Douglas Young

From: Douglas Young
Sent: Friday, May 18, 2018 3:13 PM
To: 'william.thompson@GA.com'
Subject: Request for Info - File #0087-EX-CN-2018
Attachments: REVSatDataNTIA.DOCX

Importance: High

Submit the data requested in the attached document.

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 May 18, 2018 may result in application dismissal pursuant to Section 5.67 and forfeiture of the filing fee pursuant to Section 1.1108.

NTIA Space record data form

NTIA requires the following data for space related experiments using government shared spectrum. For each transmit frequency, please provide the data for both ends of the transmit-receive link. Use Part A to describe the satellite to ground information. Part B is for all ground to space transmit links.

Part A: Space to Earth Downlink Data

Satellite Transmitter Data

Transmit Frequency: 2272.5 MHz		
Satellite Name: Orbital Test Bed (OTB)		
Data Field	**Data Answer**	**Description/Comments**
Polarization (XAP)	XAP = J and R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Orientation (XAZ)	XAZ = EC	NB= NARROWBEAM EC = EARTH COVERAGE
Antenna Dimension (XAD)	Antenna 1 ANTENNA GAIN 0dB BEAMWIDTH Omni Directional Antenna 2 ANTENNA GAIN 3 dB BEAMWIDTH +-60 Deg XAD = XAD01 00G360B/03G120B	(NTIA format (XAD), EXAMPLE, XAD01 16G030B)
Type of satellite (State = SP) (City = geo or non)	Type = Nongeostationary	Choose either: Geostationary or Nongeostationary
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).
For Nongeostationary (Orbital Data)	INCLINATION ANGLE 24deg, APOGEE IN KILOMETERS 720, PERIGEE IN KILOMETERS 720, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 653, THE NUMBER OF SATELLITES IN THE SYSTEM 1, ORB = *ORB,0024IN00720AP00720PE1.653H01NR	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

Earth Station Data (Primary Receiver)		
State (RSC)	RSC = GA	
City Name (RAL)	RAL = Pendergrass	
Latitude (DDMMSS)	Lat = 341747N	
Longitude (DDDMMSS)	Lon = 0836719W	
Antenna Polarization (RAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (RAZ)	RAZ = V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN 38.1dBi, BEAMWIDTH 1.9 degrees, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 283m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4m RAD =38G1.9B000-360A00283H6.4	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
Earth Station Data (Secondary Receiver)		
State (RSC)	RSC = HI	
City Name (RAL)	RAL = Naalehu	
Latitude (DDMMSS)	Lat = 190138N	
Longitude (DDDMMSS)	Lon = 1556629W	
Antenna Polarization (RAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (RAZ)	RAZ = V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN 45.9dBi, BEAMWIDTH 0.8 degrees, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 378m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 20m RAD =46G0.8B000-360A00378H020	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (insert name)		

Earth Station Data (Secondary Receiver)		
State (RSC)	RSC = ARG	
City Name (RAL)	RAL = Cordoba	
Latitude (DDMMSS)	Lat = 315200S	
Longitude (DDDMMSS)	Lon =0644600W	
Antenna Polarization (RAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (RAZ)	RAZ = V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN 38.1dBi, BEAMWIDTH 1.9 degrees, AZIMUTHAL RANGE000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 691m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4m RAD =38G1.9B000-360A00691H6.4	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
Earth Station Data (Secondary Receiver)		
State (RSC)	RSC = AFS	
City Name (RAL)	RAL = Hartebeesthoek	
Latitude (DDMMSS)	Lat = 258865S	
Longitude (DDDMMSS)	Lon =277056E	
Antenna Polarization (RAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (RAZ)	RAZ = V03	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN 27dBi, BEAMWIDTH 2.8 degrees, AZIMUTHAL RANGE000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 1563.5m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 5m RAD =27G2.8B000-360A01563H005	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006

FCC notes:

1. Use S-Note S945.
2. REM AGN, Cubesat, (insert name)

Part B: Ground Stations, Earth to Space link data:

Earth Station Transmitter Data

Transmit Frequency: 2061MHz		
State (XSC)	XSC = GA	
City Name (XAL)	XAL = Pendergrass	
Latitude (DDMMSS)	Lat = 341747N	
Longitude (DDDMMSS)	Lon = 0836719W	
Antenna Polarization (XAP)	XAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	XAZ =V10	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 38.1dBi, BEAMWIDTH 1.9 degrees, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 283m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4m RAD =38G1.9B000-360A00283H6.4	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
State (XSC)	RSC = HI	
City Name (XAL)	RAL = Naalehu	
Latitude (DDMMSS)	Lat = 190138N	
Longitude (DDDMMSS)	Lon =1556629W	
Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	RAZ = V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 45.9dBi, BEAMWIDTH 0.8 degrees, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 378m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 20m RAD =46G0.8B000-360A00378H020	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006

State (XSC)	RSC = ARG	
City Name (XAL)	RAL = Cordoba	
Latitude (DDMMSS)	Lat = 315200S	
Longitude (DDDMMSS)	Lon =0644600W	
Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	RAZ =V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 38.1dBi, BEAMWIDTH 1.9 degrees, AZIMUTHAL RANGE000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 691m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4m RAD =38G1.9B000-360A00691H6.4	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
State (XSC)	RSC = AFS	
City Name (XAL)	RAL = Hartebeesthoek	
Latitude (DDMMSS)	Lat = 258865S	
Longitude (DDDMMSS)	Lon =0277056E	
Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	RAZ =V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 27dBi, BEAMWIDTH 2.8 degrees, AZIMUTHAL RANGE000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 1563.5m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 5m RAD =27G2.8B000-360A01563H005	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006

Satellite Receive Specifications		
Polarization (RAP)	RAP = R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Azimuth (RAZ)	RAZ = EC	STATION RECEIVER ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Dimension (RAD)	ANTENNA GAIN 3dB BEAMWIDTH +-60 RAD = 03G120B	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) City = G/No	Type = Nongeostationary	Choose either: Geostationary or Nongeostationary
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).
For Nongeostationary (Orbital Data)	INCLINATION ANGLE 24deg, APOGEE IN KILOMETERS 720, PERIGEE IN KILOMETERS 720, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 653, THE NUMBER OF SATELLITES IN THE SYSTEM 1,	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

Transmit Frequency: 2062MHz		
State (XSC)	XSC = GA	
City Name (XAL)	XAL = Pendergrass	
Latitude (DDMMSS)	Lat = 341747N	
Longitude (DDDMMSS)	Lon = 0836719W	
Antenna Polarization (XAP)	XAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	XAZ =V10	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 38.1dBi, BEAMWIDTH 1.9 degrees, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 283m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4m RAD =38G1.9B000-360A00283H6.4	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
State (XSC)	RSC = HI	
City Name (XAL)	RAL = Naalehu	
Latitude (DDMMSS)	Lat = 190138N	
Longitude (DDDMMSS)	Lon =1556629W	
Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	RAZ = V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 45.9dBi, BEAMWIDTH 0.8 degrees, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 378m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 20m RAD =46G0.8B000-360A00378H020	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006

State (XSC)	RSC = ARG	
City Name (XAL)	RAL = Cordoba	
Latitude (DDMMSS)	Lat = 315200S	
Longitude (DDDMMSS)	Lon =0644600W	
Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	RAZ =V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 38.1dBi, BEAMWIDTH 1.9 degrees, AZIMUTHAL RANGE000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 691m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4m RAD =38G1.9B000-360A00691H6.4	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
State (XSC)	RSC = AFS	
City Name (XAL)	RAL = Hartebeesthoek	
Latitude (DDMMSS)	Lat = 258865S	
Longitude (DDDMMSS)	Lon =0277056E	
Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	RAZ =V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 27dBi, BEAMWIDTH 2.8 degrees, AZIMUTHAL RANGE000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 1563.5m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 5m RAD =27G2.8B000-360A01563H005	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006

Satellite Receive Specifications		
Polarization (RAP)	RAP = R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Azimuth (RAZ)	RAZ = EC	STATION RECEIVER ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Dimension (RAD)	ANTENNA GAIN 3dB BEAMWIDTH +-60 RAD = 03G120B	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) City = G/No	Type = Nongeostationary	Choose either: Geostationary or Nongeostationary
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).
For Nongeostationary (Orbital Data)	INCLINATION ANGLE 24deg, APOGEE IN KILOMETERS 720, PERIGEE IN KILOMETERS 720, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 653, THE NUMBER OF SATELLITES IN THE SYSTEM 1,	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

Transmit Frequency: 2063MHz		
State (XSC)	XSC = GA	
City Name (XAL)	XAL = Pendergrass	
Latitude (DDMMSS)	Lat = 341747N	
Longitude (DDDMMSS)	Lon = 0836719W	
Antenna Polarization (XAP)	XAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	XAZ =V10	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 38.1dBi, BEAMWIDTH 1.9 degrees, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 283m THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4m RAD =38G1.9B000-360A00283H6.4	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
State (XSC)	RSC = HI	
City Name (XAL)	RAL = Naalehu	
Latitude (DDMMSS)	Lat = 190138N	
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Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
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State (XSC)	RSC = ARG	
City Name (XAL)	RAL = Cordoba	
Latitude (DDMMSS)	Lat = 315200S	
Longitude (DDDMMSS)	Lon =0644600W	
Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	RAZ =V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
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State (XSC)	RSC = AFS	
City Name (XAL)	RAL = Hartebeesthoek	
Latitude (DDMMSS)	Lat = 258865S	
Longitude (DDDMMSS)	Lon =0277056E	
Antenna Polarization (XAP)	RAP = T	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	RAZ =V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
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Satellite Receive Specifications		
Polarization (RAP)	RAP = R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Azimuth (RAZ)	RAZ = EC	STATION RECEIVER ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Dimension (RAD)	ANTENNA GAIN 3dB BEAMWIDTH +-60 RAD = 03G120B	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) City = G/No	Type = Nongeostationary	Choose either: Geostationary or Nongeostationary
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).
For Nongeostationary (Orbital Data)	INCLINATION ANGLE 24deg, APOGEE IN KILOMETERS 720, PERIGEE IN KILOMETERS 720, ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 653, THE NUMBER OF SATELLITES IN THE SYSTEM 1,	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