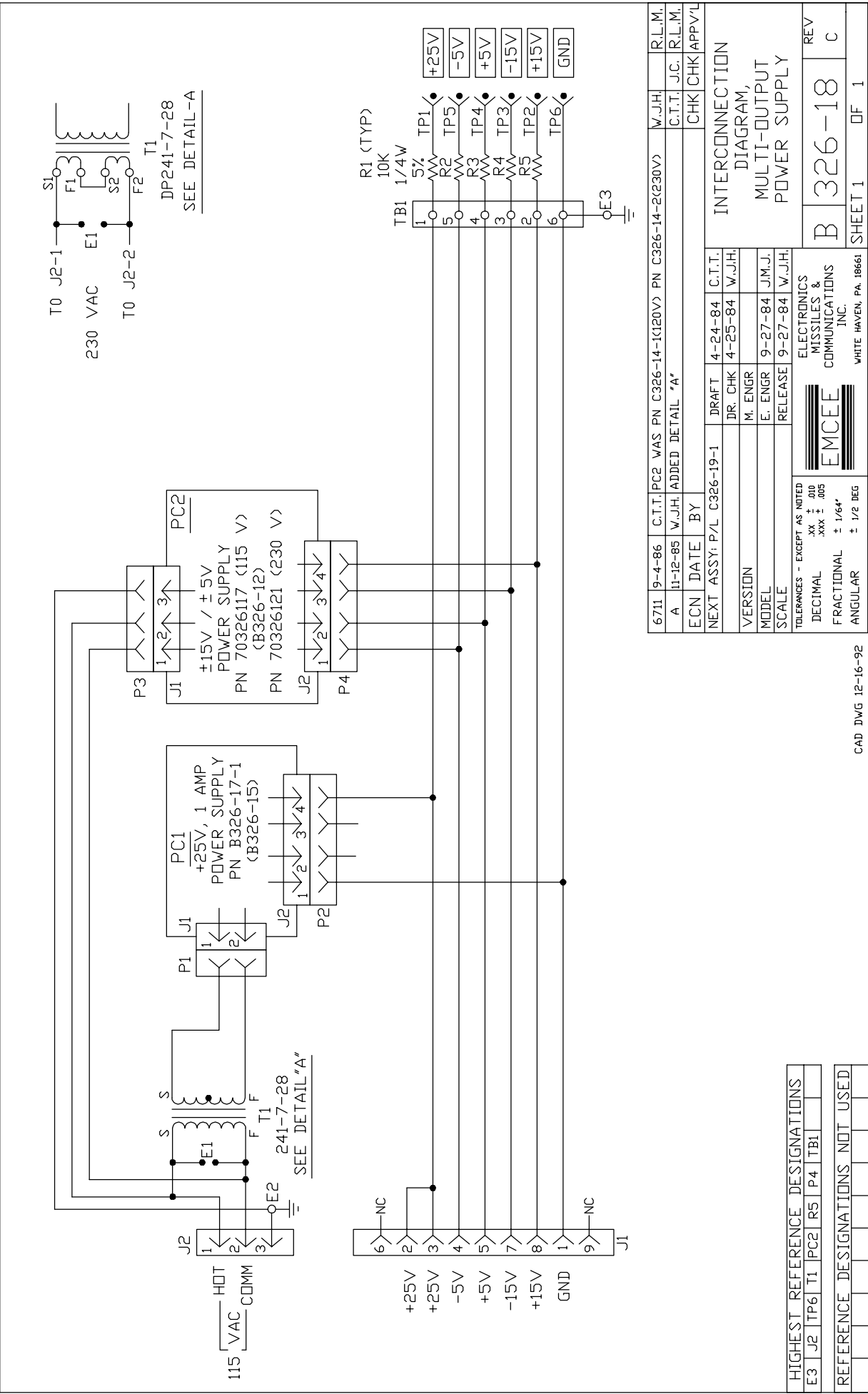
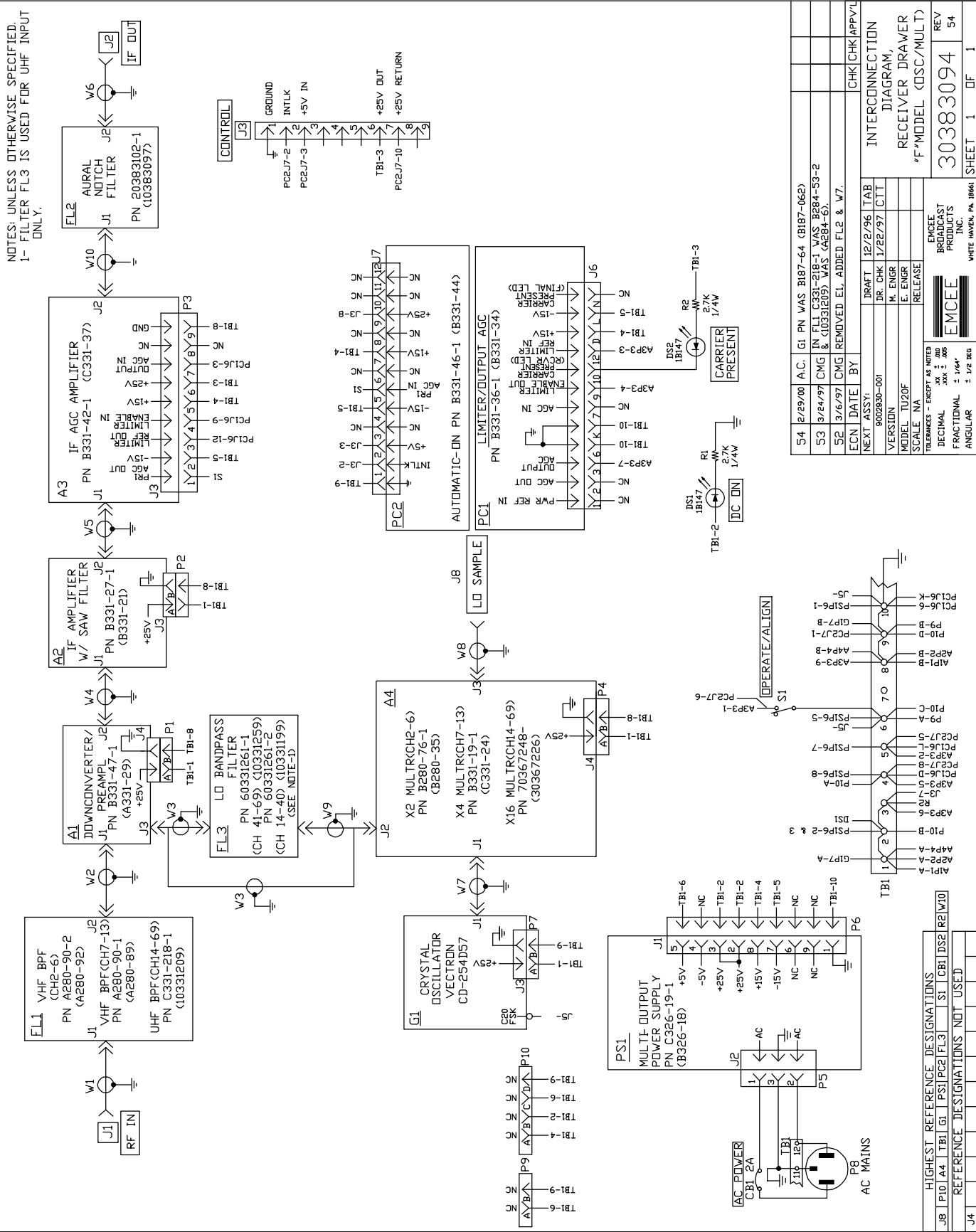


SECTION V

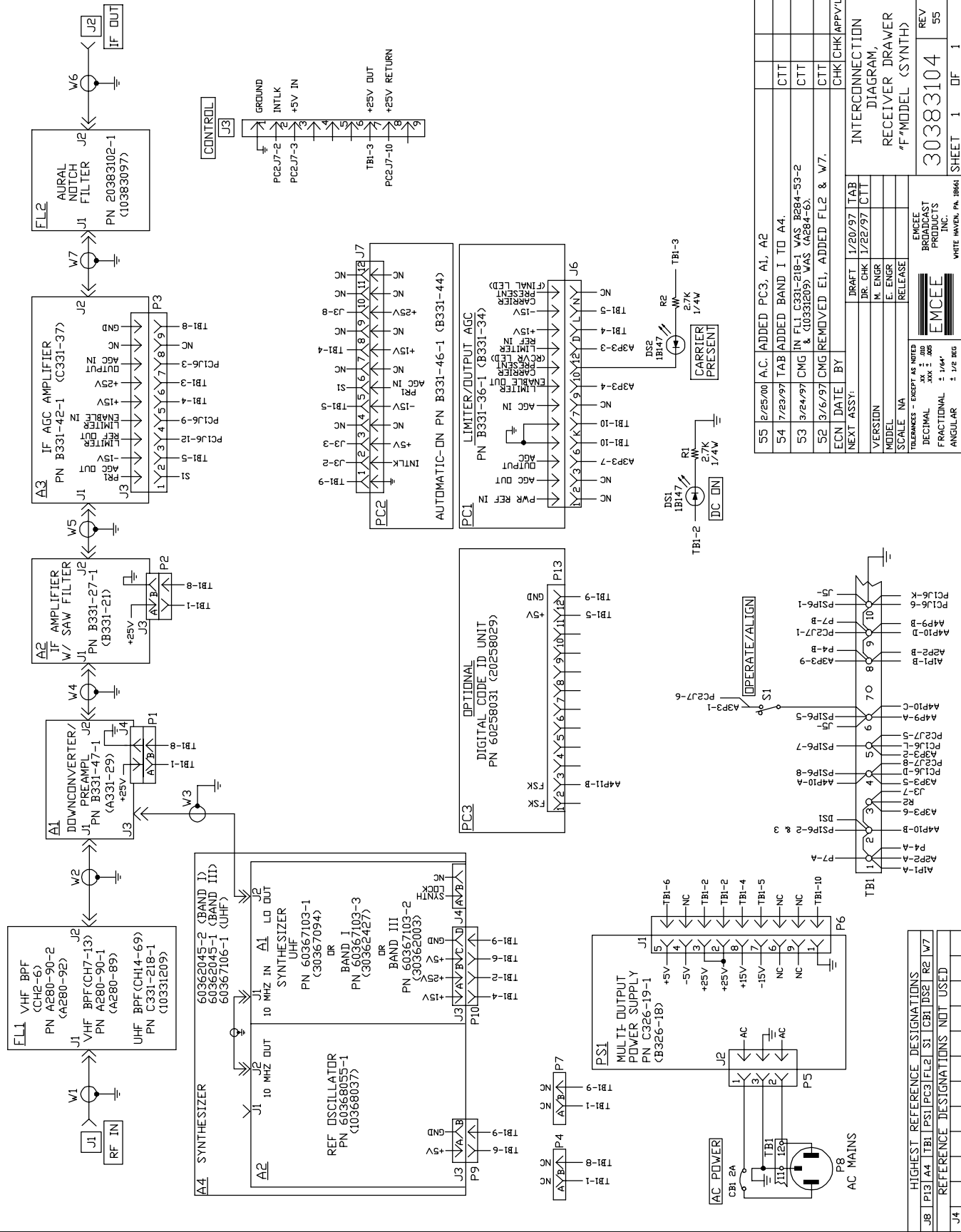
SCHEMATIC DIAGRAMS

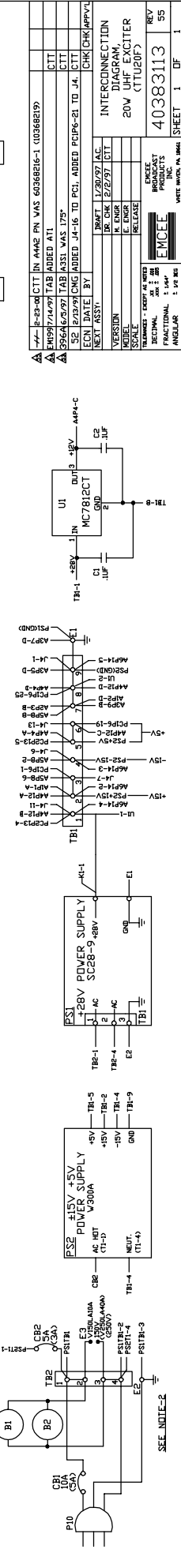
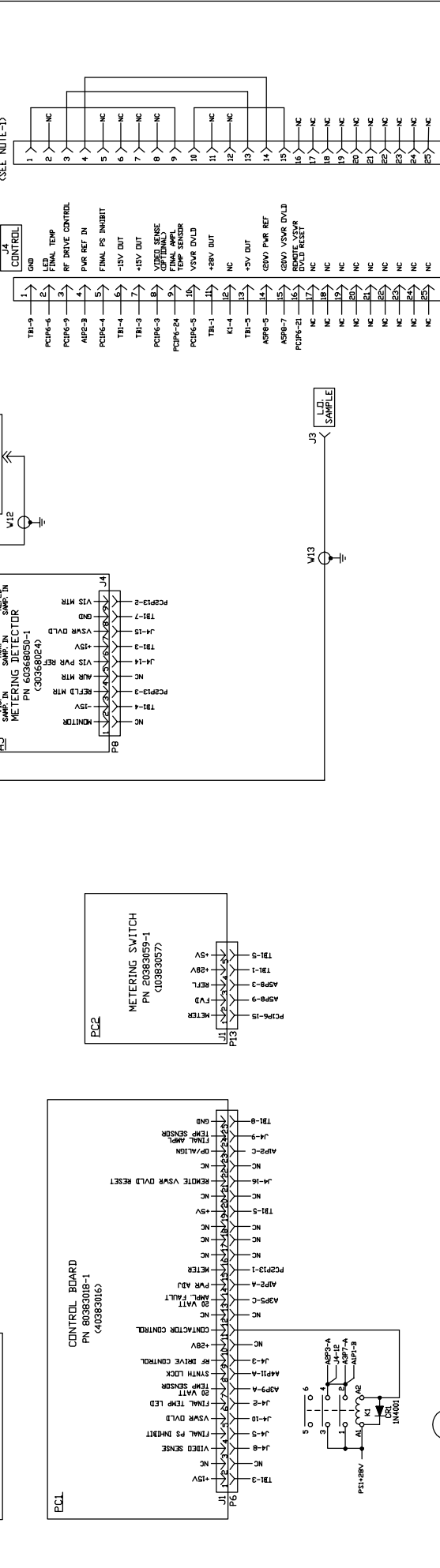
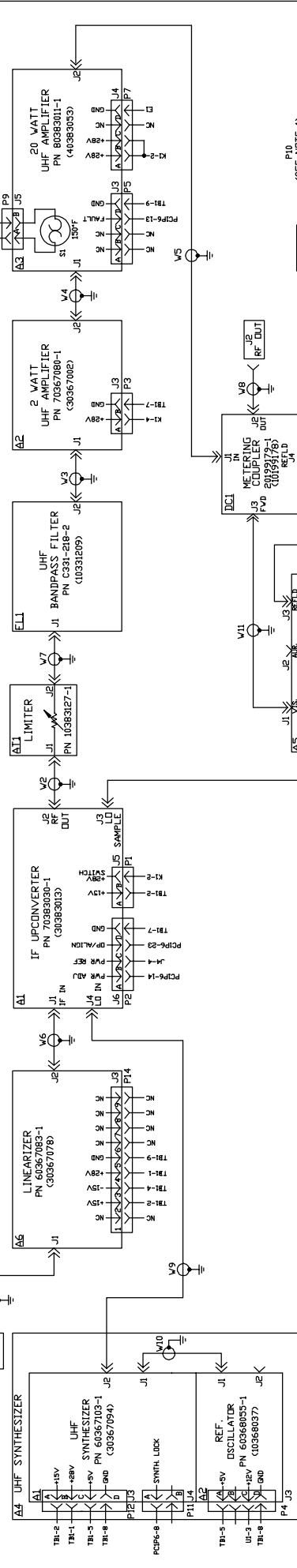
**MODULE SCHEMATICS
ARE LISTED IN
ALPHANUMERICAL SEQUENCE**



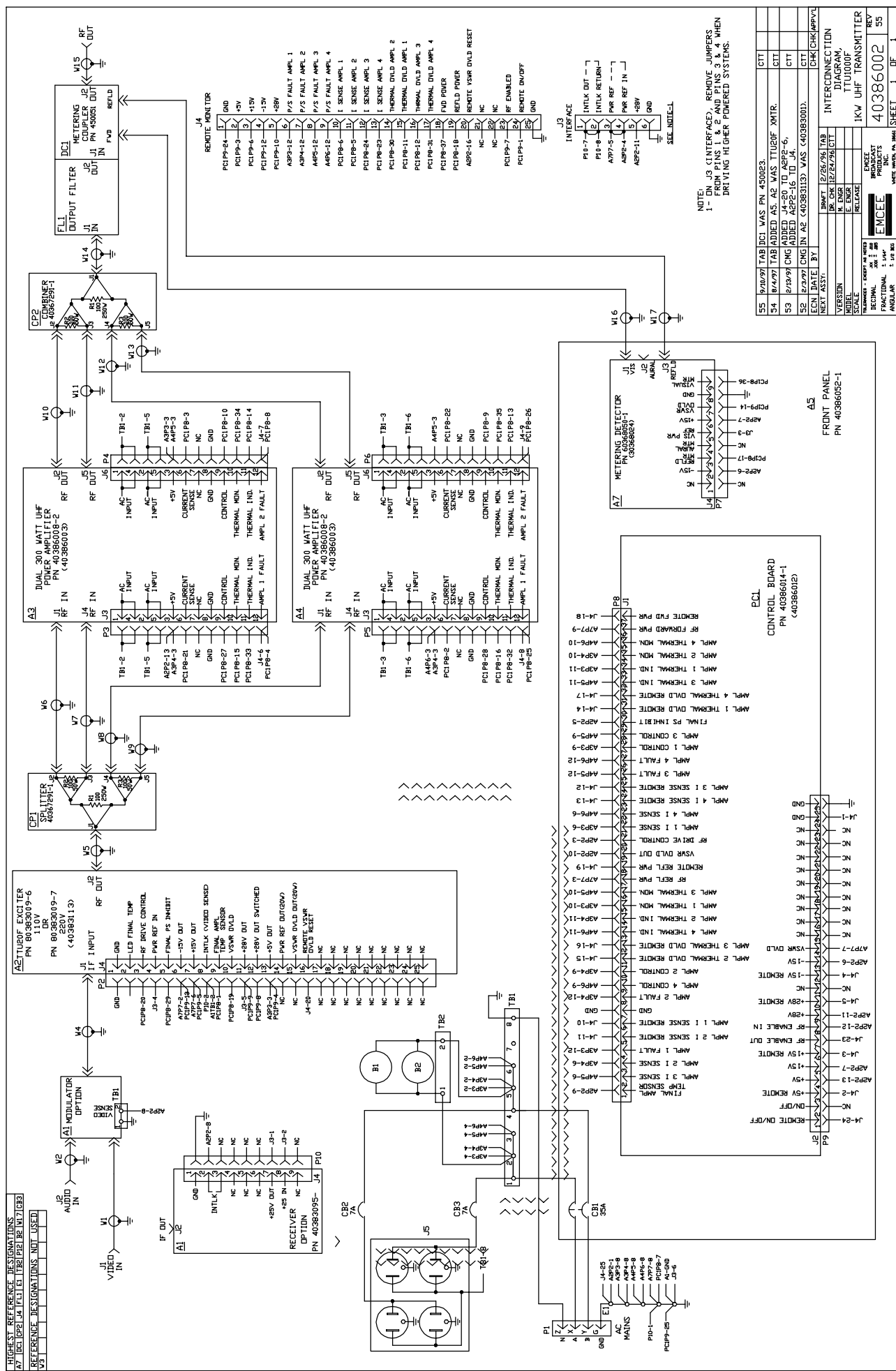


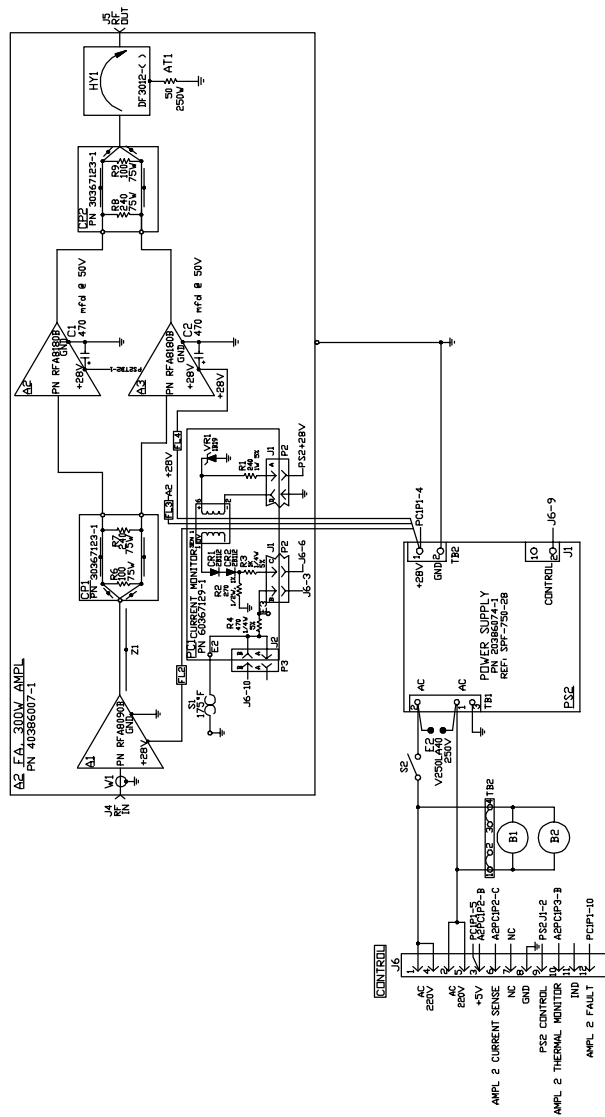
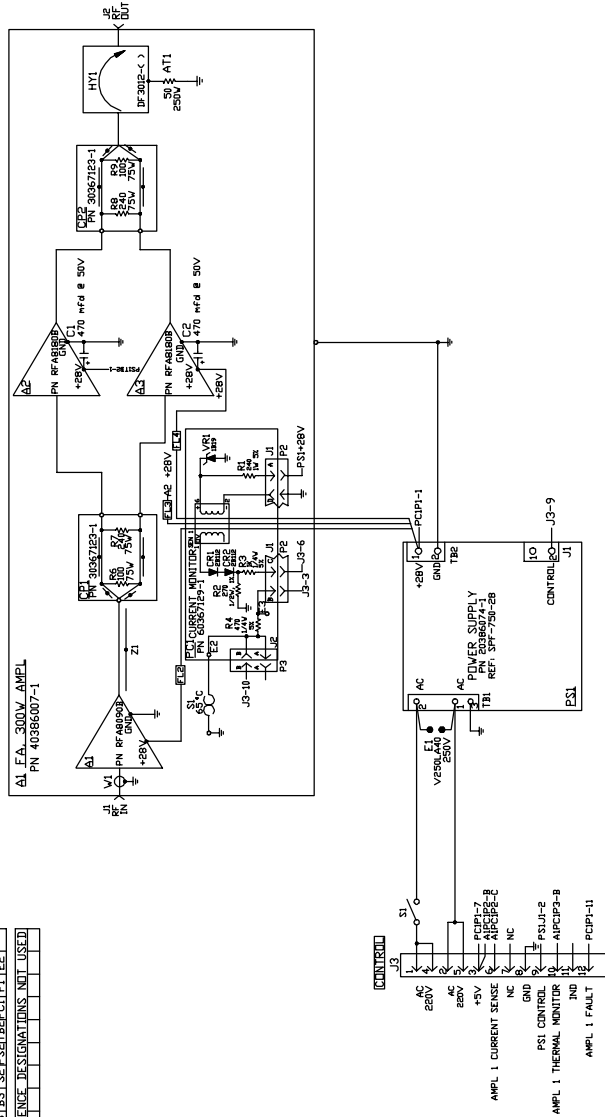
54	E/09/00	A.C.	G.I PN WAS B187-64 (B187-062)
53	3/24/97	CMG	IN FLI C331-218-1 WAS B284-S3-2 & (C033205) WAS (A284-6)
52	3/6/97	CMG	REMOVED E1, ADDED FL2 & W7.
ECN	DATE	BY	
52	DATE	BY	
NEXT ASSY:	9002830-001		
VERSION	MODEL T20F		
SCALE NA			
TOLERANCES - EXCEPT AS NOTED			
DIMENAL .xxx ± .005			
FRACTIONAL 1/64"			
ANGULAR ± 1/8 DEG			



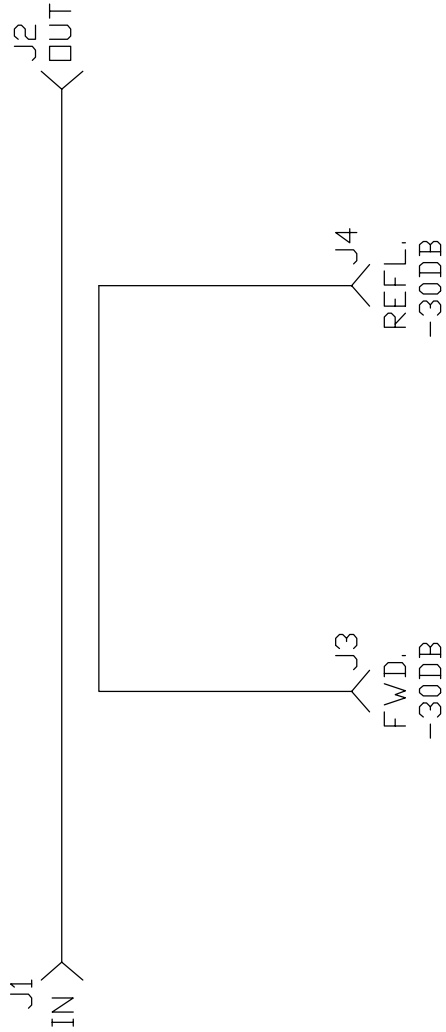


4	EN50173-1/11	EN 4402 PN	40368216-1	10368219			
5	EN50173-1/11	TAB ADDED	ATI		CTI		
6	EN50173-1/11	TAB ADDED	ATI		CTI		
7	EN50173-1/11	TAB ADDED	ATI		CTI		
8	EN50173-1/11	TAB ADDED	ATI		CTI		
9	EN50173-1/11	TAB ADDED	ATI		CTI		
10	EN50173-1/11	TAB ADDED	ATI		CTI		
11	EN50173-1/11	TAB ADDED	ATI		CTI		
12	EN50173-1/11	TAB ADDED	ATI		CTI		
13	EN50173-1/11	TAB ADDED	ATI		CTI		
14	EN50173-1/11	TAB ADDED	ATI		CTI		
15	EN50173-1/11	TAB ADDED	ATI		CTI		
16	EN50173-1/11	TAB ADDED	ATI		CTI		
17	EN50173-1/11	TAB ADDED	ATI		CTI		
18	EN50173-1/11	TAB ADDED	ATI		CTI		
19	EN50173-1/11	TAB ADDED	ATI		CTI		
20	EN50173-1/11	TAB ADDED	ATI		CTI		
21	EN50173-1/11	TAB ADDED	ATI		CTI		
22	EN50173-1/11	TAB ADDED	ATI		CTI		
23	EN50173-1/11	TAB ADDED	ATI		CTI		
24	EN50173-1/11	TAB ADDED	ATI		CTI		
25	EN50173-1/11	TAB ADDED	ATI		CTI		
26	EN50173-1/11	TAB ADDED	ATI		CTI		
27	EN50173-1/11	TAB ADDED	ATI		CTI		
28	EN50173-1/11	TAB ADDED	ATI		CTI		
29	EN50173-1/11	TAB ADDED	ATI		CTI		
30	EN50173-1/11	TAB ADDED	ATI		CTI		
31	EN50173-1/11	TAB ADDED	ATI		CTI		
32	EN50173-1/11	TAB ADDED	ATI		CTI		
33	EN50173-1/11	TAB ADDED	ATI		CTI		
34	EN50173-1/11	TAB ADDED	ATI		CTI		
35	EN50173-1/11	TAB ADDED	ATI		CTI		
36	EN50173-1/11	TAB ADDED	ATI		CTI		
37	EN50173-1/11	TAB ADDED	ATI		CTI		
38	EN50173-1/11	TAB ADDED	ATI		CTI		
39	EN50173-1/11	TAB ADDED	ATI		CTI		
40	EN50173-1/11	TAB ADDED	ATI		CTI		
41	EN50173-1/11	TAB ADDED	ATI		CTI		
42	EN50173-1/11	TAB ADDED	ATI		CTI		
43	EN50173-1/11	TAB ADDED	ATI		CTI		
44	EN50173-1/11	TAB ADDED	ATI		CTI		
45	EN50173-1/11	TAB ADDED	ATI		CTI		
46	EN50173-1/11	TAB ADDED	ATI		CTI		
47	EN50173-1/11	TAB ADDED	ATI		CTI		
48	EN50173-1/11	TAB ADDED	ATI		CTI		
49	EN50173-1/11	TAB ADDED	ATI		CTI		
50	EN50173-1/11	TAB ADDED	ATI		CTI		
51	EN50173-1/11	TAB ADDED	ATI		CTI		
52	EN50173-1/11	TAB ADDED	ATI		CTI		
53	EN50173-1/11	TAB ADDED	ATI		CTI		
54	EN50173-1/11	TAB ADDED	ATI		CTI		
55	EN50173-1/11	TAB ADDED	ATI		CTI		
56	EN50173-1/11	TAB ADDED	ATI		CTI		
57	EN50173-1/11	TAB ADDED	ATI		CTI		
58	EN50173-1/11	TAB ADDED	ATI		CTI		
59	EN50173-1/11	TAB ADDED	ATI		CTI		
60	EN50173-1/11	TAB ADDED	ATI		CTI		
61	EN50173-1/11	TAB ADDED	ATI		CTI		
62	EN50173-1/11	TAB ADDED	ATI		CTI		
63	EN50173-1/11	TAB ADDED	ATI		CTI		
64	EN50173-1/11	TAB ADDED	ATI		CTI		
65	EN50173-1/11	TAB ADDED	ATI		CTI		
66	EN50173-1/11	TAB ADDED	ATI		CTI		
67	EN50173-1/11	TAB ADDED	ATI		CTI		
68	EN50173-1/11	TAB ADDED	ATI		CTI		
69	EN50173-1/11	TAB ADDED	ATI		CTI		
70	EN50173-1/11	TAB ADDED	ATI		CTI		
71	EN50173-1/11	TAB ADDED	ATI		CTI		
72	EN50173-1/11	TAB ADDED	ATI		CTI		
73	EN50173-1/11	TAB ADDED	ATI		CTI		
74	EN50173-1/11	TAB ADDED	ATI		CTI		
75	EN50173-1/11	TAB ADDED	ATI		CTI		
76	EN50173-1/11	TAB ADDED	ATI		CTI		
77	EN50173-1/11	TAB ADDED	ATI		CTI		
78	EN50173-1/11	TAB ADDED	ATI		CTI		
79	EN50173-1/11	TAB ADDED	ATI		CTI		
80	EN50173-1/11	TAB ADDED	ATI		CTI		
81	EN50173-1/11	TAB ADDED	ATI		CTI		
82	EN50173-1/11	TAB ADDED	ATI		CTI		
83	EN50173-1/11	TAB ADDED	ATI		CTI		
84	EN50173-1/11	TAB ADDED	ATI		CTI		
85	EN50173-1/11	TAB ADDED	ATI		CTI		
86	EN50173-1/11	TAB ADDED	ATI		CTI		
87	EN50173-1/11	TAB ADDED	ATI		CTI		
88	EN50173-1/11	TAB ADDED	ATI		CTI		
89	EN50173-1/11	TAB ADDED	ATI		CTI		
90	EN50173-1/11	TAB ADDED	ATI		CTI		
91	EN50173-1/11	TAB ADDED	ATI		CTI		
92	EN50173-1/11	TAB ADDED	ATI		CTI		
93	EN50173-1/11	TAB ADDED	ATI		CTI		
94	EN50173-1/11	TAB ADDED	ATI		CTI		
95	EN50173-1/11	TAB ADDED	ATI		CTI		
96	EN50173-1/11	TAB ADDED	ATI		CTI		
97	EN50173-1/11	TAB ADDED	ATI		CTI		
98	EN50173-1/11	TAB ADDED	ATI		CTI		
99	EN50173-1/11	TAB ADDED	ATI		CTI		
100	EN50173-1/11	TAB ADDED	ATI		CTI		

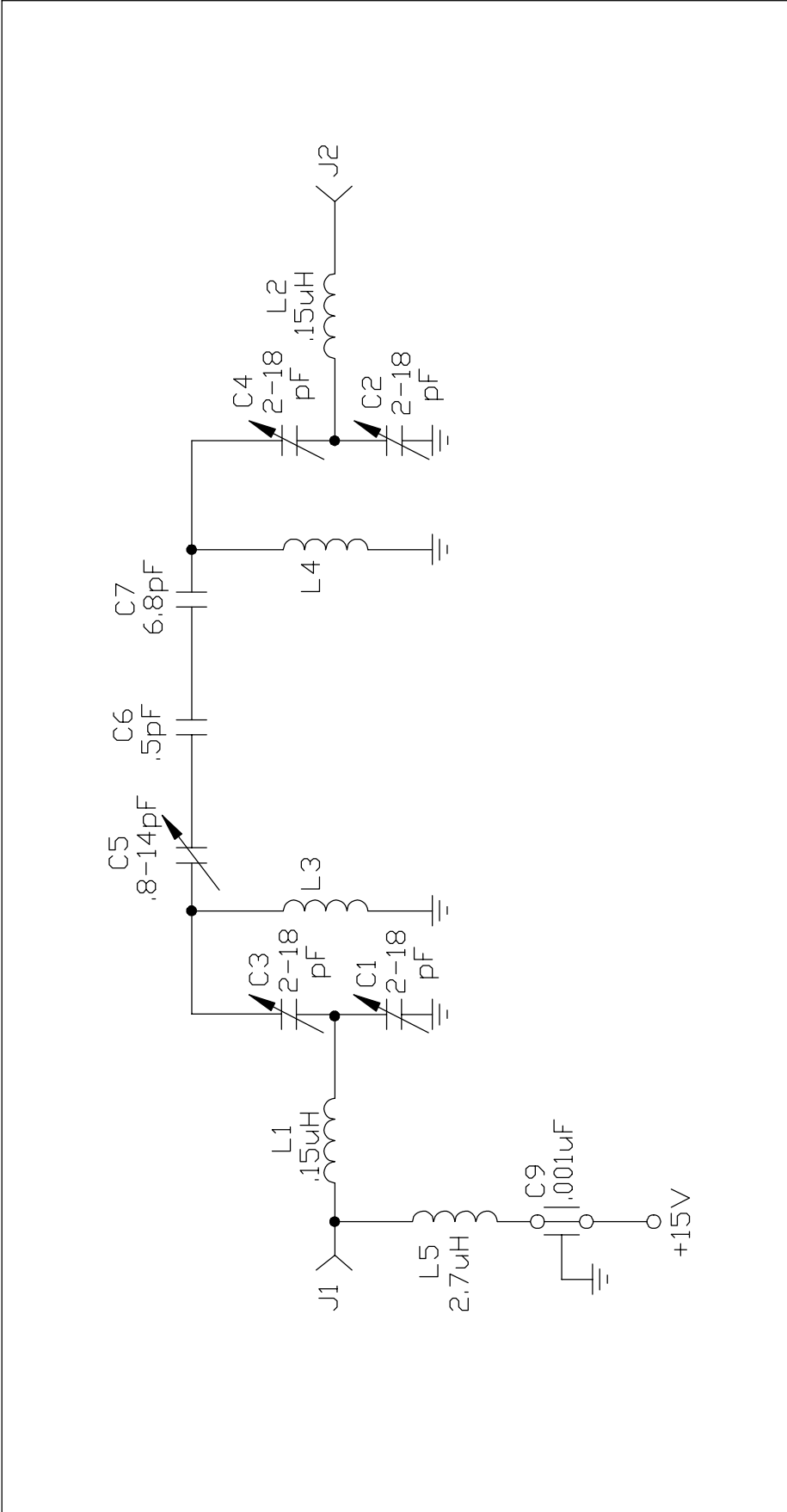




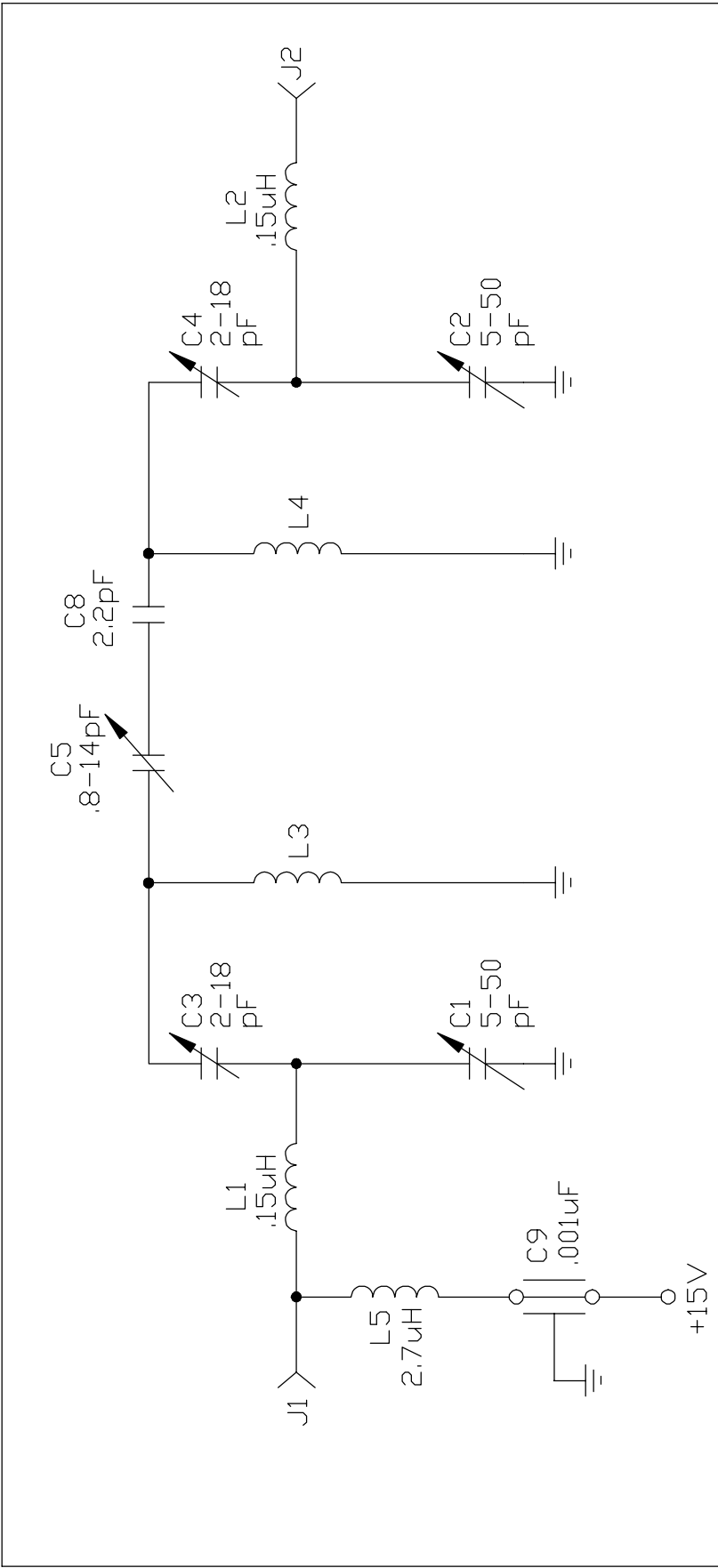
56	2/29/98	AC	3-11 WAS AMPL 1 THERMAL MONITOR			
			3-1 WAS AMPL 2 THERMAL MONITOR			
57	3-9-99	CTT	PCI PN WAS 20386607/1. 03586630			G.I.T
58	3/15/99	AC	AIRED WIRE FROM PCI 1 5 TO 36-63			G.I.T
59	3/15/99	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
60	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
61	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
62	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
63	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
64	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
65	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
66	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
67	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
68	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
69	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
70	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
71	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
72	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
73	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
74	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
75	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
76	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
77	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
78	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
79	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
80	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
81	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
82	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
83	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
84	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
85	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
86	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
87	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
88	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
89	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
90	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
91	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
92	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
93	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
94	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
95	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
96	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
97	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
98	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
99	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T
100	6/23/97	TAB	PCI 1 P. 1 WAS 20386647/1 03586644			G.I.T



52	12-21-95	AC	J3 WAS OUT TO DETECTOR FWD. J4 WAS OUT TO DETECTOR REFL.							
ECN	DATE	BY						CHK	CHK	APPV'L
NEXT ASSY:				DRAFT	10-24-95	VN	SCHEMATIC DIAGRAM, METERING COUPLER			
VERSION				DR. CHK						
MODEL				M. ENGR						
SCALE				E. ENGR						
TOLERANCES - EXCEPT AS NOTED				RELEASE			ELECTRONICS MISSILES & COMMUNICATIONS INC. WHITE HAVEN, PA. 18661			
DECIMAL				.XX ± .010 .XXX ± .005						
FRACTIONAL				± 1/64"						
ANGULAR				± 1/2 DEG						
							10199178		REV 52	
							SHEET 1		OF 1	



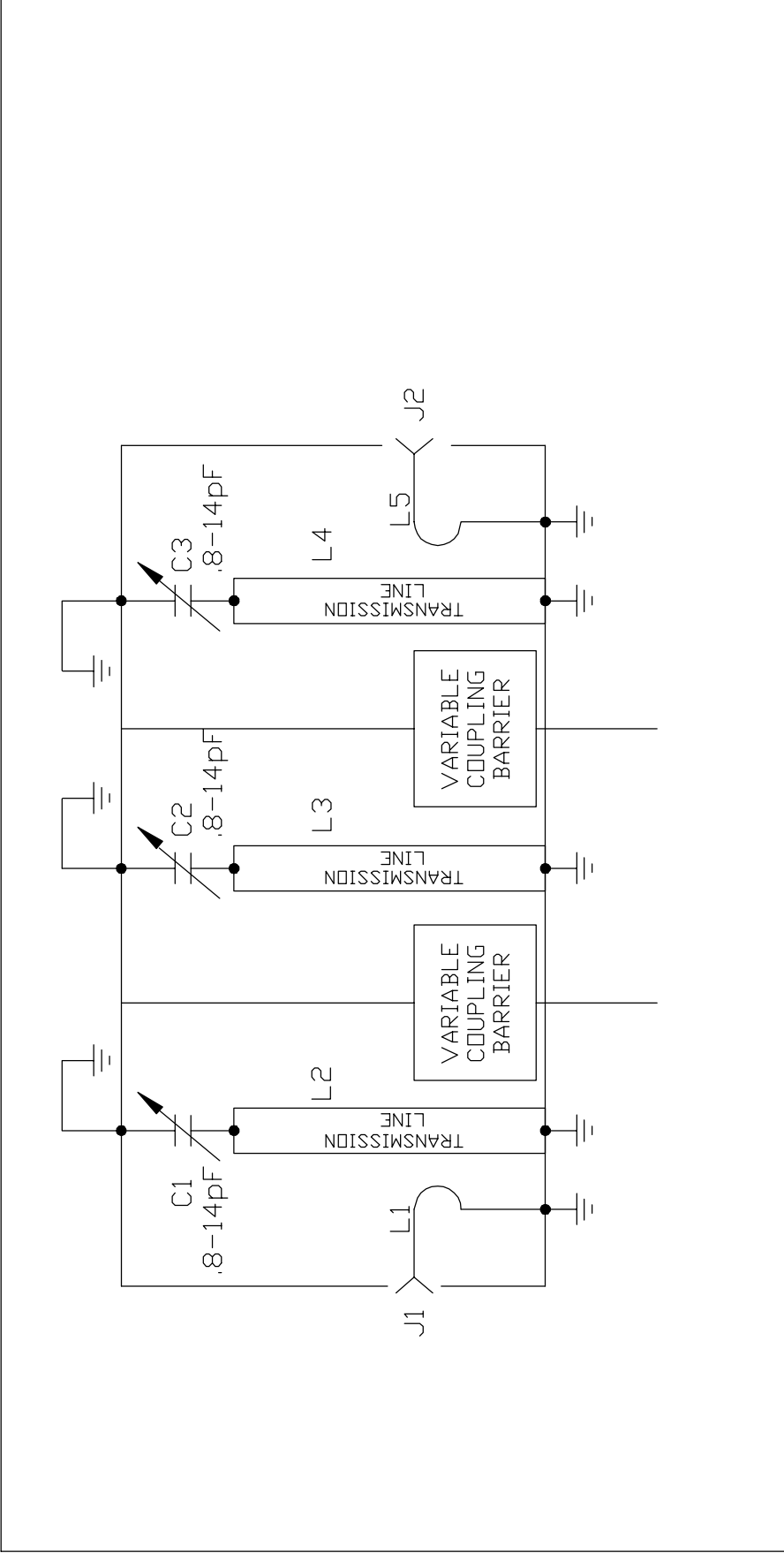
ECN	DATE	BY	CHK		CHK	APPV/L
NEXT ASSY:P/L	A280-90-1		DRAFT	5-16-79	C.T.T.	SCHEMATIC DIAGRAM, VHF BANDPASS FILTER (CH 7-13)
	P/L A280-91-1		DR. CHK	6-4-79	W.J.H.	
VERSION			M. ENGR			
MODEL			E. ENGR			
SCALE			RELEASE	6-26-79	G.B.	A280-89
TOLERANCES - EXCEPT AS NOTED			ELECTRONICS MISSILES & COMMUNICATIONS INC.			
DECIMAL	.XX	± .010 .XXX ± .005				
FRACTIONAL		± 1/64"				
ANGULAR		± 1/2 DEG				
SHEET 1						OF 1



ECN		DATE	BY	CHK		CHK	APPV'L
NEXT ASSY: P/L A280-90				DRAFT	5-16-79	C.T.T.	
P/L A280-91				DR. CHK	6-4-79	W.J.H.	
VERSION				M. ENGR			
MODEL				E. ENGR			
SCALE NONE				RELEASE	9-3-93	R.H.N.	
TOLERANCES - EXCEPT AS NOTED				ELECTRONICS MISSILES & COMMUNICATIONS INC.			
DECIMAL				.XX ± .010 .XXX ± .005			
FRACTIONAL				± 1/64"			
ANGULAR				± 1/2 DEG			
SCHEMATIC DIAGRAM, VHF BANDPASS FILTER (CH 2-6)						REV 1	
A280-92						SHEET 1 OF 1	
WHITE HAVEN, PA. 18661							

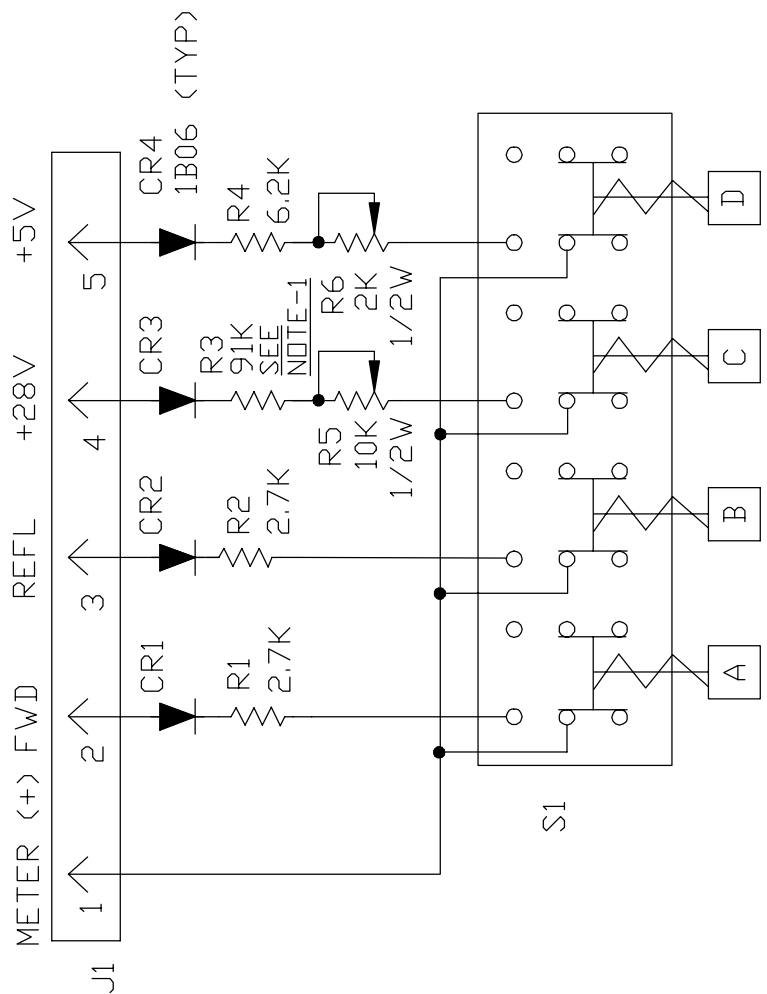
A280-92

DF 1



52	3-18-97	S.D.C.	L5 WAS L4						
ECN	DATE	BY			CHK	CHK	APPV/L		
NEXT ASSY: P/L C331-218				DRAFT	8-17-95	VN	SCHEMATIC DIAGRAM, UHF BANDPASS FILTER		
VERSION				DR. CHK	10-23-95	C.T.T.			
MODEL				M. ENGR					
SCALE				E. ENGR					
TOLERANCES - EXCEPT AS NOTED				RELEASE	11-6-96	DB	ELECTRONICS MISSILES & COMMUNICATIONS INC.		
DECIMAL				XX	± .010				
FRACTIONAL				XXX	± .005				
ANGULAR					± 1/64°				
					± 1/2 DEG		10331209		
							SHEET 1		
							DF 1		
							REV 52		
							WHITE HAVEN, PA. 18661		

NOTE:
1-FOR OPERATION IN THE
TTU100FA VALUE OF R3
IS 100K.



54	12-3-99	CTT	ADDED NOTE-1 AND VALUE OF R3 WAS 6.2K AND R4 91K		
53	7/31/96	CMG	CHANGED SCH. TO CONFORM TO NEW SWITCH CONFIG.	CTT	
52	12/1/95	A.C.	ADDED E & F POSITION	CTT	
ECN	DATE	BY		CHK	CHK APPV'L
NEXT ASSY:					
VERSION			DRAFT	10-10-95	A.C.
MODEL			DR. CHK	10-11-95	C.T.T.
SCALE			M. ENGR		
			E. ENGR		
			RELEASE		
TOLERANCES - EXCEPT AS NOTED			SCHEMATIC DIAGRAM, METERING SWITCH TTU20F		
DECIMAL	.XX ± .010		EMCEE BROADCAST PRODUCTS INC. WHITE HAVEN, PA. 18661		
FRACTIONAL	.XXX ± .005				
ANGULAR	± 1/64°				
			SHEET 1 OF 1		
			REV 54		

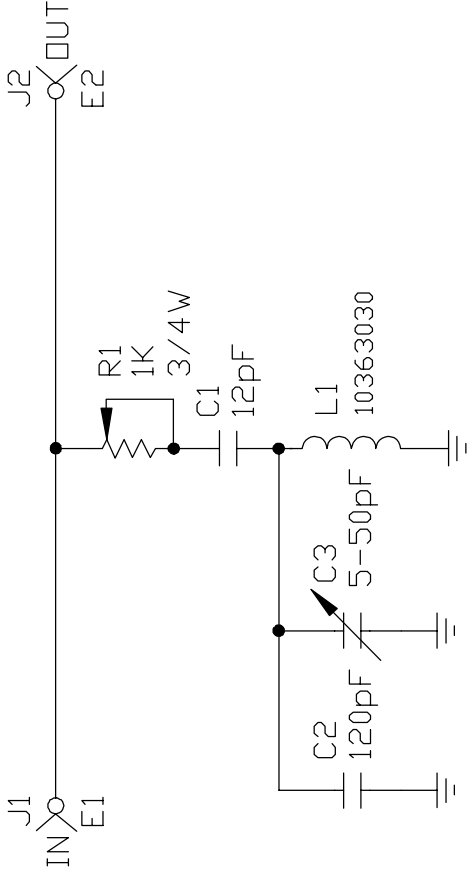
HIGHEST REFERENCE DESIGNATIONS

J2	E2	R1	C3	L1					
----	----	----	----	----	--	--	--	--	--

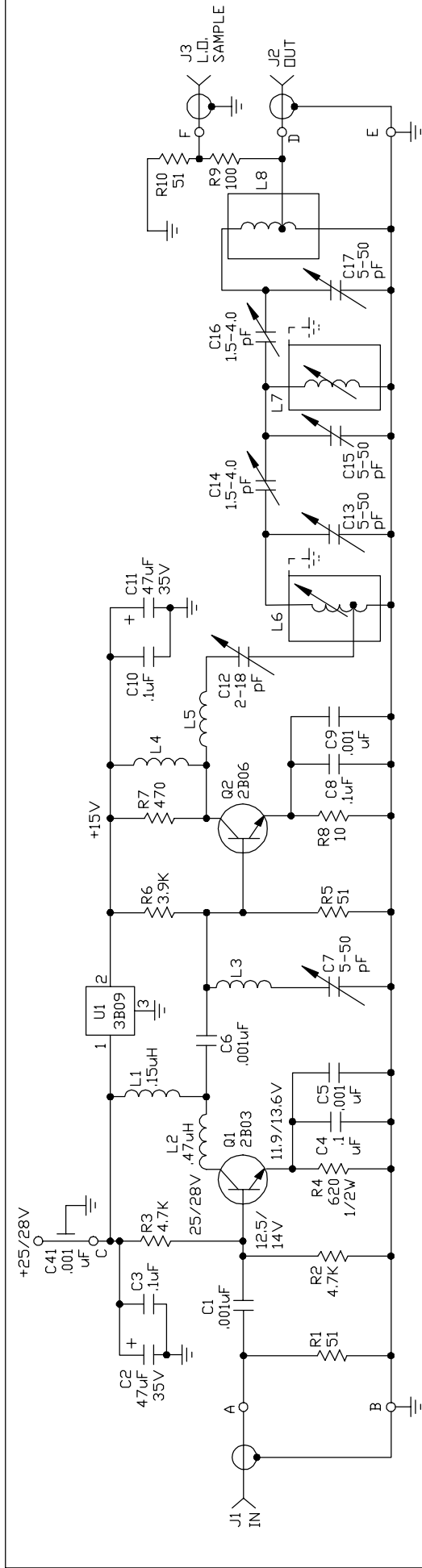
REFERENCE DESIGNATIONS NOT USED

--	--	--	--	--	--	--	--	--	--

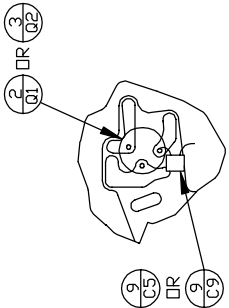
NOTE:
1-J1 & J2 ARE NOT ON THE
PC BOARD.



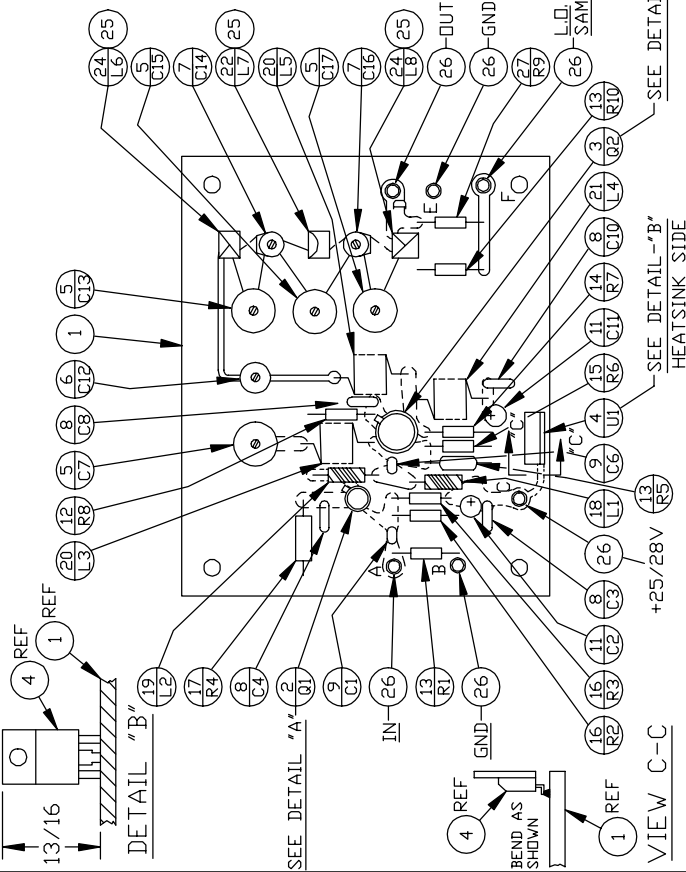
ECN	DATE	BY			CHK	CHK	APPV'L
NEXT ASSY:				DRAFT	12/17/96	A.C.	
VERSION				DR. CHK			
MODEL				M. ENGR			
SCALE				E. ENGR			
SCALE				RELEASE			
TOLERANCES - EXCEPT AS NOTED							
DECIMAL			.XX ± .010 .XXX ± .005	EMCEE BROADCAST PRODUCTS INC. WHITE HAVEN, PA. 18661			
FRACTIONAL			± 1/64"				
ANGULAR			± 1/2 DEG				
					10383097		REV 51
					SHEET 1		OF 1



NOTES : UNLESS OTHERWISE SPECIFIED
 1-ALL RESISTORS ARE 1/4W, 5%.
 2-CONNECTORS J1, J2, J3, AND CAPACITORS C41
 ARE MOUNTED ON MODULE CAN.
 3-CAPACITORS C5 & C9 ARE MOUNTED ON BOTTOM
 OF PC BOARD (SEE DETIL "A") FROM
 EMITTER LEAD OF TRANSISTOR Q1 & Q2 TO GND.



DETAIL "A"
 (SEE NOTE-3)



E	12-29-89	DB	ADDED TRANSISTOR VOLTAGE 13.6V	C.T.T.	RGN
A1	4-25-89	SMP	ADDED SECTION C-C	C.T.T.	C.T.T.
6025	4-18-83	W.J.H. REFER TO ECN		B.G.	W.J.H. M.G.
5423	8-8-80	JL	ITEM 7 WAS EF JOHNSON, 1-3pF CAP P.N. 278-0103-005	W.J.H. R.K.	V.J.H.
ECN	DATE	BY		CHK	CHK APPV'L
NEXT ASSY: P/L B280-76			DRAFT	8-2-77	J.C.
VERSION			DR. CHK	3-2-78	W.J.H.
MODEL			M. ENGR	3-2-78	G.K.
SCALE NONE			E. ENGR		
TOLERANCES - EXCEPT AS NOTED			RELEASE	3-20-80	G.B.
DECIMAL .001					
FRACTIONAL ± 1/64"					
ANGULAR ± 1/2 DEG					

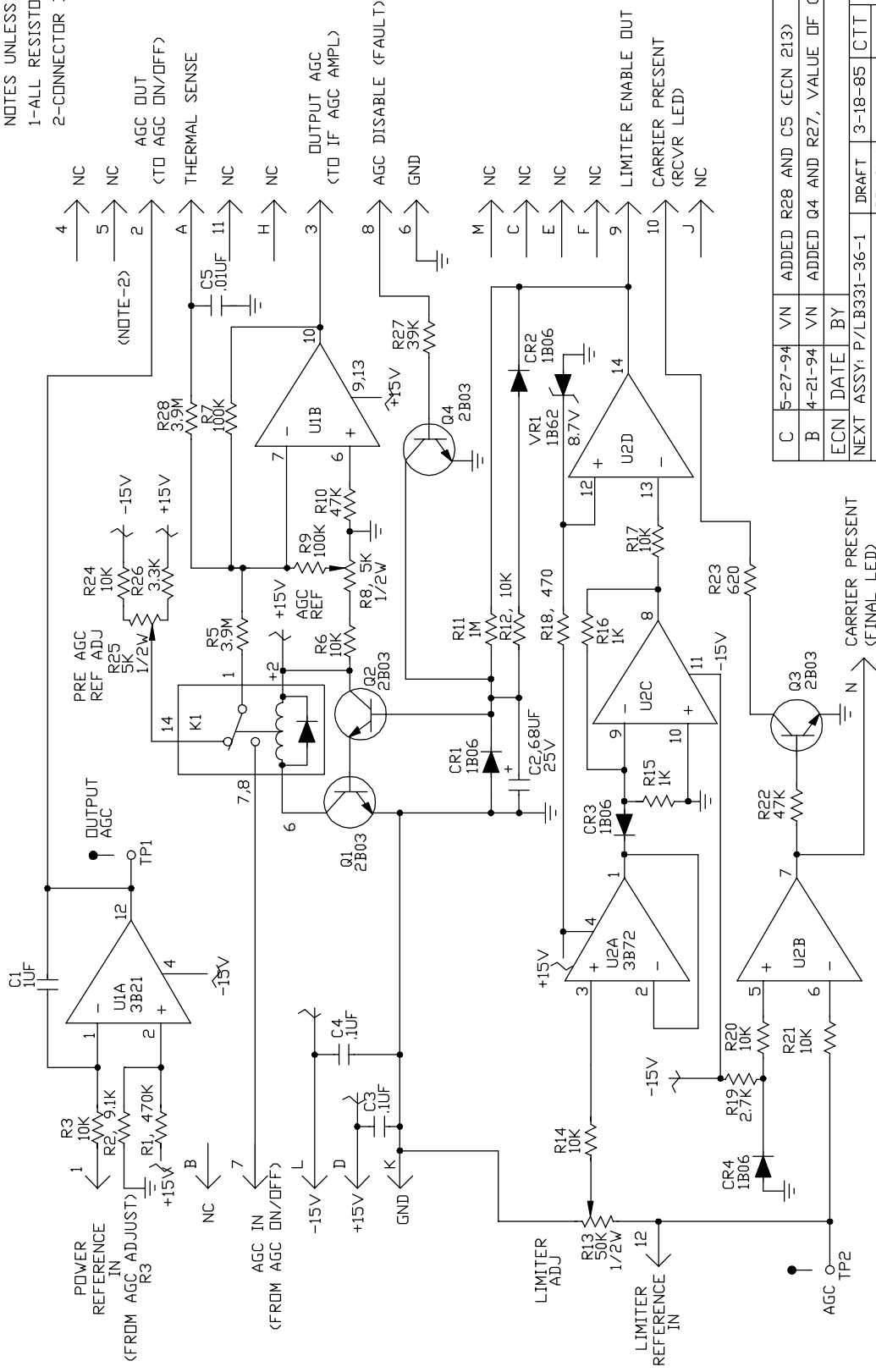
SCHEMATIC DIAGRAM,
 & ASSEMBLY,
 PC BOARD,
 MULTIPLIER, X2

EMCEE
 ELECTRONICS
 MISSILES &
 COMMUNICATIONS
 INC.
 WHITE HAVEN, PA. 18661

PL B280-35 REV E

SHEET1 OF 1

NOTES UNLESS OTHERWISE SPECIFIED
1-ALL RESISTORS VALUED AT 1/4W, 5%.
2-CONNECTOR DESIGNATIONS ARE P.C. FINGERS

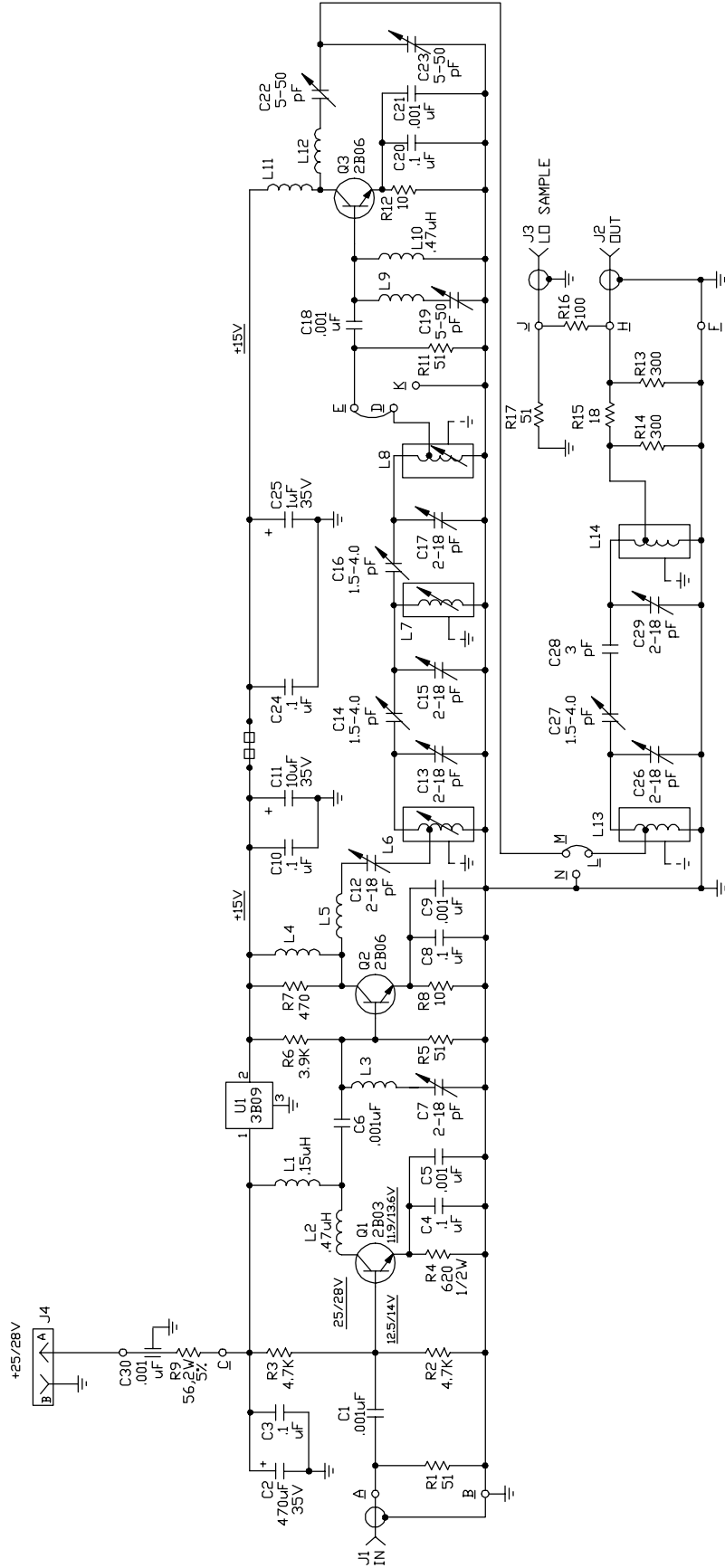


HIGHEST REFERENCE DESIGNATIONS											
U2	Q4	R28	C5	CR4	VR1	K1	TP2				
REFERENCE DESIGNATIONS NOT USED											
R4											

C	5-27-94	VN	ADDED R28 AND C5 (ECN 213)	CTT	JL	RGN
B	4-21-94	VN	ADDED Q4 AND R27, VALUE OF C2 WAS 10 UF	CTT	JMJ	JMJ
ECN	DATE	BY		CHK	CHK	APPV'L
NEXT ASSY: P/LB331-36-1			DRAFT	3-18-85	CTT	
VERSION			DR. CHK			
MODEL			M. ENGR			
SCALE: NONE			E. ENGR	4-25-86	JMJ	
TOLERANCES - EXCEPT AS NOTED			RELEASE	4-25-86	JMJ	
DECIMAL .XX ± .010 .XXX ± .005			SCHEMATIC DIAGRAM, LIMITER/OUTPUT AGC CONTROL			
FRACTIONAL ± 1/64"						
ANGULAR ± 1/2 DEG						
EMCEE			ELECTRONICS MISSILES & COMMUNICATIONS INC.			
SHEET 1			OF	1	REV	C

WHITE HAVEN, PA. 18661

NOTES : UNLESS OTHERWISE SPECIFIED
1-THE SYMBOL  DENOTES A FERRITE BEAD.
2-ALL RESISTORS ARE 1/4W, 5%
3-COMPONENTS J1,J2,J3,J4,R9 AND C30 ARE
MOUNTED ON THE MODULE CAN.



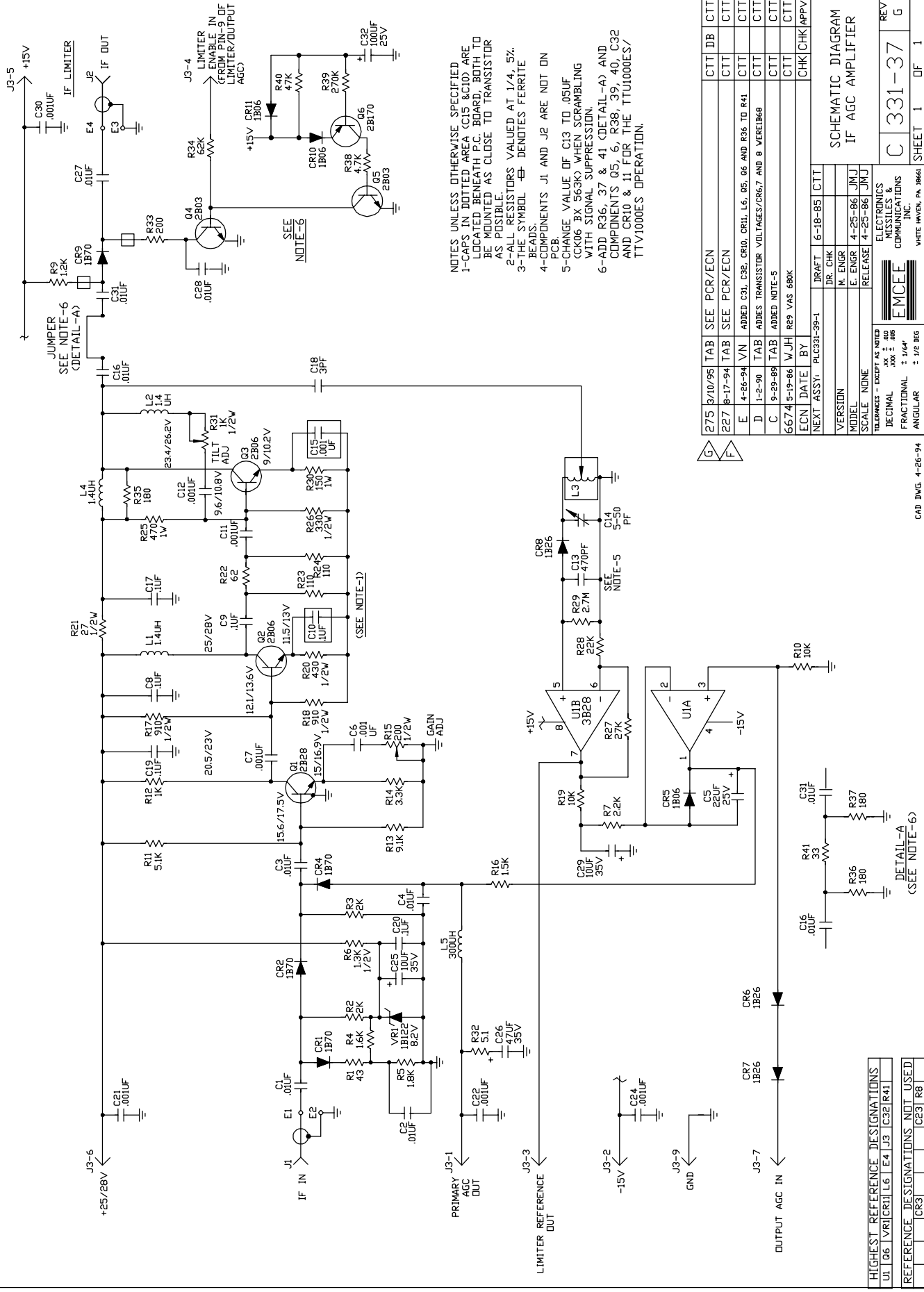
D	3-16-94	VN	C11 WAS 47uF			C.T.T	RGN	RGN
C	1-2-90	TAB	CHANGED TRANSISTORS VOLTAGES. ADDED J3,J4-R9 TO NOTE 3			C.T.T	RGN	RGN
	67967-5-89	CAB	ADDED RESISTOR R9			C.T.T	RGN	RGN
ECN	DATE	BY				CHK	CHK	APPV/L
NEXT ASSY. SEE DASH No.			DRAFT	8-30-84	W.J.H.	SCHEMATIC DIAGRAM, X4 MULTIPLIER		
PL C331-16-1PL B331-19-1			DR. CHK	8-31-84	C.T.T.			
VERSION			M. ENGR					
MODEL			E. ENGR	4-25-86	JMJ			
SCALE N/A			RELEASE	4-25-86	JMJ	ELECTRONICS MISSILES & COMMUNICATIONS INC. WHITE HAVEN, PA. 18661		
TOLERANCES - EXCEPT AS NOTED								
DECIMAL .XX ± .005								
FRACTIONAL 1/16 ± 1/64								
ANGULAR ± 1/2 DEG						REV D		
CAD DWG 10-9-95						SHEET 1 OF 1		

HIGHEST REFERENCE DESIGNATIONS

C30J14R17J4 Q3 U1

REFERENCE DESIGNATIONS NOT USED

R10



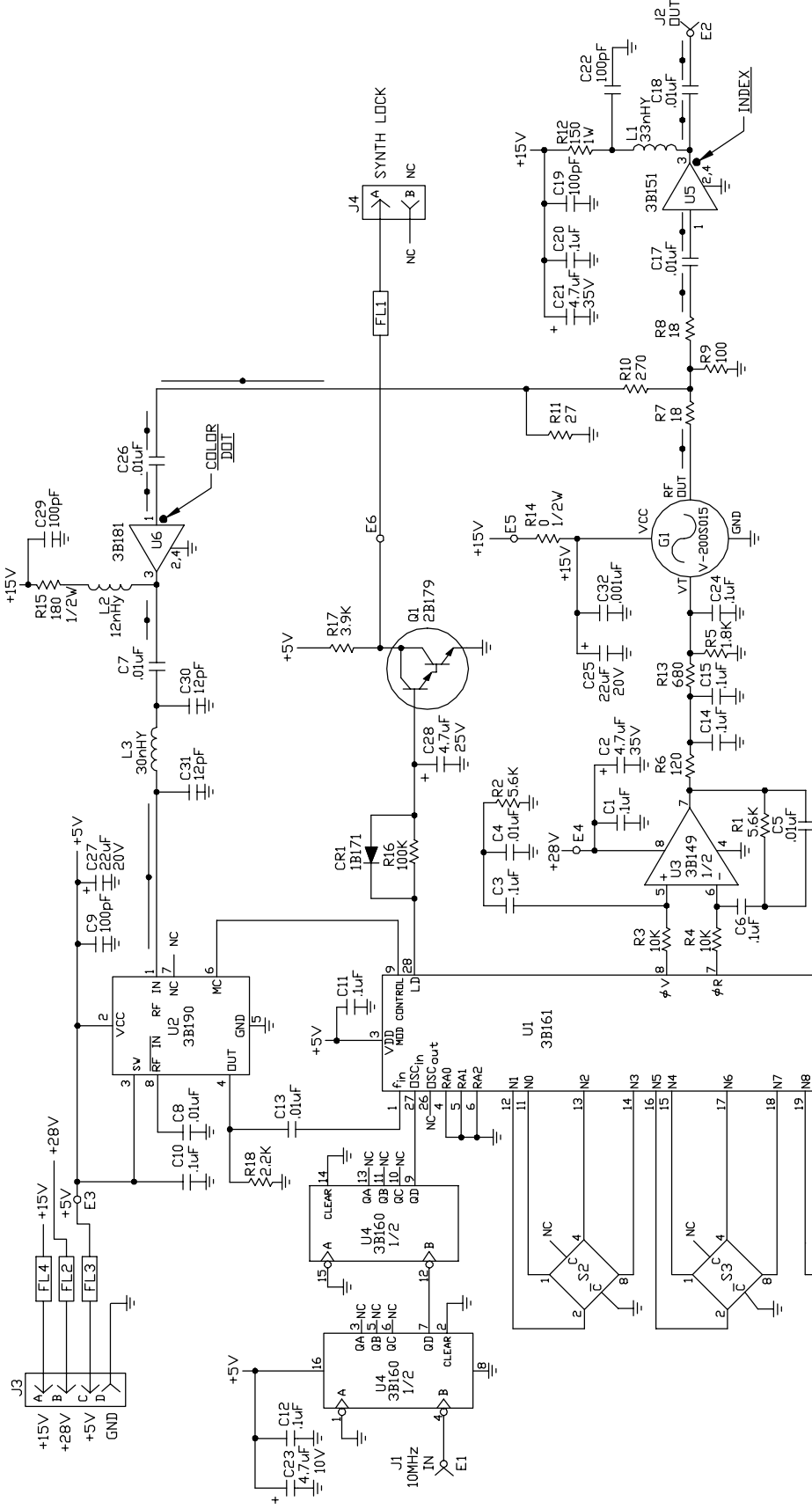
CTT	DB	CTT
275	9/10/95	TAB SEE PCR/ECN
227	8-17-94	TAB SEE PCR/ECN
E	4-26-94	VN ADDED C31, C32, CR10, CR11, L6, Q5, Q6 AND R36 TO R41
D	1-2-90	TAB ADDED TRANSISTOR VOLTAGES/CR6, 7 AND 8 VERIFIED
C	9-29-89	TAB ADDED NOTE-5
6674	9-19-86	WJH R25 WAS 680K
ECN	DATE	BY
NEXT ASSY:	PLC331-39-1	
DRAFT	6-18-85	CTT
JR. CHK		
M. ENGR	4-25-86	JMJ
E. ENGR	4-25-86	JMJ
RELEASE	4-25-86	JMJ
VERSION	NONE	
MODEL		
SCALE	NONE	
TOLERANCES - EXCEPT AS NOTED		
DECIMAL	XX ± .001	
FRACTIONAL	XX ± 1/64	
ANGULAR	± 1/2 DEG	

SCHEMATIC DIAGRAM
IF AGC AMPLIFIER

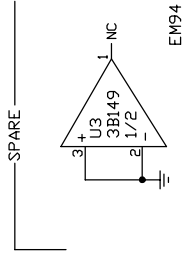
HIGHEST REFERENCE DESIGNATIONS	U1 Q6 VR1 CR11 L6 E4 J3 C32 R41
REFERENCE DESIGNATIONS NOT USED	CR3 R8

DETAIL-A
(SEE NOTE-6)

CAD DWG 4-26-94



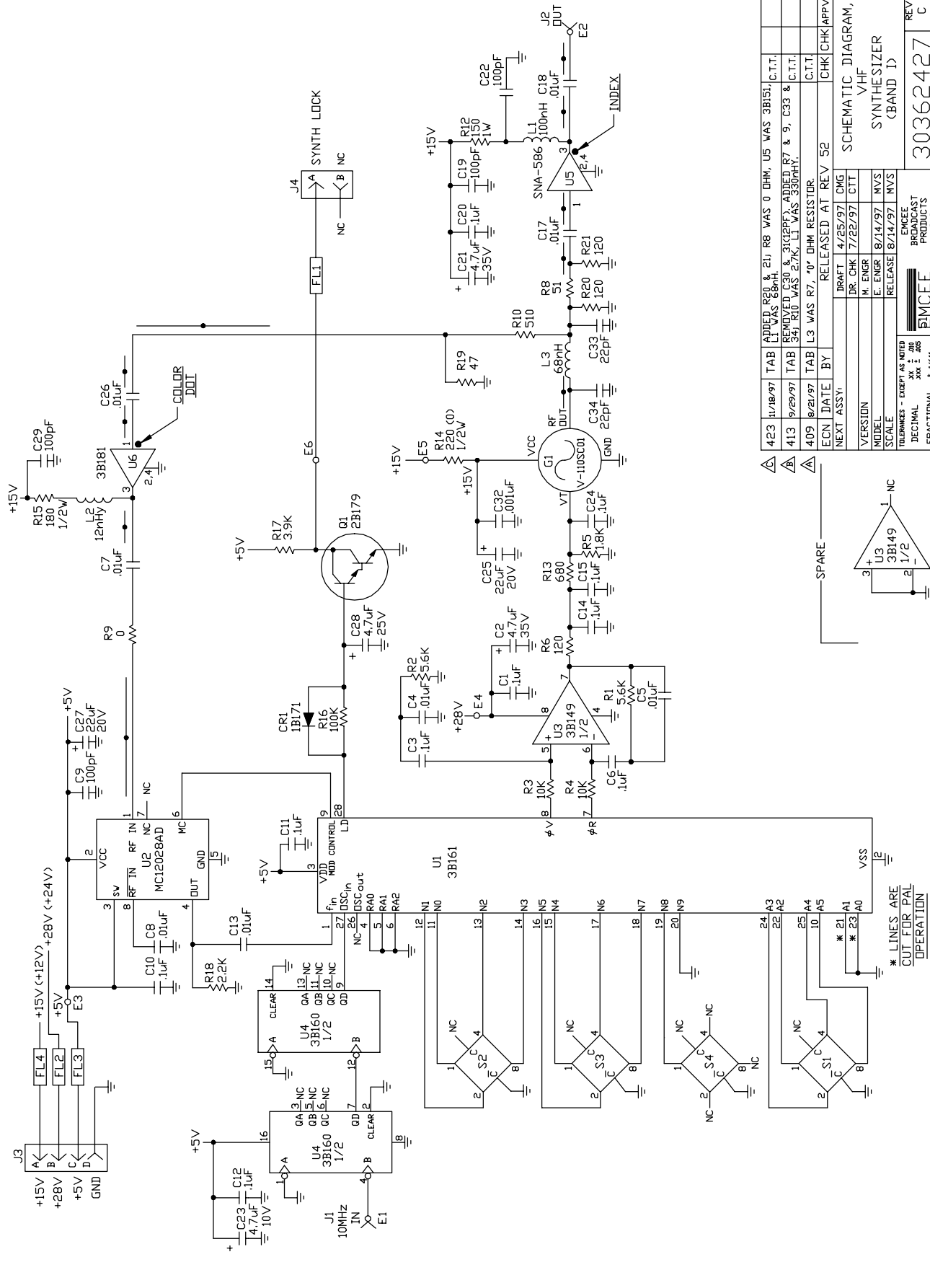
250	1-3-94	VN	R10 WAS 91 OHMS, R11 WAS 10 OHMS		CTT	JL	RGN
B	12-18-93	CTT	CHANGED VALUES - R910 WAS 47.87 R WAS 30, R15 WAS 390 U6 WAS 38B393 ADDED L3,C30, AND C31	MVS	RGN		RGN
A	10-7-93	TAB	REMOVED FERRITE BEAD FROM L1-R12	CTT	RGN	CTT	RGN
ECN DATE	BY	RELEASED AT REV.	52	CHK	CHK	APPROV	
NEXT ASSY:		DRAFT	3-24-93	TAB			
		DR. CHK	4-1-93	CTT			
VERSION		M. ENGR					
MODEL		E. ENGR	9-1-93	JMK			
SCALE		RELEASE	9-1-93	RN			
TOLERANCES - EXCEPT AS NOTED				ENGINEER BROADCAST PRODUCTS INC. PMCEE			
DECIMAL	.XX ± .005						
FRACTIONAL	± 1/64"						
ANGULAR	± 1/8 DEG						
SHEET 1 OF 1				REV D 30362003			
SCHEMATIC DIAGRAM, VHF SYNTHESIZER (BAND III)							



* LINES ARE
CUT FOR PA
OPERATION

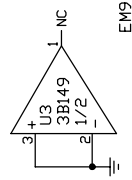
HIGHEST REFERENCE DESIGNATIONS
C34 U6 R2 I1 G1 L5 4 J4 I6 3 C R I1 F L 4 Q1
REFERENCE DESIGNATIONS NOT USED
C30 C31 R1 I1 R7

NOTE:
1-VALUES IN PARENTHESIS ARE
FOR RSVA2 OPERATION.



* LINES ARE
CUT FOR PAL
OPERATION

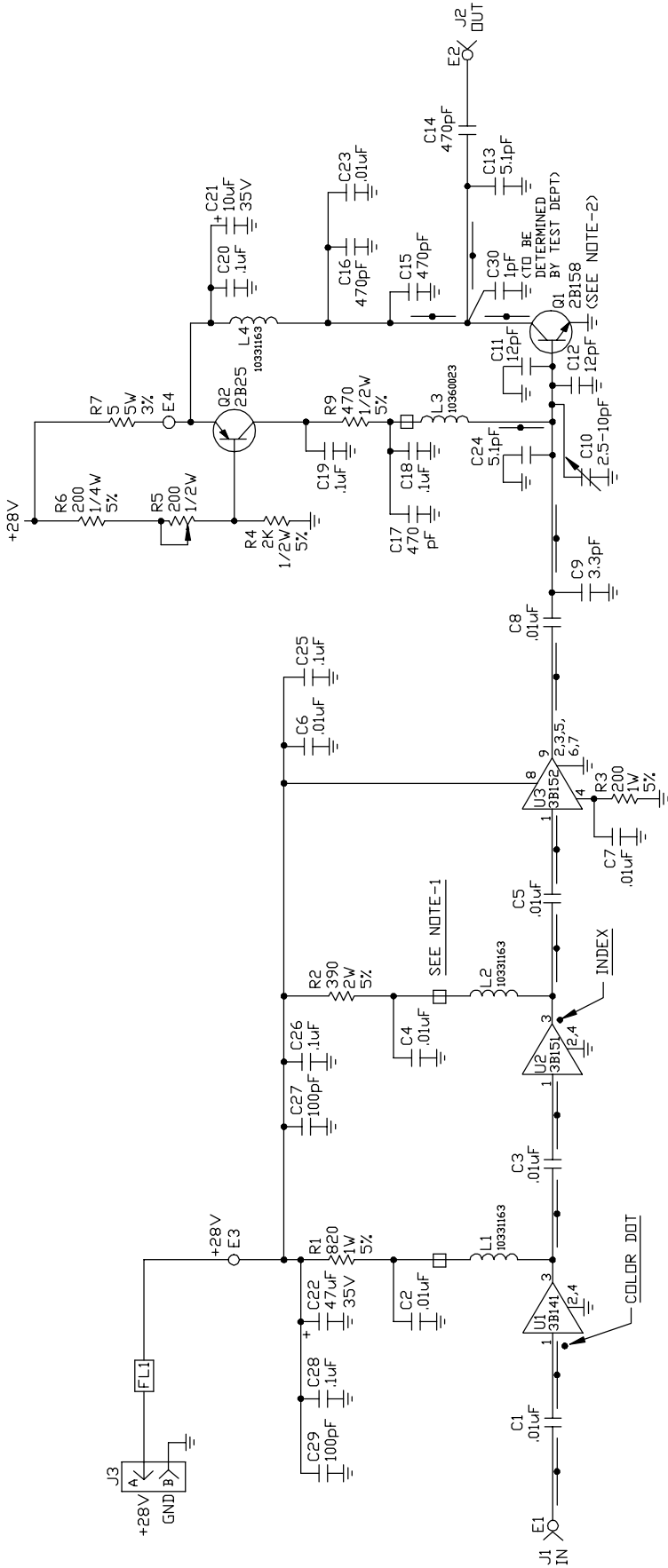
423	11/18/97	TAB	ADDED R20 & 21, RB WAS 0 OHM, U5 WAS 3B151	C.T.T.	
413	9/29/97	TAB	REMOVED C30 & 31(2PF), ADDED R7 & 9, C33 & 34, R10 WAS 2.7K, L1 WAS 330PHY.	C.T.T.	
409	8/21/97	TAB	L3 WAS R7, '0' OHM RESISTOR	C.T.T.	
ECN DATE			RELEASED AT REV 52	CHK/CHK/APPV/L	
NEXT ASSY:			DRAFT 4/25/97 CMG		
VERSION			DR. CHK 7/22/97 CTT		
MODEL			M. ENGR		
SCALE			E. ENGR 8/14/97 MVS		
TOLERANCES - EXCEPT AS NOTED			RELEASE 8/14/97 MVS		
DECIMAL			XX ± .005		REV
FRACTIONAL			± 1/64"		C
ANGULAR			± 1/2 DEG		
				SHEET 1	DF 1
				WHITE HAVEN, PA. 18661	



HIGHEST REFERENCE DESIGNATIONS			
U3	Q2	C30	R9
L4	FL1	E4	

REFERENCE DESIGNATIONS NOT USED			
R8			

NOTES: UNLESS OTHERWISE SPECIFIED,
 1-THE SYMBOL  INDICATES FERRITE BEADS.
 2-COMPONENTS J1, 2, 3, FL1, U3, C10, C11, C12R7, Q1, AND Q2 ARE NOT ON PCB ASSEMBLY.



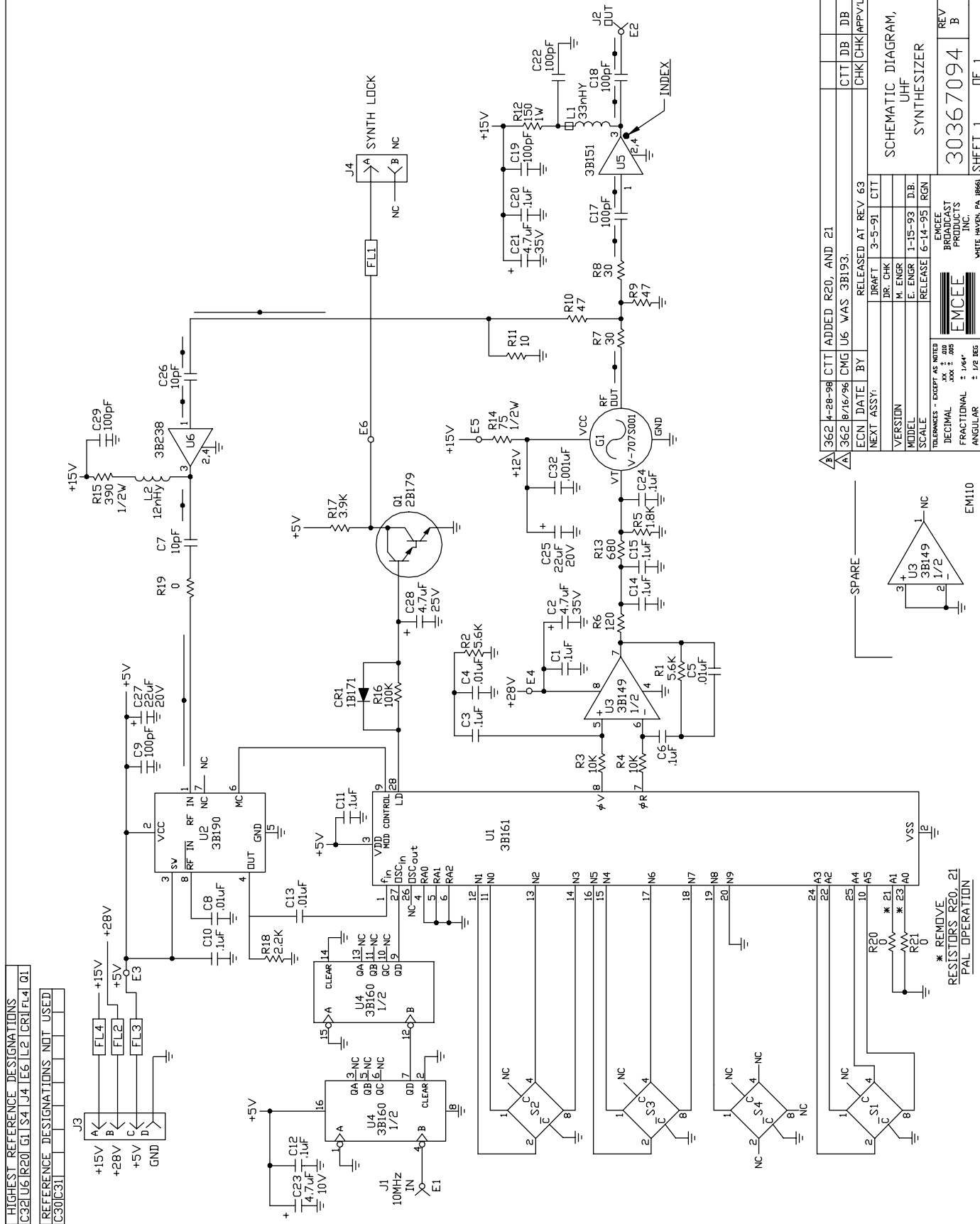
A	12-6-93	TAB	ADDED C30	RELEASED AT REV 55	CTT	RGN	RGN
ECN	DATE	BY	RELEASED AT REV 55			CHK	CHK/APPRVL
NEXT ASSY:				DRAFT	B-03-90	SMP	
VERSION				DR. CHK			
MODEL				M. ENGR			
SCALE				E. ENGR	6-19-92	RGN	
TOLERANCES - EXCEPT AS NOTED				RELEASE	6-19-92	RGN	
DECIMAL				XXX ± .005			
FRACTIONAL				± 1/64"			
ANGULAR				± 1/2 DEG			



ELECTRONICS
 MISSILES &
 COMMUNICATIONS
 INC.
 WHITE HAVEN, PA. 18661

SCHEMATIC DIAGRAM, 2W UHF AMPLIFIER				REV
30367002				A

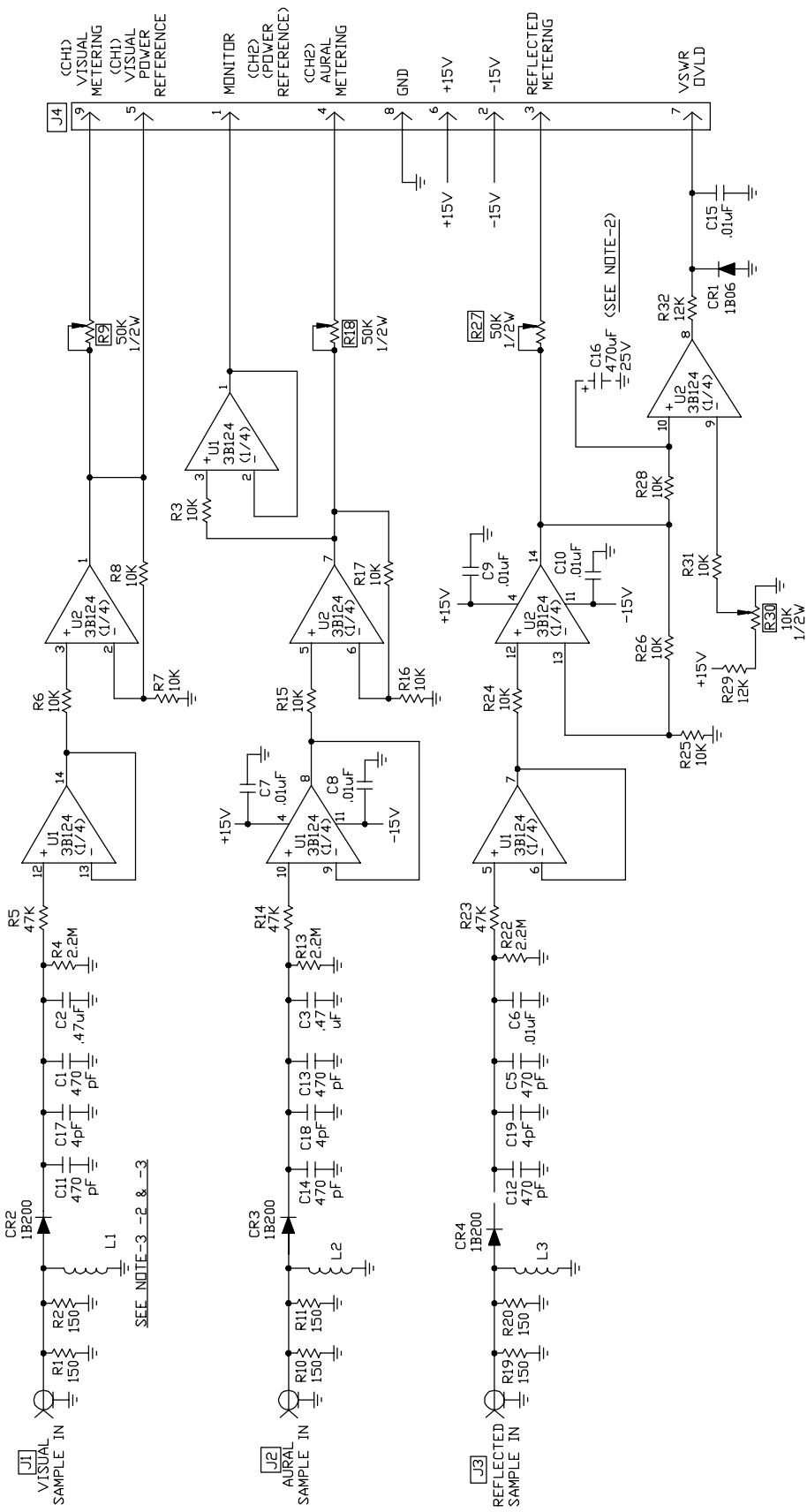
SHEET 1	OF 1
---------	------



362	4-28-98	CTT	ADDED R20, AND 21					
ECN	DATE	BY	CMG	U6 WAS 3B193.			CTT	DB DB
362	8/16/96						CHK	CHK APP/V/L
RELEASED AT REV 63								
NEXT ASSY:			DRAFT	3-5-91	CTT			
VERSION			DR. CHK					
MODEL			M. ENGR					
SCALE			E. ENGR	1-15-93	D.B.			
			RELEASE	6-14-95	RGN			
TOLERANCES - EXCEPT AS NOTED			EMCEE					
DECIMAL			XXX ± .005					
FRACTIONAL			1/16"					
ANGULAR			1/2 DEG					
30367094						REV	B	
SHEET 1 OF 1								

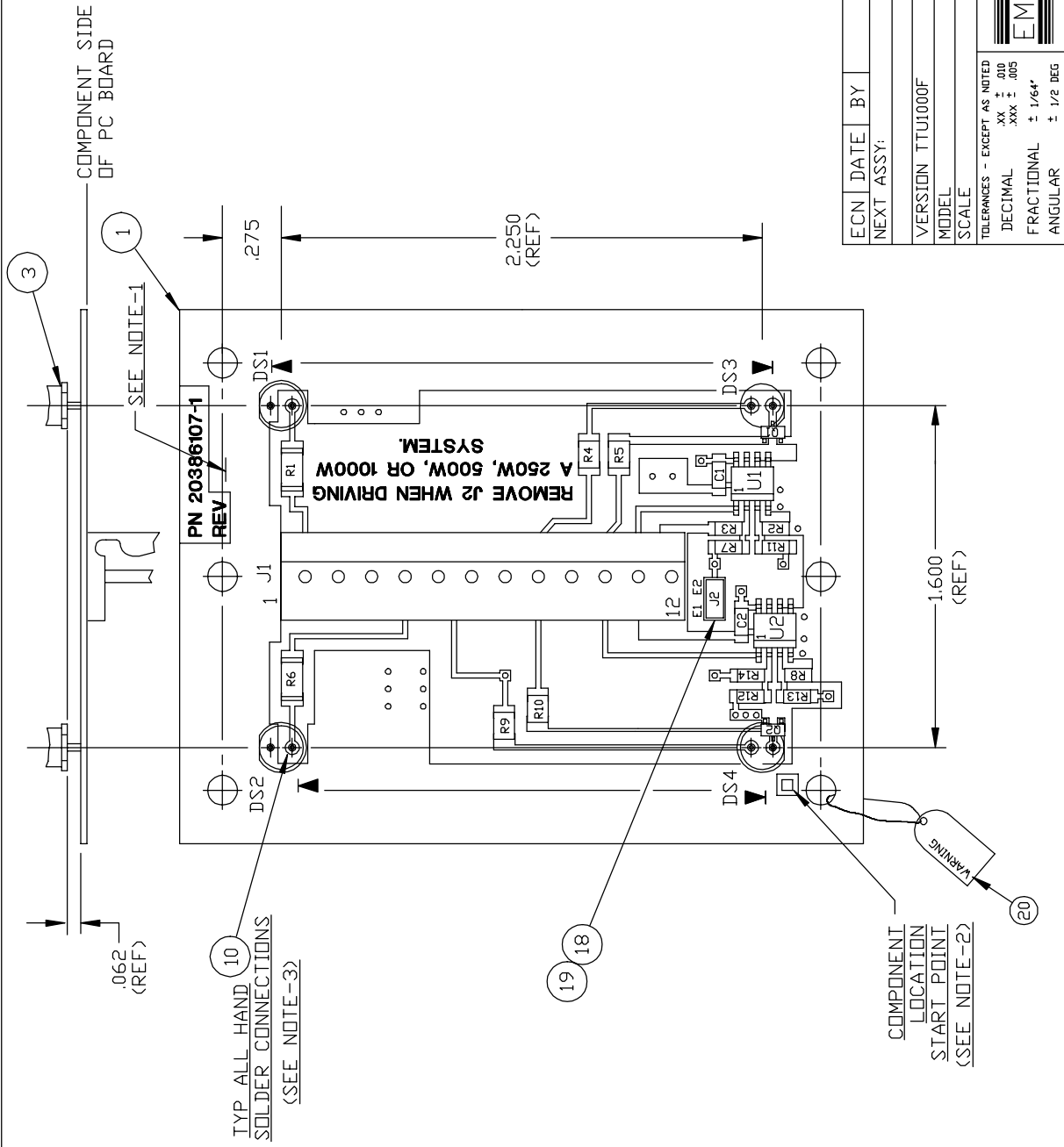
HIGHEST REFERENCE DESIGNATIONS			
R35	C19	U2	CR4
J4	L3		
REFERENCE DESIGNATIONS NOT USED			
R12	R21		

NOTES: UNLESS OTHERWISE SPECIFIED,
1-COMPONENTS CR1, C2, R9, R18, R27,
AND R30 ARE NOT SURFACE MOUNTED.
2-WHEN USING ON OTHER THAN HS EQUIPMENT,
C16 AND L1, L2, & L3 ARE ELIMINATED.
3-COILS L1,2 & 3 ARE STRIP LINE RUNS.



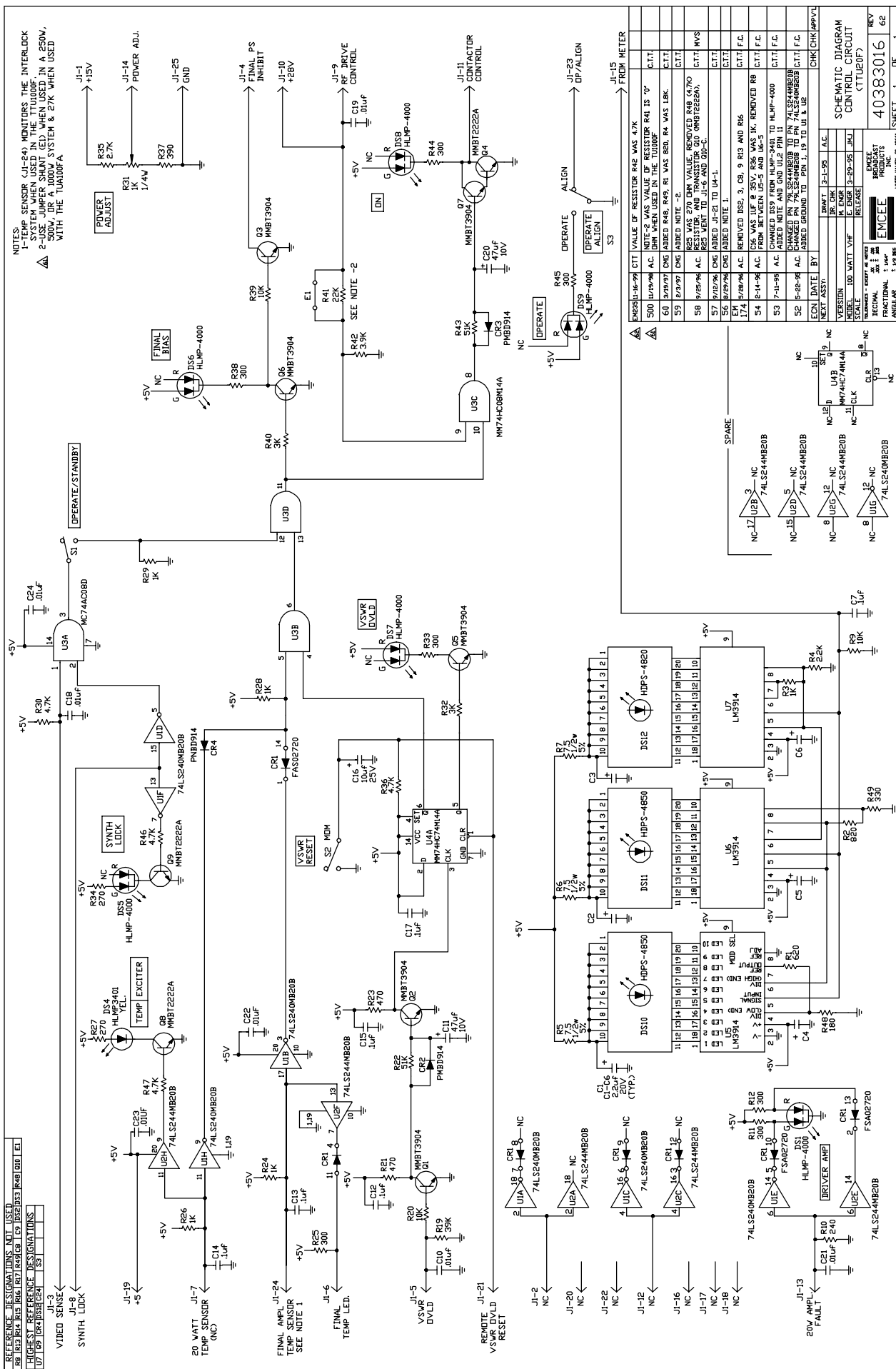
384	1/8/97	CMG	CR2, 3, 4 WERE 1B159 (PN HSMS-2811).	CTT		160	7-28-93	TAB	SEE PCR/ECN	CTT	BN	BN
N	10/30/96	CMG	R26 WAS 4.7K.	CTT	DB	150	5-20-93	TAB	SEE PCR/ECN	CTT	BN	BN
352	7/9/96	A.C.	ADDED RUN FROM R3 TO U2-7, L1-L3 WAS PN 10368443-1. MODIFIED NOTE-1 & 2.	CTT	DB	C	2-20-91	CTT	ADDED R3, AND RUN FROM J4-1 TO U1-1	BN		
345	5-7-96	VN	ADDED C17,18,19, L1,2,3 AND NOTE-3	CTT	DB	B	2-14-91	TAB	VALUE OF R26 WAS 10K	BN		
K	10-17-95	CT	ADDED C16 TO NOTE 2	CTT	DB	A	10-26-90	TAB	U1 & U2 WERE 3B72	PJS	BN	
287	6/15/95	TAB	REMOVED R33, 34, & 35; ADDED SITE CONTROLLER TO NOTE-2	CTT	FC	ECN	DATE	BY	RELEASED AT REV 55	CHK	CHK	APPL
224	8-16-94	TAB	ADDED R33, 34, & 35	CTT	SCALE	NEXT ASSY:						
217	7-15-94	VN	ADDED C15	CTT	CTT	DR. CHK	7-12-90	CTT				
F	10-20-93	TAB	UPDATED NOTE-2	CTT	CTT	M. ENGR	10-4-90	DB				
ECN				CTT	CTT	RELEASE	10-5-90	JMJ				
				CTT	CTT	TOLERANCES - EXCEPT AS NOTED						
				CTT	CTT	XX ± .00						
				CTT	CTT	XX ± .00						
				CTT	CTT	FRACTIONAL	± 1/64"					
				CTT	CTT	ANGULAR	± 1/2 DEG					
				CHK	CHK	EMCEE						
								SCHEMATIC DIAGRAM, METERING DETECTOR				
								30368024				
								P				
								SHEET 1				
								DF 1				
								WHITE HAVEN, PA. 18641				

1-MARK REV LEVEL PER SH. 1 OF 1 AND
SPEC A232-107-3.
2-APPLY SOLDER PASTE (ITEM 17) TO PC
BOARD USING SOLDER STENCIL (ITEM 16).
3-COMPONENTS DSI, DS2, DS3, DS4, ARE
MOUNTED TO NON-COMPONENT SIDE OF
PC BOARD.



(-1) PCB ASSY, STATUS DISPLAY

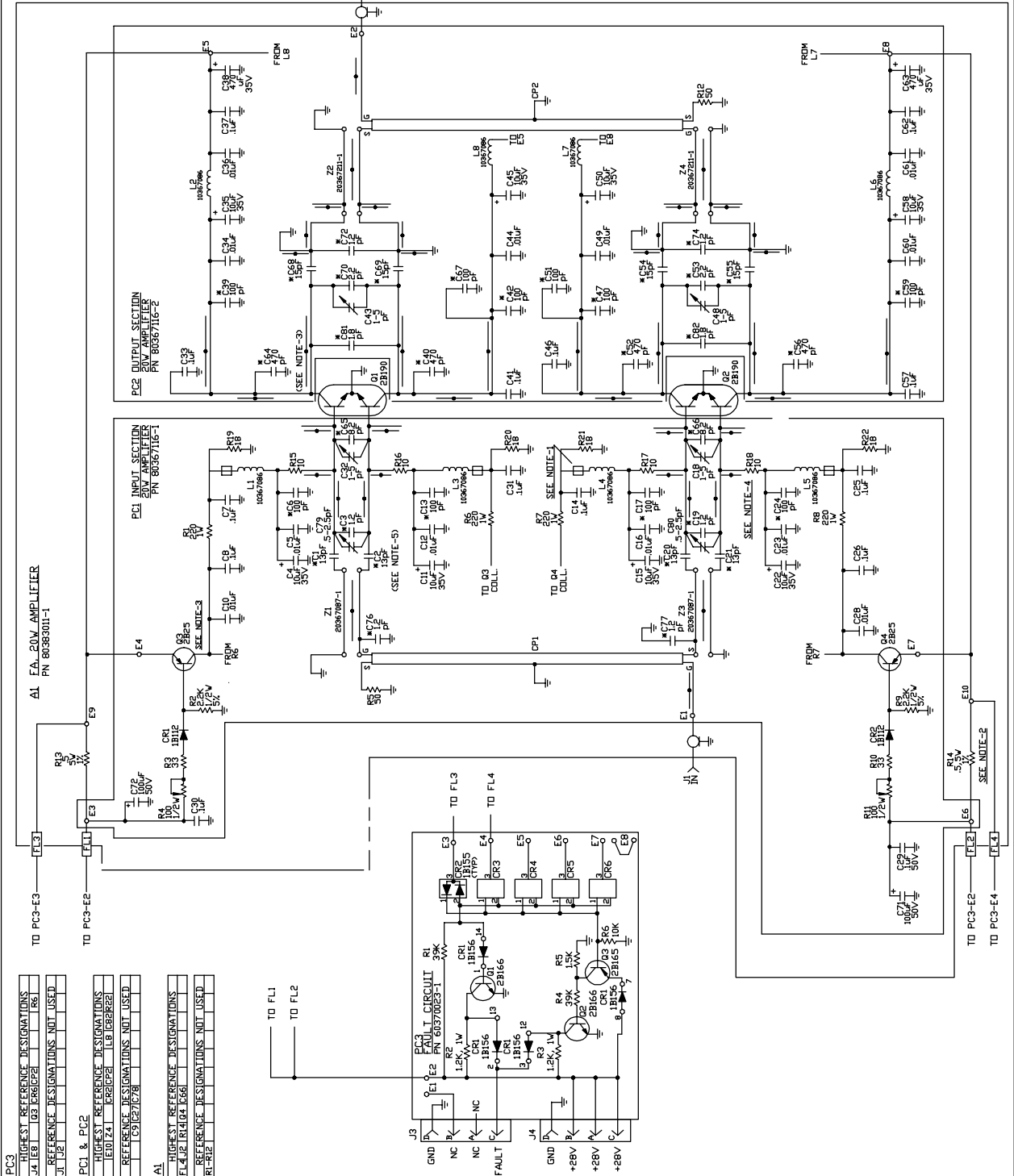
ECN	DATE	BY	RELEASED AT REV 51		CHK	CHK	APPV'L
NEXT ASSY:			DRAFT	1/22/98	A.C.		
VERSION TTU1000F			DR. CHK	5-18-99	CTT		
MODEL			M. ENGR				
SCALE			E. ENGR				
TOLERANCES - EXCEPT AS NOTED			RELEASE 1-19-00				CTT
DECIMAL .XX ± .010 XXX ± .005			EMCEE				EMCEE BROADCAST PRODUCTS INC.
FRACTIONAL ± 1/64"			SHEET 1 OF 1				REV 51
ANGULAR ± 1/2 DEG			WHITE HAVEN, PA. 18661				

[illegible]

THIS IS A
BUREAU OF

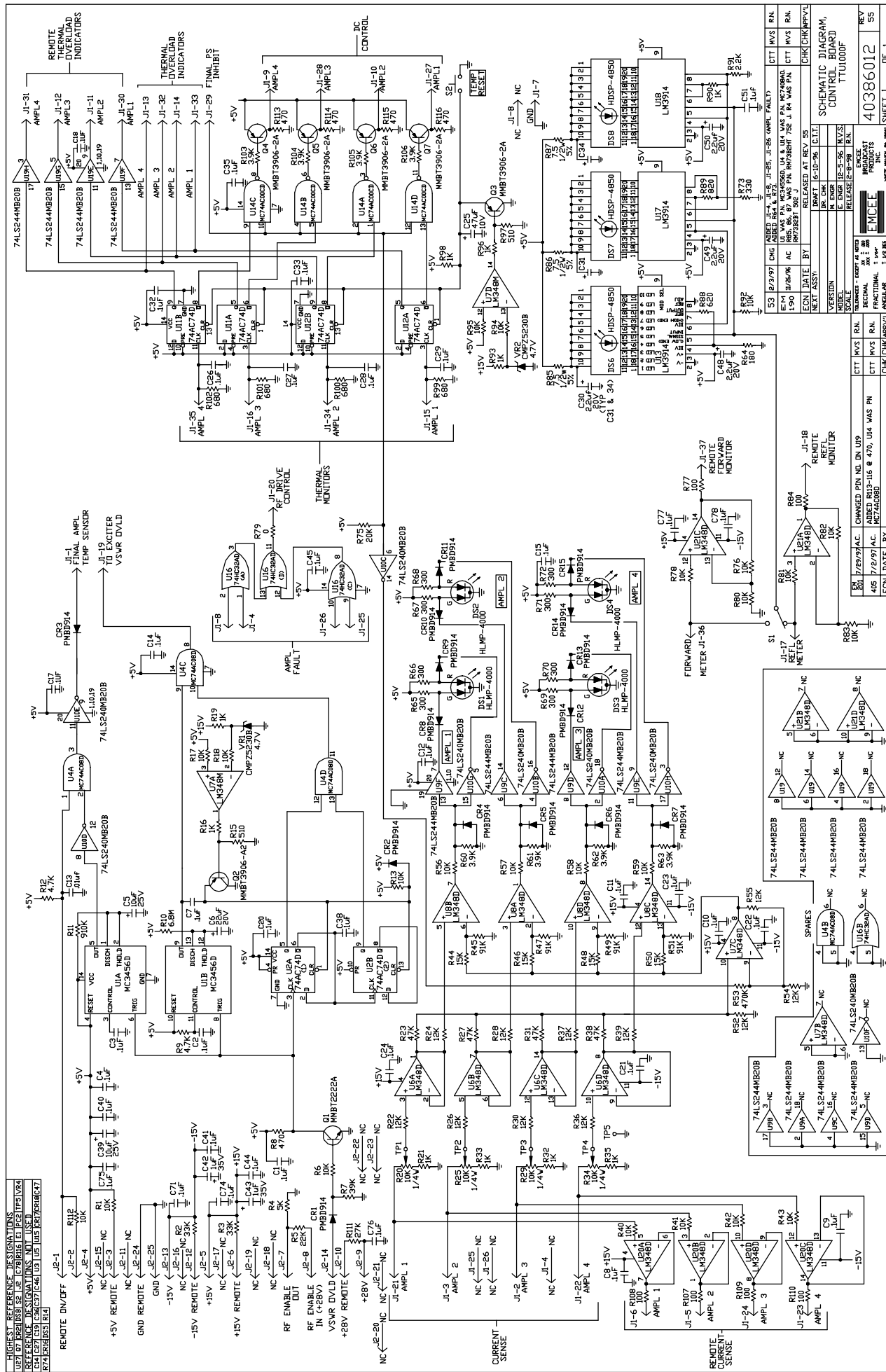
REV: 52 **(-2)** PCB ASSEMBLY, CONTROL/MONITOR, (TTU1000F)
OBSOLETE

PC3			
HIGHEST REFERENCE DESIGNATIONS	J4 E8	Q3 C65C22	R6
REFERENCE DESIGNATIONS NOT USED	J1 L2		
PC1 & PC2			
HIGHEST REFERENCE DESIGNATIONS	E10 Z4	E62 C22	L8 C62R22
REFERENCE DESIGNATIONS NOT USED			
A1			
HIGHEST REFERENCE DESIGNATIONS	F4 L2	F4 L4	L6 C64
REFERENCE DESIGNATIONS NOT USED			

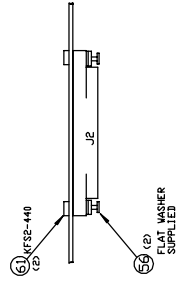
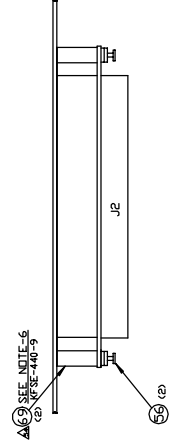
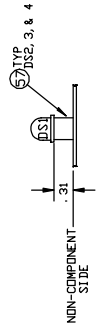


NOTE: UNLESS OTHERWISE SPECIFIED:
 1- THE SYMBOL-DENOTES FERRITE BEADS.
 2- RESISTOR VALUES ARE 1/4W, 5%.
 3- COMPONENTS D1 THRU Q4, F1 THRU F4, AND F5 ARE NOT LOCATED IN PCB ASSY.
 4- COMPONENTS R13 THRU R15 MAY BE CAPACITORS OR RESISTORS, MARKED WITH AN ASTERISK.
 5- ARE ATC CAPACITORS.

EN4046-21-94	UN	REMOVED C78 1.50F CAPACITOR	CHK	CHK	APPV
ECN	DATE	BY	DRMT	3/28/95	TAB
SCHEMATIC DIAGRAM,			INC	CHK	6/25/95
20W UHF			RELEASE		
AMPLIFIER					
(TU20F)					
40383053					
NEW					
52					
1					
DF					

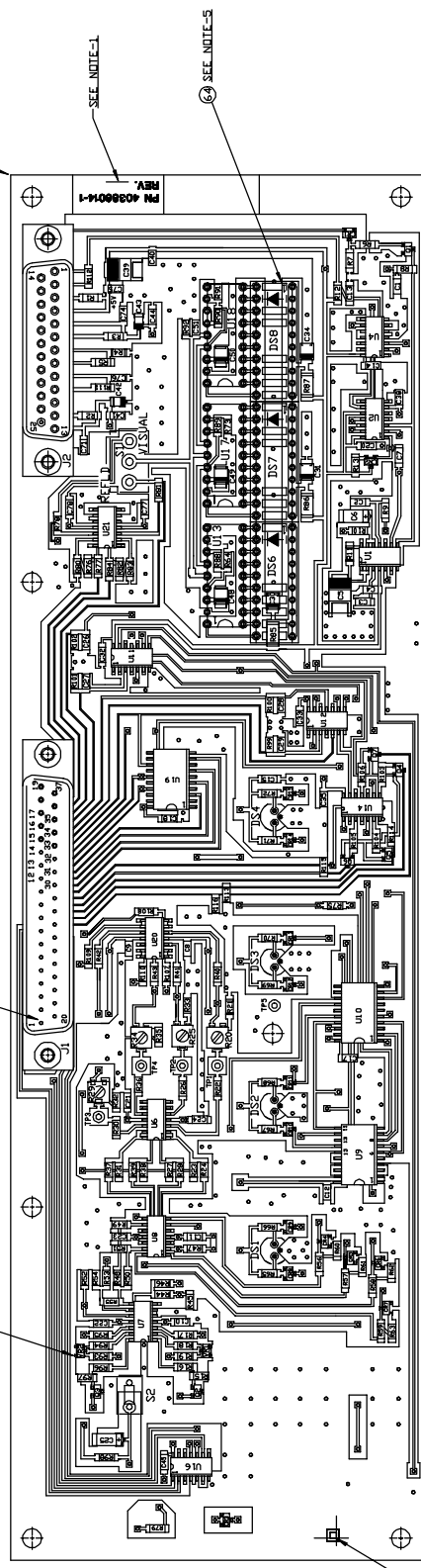
[illegible]

NOTES:
 1-MARK REV LEVEL PER SHEET 1 OF 1 AND SPEC A238-107-3.
 2-APPLY SOLDER PASTE (ITEM 59) TO PC BOARD COMPONENTS U13, 17, 18, D56, 7, & 8 ARE MOUNTED TO NON-COMPONENT SIDE OF PC BOARD.
 4-SEE COORDINATE SHEETS FOR LOCATION OF COMPONENTS.
 5-MAKE SURE TO INSERT THE L.E.D. ARRAYS INTO THE SOCKETS BEFORE SOLDERING THE SOCKETS INTO THE BOARD.
 6-INSTALL SPACERS (ITEM 69) BEFORE SOLDERING CONNECTOR IN PLACE.



59 TYP ALL SURFACE MOUNT COMPONENTS (SEE NOTE-2)

58 TYP ALL HAND SOLDER COMPONENTS



COMPONENT LOCATION START POINT SEE NOTE-4

REV	DATE	BY	REASON	CHK	APP	CIT
1	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
2	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
3	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
4	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
5	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
6	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
7	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
8	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
9	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
10	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
11	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
12	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
13	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
14	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
15	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
16	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
17	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
18	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
19	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
20	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
21	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
22	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
23	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
24	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
25	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
26	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
27	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
28	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
29	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
30	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
31	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
32	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
33	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
34	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
35	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
36	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
37	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
38	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
39	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
40	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
41	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
42	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
43	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
44	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
45	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
46	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
47	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
48	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
49	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
50	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
51	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
52	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
53	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
54	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
55	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
56	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
57	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
58	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
59	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
60	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
61	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
62	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
63	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
64	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
65	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
66	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
67	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
68	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
69	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
70	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
71	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
72	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
73	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
74	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
75	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
76	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
77	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
78	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
79	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
80	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
81	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
82	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
83	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
84	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
85	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
86	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
87	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
88	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
89	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
90	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
91	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
92	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
93	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
94	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
95	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
96	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
97	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
98	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
99	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT
100	12/25/96	A	CHANGED PER EM 190	10/29/96	CHG	CTT

1 PCB ASSY, CONTROL BOARD, TTUI 000F

PCB ASSEMBLY CONTROL CIRCUIT, TTUI 000F	REV 40386014	REV 58
ENCLER BROADCAST PRODUCTS INC.	40386014	58
NOTE: WORK IN PROGRESS	SHEET 1	OF 3