From: Dan Leppold

To: Behnam Ghaffari
Date: April 30, 2007

Subject:
FCC File No. 0239-EX-RR-2006

Message:

This reply is in response to an e-mail I received with the following questions. My answers for each question is in blue text. Contact me with any questions at my desk at727-302-7207.

520 kHz information
- peak envelope power (PEP); 8.6 (loop) milliwatts or 24 (rod) milliwatts
- type of antenna;LP-105 loop antenna or VA-105 rod antenna
- transmit antenna gain; 1.5 (loop) and 1 (rod)
- elevation above sea level of the antenna site; about 15 feet
- height above ground of the focal point of the antenna; 6 feet
- antenna polarization; (Loop) y- facing perpendicular to the test surface(wall), (rod) vertical
- the azimuth that the antenna is pointed or appropriate designator to indicate whether the antenna is rotating, non-directional, etc.; All antenna are non -rotating, loop antenna is directional, rod is simple vertical rod, is not directional.
- pulse repetition rate (PRR) that the equipment is capable of operating on to include PRR stagger sequences if appropriate, whether the PRR is adjustable and what PRR"s the equipment can accept, and any other information that would be helpful in understanding the pulse characteristics of the equipment; PRR does not apply. Signal is cw.
- pulse width; PW does not apply. Signal is cw.
- equipment nomenclatures; Low power HP651A signal generator is source for antennas.
- whether the equipment is capable of blanking transmissions in certain azimuths and any limitations with respect to blanking; No blanking capability on equipment.
- radius of operations if appropriate; Operation is at Raytheon site (St. Petersburg, FL and Largo, FL only) lat/long noted in license renewal.
- detailed description of the proposed operation to include any technical parameters that will be altered during operations. Licensed emissions are used to evaluate and measure shielding effectiveness of enclosures and buildings within 10 feet of a shielded wall. Signal source with transmitting antenna is on one side, with a receiver and RX antenna on opposite side. Shielding value is determined by measuring received signal strength both with and without the shielding wall between the receive and the transmit antennas.
- will interrogations (transmissions) be made on 1090 MHz as well as 1030 MHz (airborne transponders typically only transmit on 1090 MHz and receive on 1030 MHz)? Interrogations does not apply. Signal is cw at 1090 only.
- if transmissions will be made on 1030 MHz, in what modes of operation will the transmitter operate (Modes 1, 2, 3A,3C, 4, 5, Mode-S)? Is this a TCAS and is TCAS the only reason why the 1030 MHz transmissions are needed (airborne Mode 4 and/or 5 operations will be very difficult if not impossible to authorize and airborne Mode-S is not authorized)? No transmissions will be at 1030 MHz.
1090 information to be included in future e-mail.
eom