



SERVICE LETTER

Equipment Type(s): RT-1501A, IN-1502A, IN-1502B and IN-1502H

Subject: Test Pattern Edges are not smooth and completely round

Issue: RT-1501A units do not always exhibit a test pattern display with a smooth edge perimeter because the AFC is sweeping the first local oscillator. Since the magnetron is not firing in test mode, the AFC will not lock and continue to sweep in search of a lock. The AFC sweep frequency will sweep through the IF band and pass through the IF filters. When this energy is passed through the IF filters, the energy will cause the Automatic Gain Control (AGC) circuit to change the gain of the receiver. The AGC gate is always active and will always try to correct the sensitivity of the WX Receiver.

In addition, some RT-1501A units will show an outer red band on 160 mile range in test mode before the radar is warmed-up due to this energy passing through the IF filters and changing the AGC. Most RT-1501A units will show only noise dots four or five times per revolution during this warm up time.

Once the warm-up time has completed, and the test pattern is displayed, the AFC sweep will continue to change the AGC circuit causing the gain of the receiver to change. This change in receiver gain will cause the test pattern to have un-even edges at about 4 or 5 points per revolution.

Service Required: This is normal operation and no service is required.

For additional information contact:

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