DATE 22-3-56
SH. 1 OF 2
COMPILED BY
CLB
TITLE: RECEIVER SUBASSEMBLY, R-5007/FRR-502

MODIFICATION FOR SQUELCH OPERATION

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1. TEST EQUIPMENT:

- (a) Signal Generator, Measurement Corp. Model 82
- (b) AC Voltmeter, -40 to +30 db range
- (c) 600 ohm, 2 watt carbon resistor
- (d) VTVM. Hewlett-Packard Model 410B

## 2. CONDITIONS:

For test, receiver controls to be set as follows:

AC line voltage

110 V AC

AVC switch

ON

BFO switch

OFF

Noise limiter

off

RF Gain control

Maximum

AF Gain control

As detailed in paragraph 4(b)

## 3. DC CHECK:

- 1. With receiver "ON", RF Gain at minimum, V110 and V104 removed, measure voltages between points specified below and ground using vacuum tube voltmeter.
  - (a) pin 1. V110 voltage to be 11.5 V DC ±20%
  - (b) pin 1, V104 voltage to be 11.5 V DC +20%
  - (c) pin 7. V104 voltage to be 6.0 V DC  $\pm 20\%$

Insert V104 in socket and recheck voltages at

- (d) pin 1, V104 voltage to be 7.5 V DC  $\pm 20\%$
- (e) pin 7, V104 voltage to be 8.2 V DC  $\pm 20\%$

NOTE: Under no circumstances should voltage in (d) be more positive that that in (e).

- (f) Junction of R155, R156 negative voltage to be not less than -27 V DC
- 4. (a) Set signal generator to suitable frequency, output level to 6 UV modulated 30% at 1000 cps. (Allowance to be made for 6 db pad.)
  - (b) Turn squelch control fully counter clockwise and tune receiver.

    Adjust audio gain control to give 1.8 watts output ( + 30 dbm.)
  - (c) Turn squelch control until A/F audio output falls not more that 1 db.
  - (d) Set signal generator to output level 3 db lower than in (a) above.
  - (e) Audio output to be not more than -30 dbm.
- 5. With receiver and signal generator set as above but with signal levels as listed in test sheet, repeat test procedures above. Record results on test sheet.

