

To: Raymond Coyle
E-Mail: rrcoyle@mtu.edu
From: Behnam Ghaffari
Date: April 08, 2019

Subject: 0154-EX-CN-2019

Message:

1. Please go back to your application and open an antenna for the ground station and enter the required parameters (e.g. coordinates, frequency band, ERP, emission designator(s), etc.)

2. Please submit the following items:

1. IARU consent/coordination letter,
2. NOAA approval letter for the imaging operations,
3. Orbital Debris Assessment (ODAR),
4. SpaceCap analysis (You will need to email the file directly to (behnam.ghaffari@fcc.gov). Please change the .mdb extension to .txt ,
5. ITU Cost recovery letter with University's letterhead.

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

- a.) 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),

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 08, 2019 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 : 47237