

15-Feb-06

Need for License Description

This license is need for an outdoor antenna measurement range that was constructed at the General Dynamics facility to characterize antenna systems built at this location. This antenna characterization is being done on contract from the Air Force Research Laboratory. Special authorization is required both because the application needs to be handled expeditiously, and also because the frequencies required may not be generally available for experimental use.

This experiment is in continuation of a similar experiment where a Special Temporary Authority licenses were granted in July 2004, file number 0388-EX-ST-2004, and March 2006, file number 0086-EX-ST-2006. The transmitting antenna will be mounted in a fixed location on a tower on the property of our Ypsilanti, MI research facility. The intention is to use the tower transmitter to characterize an antenna located on the roof of our research facility. The frequency band has been expanded to cover 5-15 GHz and the power level is increased from the previous license application, 10 mW ERP to 100 mW ERP.

The experiments will be infrequent and their duration short at low power levels. We will be transmitting on infrequent days during the specified time period, and the continuous duration of the transmitted tone is unlikely to exceed 8 hours.

We will be transmitting a single frequency tone over the specified band, but we will not exceed the total power or bandwidth as specified in the application.

We need to know the status of the license as soon as possible, so that we can plan our experiments accordingly. We would like to start by 15-Jan-06.