

Description of project for File Number 0032-EX-CN-2020

The Defense Advanced Research Projects Agency (DARPA) project involves the use of unmanned aerial systems (UAS) to locate and identify radio frequency (RF) spectrum users over a large area. – 10s of km². This phase of the project will use approximately five low altitude (<100 m) UASs in a field demonstration to show the ability of the UAS to collect spectrum data and then adjust the UAS behavior based on the measurements.

The radios in the submitted license are required to transmit data to and from the UAS for the collection of the spectrum data and for UAS behavior adjustment based on the collected data. This radio system separate from the radio systems used for UAS command and control, which are licensed separately.

The UASs will fly at test ranges and those flights are coordinated and approved by the Federal Aviation Authority (FAA). Additionally field tests will occur with ground-based systems where antenna heights are under 6 meters.