

ATNAVICS Experimental License Request

1 Purpose of Operation

Raytheon Integrated Systems (IDS) Radar development testing. Frequency authorization is being requested for the period of November 20, 2015-May 13, 2016 in X-band at frequencies between 9.55 - 9.65 GHz, in order to test prototype radar arrays in a relevant environment. Outdoor testing, across multiple frequencies as noted above is required to assess hardware compliance with requirements and to continue research and development. Only one unit will be tested at a time. Technical Synopsis: Spectrum needed: 9.55 - 9.65 GHz. Power levels requested: 160 W output power, 953.4 kW ERP (peak) . Location of use: NTIA-ITS Table Mountain Antenna Fields Site in Boulder, Co and Raytheon Test Facility in Sudbury, MA . Direction of radiation: South East with +/- 45 degree scan angle with ability to adjust mechanically about boresite pointing angle +/- 30 degs). Stop buzzer contact: Robert Palumbo, 978-376-7321

- File Number: 0246-EX-PL-2016
- Class of Station: FX
- Station Locations: FX
- Effective: 05/14/2016
- Expiration: 05/13/2017

2 Experimental Explanation

As detailed in paragraph 1 above, The Raytheon Low Power Radar 2 (LPR2) array is planned to be tested at the NTIA-ITS Table Mountain Antenna Fields Site in Boulder, Co. The purpose of this request for Experimental License is to test array compliance to RF performance requirements in a relevant environment. Radar development testing is planned in parallel at the Raytheon facility in Sudbury, MA.

. This License is for a development and technical demonstration.