

From: Sochurek, Jan E. [jan.sochurek@ngc.com]
Sent: Tuesday, April 26, 2005 9:54 AM
To: John Kennedy
Cc: Vance Schuermann (E-mail); Fremd, Rodney W.
Subject: FCC File # 0140-EX-ST-2005 [Reference Number: 3602]

John,

Per our conversation this morning and your e-mail (below) to me, here the answers to your question in regards to PRF and PW for File # 0140-EX-ST-2005.

The Pulse Repetition Frequency is 1 kHz to 1.5 kHz

The Pulse Width is 100 uSec

Thanks again for your help in this matter.

Regards,

JAN SOCHUREK - Spectrum Licensing
Northrop Grumman Electronic Systems
Radio Frequency Spectrum and Licensing
Coordination Group
(410)765-5626
(410)541-1745 pager

Dear Mr. Jan Sochurek:

Please report the pulse repetition rate and the pulse width that will be used under this experiment.

Confirmation Number: EL219559

From: Sochurek, Jan E. [jan.sochurek@ngc.com]
Sent: Monday, April 11, 2005 8:30 AM
To: John Kennedy
Cc: Vance Schuemann (E-mail); Fremd, Rodney W.
Subject: RE: FILE # 0140-EX-ST-2005

John,

The peak effective radiated power is 10 kW.

Jan

-----Original Message-----

From: John Kennedy [mailto:John.Kennedy@fcc.gov]
Sent: Friday, April 08, 2005 4:02 PM
To: Sochurek, Jan E.
Subject: RE: FILE # 0140-EX-ST-2005

Mr. Sochurek,

Also report the PEAK effective radiated power as opposed to the 2 kW MEAN effective radiated power which is currently in the Transmitter section of this application.

Also for application 0037-EX-ML-2005, please prior coordinate with the appropriate FAA Regional Office for use of the frequency 1030 MHz and the bands 2700-2795 MHz and 2845-2880 MHz. Submit answers to the same technical questions below to the FAA Regional Office and send a copy to me in case the FAA contacts me concerning your responses.

John W. Kennedy
Federal Communications Commission
Office of Engineering and Technology
Experimental Licensing Branch
(202) 418-2484

-----Original Message-----

From: Sochurek, Jan E. [mailto:jan.sochurek@ngc.com]
Sent: Friday, April 08, 2005 3:37 PM
To: John Kennedy
Cc: Vance Schuemann (E-mail); Fremd, Rodney W.
Subject: FILE # 0140-EX-ST-2005

John,

I apologize getting this information back so late to you, but I was going to discuss it with you two weeks ago when we were supposed to get together. When that didn't happen, I figured we would discuss it today. In turn, that did not take place due to Rod being sick. So, I figure I had better e-mail the information to you so that you can continue to process the renewal.

- peak envelope power (PEP); 2kW Average
- type of antenna; Linear FM Electronically Scanned Array (ESA)

- transmit antenna gain; 36 dBi
- elevation above sea level of the antenna site; Flying test bed at 20,000 feet
- height above ground of the focal point of the antenna; See previous answer
- antenna polarization;
- the azimuth that the antenna is pointed or appropriate designator to indicate whether the antenna is rotating, non-directional, etc.; The antenna does not rotate, it electronically scans
- 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 (staggered, jittered, fixed) of the equipment; PRF is 1kHz to 1.5kHz
- pulse width; 100uSec
- equipment nomenclatures; Has no nomenclature, it is an IR & D effort
- whether the equipment is capable of blanking transmissions in certain azimuths and any limitations with respect to blanking; Yes, the equipment could be set up for blanking
- radius of operations if appropriate; 200 nautical mile radius around Linthicum, N39-11-08 W076-25-42 NAD-83 and 100 nautical mile radius around Webster Field, N38-08-45 W076-25-42 NAD-83
- detailed description of the proposed operation to include any technical parameters that will be altered during operations. Testing will be performed using two of Northrop Grumman's own aircraft (one with the radar and one as a target plane) and through the use of stationary targets on the ground at Webster Field.

Thank you for your help in this matter.

Regards,

JAN SOCHUREK - Spectrum Licensing
 Northrop Grumman Electronic Systems
 Radio Frequency Spectrum and Licensing
 Coordination Group
 (410)765-5626