

John Kennedy

From: Sochurek, Jan E. [jan.sochurek@ngc.com]
Sent: Wednesday, March 01, 2006 4:01 PM
To: John Kennedy
Cc: vanceschuemann@paulhastings.com; Fremd, Rodney W.
Subject: RE: FCC File # 0053-EX-RR-2003

John,

The 100 Watts basically is needed to do the antenna testing due to the 1600 foot range from the source dish to the antenna under test. The source dish is approximately 30 dBi. We are inputting a pulsed signal into the 30 dBi dish to obtain up to approximately 100 Watts ERP.

The RF signal radiated to the antenna under test is in a very directional beam over a fairly constant counterpoise (ground plane). This allows us to rotate the antenna in the narrow beam width to provide accurate antenna pattern measurements. The 30 dBi parabolic dish will generate very small Sidelobes and a narrow beam width based on the 3 dB points.

The site for this antenna testing was selected in 1968 for its geographical and topographical characteristics. The site is surrounded by a number of ridges and is in a topographical depression which makes it ideal for preventing ambient noise from interfering with the far field antenna measurements. Due to the antenna directivity and the surrounding topography, the possible interference with outside communications equipment is very remote. The testing in these three frequency bands is conducted approximately two weeks (two, five day work weeks for eight hours) out of the year. In fact, in the time span from 1968 to the present, we have had no interference complaints in these three lower frequency ranges.

It should be noted that these measurements in these bands is conducted for the U.S. Government and is classified. The nature of the program is not readily able to be disclosed. For the contract number to be released, it would have to be obtained through a request to the customer security section and would take a length of time to go through the various channels.

If you have any further questions, don't hesitate to ask.

Regards,

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

From: John Kennedy [mailto:John.Kennedy@fcc.gov]
Sent: Tuesday, February 28, 2006 1:45 PM
To: Sochurek, Jan E.
Subject: FCC File # 0053-EX-RR-2003

Dear Mr. Jan Sochurek:

Please justify the need to use 100 W Peak (ERP) for the antenna testing under FCC File # 0053-EX-RR-2003.

John W. Kennedy
Federal Communications Commission
Office of Engineering and Technology

3/9/2006

Experimental Licensing Branch
(202) 418-2484