

# TMC SPECIFICATION

NO. S 1141

REV: 0

COMPILED: AD

CHECKED:

APPD: *[Signature]*

SHEET 1 OF 5

TITLE:

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9/16/66

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*1/11/67 9/20/66*

CFA-2

OPERATION

# TMC SPECIFICATION

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SHEET 2 OF 5

TITLE: CFA-2 OPERATION

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A. 60 W.P.M.

## 1. Preset controls as shown below:

- (a) Line current S1001 to 60 MA. (Located on rear chassis apron.)
- (b) Int. - Ext. Line Supply S1001 to Int. (located on rear chassis apron.)
- (c) Speed Switch S1003 to SLOW. (Located on rear chassis apron.)
- (d) Discriminator Switches S1009, S1010 to desired mode. (Located on subassembly accessible by removing top cover.)
- (e) Function Switch S1008 to MARK. (Located on front panel.)
- (f) CH1 and CH2 gain controls R1002, R1003 to maximum CCW rotation. (Located on front panel.)
- (g) Meter switch S1006 to B+ position. (Located on front panel.)
- (h) Bias control R1001 to mid-range. (Located on front panel.)
- (i) CH1 and CH2 ON-OFF to OFF. (Located on front panel.)
- (j) Power to OFF. (Located on front panel.)

2. Connect a jumper between Pins 8 and 9 of TB1001.

3. Connect a jumper between Pins 10 and 11 of TB1001.

4. Connect the 600 OHM line output of an appropriate receiver to Pins 1 and 3 of TB1001.

- (a) Set receiver line level to "0" DBM.

5. Connect a 60 W.P.M. printer to the TTY monitor jack J1012 on the front panel.

6. Turn the AC power switch S1004 to the ON position.

7. The meter should read as indicated in the following positions:

- (a) Line Current X5 -- 60 MA
- (b) B- -- 12 V

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- (c) Disc 1 -- no reading
- (d) Disc 2 -- no reading
- (e) B+ -- 12 V
- (f) Line Voltage X20 -- approximately 260 V

8. Turn the CH1 gain R1003 to one fourth of the way open and set meter switch S1006 to Disc 1 position.

9. Adjust the receiver as shown below:

(a) The following conditions will exist when the station is sending traffic.

(b) Set the receiver tuning so you are at zero beat with the signal.

(c) Tune the receiver, very slowly using the BFO tuning if tuneable, away from the signal so the Mark and space tones are becoming increasingly high in pitch.

(d) You will see the tuning meter go through a negative peak, come back through zero, and go through a positive peak. (The meter will be kicking in accordance with the traffic.)

(e) Now back off, tuning toward the station until the meter is deflecting equally above and below zero.

10. Set the CH1 gain control R1003 as shown below:

(a) Adjust so the meter is deflecting to approximately + and - 10 with traffic.

(b) If the station goes to Mark and stays there the meter should be set to read + and - 15. (Depending on phase of signal.)

(c) The gain control can be set at either of the above 2 conditions and should fall in for the other without readjustment.

11. If the station breaks into a group of R-Y's the meter should kick

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very slightly at zero. If the meter is not at zero the receiver tuning is slightly off. Tuning the receiver away from the signal should make the meter move to the right, and tuning toward the signal make the meter move to the left.

NOTE: An R-Y signal is the easiest and most accurate signal to use for tuning.

NOTE: A steady Mark signal is the easiest and most accurate for setting the CFA channel gain. With a little practice accurate tuning can be achieved under any traffic condition.

## 12. Setting of the function switch S1008.

(a) When the station is in a steady Mark condition and the meter is deflecting to the right the function switch should be in the Line + position. If the meter is deflecting to the left, under the above condition, the function switch should be set to the Line - position.

## 13. Setting of the Bias control R1001.

(a) When the station is sending a series of R-Y's and the meter switch in the Line Current X5 position adjust the Bias Control for 30 MA.

(b) Under traffic conditions set the Bias Control so the meter is deflecting equally above and below 30 MA in the Line Current X5 position.

## B. 75 W.P.M.

1. Repeat steps A1 through A13.

## C. 100 W.P.M.

1. Set speed switch S1003 to FAST.

2. Repeat steps A1 through A13.

