Application for Experimental License

Northrop Grumman Systems Corporation (NGSC) applies for this conventional experimental license to test a wide bandwidth antenna using a commercial signal generator with different waveforms for future radar development and antenna/horn combinations. This work is follow-on to that currently authorized by STA WN9XIH, FCC File No. 0268-EX-ST-2019.

Data will be transmitted between an aircraft and a ground station. The aircraft will fly at a maximum altitude of 17,500 feet within 300 km of a center point located a 38.0 N, 75.5 W. Pulsed tone and Barker coded pulse will be employed. For all frequencies and emission types, the pulse width is 10 uSec and the PRF is 10 kHz. The antenna is a high gain horn manufactured by Argon ST, Inc., part no. 263D0600. Transmitter output is 100 watts to a 16 dBi gain antenna, yielding 2.2 KW ERP. The main beam width is 20 degrees. Both vertical and horizontal polarization will be employed.

Stop buzzer during tests is Bill Manning at 443-481-7388.