

## Experimental Application to Test Radar Instrumentation

FRN: 0029110079

File Number: 0947-EX-CN-2021

### Government Project Description

The purpose of this application is to request authorization from the FCC for the Remote Sensing Center at The University of Alabama to operate an aircraft-mounted radar system from November 15 of 2021 to March 28 of 2022 (2-4 hours each flight), near the University of Alabama Arboretum and the Talladega National Forest in Alabama, to develop, calibrate and test the radar system and collect radar data on soil moisture in low and high vegetation areas. The objective of the overall project is to collect soil moisture data to improve the national water model (National Oceanic and Atmospheric Administration (NOAA) contract number NA19NES4320002. The radar data will be used to map the soil moisture for estimating the water retained over vegetated areas.

We are requesting operations near the Remote Sensing Center's R&D facilities in Tuscaloosa, AL. We are including nominal operating parameters (frequency and power) and can adjust these parameters to accommodate FCC requirements.

Scott Spear

**Remote Sensing Center**

**University of Alabama, Tuscaloosa, Alabama**

**October 25<sup>th</sup>, 2021**