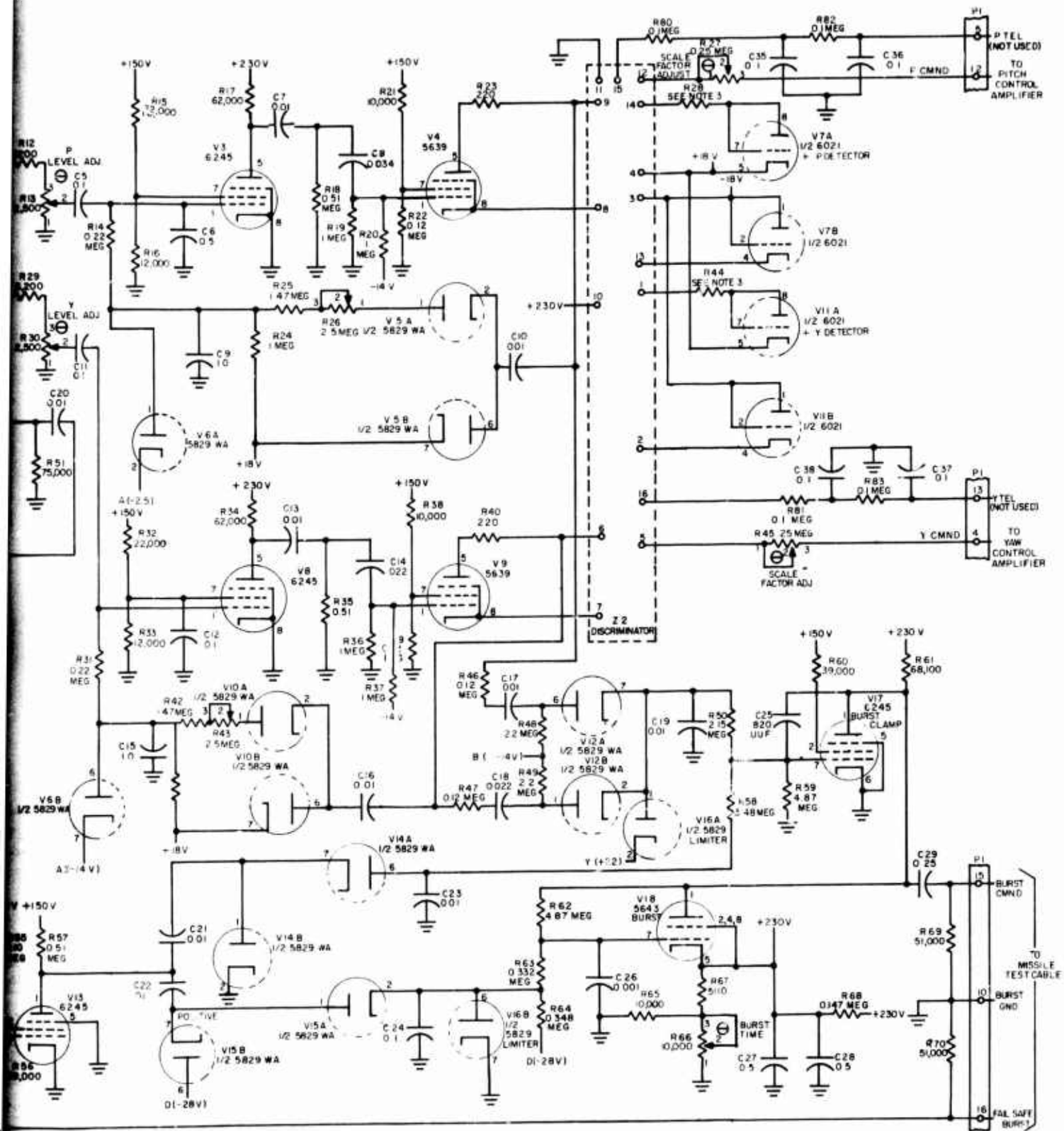
SSIFIED

	SUPPESSOR			SCREEN			CONTROL			CATHODE			FILAMENT		
	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	QHMS

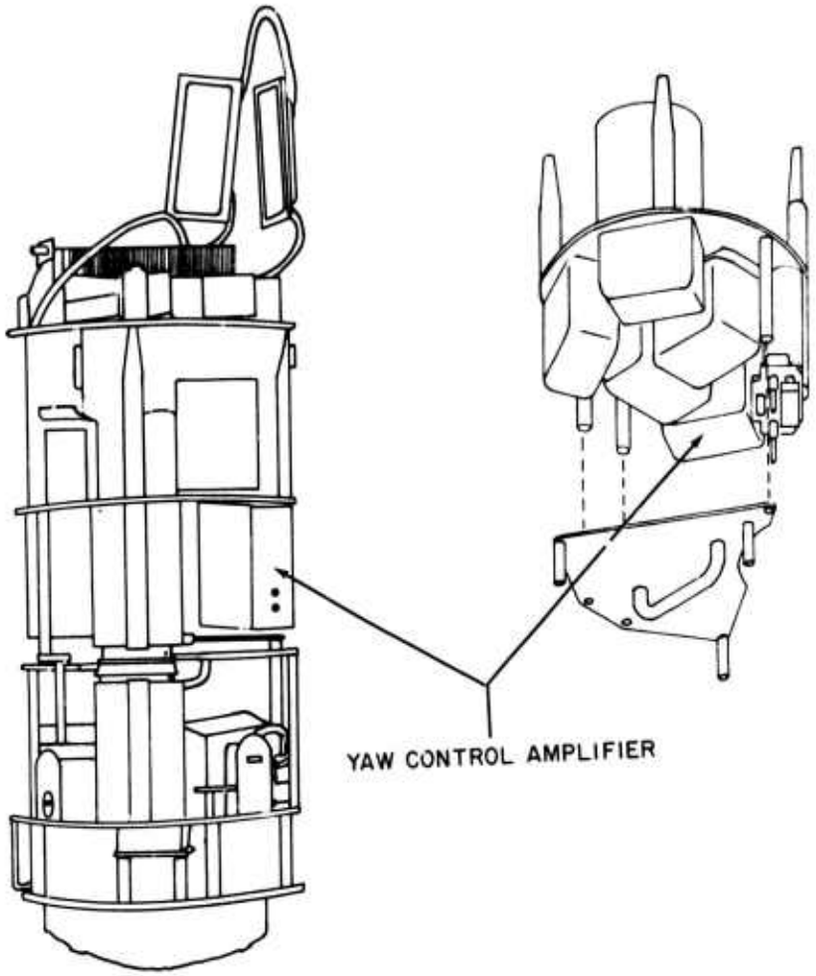
THIS DATA NOT AVAILABLE

[redacted]


NOTE
DC CONTINUITY BETWEEN
1 AND 3 ONLY
+150V +150V +150V
+230V
FROM MODULATOR
PULSE TRAIN
FAIL SAFE BIAS
P1
CR1
D(-28)
TEST ORDERS
FROM GND PWR PLUG
1150~ LOW PASS FILTER
180~ LOW PASS FILTER
400-600~ BAND PASS FILTER
800-900~ BAND PASS FILTER
Z1 FILTER
P LEVEL ADJ
Y LEVEL ADJ
V1A 1/2 6021
V1B 1/2 6021
V2 6021
V3 6245
V6A 5829 WA
V6B 1/2 5829 WA
V10A 1/2 5829 WA
V10B 1/2 5829 WA
V13 6245
V15B 1/2 5829 WA
V19 5829 WA
V20 5643
+18V
A1(-14V)
D(-28V)
POS TYP

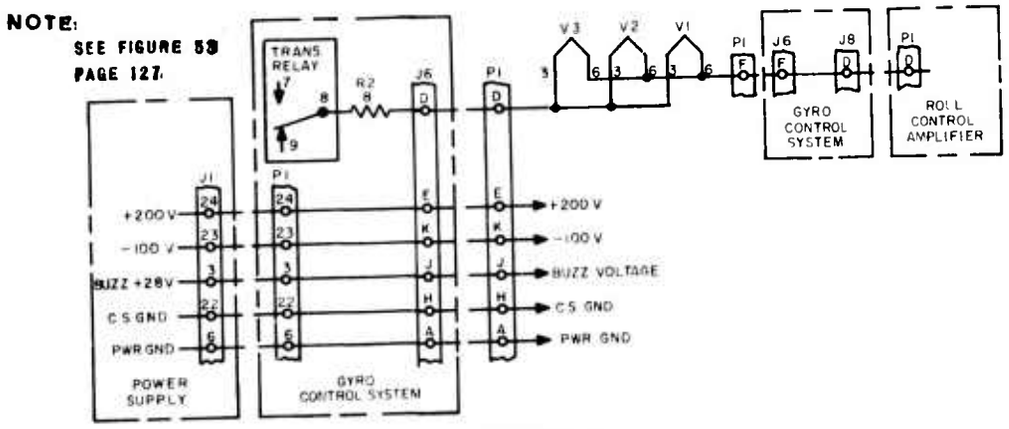

+150V
+230V
+18V
-18V
-14V
P LEVEL ADJ
Y LEVEL ADJ
SCALE FACTOR ADJUST
SCALE FACTOR ADJ
SEE NOTE 3
P CMND
Y CMND
P TEL (NOT USED)
Y TEL (NOT USED)
TO PITCH CONTROL AMPLIFIER
TO YAW CONTROL AMPLIFIER
V3 6245
V4 5639
V5A 1/2 5829 WA
V5B 1/2 5829 WA
V6A 5829 WA
V6B 1/2 5829 WA
V7A 1/2 6021 + P DETECTOR
V7B 1/2 6021
V8 6245
V9 5639
V10A 1/2 5829 WA
V10B 1/2 5829 WA
V11A 1/2 6021 + Y DETECTOR
V11B 1/2 6021
V12A 1/2 5829 WA
V12B 1/2 5829 WA
V13 6245
V14A 1/2 5829 WA
V14B 1/2 5829 WA
V15A 1/2 5829 WA
V15B 1/2 5829 WA
V16A 1/2 5829 LIMITER
V16B 1/2 5829 LIMITER
V17 6245 BURST CLAMP
V18 5643 BURST
Z2 DISCRIMINATOR
BURST CMND
BURST GND
BURST TIME
FAIL SAFE BURST
TO MISSILE TEST CABLE
GS-16733 SIGNAL DATA CONVERTER

UNCLASSIFIED

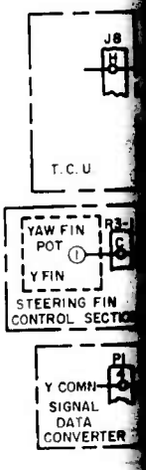


MISSILE GUIDANCE SET

NOTE:
SEE FIGURE 53
PAGE 127.



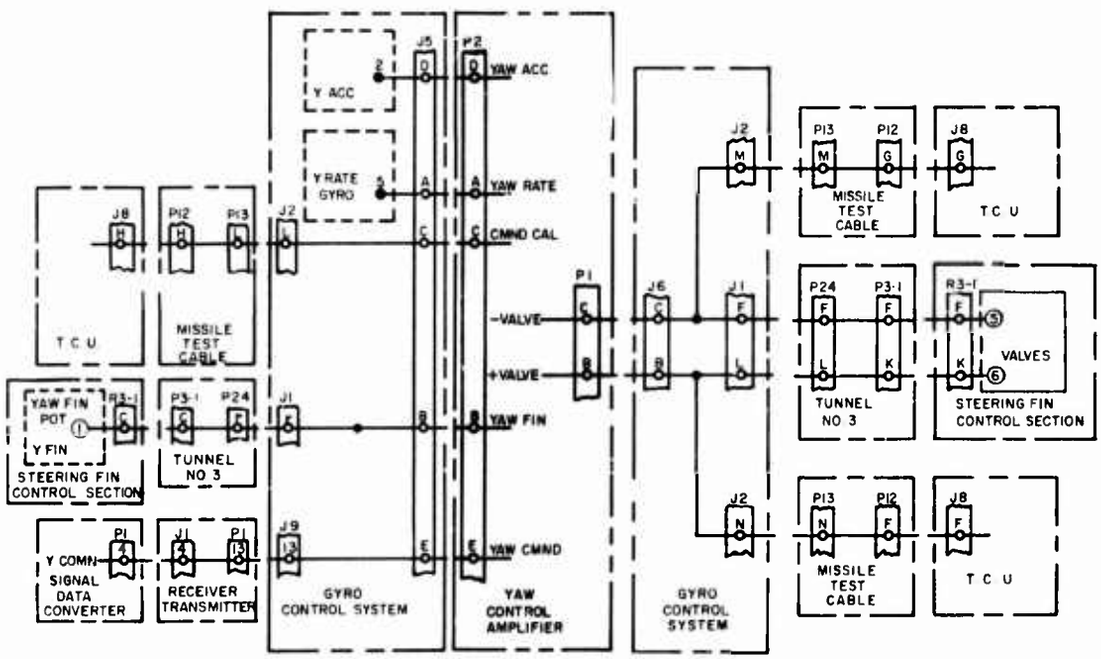
POWER DISTRIBUTION



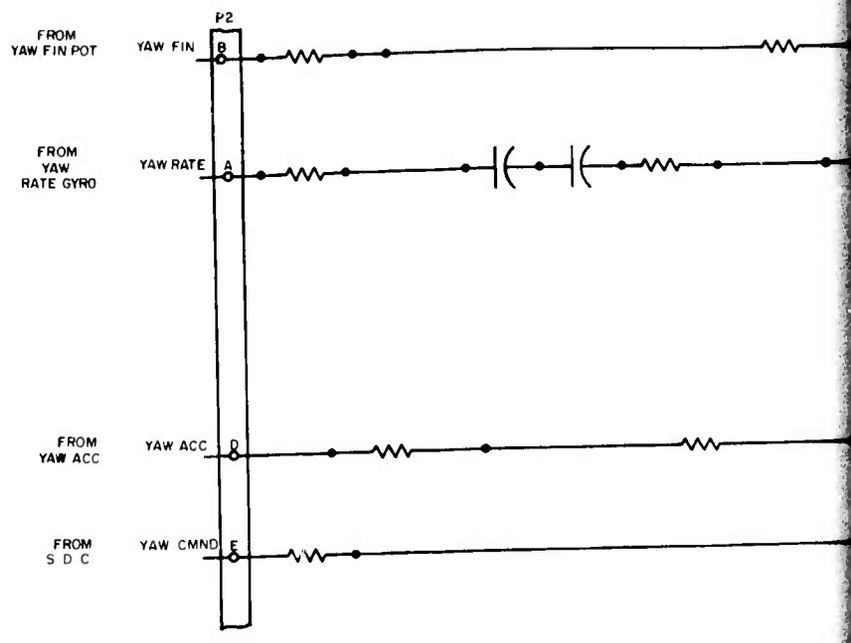
YAW CONTROL AMPLIFIER, NOTES

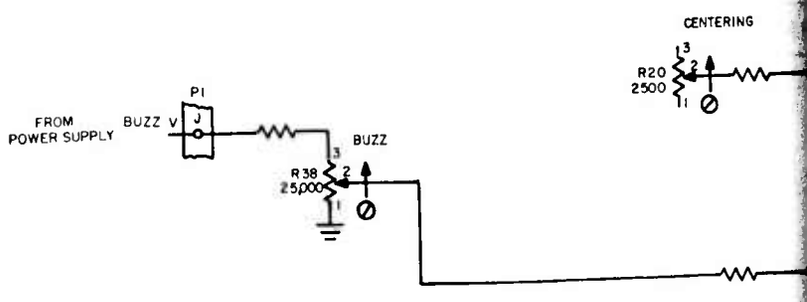
A

UNCLASSIFIED

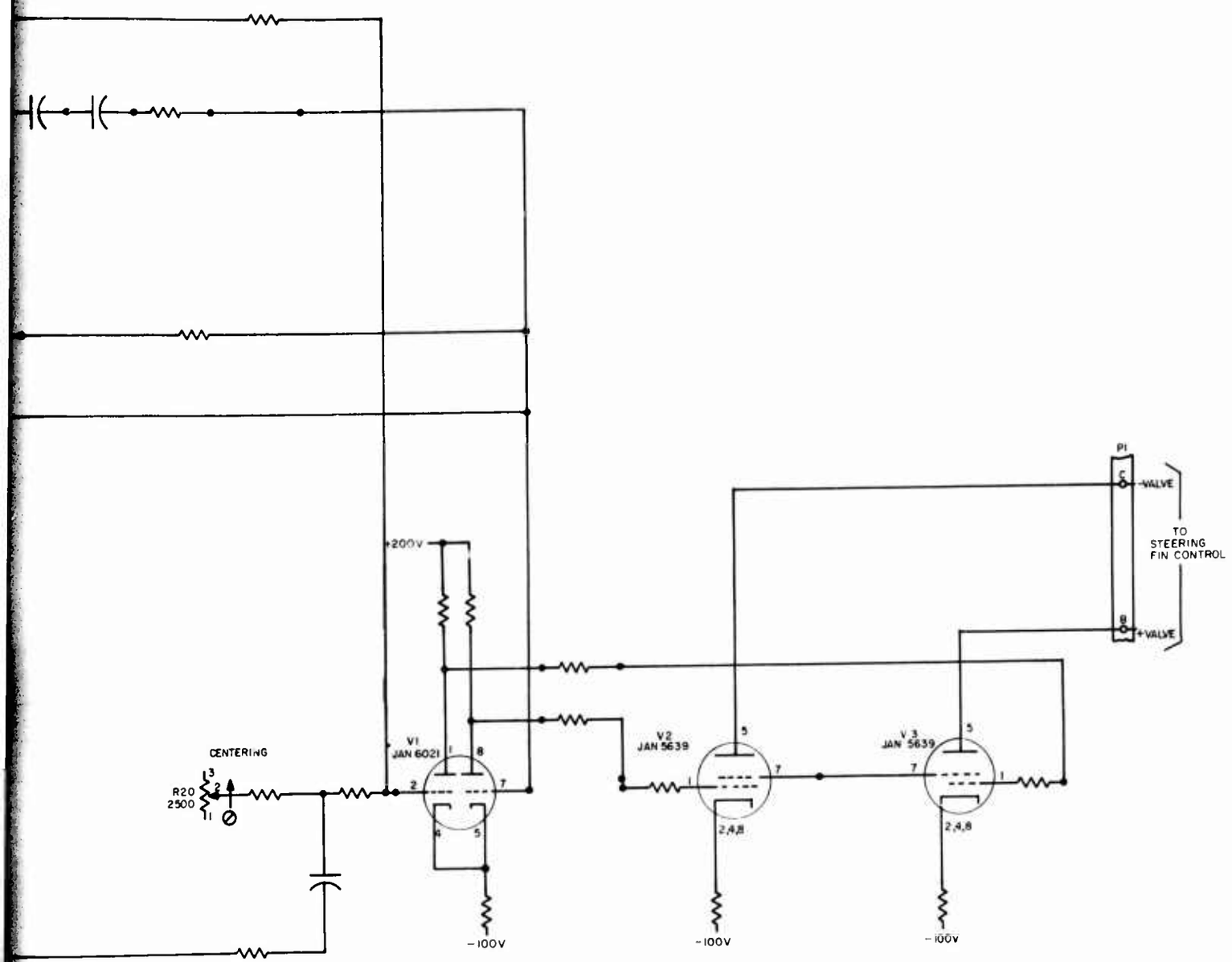


SIGNAL DISTRIBUTION


P2
FROM YAW FIN POT
YAW FIN
B
FROM YAW RATE GYRO
YAW RATE
A
FROM YAW ACC
YAW ACC
D
FROM S D C
YAW CMND
E


CENTERING
R20
2500
3
2
1
P1
FROM POWER SUPPLY
BUZZ V
J
BUZZ
R38
25,000
3
2
1

UNCLASSIFIED



YAW CONTROL AMPLIFIER SIMPLIFIED SCHEMATIC

MEASURMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			F
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	

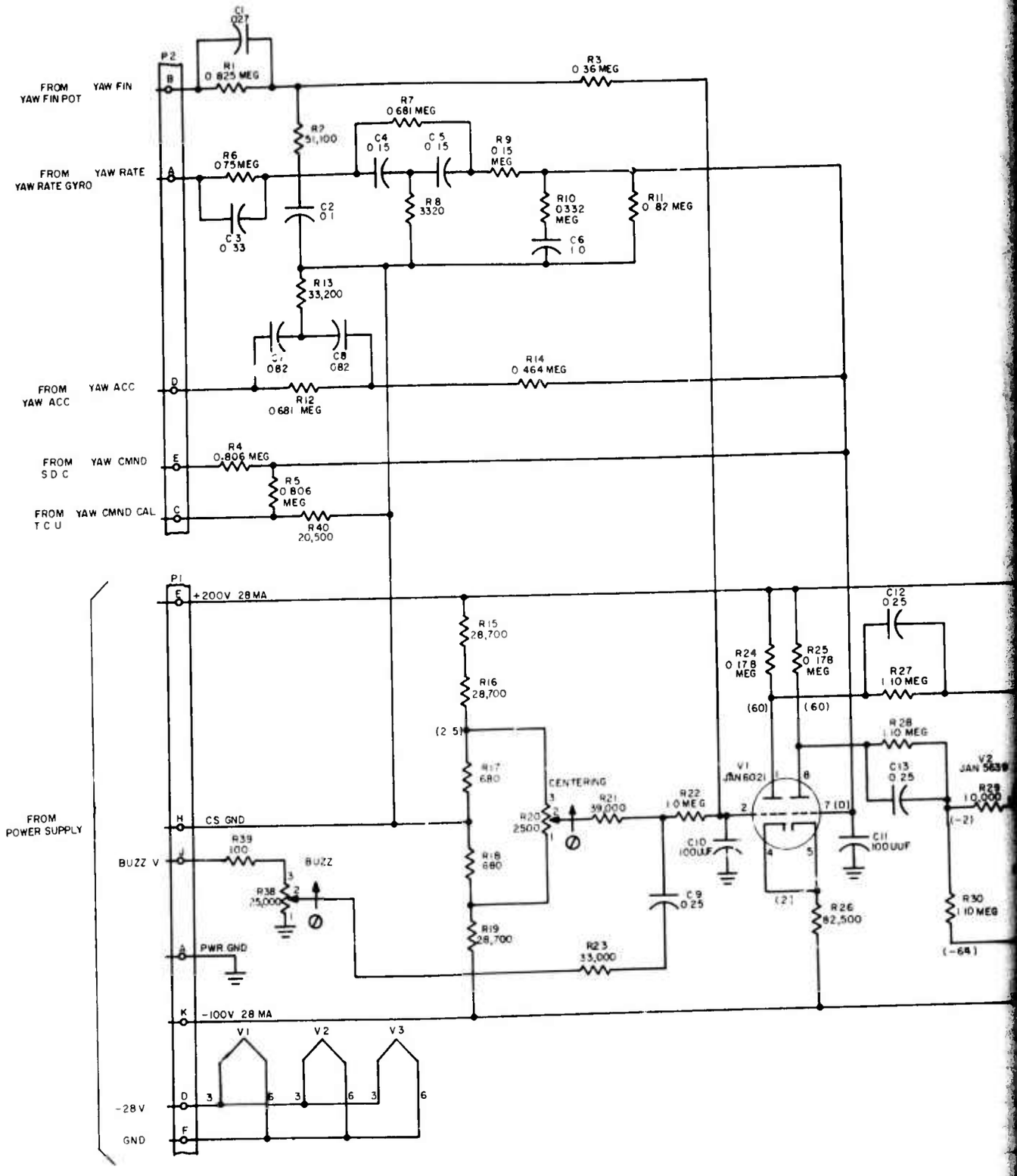
THIS DATA NOT AVA

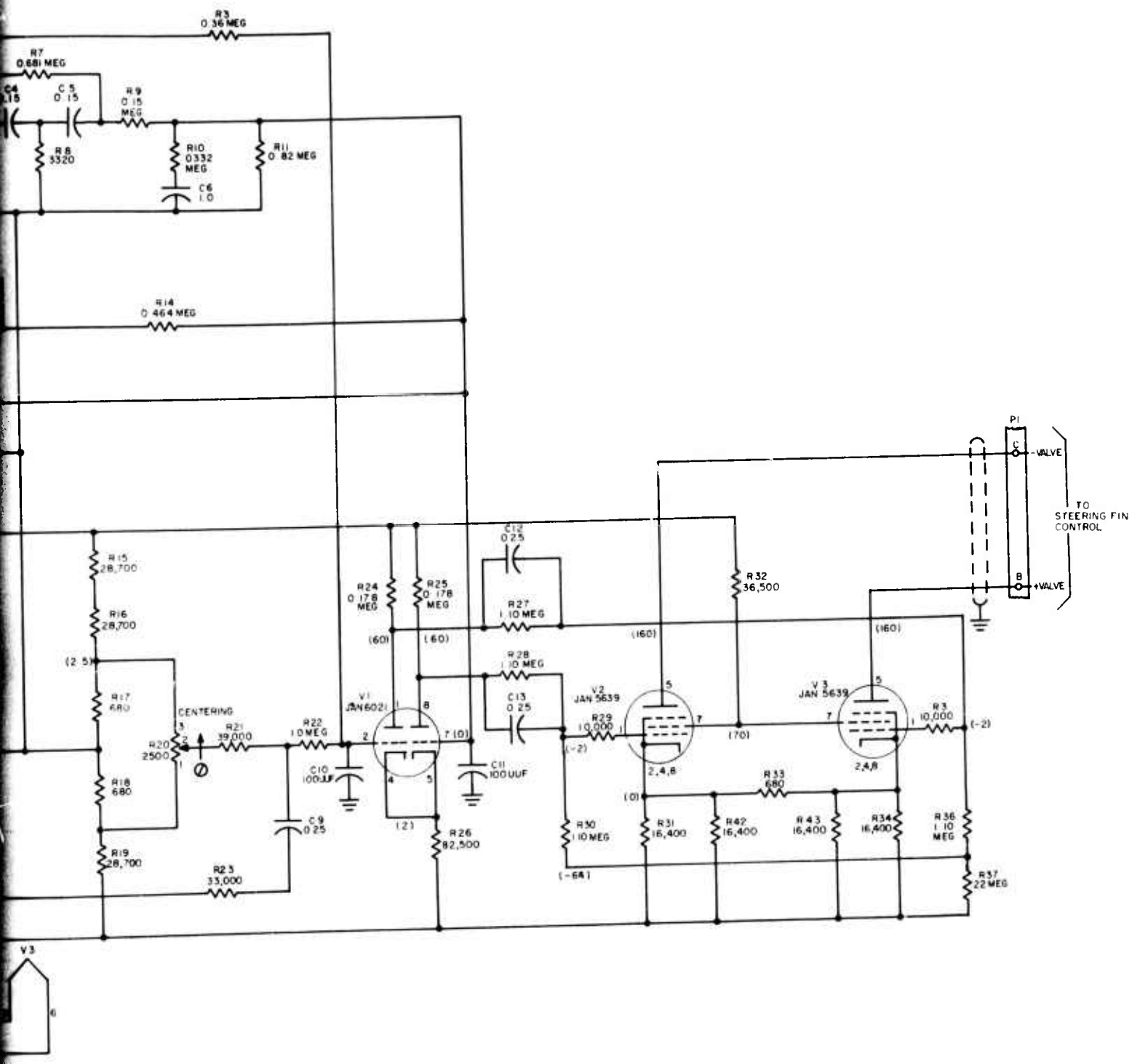
YAW CONTROL AMPLIFIER, NOTES

A

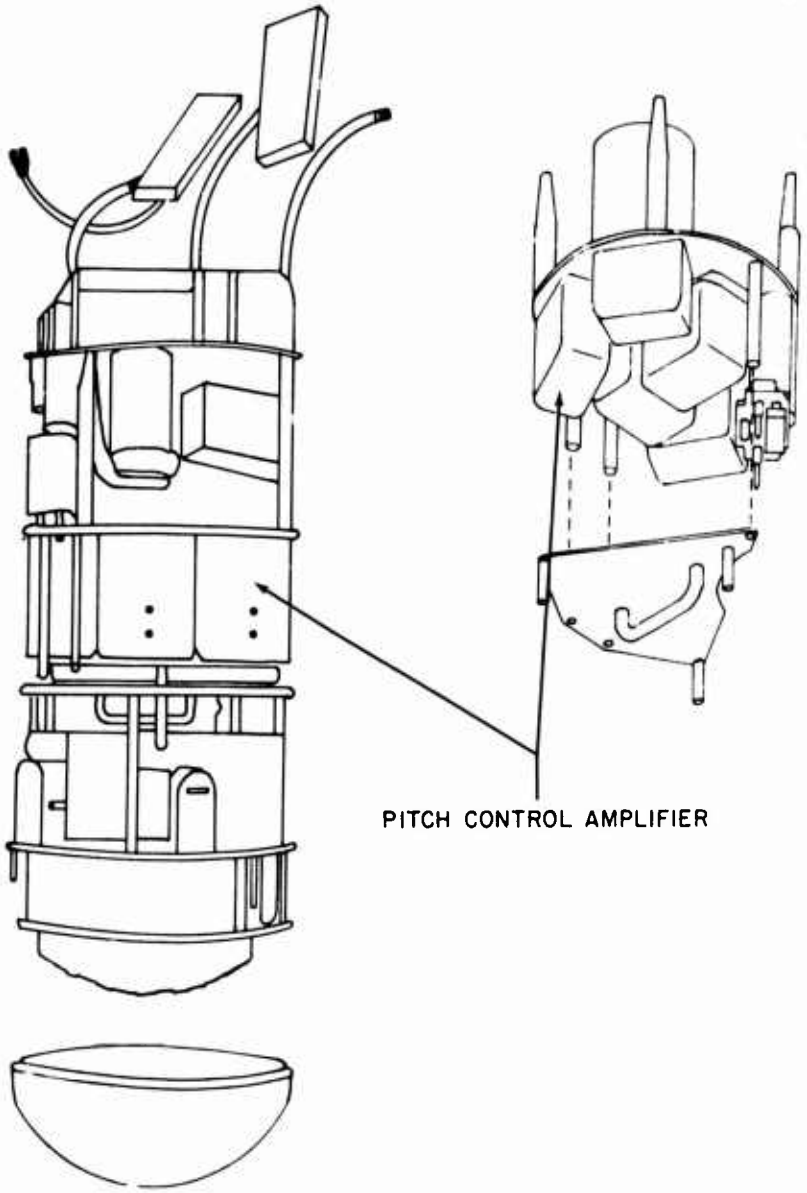
	SUPPESSOR			SCREEN			CONTROL			CATHODE			FILAMENT		
MS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

THIS DATA NOT AVAILABLE

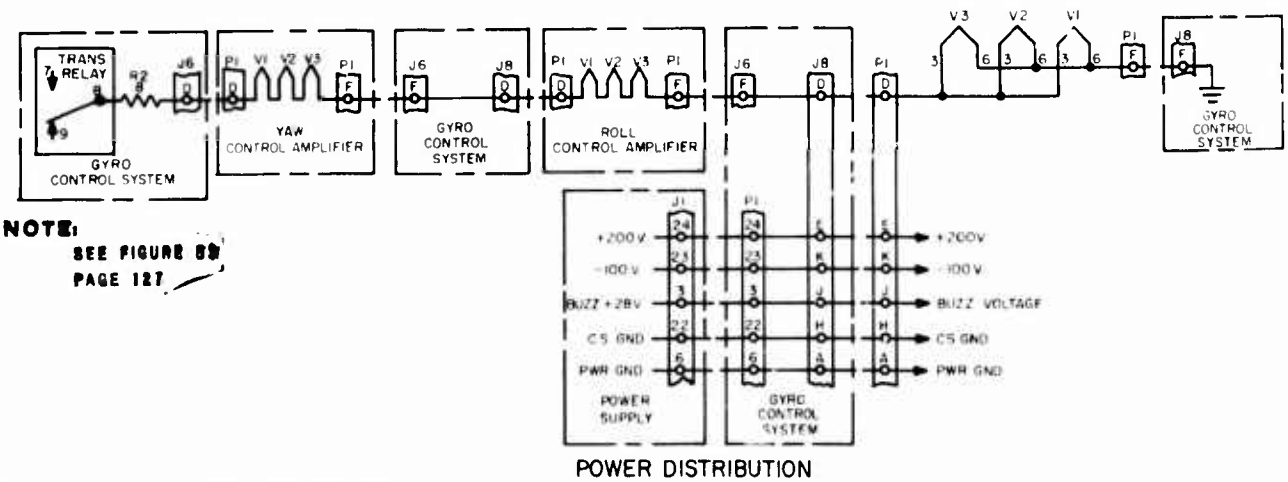

C1 027
P2
B
R1 0 825 MEG
FROM YAW FIN POT
YAW FIN
R3 0 36 MEG
R7 0 681 MEG
R2 51,100
C4 0 15
C5 0 15
R9 0 15 MEG
A
R6 0 75 MEG
FROM YAW RATE GYRO
YAW RATE
C2 0 1
R8 3320
R10 0 332 MEG
R11 0 82 MEG
C3 0 33
C6 1 0
R13 33,200
C7 0 82
C8 0 82
R14 0 464 MEG
D
FROM YAW ACC
YAW ACC
R12 0 681 MEG
E
R4 0 806 MEG
FROM S D C
YAW CMND
R5 0 806 MEG
C
FROM T C U
YAW CMND CAL
R40 20,500
P1
E
+200V 28 MA
R15 28,700
R16 28,700
(2 5)
R17 680
CENTERING
R20 2500
R21 39,000
R22 1 0 MEG
R24 0 178 MEG
R25 0 178 MEG
C12 0 25
R27 1 10 MEG
(60)
(60)
R28 1 10 MEG
V1 JAN6021
C13 0 25
V2 JAN 5639
R29 10,000
(-2)
H
CS GND
FROM POWER SUPPLY
R18 680
C10 100UUF
C11 100UUF
R26 82,500
R30 1 10 MEG
(-64)
J
BUZZ V
R39 100
BUZZ
R38 25,000
C9 0 25
R19 28,700
R23 33,000
A
PWR GND
K
-100V 28 MA
V1
V2
V3
D
-28 V
F
GND



GS-16729 YAW CONTROL AMPLIFIER



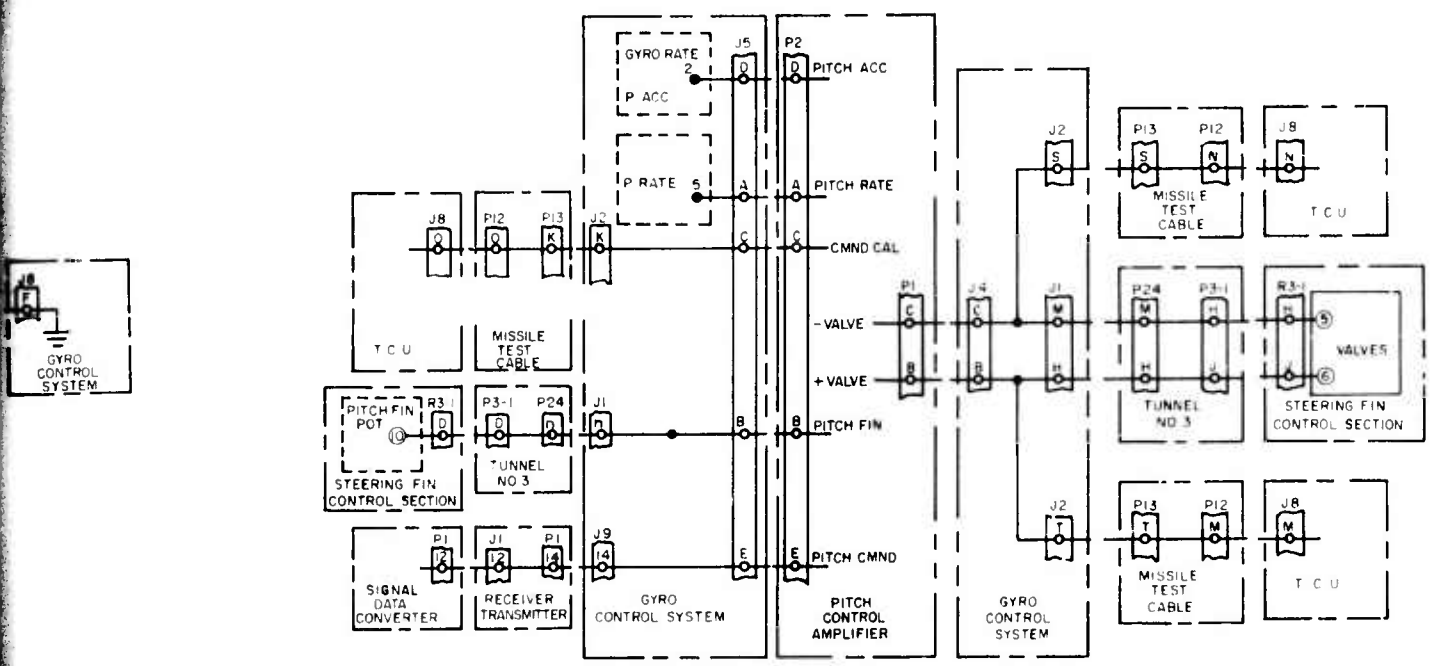
MISSILE GUIDANCE SET



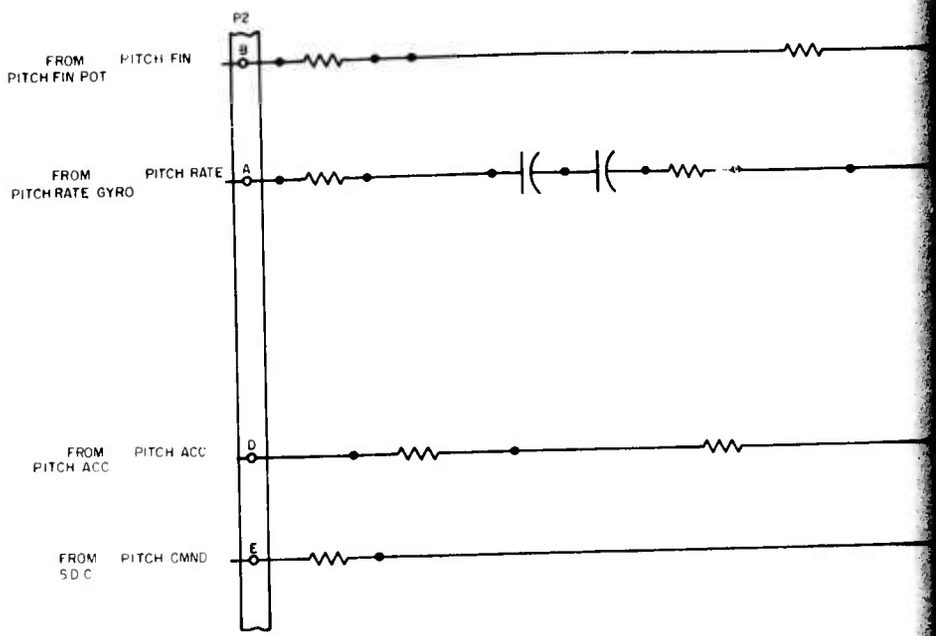
NOTE:
SEE FIGURE 89
PAGE 127

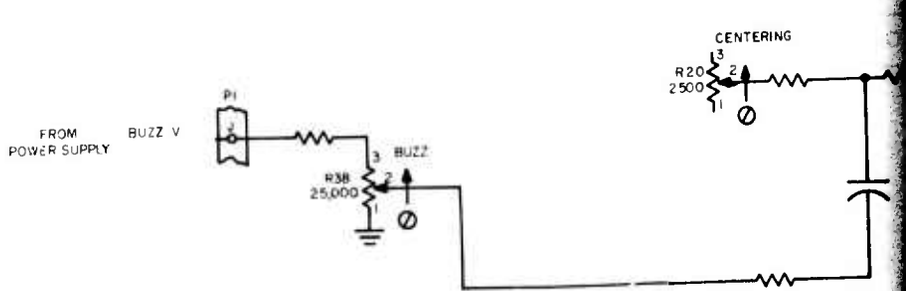
POWER DISTRIBUTION

PITCH CONTROL AMPLIFIER, NOTES



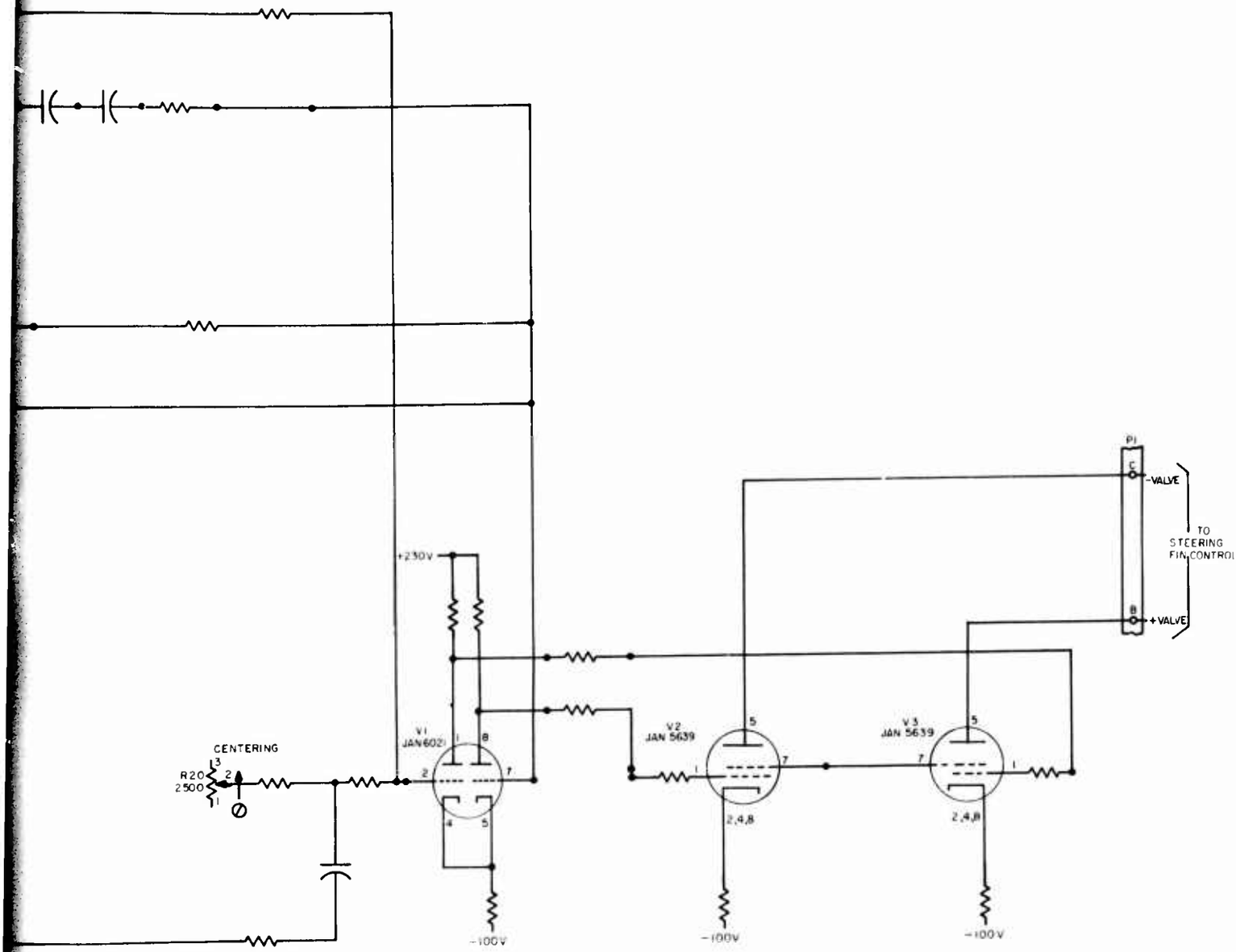
SIGNAL DISTRIBUTION


P2
FROM PITCH FIN POT
PITCH FIN
B
FROM PITCH RATE GYRO
PITCH RATE
A
FROM PITCH ACC
PITCH ACC
D
FROM SDC
PITCH CMND
E


CENTERING
R20
2500
3
2
1
P1
FROM POWER SUPPLY
BUZZ V
3
BUZZ
R38
25,000
2
1

[redacted]

UNCLASSIFIED



PITCH CONTROL AMPLIFIER SIMPLIFIED SCHEMATIC

[redacted]

MEASURMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN

THIS DATA NOT AVA

PITCH CONTROL AMPLIFIER, NOTES

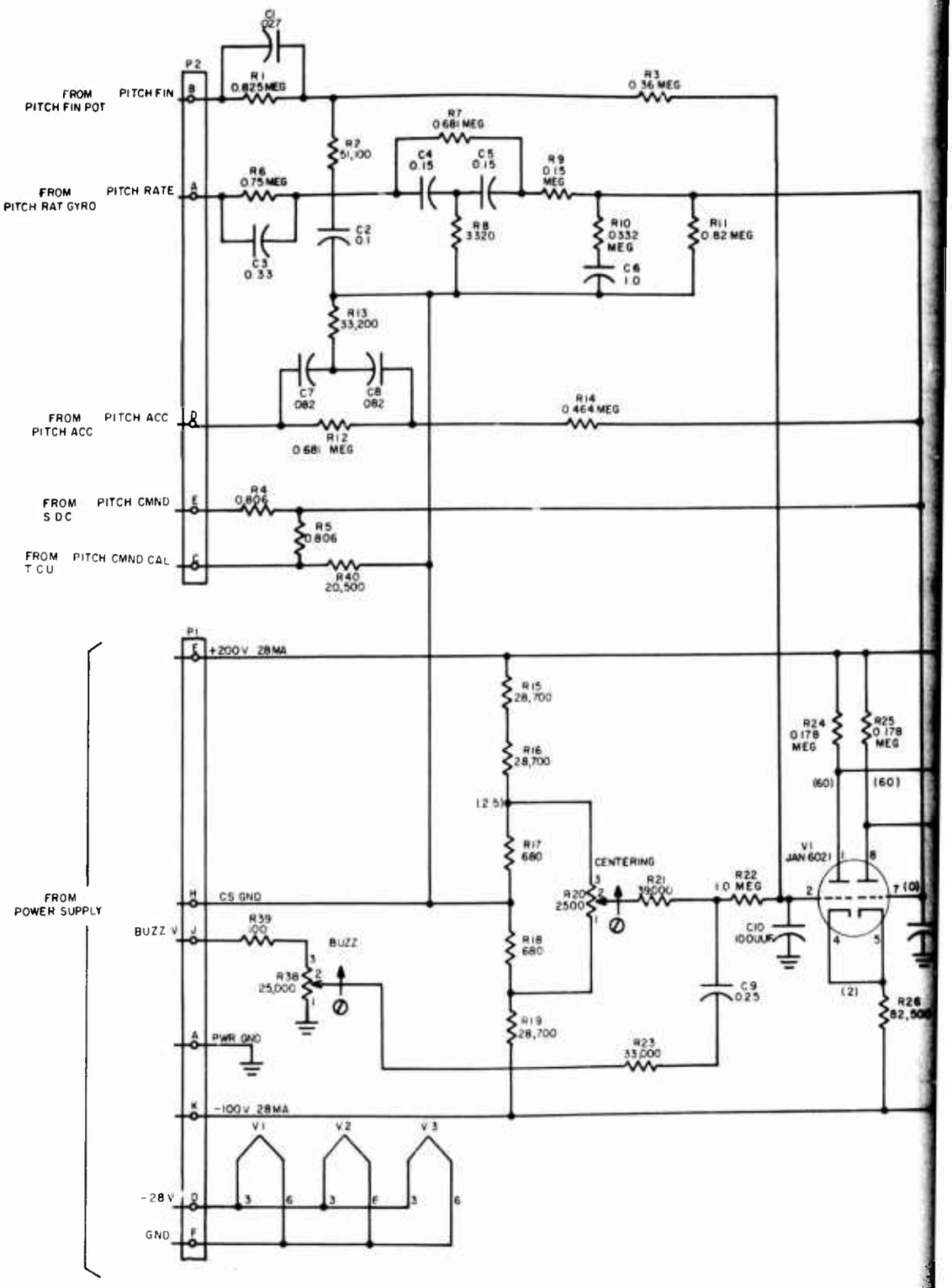
A

SUPPESSOR			SCREEN			CONTROL			CATHODE			FILAMENT		
PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

THIS DATA NOT AVAILABLE

[redacted]

UNCLASSIFIED

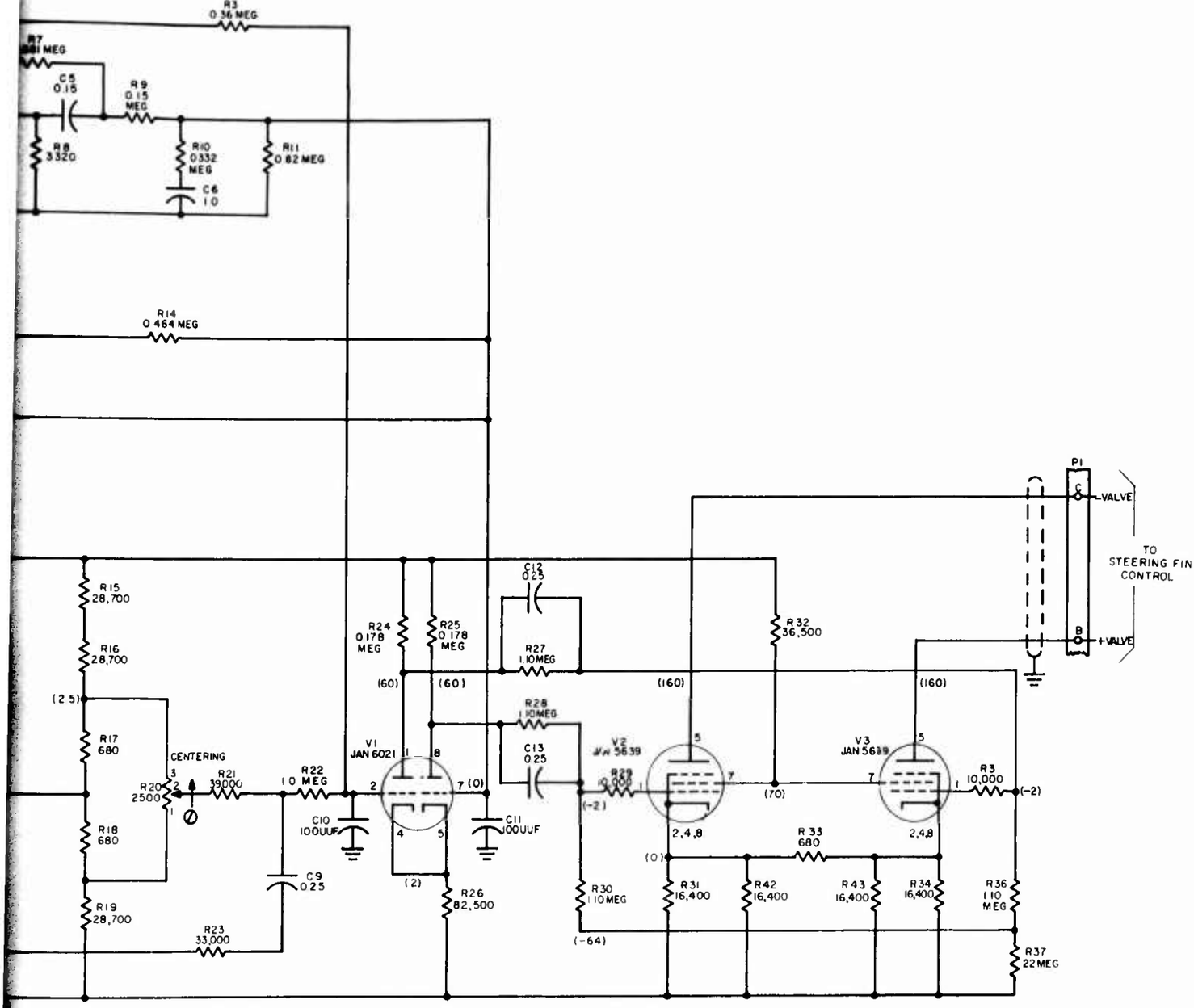


[redacted]

[redacted]

A

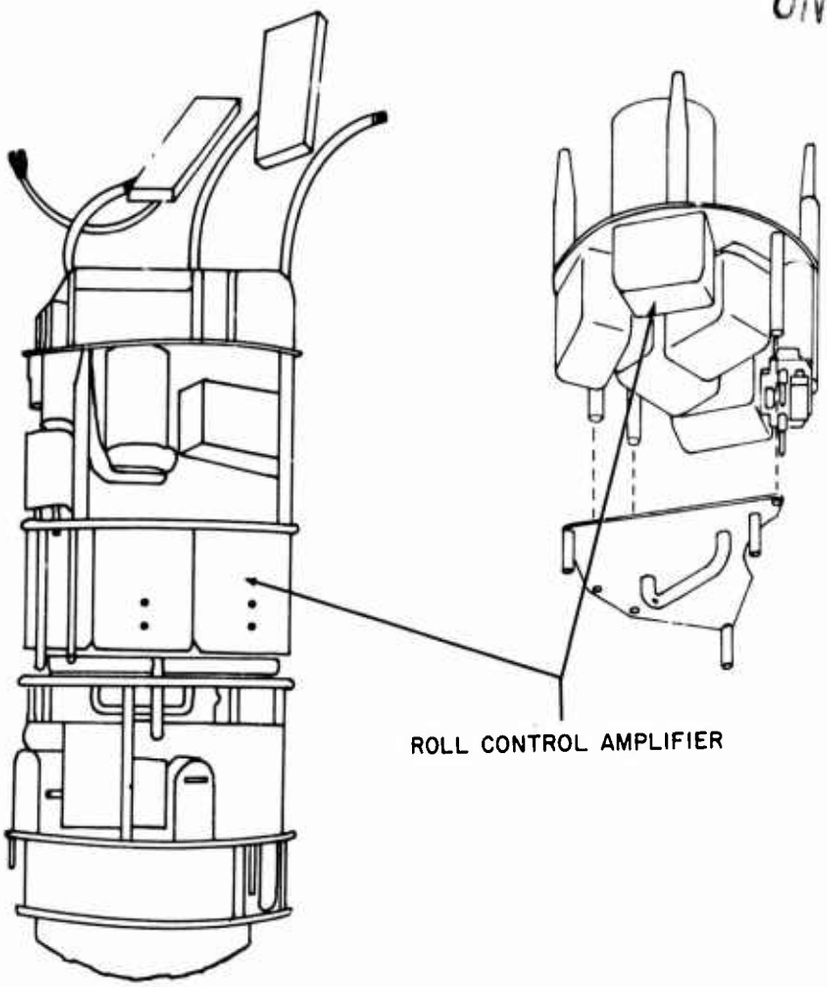
UNCLASSIFIED



GS-16729 PITCH CONTROL AMPLIFIER

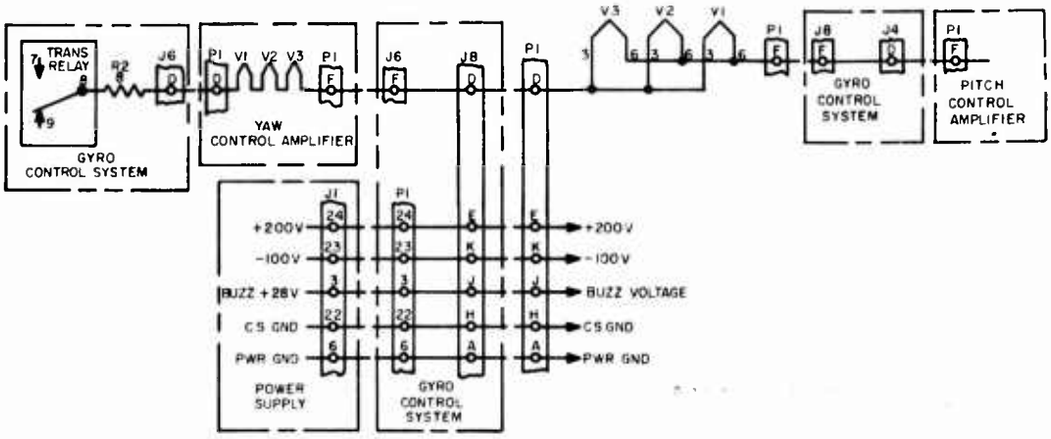
UNCLASSIFIED

[redacted]
UNCLASSIFIED

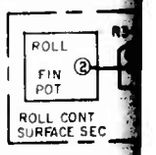


MISSILE GUIDANCE SET

NOTE:
SEE FIGURE 59
PAGE 127



POWER DISTRIBUTION

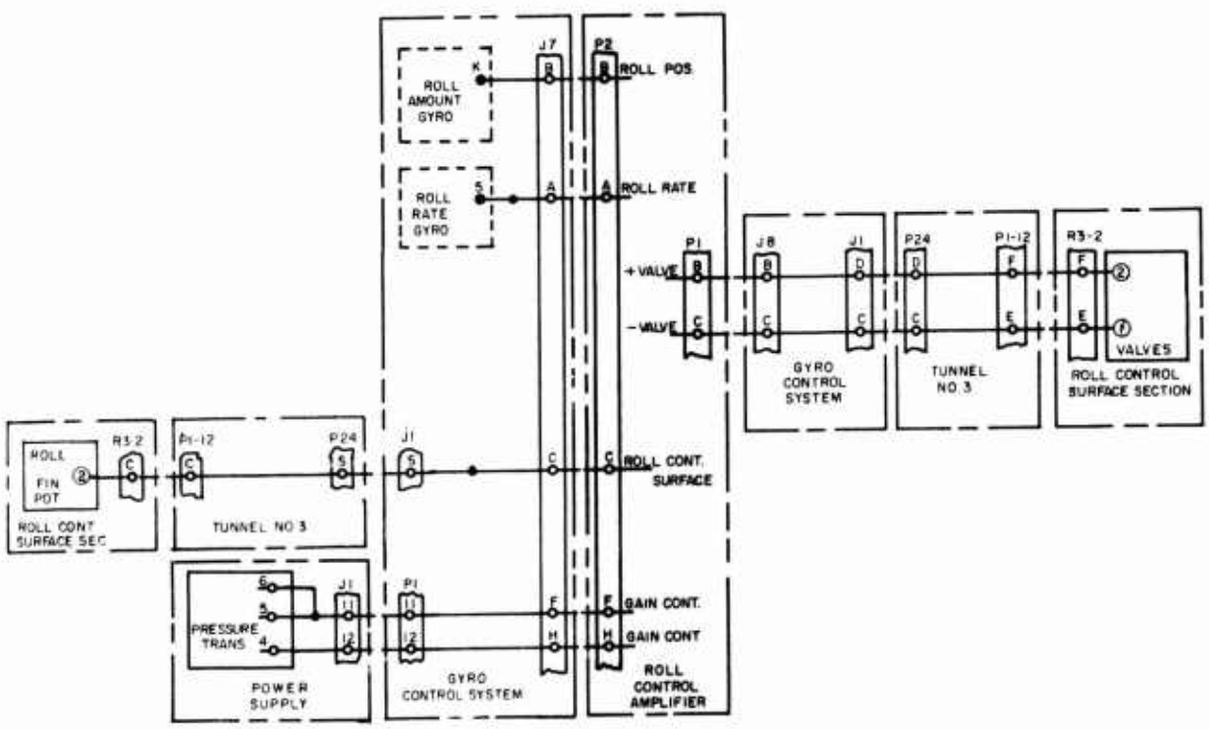


ROLL CONTROL AMPLIFIER, NOTES

[redacted]

A

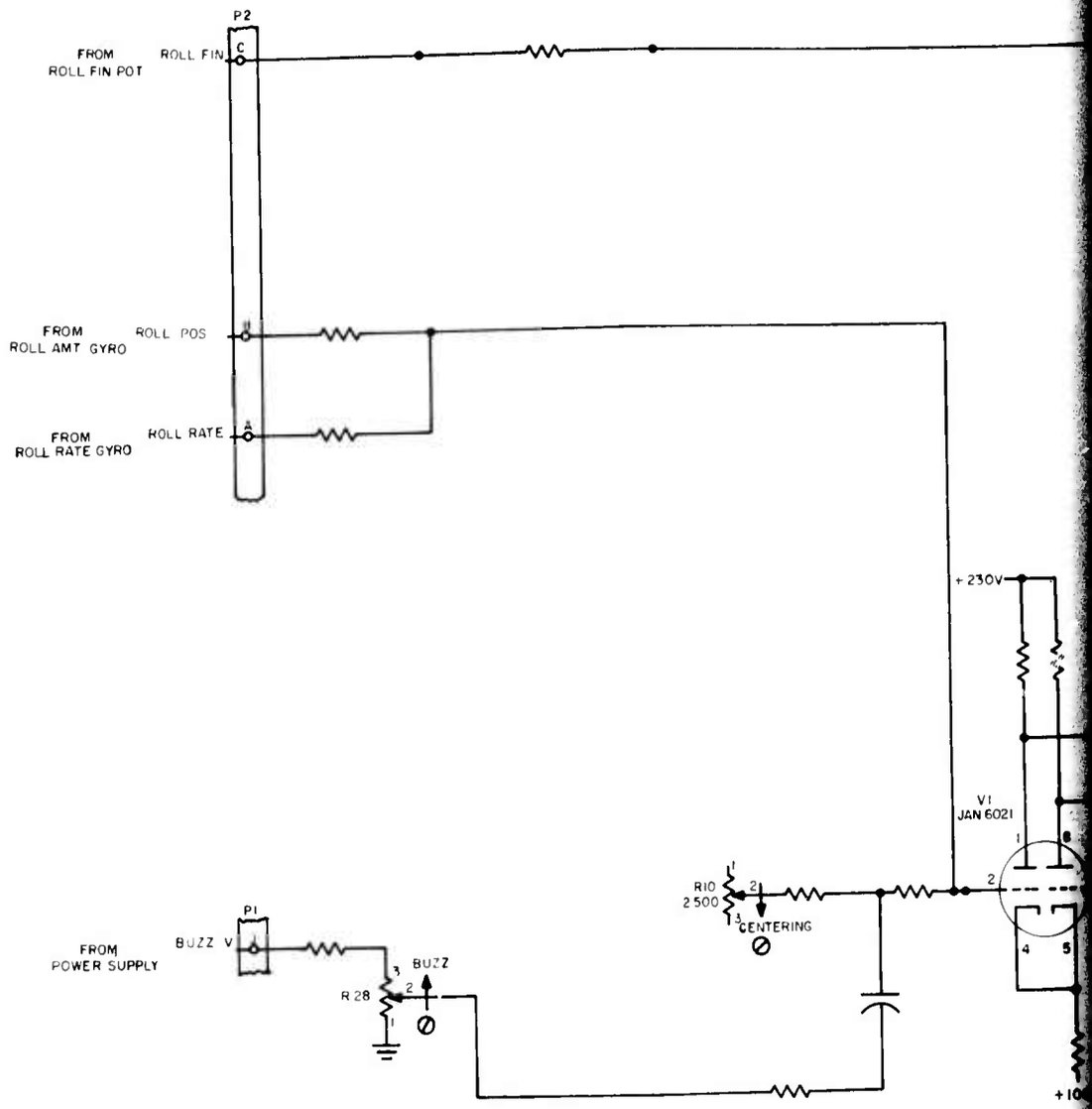
SIFIED



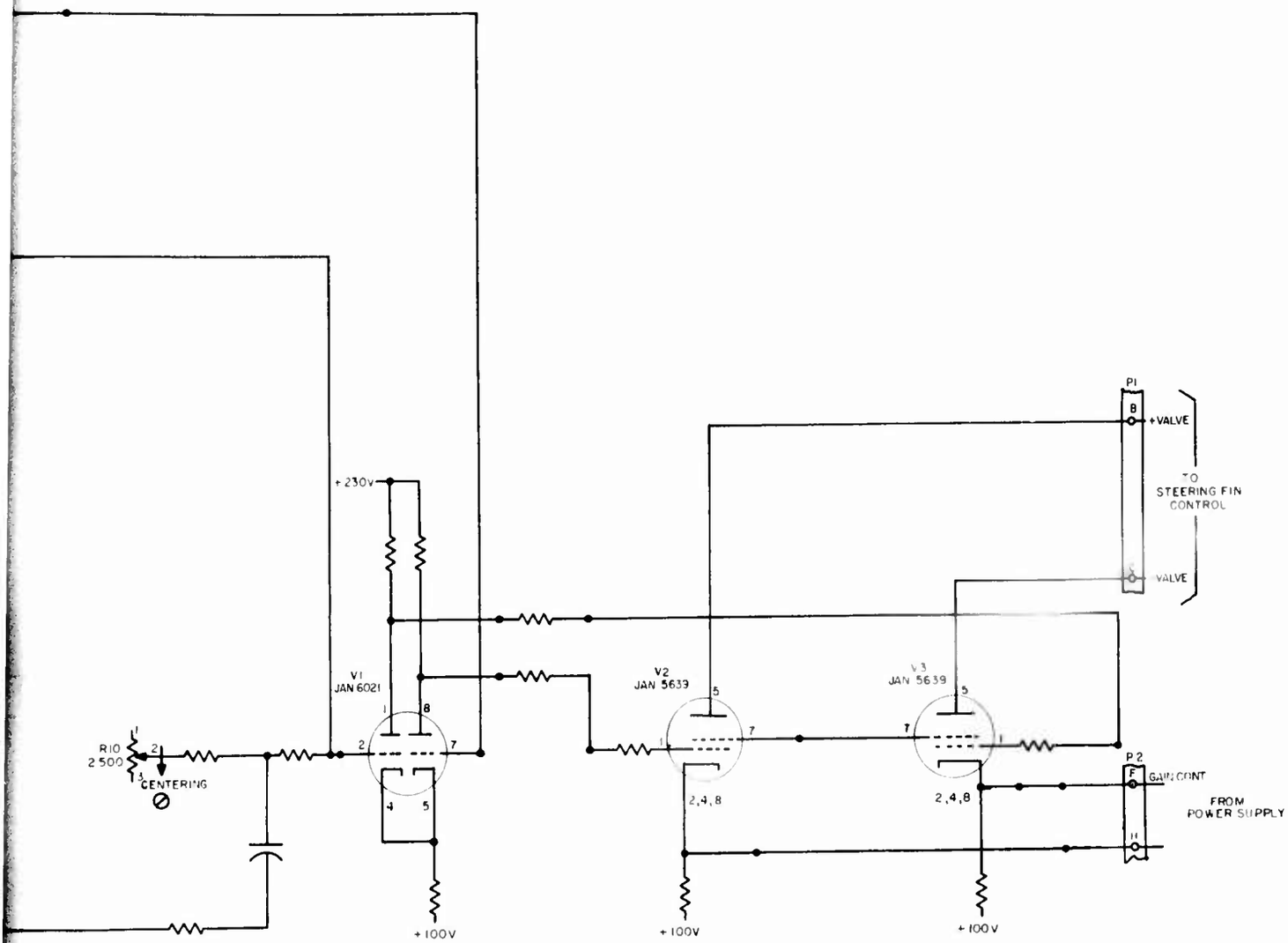
P1
PITCH CONTROL AMPLIFIER

SIGNAL DISTRIBUTION

B


P2
FROM
ROLL FIN POT
ROLL FIN
C
FROM
ROLL AMT GYRO
ROLL POS
B
FROM
ROLL RATE GYRO
ROLL RATE
A
+230V
V1
JAN 6021
R10
2500
CENTERING
P1
FROM
POWER SUPPLY
BUZZ V
BUZZ
R28
+10

A



ROLL CONTROL AMPLIFIER SIMPLIFIED SCHEMATIC

[redacted]

UNCLASSIFIED

MEASURMENT NOTES

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PI

THIS DATA NOT AVA

ROLL CONTROL AMPLIFIER, NOTES

[redacted]

[redacted]

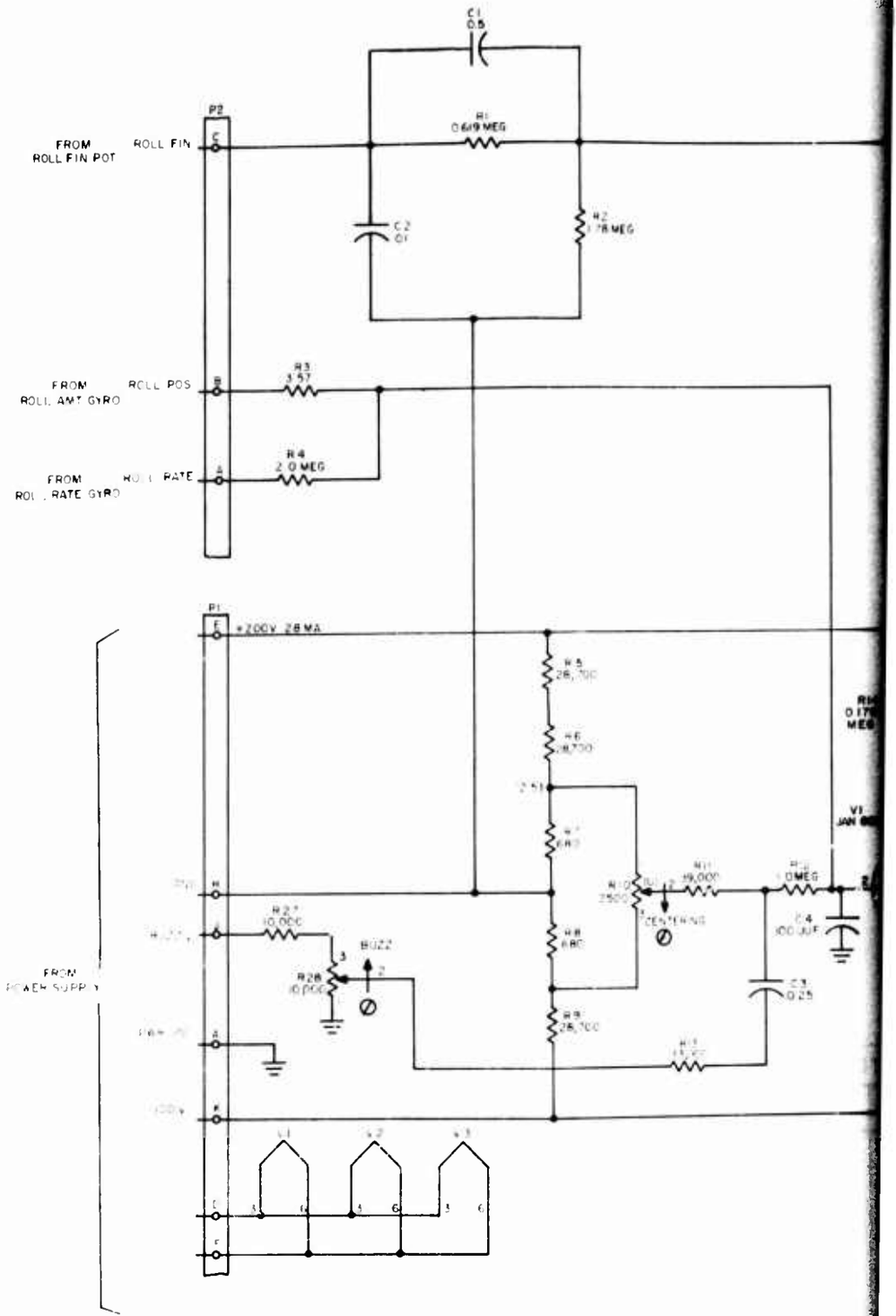
ED

	SUPPESSOR			SCREEN			CONTROL			CATHODE			FILAMENT		
	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

THIS DATA NOT AVAILABLE

[redacted]

[redacted] UNCLASSIFIED



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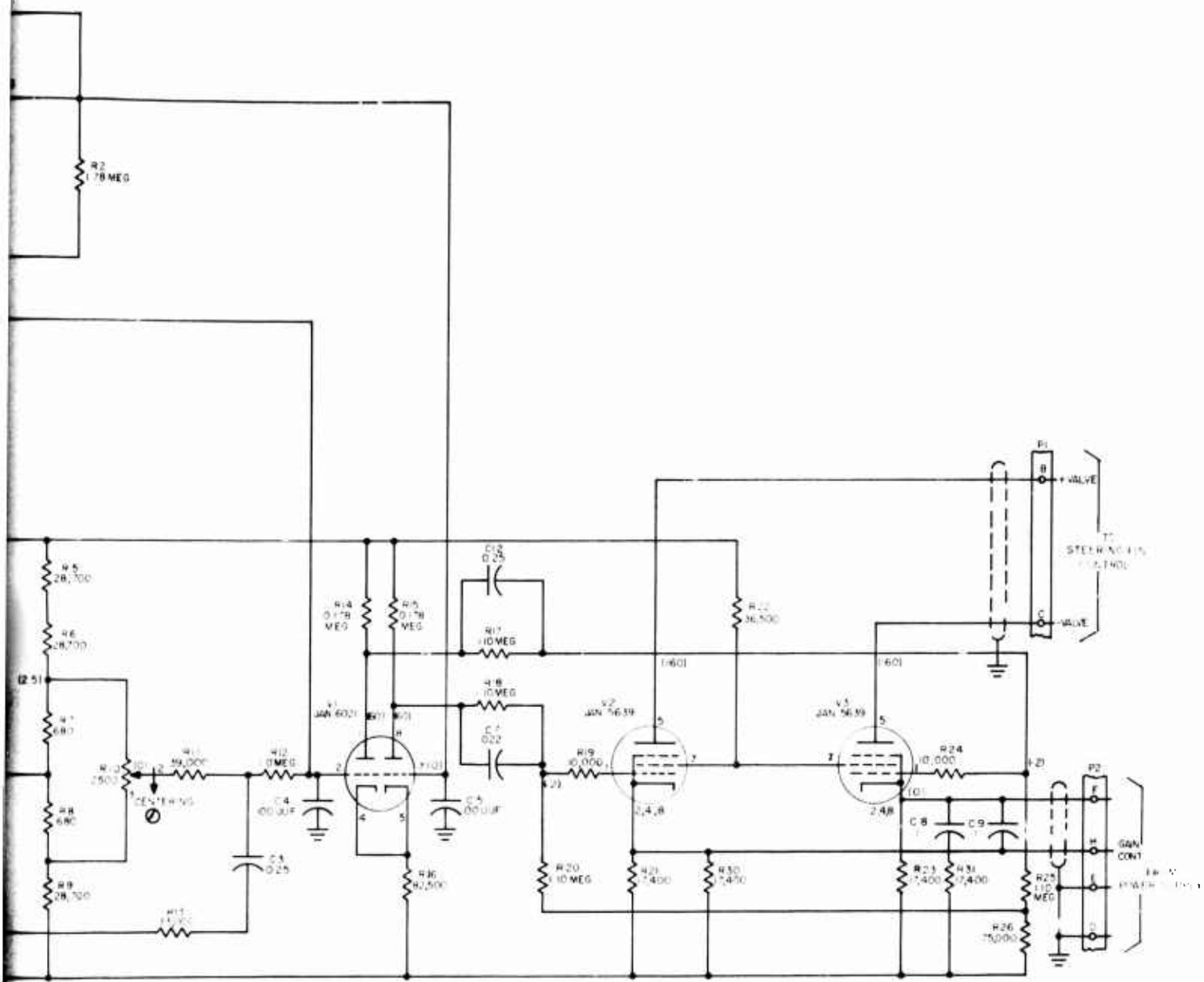
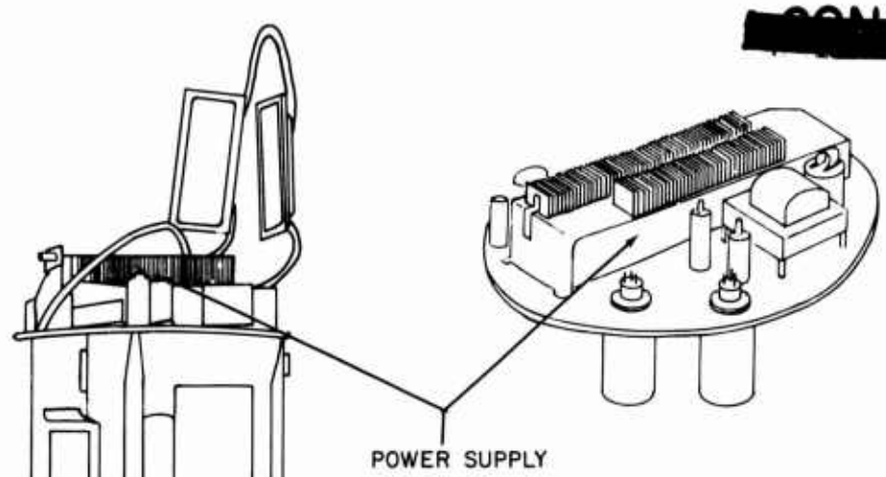
UNCLASSIFIED



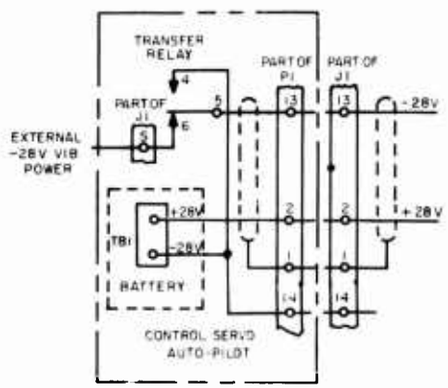
GS-16728 ROLL CONTROL AMPLIFIER

~~CONFIDENTIAL~~ ~~MODIFIED HANDL~~



MEASURMENT NOTES

MISSILE GUIDANCE SET



POWER DISTRIBUTION

NOTE:

SEE F
FOR F

SOCKET NO.	TUBE NO.	TUBE TYPE	TUBE FUNCTION	PLATE			SUPPESSOR			
				PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	P

THIS DATA NOT AV

POWER SUPPLY, MISSILE, NOTES

~~MODIFIED~~

UNCLASSIFIED

[redacted] MODIFIED HANDLING AUTHORIZED

MEASURMENT NOTES

NOTE:

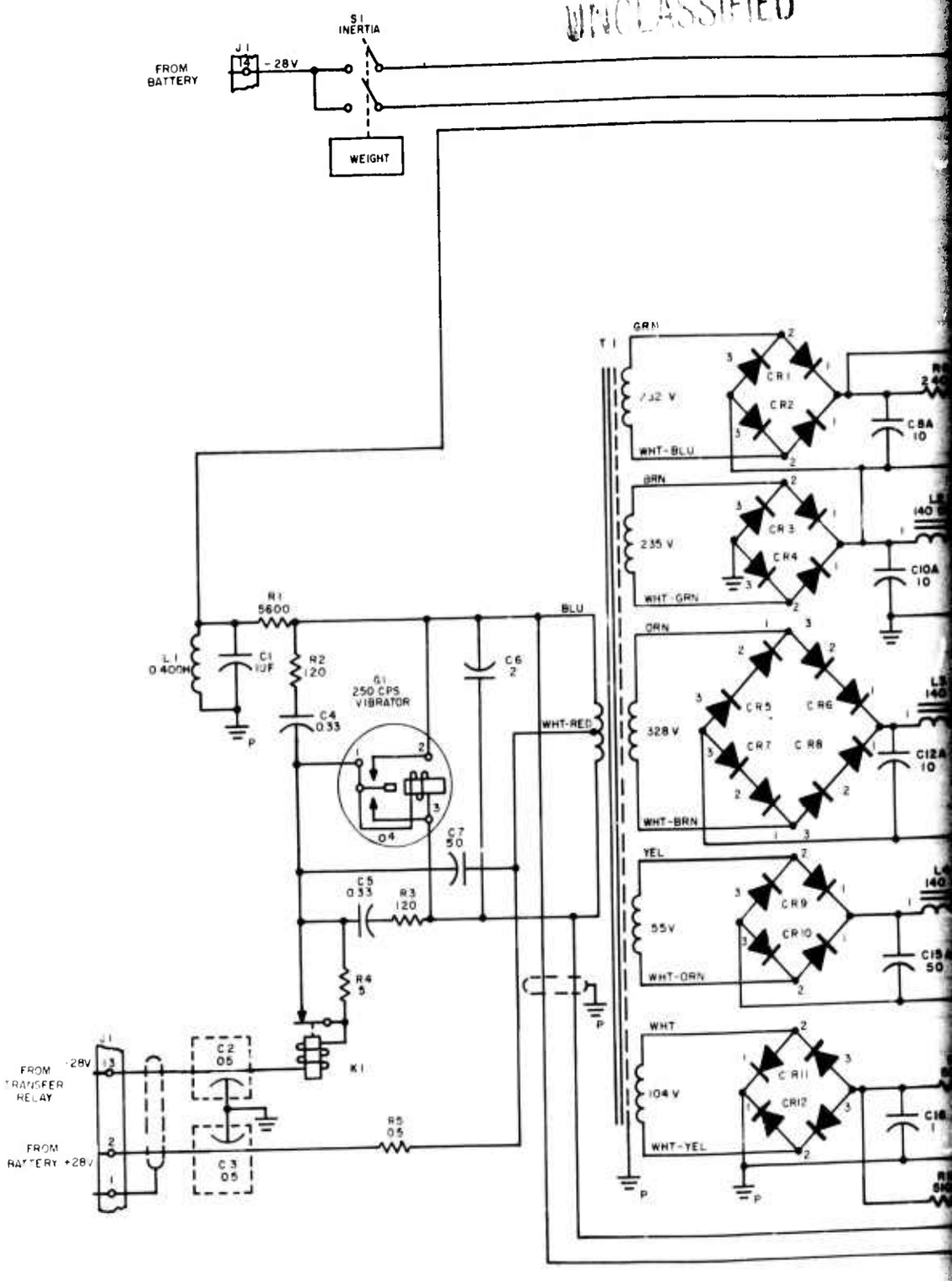
SEE FIGURE 54, PAGE 127
FOR POWER DISTRIBUTION

	SUPPESSOR			SCREEN			CONTROL			CATHODE			FILAMENT		
S	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS	PIN	VOLTS	OHMS

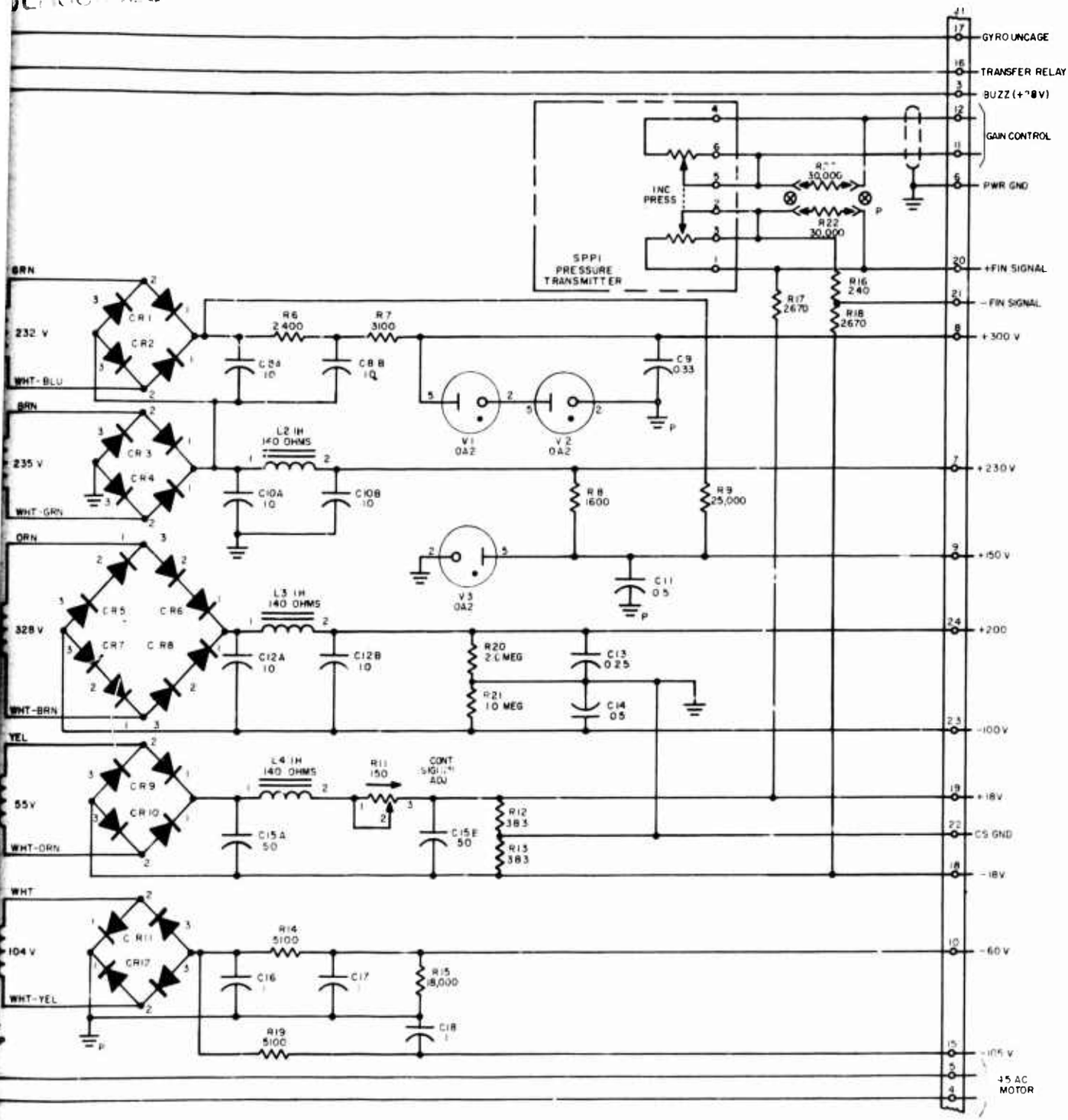
THIS DATA NOT AVAILABLE

[redacted] MODIFIED HANDLING AUTHORIZED

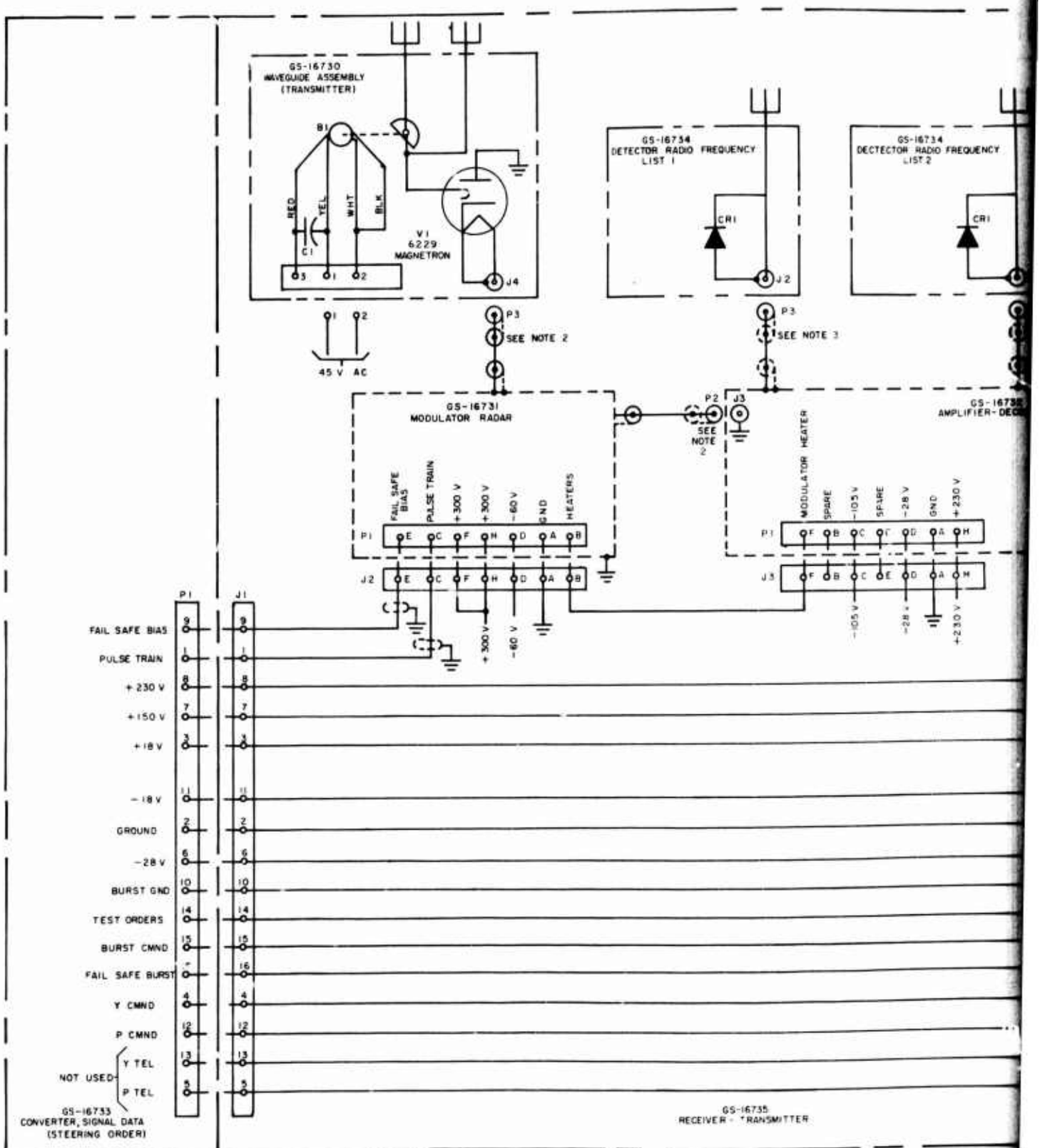
UNCLASSIFIED



CLASSIFIED



GS-16815 POWER SUPPLY MISSILE



S-16725 GUIDANCE SECTION INTERCONNECTING SCHEMATIC I

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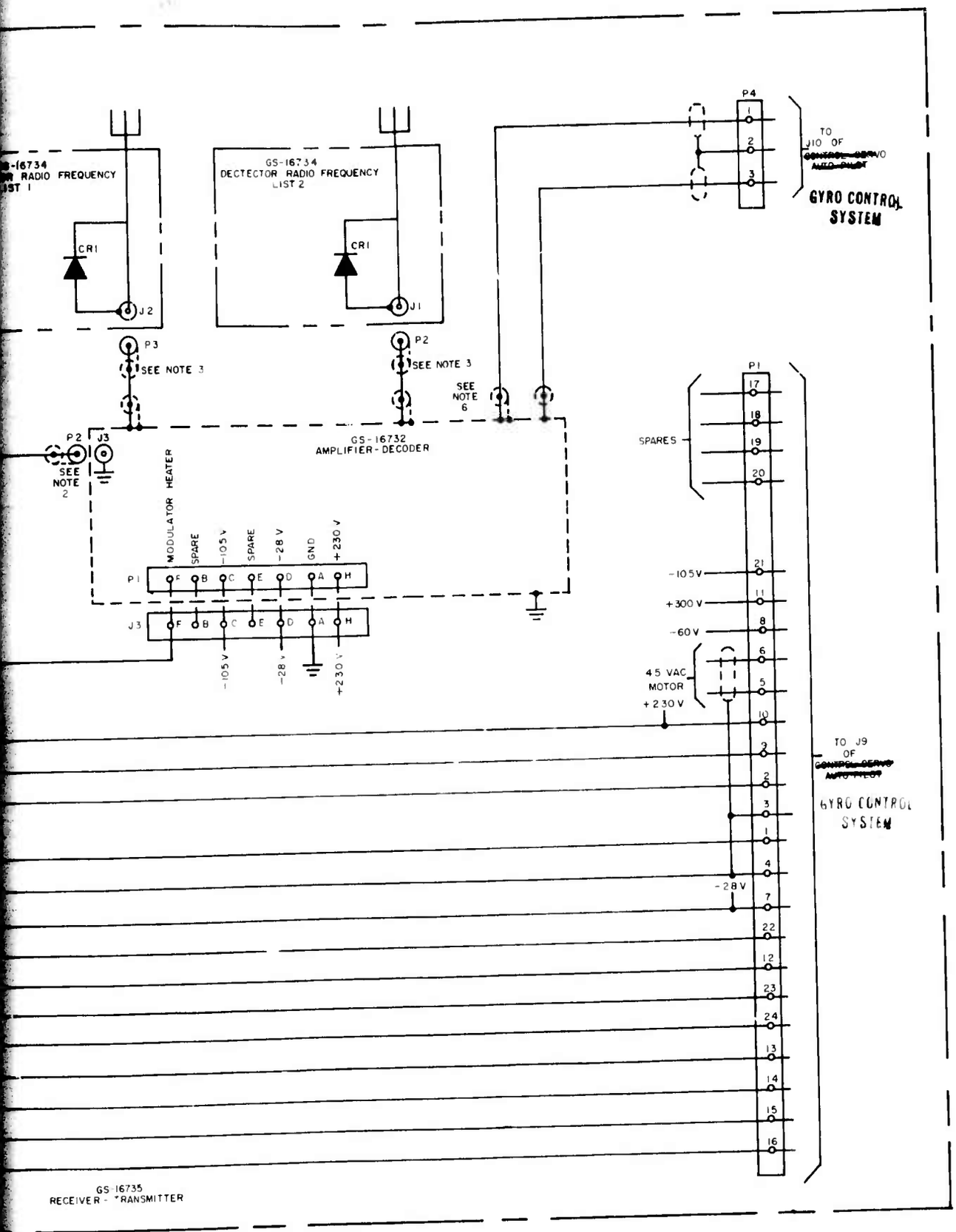
CONFIDENTIAL



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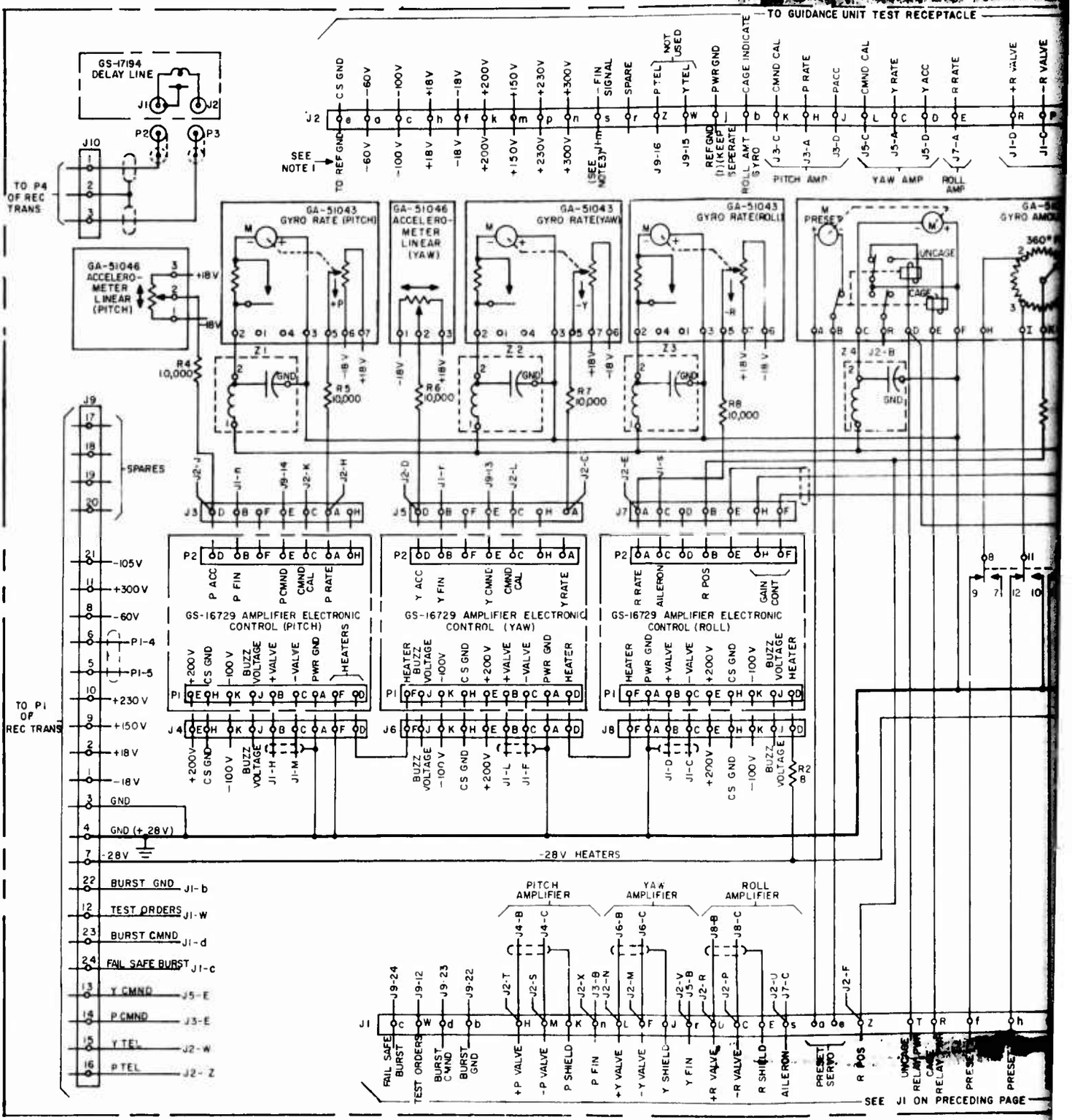

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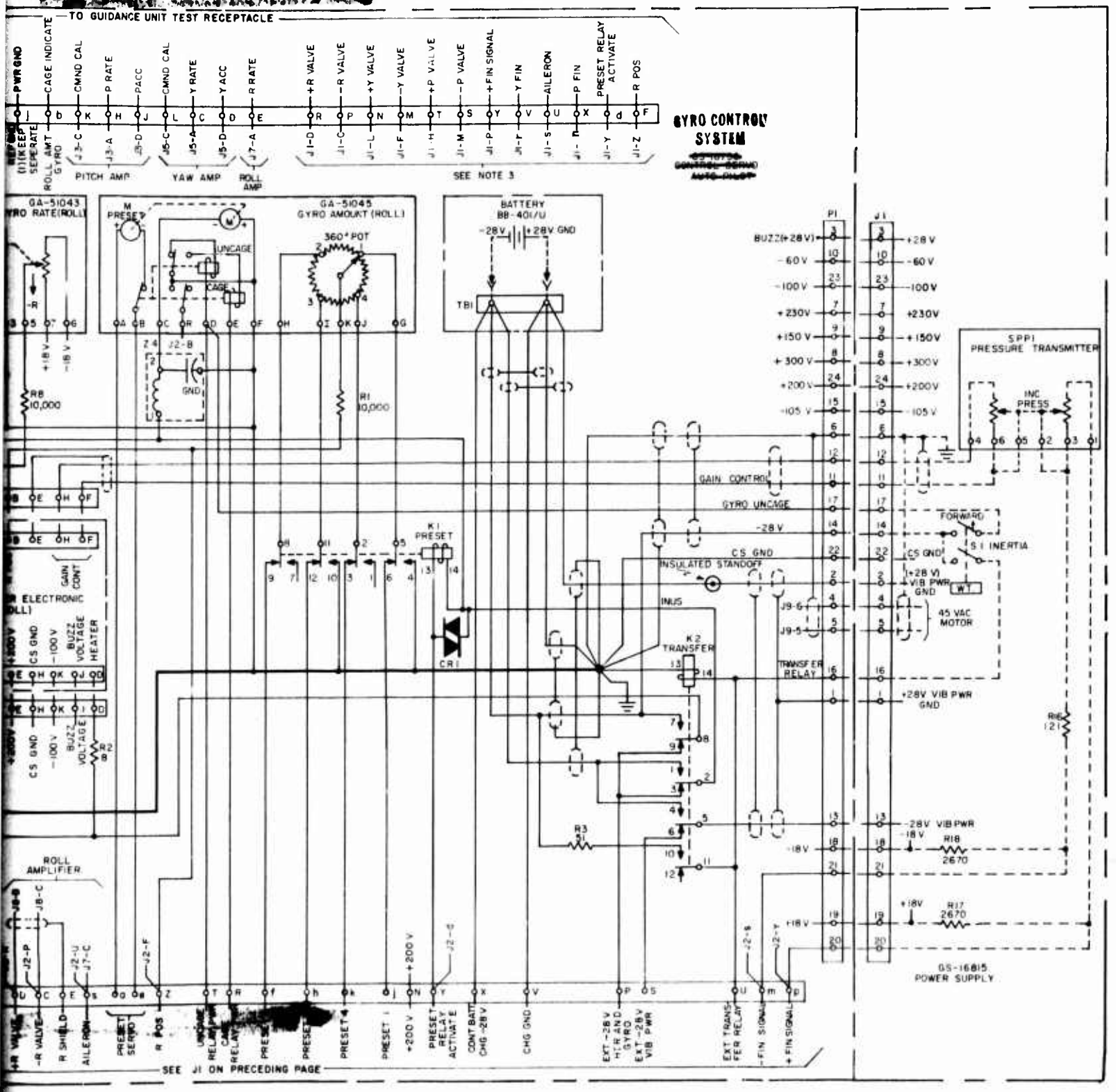
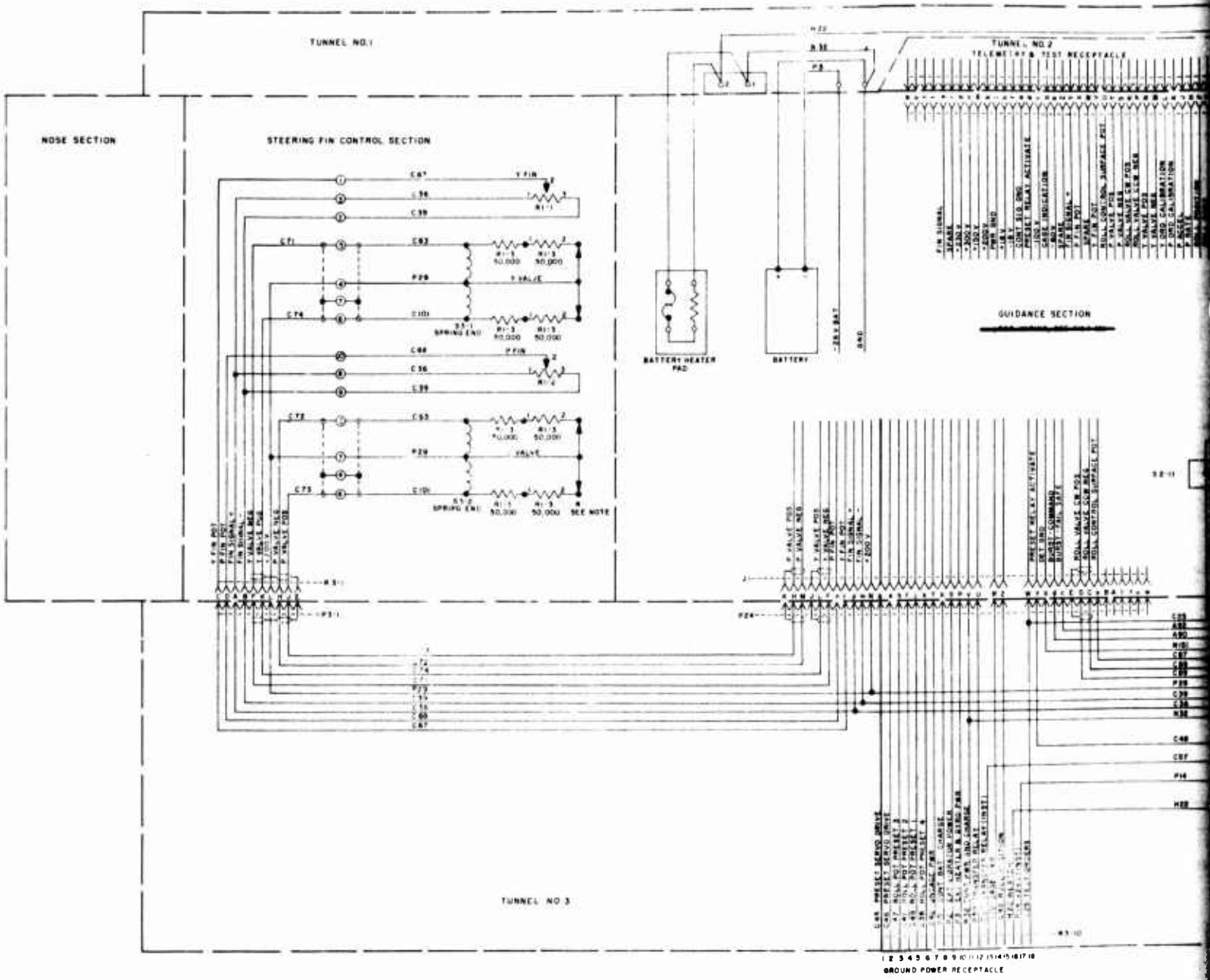


GS-16725 GUIDANCE SECTION INTERCONNECTING SCHEMATIC II



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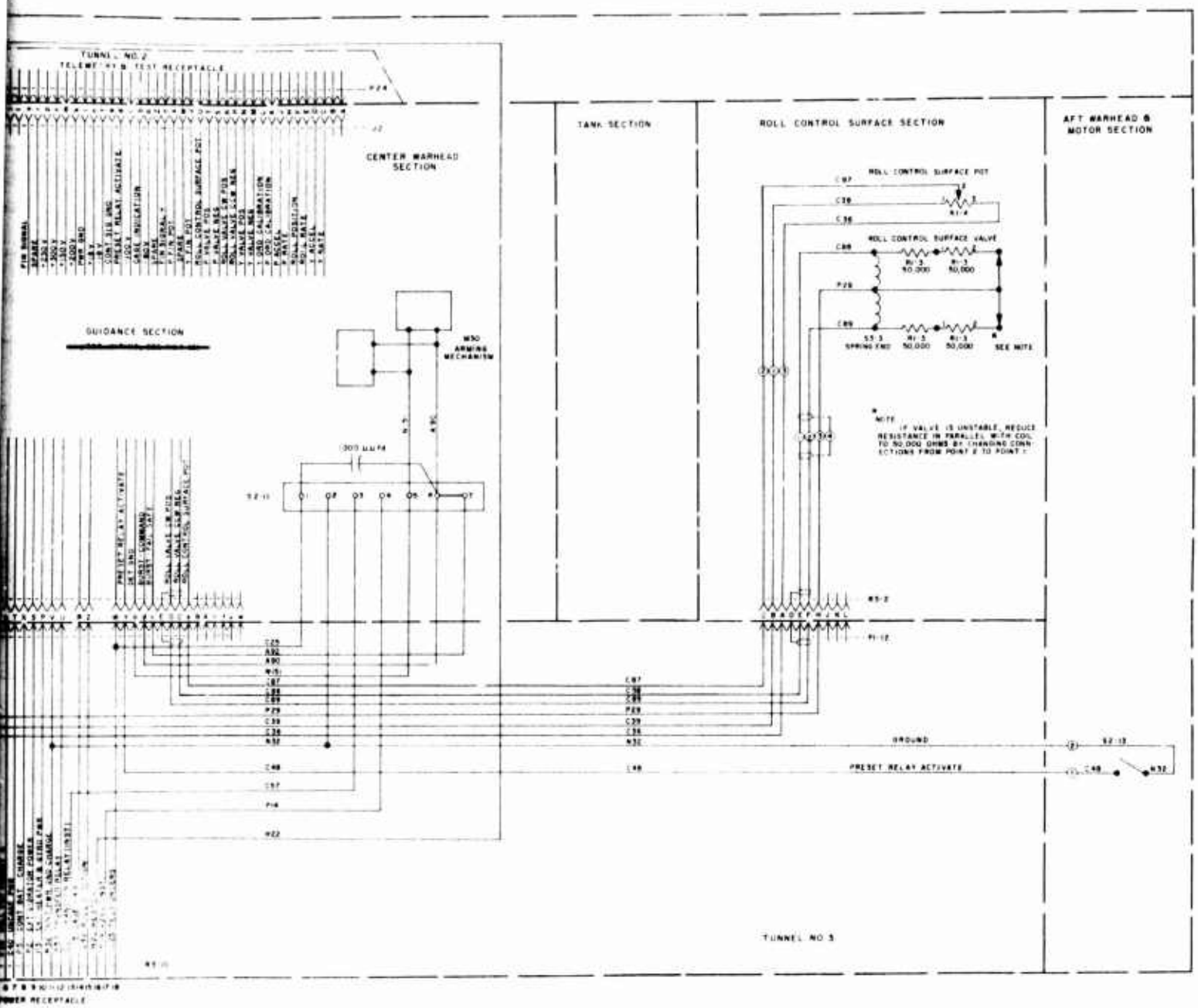

Missile wiring diagram.

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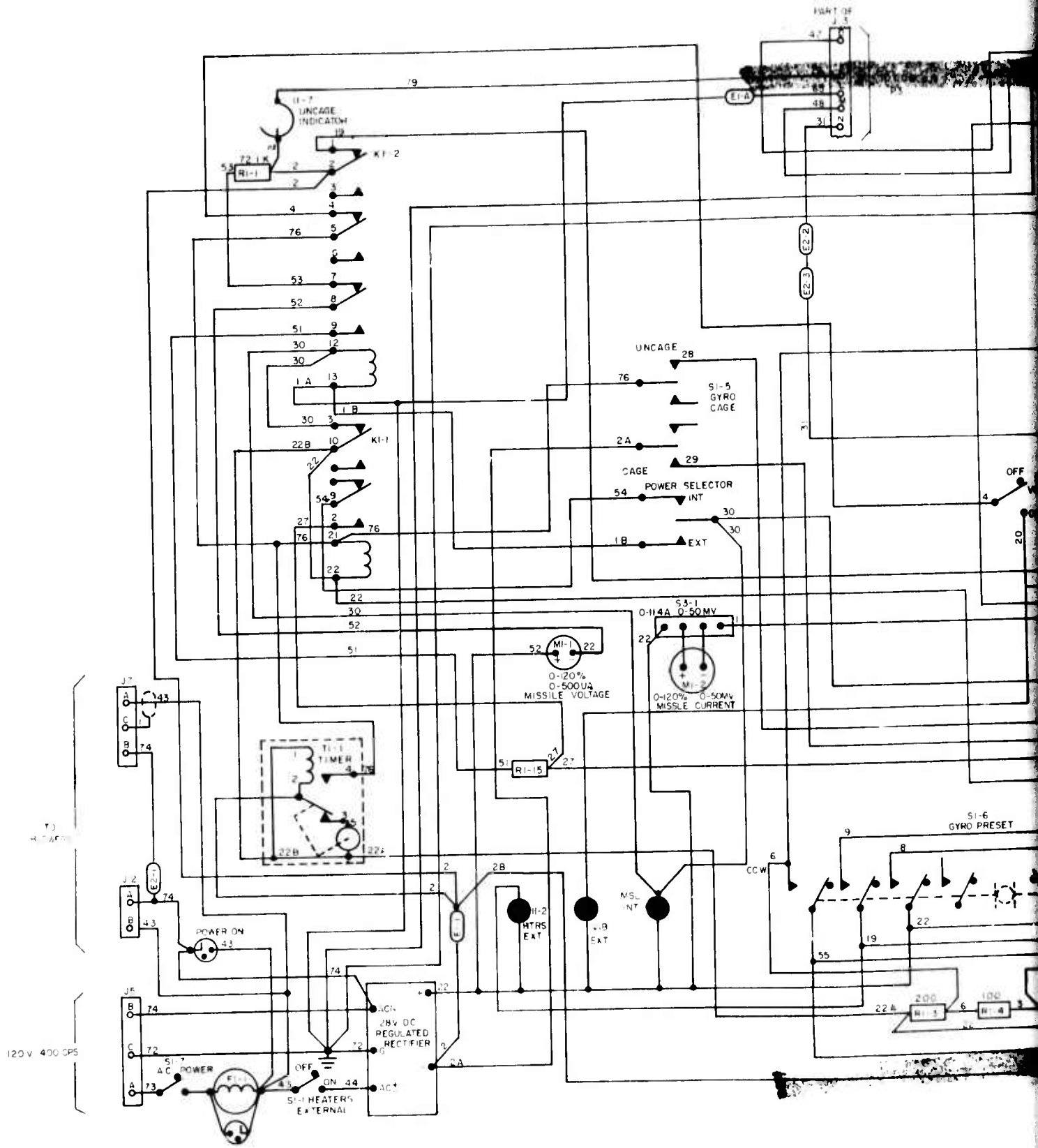

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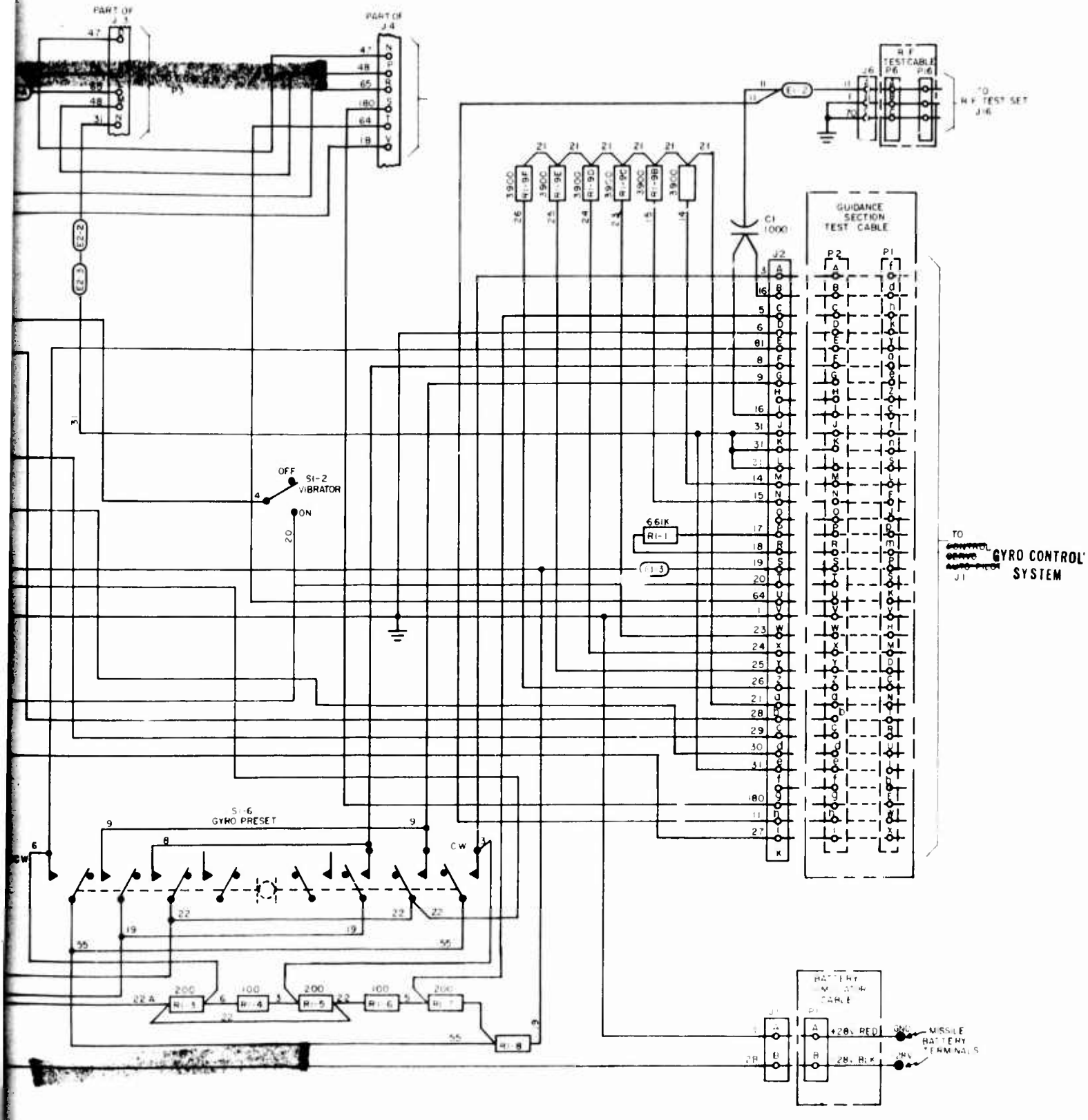
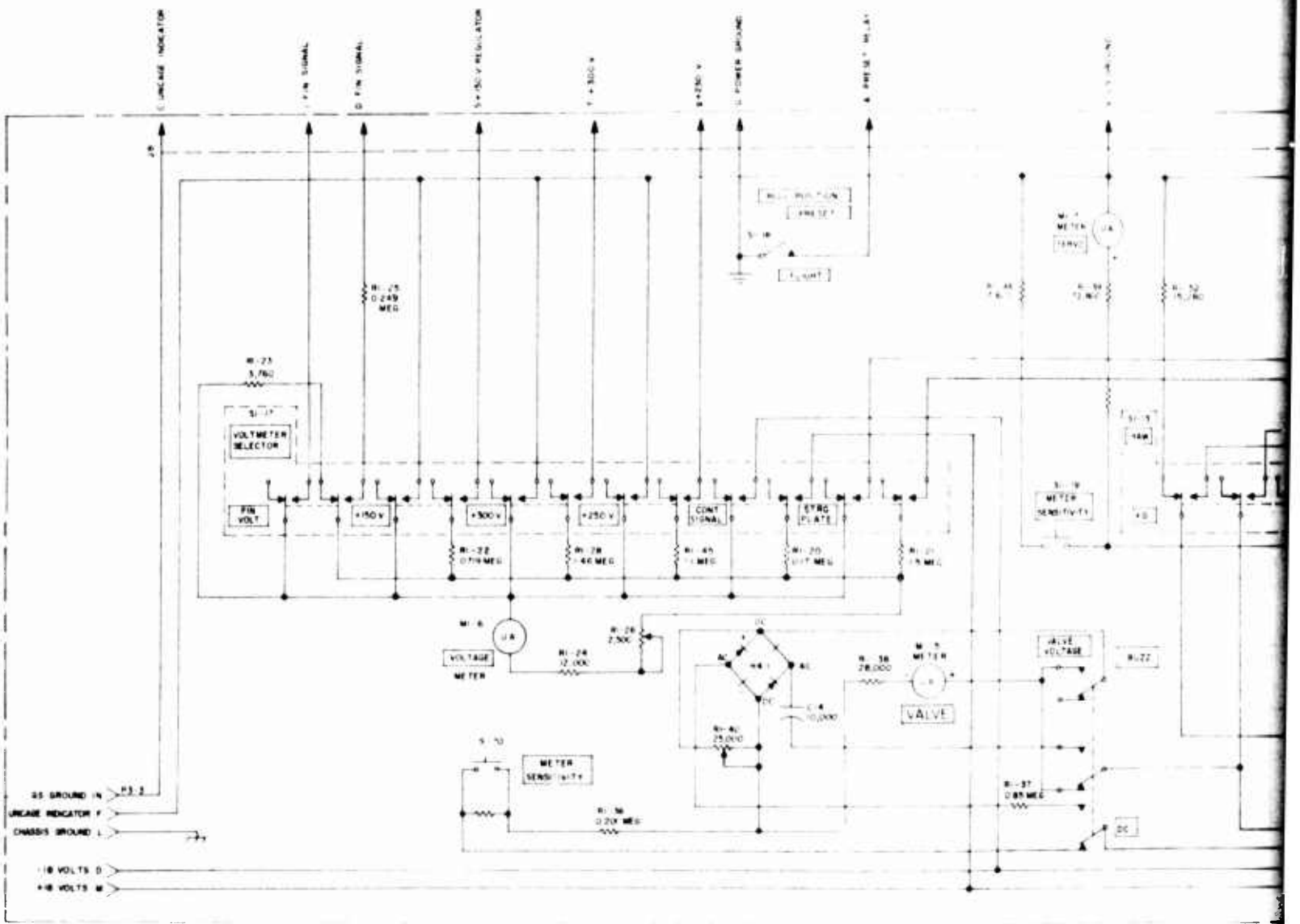


TEST POWER CONTROL UNIT, WIRING DIAGRAM



TEST CONTROL UNIT

Wiring diagram, ~~test control indicator panel~~ (sheet 1).

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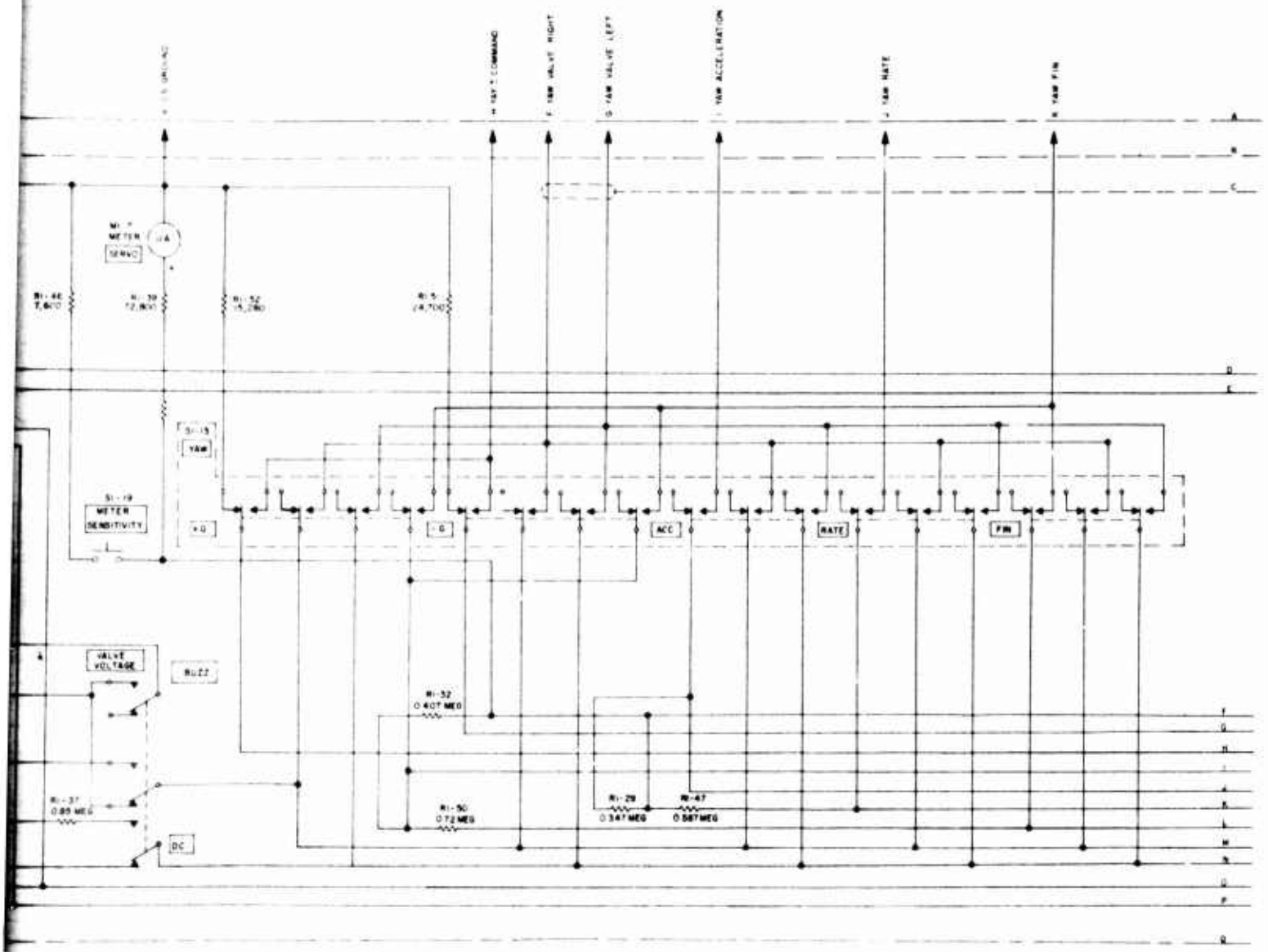

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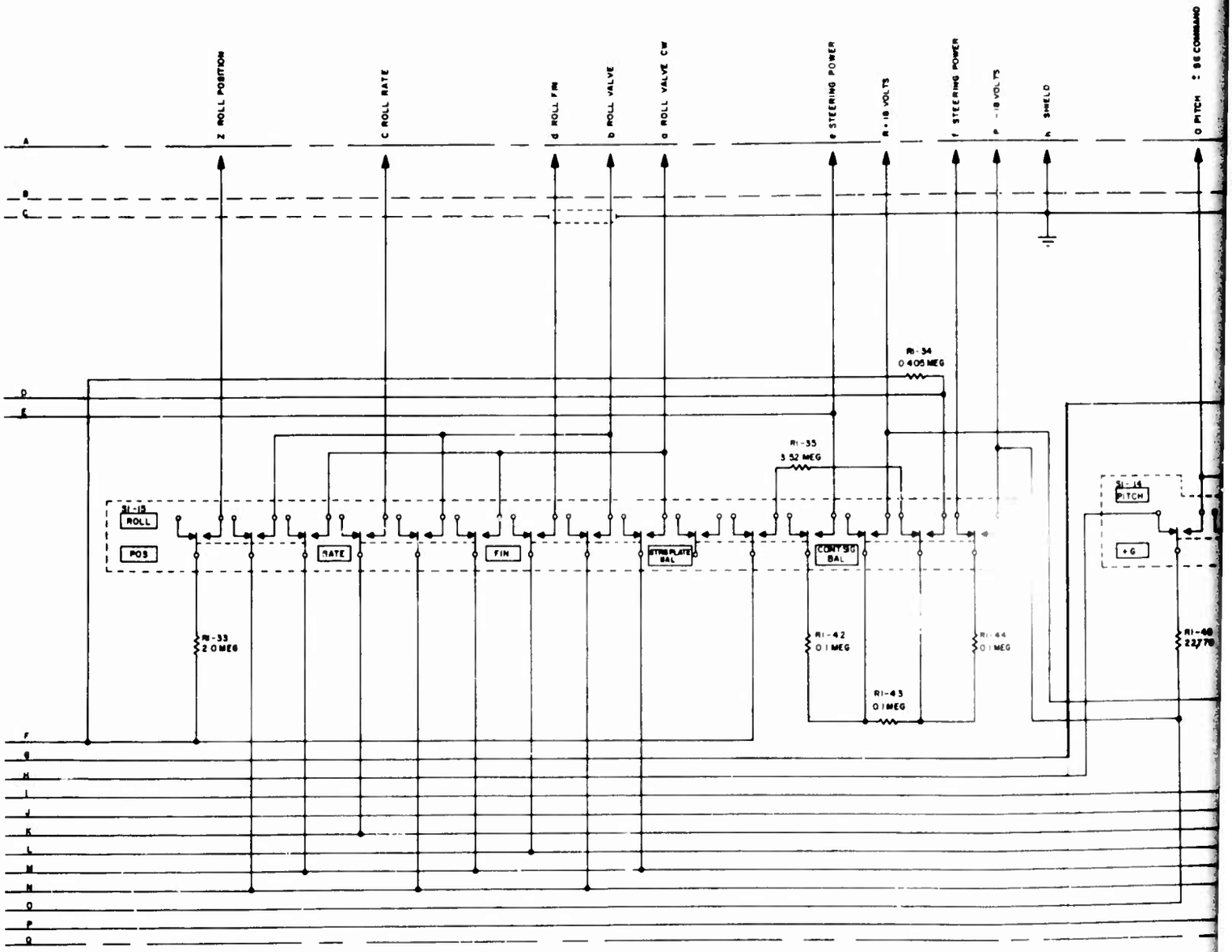

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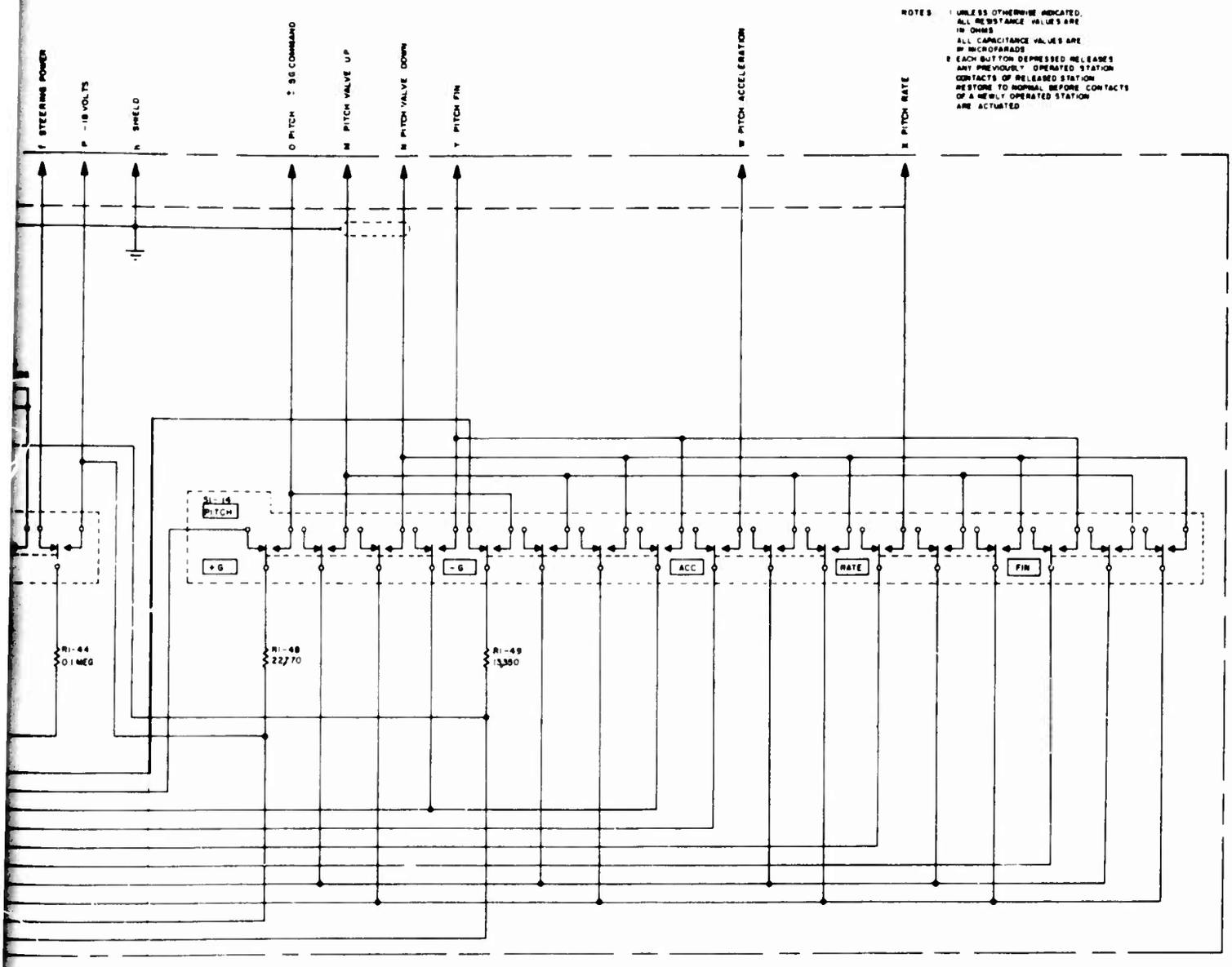
Wiring



TEST CONTROL UNIT

Wiring diagram, ~~test control indicator panel~~ (sheet 2).

ABBREVIATIONS

ac——alternating current
acc——accelerometer
acn——alternating current neutral
adj——adjust(able) (ing)
afc——automatic frequency control
al——aluminum
amp——ampere(s)
ampl——amplifier
ant——antenna
assy——assembly(ies)
atten——attenuator
bal——balance
cal——calibrate
cap——capacity, capacitor
cath——cathode
cav——cavity
ccs——command cal switch
ccw——counterclockwise
ckt——circuit
cl——clear
comm——common
comp——compensate
cont——control
cps——cycles per second
cs——control signal
cur——current
cw——clockwise, continuous wave(s)
db——decibel(s)
dc——direct current
dia——diameter
dpdt——double-pole, double-throw
dpst——double-pole, single-throw
ea——each
ext——external
fil——filament(s)
fl——flat
fm——frequency modulation
freq——frequency
gc——gate control
gnd——ground
h——height, high
hor——horizontal
htrs——heaters
hv——heavy
hy——henry(ies)
in——inch(es)
ind——inductance, induction, indicator
int——internal
kc——kilocycle(s)
lchr——launcher
lg——length, long
lp——low pass
lpf——low pass filter
ma——milliampere(s)
max——maximum
mc——megacycle(s)
meas——measure
med——medium
meg——megohm(s)
min——minimum, miniature, minute(s)
min-bay-base——miniature bayonet base
mod——modification, modulator
mon——monitor
mot——motor
mtd——mounted
mtg——mounting(s)
mv——multivibrator
nc——not connected, normally closed
No.——number(s)
nom——nominal
ord——Ordnance Corps
osc——oscillator
ped——pedestal
PMC——power meter cal
pos——positive
pri——primary

IONS

gate control	ps——pulse selector
ground	pwr——power
height, high	rc——relay control
horizontal	rd——round
heaters	rec——receive
heavy	rect——rectangular, rectifier
henry(ies)	reg——regular
inch(es)	rep——repetition
inductance, induction, indicator	rest——restore
internal	RF——radio frequency
kilocycle(s)	rpm——revolutions per minute
launcher	sec——seconds(s)
length, long	sens——sensitivity
low pass	sgle-fil——single filament
low pass filter	sgle-ph——single phase
milliampere(s)	sig——signal
maximum	sil——silver
megacycle(s)	spdt——single-pole, double-throw
measure	stght——straight
medium	strg——steering
megohm(s)	sw——switch
minimum, miniature, minute(s)	TCU——test control unit
miniature bayonet base	T/D's——time microseconds control
modification, modulator	term.——terminal(s)
monitor	thd——thread(ed) (s)
motor	TPCU——test power control unit
mounte	trans——transformer
mounti	TSS——test selector switch
multiv	ua—— microampere(s)
not conn , normally closed	uf——microfarad(s)
number(s)	uuf——micromicrofarad(s)
nominal	uh——microhenry(ies)
Ordnance Corps	usec——microsecond(s)
oscillator	V——volt(s)
pedestal	vert——vertical
power meter cal	w——watt, wide. width
positive	xtal——crystal
primary	