

Date & Time Filed: Feb 10 2004 8:09:38:560PM
File Number: SES-MOD-INTR2004-00267

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM	FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:

Immeon VSAT Network

1-8. Legal Name of Applicant			
Name:	ViaSat, Inc.	Phone Number:	760-476-2583
DBA Name:		Fax Number:	760-929-3941
Street:	6155 El Camino Real	E-Mail:	daryl.hunter@viasat.com
City:	Carlsbad	State:	CA
Country:	USA	Zipcode:	92009 -
Attention:	Mr Daryl T Hunter, P.E.		

9-16. Name of Contact Representative (If other than applicant)

Name:	Daryl T. Hunter, P.E.	Phone Number:	760-476-2583
Company:	ViaSat, Inc.	Fax Number:	760-929-3941
Street:	6155 El Camino Real	E-Mail:	daryl.hunter@viasat.com
City:	Carlsbad	State:	CA
Country:	USA	Zipcode:	92009-
Contact Title:	Director, Network Operations	Relationship:	Engineer

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

- a1. Earth Station
- a2. Space Station

- (N/A) b1. Application for License of New Station
- (N/A) b2. Application for Registration of New Domestic Receive-Only Station
- (N/A) b3. Amendment to a Pending Application
- (N/A) b4. Modification of License or Registration
- b5. Assignment of License or Registration
- b6. Transfer of Control of License or Registration
- (N/A) b7. Notification of Minor Modification
- (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- (N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- (N/A) b10. Other (Please specify)

<p>17c. Is a fee submitted with this application?</p> <p><input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).</p> <p><input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee</p> <p><input type="radio"/> Other (please explain):</p>	
<p>17d.</p> <p>Fee Classification A CGV – Fixed Satellite VSAT System</p>	
<p>18. If this filing is in reference to an existing station, enter:</p> <p>(a) Call sign of station: E010274</p>	<p>19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number:</p> <p>(a) Date pending application was filed:</p> <p>(b) File number: SESLIC2001101001922</p>

TYPE OF SERVICE

<p>20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:</p> <p><input checked="" type="checkbox"/> a. Fixed Satellite <input type="checkbox"/> b. Mobile Satellite <input type="checkbox"/> c. Radiodetermination Satellite <input type="checkbox"/> d. Earth Exploration Satellite <input type="checkbox"/> e. Direct to Home Fixed Satellite <input type="checkbox"/> f. Digital Audio Radio Service <input type="checkbox"/> g. Other (please specify)</p>	
<p>21. STATUS: Choose the button next to the applicable status. Choose only one.</p> <p><input type="radio"/> Common Carrier <input checked="" type="radio"/> Non-Common Carrier</p>	<p>22. If earth station applicant, check all that apply.</p> <p><input checked="" type="checkbox"/> Using U.S. licensed satellites <input type="checkbox"/> Using Non-U.S. licensed satellites</p>
<p>23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:</p> <p><input type="radio"/> Connected to a Public Switched Network <input type="radio"/> Not connected to a Public Switched Network <input checked="" type="radio"/> N/A</p>	
<p>24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s).</p> <p><input type="checkbox"/> a. C-Band (4/6 GHz) <input checked="" type="checkbox"/> b. Ku-Band (12/14 GHz) <input type="checkbox"/> c. Other (Please specify upper and lower frequencies in MHz.)</p> <p>Frequency Lower: Frequency Upper: (Please specify additional frequencies in an attachment)</p>	

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.

- a. Fixed Earth Station
- b. Temporary–Fixed Earth Station
- c. 12/14 GHz VSAT Network
- d. Mobile Earth Station
- e. Geostationary Space Station
- f. Non–Geostationary Space Station
- g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY:

- Transmit/Receive Transmit–Only Receive–Only N/A

"For Space Station applications, select N/A."

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

- a -- authorization to add new emission designator and related service
- b -- authorization to change emission designator and related service
- c -- authorization to increase EIRP and EIRP density
- d -- authorization to replace antenna
- e -- authorization to add antenna
- f -- authorization to relocate fixed station
- g -- authorization to change frequency(ies)
- h -- authorization to add frequency
- i -- authorization to add Points of Communication (satellites & countries)
- j -- authorization to change Points of Communication (satellites & countries)
- k -- authorization for facilities for which environmental assessment and radiation hazard reporting is required
- l -- authorization to change orbit location
- m -- authorization to perform fleet management
- n -- authorization to extend milestones
- o -- Other (Please specify)

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission’s rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments. Yes No

ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.

29. Is the applicant a foreign government or the representative of any foreign government? Yes No N/A

30. Is the applicant an alien or the representative of an alien? Yes No N/A

31. Is the applicant a corporation organized under the laws of any foreign government? Yes No N/A

32. Is the applicant a corporation of which more than one–fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? Yes No N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

Yes No N/A

34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.

BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules?
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

Yes No

36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explanation of circumstances.

Yes No

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explanation of circumstances.

Yes No

38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances

Yes No

39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhibit, an explanation of the circumstances.

Yes No

40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.

41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes.

Yes No

42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.

Yes No

42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station?N/A

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

VSAT network providing communications to and from the Internet

Imm_Drwg

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to applicable response.)

- Individual
- Unincorporated Association
- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

45. Name of Person Signing Gregory D. Monahan	46. Title of Person Signing Vice President – Administration
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47. Please supply any need attachments.

Attachment 1: Imm_RadHaz	Attachment 2:	Attachment 3:
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WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT
(U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION
(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

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:	ATL HUB-1	E5. Call Sign:	E010274
E2. Contact Name	ViaSat NOC	E6. Phone Number:	1-888-272-7232
E3. Street:	4311 Communications Dr.	E7. City:	Norcross
		E8. County:	Gwinnett
E4. State	GA	E9. Zip Code	30093
E10. Area of Operation:			Fixed
E11. Latitude:	33 °56 '19.0 "N		
E12. Longitude:	84 °8 '9.0 "W		
E13. Lat/Lon Coordinates are:	<input checked="" type="radio"/> NAD-27	<input type="radio"/> NAD-83	<input type="radio"/> N/A
E14. Site Elevation (AMSL):	287.0 meters		

<p>E15. 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 as a technical analysis showing compliance with two-degree spacing policy.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p>
<p>E16. 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(a2) and (b) as demonstrated by the manufacturer's qualification measurements?</p>	<p><input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A</p>
<p>E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>

<p>E18. Is frequency coordination required? If YES, attach a frequency coordination report as</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>

POINTS OF COMMUNICATION

<p>Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:</p>

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
E26. Common Name:	E27. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size<meters>	E41/42. Antenna Gain Transmint and/or Recieve (____ dBi at ____ GHz)
ATL HUB-1	ATL-A	1	ViaSat, Inc.	8060K	6.1	57.1 dBi at 14
						55.6 dBi at 11.7
	ATL-B					55.6 dBi at 11.7
						57.1 dBi at 14.0
	1AT		Prodelin	Series	1.2	41.5 dBi at 11.85
						43.0 dBi at 14.125

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 al carriers(dBW)

ATL-A	0.0/0.0	6.2	287.0	0.0	225.0	0.0	77.62
ATL-B	0.0/0.0	6.2	287.0	0.0	225.0	0.0	77.62
IAT	0.0/0.0	1.4	287.0	0.0	4.0	0.0	49.0

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)
ATL-A	11700 12200	R	Horizontal and Vertical	1M00G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

ATL-A	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

ATL-A	14000 14500	T	Horizontal and Vertical	24M0G7D	77.62	39.84
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
ATL-B	11700 12200	R	Horizontal and Vertical	1M00G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
ATL-B	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
ATL-B	14000 14500	T	Horizontal and Vertical	24M0G7D	77.62	39.84

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

1AT	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

1AT	14000 14500	T	Horizontal and Vertical	1M00G7D	49.0	25.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/Western Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
ATL-A	Geostationary	14000 14500	15.0/155.0	102.0	8.6	259.0	7.2	-9.7
ATL-B	Geostationary	14000 14500	15.0/155.0	102.0	8.6	259.0	7.2	-9.7
1AT	Geostationary	14000 14500	15.0/155.0	102.0	8.6	259.0	7.2	-10.4

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.		E66. Phone Number 1-888-272-7232	
E62. Street Address 6155 El Camino Real			
E63. City Carlsbad		E68. County San Diego	
		E67/68. State/Country CA/ USA	E64. Zip Code 92009

SATELLITE EARTH STATION AUTHORIZATIONS
 FCC Form 312 – Schedule B:(Technical and Operational Description)
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Location of Earth Station Site			
E1. Site Identifier:	Remote 1	E5. Call Sign:	E010274
E2. Contact Name	ViaSat NOC	E6. Phone Number:	1-888-272-7232
E3. Street:		E7. City:	
E4. State		E8. County:	
E10. Area of Operation:		E9. Zip Code	
E11. Latitude:	0 °0 '0.0 "	CONUS, AK, HI, U.S. Virgin Is.	
E12. Longitude:	0 °0 '0.0 "		
E13. Lat/Lon Coordinates are:	<input checked="" type="radio"/> NAD-27	<input type="radio"/> NAD-83	<input type="radio"/> N/A
E14. Site Elevation (AMSL):	0.0 meters		

E15. 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 as a technical analysis showing compliance with two-degree spacing policy.	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
E16. 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(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A

E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	<input checked="" type="radio"/> Yes <input type="radio"/> No
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E18. Is frequency coordination required? If YES, attach a frequency coordination report as	<input type="radio"/> Yes <input checked="" type="radio"/> No
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E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	<input type="radio"/> Yes <input checked="" type="radio"/> No
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E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA’s study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	<input type="radio"/> Yes <input checked="" type="radio"/> No
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POINTS OF COMMUNICATION

Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:	
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
E26. Common Name:	E27. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size<meters>	E41/42. Antenna Gain Transmint and/or Recieve (____ dBi at ____ GHz)
Remote 1	1A	5000	Prodelin	Series	1.2	41.5 dBi at 11.85
						43.0 dBi at 14.125
	1B		Channel Master	Type 123		41.8 dBi at 11.95
						43.3 dBi at 14.25
	1C		Patriot	TXINT-120KU		43.4 dBi at 14.25
						41.8 dBi at 11.725
	1D		Prodelin	1134-990		41.5 dBi at 11.85
						43.0 dBi at 14.125
	1F		Channel Master	Type 123		41.8 dBi at 11.95
						43.3 dBi at 14.25
	1G		Patriot	TXINT-120KU		41.8 dBi at 11.95

						43.4 dBi at 14.25
	1H		Prodelin	1134-990		41.5 dBi at 11.95
						43.0 dBi at 14.125
	1E	100	Sea Tel	4996T		41.6 dBi at 11.7
						42.5 dBi at 14.25
	1J					41.6 dBi at 11.7
						42.5 dBi at 14.25

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 al carriers(dBW)
1A	0.0/0.0	1.4	0.0	0.0	4.0	0.0	49.0
1B	0.0/0.0	1.4	0.0	0.0	2.0	0.0	46.3
1C	0.0/0.0	1.4	0.0	0.0	2.0	0.0	46.4
1D	0.0/0.0	1.4	0.0	0.0	2.0	0.0	46.0
1F	0.0/0.0	1.4	0.0	0.0	4.0	0.0	49.3
1G	0.0/0.0	1.4	0.0	0.0	4.0	0.0	49.4
1H	0.0/0.0	1.4	0.0	0.0	4.0	0.0	49.0

1E	0.0/0.0	1.4	0.0	0.0	2.0	0.0	45.5
1J	0.0/0.0	1.4	0.0	0.0	3.8	0.0	48.3

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 ERIP Density per Carrier (dBW/4kHz)
1A	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

1A	14000 14500	T	Horizontal and Vertical	1M00G7D	49.0	25.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

1B	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1B	14000 14500	T	Horizontal and Vertical	800KG7D	46.3	23.3
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1C	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1C	14000 14500	T	Horizontal and Vertical	800KG7D	46.4	23.4

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

1D	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

1D	14000 14500	T	Horizontal and Vertical	800KG7D	46.0	23.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

1F	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1F	14000 14500	T	Horizontal and Vertical	800KG7D	49.3	26.3
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1G	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1G	14000 14500	T	Horizontal and Vertical	800KG7D	49.4	26.4

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1H	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1H	14000 14500	T	Horizontal and Vertical	800KG7D	49.0	26.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1E	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1E	14000 14500	T	Horizontal and Vertical	400KG7D	45.5	25.5
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1J	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
1J	14000 14500	T	Horizontal and Vertical	400KG7D	48.3	28.3

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/Western Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
1A	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-6.4
1B	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-8.5
1C	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-8.5
1D	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-8.5
1F	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
1G	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
1H	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5

1E	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-8.5
1J	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-2.7

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.		E66. Phone Number 1-888-272-7232	
E62. Street Address 6155 El Camino Real			
E63. City Carlsbad	E68. County San Diego	E67/68. State/Country CA/ USA	E64. Zip Code 92009

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: Remote 2
E2: Contact Name ViaSat NOC
E3. Street:
E4. State
E10. Area of Operation:
E11. Latitude: 0 °0 '0.0 "
E12. Longitude: 0 °0 '0.0 "
E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A
E14. Site Elevation (AMSL): 0.0 meters

E5. Call Sign: E010274
E6. Phone Number: 1-888-272-7232
E7. City:
E8. County:
E9. Zip Code
CONUS, AK, HI, U.S. Virgin IS

E15. 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 as a technical analysis showing compliance with two-degree spacing policy.

Yes No N/A

E16. 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(a2) and (b) as demonstrated by the manufacturer's qualification measurements?

Yes No N/A

E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	<input checked="" type="radio"/> Yes <input type="radio"/> No
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E18. Is frequency coordination required? If YES, attach a frequency coordination report as	<input type="radio"/> Yes <input checked="" type="radio"/> No
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E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	<input type="radio"/> Yes <input checked="" type="radio"/> No
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E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA’s study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	<input type="radio"/> Yes <input checked="" type="radio"/> No
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POINTS OF COMMUNICATION

Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:	
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
E26. Common Name:	E27. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size<meters>	E41/42. Antenna Gain Transmint and/or Recieve (____ dBi at ____ GHz)
Remote 2	2A	2000	Prodelin	Series	1.8	45.0 dBi at 11.85
						46.5 dBi at 14.25
	2B		Channel Master	Type 183		45.3 dBi at 11.95
						46.8 dBi at 14.25
	2C		Patriot	TXINT-180KU		45.3 dBi at 11.725
						47.0 dBi at 14.125
	2D		Prodelin	1184-500		45.0 dBi at 11.85
						46.5 dBi at 14.25
	2F		Channel Master	Type 183		46.8 dBi at 14.25
						45.3 dBi at 11.725
	2G		Patriot	TXINT-180KU		45.3 dBi at 11.725

						47.0 dBi at 14.125
	2H		Prodelin	1184-500		45.0 dBi at 11.95
						46.5 dBi at 14.25

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 al carriers(dBW)
2A	0.0/0.0	2.0	0.0	0.0	4.0	0.0	52.5
2B	0.0/0.0	2.0	0.0	0.0	2.0	0.0	49.8
2C	0.0/0.0	2.0	0.0	0.0	2.0	0.0	50.0
2D	0.0/0.0	2.0	0.0	0.0	2.0	0.0	49.5
2F	0.0/0.0	2.0	0.0	0.0	4.0	0.0	52.8
2G	0.0/0.0	2.0	0.0	0.0	4.0	0.0	53.0
2H	0.0/0.0	2.0	0.0	0.0	4.0	0.0	52.5

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)
2A	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2A	14000 14500	T	Horizontal and Vertical	1M00G7D	52.5	28.5
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2B	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2B	14000 14500	T	Horizontal and Vertical	800KG7D	49.8	26.8

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2C	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2C	14000 14500	T	Horizontal and Vertical	800KG7D	50.0	27.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2D	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2D	14000 14500	T	Horizontal and Vertical	800KG7D	49.5	26.5
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2F	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2F	14000 14500	T	Horizontal and Vertical	800KG7D	52.8	29.8

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2G	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2G	14000 14500	T	Horizontal and Vertical	800KG7D	53.0	30.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
2H	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

2H	14000 14500	T	Horizontal and Vertical	800KG7D	52.5	29.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
2A	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-6.4
2B	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-8.5

2C	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-8.5
2D	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-8.5
2F	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
2G	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
2H	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5

REMOTE CONTROL POINT LOCATION

<p>E61. Call Sign</p> <p>NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.</p>		<p>E66. Phone Number</p> <p>1-888-272-7232</p>	
<p>E62. Street Address</p> <p>6155 El Camino Real</p>			
<p>E63. City</p> <p>Carlsbad</p>	<p>E68. County</p> <p>San Diego</p>	<p>E67/68. State/Country</p> <p>CA/ USA</p>	<p>E64. Zip Code</p> <p>92009</p>

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:	Remote 3	E5. Call Sign:	E010274
E2: Contact Name	ViaSat NOC	E6. Phone Number:	1-888-272-7232
E3. Street:		E7. City:	
E4. State		E8. County:	
E10. Area of Operation:		E9. Zip Code	
E11. Latitude:	0 °0 '0.0 "	CONUS, AK, HI, U.S. Virgin IS	
E12. Longitude:	0 °0 '0.0 "		
E13. Lat/Lon Coordinates are:	<input checked="" type="radio"/> NAD-27	<input type="radio"/> NAD-83	<input type="radio"/> N/A
E14. Site Elevation (AMSL):	0.0 meters		

E15. 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 as a technical analysis showing compliance with two-degree spacing policy.	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
E16. 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(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A

E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	<input checked="" type="radio"/> Yes <input type="radio"/> No
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E18. Is frequency coordination required? If YES, attach a frequency coordination report as	<input type="radio"/> Yes <input checked="" type="radio"/> No
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E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	<input type="radio"/> Yes <input checked="" type="radio"/> No
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E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA’s study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	<input type="radio"/> Yes <input checked="" type="radio"/> No
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POINTS OF COMMUNICATION

Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:	
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
E26. Common Name:	E27. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size<meters>	E41/42. Antenna Gain Transmint and/or Recieve (____ dBi at ____ GHz)
Remote 3	3A	1000	Prodelin	Series	2.4	47.6 dBi at 11.95
						49.2 dBi at 14.25
	3B		Channel Master	Type 243		47.6 dBi at 11.95
						49.3 dBi at 14.25
	3C		Patriot	TXINT-240KU		47.3 dBi at 11.85
						48.7 dBi at 14.125
	3D		Prodelin	1244-930		47.6 dBi at 11.85
						49.2 dBi at 14.25
	3E	0	Sea Tel	9997		47.4 dBi at 12.2
						48.9 dBi at 14.25

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)
3A	0.0/0.0	2.6	0.0	0.0	4.0	0.0	55.2
3B	0.0/0.0	2.6	0.0	0.0	4.0	0.0	55.3
3C	0.0/0.0	2.6	0.0	0.0	4.0	0.0	54.7
3D	0.0/0.0	2.6	0.0	0.0	4.0	0.0	55.2
3E	0.0/0.0	2.6	0.0	0.0	4.0	0.0	54.9

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)
3A	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3A	14000 14500	T	Horizontal and Vertical	1M00G7D	55.2	31.2
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3B	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3B	14000 14500	T	Horizontal and Vertical	800KG7D	55.3	32.3
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3C	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3C	14000 14500	T	Horizontal and Vertical	800KG7D	54.7	31.7
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3D	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3D	14000 14500	T	Horizontal and Vertical	800KG7D	55.2	32.2
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3E	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

3E	14000 14500	T	Horizontal and Vertical	800KG7D	54.9	31.9
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/Western Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
3A	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-6.4
3B	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
3C	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
3D	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
3E	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.		E66. Phone Number 1-888-272-7232	
E62. Street Address 6155 El Camino Real			
E63. City Carlsbad		E68. County San Diego	
		E67/68. State/Country CA/ USA	
		E64. Zip Code 92009	

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: Remote 4
 E2: Contact Name ViaSat NOC
 E3. Street:
 E4. State
 E10. Area of Operation:
 E11. Latitude: 0 °0 '0.0 "
 E12. Longitude: 0 °0 '0.0 "
 E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A
 E14. Site Elevation (AMSL): 0.0 meters

E5. Call Sign: E010274
 E6. Phone Number: 1-888-272-7232
 E7. City:
 E8. County:
 E9. Zip Code
 CONUS, AK, HI, U.S. Virgin IS

E15. 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 as a technical analysis showing compliance with two-degree spacing policy.

Yes No N/A

E16. 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(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	<input checked="" type="radio"/> Yes <input type="radio"/> No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as Loral Ltr	<input type="radio"/> Yes <input checked="" type="radio"/> No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	<input type="radio"/> Yes <input checked="" type="radio"/> No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	<input type="radio"/> Yes <input checked="" type="radio"/> No

POINTS OF COMMUNICATION

Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:	
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
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E26. Common Name:	E27. Country:
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ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size<meters>	E41/42. Antenna Gain Transmint and/or Recieve (____ dBi at ____ GHz)
Remote 4	4A	2000	Channel Master	Type 960	0.96	39.7 dBi at 11.95
						41.2 dBi at 14.25
	4B		Patriot	TXINT-100KU	1.0	40.6 dBi at 11.95
						42.4 dBi at 14.25
	4C		Prodelin	1981	0.98	40.6 dBi at 11.95
						41.3 dBi at 14.125
	4D	100	Sea Tel	4003	1.0	39.0 dBi at 12.5
						40.0 dBi at 14.0

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 al carriers(dBW)

4A	0.0/0.0	1.2	0.0	0.0	2.0	0.0	44.2
4B	0.0/0.0	1.2	0.0	0.0	2.0	0.0	45.4
4C	0.0/0.0	1.2	0.0	0.0	2.0	0.0	44.3
4D	0.0/0.0	1.2	0.0	0.0	3.8	0.0	45.8

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)
4A	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

4A	14000 14500	T	Horizontal and Vertical	400KG7D	44.2	24.2
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

4B	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
4B	14000 14500	T	Horizontal and Vertical	400KG7D	45.4	25.4
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
4C	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						

4C	14000 14500	T	Horizontal and Vertical	400KG7D	44.3	24.3
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
4D	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						
4D	14000 14500	T	Horizontal and Vertical	400KG7D	45.8	25.8
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
QPSK, Data						

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/Western Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
4A	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
4B	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
4C	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-5.5
4D	Geostationary	14000 14500	60.0/143.0	0.0	5.0	0.0	5.0	-2.7

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.		E66. Phone Number 1-888-272-7232	
E62. Street Address 6155 El Camino Real			
E63. City Carlsbad		E68. County San Diego	
		E67/68. State/Country CA/ USA	E64. Zip Code 92009

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:	CBD HUB-2	E5. Call Sign:	E010274
E2. Contact Name	ViaSat NOC	E6. Phone Number:	1-888-272-7232
E3. Street:	6155 El Camino Real	E7. City:	Carlsbad
		E8. County:	San Diego
E4. State	CA	E9. Zip Code	92009
E10. Area of Operation:			Fixed
E11. Latitude:	33 °7 '35.0 "N		
E12. Longitude:	117 °16 '0.0 "W		
E13. Lat/Lon Coordinates are:	<input type="radio"/> NAD-27	<input checked="" type="radio"/> NAD-83	<input type="radio"/> N/A
E14. Site Elevation (AMSL):	76.0 meters		

E15. 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 as a technical analysis showing compliance with two-degree spacing policy.

Yes No N/A

E16. 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(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	<input checked="" type="radio"/> Yes <input type="radio"/> No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	<input type="radio"/> Yes <input checked="" type="radio"/> No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	<input type="radio"/> Yes <input checked="" type="radio"/> No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	<input type="radio"/> Yes <input checked="" type="radio"/> No

POINTS OF COMMUNICATION

Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:	
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
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E26. Common Name:	E27. Country:
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ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size<meters>	E41/42. Antenna Gain Transmint and/or Recieve (____ dBi at _____ GHz)
CBD HUB-2	CBD-A	1	ViaSat	8345	4.5	53.2 dBi at 11.95
						54.7 dBi at 14.25

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 al carriers(dBW)
CBD-A	0.0/0.0	7.0	85.0	0.0	200.0	0.0	77.62

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)
CBD-A	11700 12200	R	Horizontal and Vertical	1M00G7D	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

CBD-A	11700 12200	R	Horizontal and Vertical	24M0G7D	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

CBD-A	14000 14500	T	Horizontal and Vertical	24M0G7D	77.62	39.84
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, Data

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/Western Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
CBD-A	Geostationary	14000 14500	44.0/190.5	99.0	5.3	260.5	5.3	-3.9

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.		E66. Phone Number	
E62. Street Address			
E63. City	E68. County	E67/68. State/Country /	E64. Zip Code

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