

From: Dean Bruckner

To: John Kennedy

Date: July 03, 2008

Subject: FCC File # 0238-EX-PL-2008

Message:

ATTN: John Kennedy

Hi John,

Below is the information you requested. If you need any more details, please let me know. Thanks!!

Dean Bruckner, P.E.
Avionics Engineering Center
Rm 231 Stocker Center
Ohio University
Athens, OH 45701
Cell 740-591-6506
dean.c.bruckner.1@ohio.edu

=====
? NGT number: T080317
? peak envelope power (PEP): 70 W (50W horizontally polarized, 20W vertically polarized)
? type of antenna: 4-dipole array. Photo included in original application documents
? transmit antenna gain: -1 dBi for horizontally polarized signal component (for zero deg elevation, in main lobe where max gain occurs), -5 dBi for vertically polarized signal component (for zero deg elevation. Note that main lobe/max gain of vertically polarized signal component is -4 dBi at 35 deg elevation). Plot included in original application documents
? elevation above sea level of the antenna site: 767.7 ft
? height above ground of the focal point of the antenna: 10 ft
? antenna polarization: elliptical, with 72% of signal power horizontally polarized and 28% vertically polarized
? the azimuth that the antenna is pointed or appropriate designator to indicate whether the antenna is rotating, non-directional, etc.: omni-directional azimuth pattern and a shaped vertical pattern which is similar to a dipole
? 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: two 62.5 ms bursts of D8PSK every half second (two adjacent ?slots? out of eight available slots on assigned frequency each half second), as per the GPS Based Precision Approach Local Area Augmentation System (LAAS) Interface Control Document (ICD), RTCA DO-246C, April 7, 2005. Based on the ICAO VDL Mode 3 standard, with D8PSK and 25 kHz channel spacing, except with 16 slots per second instead of 4. Emission designator is 14KG7DET.
? pulse width: 62.5 ms
? equipment nomenclatures: antenna?dBs 100 VDB antenna by dB Systems; transmitter?Harris VDR-2125, which is similar to the newer Honeywell 3000 VDB transmitter
? whether the equipment is capable of blanking transmissions in certain azimuths and any limitations with respect to blanking: no azimuth blanking capability
? radius of operations if appropriate: 20 nmi at 10,000 ft AGL
? detailed description of the proposed operation to include any technical parameters that will be altered during operations: during operation, the transmitter will be left on for continuous D8PSK transmission at maximum power. No technical parameters will be varied other than the data content in the uplink.

