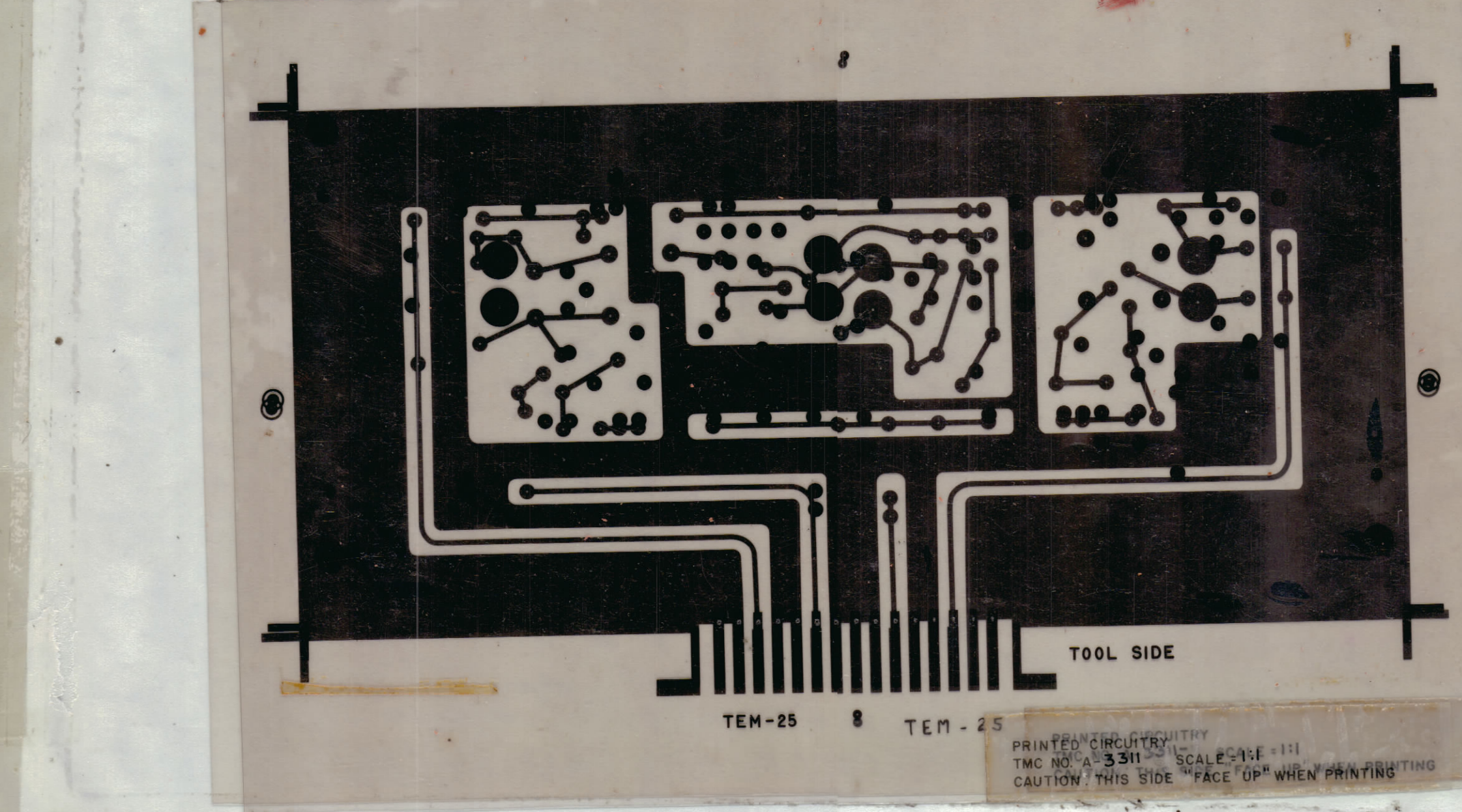


REVISIONS							
ZONE	SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
+	X1	SEE SHEET 2 OF 2 REVISION "X1"	11-20-63	1	JL		
+	X2	SEE SHEET 2, REVISION "X2"	2/24/64	2	FR		
#	X3	SEE SHEET 2	5/19-64	3	A.M.		
	X4	DELETED "A" HOLES, UPDATED NOTE 5	7-1-64	4	NP		
	X5	ADDED "A" HOLES; MTG SLOTS; REVISED NOTE 5.	7/29/64	5	JL		
+	O	ORIGINAL RELEASE FOR PRODUCTION	7.31.64	+	NPB		
	A	4 UNMARKED HOLES CHANGED TO "D" HOLES; 2 UNMARKED HOLES CHANGED TO "E" HOLES; HOLE CHART; UNMARKED DIA. DIA. WAS .050, REQ. WAS .25; "A" DIA. WAS .166; D & E ADD. SEE SHEET 2 OF 2 REV. "A"	2-11-65	13224	FA		
	B	2 UNMARKED HOLES ADDED, SEE SH 2.	1-11-67	17657	WFO		

ORIGINAL ARTWORK TO BE REMOVED FROM PROTECTIVE POCKETS WHEN PHOTOGRAPHING.
NOTE DOUBLE POCKETS.

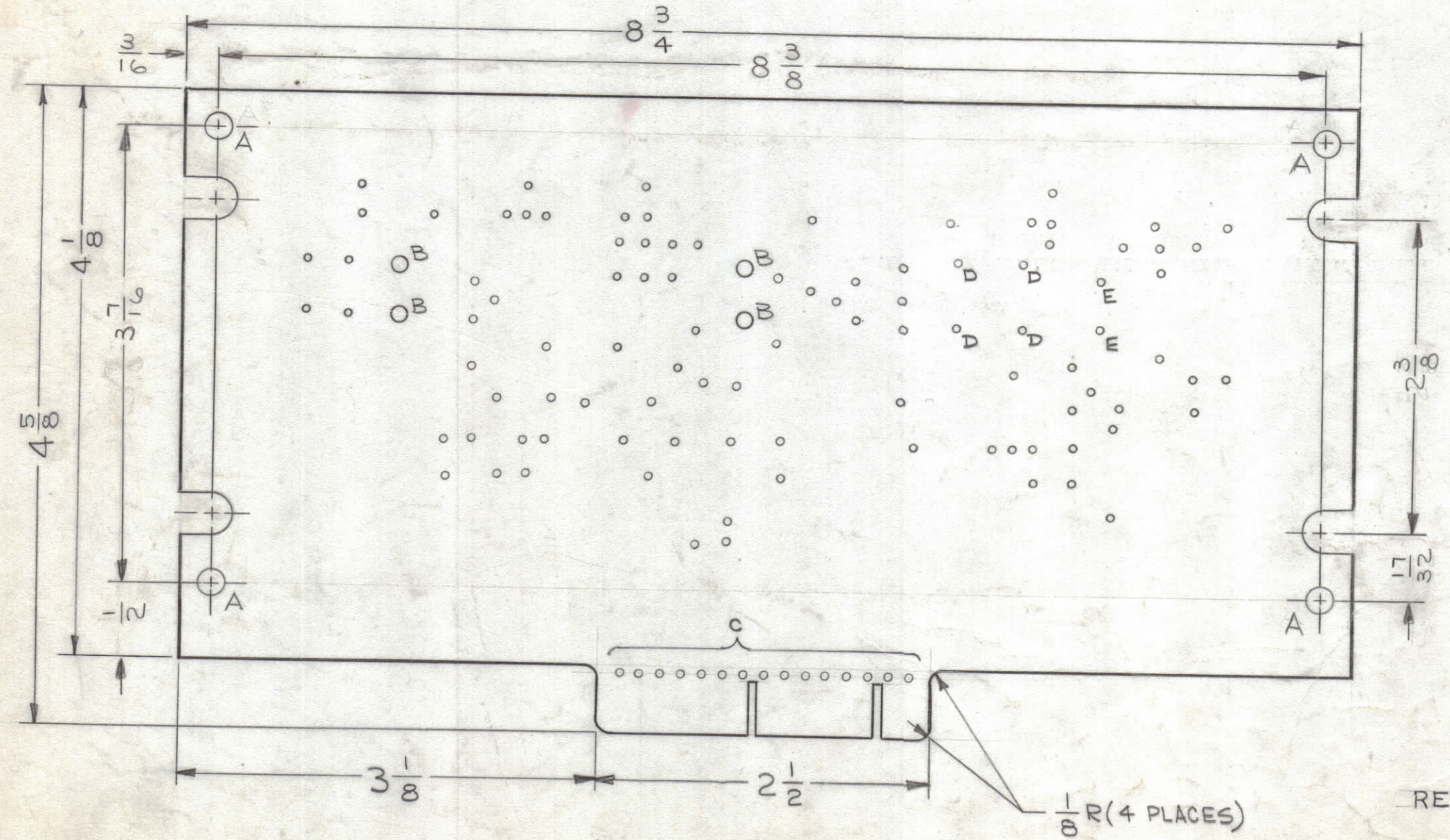
HOLE & PAD SPECIFICATIONS			
HOLE	DIA.	PAD DIA.	REQ'D.
UNMARKED	.040	.130	91
A	.161 TO .164	.250	4
B	.166	.310	4
C	.040	CONTACT FINGERS	15
D	.062	.150	4
E	.096	.150	2

- NOTE: TO BE KEPT IN ORIGINAL POSITION AND ACCORDANCE WITH THE ORIGINAL SPECIFICATIONS.
- 1 - MATERIAL - G-10 EPOXY GLASS LAMINATE 3/32 THICK, 2 OUNCE COPPER CLAD BOTH SIDES.
 - 2 - ALL BOARDS WILL BE DOUBLE-SIDED. WHENEVER A PAD APPEARS ON THE PRINTED CIRCUIT SIDE, A SIMILAR SIZE AND SHAPE SHALL APPEAR ON THE COMPONENT SIDE IN EXACT REGISTER. (EXCEPT WHERE AN EXCEPTION IS NOTED.)
 - 3 - FINGER CONTACTS SHALL ALSO APPEAR ON THE COMPONENT SIDE OF BOARD AND SHALL BE CONNECTED WITH A .040 DIA. PLATED-THRU HOLE LOCATED IN THE CENTER OF EACH FINGER CONTACT .050" AWAY FROM THE MAIN BODY OF BOARD.
 - 4 - THE PRINTED CIRCUIT BOARDS SHALL BE KEYED WITH SLOTS .070" WIDE & .400" HIGH LOCATED BETWEEN FINGER CONTACTS 7 & 8, 13 & 14 AS VIEWED FROM COMPONENT SIDE OF BOARD
 - 5 - (A) ALL HOLES TO BE PLATED-THRU WITH MINIMUM COPPER PLATING THICKNESS OF .001, EXCEPT "A" MTG. HOLES.
(B) PLATE .0003 TO .0005 NICKEL & 25 MILLIONTHS MINIMUM OF GOLD ALL ETCHED SURFACES AND PLATED-THRU HOLES.



PRINTED CIRCUITRY
TMC NO. A-3311 SCALE: 1:1
CAUTION: THIS SIDE "FACE UP" WHEN PRINTING

ETCHING, PRINTED CIRCUIT (A-3311-1)



MACHINING (A-3311-2)
DO NOT SCALE, WORK TO DIMENSIONS

4	LFS-1	AX-413
Q'TY./UNIT	MODEL USED ON	ASS'Y. NO.
SCALE	CODE	
1:1	A	
THE CONTENTS OF THIS DRAWING ARE THE EXCLUSIVE PROPERTY OF THE TECHNICAL MATERIEL CORP. ITS UNAUTHORIZED USE OR REPRODUCTION IN WHOLE OR IN PART IS STRICTLY FORBIDDEN.		
DECIMALS	FRACTIONS	
.X ± .05	± 1/64	
.XX ± .01	ANGLES	± 0° 30'
.XXX ± .005		

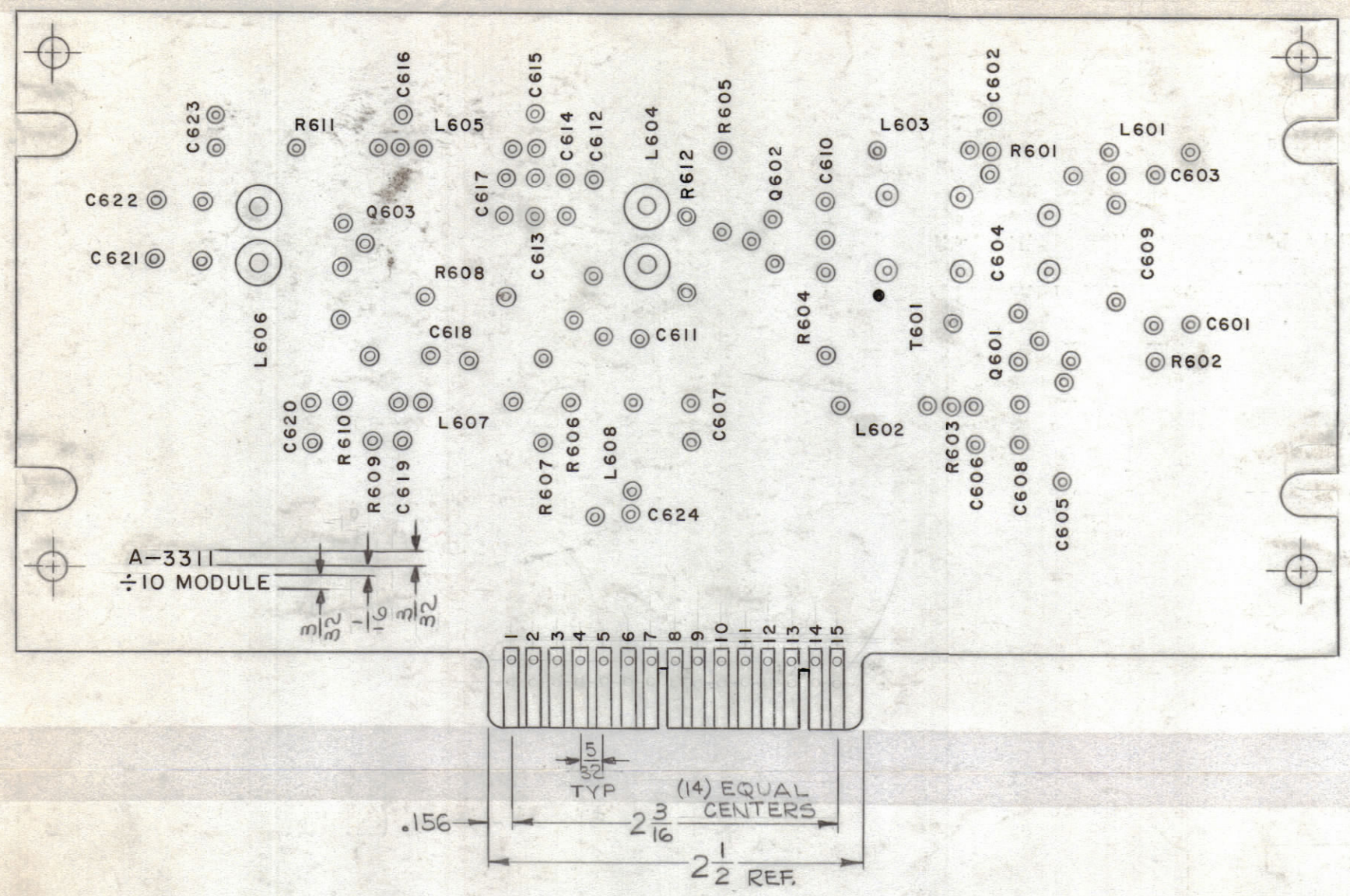
NOTES

THE ORIGINAL ARTWORK TO BE SUPPLIED BY TMC FOR PHOTOGRAPHING. (SCALE 1:1)

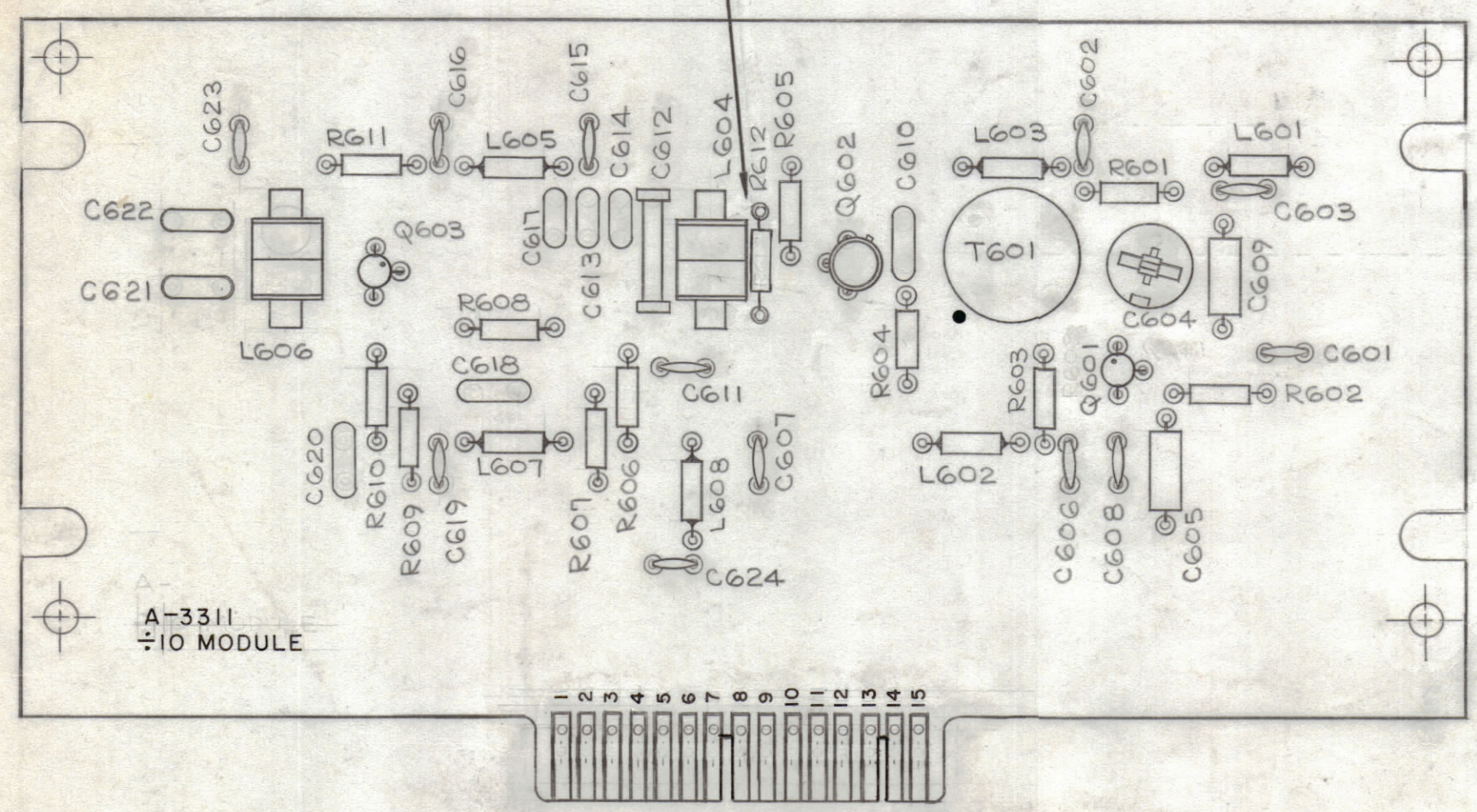
REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
M. GELLMAN LIST OF MATERIAL				
MATERIAL		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK		
SEE NOTE #1		PRINTED CIRCUIT BOARD, ASSY. (÷10 MODULE)		
FINISH		TITLE		
SEE NOTE #1		DRAWN: [Signature] DATE: 9-19-63		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		CHECKED: [Signature] DATE: 7-9-64		
ELECT. DES.		MECH. DES.		
DATE: 7-9-64		DATE: 7-9-64		
A-3311		B		
SHEET 1 OF 2		REV. LTR.		

A 3311 B

UNLESS OTHERWISE SPECIFIED —
 1- ALL LETTERING TO BE 5/64 HIGH BLACK GOTHIC, DOT 1/16 DIA., .010 STROKE
 LOCATED APPROX. AS SHOWN.
 2-MARKING PROCESS AS PER TMC SPEC S-727.

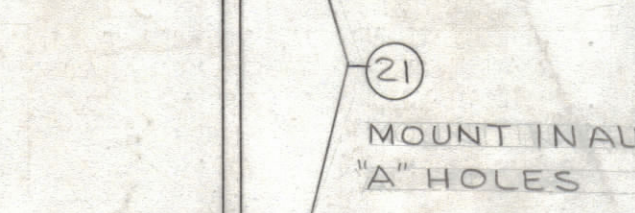


MARKING (A-3311-3)



ELECTRICAL ASS'Y. (A-3311-5)

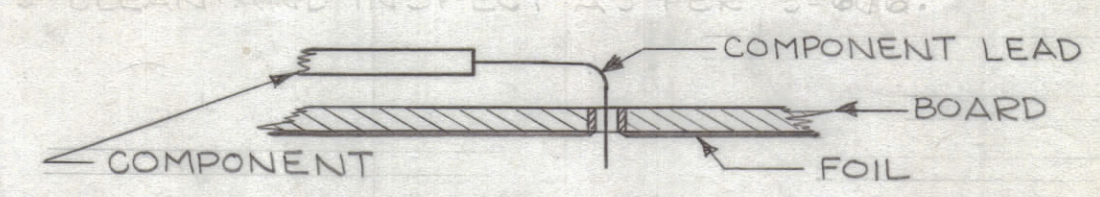
LETTERING ON THIS SIDE



SUB-ASS'Y (A-3311-4)

		REVISIONS					
ZONE	SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
B		LETTERING "22K" ADDED TO BOARD. TEST OPTIMUM VALUE WAS 27K. IT II WAS CM111E101G55	11-67	17657	W40		
		ITEM 2 WAS 522K. REVISION ADDED					
		ITEM 2 DELETED. DASH # SUP ASSY DELETED. NOTE # ADDED. ITEM 24 ADDED					
		ADDED. LEAD WIRE. 3.5MM ASS. MOUNTS HOLES & SLOTS					
		ORIGINAL RELEASE FOR PRODUCTION					

- ASSEMBLY NOTICE
1. TO MOUNT COMPONENTS INSERT LEAD THROUGH PLATED-THRU HOLES AND BEND ABOUT 1/16 OF LEAD OVER COPPER FOIL AS SHOWN.
 2. APPLY HEAT AND SOLDER TO LEAD AND FOIL CAUTION TOO MUCH HEAT WILL CAUSE THE FOIL TO SEPARATE FROM THE BOARD.
 3. CLEAN AND INSPECT AS PER S-676.
 4. FUNGUS PROOF PER TMC SPEC S-113.



REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
1	24	RC20GFXXX	RESISTOR, FIXED, COMPOSITION	R612
1	23	RC20GF332K	RESISTOR, FIXED COMPOSITION	R604
X	22	BS 100	SOLDER, SOFT	
4	21	NT-144-0440	NUT, PLAIN, SPLINE	
1	20	2N2217	TRANSISTOR	Q602
2	19	TX105	TRANSISTOR	Q601, 603
1	18	TZ 165	TRANSFORMER, R.F., FIXED	T601
2	17	CL 327	COIL, RF TUNED	L604, 6
1	16	CV 109-8	CAPACITOR, VARIABLE	C604
1	15	CM111E471H5S	CAPACITOR, FIXED MICA (DIEL)	C620
1	14	CM111E321H5S		C621
1	13	CM111E201H5S		C618
4	12	CM111E102H1S		C614
1	11	CM111E181G5S	CAPACITOR, FIXED MICA (DIEL)	C614
1	10	CM15C121J	CAPACITOR, FIXED MICA	C609
1	9	CM15B511J	CAPACITOR, FIXED MICA	C605
6	8	CL 275-101	COIL, R.F.	
12	7	CC 100-35	CAPACITOR, FIXED CERAMIC DISC.	
1	6	CC 32-SH101J	CAPACITOR, FIXED, CERAMIC	C612
1	5	RC20GF472K	RESISTOR, FIXED COMPOSITION	R605
2	4	RC20GF331K		R602, 7
1	3	RC20GF222K		R608
2	2	RC20GF103K		
4	1	RC20GF102K	RESISTOR, FIXED COMPOSITION	

- C610, C622, C613, C617
- L601, 2, 3, 5, 7, 8
- C601, 2, 3, 6, 7, 8, 11, 15, 16, 19, 23, 24
- R610, R603
- R601, R606, R609, R611

M. GELLMAN		LIST OF MATERIAL	
MATERIAL	FINISH	THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
		TITLE PRINTED CIRCUIT BOARD, ASSY. (1/10 MODULE)	
QTY./UNIT	MODEL USED ON	ASSY. NO.	DATE
4	LFS-1	AX-473	8-25-63
SCALE	CODE		DATE
1:1	A		7-7-64
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		ELECT. DES.	DATE
DECIMALS X ± .05 .XX ± .01 .XXX ± .005		MECH. DES.	DATE
FRACTIONS ± 1/64 ANGLES ± 0° 30'		A 3311 B	
TOLERANCES		SHEET	REV. LTR.
		2 OF 2	

QTY./UNIT	MODEL USED ON	ASSY. NO.
4	LFS-1	AX-473
SCALE	CODE	
1:1	A	

NOTES

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