

## Question 6: Statement of Research Project

**Description of the Research Project:** This application for an experimental license is for transmissions from a ground station at California State University, Northridge. The purpose of this ground station is to track and communicate with a 2U (20cm x 10cm x 10cm) CubeSat. The CubeSat, referred to as CSUNSat1, has been designed, built and tested by students and faculty at California State University, Northridge. CSUNSat1 will conduct research on a low temperature capable energy storage system consisting of a low temperature capable battery and two ultracapacitors.

**Necessity of Communications Facilities:** During the mission a series of experiments will be conducted onboard CSUNSat1. These experiments will be controlled by commands from the ground station at California State University Northridge. A separate experimental license is being sought for the CubeSat. CSUNSat1 will perform experiments on command. It will then be necessary for the telemetry data to be transmitted back to the ground station so that the results of the experiment can be evaluated.

**Adequacy of Existing Communications Facilities:** This ground station exists and is currently used for amateur radio operations. This license is being sought to use the ground station for experimental purposes. CSUNSat1 will be launched to the ISS in March 2016.