

To: James Cutler
E-Mail: jwcutler@umich.edu
From: Behnam Ghaffari
Date: April 20, 2016

Subject: FCC File No. 0235-EX-PL-2016

Message:

The TTC location(s) is sufficient.

a) Please submit the following items:

1. Prior coordinate using frequency 1066.752 MHz with the FAA Headquarters and obtain a Non-Government temporary (NGT) number.
2. IARU consent/coordination letter using frequency 437.485 MHz,
3. NOAA approval letter for the imaging operations (if there is imaging operation),
4. Orbital Debris Assessment (ODAR),
5. SpaceCap (You will need to email the file directly to me (Behnam.ghaffari@fcc.gov) since ELS can only handle pdf's. You will need to change the .mdb extension to .txt so it is not blocked by our firewall),
6. Cost recovery letter

b) Provide the information notes below for the purposed CubeSat. Submit your response as .pdf to your application :

- a) THE TYPE OF SATELLITE, GEOSTATIONARY OR NONGEOSTATIONARY
- B.) IF ANY SATELLITES ARE NONGEOSTATIONARY, REPORT ITS INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM,
- b) THE SATELLITE TRANSMITTER ANTENNA GAIN AND BEAMWIDTH,
- c) THE SATELLITE TRANSMITTER ANTENNA AZIMUT: NARROWBEAM (NB), EARTH COVERAGE (EC),
- d) THE EARTH STATION RECEIVER ANTENNA GAIN, BEAMWIDTH, AZIMUTHAL RANGE, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS AND THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS,
- e) THE EARTH STATION RECEIVER ANTENNA AZIMUTH, THE MINIMUM ANGLE OF ELEVATION (V00 TO V90),
- f) THE TRANSMITTER ANTENNA ORIENTATION (XAP), EXAMPLE XAP01 J , AND THE RECEIVER ANTENNA ORIENTATION (RAP), EXAMPLE RAP01 J , WHERE J REPRESENTS LINEAR POLARIZATION. OTHER POLARIZATIONS INCLUDE H FOR HORIZONTAL, V FOR VERTICAL, S FOR HORIZONTAL AND VERTICAL, L FOR LEFT HAND CIRCULAR, R FOR RIGHT HAND CIRCULAR, T FOR RIGHT

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of April 20, 2016 may result in application dismissal pursuant to Section 5.67 and forfeiture of the filing fee pursuant to Section 1.1108.

DO NOT Reply to this email by using the 'Reply' button. In order for your response to be processed expeditiously, you must upload your response via the Internet at <https://apps.fcc.gov/oetcf/els/index.cfm> by clicking on the "Reply to Correspondence" hyperlink.

Responses to this correspondence must contain the Reference number : 31991