

## Response to NTIA Request

Reference number 17632

PLEASE RESUBMIT THESE RECORDS CONTAINING THE FOLLOWING INFORMATION:

1.) THE TYPE OF SATELLITE, GEOSTATIONARY OR NONGEOSTATIONARY, (XAL AND/OR RAL).

### NonGeostationary

A.) IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).

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, THEN T01, EXAMPLE, REM04

\*ORB,98.0IN00510AP00510PE001.58H01NRT01, AND FOR SPACE-TO-SPACE COMMUNICATIONS WITH ANOTHER NONGEOSTATIONARY SATELLITE ADD AN ADDITIONAL \*ORB FOR IT ENDING IN R01, EXAMPLE, REM05

\*ORB,72.9IN03209AP00655PE013.46H01NRR01

**\*ORB,64.9IN00290AP00575PE01.617H01NRT01**

2.) THE SATELLITE TRANSMITTER ANTENNA GAIN AND BEAMWIDTH (XAD), EXAMPLE, XAD01 16G030B

**XAD01 05G090B**

**XAD02 05G090B**

**Note: XAD01 represents the X-band satellite antenna and XAD02 represents the S-band satellite antenna. The antennas have identical gain and beamwidth characteristics, but different center frequencies and physical dimensions.**

3.) THE SATELLITE TRANSMITTER ANTENNA AZIMUTH (XAZ), NARROWBEAM, NB, EARTH COVERAGE, EC, EXAMPLE, XAZ01 EC OR LEAVE BLANK FOR SPACE-TO-SPACE OPERATIONS.

**XAZ01 NB**

**XAZ02 NB**

**Note: XAZ01 represents the X-band satellite antenna and XAZ02 represents the S-band satellite antenna.**

4.) 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 (RAD), EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006

**RAD01 44G1.07B000-360A00144H004**

**RAD02 46G0.80B000-360A00144H023**

**Note: RAD01 represents the X-band Earth antenna and RAD02 represents the S-band Earth antenna.**

5.) THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00

**RAZ01 V05  
RAZ02 V05**

**Note: RAZ01 represents the X-band Earth antenna and RAZ02 represents the S-band Earth antenna.**

6.) THE S NOTE (ASSUMING NONGEOSTATIONARY, USE S871--THIS ASSIGNMENT SUPPORTS OF THE NON-GEOSTATIONARY CUBESAT TEST BED (CSTB) SATELLITE).

**S871**

7.) 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 AND LEFT HAND CIRCULAR, E FOR ELLIPTICAL AND O FOR OBLIQUE ANGLED CROSSED.

**XAP01 R  
XAP02 R  
XAP03 R  
XAP04 R**

**Note: XAP01 represents the X-band Earth antenna, XAP02 represents the S-band Earth antenna, XAP03 represents the X-band space antenna, XAP04 represents the S-band space antenna.**