

Application for Special Temporary Authority

Northrop Grumman Systems Corporation (NGSC) applies for Special Temporary Authority (STA) for the purpose of developing and testing future S-Band shipboard navigation radar. The radar hardware is based on a software-defined solidstate transceiver and a mechanically rotated active patch-array antenna. This hardware is designed to meet the following standards:

47CFR80.273(a) Radar installations on board ships that are required by the Safety Conventions or the U.S. Coast Guard to be equipped with radar.

ITU-R M.1177-4 (2011)

ITU-R SM.329 -12 (2012)

ITU-R SM.1541-06 (2015)

IMO MSC.192(79) (2005), IEC 62388 Ed.2 (2013).

The radar is capable of sector blanking. For the purposes of this test, the radar will be located at the Northrop Grumman facility near Annapolis, MD, lat/lon 39-0-21N; 76-24-28W. The desired search sector is due south of the fixed location, with an azimuth limited to 165 to 195 degrees true. If necessary, an alternate azimuth could be centered on 80 degrees true, with a sector scan of +/- 15 degrees. This is not as desirable from a program standpoint in that it does not provide the required search range over water.