FORM 442 QUESTION 6: DESCRIPTION OF RESEARCH PROJECT

- **a.** A description of the nature of the research project being conducted. CubeSail will launch as a single 3U CubeSat and, once in orbit, separate into two 1.5U sections with a 250-meter-long solar sail deployed between them. This is a CubeSat experiment for the purpose of testing deployment, satellite control, and de-orbiting with a solar sail.
- **b.** A showing that the communications facilities requested are necessary for the research project. The ground station is necessary to have access to the satellite systems. The radios on each of the satellites are necessary to communicate with the ground station.
- **c.** A showing that existing communications facilities are inadequate There is no communications channel currently available.