

Northrop Grumman Systems Corporation

Northrop Grumman Systems Corporation (NGSC) submits this application for the purpose of using the requested frequencies to test the integration of a Ku band radar system. The radar will be used from a fixed ground lab location and during airborne flight test operations. Data collected will be used to evaluate both mission system performance and radar performance.

The radar will be frequency agile. The center frequencies for the linear FM waveforms will be positioned such that the emissions will not exceed the authorized frequency band.

The pulse width(s) are: 2 usec to 104 usec. PRF(s) are: 450 to 125,000 Hz. Modulation Code / Signal (as applicable) are: Barker Phase Code and Linear FM. The antenna is a Northrop Grumman Active Electronically Scanned Array (AESA) Model 265K600G01, with antenna gain of 32.5 dBi. The main beam width is 2.7 degrees horizontal, 4.9 degrees vertical, at the 3 dB points. Vertical polarization will be used.