

**TYPE OF TEST:** Occupied Bandwidth-25 kHz channel spacing

**FCC PART:** 2.1049 (c) (1), and 90.210 (b)

**MANUFACTURER:** RITRON, INC.  
505 West Carmel Drive  
Carmel, IN 46032

**MODEL:** RRX-452

**TYPE OF UNIT:** UHF-FM Voice Full Duplex Repeater

**FCC ID:** AIERIT05-452

**DATE:** April 28, 1999

**PROCEDURE:**

The RRX-452 was aligned for transmitter operation on 464.600 MHz (Fo) per the tune-up procedure in the preliminary manual.

12.6 VDC was applied to the RRX-452. The RRX-452 was connected at the antenna duplexer terminal by a 2' long piece of 50 ohm coaxial cable to a 50 ohm RF Load with a -30 dB sampling port, then to the input of an HP 8558B Spectrum Analyzer, with input attenuation adjusted to place the unmodulated carrier on the 0 dB reference line, using the 100 Hz display bandwidth. The result of this measurement was then recorded as 0 dBc.

To obtain a modulated spectrum plot, the IFR Communications Test Set Audio Tone Generator was set to generate a 2500 Hz sine wave at the amplitude specified in part 2 of the FCC rules and regulations as "16 dB greater than that necessary to produce 50 percent (2.5 kHz) modulation .... at the frequency of maximum response of the audio modulating circuit." This audio signal was applied to the TX Audio input port of the RRX-452 (J411 pin 4 via the rear panel DB-25 pin 3).

**TYPE OF TEST:** Occupied Bandwidth-25 kHz channel spacing (page 3)

**FCC PART:** 2.989 (c) and 90.210 (b)

**MODEL:** RRX-452

**TYPE OF UNIT:** UHF-FM Voice Full Duplex Repeater

**FCC ID:** AIERIT05-452

**DATE:** April 28, 1999

