

SATELLITE EARTH STATION AUTHORIZATIONS
FCC Form 312 - Schedule B:(Technical and Operational Description)
FOR OFFICIAL USE ONLY

Location of Earth Station Site

E1: Site Identifier:	AZ Lunar Antenna	E5: Call Sign:	
E2: Contact Name:	Brian Mathews	E6: Phone Number:	303-591-3247
E3: Street:	74135 E County North 1 1/2 St	E7: City:	Dateland
E4: State:	0b2d5cd7dbbd22008e0b75131f961907	E8: County:	Yuma
		E9: Zip Code:	85333
E10: Area of Operation:	Not Applicable		
E11: Latitude:	32° 49' 44.8602"		
E12: Longitude:	113° 22' 7.1682"		
E13: Lat/Lon Coordinates are:	nad-83		
E14: Site Elevation (AMSL):	154.838		

If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide a technical analysis showing compliance with two-degree spacing policy.	N/A
If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS) or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement?	N/A
Is Frequency Coordination required?	No
Is coordination with another country required?	No
Is FAA notification required?	No
Is facility operated by remote control?	Yes

POINTS OF COMMUNICATION

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
AZ Lunar Antenna	AZ Lunar	1	CPI Vertex Antennentechnik GmbH	20m Lunar X-KA-Band Antenna	20.2	undefined at 0

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at Antenna Flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for all carriers (dBW)
AZ Lunar	0/0	267.34	181.572	0	15	0	92.6

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
AZ Lunar	8463.8 8466.2	R	null	2M40G9D	0	0

E50. Modulation and Services

Phase Modulation - Data Download

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
AZ Lunar	22550 23150	T	null	60M0G7D	92.6	50.8390874

E50. Modulation and Services

Phase Modulation - TT&C

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
AZ Lunar	25500 27000	R	null	60M0G7D	0	0

E50. Modulation and Services

Phase Modulation - Data Downlink

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
AZ Lunar	7203.669 7206.069	T	null	2M40G9D	89.7	61.9184875

E50. Modulation and Services

Phase Modulation - TT&C

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
AZ Lunar	7199.6875 7199.8375	T	null	38K0G2D	89.7	79.9227639

E50. Modulation and Services

Phase Modulation - TT&C

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
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AZ Lunar	8456.275 8461.725	R	null	1M59G1D	0	0
E50. Modulation and Services						
Phase Modulation - Data Download						

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	E56. Earth Station Azimuth Angle Eastern/Western Limit	E57. Antenna Elevation Angle Eastern/Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
AZ Lunar	Non-Geostationary	7199.6875 7199.8375	0 / 0	0 / 360	5 / 5	18.83

AZ Lunar Non-Geostationary8456.275
8461.7250 / 00 / 3605 / 50AZ Lunar Non-Geostationary8463.8
8466.20 / 00 / 3605 / 50AZ Lunar Non-Geostationary7203.669
7206.0690 / 00 / 3605 / 56.79AZ Lunar Non-Geostationary25500
270000 / 00 / 3605 / 50AZ Lunar Non-Geostationary22550
231500 / 00 / 3605 / 5-29.05

REMOTE CONTROL POINT LOCATION

E61. Call Sign: TNOC		E65. Phone Number: +47 77 60 02 68	
E62. Street Address: Prestvannvegen 38			
E63. City: Tromso	E67. County: Tromso	E64/68. State/Country: undefined / undefined	E66. Zip Code: 9291

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