

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:	Viasat NOC	E6: Phone Number:	720-493-7300
E3: Street:		E7: City:	
E4: State:		E8: County:	
		E9: Zip Code:	
E10: Area of Operation:			
E11: Latitude:	0° 0' 0"		
E12: Longitude:	0° 0' 0"		
E13: Lat/Lon Coordinates are:			
E14: Site Elevation (AMSL):	0		

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

POINTS OF COMMUNICATION

Satellite Name: GALAXY 28 (S2160)

E21. Common Name: GALAXY 28 (S2160)	E22. ITU Name: GALAXY 28
E23. Orbit Location: 89.0 W.L.	E24. Country:

Satellite Name: VIASAT-2 (S2902)	
E21. Common Name: VIASAT-2 (S2902)	E22. ITU Name: VIASAT-2 (S2902)
E23. Orbit Location: 69.9 W.L.	E24. Country:

Satellite Name: VIASAT-1 (S2747)	
E21. Common Name: VIASAT-1 (S2747)	E22. ITU Name: VIASAT-1 (S2747)
E23. Orbit Location: 115.1W.L.	E24. Country:

Satellite Name: ANIK-F2(S2472)	
E21. Common Name: ANIK-F2 (S2472)	E22. ITU Name: ANIK-F2(S2472)
E23. Orbit Location: 111.1 W.L.	E24. Country:

Satellite Name: WILDBLUE-1 (E040213)	
E21. Common Name: WILDBLUE 1(S2355)	E22. ITU Name: WILDBLUE 1
E23. Orbit Location: 111.1 W.L.	E24. Country:

Satellite Name: VIASAT-79W(S3113)	
E21. Common Name: ViaSat-3F2	E22. ITU Name: VIASAT-79W(S3113)
E23. Orbit Location: 79.0 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	2	10000	General Dynamics	3180	1.8	undefined at 0

E28. Antenna	E33/34. Diameter	E35. Above	E36. Above	E37. Building	E38. Total	E39. Maximum	E40. Total
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Id	Minor/Major (meters)	Ground Level (meters)	Sea Level (meters)	Height Above Ground Level (meters)	Input Power at Antenna Flange (Watts)	Antenna Height Above Rooftop (meters)	EIRP for all carriers (dBW)
2	1.809/1.896	0	0	0	25	0	67.6

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	1	4000000	ViaSat	RA40750-AB	0.745	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)
1	0.72/0.77	0	0	0	25	0	58.5

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)
1	19700 20200	R	null	417MG7D	0	0

E50. Modulation and Services

416.6 MBd M-ary PSK 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)
1	29500 30000	T	null	320MG7D	58.48	9.449

E50. Modulation and Services

320 MBd, Digital Carrier

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)
1	17700 18300	R	null	500MG7D	0	0

E50. Modulation and Services

500 MBd M-ary PSK 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)
1	28350 29100	T	null	20M0G7D	57.88	20.89

E50. Modulation and Services

20 MBd, Digital Carrier

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)
1	17800 19300	R	null	417MG7D	0	0

E50. Modulation and Services

416.6 MBd M-ary PSK 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	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
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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)
2	17700 18300	R	null	500MG7D	0	0

E50. Modulation and Services	500 MBd M-ary PSK Digital Data
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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)
2	29500 30000	T	null	10M0G7D	67.42	33.44

E50. Modulation and Services
10 MBd, Digital Carrier

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)
2	19700 20200	R	null	417MG7D	0	0

E50. Modulation and Services
416.6 MBd M-ary PSK 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 EIRP Density per Carrier (dBW/4kHz)
2	28350 29100	T	null	160MG7D	67.04	21.0194
E50. Modulation and Services						
160 MBd, Digital Carrier						

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)
2	Geostationary	28350 29100	79 / 79	270 / 90	5 / 5	-12.6

2Geostationary17800

1930079 / 79270 / 905 / 5-9992Geostationary19700

2020079 / 79270 / 905 / 5-9991Geostationary17800

1930079 / 79270 / 905 / 5-9991Geostationary28350

2910079 / 79270 / 905 / 5-23.482Geostationary29500

3000079 / 79270 / 905 / 5-16.11Geostationary19700

2020069.9 / 115.1110.75 / 235.45 / 19.5-9991Geostationary29500

3000069.9 / 115.1110.75 / 235.45 / 19.5-15.41Geostationary28350

2910069.9 / 115.1110.75 / 235.45 / 19.5-23.482Geostationary29500

3000069.9 / 115.1110.75 / 235.45 / 19.5-16.12Geostationary19700

2020069.9 / 115.1110.75 / 235.45 / 19.5-9992Geostationary28350

2910069.9 / 115.1110.75 / 235.45 / 19.5-12.61Geostationary17700

1830069.9 / 115.1110.75 / 235.45 / 19.5-9992Geostationary17700

1830069.9 / 115.1110.75 / 235.45 / 19.5-9992Geostationary17800

1930069.9 / 115.1110.75 / 235.45 / 19.5-9991Geostationary17800

1930069.9 / 115.1110.75 / 235.45 / 19.5-9991Geostationary19700

2020079 / 79270 / 905 / 5-9991Geostationary29500

3000079 / 79270 / 905 / 5-15.41Geostationary17700

1830079 / 79270 / 905 / 5-9992Geostationary17700

1830079 / 79270 / 905 / 5-999

REMOTE CONTROL POINT LOCATION

E61. Call Sign:	E65. Phone Number:
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		720-493-7300	
E62. Street Address: 349 Inverness Drive South			
E63. City: Englewood	E67. County: Douglas	E64/68. State/Country: undefined / undefined	E66. Zip Code: 80112

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