



AIR TRAINING COMMAND

COMPUTER SYSTEMS DEPARTMENT

AN/FSQ-7 DRUM SYSTEM

CHARTS & DIAGRAMS

5 JANUARY 1965

Course Nr. ABR30533-1

KEESLER AFB, MISS

This Schematics and Logic Diagrams Book provides student study material in support of Type II and Type III computer maintenance courses relating to WS416L.

SCHEMATICS
FOR
DRUM SYSTEM
OF
AN/FSQ-7
COMBAT DIRECTION CENTRAL
TRAINING MANUAL

1, September 1961

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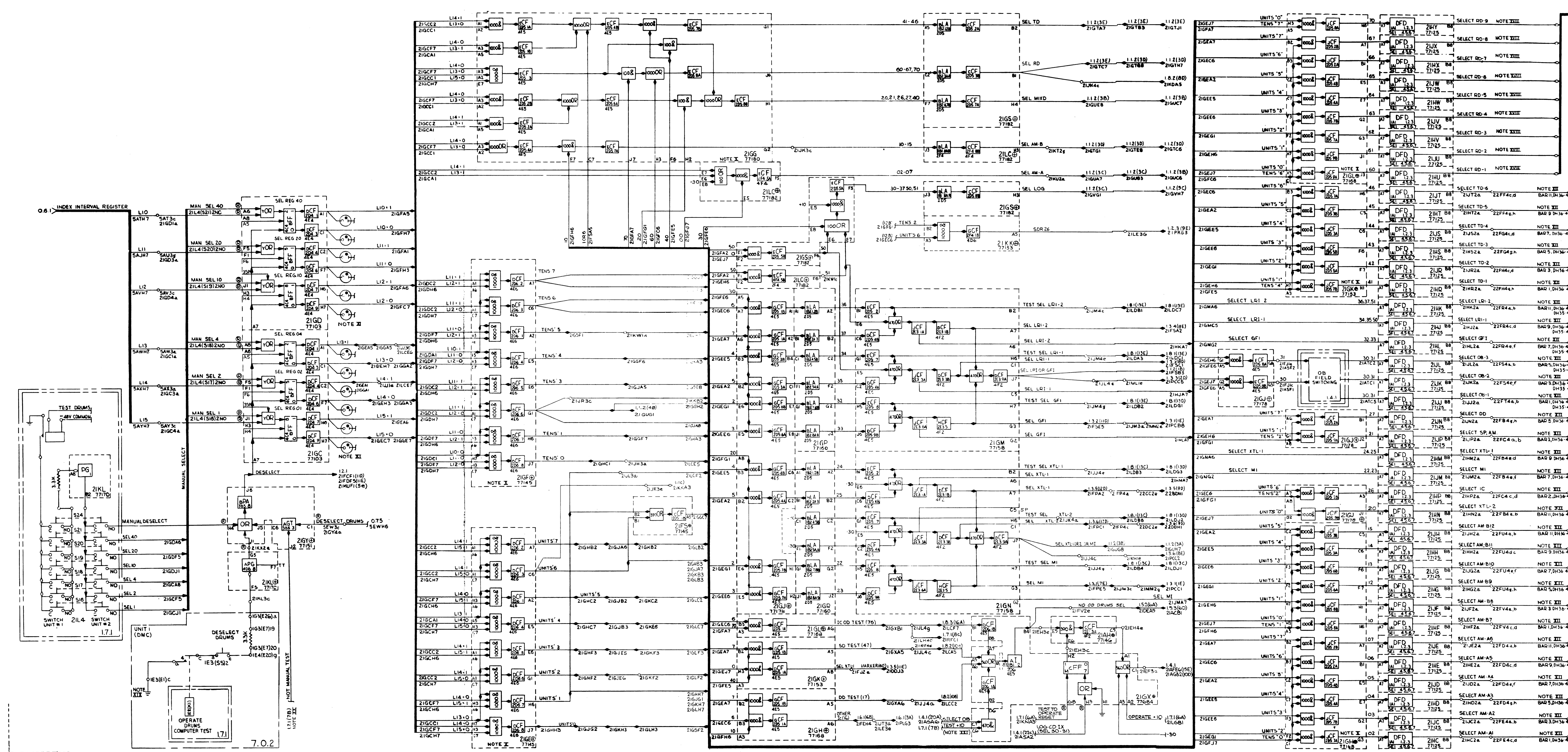
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LOGIC	DESCRIPTION
1. 0. 1	MODULE 21 A&B
1. 1. 1	7AIN DRUM SELECTION & DIODE SWITCH
1. 1. 1- 2	RD DRUM CD SELECTION & SWITCHING
1. 1. 2	MAIN DRUM TIMING & DISTRIBUTION
1. 2. 1	MAIN DRUM ADDRESSABLE CONTROL CIRCUIT
1. 2. 2	MAIN DRUMS CD READ CIRCUITS & READ BUS.
1. 2. 3	MAIN DRUMS APC & ALARM CIRCUITS
1. 3. 1	MANUAL INPUT STATUS CONTROLS
1. 3. 3	LONG RANGE RADAR INPUT NO. 1-OPERATE CIRCUITRY
1. 3. 4	LONG RANGE RADAR INPUT NO. 2-OPERATE CIRCUITRY
1. 3. 5	CROSSTELL OPERATE CIRCUITRY
1. 3. 6	SPARE CROSSTELL OPERATE CIRCUITRY
1. 4. 1	MAIN DRUM OUTPUT BUFFER STATUS OPERATE
1. 5. 1	SITUATION DISPLAY RD & TD OPERATE CIRCUITRY
1. 5. 2	SITUATION DISPLAY OD FIELD SWITCHING & READ CIRCUITRY
1. 5. 3	DIGITAL DISPLAY OD CONTROLS & READ CIRCUITS
1. 6. 1	OD IC FIELD COMP. A&B
1. 7. 1	MAIN DRUMS MANUAL CONTROLS
1. 7. 1- 2	MAIN DRUMS TEST PANEL NEON WIRING
1. 7. 2	MAIN DRUM MANUAL READ-WRITE CONTROLS
1. 7. 3	MAIN DRUM ERASE & WRITE INDEX & TIMING CHANNELS
1. 7. 3- 2	COMMON & SPECIAL SERVICE WIRING
1. 8. 1	MAIN DRUM LOOP TEST WRITE
1. 8. 2	MAIN DRUM LOOP TEST READ
1. 8. 3	INTERCOMMUNICATION TEST CONTROLS
1- 2. 1. 1	AXD DRUM SELECTION & DIODE SWITCHING
1- 2. 1. 2	AXD TIMING & DISTRIBUTION
1- 2. 2. 1	AXD DRUMS CONTROL & WRITE CIRCUITS
1- 2. 2. 2	AXD READ CIRCUITS
1. 2. 2. 3	AXD APC & ALARM CIRCUITS
1- 2. 3. 1	AUXILIARY DRUM UNIT MANUAL CONTROLS
1- 2. 3. 1- 2	AXD DRUMS TEST PANEL NEON WIRING
1- 2. 3. 2	AXD MANUAL TEST READ-WRITE CONTROLS
1- 2. 3. 3	AUXILIARY DRUMS ERASE & WRITE TIMING & INDEX CHANNELS



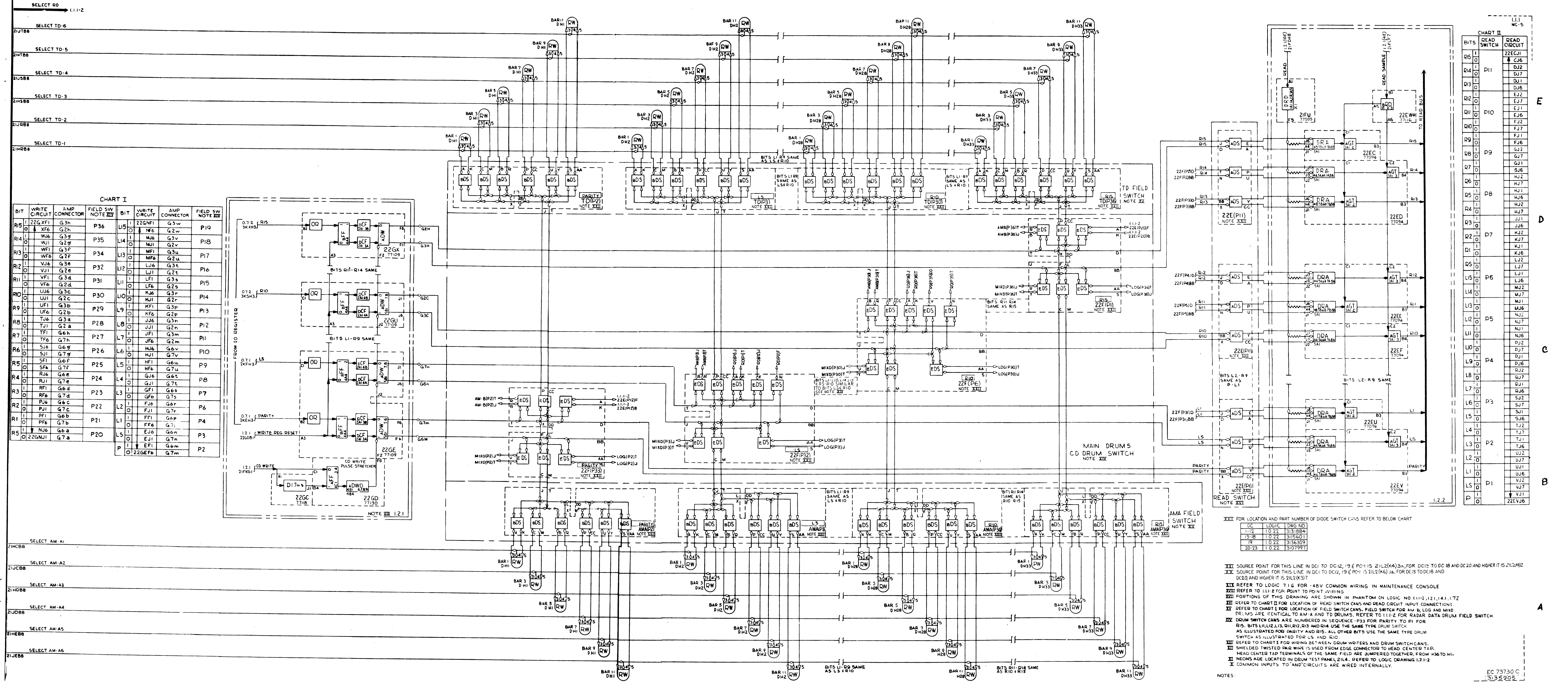


CHART I

BIT	WRITE CIRCUIT	AMP CONNECTOR	FIELD SW NOTE XX	BIT	WRITE CIRCUIT	AMP CONNECTOR	FIELD SW NOTE XX
R15	22GXF1	G3h	P36	L15	22GNI1	G3w	P19
R14	VF6	G3g	P35	L14	MF6	G2v	P18
R13	VF6	G2f	P34	L13	MF6	G2u	P17
R12	VJ6	G3e	P32	L12	LJ6	G3t	P16
R11	VF6	G2d	P31	L11	LF6	G3s	P15
R10	UJ6	G3c	P30	L10	KJ6	G2t	P14
R9	UF6	G2b	P29	L9	KF6	G3p	P13
R8	TJ6	G2a	P28	L8	JJ6	G2n	P12
R7	TF6	G7h	P27	L7	JF6	G3m	P11
R6	SJ6	G6g	P26	L6	HJ6	G6v	P10
R5	SF6	G6f	P25	L5	HF6	G6u	P9
R4	RJ6	G6e	P24	L4	GJ6	G6t	P8
R3	RF6	G6d	P23	L3	GF6	G6s	P7
R2	PJ6	G7c	P22	L2	FJ6	G6r	P6
R1	PF6	G6b	P21	L1	EJ6	G6q	P5
R5	22GNI1	G6a	P20	L5	EJ1	G7n	P3
				P	22GEF6	G7m	P2

CHART II

BITS	READ SWITCH	READ CIRCUIT
R5	1	22ECJ1
R4	0	DJ2
R3	1	DJ7
R2	0	DJ1
R1	0	DJ6
R10	1	EJ2
R9	0	EJ7
R8	1	EJ1
R7	0	EJ6
R6	1	FJ2
R5	0	FJ7
R4	1	FJ1
R3	0	FJ6
R2	1	GJ2
R1	0	GJ7
R10	1	GJ1
R9	0	HJ2
R8	1	HJ7
R7	0	HJ1
R6	1	HJ6
R5	0	HJ7
R4	1	IJ2
R3	0	IJ7
R2	1	IJ1
R1	0	IJ6
R10	1	IJ7
R9	0	JJ2
R8	1	JJ7
R7	0	JJ1
R6	1	JJ6
R5	0	KJ2
R4	1	KJ7
R3	0	KJ1
R2	1	KJ6
R1	0	KJ7
R10	1	LJ2
R9	0	LJ7
R8	1	LJ1
R7	0	LJ6
R6	1	MJ2
R5	0	MJ7
R4	1	NJ2
R3	0	NJ7
R2	1	NJ1
R1	0	NJ6
R10	1	PJ2
R9	0	PJ7
R8	1	PJ1
R7	0	PJ6
R6	1	RJ2
R5	0	RJ7
R4	1	RJ1
R3	0	RJ6
R2	1	SJ2
R1	0	SJ7
R10	1	SJ1
R9	0	SJ6
R8	1	TJ2
R7	0	TJ7
R6	1	TJ1
R5	0	TJ6
R4	1	UJ2
R3	0	UJ7
R2	1	UJ1
R1	0	UJ6
R10	1	VJ2
R9	0	VJ7
R8	1	VJ1
R7	0	VJ6
R6	1	WJ2
R5	0	WJ7
R4	1	WJ1
R3	0	WJ6
R2	1	XJ2
R1	0	XJ7
R10	1	XJ1
R9	0	XJ6
R8	1	YJ2
R7	0	YJ7
R6	1	YJ1
R5	0	YJ6
R4	1	ZJ2
R3	0	ZJ7
R2	1	ZJ1
R1	0	ZJ6
R10	1	ZJ7
R9	0	ZJ2
R8	1	ZJ1
R7	0	ZJ6
R6	1	ZJ7
R5	0	ZJ2
R4	1	ZJ1
R3	0	ZJ6
R2	1	ZJ7
R1	0	ZJ2
R10	1	ZJ1
R9	0	ZJ6
R8	1	ZJ7
R7	0	ZJ2
R6	1	ZJ1
R5	0	ZJ6
R4	1	ZJ7
R3	0	ZJ2
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R5	0	ZJ2
R4	1	ZJ1
R3	0	ZJ6
R2	1	ZJ7
R1	0	ZJ2
R10	1	ZJ1
R9	0	ZJ6
R8	1	ZJ7
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R5	0	Z

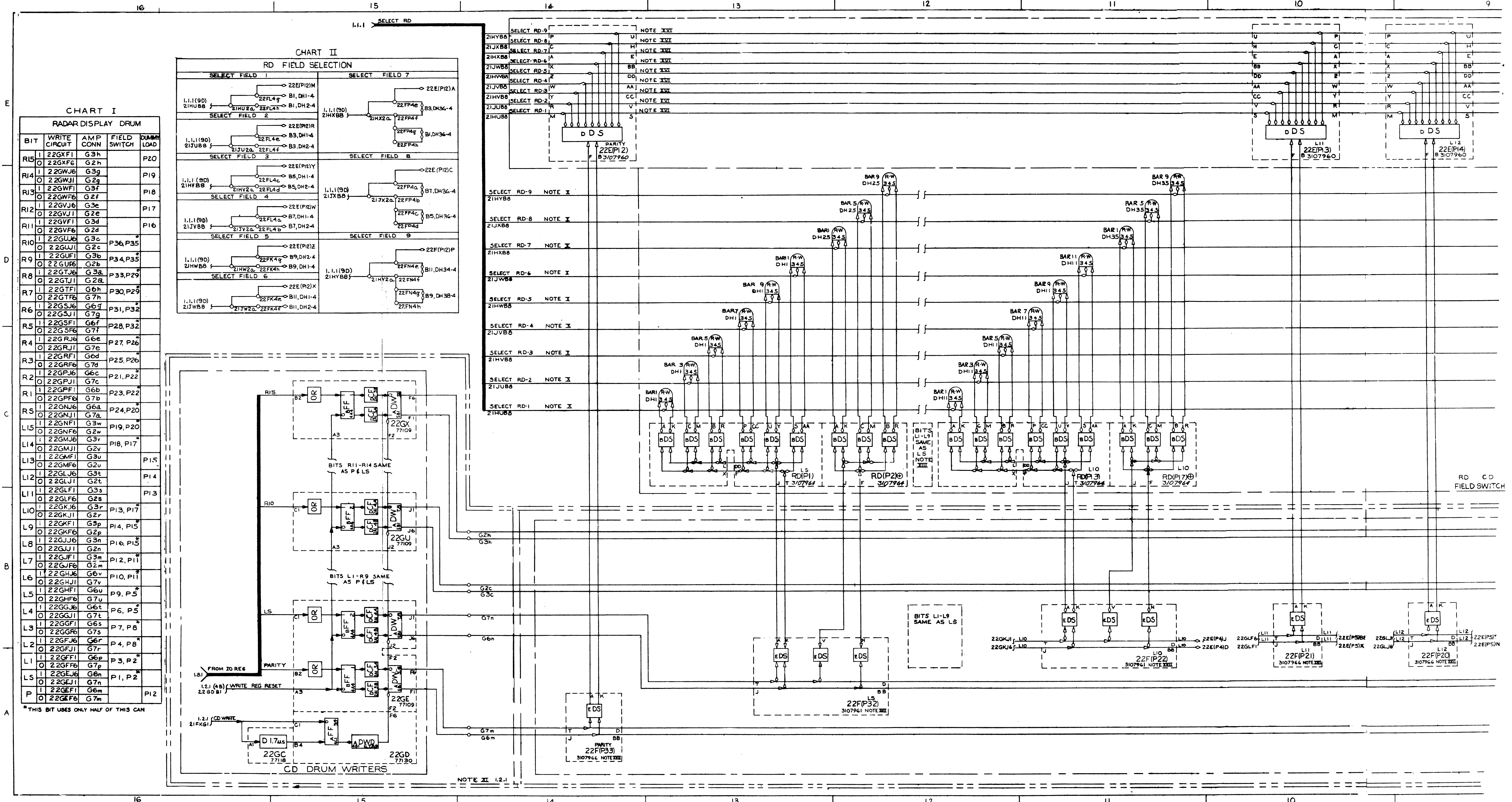
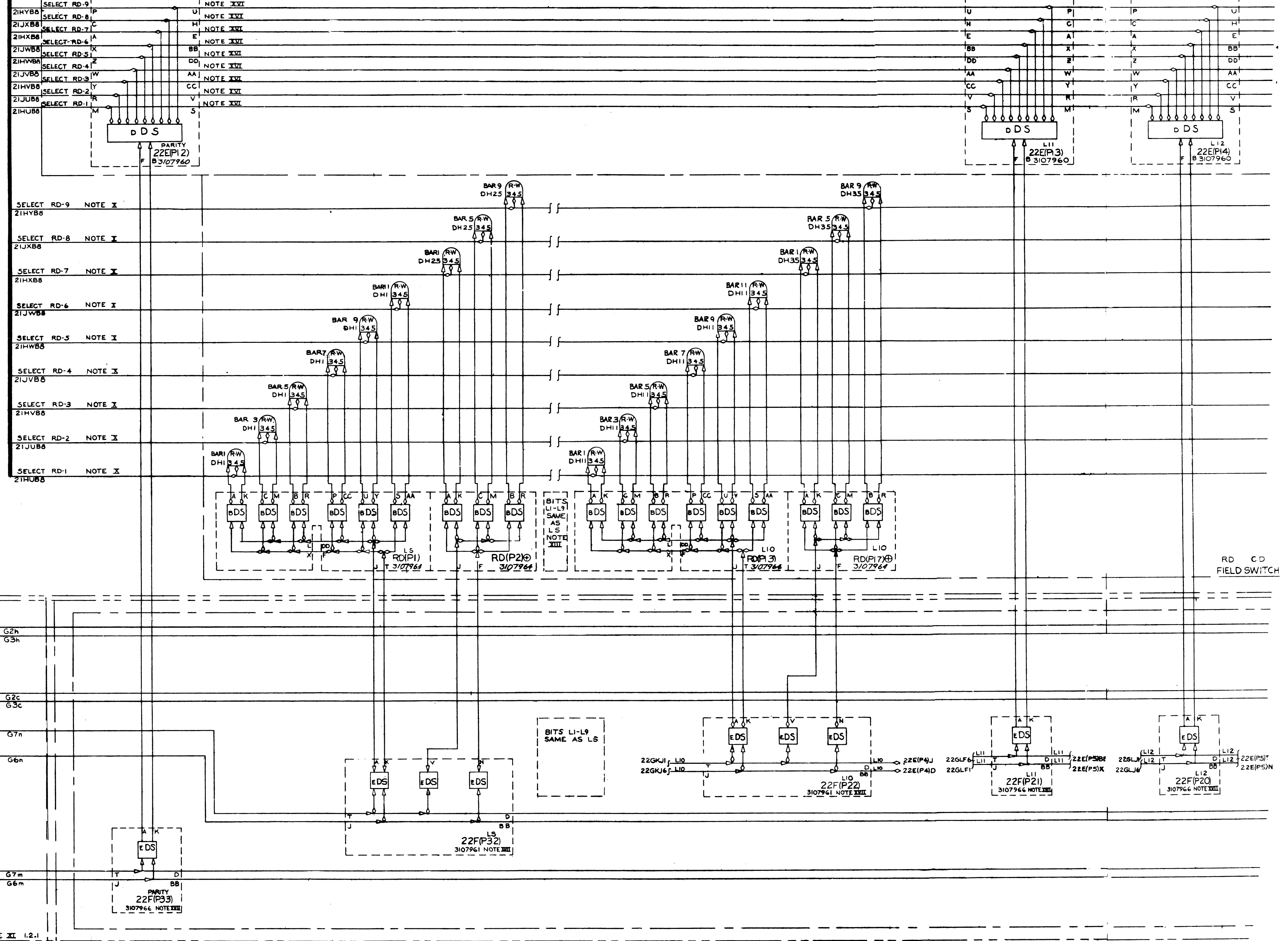
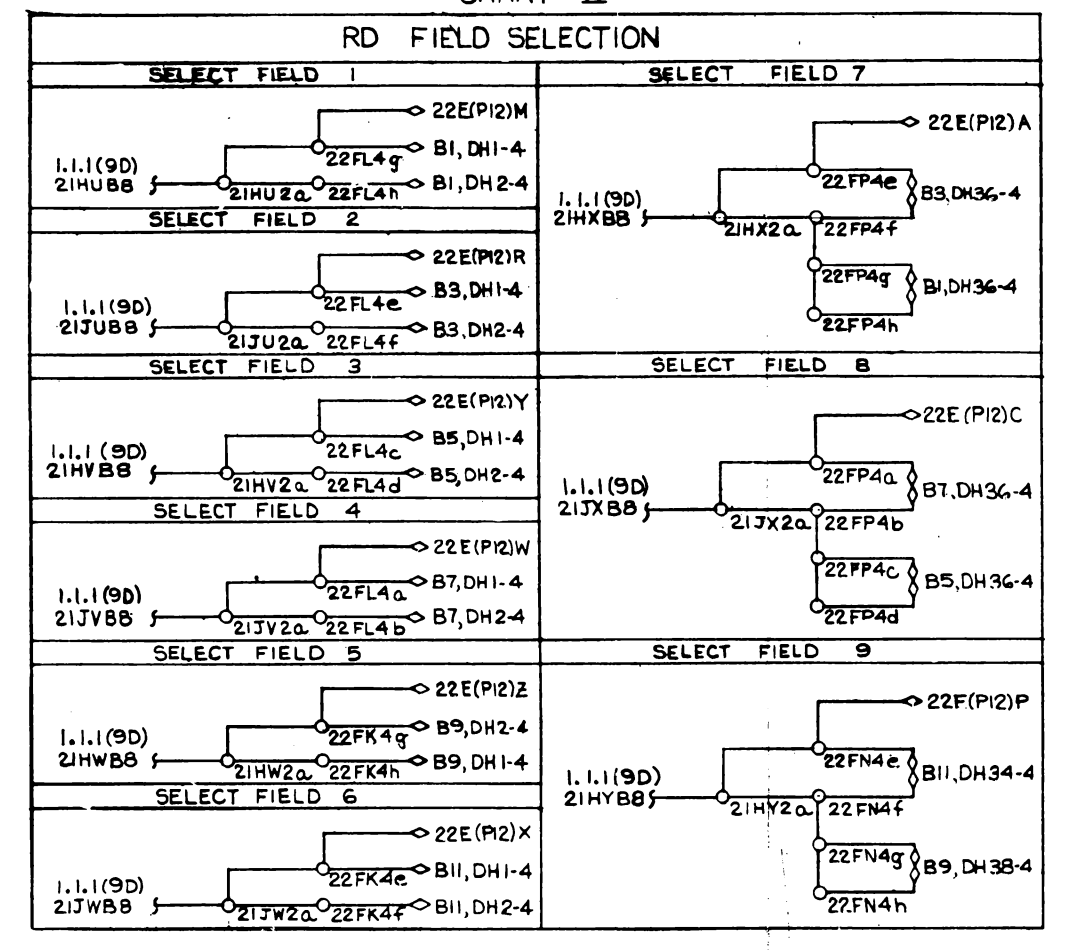
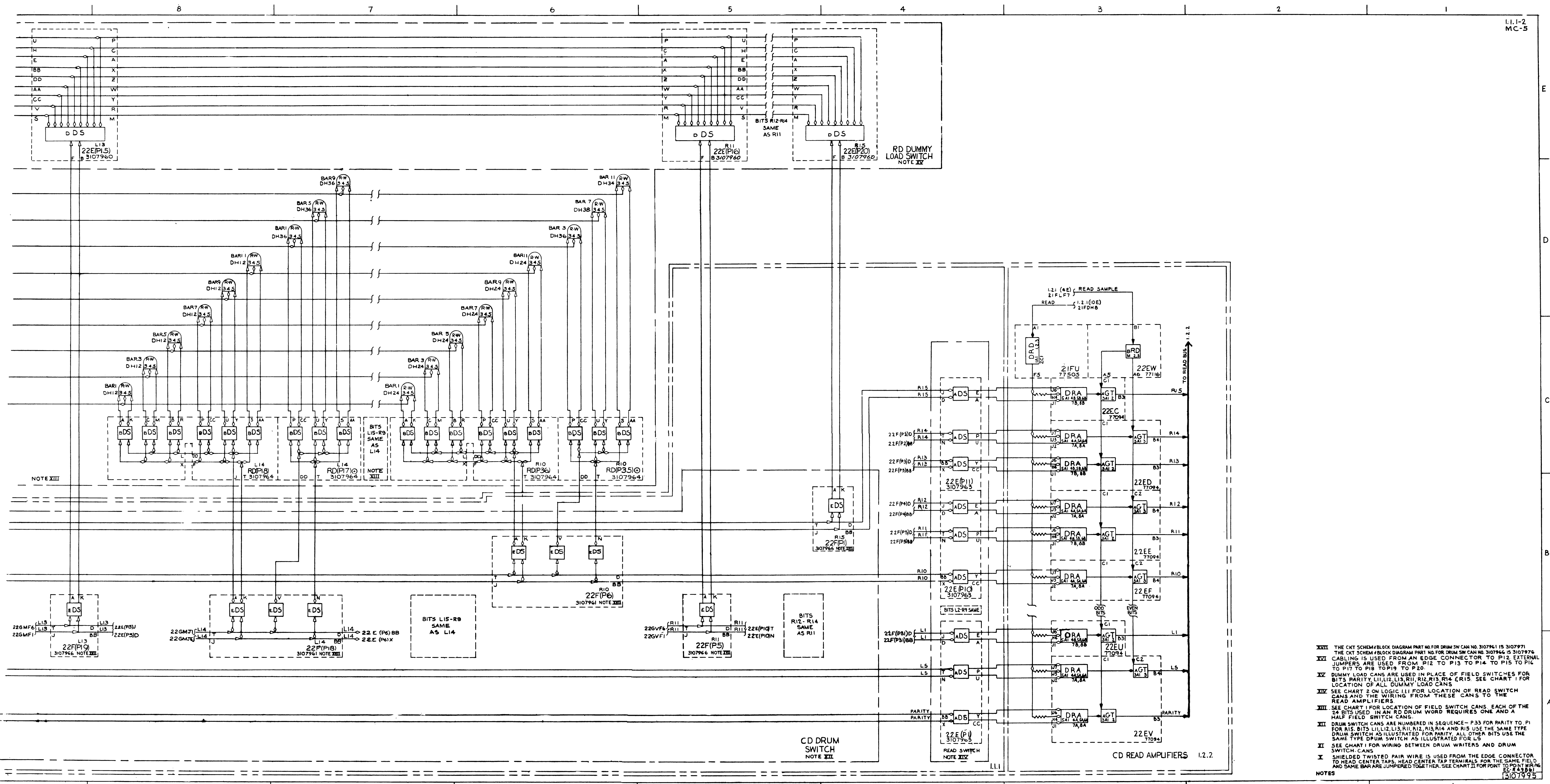


CHART I
RADAR DISPLAY DRUM

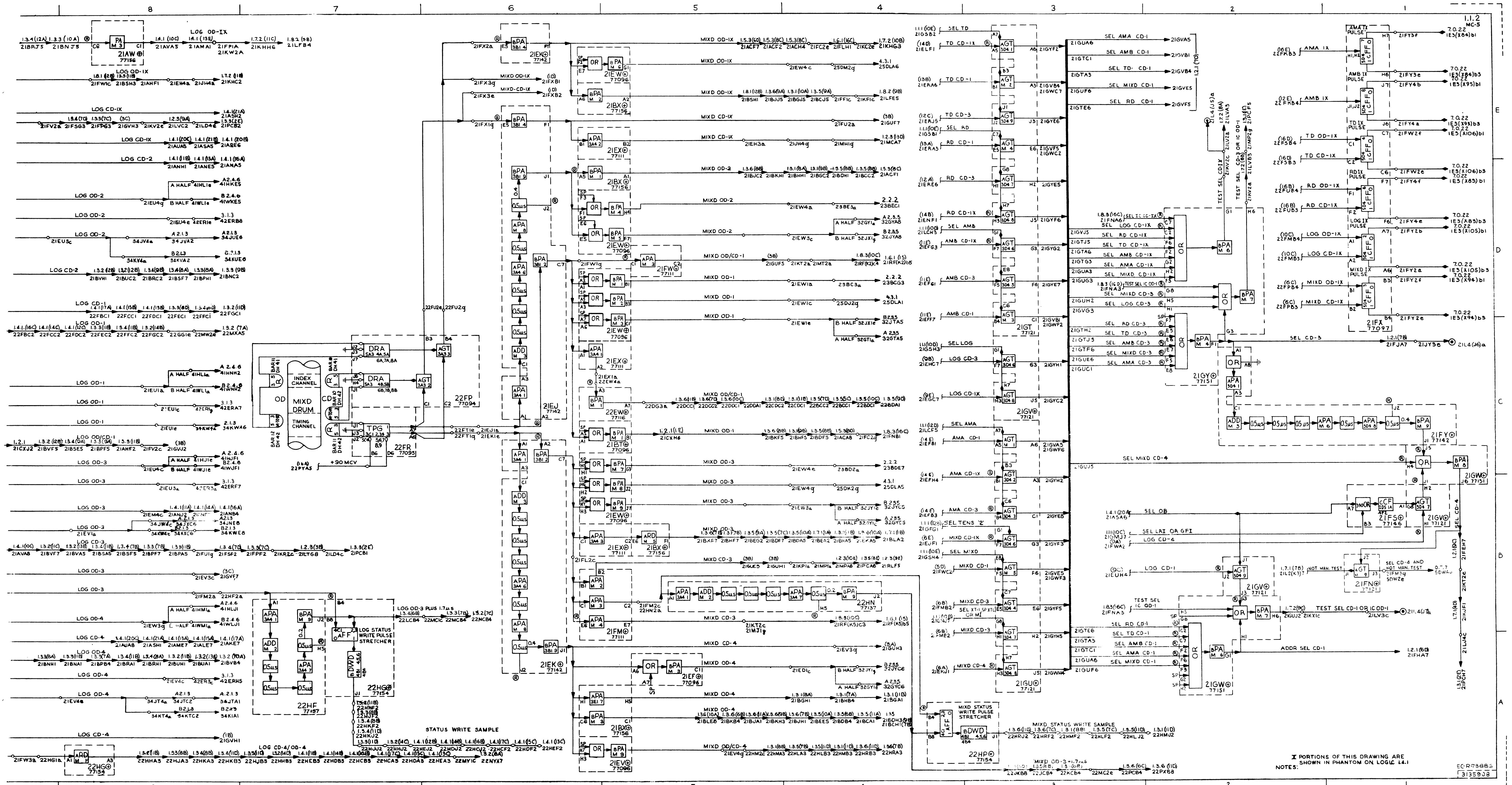
BIT	WRITE CIRCUIT	AMP CONN	FIELD SWITCH	DUMMY LOAD
R15	I 22GXF1	G3h		
O 22GXF6	G2h			
R14	I 22GWJ6	G3g		P19
O 22GWJ1	G2g			
R13	I 22GWF1	G3f		P18
O 22GWF6	G2f			
R12	I 22GVJ6	G3e		P17
O 22GVJ1	G2e			
R11	I 22GVF1	G3d		P16
O 22GVF6	G2d			
R10	I 22GUJ6	G3c	P36, P35	
O 22GUJ1	G2c			
R9	I 22GUF1	G3b	P34, P35	
O 22GUF6	G2b			
R8	I 22GTJ6	G3a	P33, P29	
O 22GTJ1	G2a			
R7	I 22GTF1	G6h	P30, P29	
O 22GTF6	G7h			
R6	I 22GSJ6	G6g	P31, P32	
O 22GSJ1	G7g			
R5	I 22GSF1	G6f	P28, P32	
O 22GSF6	G7f			
R4	I 22GRJ6	G6e	P27, P26	
O 22GRJ1	G7e			
R3	I 22GRF6	G6d	P25, P26	
O 22GRF1	G7d			
R2	I 22GFJ6	G6c	P21, P22	
O 22GFJ1	G7c			
R1	I 22GFF1	G6b	P23, P22	
O 22GFF6	G7b			
RS	I 22GNJ6	G6a	P24, P20	
O 22GNJ1	G7a			
L15	I 22GNF1	G5w	P19, P20	
O 22GNF6	G2w			
L14	I 22GMJ6	G5v	P18, P17	
O 22GMJ1	G2v			
L13	I 22GMF1	G5u	P15	
O 22GMF6	G2u			
L12	I 22GLJ6	G5t	P14	
O 22GLJ1	G2t			
L11	I 22GLF1	G5s	P13	
O 22GLF6	G2s			
L10	I 22GKJ6	G5r	P13, P17	
O 22GKJ1	G2r			
L9	I 22GKF1	G5p	P14, P15	
O 22GKF6	G2p			
L8	I 22GJ6	G5n	P16, P15	
O 22GJ1	G2n			
L7	I 22GF1	G5m	P12, P11	
O 22GF6	G2m			
L6	I 22GHJ6	G5v	P10, P11	
O 22GHJ1	G2v			
L5	I 22GHF1	G5u	P9, P5	
O 22GHF6	G2u			
L4	I 22GGJ6	G5t	P6, P5	
O 22GGJ1	G2t			
L3	I 22GFF1	G5s	P7, P8	
O 22GFF6	G2s			
L2	I 22GFJ6	G5r	P4, P8	
O 22GFJ1	G2r			
L1	I 22GFF1	G5p	P3, P2	
O 22GFF6	G2p			
LS	I 22GEJ6	G5n	P1, P2	
O 22GEJ1	G2n			
P	I 22GEF1	G5m	P12	
O 22GEF6	G2m			

*THIS BIT USES ONLY HALF OF THIS CAN





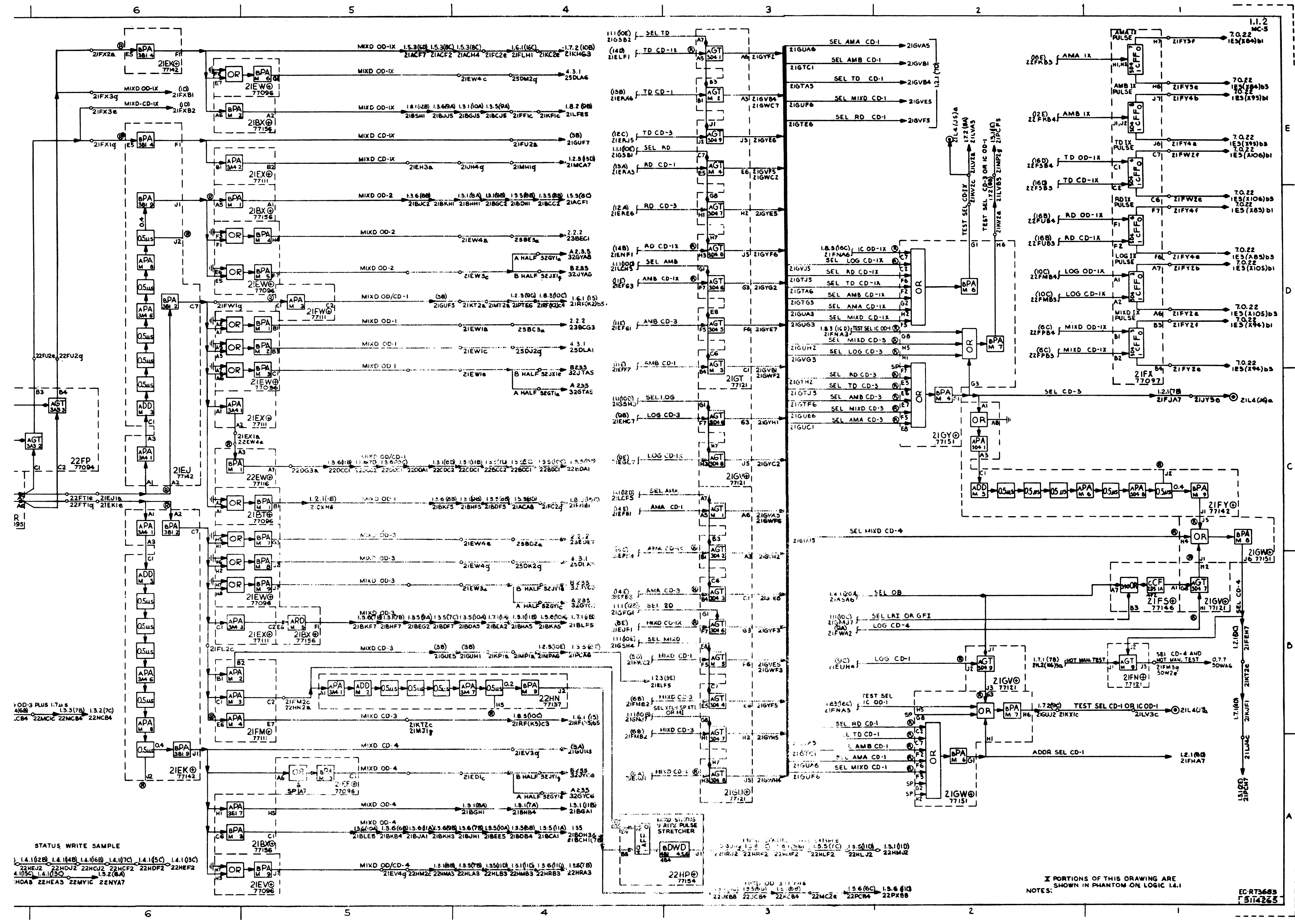
- XVIII THE CKT SCHEM/BLOCK DIAGRAM PART NO FOR DRUM SW CAN NO 3107961 IS 3107971
- XIX THE CKT SCHEM/BLOCK DIAGRAM PART NO FOR DRUM SW CAN NO 3107964 IS 3107976
- XX CABLING IS USED FROM AN EDGE CONNECTOR TO P12. EXTERNAL JUMPERS ARE USED FROM P12 TO P13 TO P14 TO P15 TO P16 TO P17 TO P18 TO P19 TO P20
- XXI DUMMY LOAD CANS ARE USED IN PLACE OF FIELD SWITCHES FOR BITS PARITY L11, L12, L13, R11, R12, R13, R14 & R15. SEE CHART I FOR LOCATION OF ALL DUMMY LOAD CANS
- XXII SEE CHART 2 ON LOGIC I/II FOR LOCATION OF READ SWITCH CANS AND THE WIRING FROM THESE CANS TO THE READ AMPLIFIERS
- XXIII SEE CHART I FOR LOCATION OF FIELD SWITCH CANS. EACH OF THE 24 BITS USED IN AN RD DRUM WORD REQUIRES ONE AND A HALF FIELD SWITCH CANS
- XXIV DRUM SWITCH CANS ARE NUMBERED IN SEQUENCE - P33 FOR PARITY TO P1 FOR R15, BITS L11, L12, L13, R11, R12, R13, R14 AND R15 USE THE SAME TYPE DRUM SWITCH AS ILLUSTRATED FOR PARITY. ALL OTHER BITS USE THE SAME TYPE DRUM SWITCH AS ILLUSTRATED FOR LS
- XXV SEE CHART I FOR WIRING BETWEEN DRUM WRITERS AND DRUM SWITCH CANS
- XXVI SHIELDED TWISTED PAIR WIRE IS USED FROM THE EDGE CONNECTOR TO HEAD CENTER TAPS. HEAD CENTER TAP TERMINALS FOR THE SAME FIELD AND SAME BAR ARE JUMPED TOGETHER. SEE CHART II FOR POINT TO POINT WIRING



MAIN DRUM TIMING AND DISTRIBUTION

PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC 14.1

EC-73885
1315598

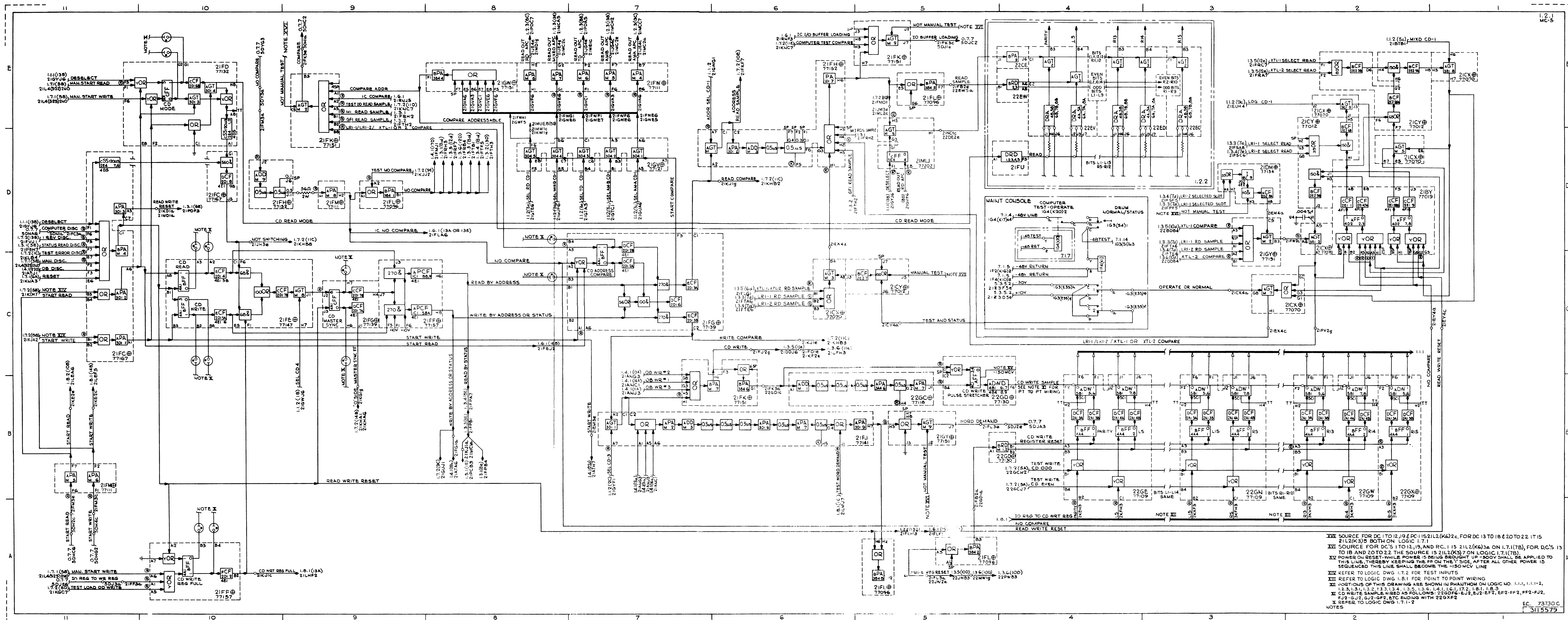


STATUS WRITE SAMPLE
 1.4.102B 1.4.104B 1.4.106B 1.4.107C 1.4.109C 1.4.103C
 2.24EJ2 2.24HJ2 2.24KJ2 2.24LJ2 2.24MJ2 2.24NJ2 2.24OJ2
 4.105A 1.4.105C 1.3.2(6A) 1.3.2(6B)
 HOAB 2.2HEA3 2.2MVC 2.2NYA7

NOTES:
 X PORTIONS OF THIS DRAWING ARE
 SHOWN IN PHANTOM ON LOGIC L.1.

EC-R73683
 5114263

MAIN DRUM TIMING AND DISTRIBUTION



XVI SOURCE FOR DC 11 TO 12, 19 IS PC11521L2(K6)2c, FOR DC 13 TO 18 & 20 TO 22 IT IS 21L2(K3)8 BOTH ON LOGIC 1.7.1
 XVII SOURCE FOR DC'S 11 TO 12, 19 AND PC 1.15 21L2(K6)3c ON 1.7.1(7B), FOR DC'S 13 TO 18 AND 20 TO 22 THE SOURCE IS 21L1(K3)7 ON LOGIC 1.7.1(7B)
 XVIII POWER ON RESET WHILE POWER IS BEING BROUGHT UP -800V SHALL BE APPLIED TO THIS LINE, THEREBY KEEPING THE FF ON THE "1" SIDE, AFTER ALL OTHER POWER IS SEQUENCED THIS LINE SHALL BECOME THE -180VDC V LINE
 XIX REFER TO LOGIC DWG 1.7.2 FOR TEST INPUTS
 XX REFER TO LOGIC DWG 1.8.1 FOR POINT TO POINT WIRING
 XXI PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC NO. 1.1.1, 1.1-2, 1.2.3, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.3.6, 1.4.1, 1.6.1, 1.7.2, 1.8.1, 1.8.3, 1.9.1, 1.9.2, 1.9.3, 1.9.4, 1.9.5, 1.9.6, 1.9.7, 1.9.8, 1.9.9, 1.9.10, 1.9.11, 1.9.12, 1.9.13, 1.9.14, 1.9.15, 1.9.16, 1.9.17, 1.9.18, 1.9.19, 1.9.20, 1.9.21, 1.9.22, 1.9.23, 1.9.24, 1.9.25, 1.9.26, 1.9.27, 1.9.28, 1.9.29, 1.9.30, 1.9.31, 1.9.32, 1.9.33, 1.9.34, 1.9.35, 1.9.36, 1.9.37, 1.9.38, 1.9.39, 1.9.40, 1.9.41, 1.9.42, 1.9.43, 1.9.44, 1.9.45, 1.9.46, 1.9.47, 1.9.48, 1.9.49, 1.9.50, 1.9.51, 1.9.52, 1.9.53, 1.9.54, 1.9.55, 1.9.56, 1.9.57, 1.9.58, 1.9.59, 1.9.60, 1.9.61, 1.9.62, 1.9.63, 1.9.64, 1.9.65, 1.9.66, 1.9.67, 1.9.68, 1.9.69, 1.9.70, 1.9.71, 1.9.72, 1.9.73, 1.9.74, 1.9.75, 1.9.76, 1.9.77, 1.9.78, 1.9.79, 1.9.80, 1.9.81, 1.9.82, 1.9.83, 1.9.84, 1.9.85, 1.9.86, 1.9.87, 1.9.88, 1.9.89, 1.9.90, 1.9.91, 1.9.92, 1.9.93, 1.9.94, 1.9.95, 1.9.96, 1.9.97, 1.9.98, 1.9.99, 1.9.100
 XXII REFER TO LOGIC DWG 1.7.1-2
 NOTES

MAIN DRUM ADDRESSABLE CONTROL CIRCUIT

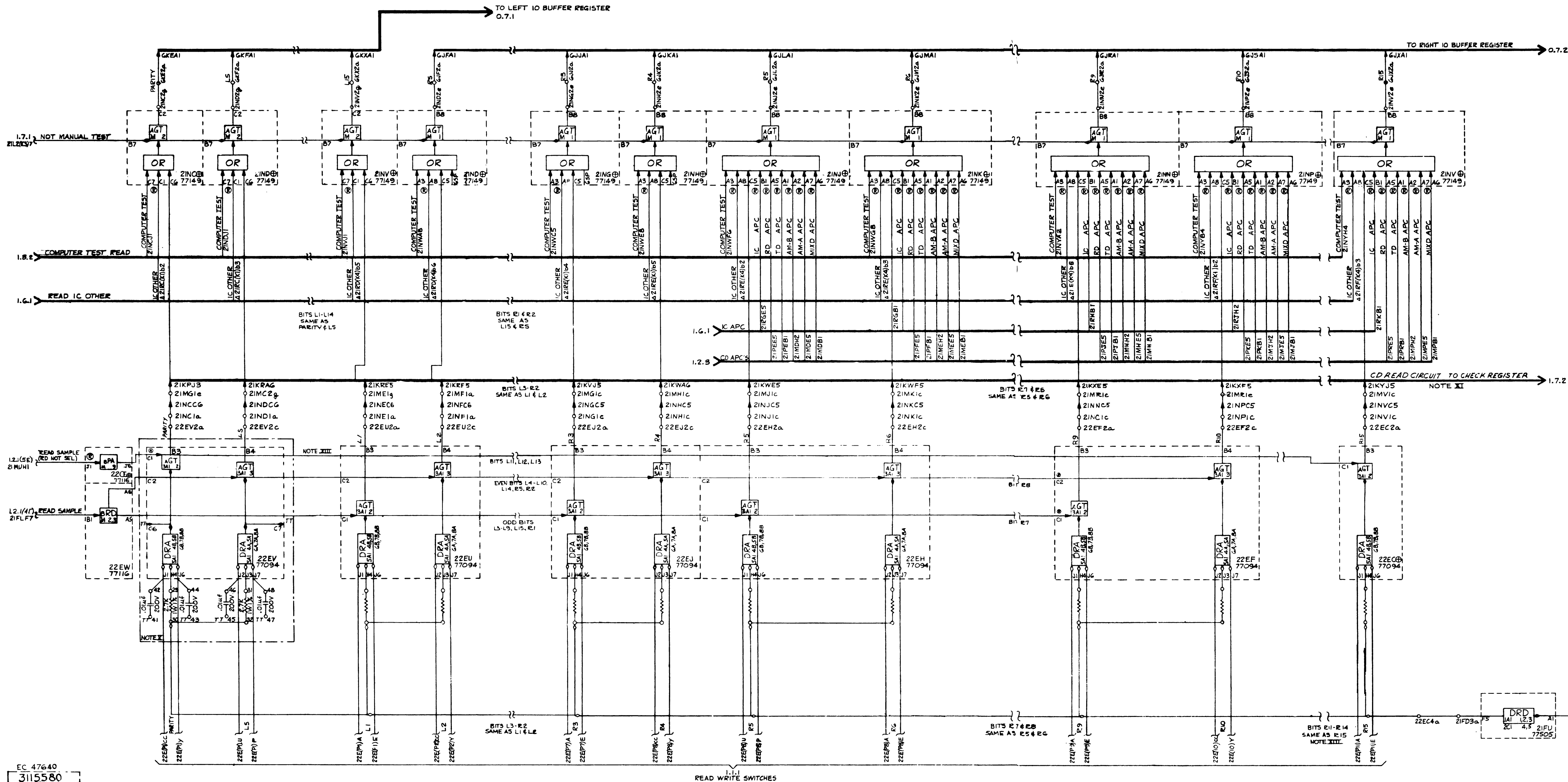


CHART II
READ SAMPLE (RED NOT SEL)

BIT	P.U. PIN
P	22CE16
L5	22EC10
L4	22EC11
L3	22EC12
L2	22EC13
L1	22EC14
L0	22EC15
L15	22EC17
L14	22EC18
L13	22EC19
L12	22EC20
L11	22EC21
L10	22EC22
L9	22EC23
L8	22EC24
L7	22EC25
L6	22EC26
L5	22EC27
L4	22EC28
L3	22EC29
L2	22EC30
L1	22EC31
L0	22EC32

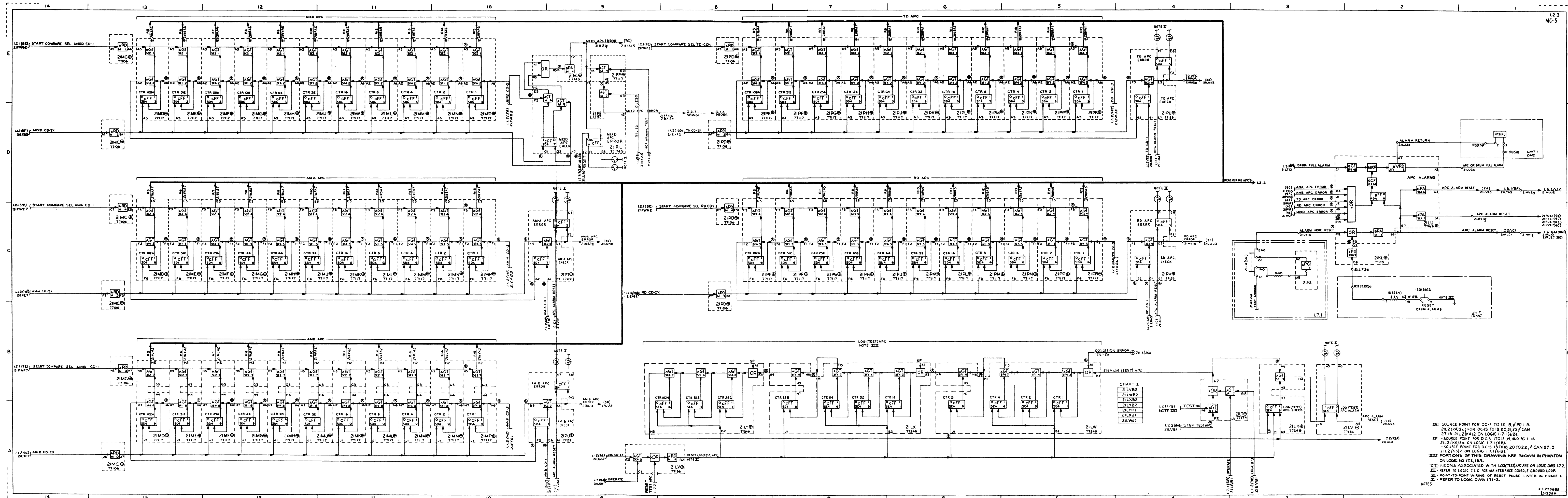
CHART I

BIT	LOGIC 1.2.2 DRA	EDGE CONNECTOR	LOGIC 1.2.2 CD READ BUS	EDGE CONNECTOR	LOGIC 1.7.2 CHECK REGISTER
P	22EV83	22EV2a	21NVC6	21MGB	21KJUB
L5	22EV84	22C	21NVC7	21MGC	21KJUB
L4	22EV85	22C	21NVC8	21MGE	21KJUB
L3	22EV86	22C	21NVC9	21MGF	21KJUB
L2	22EV87	22C	21NVC10	21MGH	21KJUB
L1	22EV88	22C	21NVC11	21MGI	21KJUB
L0	22EV89	22C	21NVC12	21MGJ	21KJUB
L15	22EV90	22C	21NVC13	21MGK	21KJUB
L14	22EV91	22C	21NVC14	21MGL	21KJUB
L13	22EV92	22C	21NVC15	21MGM	21KJUB
L12	22EV93	22C	21NVC16	21MGN	21KJUB
L11	22EV94	22C	21NVC17	21MGO	21KJUB
L10	22EV95	22C	21NVC18	21MGP	21KJUB
L9	22EV96	22C	21NVC19	21MGQ	21KJUB
L8	22EV97	22C	21NVC20	21MGK	21KJUB
L7	22EV98	22C	21NVC21	21MGR	21KJUB
L6	22EV99	22C	21NVC22	21MGS	21KJUB
L5	22EV100	22C	21NVC23	21MGT	21KJUB
L4	22EV101	22C	21NVC24	21MGU	21KJUB
L3	22EV102	22C	21NVC25	21MGV	21KJUB
L2	22EV103	22C	21NVC26	21MGW	21KJUB
L1	22EV104	22C	21NVC27	21MGX	21KJUB
L0	22EV105	22C	21NVC28	21MGY	21KJUB
L15	22EV106	22C	21NVC29	21MGZ	21KJUB
L14	22EV107	22C	21NVC30	21MGA	21KJUB
L13	22EV108	22C	21NVC31	21MGB	21KJUB
L12	22EV109	22C	21NVC32	21MGC	21KJUB
L11	22EV110	22C	21NVC33	21MGD	21KJUB
L10	22EV111	22C	21NVC34	21MGE	21KJUB
L9	22EV112	22C	21NVC35	21MGF	21KJUB
L8	22EV113	22C	21NVC36	21MGG	21KJUB
L7	22EV114	22C	21NVC37	21MGH	21KJUB
L6	22EV115	22C	21NVC38	21MGI	21KJUB
L5	22EV116	22C	21NVC39	21MGJ	21KJUB
L4	22EV117	22C	21NVC40	21MGK	21KJUB
L3	22EV118	22C	21NVC41	21MGL	21KJUB
L2	22EV119	22C	21NVC42	21MGM	21KJUB
L1	22EV120	22C	21NVC43	21MGN	21KJUB
L0	22EV121	22C	21NVC44	21MGO	21KJUB
L15	22EV122	22C	21NVC45	21MGP	21KJUB
L14	22EV123	22C	21NVC46	21MGQ	21KJUB
L13	22EV124	22C	21NVC47	21MGR	21KJUB
L12	22EV125	22C	21NVC48	21MGS	21KJUB
L11	22EV126	22C	21NVC49	21MGT	21KJUB
L10	22EV127	22C	21NVC50	21MGU	21KJUB
L9	22EV128	22C	21NVC51	21MGV	21KJUB
L8	22EV129	22C	21NVC52	21MGW	21KJUB
L7	22EV130	22C	21NVC53	21MGX	21KJUB
L6	22EV131	22C	21NVC54	21MGY	21KJUB
L5	22EV132	22C	21NVC55	21MGZ	21KJUB
L4	22EV133	22C	21NVC56	21MGA	21KJUB
L3	22EV134	22C	21NVC57	21MGB	21KJUB
L2	22EV135	22C	21NVC58	21MGC	21KJUB
L1	22EV136	22C	21NVC59	21MGD	21KJUB
L0	22EV137	22C	21NVC60	21MGE	21KJUB

NOTES:
 XIII REFER TO CHART II FOR POINT TO POINT WIRING.
 XII PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC W-111, 112, 121, 131, 132, 133, 134, 135, 136, 161, 172, 182, 183.
 XI REFER TO CHART I FOR WIRING SEQUENCE OF DRA OUTPUTS COMPONENTS & TEST TERMINALS SHOWN IN PU 22EV ARE THE SAME FOR ALL DRAS.
 X

FC 47640
3115580

MAIN DRUMS CD READ CIRCUITS AND READ BUS



- XVI SOURCE POINT FOR DC-1 TO 12, 19, PC-1 15
- XVII SOURCE POINT FOR DC-13 TO 18, PC-2 12/17 CAN 27 IS 2IL2K412 ON LOGIC 1.7.1(4.6)
- XVIII SOURCE POINT FOR DC-5, 10 TO 12, AND PC-1 15
- XIX SOURCE POINT FOR DC-3, 13 TO 16, 20 TO 22, CAN 27 IS 2IL2K412 ON LOGIC 1.7.1(6.8)
- XX PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC NO. 17.1.8.
- XXI NEONS ASSOCIATED WITH LOGTESTAPC ARE ON LOGIC 1.7.2
- XXII REFER TO LOGIC 7.1.4 FOR MAINTENANCE CONSOLE GROUND LOOP
- XXIII POINT-TO-POINT WIRING OF RESET PLACK LISTED IN CHART 1.
- XXIV REFER TO LOGIC DWG 17.1-2.

MAIN DRUMS APC & ALARM CIRCUITS

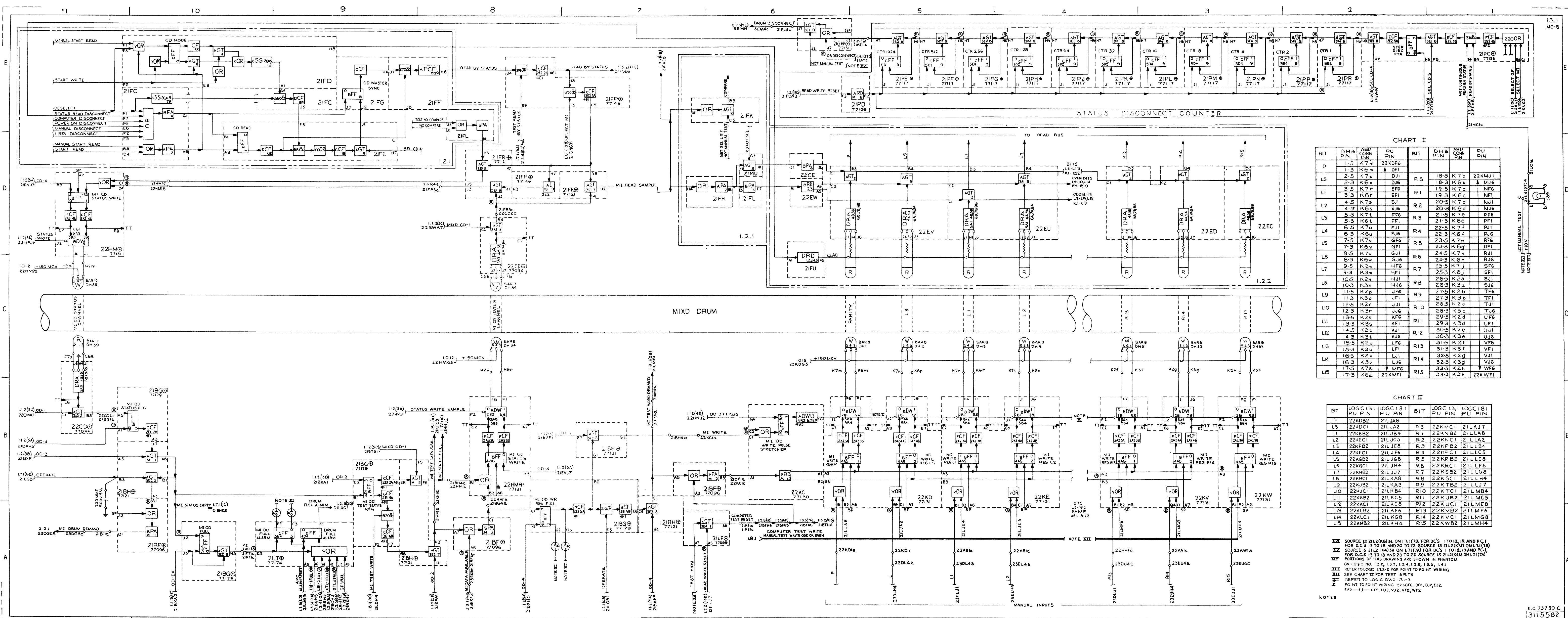


CHART I

BIT	DH & PIN	AND CONN PIN	PU PIN	BIT	DH & PIN	AND CONN PIN	PU PIN
D	1-5 K7 m	22K0F6		R5	18-5 K7 b	22KMJ1	
LS	2-5 K7 p	DJ1		R6	18-3 K6 b	MJ6	
L1	3-5 K6 r	DJ6		R7	19-5 K7 c	NF6	
L2	3-3 K6 r	EF1		R1	19-3 K6 c	NF1	
L3	4-5 K7 s	EU1		R2	20-5 K7 d	NJ1	
L4	4-3 K6 s	EJ6		R3	20-3 K6 d	NJ6	
L5	5-5 K7 t	FF6		R4	21-5 K7 e	OF6	
L6	5-3 K6 t	FF1		R5	21-3 K6 e	OF1	
L7	6-5 K7 u	FJ1		R6	22-5 K7 f	PJ1	
L8	6-3 K6 u	FJ6		R7	22-3 K6 f	PJ6	
L9	7-5 K7 v	GF6		R8	23-5 K7 g	RF6	
L10	7-3 K6 v	GF1		R9	23-3 K6 g	RF1	
L11	8-5 K7 w	GE6		R10	24-5 K7 h	RJ1	
L12	8-3 K6 w	GE1		R11	24-3 K6 h	RJ6	
L13	9-5 K7 x	HF6		R12	25-5 K7 i	SF6	
L14	9-3 K6 x	HF1		R13	25-3 K6 i	SF1	
L15	10-5 K2 n	HJ1		R14	26-5 K2 a	SJ1	
	10-3 K2 n	HJ6		R15	26-3 K2 a	SJ6	
	11-5 K2 p	IF6			27-5 K2 b	TF6	
	11-3 K2 p	IF1			27-3 K2 b	TF1	
	12-5 K2 q	JJ1			28-5 K2 c	TJ1	
	12-3 K2 q	JJ6			28-3 K2 c	TJ6	
	13-5 K2 r	KF6			29-5 K2 d	UF6	
	13-3 K2 r	KF1			29-3 K2 d	UF1	
	14-5 K2 s	KJ1			30-5 K2 e	VJ1	
	14-3 K2 s	KJ6			30-3 K2 e	VJ6	
	15-5 K2 t	LF6			31-5 K2 f	WF6	
	15-3 K2 t	LF1			31-3 K2 f	WF1	
	16-5 K2 v	LJ1			32-5 K2 g	VJ1	
	16-3 K2 v	LJ6			32-3 K2 g	VJ6	
	17-5 K7 a	MF6			33-5 K2 h	WF6	
	17-3 K7 a	MF1			33-3 K2 h	WF1	
	18-5 K6 a	22KMFI			33-3 K3 a	22KWF1	

CHART II

BIT	LOGIC I.3.1	LOGIC I.8.1	BIT	LOGIC I.3.1	LOGIC I.8.1	
	PU PIN	PU PIN		PU PIN	PU PIN	
D	22KDB2	21LJAB	R5	22KMC1	21LKJ7	
LS	22KDC1	21LJA2	R1	22KNB2	21LLA8	
L1	22KEB2	21LJB4	R2	22KNC1	21LLA2	
L2	22KEC1	21LJC5	R3	22KPB2	21LLB4	
L3	22KFB2	21LJE8	R4	22KPC1	21LLC5	
L4	22KFC2	21LJF6	R5	22KRB2	21LLE8	
L5	22KGB2	21LJG8	R6	22KRC1	21LLF6	
L6	22KGC1	21LJH4	R7	22KSC1	21LLH4	
L7	22KHB2	21LJ7	R8	22KTB2	21LLJ7	
L8	22KHC1	21LKA8	R9	22KTC1	21LLM8	
L9	22KJB2	21LKA2	R10	22KUC1	21LLM8	
L10	22KJC1	21LKB4	R11	22KUB2	21LNC5	
L11	22KKB2	21LKC5	R12	22KVC1	21LLM8	
L12	22KKC1	21LKE6	R13	22KWB2	21LNF6	
L13	22KLB2	21LKF6	R14	22KVC1	21MLM8	
L14	22KLC1	21LKG8	R15	22KWB2	21LMH4	
L15	22KMB2	21LKH4				

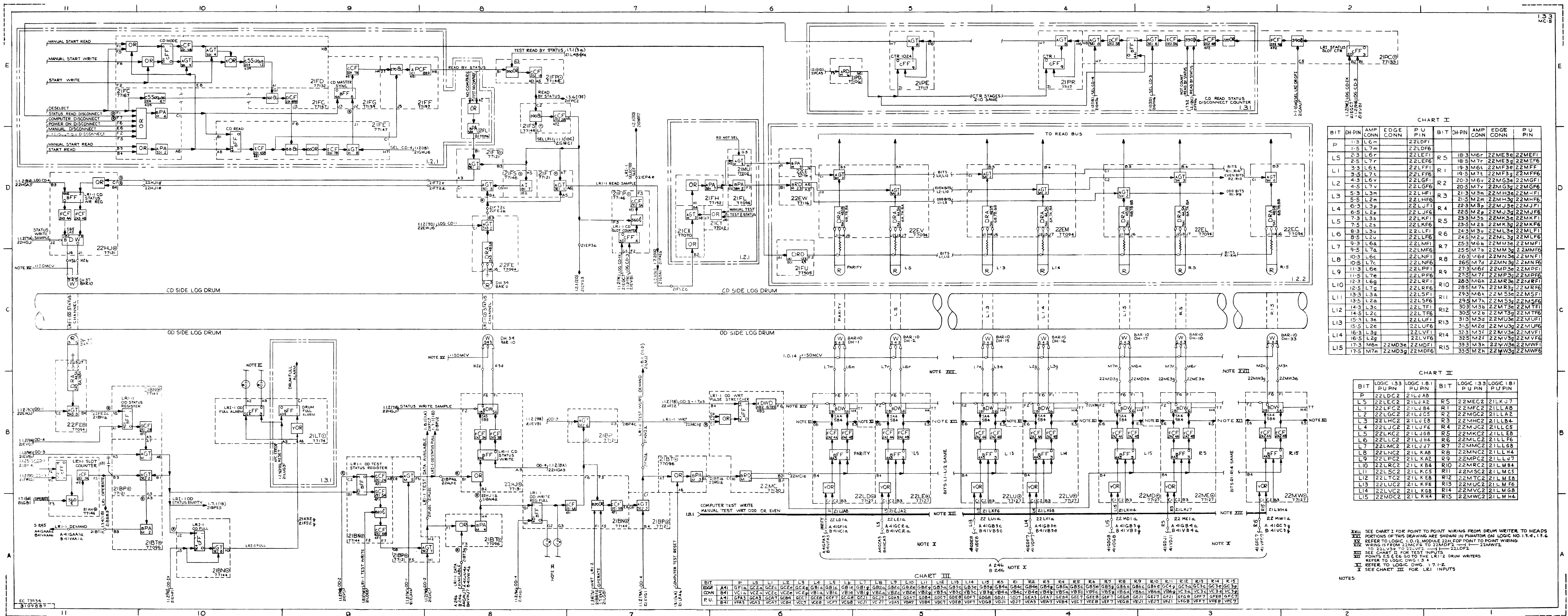
NOTE I: SOURCE IS 21L2(K6)34 ON I.71 (78) FOR DC'S 1 TO 12, 19 AND R.C.1 FOR DC'S 13 TO 18 AND 20 TO 22. SOURCE IS 21L2(K37) ON I.71 (78) FOR DC'S 19 TO 22 AND 20 TO 22. SOURCE IS 21L2(K43) ON I.71 (78) FOR DC'S 13 TO 18 AND 20 TO 22. SOURCE IS 21L2(K42) ON I.71 (78) PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC NO. 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.4.4, 1.4.1.

NOTE II: REFER TO LOGIC I.1.3.2 FOR POINT TO POINT WIRING.

NOTE III: SEE CHART IZ FOR TEST INPUTS.

NOTE IV: REFER TO LOGIC DWG 1.3.1-3.

NOTE V: POINT TO POINT WIRING: 22K0F6, DFE, D22, E22, E72 - 1 - UF2, U02, V22, V72, W72.



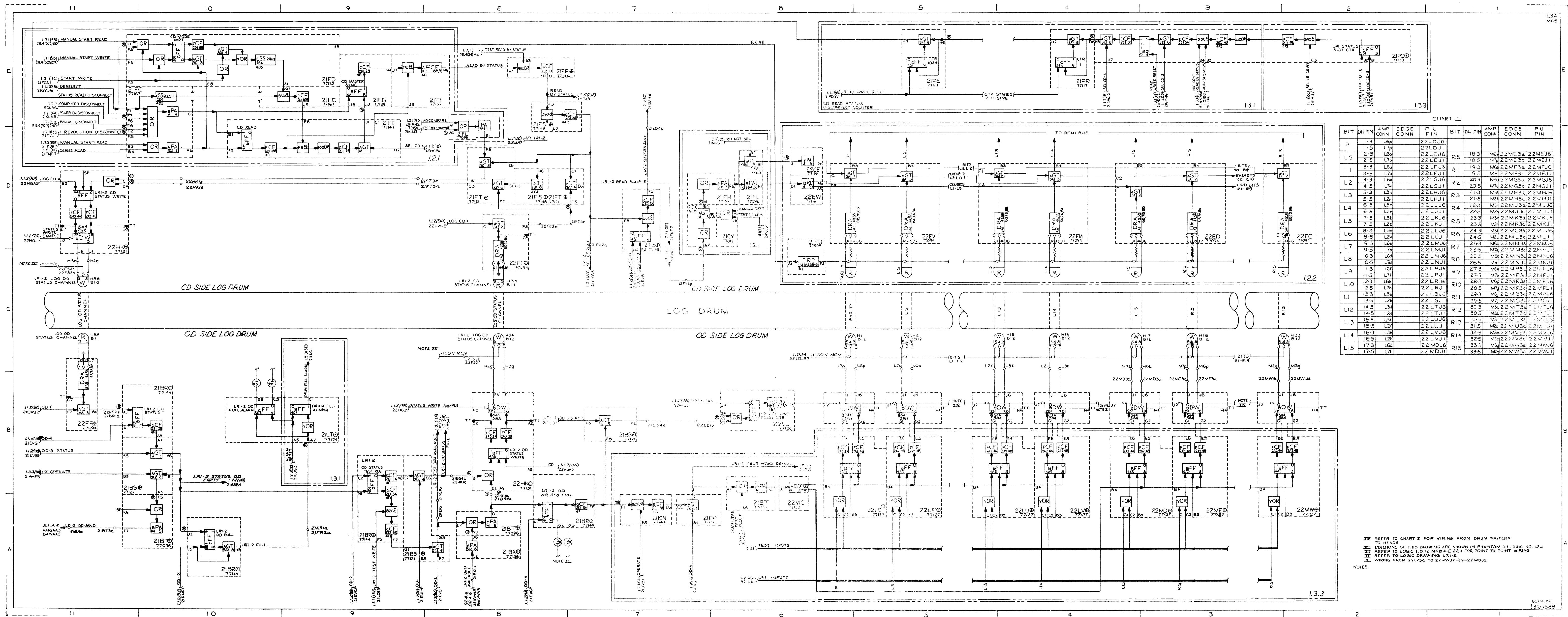
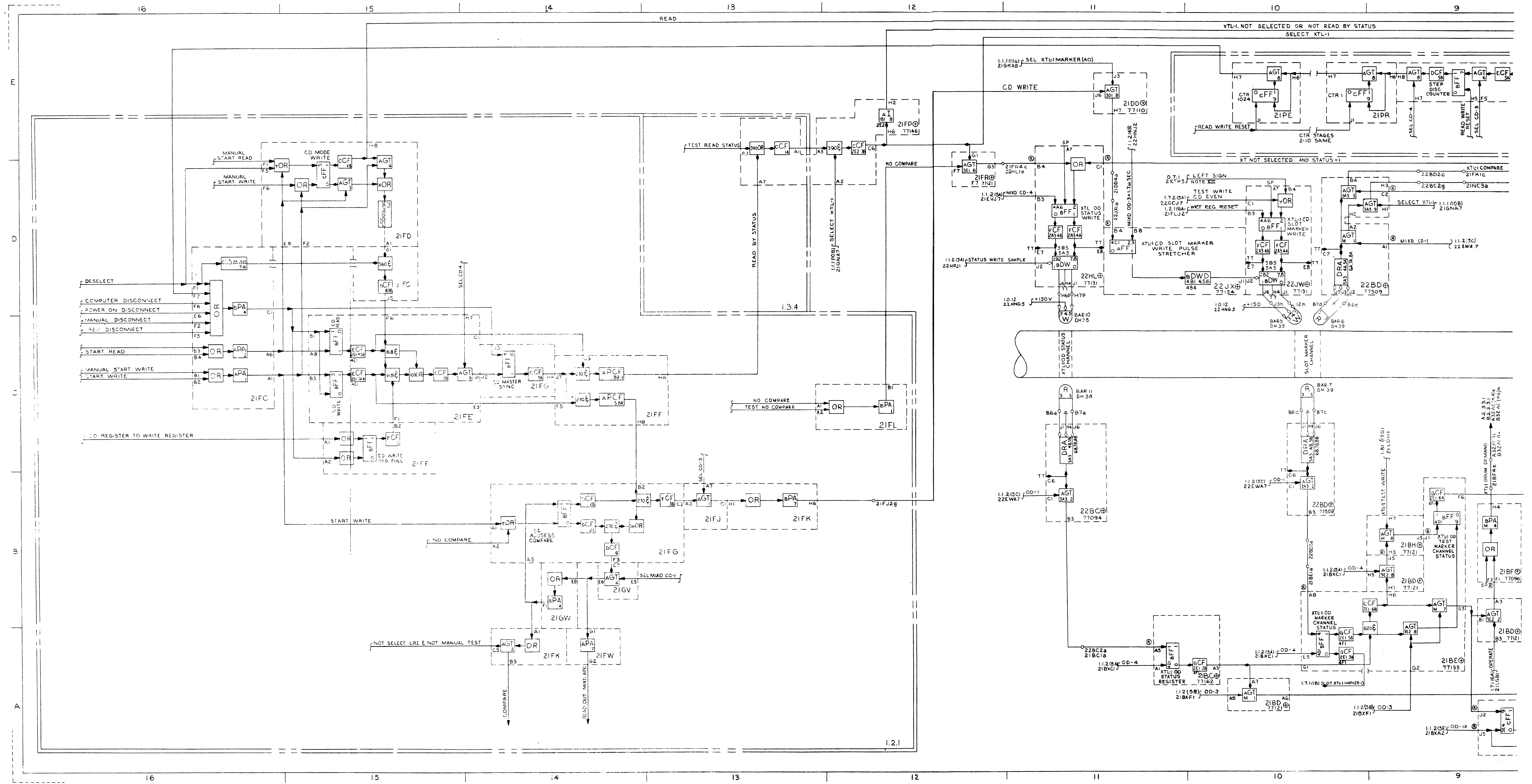


CHART I

BIT	DR-PIN	AMP CONN	EDGE CONN	P U PIN	BIT	DR-PIN	AMP CONN	EDGE CONN	P U PIN
P	1-3	L6p	22LDJ6		R1	19-3	M6	22MF3a	22MFJ6
	1-5	L7a	22LDJ1			18-5	V7	22ME3c	22MEJ1
LS	2-3	L6a	22LEJ6	RS	18-3	M6	22MF3a	22MFJ6	
	2-5	L7a	22LEJ1			19-5	V7	22MF3c	22MFJ1
L1	3-3	L6a	22LFJ6	R1	19-3	M6	22MF3a	22MFJ6	
	3-5	L7a	22LFJ1			20-3	M6	22MG3a	22MGJ6
L2	4-3	L6a	22LGJ6	R2	20-3	M6	22MG3a	22MGJ1	
	4-5	L7a	22LGJ1			21-3	M6	22MH3a	22MHJ6
L3	5-3	L6a	22LHJ6	R3	21-3	M6	22MH3a	22MHJ1	
	5-5	L7a	22LHJ1			22-3	M6	22MJ3a	22MJJ6
L4	6-3	L6a	22LJ6	R4	22-3	M6	22MJ3a	22MJJ1	
	6-5	L7a	22LJ1			22-5	M6	22M3a	22MJJ6
L5	7-3	L6a	22LKJ6	R5	23-3	M6	22MK3a	22MKJ1	
	7-5	L7a	22LKJ1			24-3	M6	22ML3a	22MLJ6
L6	8-3	L6a	22LLJ6	R6	24-3	M6	22ML3a	22MLJ1	
	8-5	L7a	22LLJ1			24-5	M6	22ML3c	22MLJ6
L7	9-3	L6a	22LMJ6	R7	25-3	M6	22MM3a	22MMJ1	
	9-5	L7a	22LMJ1			25-5	M6	22MM3c	22MMJ6
L8	10-3	L6a	22LNJ6	R8	26-3	M6	22MN3a	22MNJ1	
	10-5	L7a	22LNJ1			26-5	M6	22MN3c	22MNJ6
L9	11-3	L6a	22LQJ6	R9	27-3	M6	22MQ3a	22MQJ1	
	11-5	L7a	22LQJ1			27-5	M6	22MQ3c	22MQJ6
L10	12-3	L6a	22LRJ6	R10	28-3	M6	22MR3a	22MRJ1	
	12-5	L7a	22LRJ1			28-5	M6	22MR3c	22MRJ6
L11	13-3	L6a	22LSJ6	R11	29-3	M6	22MS3a	22MSJ1	
	13-5	L7a	22LSJ1			29-5	M6	22MS3c	22MSJ6
L12	14-3	L6a	22LTJ6	R12	30-3	M6	22MT3a	22MTJ1	
	14-5	L7a	22LTJ1			30-5	M6	22MT3c	22MTJ6
L13	15-3	L6a	22LUJ6	R13	31-3	M6	22MU3a	22MUJ1	
	15-5	L7a	22LUJ1			31-5	M6	22MU3c	22MUJ6
L14	16-3	L6a	22LVJ6	R14	32-3	M6	22MV3a	22MVJ1	
	16-5	L7a	22LVJ1			32-5	M6	22MV3c	22MVJ6
L15	17-3	L6a	22LWJ6	R15	33-3	M6	22MW3a	22MWJ1	
	17-5	L7a	22LWJ1			33-5	M6	22MW3c	22MWJ6

NOTES
 III REFER TO CHART I FOR WIRING FROM DRUM WRITER TO HEADS
 III PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC NO. 132
 III REFER TO LOGIC 1.012 MODULE 22H FOR POINT TO POINT WIRING
 III REFER TO LOGIC DRAWING L712
 I WIRING FROM 22LV3A TO 22MWJ2-5-22MWJ2



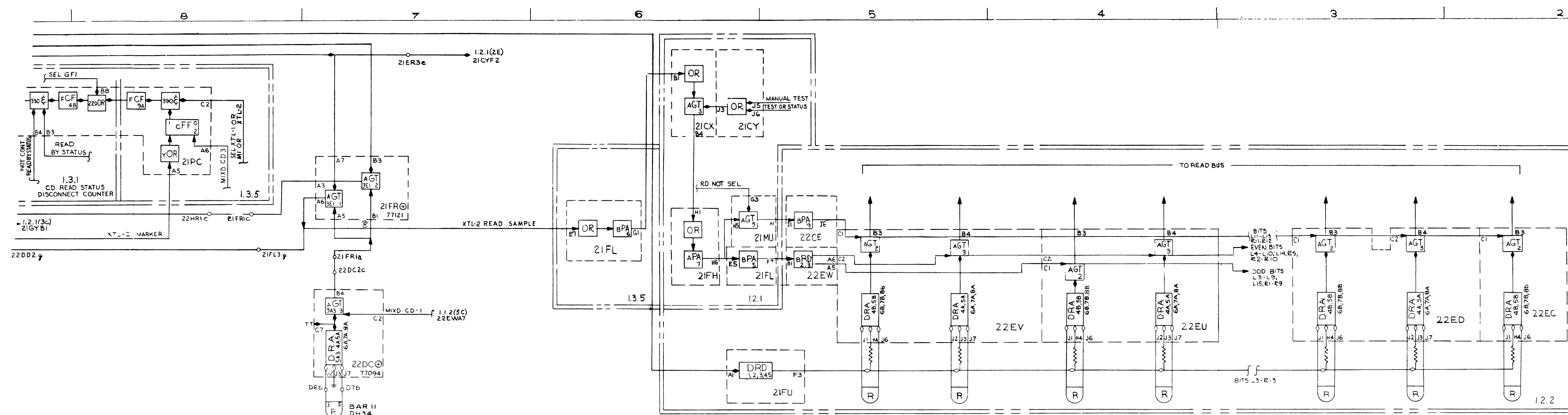


CHART II

BIT	LOGIC I.B.1 PU PIN	LOGIC I.3.6 PU PIN	BIT	LOGIC I.8.1 PU PIN	LOGIC I.3.6 PU PIN
P	21LJA8	22PD82	RS	21LKJ7	22PMC1
LS	21LJA2	22PDC1	R1	21LLA8	22PNB2
L1	21LJB4	22PEB2	R2	21LLA2	22PNC1
L2	21LJC5	22PEC1	R3	21LLB4	22PPB2
L3	21LJE8	22PF82	R4	21LLC5	22PPC1
L4	21LJF6	22PFC1	R5	21LLE8	22PRB2
L5	21LJG8	22PGB2	R6	21LLF6	22PRC1
L6	21LJH4	22PGC1	R7	21LLG8	22PSB2
L7	21LJJ7	22PHB2	R8	21LLH4	22PSC1
L8	21LKA8	22PHC1	R9	21LLJ7	22PTB2
L9	21LKA2	22PJB2	R10	21LMB4	22PTC1
L10	21LKB4	22PJC1	R11	21LMB8	22PUB2
L11	21LKC5	22PKB2	R12	21LMC5	22PUB2
L12	21LKE8	22PKC1	R13	21LME8	22PUC1
L13	21LKF6	22PLB2	R14	21LMF6	22PVB2
L14	21LKG8	22PLC1	R15	21LMG8	22PVC1
L15	21LKH4	22PMB2	R15	21LMH4	22PWB2

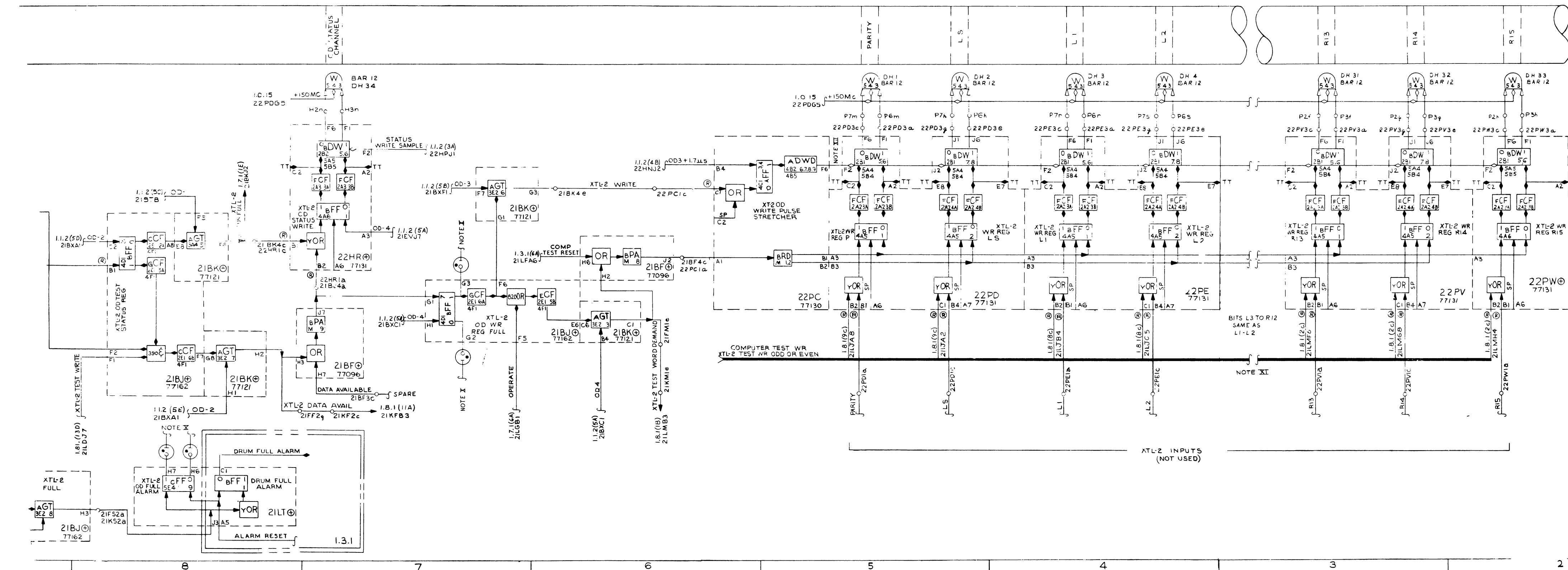


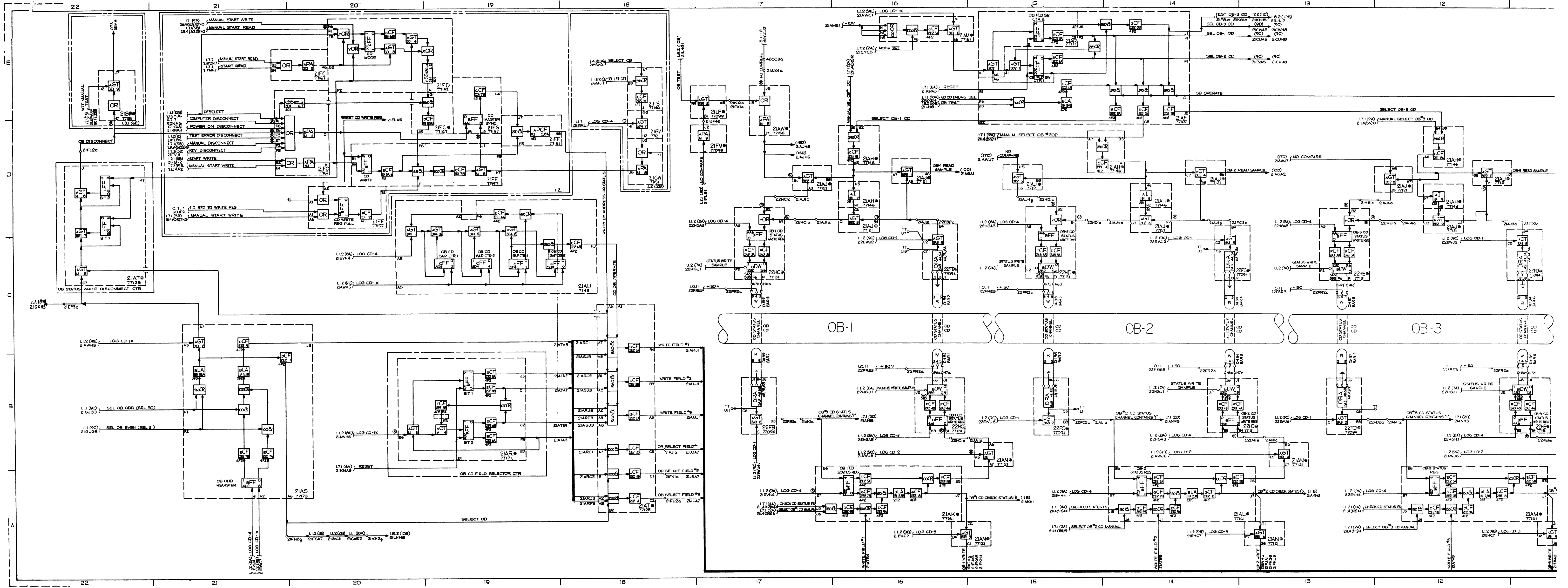
CHART I

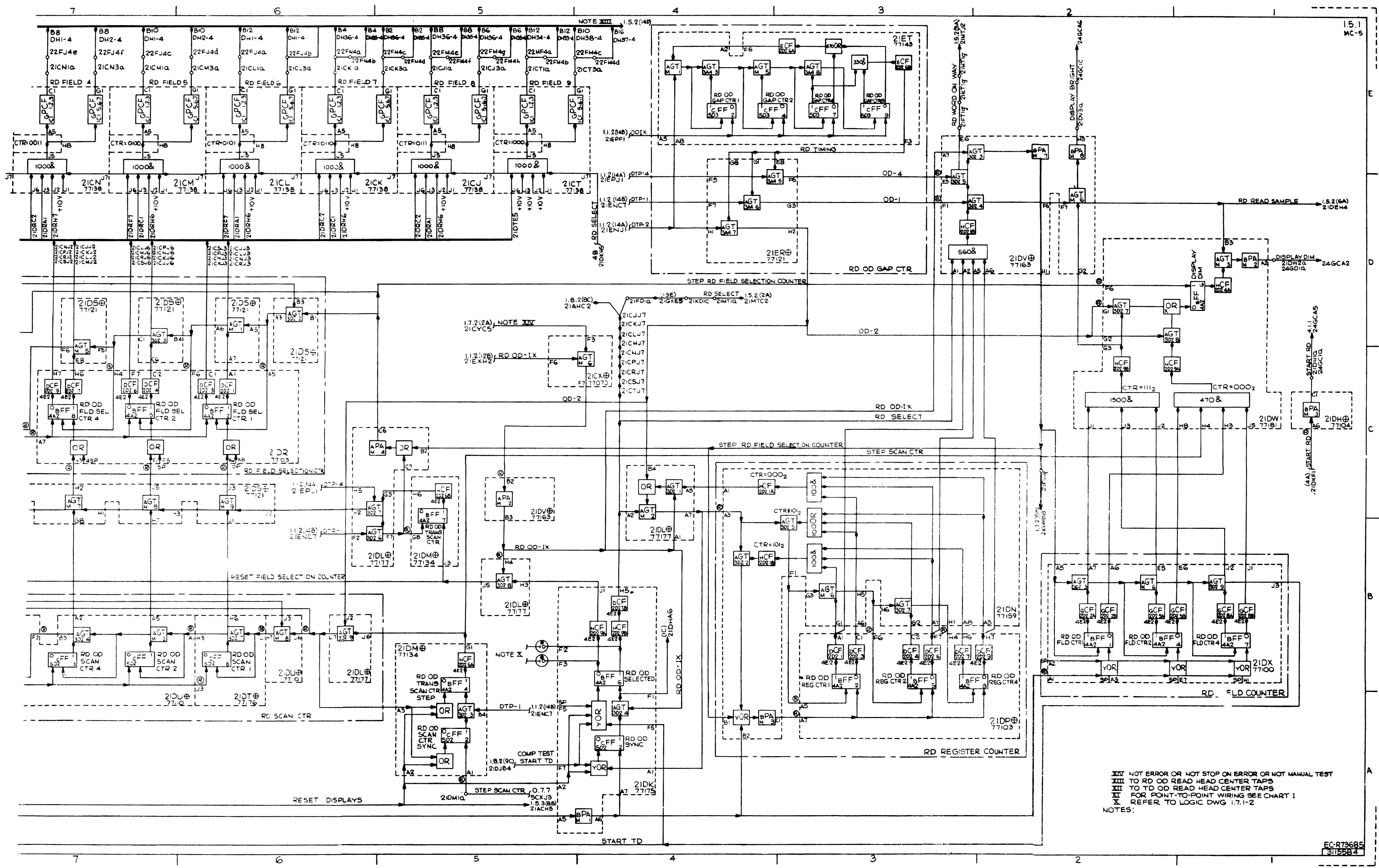
BIT	DH-PIN	AMP CONN	EDGE CONNECTOR	BIT	DH-PIN	AMP CONN	EDGE CONNECTOR
P	1-3	P6m	22PD3a	RS	18-3	P6b	22PM3e
LS	1-5	P7m	22PD3c		18-5	P7b	22PM3g
	2-3	P6r	22PD3e		19-3	P6c	22PN3a
	2-5	P7r	22PD3g		19-5	P7c	22PN3c
L1	3-3	P6r	22PE3a	R1	20-3	P6d	22PN3e
	3-5	P7r	22PE3c		20-5	P7d	22PN3g
L2	4-3	P6s	22PE3e	R2	21-3	P6e	22PP3a
	4-5	P7s	22PE3g		21-5	P7e	22PP3c
L3	5-3	P6t	22PF3a	R3	22-3	P6f	22PP3e
	5-5	P7t	22PF3c		22-5	P7f	22PP3g
L4	6-3	P6u	22PF3e	R4	23-3	P6g	22PR3a
	6-5	P7u	22PF3g		23-5	P7g	22PR3c
L5	7-3	P6v	22PG3a	R5	24-3	P6h	22PR3e
	7-5	P7v	22PG3c		24-5	P7h	22PR3g
L6	8-3	P6w	22PH3e	R6	25-3	P6i	22PS3a
	8-5	P7w	22PH3g		25-5	P7i	22PS3c
L7	9-3	P6x	22PH3e	R7	26-3	P6j	22PS3e
	9-5	P7x	22PH3g		26-5	P7j	22PS3g
L8	10-3	P6y	22PJ3a	R8	27-3	P6k	22PT3a
	10-5	P7y	22PJ3c		27-5	P7k	22PT3c
L9	11-3	P6z	22PJ3e	R9	28-3	P6l	22PT3e
	11-5	P7z	22PJ3g		28-5	P7l	22PT3g
L10	12-3	P6a	22PK3a	R10	29-3	P6m	22PU3a
	12-5	P7a	22PK3c		29-5	P7a	22PU3c
L11	13-3	P6a	22PK3e	R11	30-3	P6n	22PU3e
	13-5	P7a	22PK3g		30-5	P7a	22PU3g
L12	14-3	P6b	22PL3a	R12	31-3	P6o	22PV3a
	14-5	P7b	22PL3c		31-5	P7b	22PV3c
L13	15-3	P6b	22PL3e	R13	32-3	P6p	22PV3e
	15-5	P7b	22PL3g		32-5	P7b	22PV3g
L14	16-3	P6c	22PM3a	R14	33-3	P6q	22PW3a
	16-5	P7c	22PM3c		33-5	P7c	22PW3c
L15	17-3	P6c	22PM3e	R15	33-5	P6q	22PW3e
	17-5	P7c	22PM3g				

NOTES:
 XXII PLUGGABLE UNITS FOR SPARE XTL CIRCUITRY ARE NOT SUPPLIED.
 XXIII REFER TO UNIT SUPPLEMENT 22H LOGIC DWG 1.0.12
 XXIV FOR POINT TO POINT WIRING REFER TO LOGIC DWG 1.8.1
 XXV WIRING IS FROM 22PCF6 TO 22PDF2-11-22PHF2 TO 22PV3-11-22PDJ2
 XXVI SEE CHART II FOR TEST INPUTS
 XXVII REFER TO LOGIC DWG 1.7.1-2

CROSSTELL-2 OPERATE CIRCUITRY

EC-737306
 3215903





III NOT ERROR OR NOT STOP ON ERROR OR NOT MANUAL TEST
 III TO RD OD READ HEAD CENTER TAPS
 III TO TD OD READ HEAD CENTER TAPS
 III FOR POINT-TO-POINT WIRING SEE CHART 1
 X REFER TO LOGIC DWG 1.7.1-2
 NOTES:

SITUATION DISPLAY (RD & TD) OPERATE CIRCUITRY

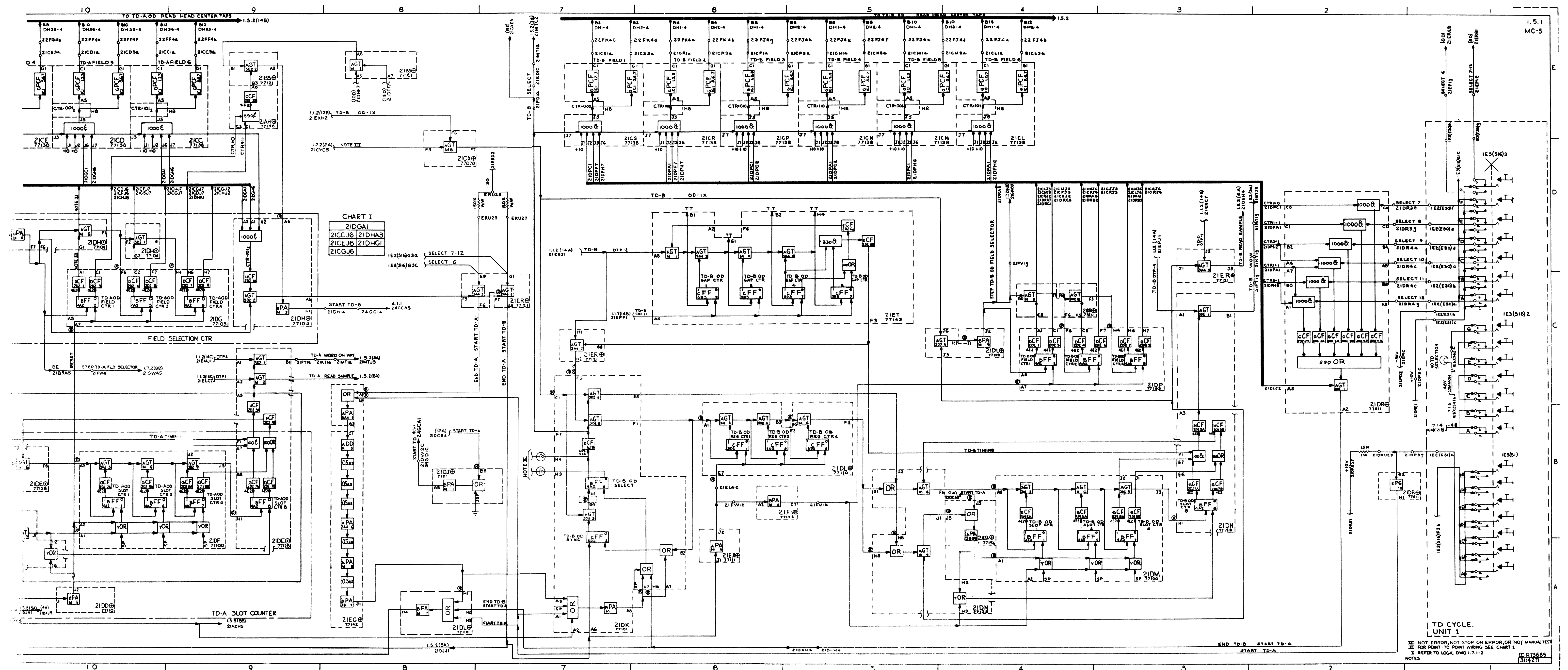


CHART I

21DGA1
21CCJ6
21DHA3
21CEJ6
21DHG1
21CGJ6

TD CYCLE UNIT 1

NOT ERROR, NOT STOP ON ERROR, OR NOT MANUAL TEST
 X REFER TO LOGIC DWG 1.7.1-2

NOTES

FC R73665
 3114271

CHART 2
DIGITAL DISPLAY INFORMATION PULSE OUTPUT WIRING

BIT	UNIT 21 EDGE CONN	UNIT 25 EDGE CONN	UNIT 25 PU PIN	BIT	UNIT 21 TEST PULSE EDGE CONN	UNIT 21 EDGE CONN	UNIT 25 EDGE CONN	UNIT 25 PU PIN
L1	21NE3c	25BC1g	25BEA5	R1	21NW83	21NW2c	25CC1g	25CEA5
L2	F3c	D1e	25BED5	R2	C2	W2g	D1e	D6
L3	G3c	D1g	25BEF6	R3	F7	X1g	D1g	J6
L4	H3c	E1e	25BEA2	R4	H3	X2e	E1e	A2
L5	J3c	F1e	D6	R5	G3	W3e	F1e	D6
L6	K3c	F1e	J7	R6	H3	W4a	F1e	J7
L7	L3c	F1e	A6	R7	21NWH8	W4g	F1e	A6
L8	M3c	G1e	D7	R8	21NYA7	Y1e	G1e	D7
L9	N3c	G1g	G2	R9	B3	Y2c	G1g	G2
L10	P3c	25BC1a	A3	R10	C2	Y2g	G2c	A3
L11	R3c	25AE4a	D8	R11	E7	X3g	E3g	D8
L12	S3c	25BE3e	G6	R12	21NYF3	21NX4e	25CC4a	25CEG6
L13	T3c	25BF1a	A7					
L14	21NU3c	25BC4a	25BEJ3					

E

D

C

B

A

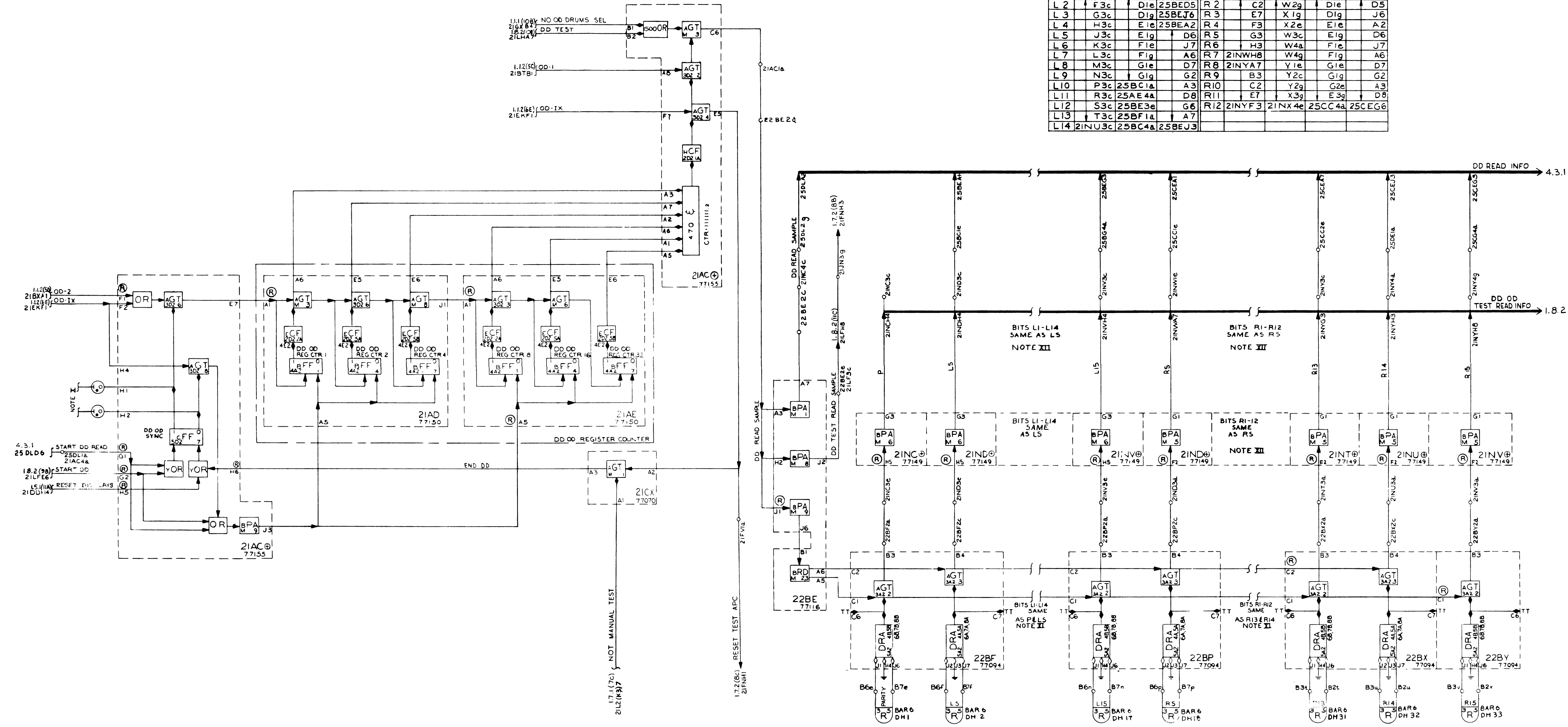
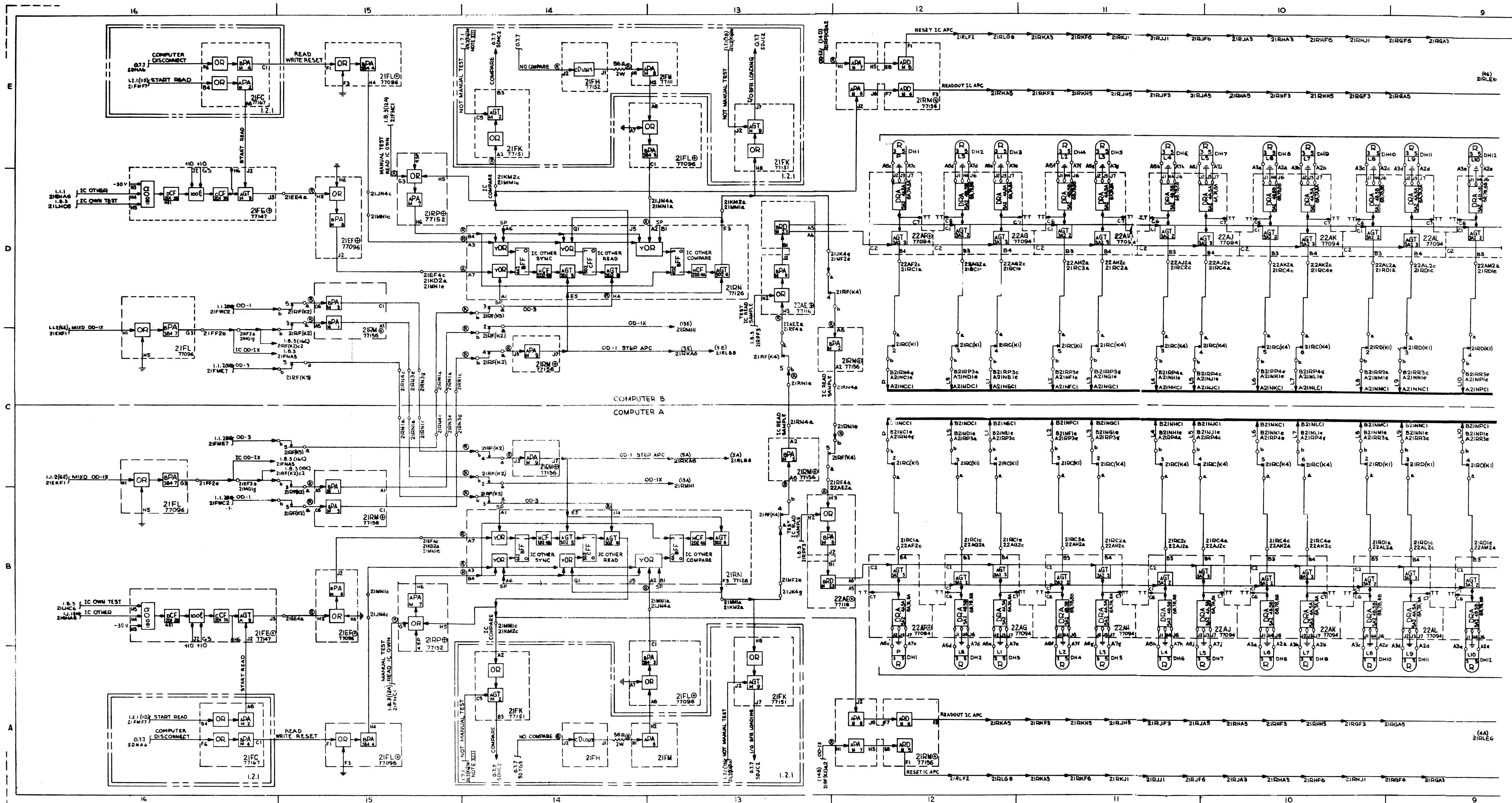


CHART 1
DIGITAL DISPLAY READ CIRCUIT WIRING

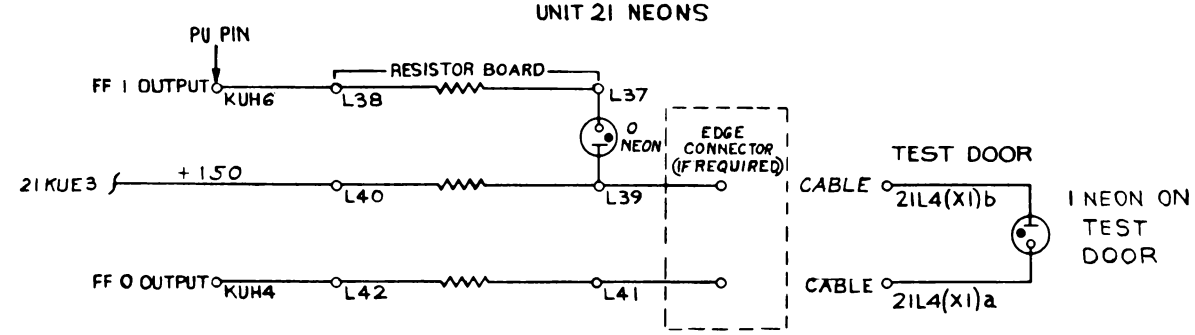
BIT	HEAD PIN	AMP CONN	PU PIN	BIT	HEAD PIN	AMP CONN	PU PIN
L1	DH3-3	B6g	22BGJ1	R1	DH19-3	B6r	22BRJ1
L2	DH4-3	B7g	GJ2	R2	DH20-3	B6s	RJ2
L3	DH5-3	B6j	HJ1	R3	DH21-3	B6t	SJ1
L4	DH6-3	B6k	HJ2	R4	DH22-3	B6u	SJ2
L5	DH7-3	B3a	JJ1	R5	DH23-3	B6v	TJ1
L6	DH8-3	B3b	JJ2	R6	DH24-3	B6w	TJ2
L7	DH9-3	B2c	KJ1	R7	DH25-3	B2l	UJ1
L8	DH10-3	B3d	KJ2	R8	DH26-3	B3m	UJ2
L9	DH11-3	B3e	LJ1	R9	DH27-3	B2n	VJ1
L10	DH12-3	B3f	LJ2	R10	DH28-3	B3p	VJ2
L11	DH13-3	B3g	MJ1	R11	DH29-3	B2r	WJ1
L12	DH14-3	B3h	MJ2	R12	DH30-3	B3s	WJ2
L13	DH15-3	B6j	NJ1				
L14	DH16-3	B6m	NJ2				

III SEE CHART B FOR OUTPUT WIRING.
 III SEE CHART I FOR WIRING FROM DRUM HEADS TO READ CIRCUIT PLUGGABLE UNIT PINS.
 X REFER TO LOGIC DWG 1.7.1-2

NOTES:



TYPICAL WIRING DRAWING
UNIT 21 NEONS

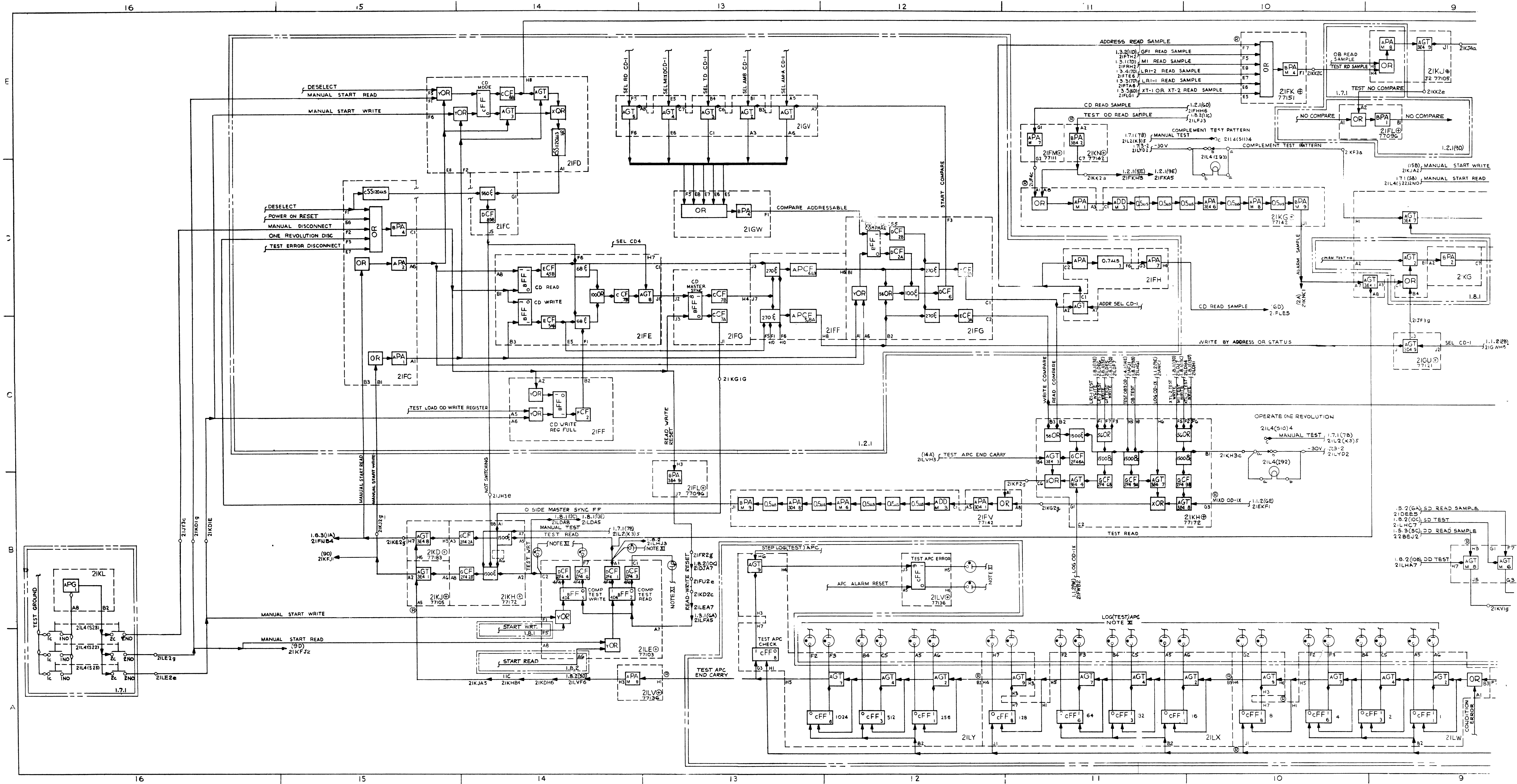


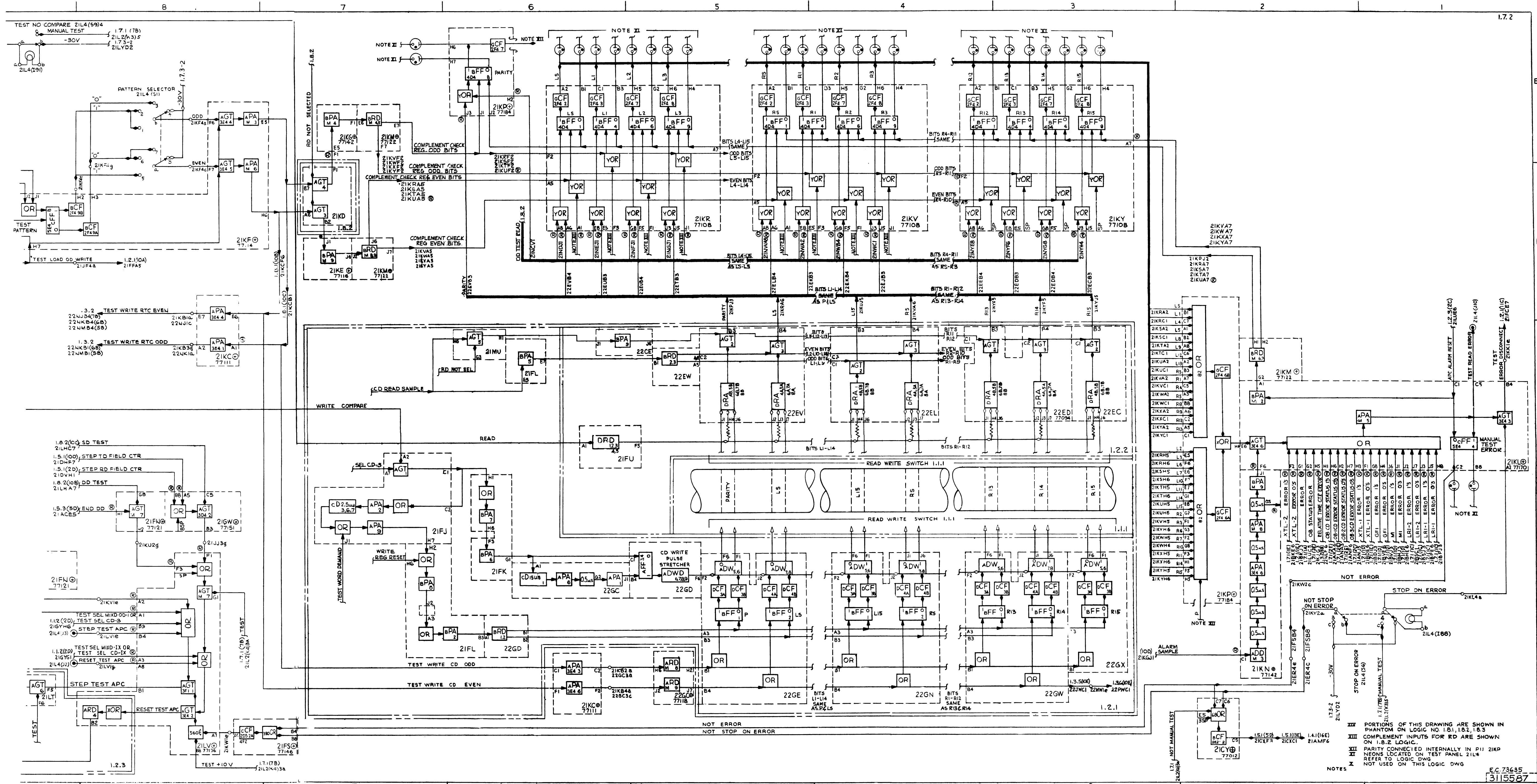
FFOUT	PUTERM	RES RESISTOR	BOARD	TERM O NEON	LOGIC & EC	NEON & TITLE
I	ACH1	U39	U37	U35	1.53	DD OD SYNC
+150	ACE3	U33	U35		EC4e JC4c	21L4(X85) b
O	ACH2	U43	U45		EC4f JC4d	21L4(X85) a
I	BCE3	U31	U29	U27	1.35	XTL10 WRITE REG FULL
+150	BCE3	U25	U27		EC3a JC3g	21L4(X64) b
O	BCE3	U33	U35		EC3b JC3h	21L4(X64) a
I	BGG3	U39	U37	U35	1.31	MICRO WRITE REG FULL
+150	BGE3	U33	U35		EG3c J63c	21L4(X65) b
O	BGG2	U41	U43		EG3d J63d	21L4(X65) a
I	BJG3	U39	U37	U35	1.34	XTL-2 OD WRITE REG FULL
+150	BJE3	U33	U35		EJ3a JJ3a	21L4(X63) b
O	BJG2	U43	U45		EJ3b JJ3b	21L4(X63) a
I	BNG3	U37	U35	U33	1.33	LR100 WRITE REG FULL
+150	BNE3	U31	U33		EN3a JN3a	21L4(X68) b
O	BNG2	U41	U43		EN3b JN3b	21L4(X68) a
I	BRG3	U39	U37	U35	1.34	LR-200 WRITE REG FULL
+150	BRE3	U33	U35		ER3a JR3a	21L4(X67) b
O	BRG2	U41	U43		ER3b JR3b	21L4(X67) a
I	BUG3	L39	L37	L35	1.32	GF100 WRITE REG FULL
+150	BUE3	L33	L35		ET3e JU3a	21L4(X66) b
O	BUG2	L41	L43		ET3f JU3b	21L4(X66) a
I	DCH4	U39	U37	U35	1.51	TD OD SELECTED
+150	DCE3	U33	U35		EC4c JC4a	21L4(X87) b
O	DCH3	U41	U43		EC4d JC4b	21L4(X87) a
I	DKF2	L37	L39	L41	1.51	RD OD SELECTED
+150	DKE3	L43	L41		EK3a JK3a	21L4(X86) b
O	DKF3	L45	L47		EK3b JK3b	21L4(X86) a
I	FDG1	L39	L37	L35	1.21	CD MODE
+150	FDE3	L33	L35		JD3g	21L4(X80) b
O	FDG2	L41	L43		JD3h	21L4(X80) a
I	FEA2	U5	U7	U9	1.21	CD READ
+150	FE3	U11	U9		JE3a	21L4(X102) b
O	FEA3	U1	U3		JE3b	21L4(X102) a
I	FEB2	U17	U19	U21	1.21	CD WRITE
+150	FEE3	U23	U21		JE3c	21L4(X103) b
O	FEB3	U13	U15		JE3d	21L4(X103) a
I	FFB4	L15	L17	L19	1.21	CD WRITE REG FULL
+150	FFE3	L21	L19		JF3a	21L4(X62) b
O	FFB3	L7	L9		JF3b	21L4(X62) a
I	FGB4	U13	U15	U17	1.21	CD ADDRESS COMPARE
+150	FGE3	U19	U17		JG3e	21L4(X81) b
O	FGB3	U9	U11		JG3f	21L4(X81) a
I	FGH7	U39	U37	U35	1.21	CD MASTER SYNC
+150	FGE3	U33	U35		JG3a	21L4(X79) b
O	FGH6	U43	U41		JG3b	21L4(X79) a
I	GCA1	U10	U9	U7	1.11	SELECTION REG 04
+150	GCE3	U8	U7		JC4e	21L4(X98) b
O	GCA2	U6	U5		JC4f	21L4(X98) a
I	GCC2	U30	U29	U27	1.11	SELECTION REG 02
+150	GCE3	U28	U27		JC4g	21L4(X97) b
O	GCF7	U26	U25		JC4h	21L4(X97) a
I	GCH6	U46	U45	U43	1.11	SELECTION REG 01
+150	GCE3	J44	U43		JE3e	21L4(X96) b
O	GCH7	U42	U41		JE3f	21L4(X96) a
I	GDA1	L10	L9	L7	1.11	SELECTION REG 40
+150	GDC3	L8	L7		JD4a	21L4(X101) b
O	GDA2	L6	L5		JD4b	21L4(X101) a
I	GDC2	L30	L29	L27	1.11	SELECTION REG 20
+150	GDE3	L28	L27		JD4c	21L4(X100) b
O	GDF7	L26	L25		JD4d	21L4(X100) a
I	GDH6	L46	L45	L43	1.11	SELECTION REG 10
+150	GDE3	L44	L43		JD4e	21L4(X99) b
O	GDH7	L42	L41		JD4f	21L4(X99) a

FFOUT	PUTERM	RES RESISTOR	BOARD	TERM O NEON	LOGIC & EC	NEON & TITLE
I	KLBB	U3	U9	U11	1.72	MANUAL TEST ERROR
+150	KLE3	U13	U11			21L4(X94) b
O	KLC2	U7	U5			21L4(X94) a
I	KPH6	L39	L37	L35	1.72	PARITY
+150	KPE3	L33	L35			21L4(X17) b
O	KPH7	L43	L41			21L4(X17) a
I	KRA2	U14	U13	U11	1.72	LS
+150	KRE3	U12	U11			21L4(X16) b
O	KRB1	U10	U9			21L4(X16) a
I	KRC1	U20	U19	U17	1.72	L1
+150	KRE3	U18	U17			21L4(X15) b
O	KRB3	U16	U15			21L4(X15) a
I	KRH5	U30	U29	U31	1.72	L2
+150	KRE3	U32	U31			21L4(X14) b
O	KRG2	U34	U33			21L4(X14) a
I	KRH6	U38	U37	U39	1.72	L3
+150	KRE3	U40	U39			21L4(X13) b
O	KRH4	U42	U41			21L4(X13) a
I	KSA2	L14	L13	L11	1.72	L4
+150	KSE3	L12	L11			21L4(X12) b
O	KSB1	L10	L9			21L4(X12) a
I	KSQ1	L20	L19	L17	1.72	L5
+150	KSE3	L18	L17			21L4(X11) b
O	KSB3	L16	L15			21L4(X11) a
I	KSH5	L30	L29	L31	1.72	L6
+150	KSE3	L32	L31			21L4(X10) b
O	KSG2	L34	L33			21L4(X10) a
I	KSH6	L38	L37	L39	1.72	L7
+150	KSE3	L40	L39			21L4(X9) b
O	KSH4	L42	L41			21L4(X9) a
I	KTA2	U12	U11	U9	1.72	L8
+150	KTE3	U10	U9			21L4(X8) b
O	KTBI	U8	U7			21L4(X8) a
I	KTC1	U18	U17	U15	1.72	L9
+150	KTE3	U16	U15			21L4(X7) b
O	KTB3	U14	U13			21L4(X7) a
I	KTH5	U30	U29	U31	1.72	L10
+150	KTE3	U32	U31			21L4(X6) b
O	KTG2	U34	U33			21L4(X6) a
I	KTH6	U38	U37	U39	1.72	L11
+150	KTE3	U40	U39			21L4(X5) b
O	KTH4	U42	U41			21L4(X5) a
I	KUA2	L14	L13	L11	1.72	L12
+150	KUE3	L12	L11			21L4(X4) b
O	KUB1	L10	L9			21L4(X4) a
I	KUC1	L20	L19	L17	1.72	L13
+150	KUE3	L18	L17			21L4(X3) b
O	KUB3	L16	L15			21L4(X3) a
I	KUH5	L30	L29	L31	1.72	L14
+150	KUE3	L32	L31			21L4(X2) b
O	KUG2	L34	L33			21L4(X2) a
I	KUH6	L38	L37	L39	1.72	L15
+150	KUE3	L40	L39			21L4(X1) b
O	KUH4	L42	L41			21L4(X1) a
I	KVA2	U14	U13	U11	1.72	R5
+150	KVE3	U12	U11			21L4(X33) b
O	KVB1	U10	U9			21L4(X33) a
I	KVC1	U20	U19	U17	1.72	R1
+150	KVE3	U18	U17			21L4(X32) b
O	KVB3	U16	U15			21L4(X32) a
I	KVH5	U30	U29	U31	1.72	R2
+150	KVE3	U32	U31			21L4(X31) b
O	KVG2	U34	U33			21L4(X31) a

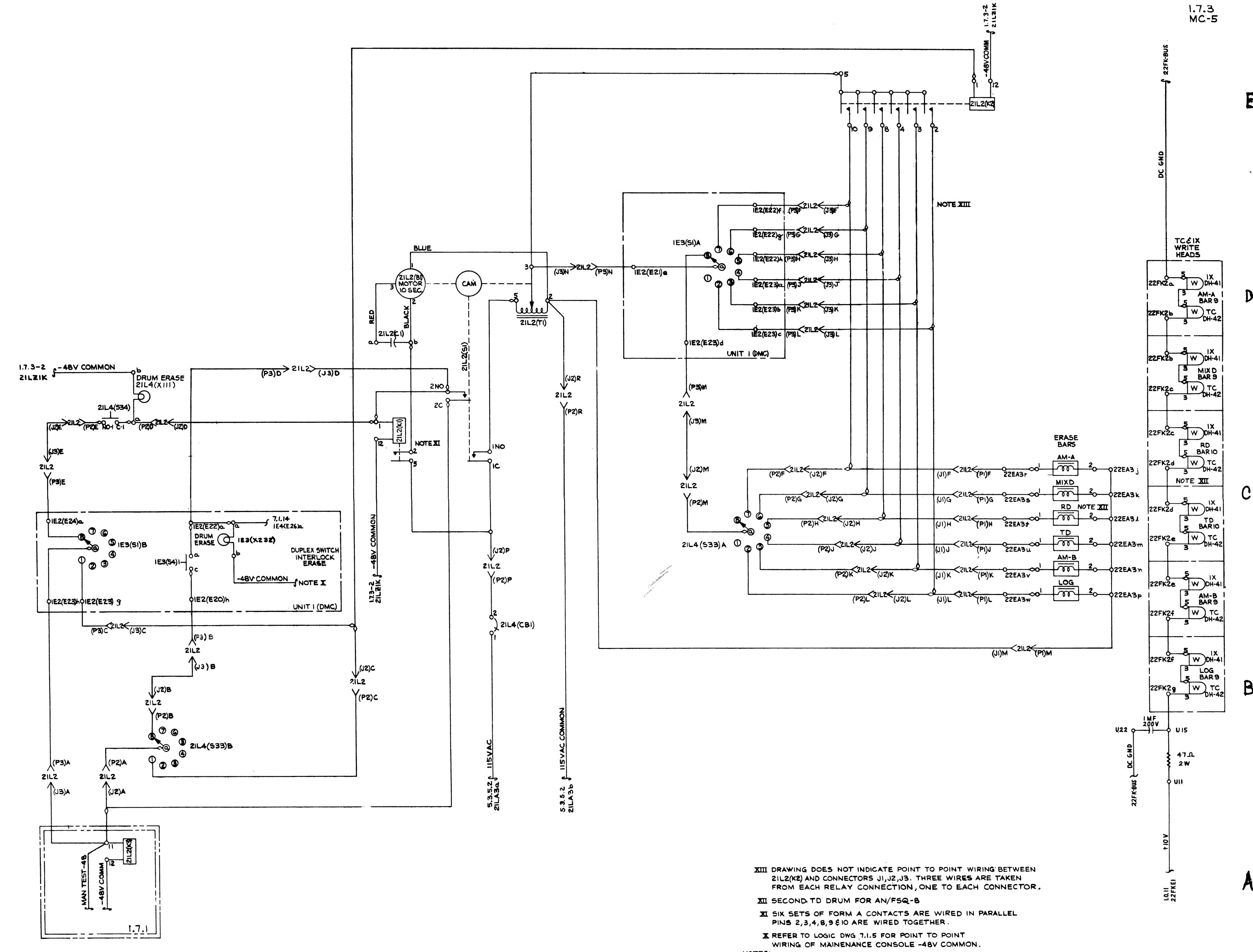
FFOUT	PUTERM	RES RESISTOR	BOARD	TERM O NEON	LOGIC & EC	NEON & TITLE
I	KVH6	U38	U37	U39	1.72	R3
+150	KVE3	U40	U39			21L4(X30) b
O	KVH4	U42	U41			21L4(X30) a
I	KWA2	L14	L13	L11	1.72	R4
+150	KWE3	L12	L11			21L4(X29) b
O	KWB1	L10	L9			21L4(X29) a
I	KWC1	L20	L19	L17	1.72	R5
+150	KWE3	L18	L17			21L4(X28) b
O	KWB3	L16	L15			21L4(X28) a
I	KWH5	L30	L29	L31	1.72	R6
+150	KWE3	L32	L31			21L4(X27) b
O	KWG2	L34	L33			21L4(X27) a
I	KWH6	L38	L37	L39	1.72	R7
+150	KWE3	L40	L39			21L4(X26) b
O	KWH4	L42	L41			21L4(X26) a
I	KXA2	U12	U11	U9	1.72	R8
+150	KXE3	U10	U9			21L4(X25) b
O	KXB1	U8	U7			21L4(X25) a
I	KXC1	U18	U17	U15	1.72	R9
+150	KXE3	U16	U15			21L4(X24) b
O	KXB3	U14	U13			21L4(X24) a
I	KXH5	U30	U29	U31	1.72	R10
+150	KXE3	U32	U31			21L4(X23) b
O	KXG2	U34	U33			21L4(X23) a
I	KXH6	U38	U37	U39	1.72	R11
+150	KXE3	U40	U39			21L4(X22) b
O	KXH4	U42	U41			21L4(X22) a
I	KYA2	L14	L13	L11	1.72	R12
+150	KYE3	L12	L11			21L4(X21) b
O	KYB1	L10	L9			21L4(X21) a
I	KYC1	L20	L19	L17	1.72	R13
+150	KYE3	L18	L17			21L4(X20) b
O	KYB3	L16	L15			21L4(X20) a
I	KYH5	L30	L29	L31	1.72	R14
+150	KYE3	L32	L31			21L4(X19) b
O	KYG2	L34	L33			21L4(X19) a
I	KYH6	L38	L37	L39	1.72	R15
+150	KYE3	L40	L39			21L4(X18) b
O	KYH4	L42	L41			21L4(X18) a
I	LEA1	U8	U7	U5	1.72	COMP TEST READ
+150	LEE3	U6	U5			21L4(X77) b
O	LEC1	U4	U3			21L4(X77) a
I	LEC2	U16	U15	U13	1.72	COMP TEST WRITE
+150	LEE3	U14	U13			21L4(X78) b
O	LEF7	U12	U11			21L4(X78) a
I	LEH6	U38	U37	U35	1.81	COMP TEST SYNC
+150	LEF3	U36	U35			21L4(X76) b
O	LEH7	U34	U33			21L4(X76) a
I	LTA2	U2	U1	U3	1.33	LRH OD FULL ALARM
+150	LTA3	U4	U3			21L4(X61) b
O	LTA3	U6	U5			21L4(X61) a
I	LTB6	U12	U11	U13	1.34	LR1200 FULL ALARM
+150	LTC5	U14	U13			21L4(X60) b
O	LTC5	U16	U15			21L4(X60) a
I	LTf2	U20	U19	U21	1.31	MICRO FULL ALARM
+150	LTF3	U22	U21			21L4(X58) b
O	LTF3	U24	U23			21L4(X58) a
I	LTH1	U28	U27	U29	1.35	XTL100 FULL ALARM
+150	LTH3	U30	U29			21L4(X57) b
O	LTH2	U32	U31			21L4(X57) a
I	LTH7	U42	U41	U39	1.36	XTL-2 OD FULL ALARM
+150	LTH3	U40	U39			21L4(X56) b
O	LTH6	U38	U37			21L4(X56) a

FFOUT	PUTERM	RES RESISTOR	BOARD	TERM O NEON	LOGIC & EC	NEON & TITLE
I	LVA6	L10	L9	L7	1.72	TEST APC 1
+150	LVA6	L10	L9	L7	1.72	TEST APC 1
O	LWA5	L6	L5			21L4(X34) a
I	LWC5	L18	L17	L15	1.72	TEST APC 2
+150	LWE3	L16	L15			21L4(X35) b
O	LWB4	L14	L13			21L4(X35) a
I	LWF3	L30	L29	L27	1.72	TEST APC 4
+150	LWE3	L28	L27			21L4(X36) b
O	LWF2	L26	L25			21L4(X36) a
I	LWH7	L32	L31	L33	1.72	TEST APC 8
+150	LWE3	L34	L33			21L4(X37) b
O	LWG2	L36	L35			21L4





MAIN DRUM MANUAL READ-WRITE CONTROLS



EC 72482
511558B

NOTE III
DRAWING DOES NOT INDICATE POINT TO POINT WIRING BETWEEN 21L2(K2) AND CONNECTORS J1, J2, J3. THREE WIRES ARE TAKEN FROM EACH RELAY CONNECTION, ONE TO EACH CONNECTOR.

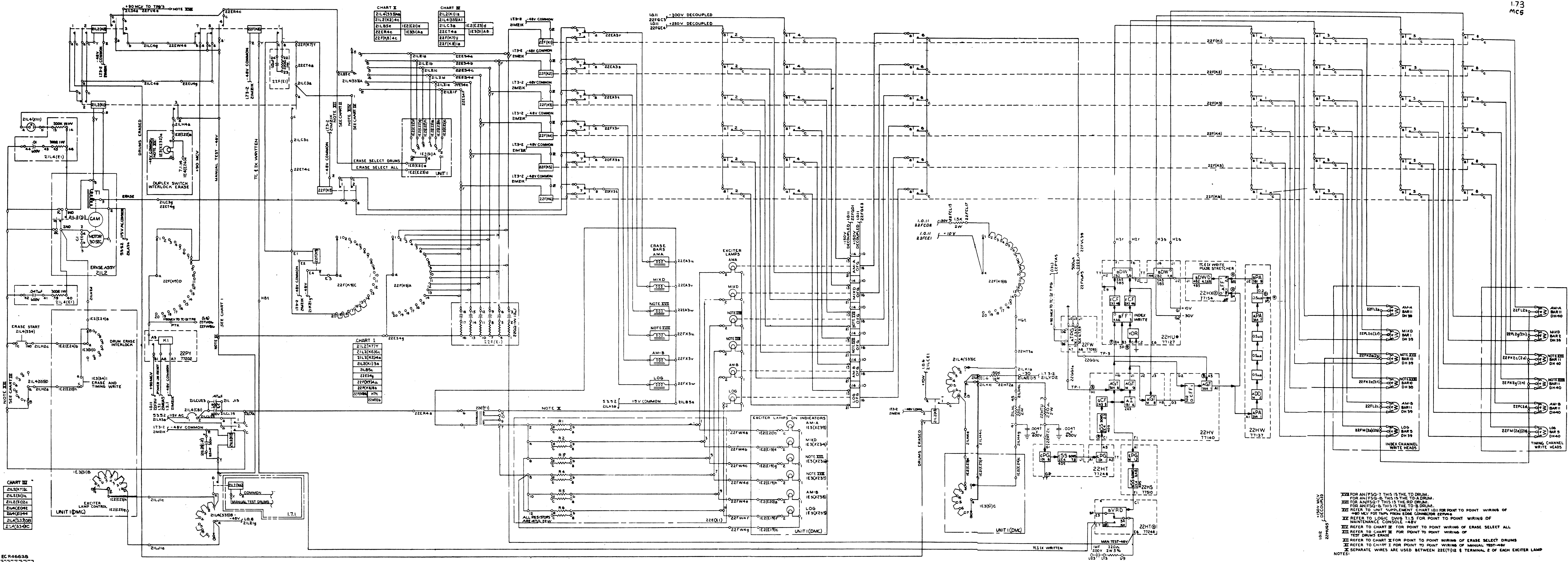
NOTE XII
SECOND TD DRUM FOR AN/F5Q-8

NOTE XI
SIX SETS OF FORM A CONTACTS ARE WIRED IN PARALLEL PINS 2, 3, 4, 8, 9 & 10 ARE WIRED TOGETHER.

NOTE X
REFER TO LOGIC DIAG 7.1.5 FOR POINT TO POINT WIRING OF MAINTENANCE CONSOLE -48V COMMON.

NOTES:

F
D
C
B
A

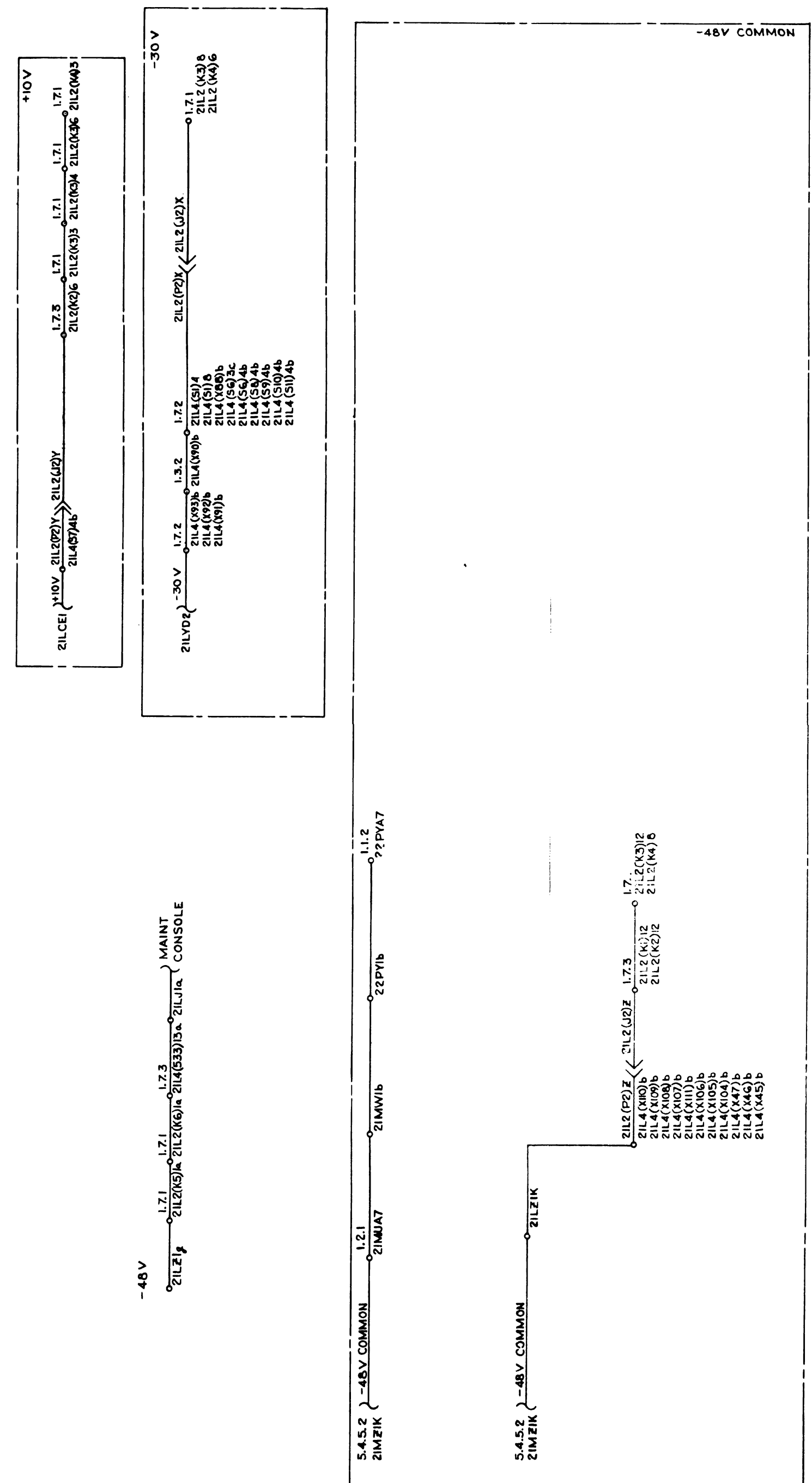


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3131-8-6

NOTE I
NOTE II
NOTE III
NOTE IV
NOTE V
NOTE VI
NOTE VII
NOTE VIII
NOTE IX
NOTE X
NOTE XI
NOTE XII
NOTE XIII
NOTE XIV
NOTE XV
NOTE XVI
NOTE XVII
NOTE XVIII
NOTE XIX
NOTE XX
NOTE XXI
NOTE XXII

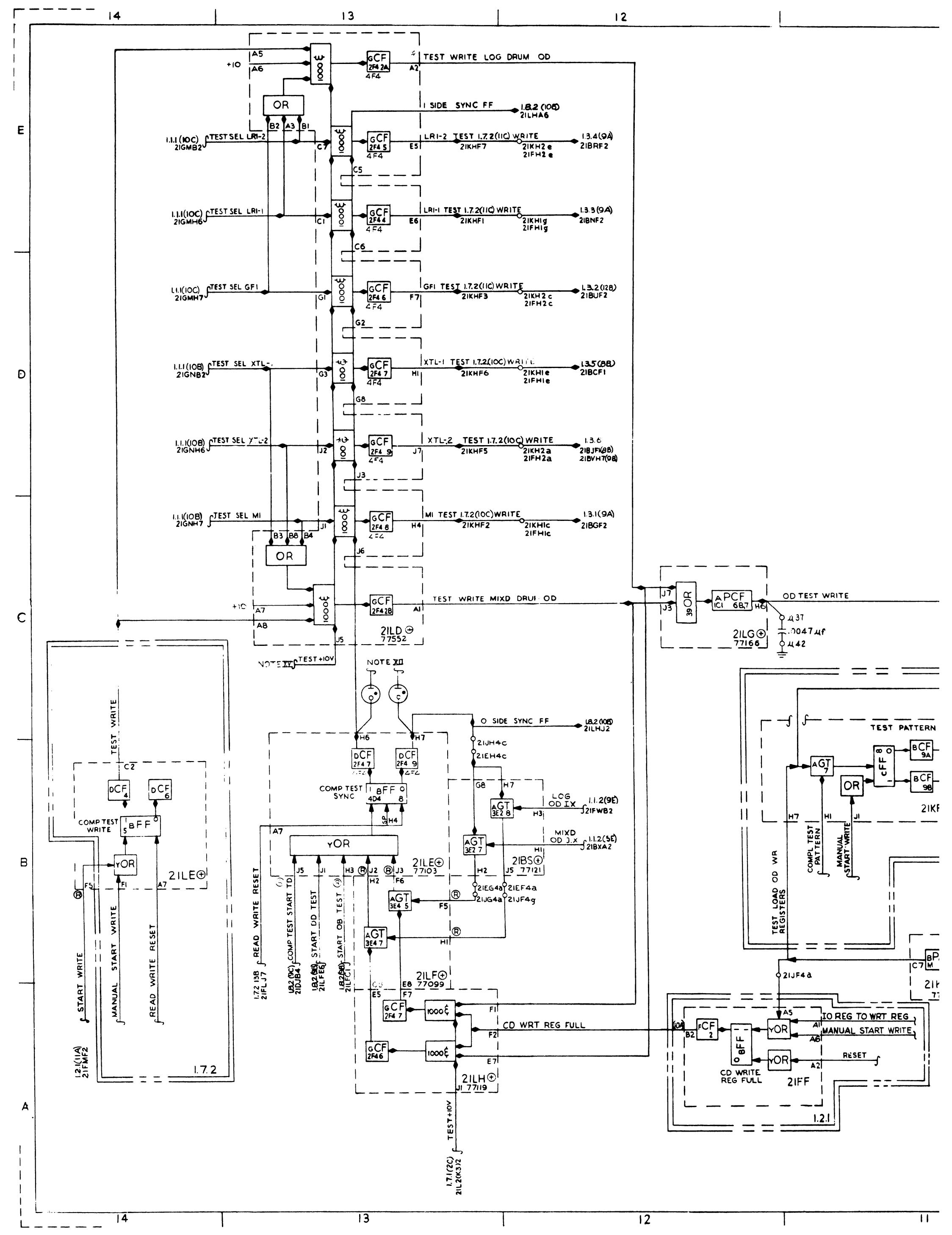
XXI FOR AN/PSQ-7 THIS IS THE TO DRUM.
XXII FOR AN/PSQ-8 THIS IS THE TO DRUM.
XXIII FOR AN/PSQ-7 THIS IS THE RD DRUM.
XXIV FOR AN/PSQ-8 THIS IS THE RD DRUM.
XXV REFER TO UNIT SUPPLEMENT CHART 101 FOR POINT TO POINT WIRING OF MAINTENANCE CONSOLE -48V.
XXVI REFER TO LOGIC DIAG 715 FOR POINT TO POINT WIRING OF MAINTENANCE CONSOLE -48V.
XXVII REFER TO CHART III FOR POINT TO POINT WIRING OF ERASE SELECT ALL.
XXVIII REFER TO CHART III FOR POINT TO POINT WIRING OF TEST DRUMS ERASE.
XXIX REFER TO CHART II FOR POINT TO POINT WIRING OF ERASE SELECT DRUMS.
XXX REFER TO CHART I FOR POINT TO POINT WIRING OF MANUAL TEST DRUMS.
XXXI SEPARATE WIRES ARE USED BETWEEN 22E(1) & TERMINAL 2 OF EACH EXCITER LAMP NOTES!

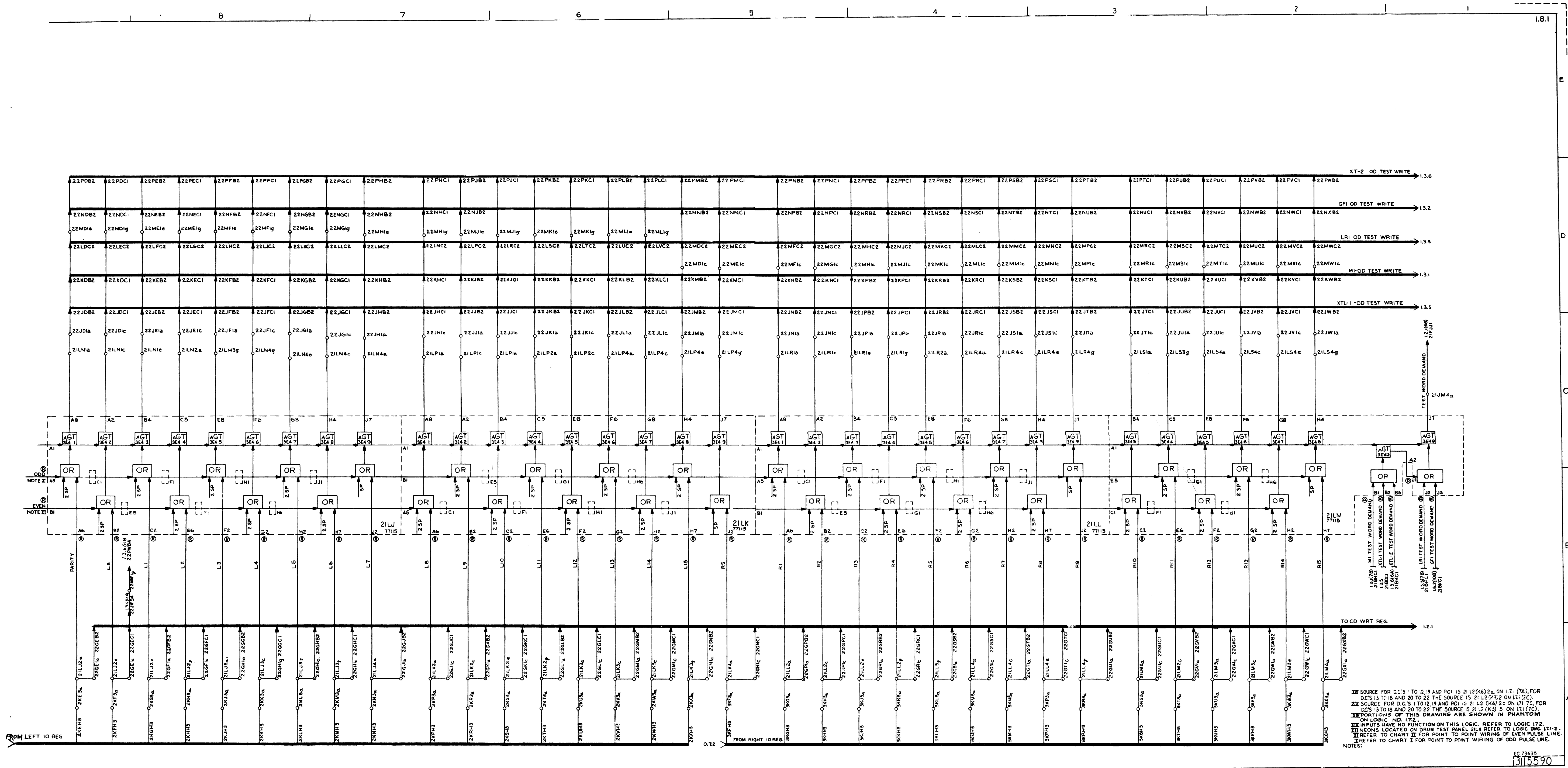
MAIN DRUM ERASE & WRITE INDEX & TIMING CHANNELS



COMMON & SPECIAL SERVICE WIRING

1.7.3-2
MC-5

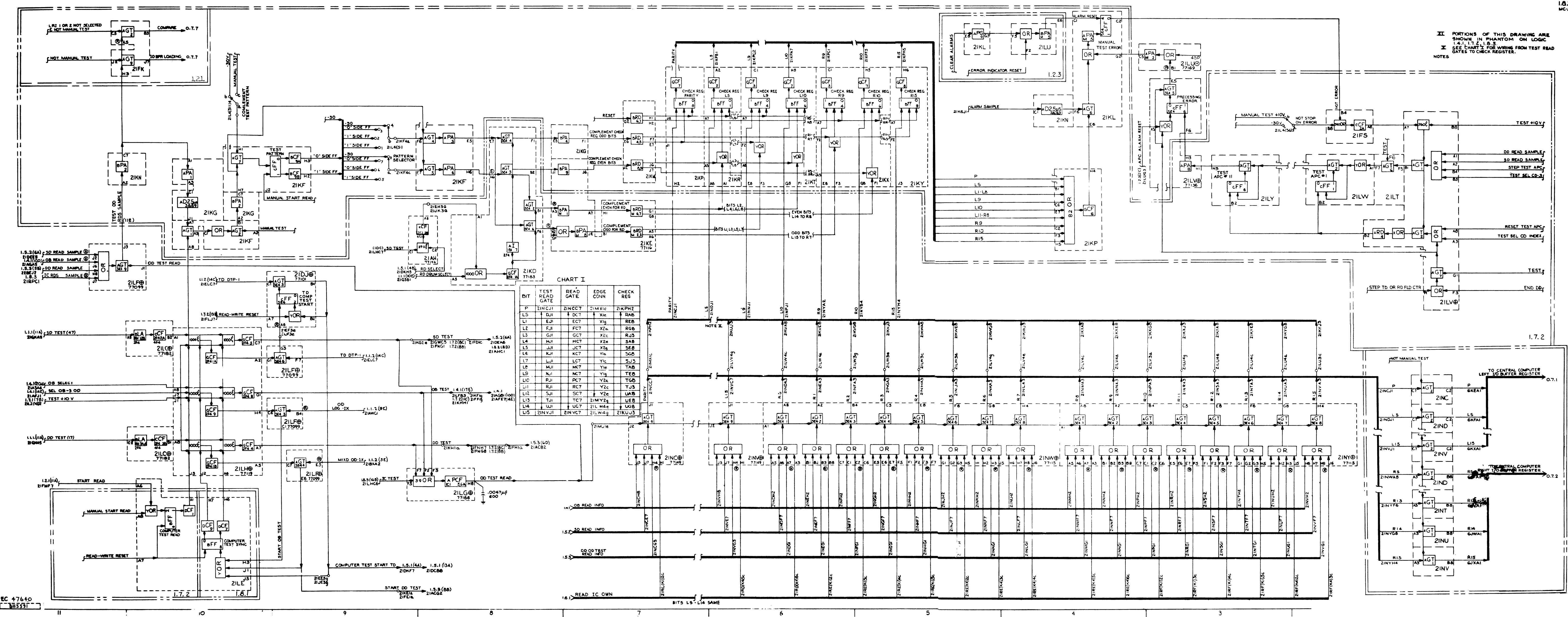




III SOURCE FOR DC'S 1 TO 13, 19 AND PC1 15 21 L2(K6) 2a ON 171 (7A), FOR DC'S 13 TO 18 AND 20 TO 22 THE SOURCE IS 21 L2(K3) 2c ON 171 (7C).
 IV SOURCE FOR DC'S 1 TO 12, 19 AND PC1 15 21 L2 (K6) 2c ON 171 (7C). FOR DC'S 13 TO 18 AND 20 TO 22 THE SOURCE IS 21 L2 (K3) 5 ON 171 (7C).
 V PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM.
 ON LOGIC NO. 171.
 VI MEANS LOCATED ON DRUM TEST PANEL 21L4 REFER TO LOGIC DWG. 171-2.
 VII REFER TO CHART II FOR POINT TO POINT WIRING OF EVEN PULSE LINE.
 VIII REFER TO CHART I FOR POINT TO POINT WIRING OF ODD PULSE LINE.

CG 73635
 13115590

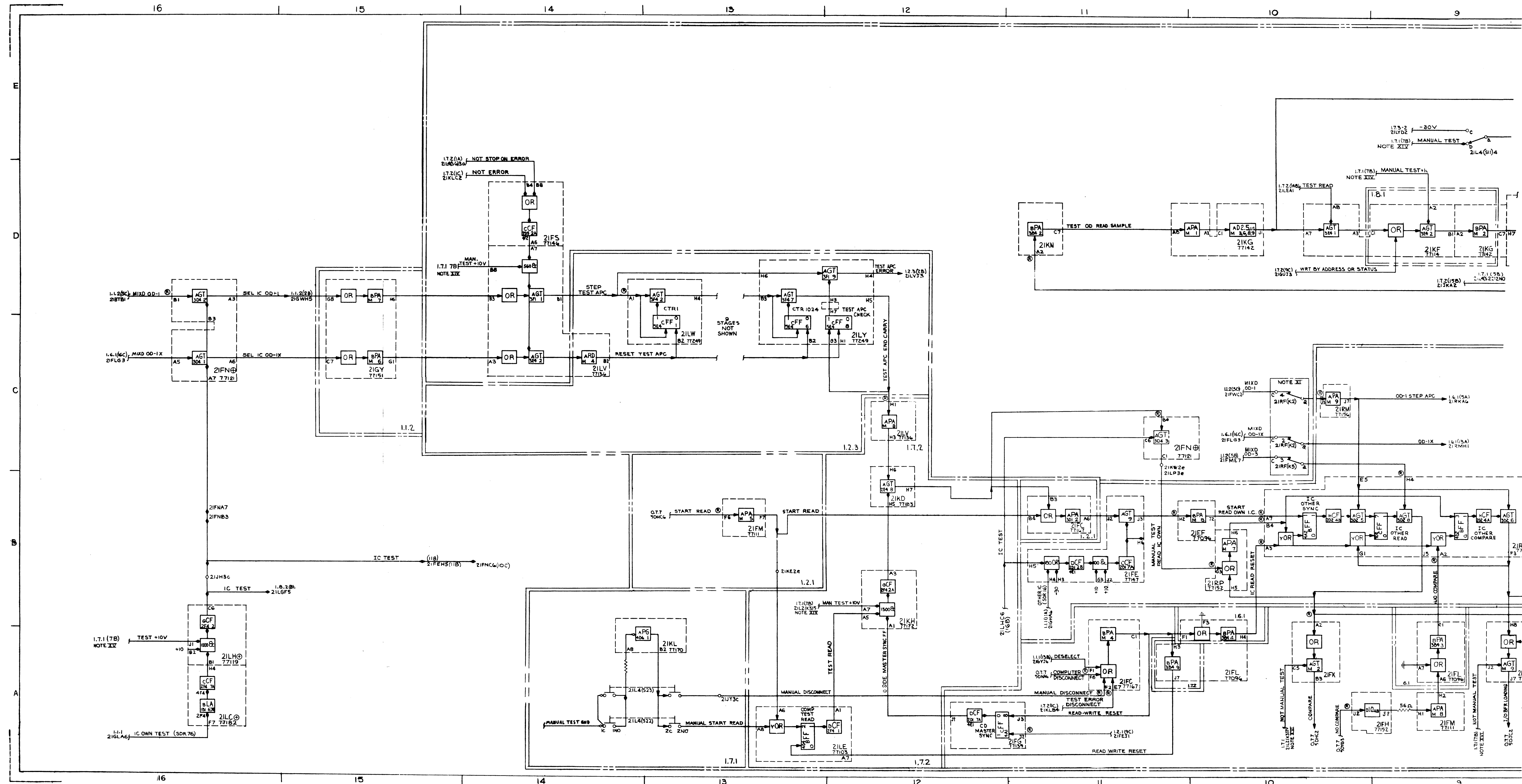
MAIN DRUM LOOP TEST WRITE



II PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC 1.4, 1.7, 1.8, 1.9. SEE CHART I FOR WIRING FROM TEST READ GATES TO CHECK REGISTER.

MAIN DRUM LOOP TEST READ

EC 47440
115531



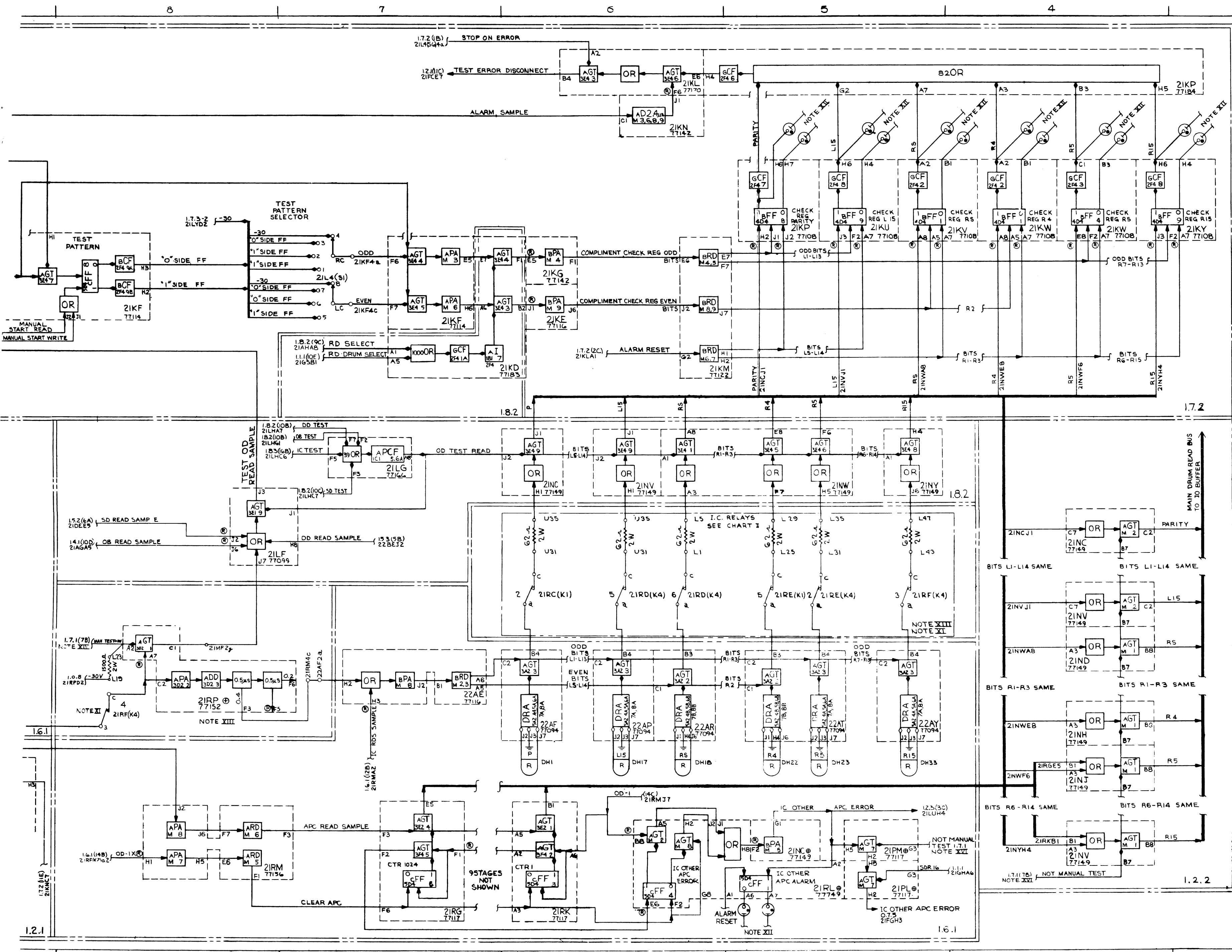


CHART I

BIT	IC RELAY	RESISTOR BOARD ZIN TO RESISTOR	ZIN FROM RESISTOR	PU PIN	ZIR
P	C(KI)2c	CU31	CU35	CH1	ZIR
L5	C(KI)3c	DL31	DL35	DH1	ZIR
L1	C(KI)4c	EU31	EU35	EH1	ZIR
L2	C(KI)5c	FL31	FL35	FH1	ZIR
L3	C(KI)2a	GU31	GU35	GH1	ZIR
L4	C(KI)3c	HL31	HL35	HH1	ZIR
L5	C(KI)4c	JU31	JU35	JH1	ZIR
L6	C(KI)5c	KL31	KL35	KH1	ZIR
L7	C(KI)6c	LU31	LU35	LH1	ZIR
L8	D(KI)2c	ML31	ML35	MH1	ZIR
L9	D(KI)3c	NU31	NU35	NH1	ZIR
L10	D(KI)4a	PL31	PL35	PH1	ZIR
L11	D(KI)5c	RU31	RU35	RH1	ZIR
L12	D(KI)2c	SL31	SL35	SH1	ZIR
L13	D(KI)3c	TU31	TU35	TH1	ZIR
L14	D(KI)4c	VU31	VU35	VH1	ZIR
R5	D(KI)5c	WL1	WL5	WA3	ZIR
R1	E(KI)2c	WL7	WL11	WB8	ZIR
R2	E(KI)3c	WL3	WL7	WC6	ZIR
R3	E(KI)4c	WL9	WL13	WF5	ZIR
R4	E(KI)5c	WL25	WL29	WF7	ZIR
R5	E(KI)2c	WL31	WL35	WH5	ZIR
R6	E(KI)3c	WL37	WL41	WJ5	ZIR
R7	E(KI)4c	WL43	WL47	WJ6	ZIR
R8	E(KI)5c	YL1	YL5	YA3	ZIR
R9	E(KI)6c	YL7	YL11	YB8	ZIR
R10	F(KI)2c	YL13	YL17	YC6	ZIR
R11	F(KI)3c	YL19	YL23	YF5	ZIR
R12	F(KI)4c	YL25	YL29	YF7	ZIR
R13	F(KI)5c	YL31	YL35	YH5	ZIR
R14	F(KI)2c	YL37	YL41	YJ5	ZIR
R15	F(KI)3c	YL43	YL47	YJ6	ZIR

XXVI SOURCE FOR +10 NOT MANUAL TEST DC-13 THRU 18 AND 20 THRU 22 2IL2(K3)7 DC-1 THRU 12 19 PC-1 AND CC-1 THRU 2 2IL2(K6)3a
 XXV SOURCE FOR TEST +10 DC 3 THRU 18 AND 20 THRU 22 2IL2(K3)2 DC 1 THRU 12, 19 PC-1 AND CC-1 THRU 3 2IL2(K6)3a
 XXIV SOURCE FOR +10 IN MANUAL TEST DC-3 THRU 18 AND 20 THRU 22 2IL2(K3)5 DC 1 THRU 12, 19, PC-1 AND CC-1 THRU 3 2IL2(K6)2c
 XXIII THIS IS NOT A PHANTOM AREA.
 XXII REFER TO LOGIC DWG I-71.2
 XXI ALL RELAYS ARE SHOWN IN THE ENERGIZED POSITION FOR TEST PURPOSES
 X DOES NOT APPLY TO THIS LOGIC
 NOTES

I.8.3
MC-5

EC R73685
3135865

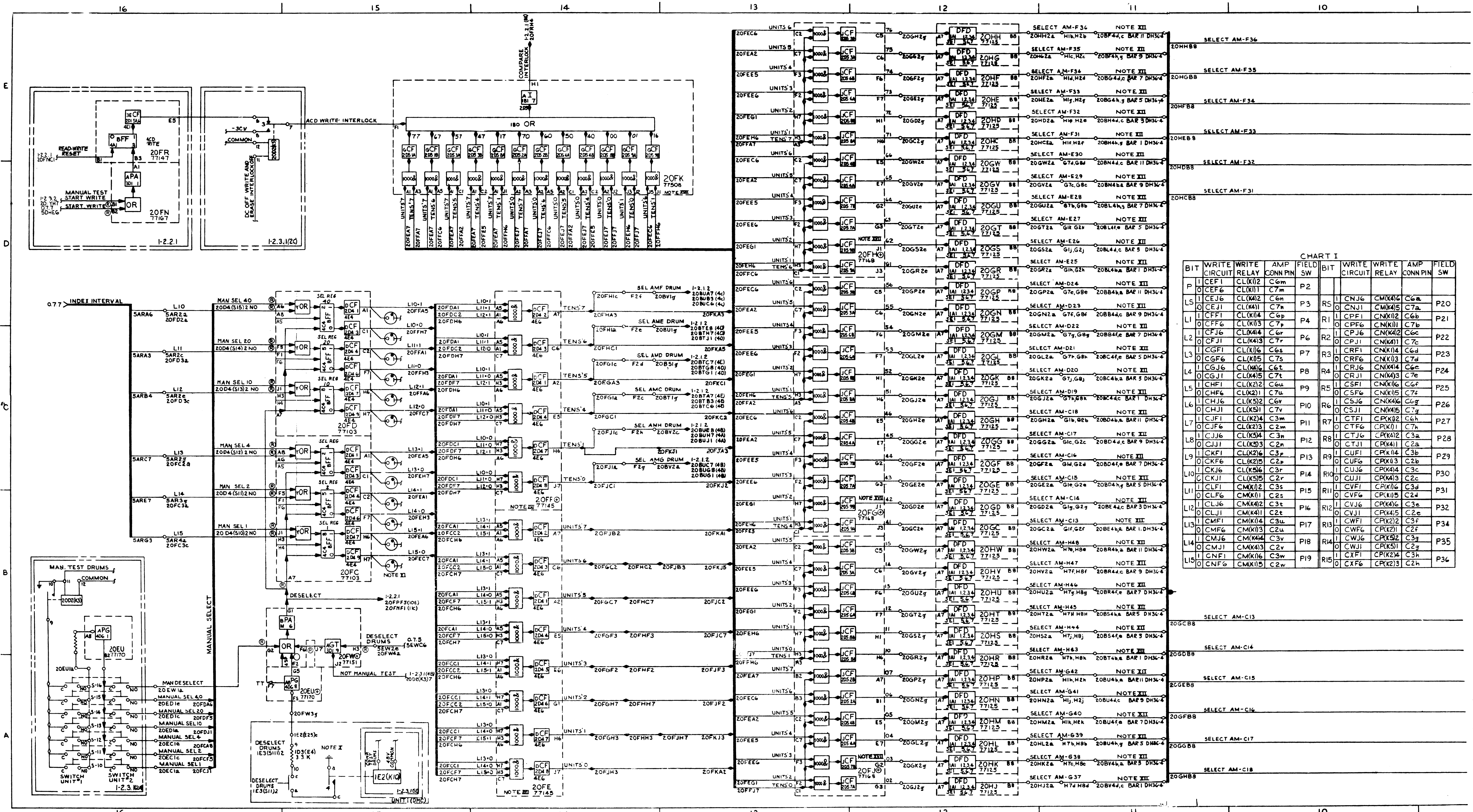


CHART I

BIT	WRITE CIRCUIT	WRITE RELAY	AMP CONN PIN	FIELD SW	BIT	WRITE CIRCUIT	WRITE RELAY	AMP CONN PIN	FIELD SW
F	CEFI	CL(K)2	C6m	P2					
	CEF6	CL(K)1	C7m						
LS	CEJ6	CL(K)2	C6m	P3	RS	CNJ6	CM(K)6	C6a	P20
	CEJ1	CL(K)1	C7m						
LI	CFFI	CL(K)4	C6p	P4	R1	CPFI	CM(K)2	C6b	P21
	CFF6	CL(K)3	C7p						
L2	CFJ6	CL(K)4	C6r	P6	R2	CPJ6	CM(K)2	C6c	P22
	CFJ1	CL(K)3	C7r						
L3	CGFI	CL(K)6	C6s	P7	R3	CGFI	CM(K)4	C6d	P23
	CGF6	CL(K)2	C7s						
L4	CJG6	CL(K)6	C6t	P8	R4	CRJ6	CM(K)4	C6e	P24
	CJG1	CL(K)5	C7t						
L5	CHF1	CL(K)2	C6u	P9	R5	CHF1	CM(K)6	C6f	P25
	CHF6	CL(K)1	C7u						
L6	CHJ6	CL(K)2	C6v	PI0	R6	CHJ6	CM(K)6	C6g	P26
	CHJ1	CL(K)1	C7v						
L7	CJFI	CL(K)2	C3m	PI1	R7	CTFI	CP(K)2	C2a	P27
	CJF6	CL(K)3	C2m						
L8	CJJ6	CL(K)4	C3n	PI2	R8	CTJ6	CP(K)2	C2a	P28
	CJJ1	CL(K)3	C2n						
L9	CKFI	CL(K)6	C3p	PI3	R9	CUFI	CP(K)4	C3b	P29
	CKF6	CL(K)5	C2p						
L10	CKJ6	CL(K)6	C3r	PI4	R10	CUJ6	CP(K)4	C3c	P30
	CKJ1	CL(K)5	C2r						
L11	CLFI	CM(K)2	C3s	PI5	R11	CVFI	CP(K)6	C3d	P31
	CLF6	CM(K)1	C2s						
L12	CLJ6	CM(K)2	C3t	PI6	R12	CJVF6	CP(K)6	C3e	P32
	CLJ1	CM(K)1	C2t						
L13	CMFI	CM(K)4	C3u	PI7	R13	CWFI	CP(K)2	C3f	P34
	CMF6	CM(K)3	C2u						
L14	CMJ6	CM(K)4	C3v	PI8	R14	CWJ6	CP(K)2	C3g	P35
	CMJ1	CM(K)3	C2v						
L15	CNFI	CM(K)6	C3w	PI9	R15	CXFI	CP(K)4	C3h	P36
	CNF6	CM(K)5	C2w						

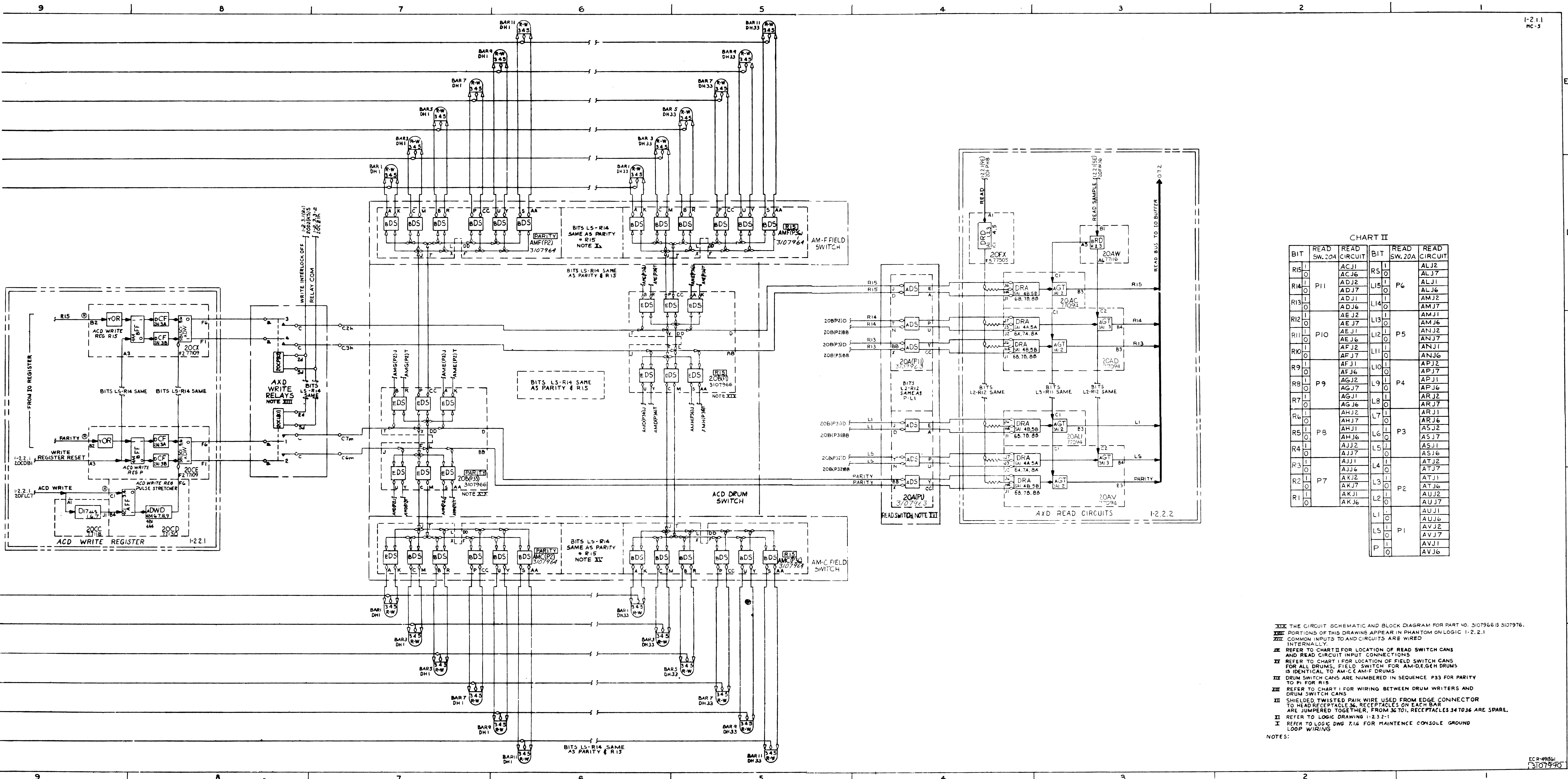
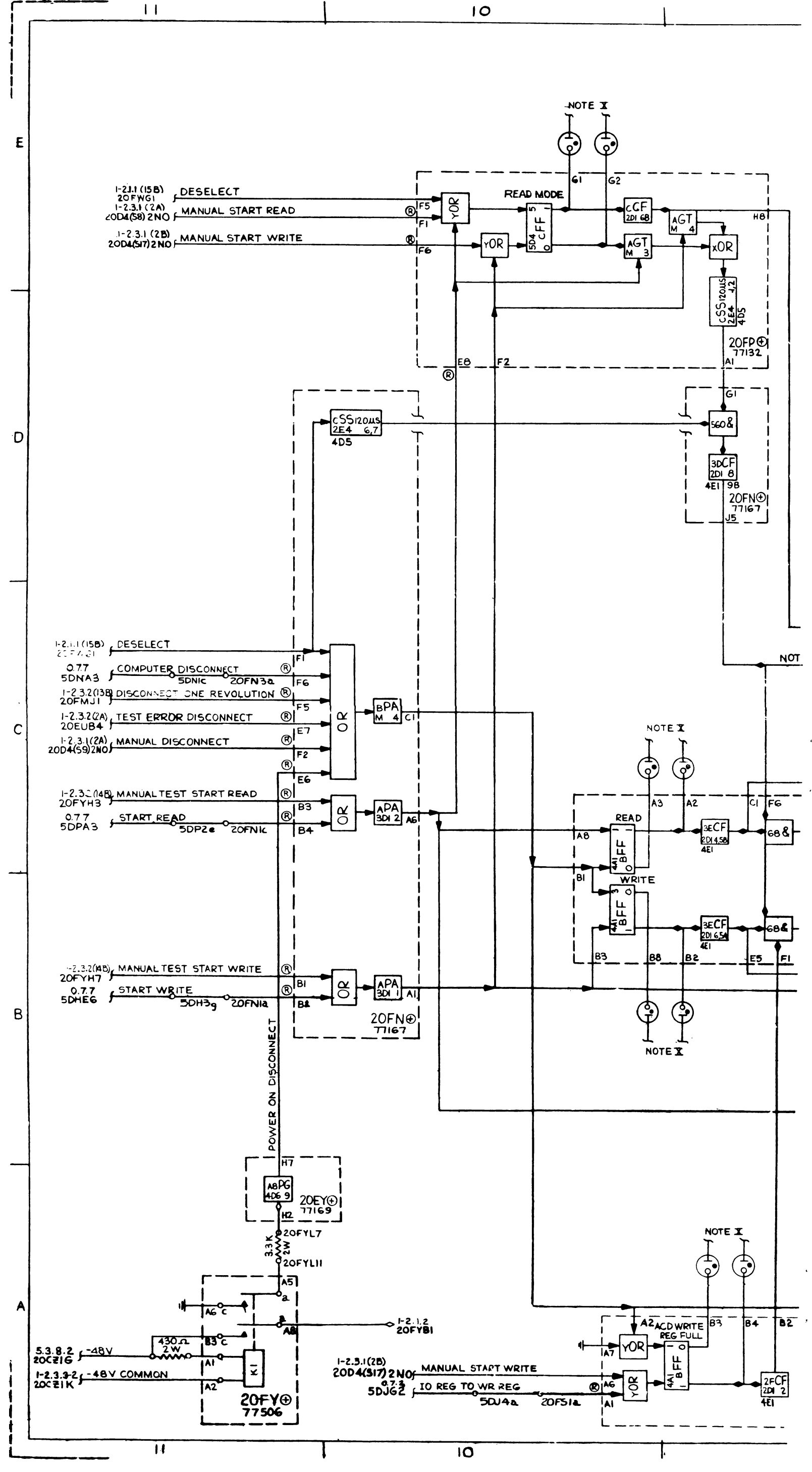
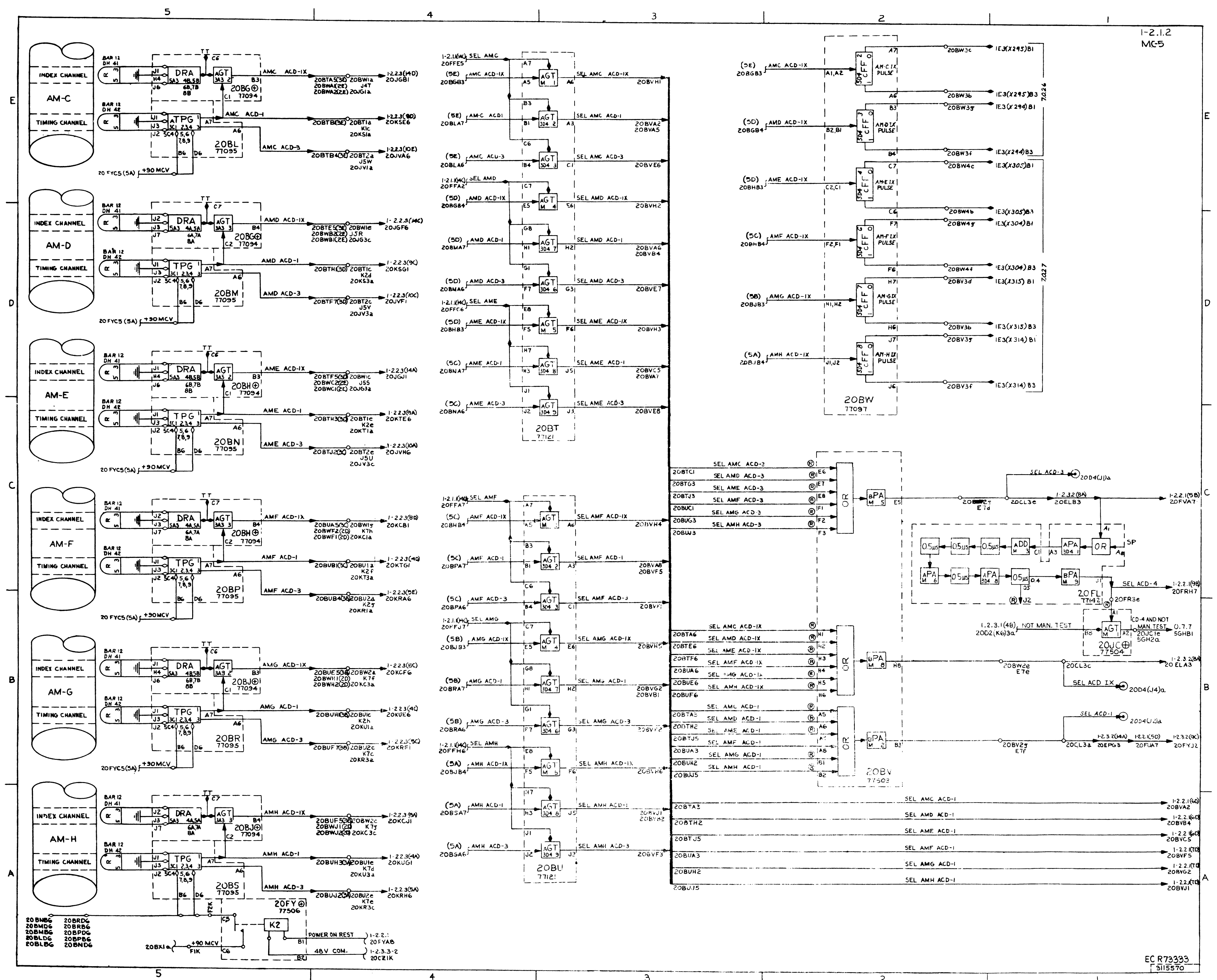


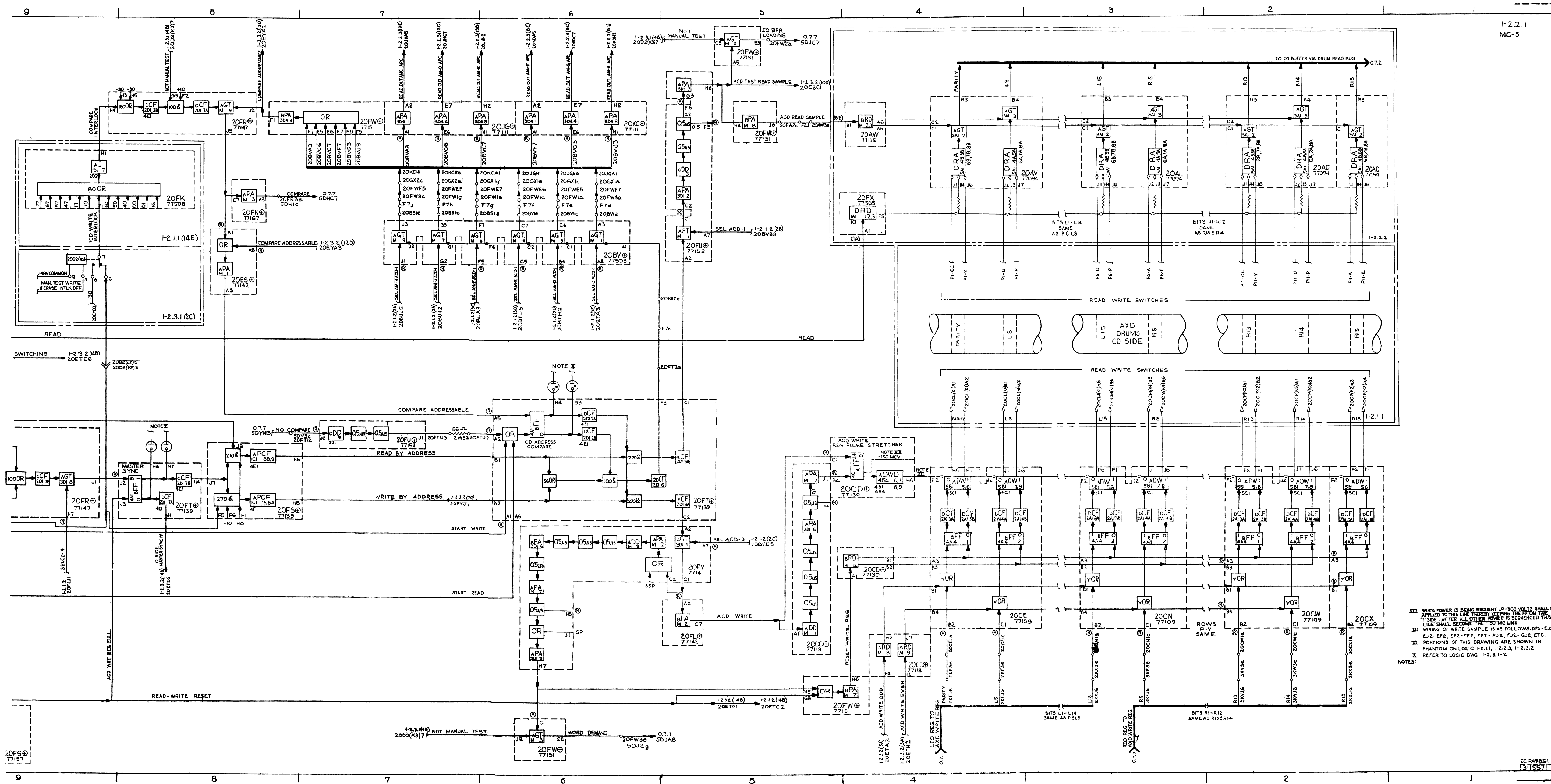
CHART II

BIT	READ SW. 20A	READ CIRCUIT	BIT	READ SW. 20A	READ CIRCUIT
R15	0	ACJ6	R5	1	ALJ2
R14	0	ACJ6	R5	0	ALJ7
R13	0	ADJ2	L15	0	ALJ1
R12	0	ADJ7	L14	0	ALJ6
R11	0	ADJ1	L14	0	AMJ2
R10	0	ADJ6	L13	0	AMJ7
R9	0	AEJ2	L13	0	AMJ1
R8	0	AEJ7	L12	0	AMJ6
R7	0	AEJ1	L12	0	ANJ2
R6	0	AEJ6	L11	0	ANJ7
R5	0	AFJ2	L11	0	ANJ1
R4	0	AFJ7	L10	0	ANJ6
R3	0	AFJ1	L10	0	APJ2
R2	0	AFJ6	L9	0	APJ7
R1	0	AGJ2	L9	0	APJ1
		AGJ7	L8	0	APJ6
		AGJ1	L8	0	ARJ2
		AGJ6	L7	0	ARJ7
		AHJ2	L7	0	ARJ1
		AHJ7	L6	0	ARJ6
		AHJ1	L6	0	ASJ2
		AHJ6	L5	0	ASJ7
		AJJ2	L5	0	ASJ1
		AJJ7	L4	0	ASJ6
		AJJ1	L4	0	ATJ2
		AJJ6	L3	0	ATJ7
		AKJ2	L3	0	ATJ1
		AKJ7	L2	0	ATJ6
		AKJ1	L2	0	AUJ2
		AKJ6	L2	0	AUJ7
			L1	0	AUJ1
			L5	0	AUJ6
			L5	0	AVJ2
			L5	0	AVJ7
			L5	0	AVJ1
			L5	0	AVJ6
			P1	0	
			P1	0	
			P1	0	

- XIX THE CIRCUIT SCHEMATIC AND BLOCK DIAGRAM FOR PART NO. 3107966 IS 3107976.
 XX PORTIONS OF THIS DRAWING APPEAR IN PHANTOM ON LOGIC 1-2.2.1
 XXI COMMON INPUTS TO AND CIRCUITS ARE WIRED INTERNALLY.
 XXII REFER TO CHART II FOR LOCATION OF READ SWITCH CANS AND READ CIRCUIT INPUT CONNECTIONS.
 XXIII REFER TO CHART I FOR LOCATION OF FIELD SWITCH CANS FOR ALL DRUMS. FIELD SWITCH FOR AM-D, E, G, H DRUMS IS IDENTICAL TO AM-C & AM-F DRUMS.
 XXIV DRUM SWITCH CANS ARE NUMBERED IN SEQUENCE P33 FOR PARITY TO P1 FOR R15.
 XXV REFER TO CHART I FOR WIRING BETWEEN DRUM WRITERS AND DRUM SWITCH CANS.
 XXVI SHIELDED TWISTED PAIR WIRE USED FROM EDGE CONNECTOR TO HEAD RECEPTABLES. RECEPTABLES ON EACH BAR ARE JUMPED TOGETHER, FROM 36 TO 1. RECEPTABLES 34 TO 36 ARE SPARE.
 XXVII REFER TO LOGIC DRAWING 1-2.3.2-1
 XXVIII REFER TO LOGIC DWG 7.16 FOR MAINTENANCE CONSOLE GROUND LOOP WIRING

NOTES:

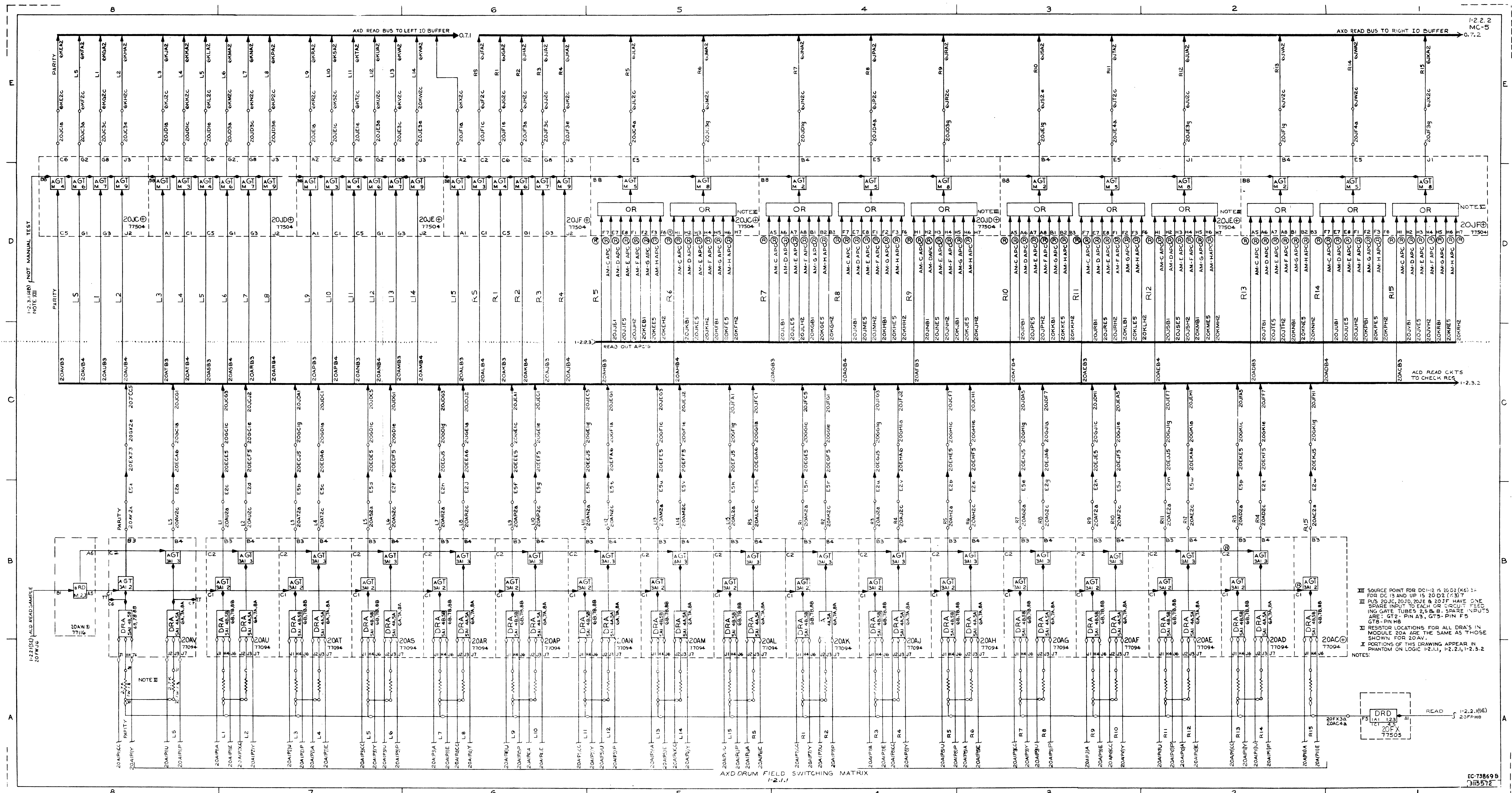




1-2.2.1
MC-5

NOTES:
 III WHEN POWER IS BEING BROUGHT UP 300 VOLTS SHALL BE APPLIED TO THIS LINE THEREBY KEEPING THE FT ON THE 1-SIDE. AFTER ALL OTHER POWER IS SEQUENCED THIS LINE SHALL REMAIN THE 1-SIDE.
 II WIRING OF WRITE SAMPLE IS AS FOLLOWS: D6-EJ2, EJ2-EF2, EF2-FF2, FF2-FJ2, FJ2-GJ2, ETC.
 I PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC 1-2.1.1, 1-2.2.3, 1-2.3.2.
 X REFER TO LOGIC DWG 1-2.3.1-2.

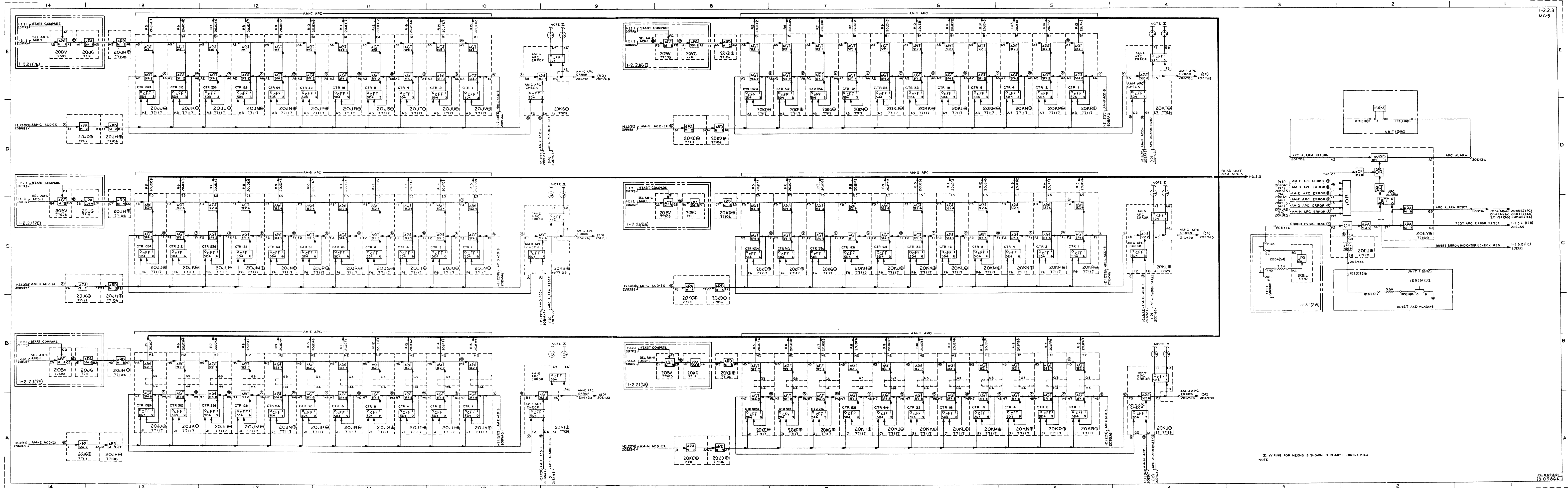
EC 49861
3115571



NOTE I
1-2.2.1 (B) NOT MANUAL TEST

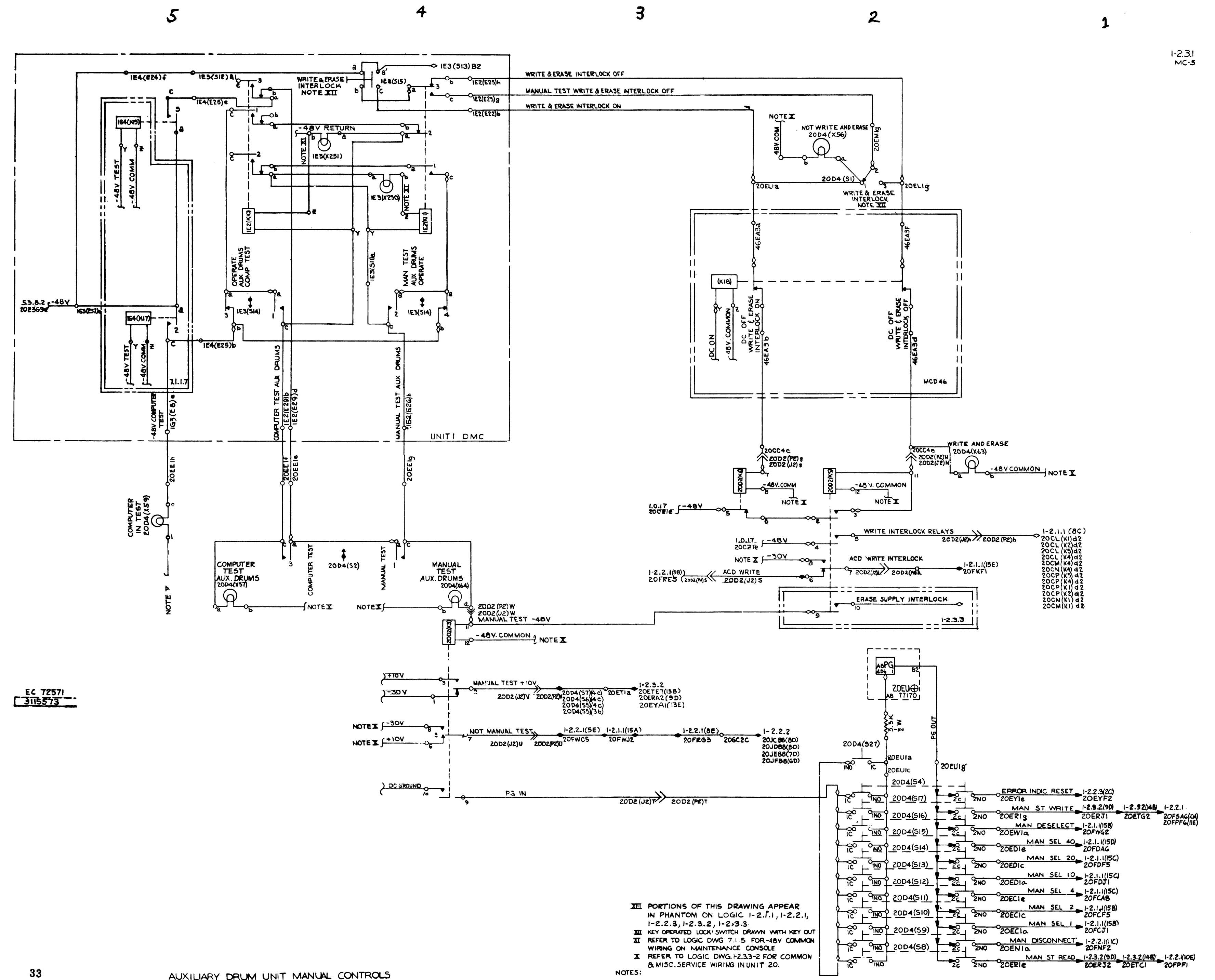
NOTE II
RESISTOR LOCATIONS FOR ALL DRA'S IN MODULE 20A ARE THE SAME AS THOSE SHOWN FOR 20A.

NOTE III
PORTIONS OF THIS DRAWING APPEAR IN PHANTOM ON LOGIC 1-2.1.1, 1-2.2.1, 1-2.3.2



WIRING FOR NEONS IS SHOWN IN CHART 1-2.3.4
NOTE

AXD APC & ALARM CIRCUITS



EC 72571
3115573

III PORTIONS OF THIS DRAWING APPEAR IN PHANTOM ON LOGIC I-2.1.1, I-2.2.1, I-2.2.3, I-2.3.2, I-2.3.3

II KEY OPERATED LOCK SWITCH DRAWN WITH KEY OUT

IV REFER TO LOGIC DWG 71.5 FOR -48V COMMON WIRING ON MAINTENANCE CONSOLE

X REFER TO LOGIC DWG I-2.3.3-2 FOR COMMON & MISC. SERVICE WIRING IN UNIT 20.

NOTES:

F
D
C
B
A

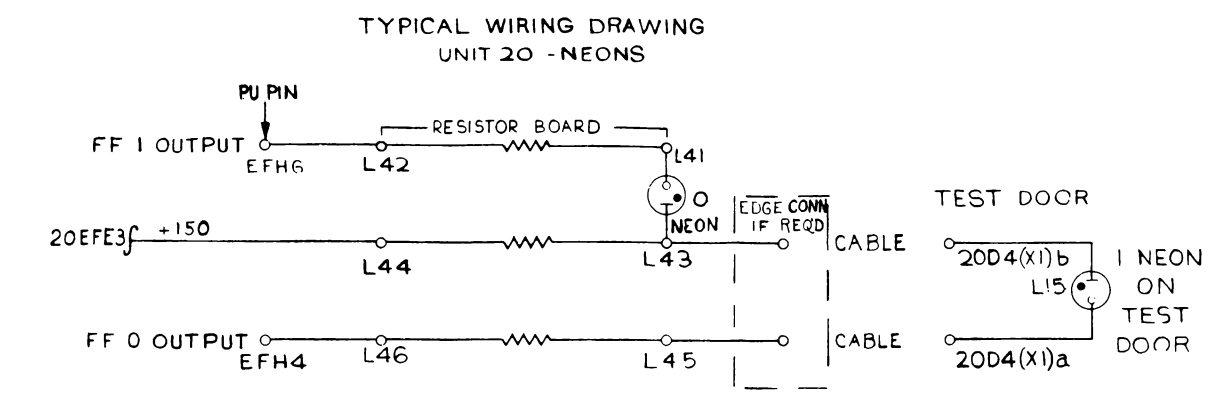
3

2

1

ADVANCE

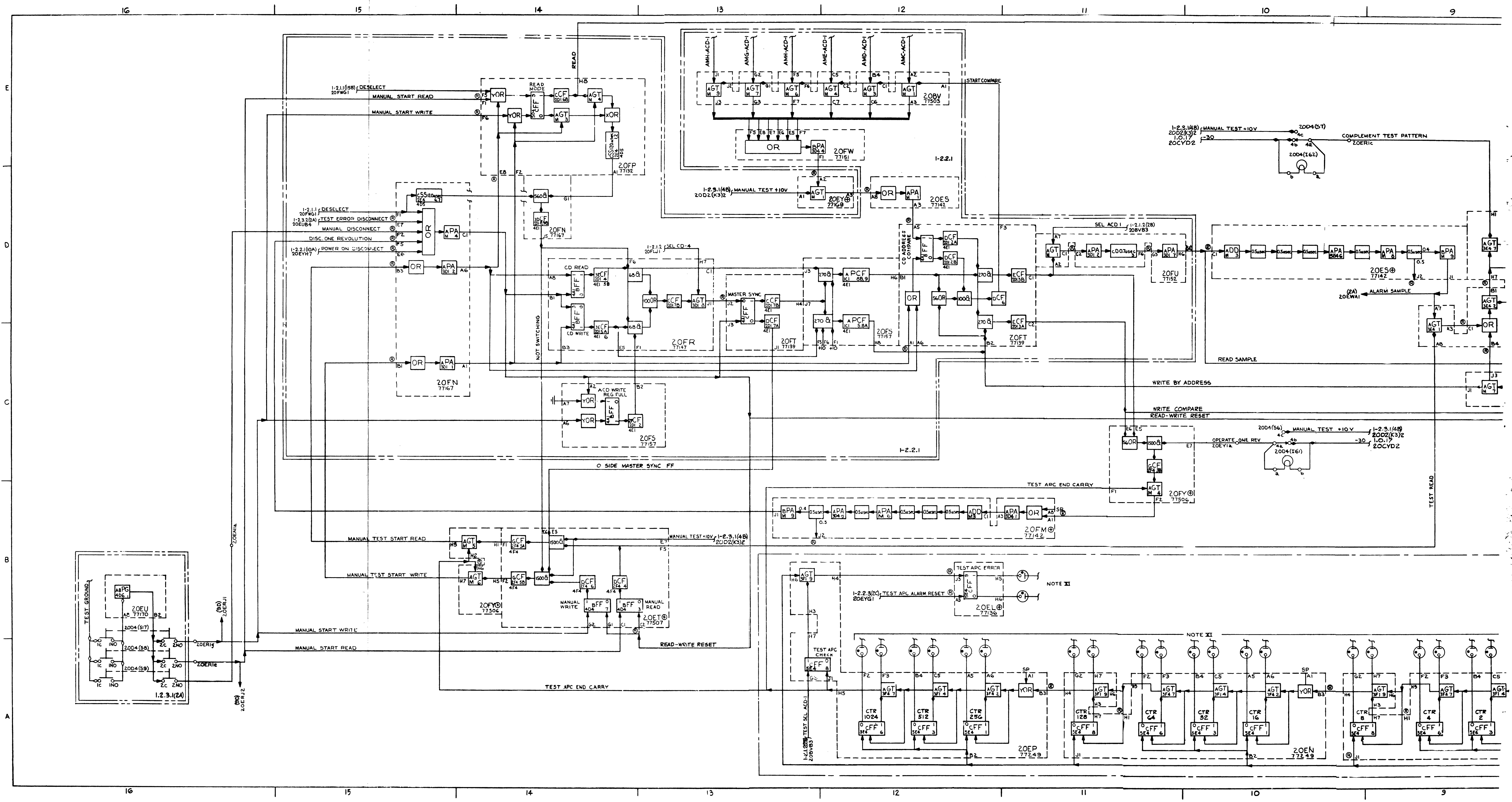
1-2.3.1-2

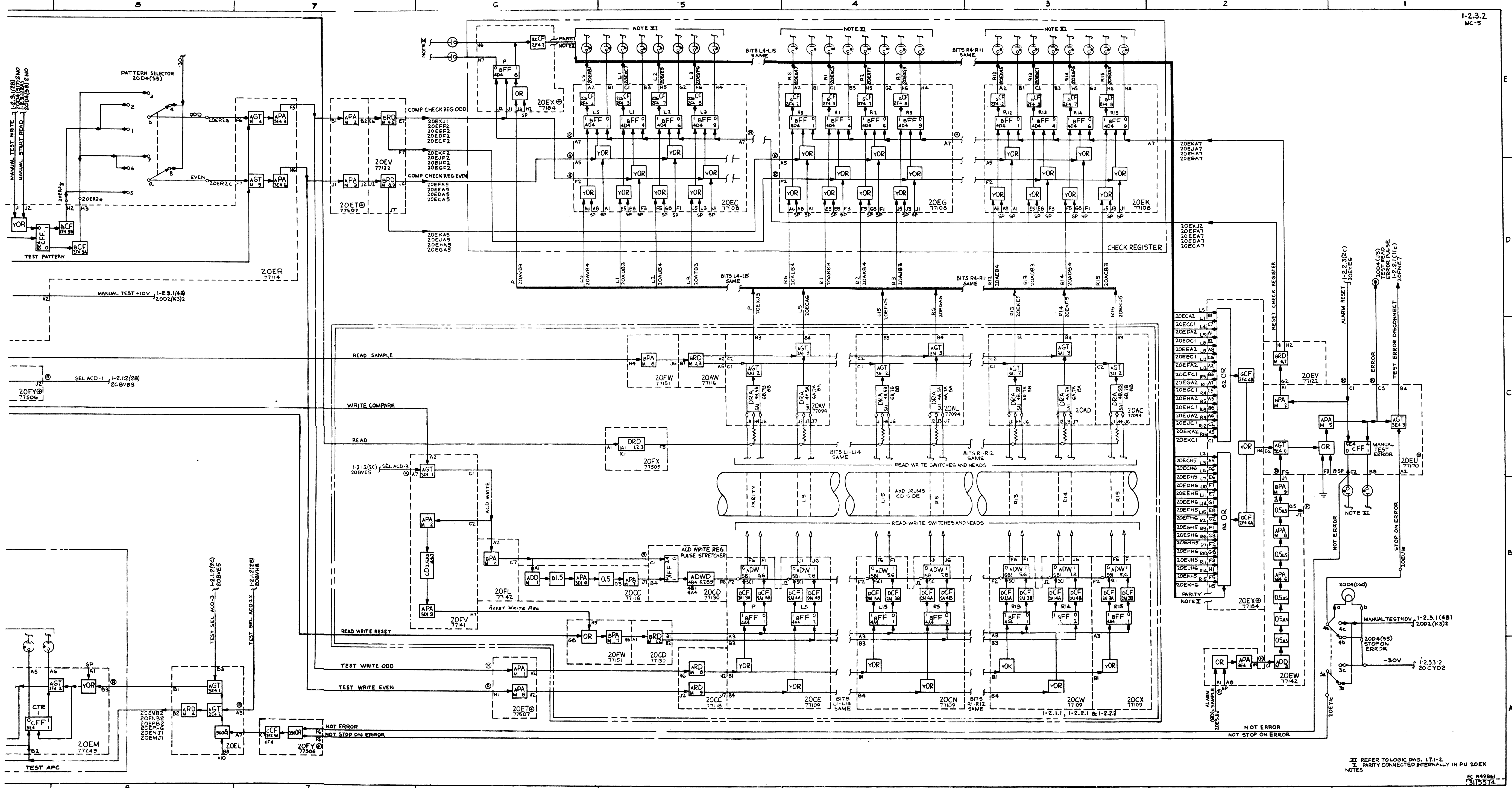


FF OUT	PU TERM	RES RESISTOR	BOARD O NEON	TERM	LOGIC E.C.C.	NEON & TITLE
						L 5
						20D4(X16)b
						20D4(X16)a
						L 1
						20D4(X15)b
						20D4(X15)a
						L 2
						20D4(X14)b
						20D4(X14)a
						L 3
						20D4(X13)b
						20D4(X13)a
						L 4
						20D4(X12)b
						20D4(X12)a
						L 5
						20D4(X11)b
						20D4(X11)a
						L 6
						20D4(X10)b
						20D4(X10)a
						L 7
						20D4(X9)b
						20D4(X9)a
						L 8
						20D4(X8)b
						20D4(X8)a
						L 9
						20D4(X7)b
						20D4(X7)a
						L 10
						20D4(X6)b
						20D4(X6)a
						L 11
						20D4(X5)b
						20D4(X5)a
						L 12
						20D4(X4)b
						20D4(X4)a
						L 13
						20D4(X3)b
						20D4(X3)a
						L 14
						20D4(X2)b
						20D4(X2)a
						L 15
						20D4(X1)b
						20D4(X1)a
						R 5
						20D4(X33)b
						20D4(X33)a
						R 1
						20D4(X32)b
						20D4(X32)a
						R 2
						20D4(X31)b
						20D4(X31)a
						R 3
						20D4(X30)b
						20D4(X30)a
						R 4
						20D4(X29)b
						20D4(X29)a

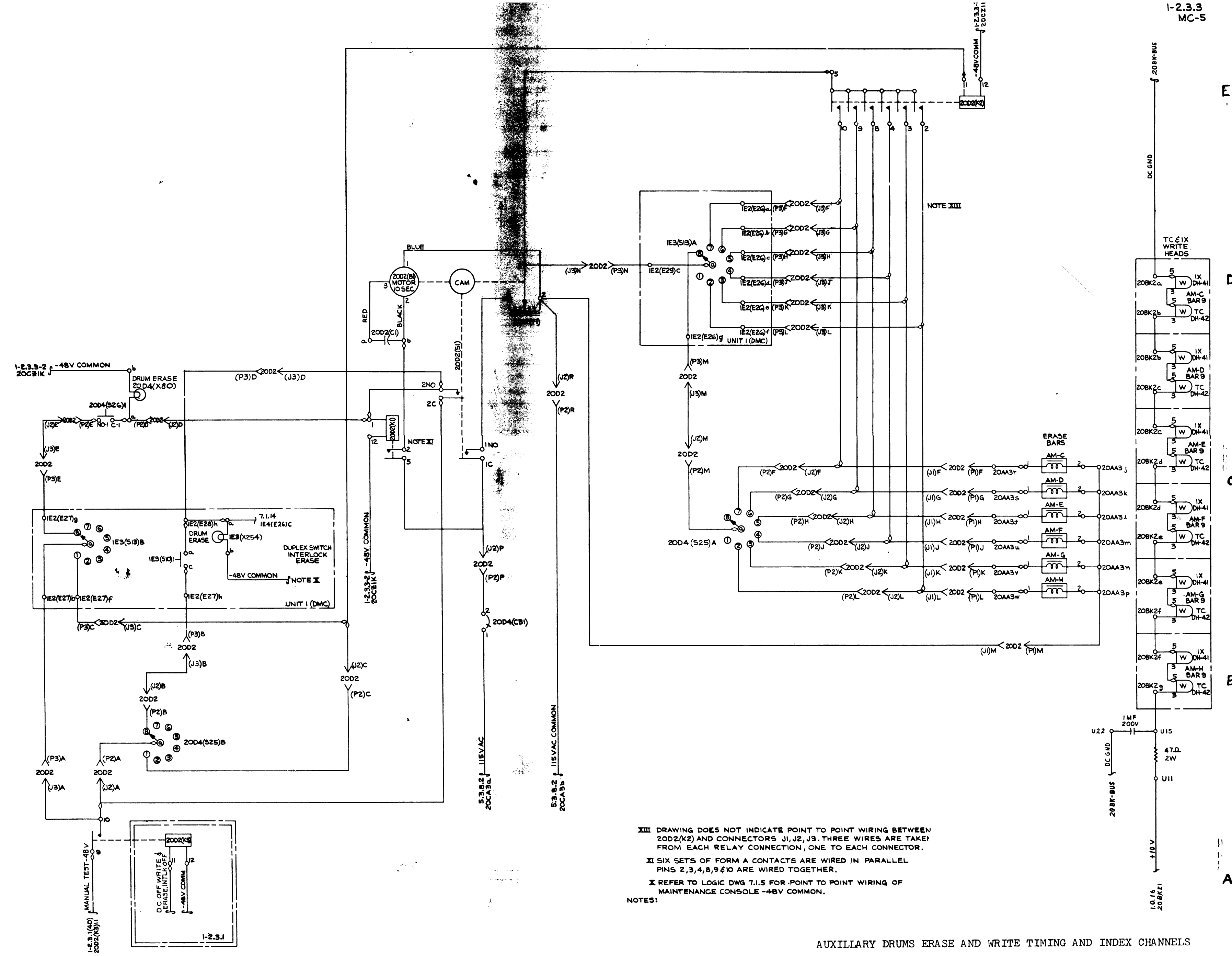
FF OUT	PU TERM	RES RESISTOR	BOARD O NEON	TERM	LOGIC E.C.C.	NEON & TITLE
						R 5
						20D4(X28)b
						20D4(X28)a
						R 6
						20D4(X27)b
						20D4(X27)a
						R 7
						20D4(X26)b
						20D4(X26)a
						R 8
						20D4(X25)b
						20D4(X25)a
						R 9
						20D4(X24)b
						20D4(X24)a
						R 10
						20D4(X23)b
						20D4(X23)a
						R 11
						20D4(X22)b
						20D4(X22)a
						R 12
						20D4(X21)b
						20D4(X21)a
						R 13
						20D4(X20)b
						20D4(X20)a
						R 14
						20D4(X19)b
						20D4(X19)a
						R 15
						20D4(X18)b
						20D4(X18)a
						TEST APC ERROR
						20D4(X48)b
						20D4(X48)a
						TEST APC 1
						20D4(X34)b
						20D4(X34)a
						TEST APC 2
						20D4(X35)b
						20D4(X35)a
						TEST APC 4
						20D4(X36)b
						20D4(X36)a
						TEST APC P
						20D4(X37)b
						20D4(X37)a
						TEST APC 16
						20D4(X38)b
						20D4(X38)a
						TEST APC 32
						20D4(X39)b
						20D4(X39)a
						TEST APC 1
						20D4(X40)b
						20D4(X40)a
						TEST APC 17B
						20D4(X41)b
						20D4(X41)a
						TEST APC 256
						20D4(X42)b
						20D4(X42)a
						TEST APC 5 2
						20D4(X43)b
						20D4(X43)a

FF OUT	PU TERM	RES RESISTOR	BOARD O NEON	TERM	LOGIC E.C.C.	NEON & TITLE
						TEST APC 24
						20D4(X44)b
						20D4(X44)a
						NOT ERROR
						20D4(X59)b
						20D4(X59)a
						PARITY
						20D4(X17)b
						20D4(X17)a
						SEL REG 4
						20D4(X68)b
						20D4(X68)a
						SEL REG 2
						20D4(X67)b
						20D4(X67)a
						SEL REG 1
						20D4(X66)b
						20D4(X66)a
						SEL REG 40
						20D4(X71)b
						20D4(X71)a
						SEL REG 20
						20D4(X70)b
						20D4(X70)a
						SEL REG 10
						20D4(X69)b
						20D4(X69)a
						READ MODE
						20D4(X46)b
						20D4(X46)a
						READ FF
						20D4(X65)b
						20D4(X65)a
						WRITE FF
						20D4(X72)b
						20D4(X72)a
						ADD WRITE REG FULL
						20D4(X55)b
						20D4(X55)a
						COMPARE
						20D4(X47)b
						20D4(X47)a
						MASTER SYNC
						20D4(X45)b
						20D4(X45)a
						AM-CAP ERROR
						20D4(X54)b
						20D4(X54)a
						AM-DAP ERROR
						20D4(X53)b
						20D4(X53)a
						AME-APC ERROR
						20D4(X52)b
						20D4(X52)a
						AM-F-APC ERROR
						20D4(X51)b
						20D4(X51)a
						AM-G-APC ERROR
						20D4(X50)b
						20D4(X50)a
						AM-H-APC ERROR
						20D4(X49)b
						20D4(X49)a





II REFER TO LOGIC DWG. 1-2.1-2.
NOTES
PARITY CONNECTED INTERNALLY IN PU 20EX



III DRAWING DOES NOT INDICATE POINT TO POINT WIRING BETWEEN 20D2(K2) AND CONNECTORS J1, J2, J3. THREE WIRES ARE TAKEN FROM EACH RELAY CONNECTION, ONE TO EACH CONNECTOR.

II SIX SETS OF FORM A CONTACTS ARE WIRED IN PARALLEL PINS 2, 3, 4, 8, 9 & 10 ARE WIRED TOGETHER.

I REFER TO LOGIC DWG 7.1.5 FOR POINT TO POINT WIRING OF MAINTENANCE CONSOLE -48V COMMON.

NOTES:

AUXILIARY DRUMS ERASE AND WRITE TIMING AND INDEX CHANNELS