

Applicant: Miles Space, Inc
File Number: 0239-EX-CM-2020
Correspondence Reference Number: 59088
Date of Original Email: 12/14/2020

Additional response requested 12/14/2020

a) THE TYPE OF SATELLITE, GEOSTATIONARY OR NONGEOSTATIONARY

Our mission is not Earth orbital. It is extra-planetary and performs primarily outside of a 4 million kilometer radius from Earth.

B.) IF ANY SATELLITES ARE NONGEOSTATIONARY, REPORT ITS

INCLINATION ANGLE varies throughout the mission due to its non-orbital nature.

APOGEE IN KILOMETERS: 12 million

PERIGEE IN KILOMETERS: Initially 70

ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL: n/a

THE NUMBER OF SATELLITES IN THE SYSTEM: 1

b) THE SATELLITE TRANSMITTER ANTENNA GAIN AND BEAMWIDTH

(a) Width of beam in degrees at the half-power point: 60.00

c) THE SATELLITE TRANSMITTER ANTENNA AZIMUTH: NARROWBEAM (NB), EARTH COVERAGE (EC),

The satellite will be constantly rolling along its center access.

Due to the extreme range of the mission. Earth coverage would include the entire face in the direction of our satellite.

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,

Team Miles will utilize multiple receivers varying in gain, beamwidth, site elevation, and antenna height. These are receive-only radio systems.

e) THE EARTH STATION RECEIVER ANTENNA AZIMUTH, THE MINIMUM ANGLE OF ELEVATION (V00 TO V90),

To support our extra-planetary mission, receivers use a full range of possible azimuths and elevations by pointing physically or electronically as needed based on the satellite's current position.

f) THE TRANSMITTER ANTENNA ORIENTATION.

The space craft's transmitter antenna is fixed on one face of the space craft and will be oriented based on the overall craft's attitude and trajectory.