

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:	1	E5: Call Sign:	
E2: Contact Name:	ERIC LUND	E6: Phone Number:	240-420-8990
E3: Street:	17625 TECHNOLOGY BLVD	E7: City:	HAGERSTOWN
E4: State:	357266aedbb122008e0b75131f96190f	E8: County:	WASHINGTON
		E9: Zip Code:	21740
E10: Area of Operation:			
E11: Latitude:	39° 35' 53.8"		
E12: Longitude:	77° 45' 33.4"		
E13: Lat/Lon Coordinates are:	nad-83		
E14: Site Elevation (AMSL):	174.65		

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.	Yes
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?	Yes
Is coordination with another country required?	No
Is FAA notification required?	No
Is facility operated by remote control?	No

POINTS OF COMMUNICATION

Satellite Name: Intelsat 904 (S2408)	
E21. Common Name: INTELSAT 904 (S2408)	E22. ITU Name: Intelsat 904(S2408)
E23. Orbit Location: 29.5 W.L.	E24. Country:

Satellite Name: INTELSAT 30	
E21. Common Name: INTELSAT 30 (S2887)	E22. ITU Name: INTELSAT 30
E23. Orbit Location: 95.05 W.L.	E24. Country:

Satellite Name: DIRECTV D16	
E21. Common Name: DIRECTV D16 (S3039)	E22. ITU Name: DIRECTV D16
E23. Orbit Location: 100.85	E24. Country:

Satellite Name: INTELSAT 31	
E21. Common Name: INTELSAT 31 (S2924)	E22. ITU Name: INTELSAT 31
E23. Orbit Location: 95.05 W.L.	E24. Country:

Satellite Name: INTELSAT 14 (S2785)	
E21. Common Name: INTELSAT 14 (S2785)	E22. ITU Name: INTELSAT 14 (S2785)
E23. Orbit Location: 45.0 W.L.	E24. Country:

Satellite Name: SKY-B1	
E21. Common Name: SKY-B1(S2922)	E22. ITU Name: SKY-B1
E23. Orbit Location: 43.15 W.L.	E24. Country:

Satellite Name: PERMITTED LIST	
E21. Common Name: PERMITTED LIST	E22. ITU Name: PERMITTED LIST
E23. Orbit Location: GSO	E24. Country:

Satellite Name: QUETZSAT-1(MEX)	
E21. Common Name: QUETZSAT-1	E22. ITU Name: QUETZSAT-1(MEX)

E23. Orbit Location: 77.00 W.L.

E24. Country: USA

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)
1	MTN-K91	1	TIW	14.2 METER	14.2	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)
MTN-K91	14.2/14.2	17.05	191.7	0	195	0	88.3

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 EIRP Density per Carrier (dBW/4kHz)
MTN-K91	11700 12200	R	null	56K0G7W	0	0

E50. Modulation and Services

DIGITAL DATA, VOICE AND VIDEO SERVICE

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 EIRP Density per Carrier (dBW/4kHz)
MTN-K91	10950 11200	R	null	72M0G7W	0	0

E50. Modulation and Services

DIGITAL DATA, VOICE AND VIDEO SERVICE

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)
MTN-K91	11450 12200	R	null	56K0G7W	0	0

E50. Modulation and Services

digital data

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)
MTN-K91	14000 14500	T	null	2M00F9D	78.09	51.1

E50. Modulation and Services

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)
MTN-K91	13778 14000	T	null	850KF9D	74.37	51.0964107

E50. Modulation and Services

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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MTN-K91	17300 17800	T	null	2M00F2D	83.3	56.3
E50. Modulation and Services						
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)
MTN-K91	12200 12700	R	null	2M00F2D	0	0
E50. Modulation and Services						
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)
MTN-K91	13750 13770	T	null	850KF9D	74.37	51.0964107
E50. Modulation and Services						
TT&C						

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)
MTN-K91	Geostationary	11700 12200	6 / 149	101.86 / 257.78	5.29 / 5.69	-999

MTN-K91Geostationary12200

127006 / 149101.86 / 257.785.29 / 5.69-999MTN-K91Geostationary11450

122006 / 149101.86 / 257.785.29 / 5.69-999MTN-K91Geostationary10950

112006 / 149101.86 / 257.785.29 / 5.69-999MTN-K91Geostationary14000

145006 / 149101.86 / 257.785.29 / 5.69-1MTN-K91Geostationary13778
 140006 / 149101.86 / 257.785.29 / 5.6911.6MTN-K91Geostationary17300
 178006 / 149101.86 / 257.785.29 / 5.694.2MTN-K91Geostationary13750
 137706 / 149101.86 / 257.785.29 / 5.6911.6

REMOTE CONTROL POINT LOCATION

E61. Call Sign: undefined		E65. Phone Number: undefined	
E62. Street Address: undefined			
E63. City: undefined	E67. County: undefined	E64/68. State/Country: undefined / undefined	E66. Zip Code: undefined

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