

Statement that Authorization is Essential for Research Project

Question: Is this authorization to be used for providing communications essential to a research project? (The radio communication is not the objective of the research project)? If "YES", include as an exhibit the following information:

- a. A description of the nature of the research project being conducted.
- b. A showing that the communications facilities requested are necessary for the research project.
- c. A showing that existing communications facilities are inadequate.

Answer: Yes, the authorization is essential the research project.

a- Nature of Research: The overall goal is to develop and demonstrate an experimental COTS satellite bus, carrying an experimental hyperspectral imaging system.

b - Necessary for Project: The communications facility being requested for this project is essential to mission success. Telemetry will be used to monitor the onboard satellite systems, as well as to receive image files.

c – Existing Facilities Inadequate: There are no existing facilities available at the University, besides the ones for which a license is requested.