

Explanation of Need for Experimental License, Antenna Description

Northrop Grumman Systems Corporation ("NGSC") hereby requests authorization to operate a fixed experimental radio station facility with one mobile aircraft unit that will be tested in each of the two locations described in the attached Form 442 application. The equipment will be demonstrated to Government end users and is expected to fill a void by creating a reliable and easily deployed, network-based battlefield information sharing platform. This equipment is designed to offer a self-repairing, high-speed, narrow-bandwidth network capable of operating under extremely challenging environmental conditions. New and proven technologies are integrated as part of error correction and interference rejection packages that can be rapidly deployed by a wide variety of Government end users in battlefield conditions.

The equipment NGSC will test includes two fixed antennas (affixed to buildings) and one aeronautical mobile single element antenna with 3dB gain. The fixed antennas will not extend more than six meters above the roofline of the buildings to which they are affixed. The airplane being used for these tests will fly not more than 2000 feet above ground level within a 60-mile radius of the base stations.

The stop buzzer contact for the program to terminate operations is Mr. Daniel Robinson, (office) (661) 480-8092.