

A drawing (1101432) of the equipment identification plate (name-plate) is attached, per 2.983(f).

8" x 11" photographs to show construction, component placement, panel layout and markings, etc., are attached, per 2.983(g).

Measurements and Test Data

The tests, measurements and results reported here were made to determine compliance of the Mentor Model M15 transceiver (FCC ID BULM15) with FCC type acceptance rules parts 2.985 through 2.999. Reference is also made to FCC Rules parts 87 Subpart D.

1. R.F. Power Output - 2.985

Equipment: RF Wattmeter, Bird Model 43 with 10 watt 100-250 Mhz element
Coaxial Load Resistance, Bird Model 8135, 50 ohms, 150 watts
Digital Voltmeter, Beckman Model 300
Regulated Power Supply, Deltron Model SP
RG-58A/U coaxial cables and connectors as needed

Procedure:

- (a) Connect RF Wattmeter and Coaxial load resistance to M15 antenna connector, via coax cables
- (b) Adjust M15 transmitter section as described earlier in this report
- (c) Connect M15 to regulated power supply, using 16 gauge wires and keeping wires as short as practical (about 3 feet each). Set power supply voltage for 13.75 volts at the M15 power connector. Note that voltage drops about 0.15 volt when transmitting.
- (d) For each transmitter and each frequency to be tested, energize the transmitter, without modulation, and record power indicated by wattmeter. Check that there is no significant reflected power by reversing wattmeter element.

Results:

| Transmitter No. | Frequency, Mhz | RF Watts |
|-----------------|----------------|----------|
| #2 | 118.350 | 4.5 |
| #2 | 126.200 | 5.5 |
| #2 | 135.975 | 5.1 |
| #4 | 118.350 | 4.9 |
| #4 | 126.200 | 5.5 |
| #4 | 135.975 | 4.8 |
| #5 | 118.350 | 5.0 |
| #5 | 126.200 | 6.3 |
| #5 | 135.975 | 5.6 |