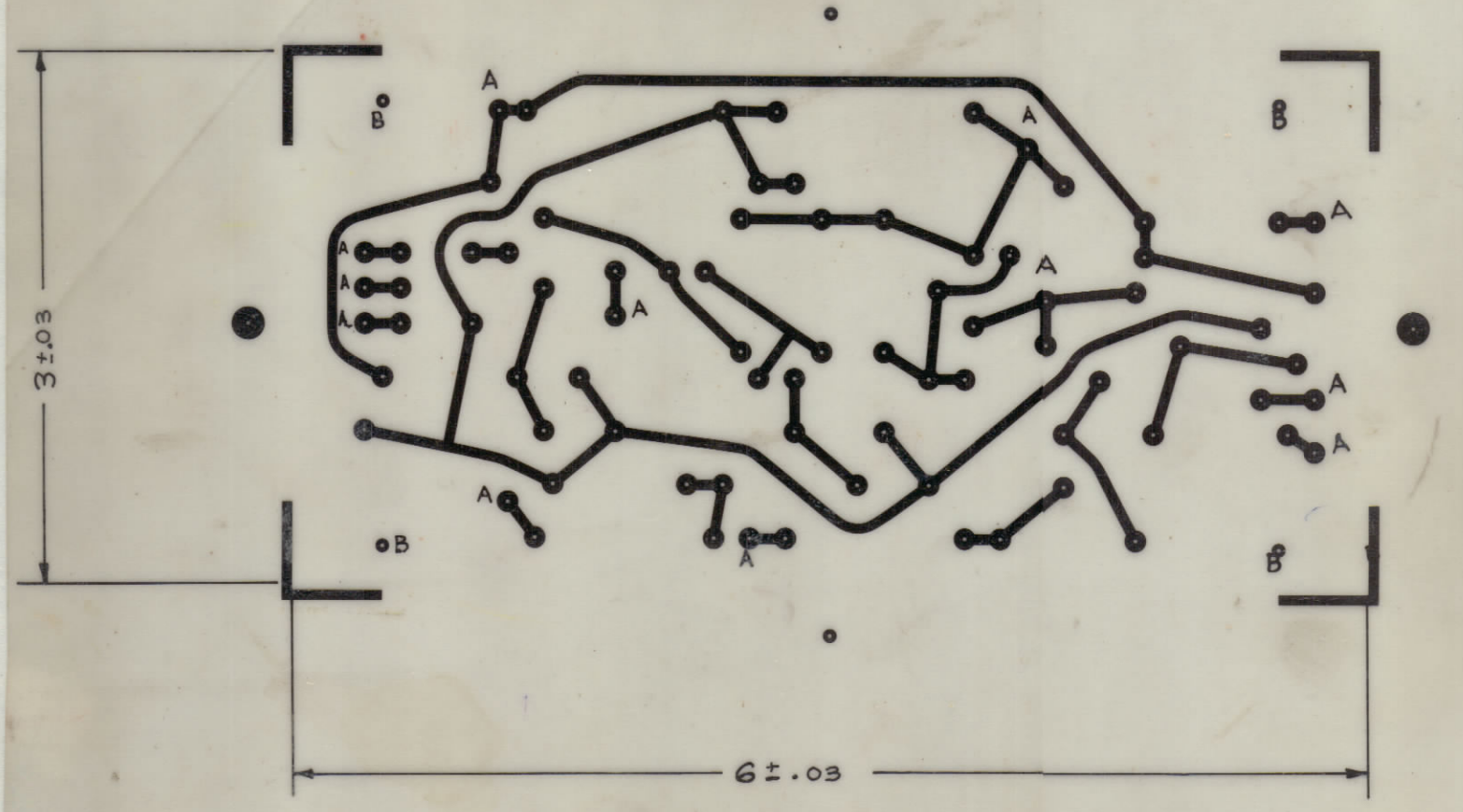


REVISIONS						
ZONE	SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD
-	A	FOR REVISION SEE SHEET 2 OF 2 "A"	10.13.64	12275	WJB	
	B	FOR REV. SEE SH. 2 OF 2 "B"	11.17.66	15520	HCA	
	C	PLATED-THRU NOTE DELETED, MAT. THICKNESS WAS 1/64 SEE SHEET 2	10-3-66	16941		
	D	SEE SHEET 2	MAR 26 1967	17903	WTD	
	E	SEE SHEET 2	6.10.69	19483	GE	OP

MACHINING INSIDE

TO BE USED FOR MACHINING ONLY



TMC NO. A3078-E

HOLE & PAD SPECS.

UNMARKED	: .059 ± .005	PAD DIA. .120	67 REQ.
"A"	: .081 ± .005	PAD DIA. .120	12 REQ.
"B"	: .156 ± .005	NO PAD	4 REQ.

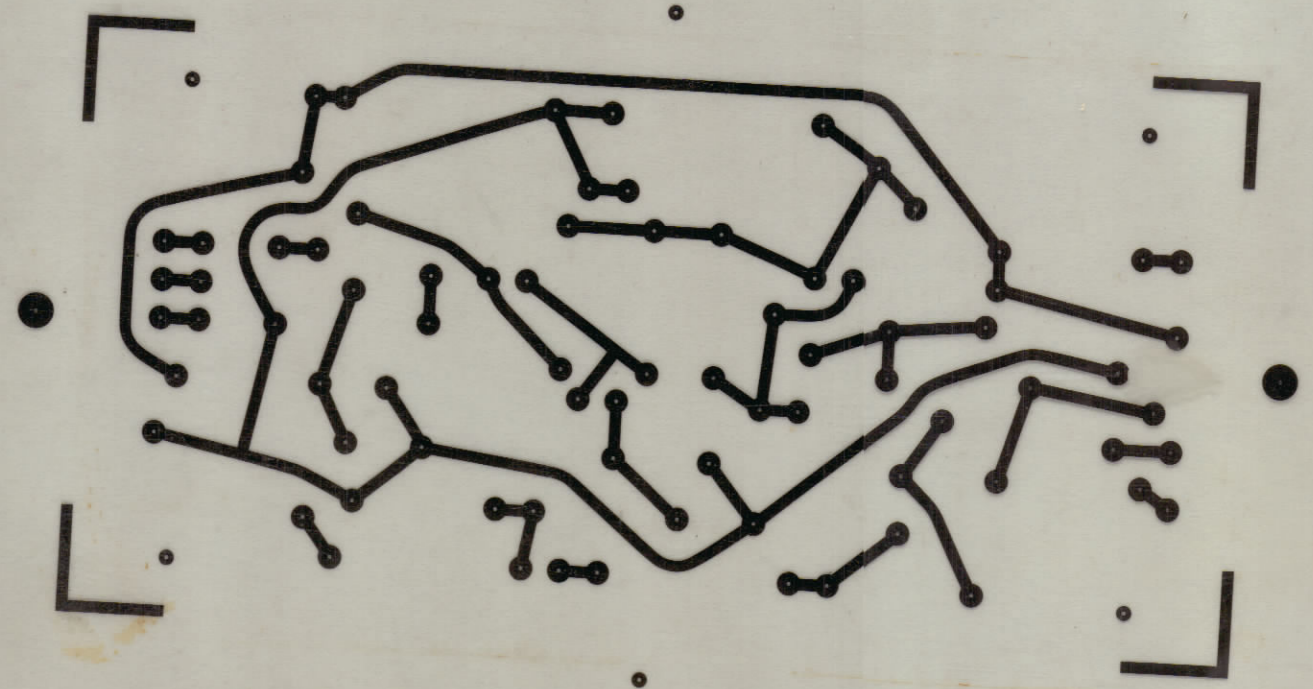
OTHER SPECIFICATIONS

CONDUCTOR:

- NOMINAL WIDTH: $.062 \pm .005$ MIN. $.040$
- MIN. WIDTH: $.040$ RE- $.040$ FOR MIN. SPACING
- MIN. SPACING: $.031$
- NO FILLETS REQ'D
- COPPER FOIL: 2 OUNCES, - ONE SIDE
- PLATING:
 - MIN. THICKNESS: $.0008$ TIN LEAD
 - ALL CONDUCTORS
- BASE MATERIAL: EPOXY G-10 3/32 THK.

ORIGINAL INSIDE

THIS IS ORIGINAL ARTWORK
SCALE: 1:1



TMC NO. A3078-E

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Property of:
THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, NEW YORK

NOTE:

- LETTER DESIGNATIONS AS SHOWN, DENOTE HOLE SIZES; DO NOT PRINT.
- DO NOT USE STAR OR TORX DESIGNATIONS OR SHOWN ON CIRCUIT BOARD SPECIFICATIONS MORE THAN THICKNESS OF $.0015$ AT ANY POINT WITHIN THE HOLE.
- THE SOLDER-PLATE THICKNESS MUST BE A MIN. OF $.0008$ AT ANY POINT WITHIN THE HOLE PER TMC SPEC. #S-785.
- THE FINISHED DIA. OF THE PLATED-THRU HOLE MUST BE A MIN. OF $.050$

A3078-A-E

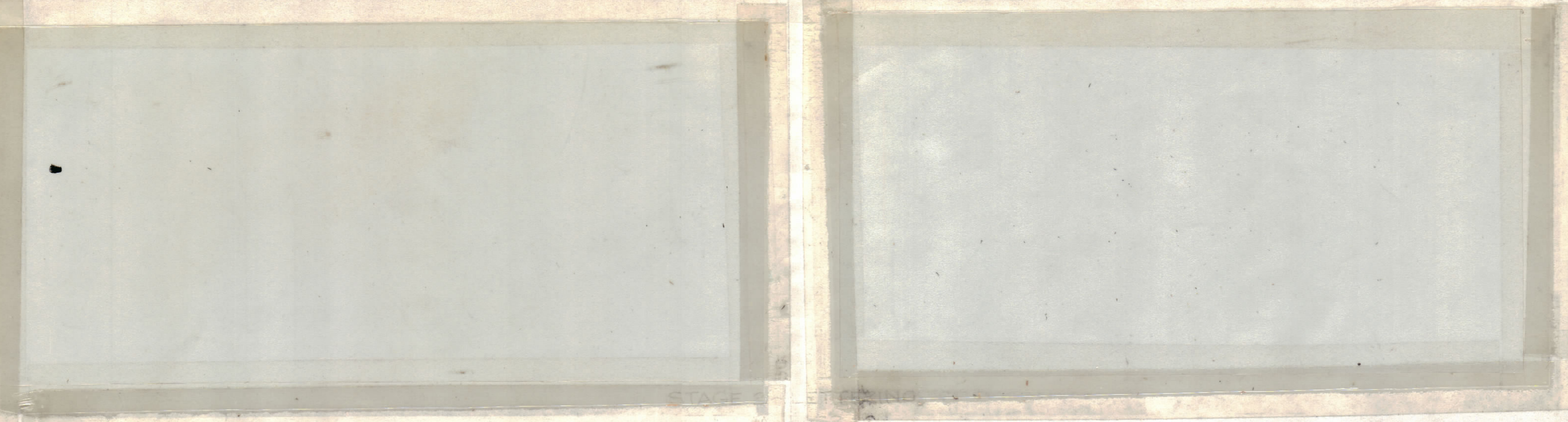
REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
J. STRUMER LIST OF MATERIAL				
MATERIAL		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK		
3/32 G10 EPOXY		TITLE PRINTED, ELECTRICAL CIRCUIT VOX & PTT UNIT		
FINISH		DRAWN W.S.		
NATURAL SEMI GLOSS		DATE 9/13/62		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		CHECKED JDe		
DECIMALS		DATE 4/1/63		
X ± .05		DATE 4-1-63		
XX ± .01		DATE 4-1-63		
XXX ± .005		DATE 4-1-63		
TOLERANCES		FINAL APPROVAL		
± 1/64		DATE 4-1-63		
ANGLES ± 0° 30'		DATE 4-1-63		
		SHEET 1 OF 2		
		REV. LTR.		

Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.
SCALE 1:1	KIT-155 UNIT	A-3139
	CODE	

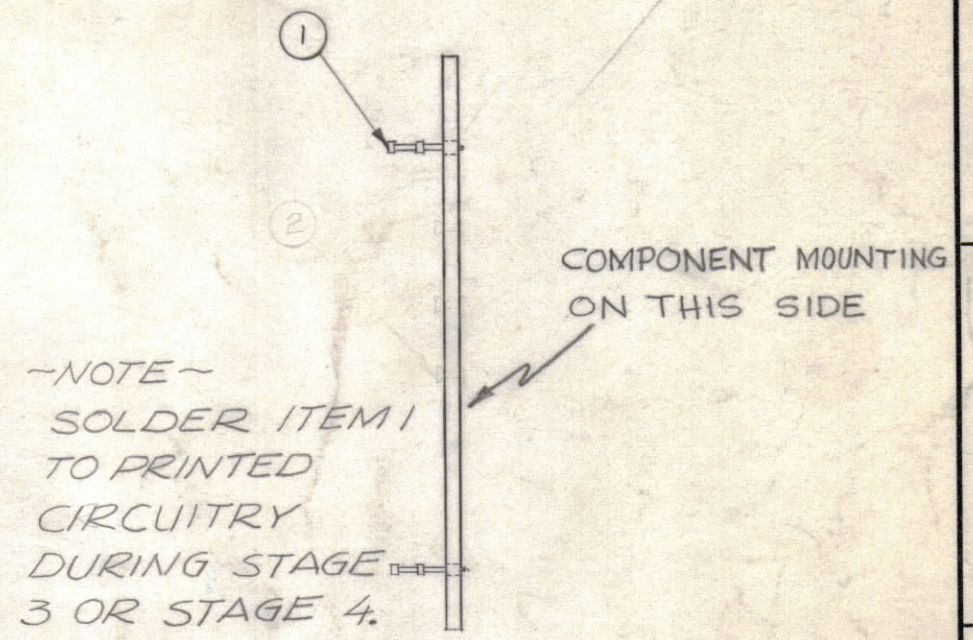
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NOTES

NOTE: ~ ALL LETTERING TO BE 3/32 HIGH BLACK GOTHIC MARKING PROCESS: AS PER TMC SPECIFICATION S-727

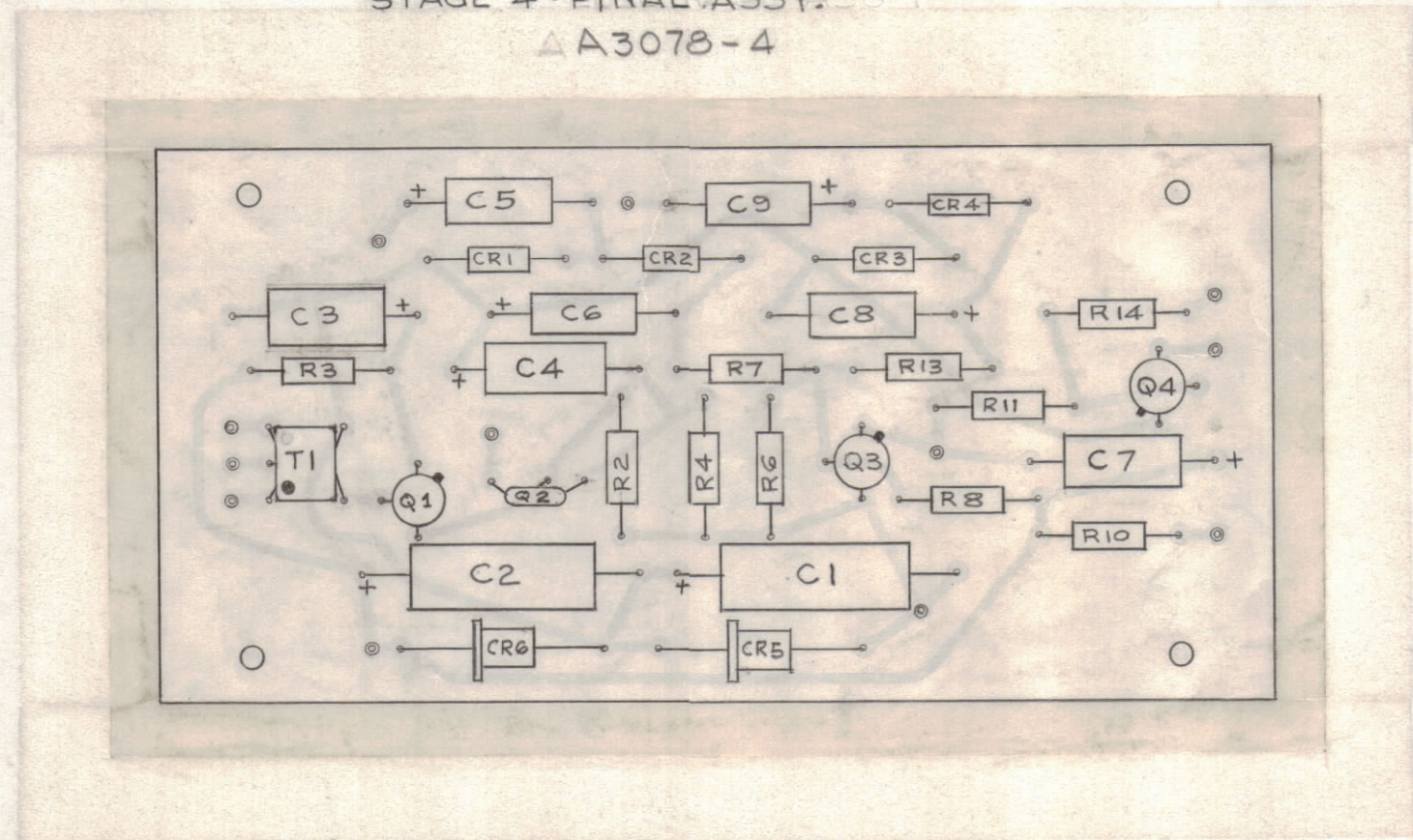


STAGE 2 - LETTERING
A 3078-2



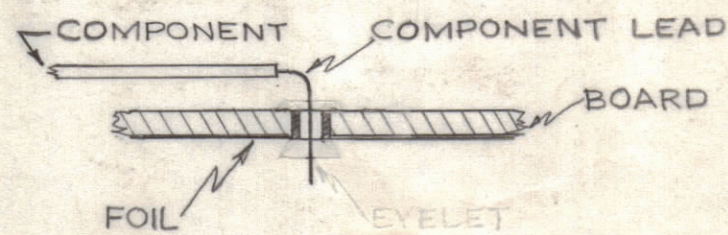
STAGE 3 - SUB-ASSEMBLY
A 3078-3

STAGE 4 - FINAL ASSY. BSY
A 3078-4



~ ASSEMBLY NOTICE ~

- 1~ TO MOUNT COMPONENTS - INSERT LEAD THROUGH BOARD & BEND ABOUT 1/16" OF LEAD OVER COPPER FOIL AS SHOWN.
- 2~ APPLY HEAT & SOLDER TO LEAD & FOIL - CAUTION - TOO MUCH HEAT WILL CAUSE THE FOIL TO SEPARATE FROM THE BOARD.
- 3~ TINE ALL FOIL CONDUCTORS AFTER COMPONENTS ARE IN PLACE.
- 4~ CLEAN & INSPECT AS PER S-676.
- 5~ SEE NOTE ON STAGE 3.



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ZONE	SYM	DESCRIPTION	DATE	E.M.N.#	DRAFT	CHKD	APPD
C2	A	IT.13 WAS RC20GF153J	10.13.64	12275	W.S.	H.C.	
	B	IT.17 WAS 2N1370-7; Add "Z" to IT. 2	11.17.66	15520	H.C.	H.C.	
	C	SEE SHEET (D) ITEM 1 WAS TE127-2	10-3-66	16941			
D6	D	THE WHITE DOT ON T1 HAS BEEN RELOCATED: SEE THIS SHEET	MAR 2 1967	17903	W.A.O.		
	E	ADD NOTE 5 & SOLDER NOTE	6.10.69	19483	GE		

REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
1	18	TF-246-13	TRANSFORMER, SUBMINIATURE	
1	18	2N213A	TRANSISTOR, GERMANIUM	Q2
3	17	TX108	TRANSISTOR, GERMANIUM	Q1,3,4
4	16	1N34A	DIODE GERMANIUM	CR1,2,3,4
2	15	1N1524	DIODE, SILICON, ZENER	CR5
✓	14	BS-100	SOLDER, SOFT, COMPOSITION	
1	13	RC20GF103J	RESISTOR, FIXED, COMPOSITION	R11
1	12	RC20GF473J		R10
1	11	RC20GF273J		R6
3	10	RC20GF103J		R2, R7, R13
1	9	RC20GF472J		R4
3	8	RC20GF223J	RESISTOR, FIXED, COMPOSITION	R3,8,14
1	7	CE-105-100-15	CAPACITOR, ELECTROLYTIC MIN.	C7
2	6	CE-105-30-15		C3, C4
2	5	CE-105-125-15		C1, C2
4	4	CE-105-3-15	CAPACITOR, ELECTROLYTIC, MIN.	C5, C6, C8, C9
1	3	2N213A	TRANSISTOR, GERMANIUM	Q2
1	2	TF-246-13Z	TRANSFORMER, SUBMINIATURE	T1
12	1	TE-127-3	TERMINAL, TURRET	

J. STRUMER		LIST OF MATERIAL	
MATERIAL		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
FINISH		TITLE PRINTED ELECTRICAL CIRCUIT ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES	DRAWN W.S.	DATE 7/20/62	FINAL APPROVAL B
DECIMALS .X ± .05 .XX ± .01 .XXX ± .005	TOLERANCES	DATE 4/1/63	DATE 4-1-67
FRACTIONS ± 1/64 ANGLES ± 0° 30'		DATE 4-1-63	DATE 4-1-63
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		REV. LTR. E	

NOTES