TEST PROCEDURE

for

AX567

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M R SALAINS

| TM                    | NO. 5 983 |       |              |  |  |
|-----------------------|-----------|-------|--------------|--|--|
| REV: DA               |           |       |              |  |  |
| COMPILED: NLB         | CHECKED:  | APPD: | SHEET 7 OF 5 |  |  |
| TITLE: TEST PROCEDURE | FOR AX567 |       |              |  |  |
| Typed by mtp 6/5/65   |           |       |              |  |  |

### I. INTRODUCTION

The Model AX567, a Remote Control Unit, is used in a TMC Model LRCC-1 which is comprised of eight (8) AX567 units. One AX567 unit is used to remotely control and monitor an individual receiver. The following test procedure will be used to test ONE AX567 unit at a time. Therefore, it will be necessary to repeat this test procedure for each AX567 unit in the LRCC-1.

# II. EQUIPMENT REQUIRED

- A. Signal Generator Hewlett-Packard Model 606A or equivalent.
- B. Headset 600 ohm impedance.

|        | TMC SPECIFICATION               |    |     |       |    |     |     |  | N | NO. 5 983 |     |     |  |   |    |     |   |  |      |    |  |
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## III. PRELIMINARY REQUIREMENT

- A. The AX567 unit must be "BUZZED OUT".
- B. The AX567 unit must be inter-connected to its appropriate receiver system.

#### IV. PROCEDURE

A. With TUNE OVER-RIDE switch (S2010 located on rear panel) in the OFF position, perform the following:

# 1. Preliminary Settings

| a) | MC Selector          | 2                     |
|----|----------------------|-----------------------|
| b) | 100 KC Selector      | 0                     |
| c) | 10 KC Selector       | 0                     |
| d) | 1 KC Selector        | 0                     |
| e) | .1 KC Selector       | 0                     |
| f) | AFC Control          | OFF                   |
| g) | AFC Unlock Indicator | ON                    |
| h) | Channel Enable "ON"  | A <sub>l</sub> (Only) |
| i) | RF Gain Control      | CENTER POSITION       |
| j) | Meter Selector       | LEVEL                 |

- 2. Depress the TUNE SYNC button, and the following should occur:
- a) The Carrier Frequency controls on the HFSR-1 should be positioned at  $2.000\ \mathrm{mc}$ .
- b) The Servo in the HFRR-2A should go into synchronization within 15 seconds, and the TUNE SYNC button should light. Skip the following step (2c) if the above holds true.
  - c) The FAULT RESET button will light 30 seconds after the initial tune cycle. Depress th FAULT RESET button which will reset the servo in the HFRR-2A. This should bring the HFRR-2A into synchronization, and the TUNE SYNC button will light. The FAULT RESET button should be extinguished.

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## IV. PROCEDURE - Cont'd

- 3. When the TUNE SYNC light is "ON", detune the HFRR-2A from 2.000 mc. The TUNE SYNC light should extinguish and the FAULT RESET button should come "ON". Depress the FAULT RESET button which will reset the serve in the HFRR-2A. This should bring the HFRR-2A into synchronization within 20 seconds. The FAULT RESET button light will extinguish, and the TUNE SYNC button will light.
- 4. Connect the signal generator to the HFRR-2A and tune it to 2.000 mc. Adjust the generator output to 1 microvolt, and insert 1 kc modulation at 50%.
  - a) The Level Meter on the AX567 should remain at 0.
- b) Increase the generator output 20 db to 10 microvolts. The Level Meter should indicate 20 db's above 1 microvolt.
- c) Increase the generator's output 40, then 60 db. The L vel Meter should indicate this increase.
  - 5. Reset the signal generator output to 20 db at 10 microvolts.
- $\,$  6. The Mode Selector Control on the MCGA-1 should be in the SYNTH position.
  - 7. Plug a head set into the monitor jack of the MSAA-1.
- 8. Make the following signal generator change to accommodate the four channels:

| CHANNEL ENABLE | GENERATOR SETTINGS |
|----------------|--------------------|
| Al             | 2.0015 MC          |
| A2             | 2.0045 MC          |
| B1             | 1.9985 MC          |
| B2             | 1.9955 MC          |
|                |                    |

- a) Use the head set to listen for a tone when adjusting the RF Gain Control each channel.
  - b) Reset the signal generator to 2.000 MC.
  - 9. Position the AFC Control on the AX567 to 0 db.
- 10. The Mode Selector Control on the MCGA-1 should be in the AFC position.
  - 11. Move th Meter Selector switch to AFC.

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## IV. PROCEDURE - Cont'd

- 12. Hold the AFC SCAN switch to the right. When the meter reads maximum + KC's, adjust R2004 (located on the rear panel of the AX567) for full scale deflection.
- 13. The Meter will indicate where in the +3KC acquisition range the pointer on the AFCA-1 is located.
- 14. If the AFC Unlock indicator goes "OFF", it means you are locked on to the carrier.
- 15. By holding the AFC Scan switch in the opposite direction, the AFC Unlock indicator will light.
- 16. When the AFC Unlock indicator is lit, use the AFC SCAN switch to bring the AFCA-1 into a locked condition. The AFC Unlock indicator will extinguish when you are locked onto the carrier.
- B. TUNE OVER-RIDE switch (S2010, located on rear panel) is in the "ON" position. Perform the following:
- 1. In this Mode of operation, the carrier frequency controls on the HFSR-1 are directly controlled by the AX567. Each time the carrier frequency is changed on the AX567, there will be a corresponding change to the carrier frequency on the HFSR-1.
- 2. All other functions are controlled similar to Section "A" of this Test Procedure.

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