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To: Federal Communication Commission:
FCC ID: JTEGWMT0820
Subject: Class II changes

The only change is to replace the Power Amplifier gain block, Andrew part number G75A0091-1, with a similar gain block Andrew part number A003232.G1. The new amplifier block is comprised of a Freescale Semiconductor MHL9838N module followed by a Freescale MRF9045N MOSFET, biased to operate in the AB-linear region. The new amplifier block is pin-for-pin compatible with the old, having the same frequency coverage and gain.

The old amplifier did not have internal low-pass filtering on the output, relying on an external ferrite isolator/low-pass-filter assembly to control out-of-band spurious signals. That isolator/filter assembly is unchanged with the new amplifier, so the out-of-band spurious and harmonic performance is unchanged in the new design.

The original design of the Andrew GWMT0820 relies on a power-control loop that is wrapped around the RF gain stages, using a sample of the RF output to drive an attenuator that is located at the beginning of the RF chain. This attenuator is under microprocessor control, and the commanded output power versus the actual output power is calibrated as part of the final test of the unit, and the data is stored in the unit's memory. Thus, the actual power linearity and frequency response of both the old and the new power amplifier gain block would be corrected to the same accuracy.

The frequency-determining circuitry of the unit is unchanged in the new design.

If you need additional information, please do not hesitate to contact me.

Best Regards,

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Block Diagram

