

Application to Modify Experimental License KA2XGP

Northrop Grumman Systems Corporation (NGSC) is tasked under multiple contracts, proposal requests and resulting Internal Research and Development (IRAD) to develop RF systems of various bandwidths and frequencies. In order to support this need, NGSC must assess system functionality at those frequencies, using generic waveforms, to determine both transmitted and received spectral issues and system performance on a macro scale, to point an AESA, and to process the signals.

In addition, wide-band antennas no longer act as a band-pass filter for out-of-band signals. The rejection and signal processing now is performed as part of the digital receiver chain. Systems engineering needs require assessing the impact of known received signals that would normally be considered as out of band, directed at the system antenna with respect to functionality. Due to the emerging technology and subsequent classification of the contracted efforts, the specific contracts associated with these wide band systems are classified and cannot currently be divulged. This license is to support all emerging technologies testing at all active NGSC outdoor / public airspace radiating facilities associated with the NGSC Linthicum production plant.

Waveforms for each frequency / location are NON and PON. The pulsed PON uses generic 10% duty cycle, 20usec pulse.