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Callsign/Satellite ID:

# APPLICATION FOR EARTH STATION AUTHORIZATIONS 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: Satellite Carrier Monitoring System Application

1_8	Legal Na	ame of	Anı	nlicant
11-0.	Legai IN	mic or	AVI	uncam

Name: SkyTerra Subsidiary LLC Phone Number: 703–390–2001

**DBA Fax Number:** 703–390–2770

Name:

Street: 10802 Parkridge Blvd E–Mail: jeff.carlisle@skyterra.com

City: Reston State: VA

Country: USA Zipcode: 20191 -

**Attention:** Mr Jeffrey J. Carlisle

9–16. Name of Contact Representative

Name: Bruce D. Jacobs **Phone Number:** 202–663–8077

**Company:** Pillsbury Winthrop Shaw Pittman **Fax Number:** 202–663–8007

LLP

Street: 2300 N Street NW E-Mail: bruce.jacobs@pillsburylaw.com

City: Washington State: DC

Country: USA Zipcode: 20037–

Attention: Relationship: Legal Counsel

## **CLASSIFICATION OF FILING**

17. Choose the button next to the	b.
classification that applies to this filing for	b1. Application for License of New Station
both questions a. and b. Choose only one	b2. Application for Registration of New Domestic Receive–Only Station
for 17a and only one for 17b.	(N/A) b3. Amendment to a Pending Application
	(N/A) b4. Modification of License or Registration
a.  a1. Earth Station	(N/A) b5. Assignment of License or Registration
<del>-</del>	(N/A) b6. Transfer of Control of License or Registration
(N/A) a2. Space Station	(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
	o b10. Other (Please specify)
	b11. Application for Earth Station to Access a Non−U.S.satellite Not Currently Authorized to
	Provide the Proposed Service in the Proposed Frequencies in the United States.
	o b12. Application for Database Entry
	(N/A) b13. Amendment to a Pending Database Entry Application
	(N/A) b14. Modifiction of Database Entry
17c. Is a fee submitted with this application	on?
If Yes, complete and attach FCC Form	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
Governmental Entity Noncomme	ercial educational licensee
Other(please explain):	
17d.	
Fee Classification BGB – Mobile Satellite	Earth Stations Blanket
Authorization	

18. If this filing is in reference to an	19. If this filing is an amendment to a pending a	pplication enter:
existing station, enter:  (a) Call sign of station:	(a) Date pending application was filed:	(b) File number of pending application:
Not Applicable	Not Applicable	Not Applicable

## ENVIRONMENTAL POLICY

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.	Exhibit B
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	utical en route or
29. Is the applicant a foreign government or the representative of any foreign government?	O Yes O No
30. Is the applicant an alien or the representative of an alien?	O Yes O No O N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes O No O 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?	O Yes O No O 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?	O Yes O No	o o 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.	O 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 explination of circumstances.	<b>O</b> Yes	<b>⊚</b> 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 explination of circumstances.	O Yes	<b>⊚</b> 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	O Yes	<b>⊚</b> 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 exhinit, an explanation of the circumstances.	O Yes	<b>⊘</b> 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	O 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, coordinated or is in the process of coordinating the space station?	what administr	ration has
43. Description. (Summarize the nature of the application and the services to be provided). (If the not appear in this box, please go to the end of the form to view it in its entirety.)	complete desc	ription does
Applicant seeks authority to operate four technically identical earth stati locations, as part of its satellite carrier monitoring system.	ons at fix	ced
Exhibit C		

43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.	O A
By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.	<b>●</b> B
By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.	<b>o</b> c

#### **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.

O Individual				
<ul> <li>Unincorporated Association</li> </ul>				
Partnership				
Corporation				
Governmental Entity				
Other (please specify)				
Limited Liability Corporation				
45. Name of Person Signing Jeffrey J. Carlisle		46. Title of Person Sig Vice President, Regula		
47. Please supply any need attachmen				
			Attachment 3:	
Attachment 1: Exhibit A	Attachment 2:		Attachment 5:	
	Attachment 2:		Attachment 3:	

Location of Earth Station Site

E1: Site Identifier: SCMS 1 E5. Call Sign:

E2: Contact Name Dick Evans E6. Phone 7033902711

Number:

E3. Street: 21091 FM 507 E7. City: Harlingen

E8. County: Cameron

E4. State TX E9. Zip Code 78550

E10. Area of Operation: N/A

E11. Latitude: 26 ° 15 '11.0 "N

E12. Longitude: 97 °39 '39.0 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 10.0 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.	O Yes	O 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?	<b>O</b> Yes	O No	<b>⊚</b> N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	● Yes	٥	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Yes	•	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.	O Yes	•	No
POINTS OF COMMUNICATION	1		
Satellite Name:OTHER   OTHER   If you selected OTHER, please enter the following:			

E21. Common Na	nme: MSAT-2		I	E22. IT	U Name: MSAT-2				
E23. Orbit Location	on: 101.3W.L.		I	E24. Co	untry: USA				
			•						
Satellite Name	:SKYTERRA 1   SKY	TERRA 1   101.3 W	.L. If you s	you selected OTHER, please enter the following:					
E21. Common Na	nme:		I	E22. IT	U Name:				
E23. Orbit Location:					untry:				
Satallita Nama	::OTHER   OTHER	If you selected OT	HED places	enter the	a following:				
	· · ·	II you selected OTI			U Name: MSAT-1				
E21. Common Name: MSAT-1					untry: Canada				
	E23. Orbit Location: 106.5W.L.								
POINTS OF O	COMMUNICATION	(Destination Point	ts)						
E25. Site Identifie	er: SCMS 1								
E26. Common Na	nme:		I	E27. Co	untry:Canada				
POINTS OF C	OMMUNICATION (	Destination Points	s)						
E25. Site Identifie	er: SCMS 1								
E26. Common Na	ame:		I	E27. Country: Canada					
POINTS OF C	OMMUNICATION (	Destination Points	s)						
E25. Site Identifie	er: SCMS 1								
E26. Common Na	ame:		I	E27. Country: Canada					
ANTENNA									
Site ID	E28. Antenna Id	E29. Quantity	E30. Manufactu	ırer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz)		

SCMS 1	M2	1	Westinghouse	AU-10FS	0.76	19.6 dBi at 1.5
						20.2 dBi at 1.6

Id	Diameter	E35. Above Ground Level  (meters)	(meters)	Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
M2	0.76/0.76	4.0	14.0	3.0	0.43	1.0	16.5

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			EIRP per Carrier	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
M2	1626.5 1660.5	Т	Right Hand Circular	NON	16.5	-19.5

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.)

M2	1525	1559	R	Right Hand	5K00G9W	0.0	0.0
				Circular			

4800 bps QPSK data carrier

M2	1626.5	Т	Right Hand	5K00G9W	16.5	-19.5
	1660.5		Circular			

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.)

4800 bps QPSK data carrier

## FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
M2	Geostationary	1525 1559	101.3/ 107.3	188.2	59.1	201.0	57.5	0.0
	Geostationary	1626.5 1660.5	101.3/ 107.3	188.2	59.1	201.0	57.5	-39.5

E61. Call Sign		E65. Phone Number		
NOTE: Please enter the callsign of the controcallsign for which this application is being filed.				
E62. Street Address				
E63. City	E67. County		E64/68. State/Country	E66. Zip Code
			/	

Location of Earth Station Site

E1: Site Identifier: SCMS 2 E5. Call Sign:

E2: Contact Name Dick Evans E6. Phone 7033902711

Number:

E3. Street: 3877 University E7. City: Anchorage

Drive

E8. County: Anchorage

Borough

E4. State AK E9. Zip Code 99508

E10. Area of Operation: N/A

E11. Latitude: 61 °11 '26.0 "N

E12. Longitude: 149 °48 '30.0 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 60.0 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.	O Yes	o 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?	O Yes	o No	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	<b>⊚</b> Yes	s <b>o</b>	No
T10 I. f			
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	s 💿	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Yes	s 🔞	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.	O Yes	s 🔞	No
POINTS OF COMMUNICATION			
Satellite Name:OTHER   OTHER   If you selected OTHER, please enter the following:			

E21. Common Nam	ne: MSAT-1			E22. ITU	Name: MSAT-1			
E23. Orbit Location	n: 106.5W.L.			E24. Cou	ntry: Canada			
Satellite Name:C	OTHER   OTHER	If you selected OTH	HER, please	enter the	following:			
E21. Common Nam	ne: MSAT-2			E22. ITU	Name: MSAT-2			
E23. Orbit Location: 101.3W.L.				E24. Cou	ntry: USA			
Satellite Name:SKYTERRA 1   SKYTERRA 1   101.3 W.L. If you selected OTHER, please enter the following:								
E21. Common Name:				E22. ITU	Name:			
E23. Orbit Location	E23. Orbit Location:				ntry:			
POINTS OF CO	OMMUNICATION	(Destination Points	s)	•				
E25. Site Identifier:	SCMS 2							
E26. Common Nam	ne:			E27. Cou	ntry:Canada			
POINTS OF CO	MMUNICATION (	Destination Points)	)	l				
E25. Site Identifier:	SCMS 2							
E26. Common Nam	ne:			E27. Country: Canada				
POINTS OF CO	MMUNICATION (	Destination Points)	)	<u> </u>				
E25. Site Identifier:	SCMS 2							
E26. Common Nam	ne:			E27. Country: Canada				
ANTENNA				!				
Site ID	E28. Antenna Id	E29. Quantity	E30. Manufac	turer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz)	

SCMS 2	M2	1	Westinghouse	AU-10FS	0.76	19.6 dBi at 1.5
						20.2 dBi at 1.6

Id	Diameter	E35. Above Ground Level  (meters)	(meters)	Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
M2	0.76/0.76	20.0	80.0	0.0	0.43	0.0	16.5

	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization(H,V, L,R)		EIRP per Carrier	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
M2	1626.5 1660.5	Т	Right Hand Circular	NON	16.5	-19.5

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.)

M2	1525	1559	R	Right Hand	5K00G9W	0.0	0.0
				Circular			

4800 bps QPSK data carrier

M2	1626.5	Т	Right Hand	5K00G9W	16.5	-19.5
	1660.5		Circular			

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.)

4800 bps QPSK data 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 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)
M2	Geostationary	1525 1559	101.3/ 107.3	127.8	10.1	133.7	12.3	0.0
	Geostationary	1626.5 1660.5	101.3/ 107.3	127.8	10.1	133.7	12.3	-23.5

E61. Call Sign		E65. Phone Number			
NOTE: Please enter the callsign of the contro callsign for which this application is being filed.					
E62. Street Address					
E63. City	E67. County		E64/68. State/Country	E66. Zip Code	

Location of Earth Station Site

E1: Site Identifier: SCMS 3 E5. Call Sign:

E2: Contact Name Dick Evans E6. Phone 7033902711

Number:

E3. Street: 7246 Humboldt E7. City: Eureka

Hill Road

E8. County: Humboldt

E4. State CA E9. Zip Code 95503

E10. Area of Operation: N/A

E11. Latitude: 40 °42 '59.0 "N

E12. Longitude: 124 °12 '13.0 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 145.0 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.	O Yo	es	O 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?	O Yo	es	O No	•	N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	Ø ,	/es	С	, No	
	•				
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	o ,	les .	•	No	
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	٥,	l'es	•	, 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.		l'es	•	, No	
POINTS OF COMMUNICATION					
Satellite Name: SKYTERRA 1   SKYTERRA 1   101.3 W.L. If you selected OTHER, please enter the following	o:				

E21. Common Nan	ne:		]	E22. ITU	J Name:				
E23. Orbit Location	n:		]	E24. Co	untry:				
Satellite Name:	OTHER   OTHER	If you selected OTH	HER, please	enter the	following:				
E21. Common Nan	ne: MSAT-1		]	E22. ITU	J Name: MSAT-1				
E23. Orbit Location	n: 106.5W.L.		]	E24. Country: Canada					
Satellite Name:	OTHER   OTHER	If you selected OTH	HER, please	lease enter the following:					
E21. Common Nan	me: MSAT-2		]	E22. ITU Name: MSAT-2					
E23. Orbit Location	n: 101.3W.L.		]	E24. Country: USA					
POINTS OF C	OMMUNICATION	(Destination Points	s)						
E25. Site Identifier	: SCMS 3								
E26. Common Nan	ne:		]	E27. Co	untry:Canada				
POINTS OF CO	OMMUNICATION (	Destination Points)	)						
E25. Site Identifier	: SCMS 3								
E26. Common Nan	ne:		]	E27. Country:Canada					
POINTS OF CO	OMMUNICATION (	Destination Points)	)						
E25. Site Identifier	: SCMS 3								
E26. Common Nan	ne:		]	E27. Country: Canada					
ANTENNA									
Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacti	urer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz)		

SCMS 3	M2	1	Westinghouse	AU-10FS	0.76	19.6 dBi at 1.5
						20.2 dBi at 1.6

Id	Diameter		(meters)	Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
M2	0.76/0.76	1.5	146.5	0.0	0.43	0.0	16.5

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		Designator	EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
M2	1626.5 1660.5	Т	Right Hand Circular	N0N	16.5	-19.5

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.)

M2	1525	1559	R	Right Hand	5K00G9W	0.0	0.0
				Circular			

4800 bps QPSK data carrier

M2	1626.5	Т	Right Hand	5K00G9W	16.5	-19.5
	1660.5		Circular			

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.)

4800 bps QPSK data carrier

## FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	Station Azimuth Angle	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)
M2	Geostationary	1525 1559	101.3/ 107.3	147.1	37.4	155.0	39.8	0.0
	Geostationary	1626.5 1660.5	101.3/ 107.3	147.1	37.4	155.0	39.8	-39.5

E61. Call Sign	E65. Phone Number			
NOTE: Please enter the callsign of the contro callsign for which this application is being filed.				
E62. Street Address				
E63. City	E67. County		E64/68. State/Country	E66. Zip Code

Location of Earth Station Site

E1: Site Identifier: SCMS 4 E5. Call Sign:

E2: Contact Name Dick Evans E6. Phone 7033902711

Number:

E3. Street: 10802 Parkridge E7. City: Reston

Boulevard

E8. County: Fairfax

E4. State VA E9. Zip Code 20191

E10. Area of Operation: N/A

E11. Latitude: 38 °56 '42.0 "N

E12. Longitude: 77 ° 19 '9.0 "W

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 100.0 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.	<b>O</b> Yes	O No	<b>⊚</b> 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?	<b>O</b> Yes	O No	<b>⊗</b> N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	Yes	٥	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Yes	•	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.	O Yes	•	No
POINTS OF COMMUNICATION	•		
Satellite Name:OTHER   OTHER   If you selected OTHER, please enter the following:			

E21. Common Nam	ne: MSAT-1			E22. ITU Name: MSAT-1					
E23. Orbit Location	n: 106.5W.L.			E24. Cou	ıntry: Canada				
				•					
Satellite Name:S	SKYTERRA 1   SKY	TERRA 1   101.3 W.	selected OTHER, please enter the following:						
E21. Common Name:					Name:				
E23. Orbit Location	1:			E24. Cou	intry:				
Satellite Name:	OTHER   OTHER	If you selected OTH	HER, please						
E21. Common Nam	ne: MSAT-2			E22. ITU	Name: MSAT-2				
E23. Orbit Location	n: 101.3W.L.			E24. Cou	intry: USA				
POINTS OF CO	POINTS OF COMMUNICATION (Destination Points)								
E25. Site Identifier:	SCMS 4								
E26. Common Nam	ne:			E27. Country: Canada					
POINTS OF CO	MMUNICATION (	(Destination Points)	)						
E25. Site Identifier:	SCMS 4								
E26. Common Nam	ne:			E27. Country: Canada					
POINTS OF CO	MMUNICATION (	(Destination Points)	)	l					
E25. Site Identifier:	SCMS 4								
E26. Common Nam	ne:			E27. Country: Canada					
ANTENNA									
Site ID	E28. Antenna Id	E29. Quantity	E30. Manufac	turer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi atGHz)		

SCMS 4	M2	1	Westinghouse	AU-10FS	0.76	19.6 dBi at 1.5
						20.2 dBi at 1.6

Id	Diameter	E35. Above Ground Level  (meters)	E36. Above Sea Level  (meters)		Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
M2	0.76/0.76	7.5	107.5	6.0	0.43	1.5	16.5

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			EIRP per Carrier	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
M2	1626.5 1660.5	Т	Right Hand Circular	NON	16.5	-19.5

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.)

N	M2	1525	1559	R	Right Hand Circular	0.0	0.0
					Circulai		

4800 bps QPSK data carrier

M2	1626.5	lT	Right Hand	5K00G9W	16.5	l=19.5
			l a: 0 1			
	1660.5		Circular			

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.)

4800 bps QPSK data carrier

## FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	Station Azimuth Angle	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)
M2	Geostationary	1525 1559	101.3/ 107.3	215.3	38.5	222.6	35.3	0.0
	Geostationary	1626.5 1660.5	101.3/ 107.3	215.3	38.5	222.6	35.3	-39.5

E61. Call Sign	E65. Phone Number			
NOTE: Please enter the callsign of the contro callsign for which this application is being filed.				
E62. Street Address				
E63. City	E67. County		E64/68. State/Country	E66. Zip Code

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