

From: Hans Schantz

To: Behnam Ghaffari
Date: August 16, 2007

Subject: FCC File No. 0303-EX-PL-2007

Message:

Dear Sir,

Upon telephone inquiry to the Southern Regional (ASO) FAA, we were directed to Kip Johns as the appropriate official to perform the requested frequency coordination. On August 7, we submitted a request for coordination (see below for the text of our request). We have not received a reply from Mr. Johns.

Since use of the band 530-535kHz is not critical to our experimental license and so as to expedite processing of our experimental license request, we would like to amend our license request so as to exclude the band 530-535kHz.

Best Regards,

Hans

Dr. Hans Schantz
Q-Track Corporation

Attachment: Letter to Kip Johns (kip.johns@faa.gov) August 7, 2007

Dear Sir,

Rita in FAA Southern Region Technical Operations was kind enough to give me your contact information so I can seek your assistance in coordinating use of the 530-535kHz band and obtain a NGT number from you. I believe this band is set aside for aviation navigation beacons. I am applying for an experimental radio transmission license from the FCC [FCC File No. 0303-EX-PL-2007], on behalf of my company, Q-Track. We are developing a low power, Part 15.219 compliant wireless location system. Part 15.219 allows us to transmit 100mW in the band 510-1705kHz. For purposes of research and development, we are requesting permission to use transmit power as high as 1W, with an EIRP of 100uW. Please see the attached Technical Summary for more details.

Following is the information the FCC said I should provide to you:

- Peak envelope power (PEP): +30dBm (1W) transmitted; ~-10dBm EIRP
- Type of antenna: Various, short whip antennas (<3m) and magnetic loop and loopstick antennas.
- Transmit antenna gain: < -40dBi
- Elevation above sea level of the antenna site: 658 feet above sea level (515 Sparkman Drive; Huntsville, AL 35816)
- Height above ground of the focal point of the antenna; typically 1-2m
- Antenna polarization; typically vertical in azimuthal plane, circularly polarized in vertical direction
- The azimuth that the antenna is pointed or appropriate designator to indicate whether the antenna is rotating, non-directional, etc.; Omni-directional/quasi-isotropic patterns.
- 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;
- N/A, CW signal
- Pulse width; N/A, CW signal

- Equipment nomenclatures; QT[TM]-400 Transmitter Tag
- Whether the equipment is capable of blanking transmissions in certain azimuths and any limitations with respect to blanking; No
- Radius of operations if appropriate; <250m
- Detailed description of the proposed operation to include any technical parameters that will be altered during operations. Please see attached Technical Summary
- 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)? No. All emissions will lie within the 510-1705kHz band.
- 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 made on 1030MHz.

Thank you for your assistance. Please contact me at (256) 337-3012 if I can be of any further assistance in coordinating this frequency use and obtaining an NGT number from you. My FCC Point-of-Contact is Behnam Ghaffari (Behnam.Ghaffari@fcc.gov) if you have any questions for him. See his message to me (appended).

Best Regards,

Hans