TMC SPECIFICATION

REV: ø4			NO. S 1115
COMPILED: CL	CHECKED:	APPD:	SHEET 1 OF 5
TITLE:			

typed by vab 7/9/66

SPECIFICATIONS

FOR THE

KIT-298-4

I. This modification affects the receiver module TTRR-4. It involves changes to the 1st, 2nd, 3rd RF and mixer sections.

II. LIST OF MATERIALS SUPPLIED:

ITEM NO.	SYMBOL	QTY	TMC PART NO.	DESCRIPTION
1	R401, R402, R403	3	RC20GF822J	RESISTOR
2	C429	1	CM20B561J	CAPACITOR
3		1	NP-362-75	NAME PLATE
4		1	CK686	SCHEMATIC

III. MODIFICATION INSTRUCTIONS

A. PREPARING THE UNIT FOR THE MODIFICATIONS:

1. Turn the power OFF.
2. Remove the module from the receiver.
3. Remove the top and bottom covers.
4. Unsolder R401, R402, R403 and C429.

B. CHANGES ON THE MODULE:

1. Mount the three 8.2K ohms resistors, Item 1, in place of R401, R402 and R403.
2. Mount the 560 pf capacitor, Item 2, in place of C429. Solder it.
3. Mount the bottom cover, and plug the module in the receiver for alignment.

C. MODULE ALIGNMENT:

a. TEST EQUIPMENT REQUIRED

1. HP Model 524C Frequency Counter or equivalent.
2. HP Model 606A RF Signal Generator or equivalent.
3. Tektronic Model 545 Oscilloscope or equivalent.
4. Simpson Model 260 VOM or equivalent.

b. PROCEDURE

1. Using the oscilloscope, measure signal level at TP2; level should be approximately .3 volts peak-to-peak.
2. Using the frequency counter, check frequency of signal at TP2; signal should be approximately 1.75 MC above operating frequency of TTRR (F1 or F2, dependent upon setting of F1/F2 switch). If this signal is not obtained, check circuitry of local oscillator and buffer/doubler.
3. Remove local oscillator crystal Y401 and Y402. Connect RF signal generator to Antenna Jack of receiver; adjust generator to deliver TTRR operating frequency (F1 or F2). Connect oscilloscope to stator of adjustment A capacitor C416.
4. Adjust screw A on the TTRR for maximum amplitude on oscilloscope.
5. Connect oscilloscope to stator of adjustment B capacitor C417. Adjust screw A for maximum amplitude on oscilloscope, then adjust screw B for maximum amplitude.
6. Connect oscilloscope to stator of adjustment C capacitor C418. Adjust screw A for maximum amplitude on oscilloscope; readjust screw B for maximum amplitude, then adjust screw C for maximum amplitude on oscilloscope.
7. Connect oscilloscope to stator of adjustment D capacitor C419. Readjust screws A, B and C (in that order). Adjust screw D for maximum amplitude on oscilloscope.

8. Connect oscilloscope to TP1 (mixer input), and set generator output at 1 microvolt.
9. Readjust screws A thru D (in that order) for maximum amplitude on oscilloscope.
10. Insert local oscillator crystal (or crystal oven), and allow 30 minutes for the crystal to warm up.
11. Connect oscilloscope to TP2; adjust screw F for maximum amplitude on scope. Check frequency with counter; frequency of signal TP2 should be approximately 1.75 MC above module operating frequency.
12. Connect oscilloscope to TP3, then adjust screw E for maximum amplitude on oscilloscope.
13. Replace top cover of TTRR-4.
14. Connect oscilloscope to the IF input of the IF board in the receiver (terminal #1) and readjust screws A thru E (in that order) for maximum amplitude on oscilloscope.
15. Disconnect test equipment and affix adhesive nameplate, Item 3, to top cover of TTRR.

REVISION SHEET	THE TECHNICAL MATERIEL CORP. MAMARONECK NEW YORK	S 1115 LIST NO.

DATE	REV.	SHEET	EMN #	DESCRIPTION Sheet 5 of 5	APP.
7/11/66	ø			ORIGINAL RELEASE FOR PRODUCTION	
10/3/66	A	2 & 5	16959	Revised per EMN	

TMC FORM MLR-1 2-65—AINS.