Date & Time Filed: May 25 2017 9:41:56:126AM File Number: SES-MOD-INTR2017-01404

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: Modification to VSAT license E060147 To Add New Remotes

gal Name of Ap	pplicant		
Name:	NEXTEL COMMUNICATIONS OF THE MID-ATLANTIC INC	Phone Number:	800-572-8256
DBA Name:		Fax Number:	703–433–4483
Street:	12502 Sunrise Valley Drive	E-Mail:	fcclicensing@sprint.com
	M/S		
City:	RESTON	State:	VA
Country:	USA	Zipcode:	20196 –
Attention:	Spectrum Licensing Team		

9–16. Name of Contact Representative

Name: Government Affairs Phone Number: 800–572–8256

Company: Sprint Corporation **Fax Number:** 703–433–4483

Street: 12502 Sunrise Valley Drive E–Mail: fcclicensing@sprint.com

M/S

City: Reston State: VA

Country: USA Zipcode: 20196–

Attention: Robert Cosgrove **Relationship:** Same

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

b3. Amendment to a Pending Application

b4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

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)

(N/A) 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

(N/A) b12. Application for Database Entry

b13. Amendment to a Pending Database Entry Application

b14. Modification of Database Entry

17c. Is a fee submitted with this application.	on? 159. If No, indicate reason for fee exemption (see 47 C FR Section 1 1114)
Governmental Entity Noncomme		Sec 47 C.I.R.Section 1.1114).
Other(please explain):		
17d.		
Fee Classification CGV – Fixed Satellite V	/SAT System	
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending modification please enter only the file number:	
(a) Call sign of station:	(a) Date pending application was filed:	(b) File number:
E060147		SESMOD2013090600787

TYPE OF SERVICE

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

TYPE OF STATION

25. CLASS OF STATION: Choose the button	next to the class of sta	tion that applies. Choose only	one.	
a. Fixed Earth Station				
o b. Temporary–Fixed Earth Station				
o. 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/Δ		
Transmit/Receive Transmit-Only "For Space Station applications, select N/A."	O Receive—Only	O 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 & Double
j — authorization to change Points of Communication (satellites & tountries)
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
1 — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o — Other (Please specify)

ENVIRONMENTAL POLICY

under the laws of a foreign country?

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.	_		•			
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.	autic	al er	ı roı	ıte o	r	
29. Is the applicant a foreign government or the representative of any foreign government?	٥	Yes	•	, No)	
30. Is the applicant an alien or the representative of an alien?	0	Yes	•	. No	0	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	•	, 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	0	Yes	•	. No	· o	N/A

O Yes No

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental

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.	Ownership Statement
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 explination 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 explination 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 exhinit, 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	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.	O Yes	⊚ No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, we coordinated or is in the process of coordinating the space station?	hat administr	ation has

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.)

Nextel Communications of the Mid-Atlantic, Inc. seeks to modify its domestic VSAT network to add new remotes and Fly Away Kits to its authorization to facilitate the use of satellite backhaul in mostly rural areas throughout the U.S. as means to increase coverage

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.	● 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.	O 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.	o 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.

44. Applicant is a (an): (Choose the button next to	applicable response.)	
o Individual		
 Unincorporated Association 		
Partnership		
Corporation		
Governmental Entity		
Other (please specify)		
45. Name of Person Signing	46. Title of Person Signing	
Robert Cosgrove	Manager, Regulatory Affairs	
>	<u> </u>	

(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

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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: Livermore E5. Call Sign: E060147

E2: Contact Name Robert Cosgrove E6. Phone 703–433–3951

Number:

E3. Street: 8851 Manning E7. City: Livermore

Road

E8. County: Contra Costa

E4. State CA E9. Zip Code 94551

E10. Area of Operation: CONUS, Alaska, Hawaii, Puerto Rico, US Virgin Islands, American Samoa, Guam

& Mariana Islands

E11. Latitude: 37 °45 '39.7 "N

E12. Longitude: 121 °47 '56.8 "W

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

E14. Site Elevation (AMSL): 236.2 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	O No	O 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.	O Ye	s 🔞	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Ye	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 Ye	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 Ye	s 💿	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:

Satellite Name: PERMITTED LIST If you selected OTHER, plea	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: Livermore	
E26. Common Name:	E27. Country: USA

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)	
Livermore	Hub	2	Andrew Corporation	ESA49	4.9	53.4 dBi at 11.950	
Livermore	Hub	2	Andrew Corporation	ESA49	4.9	55.0 dBi at 14.250	

E28. Id	Diameter		` ′	Height Above	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Hub	0.0/0.0	5.7	241.9	0.0	80.0	0.0	74.0

Hub	(0.0/0.0	5.7		241.9		0.0		80.0		0.0	74.0	
FRE	EQUENCY		_!		Ţ								
E28.	. Antenna Id	E43/44. Frequency E (MHz)	Bands	E45. T/R Mo	ode	E46. Ante Polarizati L,R)		E47. En			Maximum P per Carrier W)	E49. Maximu ERIP Densit Carrier (dBW/4kHz)	y per
Hub		11700.0 12200.0		R		Linear and	d Circular	10K3G	7W	0.0		0.0	
	E50. Modulation rety.)	n and Services	(If th	ne complete d	lescripti	on does not	t appear in	this box	, please go	to the	end of the form	to view it in it	<u> </u>
				Digital V		,							
Hub		11700.0		R			d Circular	54M0G	7W	0.0		0.0	
Е		11700.0 12200.0		R		Linear and	d Circular				end of the form	0.0 to view it in its	S
entir	E50. Modulation	11700.0 12200.0	(If th	R ne complete d	lescripti	Linear and on does not	d Circular t appear in	this box			end of the form		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.)

Modulation and Services Digital Voice, Fax, and Data

					1	
Hub	14000.0	Т	Linear and Circular	54M0G7W	74 0	32.7
1140		*	Emear and emealar	5 1110 67 11	/ 7.0	32.7
	14500.0					
	1 1500.0					

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.)

Modulation and Services Digital Voice, Fax, and 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	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)
Hub	Geostationary	11700.0 12200.0	60.0/143.0	108.2	13.5	212.3	40.9	0.0
	Geostationary	14000.0 14500.0	60.0/143.0	108.2	13.5	212.3	40.9	-4.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign		E66. Phone Number		
NOTE: Please enter the callsign of the control callsign for which this application is being filed.				
E62. Street Address		•		
E63. City	E68. County		E67/68. State/Country	E64. Zip Code

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 1 E5. Call Sign: E060147 E6. Phone E2: Contact Name Robert Cosgrove 703-433-3951 Number: E3. Street: E7. City: Locations throughout CONUS, Alaska Hawaii, PR, USVI, E8. County: AS, Guam & Mariana Isl E4. State E9. Zip Code E10. Area of Operation: CONUS, Alaska, Hawaii, Puerto Rico, US Virgin Islands, American Samoa, Guam & Mariana Islands E11. Latitude: 0 °0 '0.0 "N E12. Longitude: 0 °0 '0.0 "W E13. Lat/Lon Coordinates are: **⋒** NAD-83 NAD-27 N/A 0.0 meters E14. Site Elevation (AMSL):

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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Set Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	oposed antenna(s) comply with the antenna	O Yes	O No	⊚ N/A
E17. Is the facility operated by remote control? If YES, provide the loca point.	ation and telephone number of the control	O Yes	0	No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAZ the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		!		-
Satellite Name: PERMITTED LIST If you selected OTHER, ple	ease enter the following:			
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
POINTS OF COMMUNICATION (Destination Points)				
E25. Site Identifier: Remote 1				

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
Remote 1	Remote1	5	AVL Technologies	1.8MSNG	1.8	45.3 dBi at 11.950
Remote 1	Remote1	5	AVL Technologies	1.8MSNG	1.8	46.7 dBi at 14.250

E28. Antenna Id	Diameter		` ′	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Remote1	0.0/0.0	5.0	0.0	0.0	40.0	0.0	62.7
Remote1	0.0/0.0	5.0	0.0	0.0	40.0	0.0	62.7

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote1	11700.0 12200.0	R	Linear and Circular	1M34G7W	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.)

Modulation and Services Digital Voice, Fax, and Data

Remote1	14000.0	T	Linear and Circular	1M34G7W	57.9	32.7
	12200.0					

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.)

Modulation and Services Digital Voice, Fax, and Data

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type		E54/55. Range of Satellite Arc Eastern/West ern 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)
Remote1	Geostationary	11700.0 12200.0	60.0/143.0	0.0	50.0	0.0	5.0	0.0
	Geostationary	14000.0 14500.0	60.0/143.0	0.0	5.0	0.0	5.0	-0.35

REMOTE CONTROL POINT LOCATION

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

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 E5. Call Sign: E060147 E6. Phone E2: Contact Name Robert Cosgrove 703-433-3951 Number: E3. Street: E7. City: Locations throughout CONUS, Alaska Hawaii, PR, USVI, E8. County: AS, Guam & Mariana Isl E4. State E9. Zip Code E10. Area of Operation: CONUS, Alaska, Hawaii, Puerto Rico, US Virgin Islands, American Samoa, Guam & Mariana Islands E11. Latitude: 0 °0 '0.0 "N E12. Longitude: 0 °0 '0.0 "W E13. Lat/Lon Coordinates are: **⋒** NAD-83 NAD-27 N/A 0.0 meters E14. Site Elevation (AMSL):

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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Set Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	oposed antenna(s) comply with the antenna	O Yes	O No	● N/A
E17. Is the facility operated by remote control? If YES, provide the local point.	ation and telephone number of the control	o Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency co	ordination report as	o Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FA. the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION				
Satellite Name: PERMITTED LIST If you selected OTHER, ple	ease enter the following:			
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
POINTS OF COMMUNICATION (Destination Points)				
E25. Site Identifier: Remote 2				

E26. Common Name:	E27. Country: USA

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
Remote 2	Remote2	25	Vertex/RSI	1.8MSMK	1.8	44.7 dBi at 11.950
Remote 2	Remote2	25	Vertex/RSI	1.8MSMK	1.8	45.9 dBi at 14.250

E28. Antenna Id	1	E35. Above Ground Level (meters)	` ′	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Remote2	0.0/0.0	5.0	0.0	0.0	40.0	0.0	61.9
Remote2	0.0/0.0	5.0	0.0	0.0	40.0	0.0	61.9

FREQUENCY

	E43/44. Frequency Bands (MHz)				E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote2	11700.0 12200.0	R	Linear and Circular	1M34G7W	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.)

Modulation and Services Digital Voice, Fax, and Data

Remote2	14000.0	Т	Linear and Circular	1M34G7W	57.1	31.0
Kemotez		1	Linear and Circular	11V13407W	37.1	31.9
	14500.0					

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.)

Modulation and Services Digital Voice, Fax, and Data

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type		E54/55. Range of Satellite Arc Eastern/West ern 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)
Remote2	Geostationary	11700.0 12200.0	60.0/143.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000.0 14500.0	60.0/143.0	0.0	5.0	0.0	5.0	-0.35

REMOTE CONTROL POINT LOCATION

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

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: E060147 E6. Phone E2: Contact Name Robert Cosgrove 703-433-3951 Number: E3. Street: E7. City: Locations throughout CONUS, Alaska Hawaii, PR, USVI, E8. County: AS, Guam & Mariana Isl E4. State E9. Zip Code E10. Area of Operation: CONUS, Alaska, Hawaii, Puerto Rico, US Virgin Islands, American Samoa, Guam & Mariana Islands E11. Latitude: 0 °0 '0.0 "N E12. Longitude: 0 °0 '0.0 "W E13. Lat/Lon Coordinates are: **⋒** NAD-83 NAD-27 N/A 0.0 meters E14. Site Elevation (AMSL):

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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Set Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	O Yes	O No	⊚ N/A	
E17. Is the facility operated by remote control? If YES, provide the loca point.	• Yes	•	No	
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAZ the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	O Yes	•	No	
POINTS OF COMMUNICATION		!		-
Satellite Name: PERMITTED LIST If you selected OTHER, ple	ase enter the following:			
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
POINTS OF COMMUNICATION (Destination Points)	•			·
E25. Site Identifier: Remote 3				

E26. Common Name:	E27. Country: USA

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer		E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)	
Remote 3	Remote3	1000	Gilat	AT2191	1.2	43.0 dBi at 14.125	

Id	Diameter		,	Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Remote3	1.2/1.2	14.0	0.0	0.0	17.1	0.0	55.3

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote3	11700.0 12200.0	R	Linear and Circular	1M34G7W	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.)

Modulation and Services Digital Voice, Fax, and Data

Remote3	14000.0	Т	Linear and Circular	1M34G7W	55 3	30.03
Remotes	14500.0	1	Emeur una emeurar	11113 107 11	33.3	30.03
	1.500.0					

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.)

Modulation and Services Digital Voice, Fax, and 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	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit		E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Remote3	Geostationary	11700.0 12200.0	60.0/143.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000.0 14500.0	60.0/143.0	0.0	5.0	0.0	5.0	-0.35

REMOTE CONTROL POINT LOCATION

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

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 E5. Call Sign: E060147 E6. Phone E2: Contact Name Robert Cosgrove 703-433-3951 Number: E3. Street: E7. City: Locations throughout CONUS, Alaska Hawaii, PR, USVI, E8. County: AS, Guam & Mariana Isl E4. State E9. Zip Code E10. Area of Operation: CONUS, Alaska, Hawaii, Puerto Rico, US Virgin Islands, American Samoa, Guam & Mariana Islands E11. Latitude: 0 °0 '0.0 "N E12. Longitude: 0 °0 '0.0 "W E13. Lat/Lon Coordinates are: **⋒** NAD-83 NAD-27 N/A 0.0 meters E14. Site Elevation (AMSL):

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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Set Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	O Yes	O No	⊚ N/A	
E17. Is the facility operated by remote control? If YES, provide the loca point.	o Yes	•	No	
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAZ the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	O Yes	•	No	
POINTS OF COMMUNICATION		!		-
Satellite Name: PERMITTED LIST If you selected OTHER, ple	ase enter the following:			
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
POINTS OF COMMUNICATION (Destination Points)	•			·
E25. Site Identifier: Remote 4				

E26. Common Name:	E27. Country: USA

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
Remote 4	Remote4	4	General Dynamics	2.4M SF	2.4	47.19 dBi at 11.950
Remote 4	Remote4	4	General Dynamics	2.4M SF	2.4	49.0 dBi at 14.250

E28. Antenna Id			` ′	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Remote4	2.4/2.4	1.5	0.0	0.0	12.5	0.0	58.4
Remote4	2.4/2.4	1.5	0.0	0.0	12.5	0.0	58.4

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote4	11700.0 12200.0	R	Linear and Circular	1M34G7W	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.)

Modulation and Services Digital Voice, Fax, and Data

Remote4	14000.0	T	Linear and Circular	1M34G7W	0.0	0.0
	14500.0					

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.)

Modulation and Services Digital Voice, Fax, and 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)
Remote4	Geostationary	11700.0 12200.0	60.0/143.0	0.0	5.0	0.0	5.0	12.0
	Geostationary	14000.0 14500.0	60.0/143.0	0.0	5.0	0.0	5.0	-0.35

REMOTE CONTROL POINT LOCATION

E61. Call Sign	E66. Phone Number			
NOTE: Please enter the callsign of the control callsign for which this application is being filed.				
E62. Street Address		•		
E63. City	E68. County		E67/68. State/Country	E64. Zip Code

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

Location of Earth Station Site E5. Call Sign: E1: Site Identifier: Remote 5 E060147 E6. Phone E2: Contact Name Robert Cosgrove 703-433-3951 Number: E3. Street: E7. City: Locations throughout CONUS, Alaska Hawaii, PR, USVI, E8. County: AS, Guam & Mariana Isl E4. State E9. Zip Code E10. Area of Operation: CONUS, Alaska, Hawaii, Puerto Rico, US Virgin Islands, American Samoa, Guam & Mariana Islands E11. Latitude: 0 °0 '0.0 "N E12. Longitude: 0 °0 '0.0 "W E13. Lat/Lon Coordinates are: **⋒** NAD-83 NAD-27 N/A 0.0 meters E14. Site Elevation (AMSL):

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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Set Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	o Yes	O No	● N/A	
E17. Is the facility operated by remote control? If YES, provide the local point.	ation and telephone number of the control	O Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency co	ordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FA. the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		·		
Satellite Name: PERMITTED LIST If you selected OTHER, ple	ease enter the following:			
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
POINTS OF COMMUNICATION (Destination Points)	•			
E25. Site Identifier: Remote 5				

E26. Common Name:	E27. Country: USA
	1

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
Remote 5	Remote5	2	Vertex/RSI	1.5MSF–LT	1.5	44.1 dBi at 11.950
Remote 5	Remote5	2	Vertex/RSI	1.5MSF–LT	1.5	45.7 dBi at 14.250

E28. Antenna Id		E35. Above Ground Level (meters)	E36. Above Sea Level(meters)	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Remote5	1.5/1.5	1.0	0.0	0.0	15.1	0.0	57.5
Remote5	1.5/1.5	1.0	0.0	0.0	15.1	0.0	57.5

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote5	11700.0 12200.0	R	Linear and Circular	1M34G7W	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.)

Modulation and Services Digital Voice, Fax, and Data

Remote5	14000.0	Т	Linear and Circular	1M34G7W	57.5	32.2
	14500.0					

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.)

Modulation and Services Digital Voice, Fax, and 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	1 0	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)
Remote5	Geostationary	11700.0 12200.0	60.0/143.0	0.0	5.0	0.0	5.0	12.0
	Geostationary	14000.0 14500.0	60.0/143.0	0.0	5.0	0.0	5.0	12.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign	E66. Phone Number							
NOTE: Please enter the callsign of the contro callsign for which this application is being filed.								
E62. Street Address								
E63. City	E68. County		E67/68. State/Country	E64. Zip Code				

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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