Approved by OMB 3060–0678

Date & Time Filed: Oct 29 2010 1:56:39:426PM File Number: SES–LIC–INTR2010–03373 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:

Mt. Jackson VSAT

Name:	MCI Communications Services, Inc. (fka MCI WorldCom Communications, Inc.)	Phone Number:	972-355-4772
DBA Name:		Fax Number:	972-718-0269
Street:	2400 N. Glenville Drive	E-Mail:	dan.gonzalez@verizon.com
	Dept/Loc 71216/107		
City:	Richardson	State:	TX
<b>Country:</b>	USA	Zipcode:	75082 –
Attention:	Phil Edwards		

Name:	MCI Communications Services, Inc. (fka MCI WorldCom Communications, Inc.)	Phone Number:	972 718 4599
Company:		Fax Number:	972-729-2690
Street:	600 Hidden Ridge	E-Mail:	dan.gonzalez@verizon.com
	PO Box 152092		
City:	Irving	State:	TX
<b>Country:</b>	USA	Zipcode:	75015-2092
Attention:	HQE02N53	<b>Relationship:</b>	Engineer

# 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. a. a. a1. Earth Station (N/A) a2. Space Station	<ul> <li>(N/A) b3. Amendment to a Pending Application</li> <li>(N/A) b4. Modification of License or Registration</li> <li>(N/A) b5. Assignment of License or Registration</li> <li>(N/A) b6. Transfer of Control of License or Registration</li> <li>(N/A) b7. Notification of Minor Modification</li> <li>(N/A) b8. Application for License of New Receive–Only Station Using Non–U.S. Licensed</li> <li>Satellite</li> <li>(N/A) b9. Letter of Intent to Use Non–U.S. Licensed Satellite to Provide Service in the United</li> <li>States</li> </ul>
	<b>b</b> 10. 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. 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	
If Yes, complete and attach FCC Form	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
O Governmental Entity O Noncomme	ercial educational licensee
• Other(please explain):	
17d.	
Fee Classification BGV – Fixed Satellite V	/SAT System

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

## TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide	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
	Using Non–U.S. licensed satellites
facilities:	ervice, 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 applicable 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:

### TYPE OF STATION

a. Fixed Earth Station	1		
b. Temporary–Fixed	Earth Station		
• c. 12/14 GHz VSAT	Network		
d. Mobile Earth Stati	on		
N/A) e. Geostationary S	pace Station		
N/A) f. Non–Geostation	ary Space Station		
g. Other (please spec	ify)		
PE OF EARTH STATI	ON FACILITY: Choose only	one.	

### PURPOSE OF MODIFICATION

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

Not Applicable

### ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant O Yes 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 **Radiation Report** 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, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30-34.

No No

29. Is the applicant a foreign government or the representative of any foreign government?	O Yes ● No
30. Is the applicant an alien or the representative of an alien?	O Yes ● No O N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O 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 under the laws of a foreign country?	O Yes ● 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?

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.

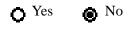
### BASIC QUALIFICATIONS

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	le No
	Intelsat Letter	
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.	O Yes	
	Andw 960 Ant	Pat

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	lo No
	TXINT100KU.	AnPat1
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	O Yes	le No
means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	TXINT100KU.	AnPat2
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	No
	Prod 1951 Antl	Pat
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.	Prod 1981 Antl	Pat

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.

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 No

Prod 1984 AntPat

• Yes

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?

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.)

MCI Communications Services, Inc (Verizon Business) wishes to build a new VSAT hub with remotes. The VSAT network will proide digital video and data services. Antennas will be used to facilitate customer communication requirements including full-time traffic, backup services, and disaster recovery such as hurricanes and other natural disasters as well

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.	<b>О</b> <sup>В</sup>
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.

44. Applicant is a (an): (Choose th	e button next to applicable respons	se.)		
• Individual				
• Unincorporated Association				
• Partnership				
• Corporation				
Governmental Entity				
Other (please specify)				
45. Name of Person Signing		46. Title of Person S	Signing	
Dan Gonzalez		Engineer – Central Office Support		
		1		
47. Please supply any need attachr	nents.			
Attachment 1:	Attachment 2:		Attachment 3:	
WILLFUL FALSE STA	ATEMENTS MADE ON THIS FO	RM ARE PUNISHABLI	E BY FINE AND / OR IMPRISONMEN	JT
-	e, Title 18, Section 1001), AND/OF			
(U.S. Code, T	Title 47, Section 312(a)(1)), AND/0	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

E14. Site Elevation	(AMSL)	280.0 meters	Ÿ	Ň
E13. Lat/Lon Coor	dinates are:	NAD-27	🛞 NAD-83	N/A
E12. Longitude:	78 °39 '25.1 "W			
E11. Latitude:	38 °43 '45.4 "N			
E10. Area of Opera	tion:	CONUS, AK, HI,	PR, VI	
E4. State	VA	E9. Zip Code	98675	
		E8. County:	Shenandoah	
E3. Street:	1295 Industrial Park Rd	E7. City:	Quicksburg	
E2: Contact Name	Charlie Hoff	E6. Phone Number:	540-477-3022	
E1: Site Identifier:	MJS	E5. Call Sign:		

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 <sup>No</sup>	O <sup>N/A</sup>
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	<b>○</b> <sup>No</sup>	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	• Yes	0	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	۲	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	۲	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.	0	Yes	۲	No

#### POINTS OF COMMUNICATION

Satellite Name: ALSAT | ALL AUTHORIZED U.S. | ALSAT 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: MJS	
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 GainTransmint and/or Recieve (dBi at GHz)
MJS	MSJ-04	1	Vertex/RSI	9.0M	9.0	58.5 dBi at 11.725
						60.1 dBi at 14.125

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)		8	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
MSJ-04	9.0/9.0	10.0	224.0	0.0	400.0	0.0	86.1

### FREQUENCY

 E43/44. Frequency Bands (MHz)	E45. T/R Mode		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
()			× /	(dBW/4kHz)

MSJ-04	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulat entirety.)	tion and Services (	If the complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Digital	Video, and Dat	za				
MSJ-04	11700 12200	R	Horizontal and Vertical	36M0G7W	0.0	0.0
	Video, and Dat					
MSJ-04	14000 14500	Т	Horizontal and Vertical	156KG7W	62.0	46.1
E50. Modulat entirety.)	tion and Services (	If the complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Digital	Video, and Dat	:a				

MSJ-04	14000 14500	Т	Horizontal and Vertical	36M0G7W	85.6	46.1
E50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
entirety.)						
Digital Vi	deo, and Data					

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)
MSJ-04	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

## 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.	E65. Phone Number 360–686–3065
E62. Street Address 1295 Industrial Park Rd	

E63. City Quicksburg	E67. County Shenandoah	E64/68. State/Country VA/ USA	E66. Zip Code 98675

### 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: Remote1	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	O NAD-27	ONAD-83	● N/A		
E14. Site Elevation (AMSL):	0.0 meters				
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.	• Yes	O <sup>N₀</sup>	<b>O</b> <sup>N/A</sup>
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 <sup>No</sup>	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

#### POINTS OF COMMUNICATION

Satellite Name: ALSAT | ALL AUTHORIZED U.S. | ALSAT 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: Remote1	
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 GainTransmint and/or Recieve (dBi at GHz)
Remote1	R1	6000	Prodelin	1123	1.2	41.7 dBi at 11.95
						43.2 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)		E36. Above Sea Level  (meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R1	1.2/1.2	2.0	0.0	0.0	14.0	0.0	54.7

# FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands	E45. T/R Mode		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
	(MHz)		L,R)	(dBW)	Carrier
					(dBW/4kHz)

R1	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital Vi	deo and Data.					
R1	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital Vi	deo and Data.					
R1	14000 14500	Т	Horizontal and Vertical	156KG7W	45.11	29.2
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital Vi	deo and Data.					

R1		14000 14500	Т	Horizontal and Vertical	2M50G7W	54.66	26.7
E	50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entir	ety.)						
	Digital Vi	deo and Data					
							_

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)
R1	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

## REMOTE CONTROL POINT LOCATION

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

### 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: Remote2	E5. Call Sign:					
E2: Contact Name Charlie H	off E6. Phone Number:	540-477-3022				
E3. Street:	E7. City:					
	E8. County:					
E4. State	E9. Zip Code					
E10. Area of Operation:	CONUS, AK, HI,	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0	"					
E12. Longitude: 0 °0 '0.0	"					
E13. Lat/Lon Coordinates are:	O NAD-27	<b>O</b> NAD-83	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.	O Yes	O <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	O N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	0	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

#### POINTS OF COMMUNICATION

Satellite Name: ALSAT | ALL AUTHORIZED U.S. | ALSAT 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: Remote2	
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 GainTransmint and/or Recieve (dBi at GHz)
Remote2	R2	3000	Prodelin	1183	1.8	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)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R2	1.8/1.8	2.5	0.0	0.0	14.0	0.0	58.0

# FREQUENCY

 E43/44. Frequency Bands (MHz)		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
(1/112)	L,IX)	· /	(dBW/4kHz)

R2	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulat entirety.)	tion and Services (	If the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital	Video and Data	à				
R2	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital	Video and Data	1				
R2	14000 14500	Т	Horizontal and Vertical	156KG7W	48.41	32.5
E50. Modulat entirety.)	tion and Services (	If the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital	Video and Data	ł				

R2	14000 14500	Т	Horizontal and Vertical	2M50G7W	57.96	30.0
E50. Modulation entirety.)	and Services (If th	e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
	deo and Data					

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)
R2	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

## REMOTE CONTROL POINT LOCATION

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

### 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	E5. Call Sign:					
E2: Contact Name Charlie Ho	ff E6. Phone Number:	360-686-3065				
E3. Street:	E7. City:					
	E8. County:					
E4. State	E9. Zip Code					
E10. Area of Operation:	CONUS, AK, HI,	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "						
E12. Longitude: 0 °0 '0.0 "						
E13. Lat/Lon Coordinates are:	ONAD-27	<b>O</b> NAD-83	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.	• Yes	● <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

#### POINTS OF COMMUNICATION

Satellite Name: ALSAT | ALL AUTHORIZED U.S. | ALSAT 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: Remote	
E26. Common Name:	E27. Country:USA

# ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote	R 3	1000	Prodelin	1251	2.4	47.6 dBi at 11.95
						49.2 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)			Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 3	2.4/2.4	3.0	0.0	0.0	14.0	0.0	60.7

# FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)		Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier
		, ,			(dBW/4kHz)

R 3	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Mod entirety.)	lulation and Services (	If the complete d	escription does not appear	in this box, please	go to the end of the	ne form to view it in its
Digit	al Video and Data	à				
R 3	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
DIGIC	al Video and Data	a 				
R 3	14000 14500	Т	Horizontal and Vertical	156KG7W	51.11	35.2
E50. Mod entirety.)	lulation and Services (	If the complete d	escription does not appear	in this box, please	go to the end of the	ne form to view it in its
Digit	al Video and Data	1				

R 3		14000 14500	Т	Horizontal and Vertical	2M50G7W	60.66	32.7
	50. Modulation	and Services (If the	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entir	ety.)						
	Digital Vi	deo and Data					

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)
R 3	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

## REMOTE CONTROL POINT LOCATION

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

### 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: Remote4	E5. Call Sign:		
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022	
E3. Street:	E7. City:		
	E8. County:		
E4. State	E9. Zip Code		
E10. Area of Operation:	CONUS, AK, HI, PR, VI		
E11. Latitude: 0 °0 '0.0 "			
E12. Longitude: 0 °0 '0.0 "			
E13. Lat/Lon Coordinates are:	O NAD-27	<b>O</b> NAD-83	● 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.	• Yes	● <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote4	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote4	R 4	6000	Patriot	TX–INT120KU	1.2	43.4 dBi at 14.25
						41.8 dBi at 11.725

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)		0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 4	1.2/1.2	2.0	0.0	0.0	14.0	0.0	54.9

E28. Antenna Id	E43/44. Frequency Bands	E45. T/R Mode		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
	(MHz)		L,R)	(dBW)	Carrier
					(dBW/4kHz)

R 4	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modul entirety.)	ation and Services (	If the complete de	escription does not appear	in this box, please	go to the end of the	ne form to view it in its
Digita	l Video and Data	<u>ا</u>				
R 4	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
	l Video and Data	L				
R 4	14000 14500	Т	Horizontal and Vertical	156KG7W	45.31	29.4
E50. Modul entirety.)	ation and Services (	If the complete de	escription does not appear	in this box, please	go to the end of the	ne form to view it in its
Digita	l Video and Data	1				

R 4	14000 14500	Т	Horizontal and Vertical	2M50G7W	54.86	26.9
E50. Modulati	on and Services (If	the complete descripti	on does not appear in	this box, please go t	o the end of the form	to view it in its
entirety.)						
Digital	Video and Data					

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)
R 4	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site						
E1: Site Identifier: Remote5	E5. Call Sign:					
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022				
E3. Street:	E7. City:					
	E8. County:					
E4. State	E9. Zip Code					
E10. Area of Operation:	CONUS, AK, HI, I	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "						
E12. Longitude: 0 °0 '0.0 "						
E13. Lat/Lon Coordinates are:	O NAD-27	O NAD-83	● 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.	• Yes	● <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote5	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote5	R 5	3000	Patriot	TX–INT180KU	1.8	47.0 dBi at 14.25
						45.3 dBi at 11.725

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)			Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 5	1.8/1.8	2.5	0.0	0.0	14.0	0.0	58.5

 Frequency Bands	Polarization(H,V,	EIRP per Carrier	• 1
(MHz)	L,R)	(dBW)	Carrier (dBW/4kHz)

R 5	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modu entirety.)	Ilation and Services (	If the complete d	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digita	al Video and Data	ι 				
R 5	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digita	al Video and Data	L				
R 5	14000 14500	Т	Horizontal and Vertical	156KG7W	48.91	33.0
E50. Modu entirety.)	lation and Services (	If the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Digita	al Video and Data	i.				

R 5	14000 14500	Т	Horizontal and Vertical	2M50G7W	58.46	30.5
E50. Modulat	tion and Services (I	f the complete descrip	otion does not appear ir	n this box, please go	to the end of the fo	orm to view it in its
entirety.)						
Digital	Video and Data					

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)
R 5	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	_
		/	

Location of Earth Station Site					
E1: Site Identifier: Remote6	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	ONAD-27	O NAD-83	● 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.	• Yes	O <sup>No</sup>	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 <sup>No</sup>	N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>()</b> N	10
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>()</b> N	10
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.	0	Yes	● <sup>N</sup>	10

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote6	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote6	R 6	1000	Patriot	TXFCC-240KUS	2.4	49.6 dBi at 14.25
						48.0 dBi at 11.725

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)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 6	2.4/2.4	3.0	0.0	0.0	14.0	0.0	61.1

 E43/44. Frequency Bands		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
(MHz)	L,R)		Carrier (dBW/4kHz)
			( <b>UD W/4KHZ</b> )

R 6	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital V:	ideo and Data					
R 6	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
	ideo and Data					
R 6	14000 14500	Т	Horizontal and Vertical	156KG7W	51.51	35.6
E50. Modulatior entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital V:	ideo and Data					

R 6		14000 14500	Т	Horizontal and Vertical	2M50G7W	61.06	33.1
E5	0. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entire	ety.)						
	Digital Vi	deo and Data					

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)
R 6	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	_
		/	

Location of Earth Station Site					
E1: Site Identifier: Remote7	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, I	CONUS, AK, HI, PR, VI			
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	O NAD-27	<b>O</b> NAD-83	● 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.	• Yes	O <sup>No</sup>	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 <sup>No</sup>	N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote7	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote7	R 7	6000	Channel Master	TYPE 123	1.2	41.8 dBi at 11.95
						43.3 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)		E36. Above Sea Level  (meters)	E37. Building Height Above Ground Level  (meters)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 7	1.2/1.2	2.0	0.0	0.0	14.0	0.0	54.8

 E43/44. Frequency Bands (MHz)		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
(1/112)	L,IX)	· /	(dBW/4kHz)

R 7	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modul entirety.)	lation and Services (	If the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
	l Video and Data	a				
R 7	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
R 7	14000 14500	Т	Horizontal and Vertical	156KG7W	45.21	29.3
E50. Modul entirety.)	lation and Services (	If the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Digital	l Video and Data	a				

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.) Digital Video and Data	R 7	14000 14500	Т	Horizontal and Vertical	2M50G7W	54.76	26.8
		and Services (If the	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
		deo and Data					

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)
R 7	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site				
E1: Site Identifier: Remote8	E5. Call Sign:			
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022		
E3. Street:	E7. City:			
	E8. County:			
E4. State	E9. Zip Code			
E10. Area of Operation:	CONUS, AK, HI, PR, VI			
E11. Latitude: 0 °0 '0.0 "				
E12. Longitude: 0 °0 '0.0 "				
E13. Lat/Lon Coordinates are:	ONAD-27	<b>O</b> NAD-83	● 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.	• Yes	<b>○</b> <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote8	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote8	R 8	3000	Channel Master	TYPE 180	1.8	45.3 dBi at 11.95
						46.8 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)		E36. Above Sea Level  (meters)	E37. Building Height Above Ground Level  (meters)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 8	1.8/1.8	2.5	0.0	0.0	14.0	0.0	58.3

 E43/44. Frequency Bands (MHz)		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
(1/112)	L,IX)	· /	(dBW/4kHz)

R 8	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Mod entirety.)	lulation and Services (	If the complete d	lescription does not appear	in this box, please	go to the end of the	he form to view it in its
Digit	al Video and Data	1				
R 8	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
	al Video and Data					
R 8	14000 14500	Т	Horizontal and Vertical	156KG7W	48.71	32.8
E50. Mod entirety.)	lulation and Services (	If the complete d	lescription does not appear	in this box, please	go to the end of the	he form to view it in its
Digit	al Video and Data	1				

	4000 4500	1	Horizontal and Vertical	2M50G7W	58.26	30.3	
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.)							
entirety.) Digital Video and Data							

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)
R 8	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site					
E1: Site Identifier: Remote10	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	O NAD−27	O NAD-83	N/A		
E14. Site Elevation (AMSL):	0.0 meters				
E12. Longitude: 0 °0 '0.0 " E13. Lat/Lon Coordinates are:	Ť	O NAD-83	♥ N/A		

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	● <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote10	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote10	R 10	1000	Channel Master	TYPE 243	2.4	47.6 dBi at 11.95
						49.3 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)		E36. Above Sea Level  (meters)	E37. Building Height Above Ground Level  (meters)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 10	2.4/2.4	3.0	0.0	0.0	14.0	0.0	60.8

 E43/44. Frequency Bands (MHz)		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
(1/112)	L,IX)	· /	(dBW/4kHz)

R 10	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	n and Services (I	the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					
R 10	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital V	ideo and Data					
R 10	14000 14500	Т	Horizontal and Vertical	156KG7W	51.21	35.3
E50. Modulation entirety.)	n and Services (I	the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					

R 10	14000 14500	Т	Horizontal and Vertical	2M50G7W	60.76	32.8
E50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
entirety.) Digital Vi	deo and Data					

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)
R 10	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	_
		/	

Location of Earth Station Site					
E1: Site Identifier: Remote11	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	ONAD-27	<b>O</b> NAD-83	● 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.	• Yes	● <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote11	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote11	R 11	3000	Prodelin	1951	0.95	39.7 dBi at 11.95
						41.2 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)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 11	0.95/0.95	1.5	0.0	0.0	13.0	0.0	52.34

 E43/44. Frequency Bands		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
(MHz)	L,R)		Carrier (dBW/4kHz)
			( <b>UD W/4KHZ</b> )

R 11	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	on and Services (1	If the complete d	escription does not appear	in this box, please	go to the end of the	ne form to view it in its
Digital	Video and Data	l				
R 11	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital Y	Video and Data	L				
R 11	14000 14500	Т	Horizontal and Vertical	156KG7W	43.11	27.2
E50. Modulatie entirety.)	on and Services (1	If the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital Y	Video and Data	L.				

R 11		14000 14500	Т	Horizontal and Vertical	2M50G7W	52.34	24.38
E50 entiret	0. Modulation y.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
I	Digital Vio	deo and Data					
L							

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)
R 11	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site				
E1: Site Identifier: Remote12	E5. Call Sign:			
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022		
E3. Street:	E7. City:			
	E8. County:			
E4. State	E9. Zip Code			
E10. Area of Operation:	CONUS, AK, HI,	, PR, VI		
E11. Latitude: 0 °0 '0.0 "				
E12. Longitude: 0 °0 '0.0 "				
E13. Lat/Lon Coordinates are:	O NAD-27	<b>O</b> NAD-83	● 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.	• Yes	<b>O</b> <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote12	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote12	R 12	3000	Prodelin	1981	0.98	39.8 dBi at 11.85
						41.3 dBi at 14.125

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)	(meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 12	0.98/0.98	1.5	0.0	0.0	14.0	0.0	52.76

 E43/44. Frequency Bands		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
(MHz)	L,R)		Carrier (dBW/4kHz)
			( <b>UD W/4KHZ</b> )

R 12	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital Vi	ideo and Data					
R 12	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
	ideo and Data					
R 12	14000 14500	Т	Horizontal and Vertical	156KG7W	43.21	27.3
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital Vi	ideo and Data					

	14000 14500	Т	Horizontal and Vertical	2M50G7W	52.76	24.8
E50. Modulation a entirety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
	leo and Data					

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)
R 12	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site				 
E1: Site Identifier: Remote13	E5. Call Sign:			
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022		
E3. Street:	E7. City:			
	E8. County:			
E4. State	E9. Zip Code			
E10. Area of Operation:	CONUS, AK, HI,	, PR, VI		
E11. Latitude: 0 °0 '0.0 "				
E12. Longitude: 0 °0 '0.0 "				
E13. Lat/Lon Coordinates are:	O <sup>NAD-27</sup>	<b>O</b> NAD-83	● 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.	• Yes	<b>O</b> <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote13	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote13	R 13	6000	Prodelin	1134	1.2	41.5 dBi at 11.95
						43.0 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)	(meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 13	1.2/1.2	2.0	0.0	0.0	14.0	0.0	54.46

E28. Antenna Id		E45. T/R Mode				E49. Maximum
	Frequency Bands			Designator	EIRP per Carrier	• 1
	(MHz)		L,R)			Carrier
						(dBW/4kHz)

R 13	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulatio entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					
R 13	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital V	ideo and Data					
R 13	14000 14500	Т	Horizontal and Vertical	156KG7W	44.91	29.0
E50. Modulatio entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					

R 13	14000 14500	Т	Horizontal and Vertical	2M50G7W	54.46	26.5
E50. Modu	lation and Services (If	the complete descripti	on does not appear in	this box, please go t	o the end of the form	to view it in its
entirety.)						
Digita	al Video and Data					

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)
R 13	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site					
E1: Site Identifier: Remore14	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, I	CONUS, AK, HI, PR, VI			
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	ONAD-27	O NAD-83	● 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.	• Yes	● <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remore14	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remore14	R 14	6000	Prodelin	1138	1.2	41.6 dBi at 11.95
						43.2 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)	(meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 14	1.2/1.2	2.0	0.0	0.0	14.0	0.0	54.66

 E43/44. Frequency Bands		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
(MHz)	L,R)		Carrier (dBW/4kHz)
			( <b>UD W/4KHZ</b> )

R 14	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulatio entirety.)	n and Services (I	f the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Digital V	ideo and Data					
R 14	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital v	ideo and Data					
R 14	14000 14500	Т	Horizontal and Vertical	156KG7W	45.11	29.2
E50. Modulatio entirety.)	n and Services (I	f the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Digital V	ideo and Data					

R 14		14000 14500	Т	Horizontal and Vertical	2M50G7W	54.66	26.7
	50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entir	ety.)						
	Digital Vi	deo and Data					

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)
R 14	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	_
		/	

Location of Earth Station Site					
E1: Site Identifier: Remote15	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, I	CONUS, AK, HI, PR, VI			
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	O NAD-27	<b>O</b> NAD-83	● 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.	• Yes	● <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote15	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote15	R 15	3000	Prodelin	1189	1.8	44.0 dBi at 11.95
						45.3 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)		E36. Above Sea Level  (meters)	E37. Building Height Above Ground Level  (meters)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 15	1.8/1.8	2.5	0.0	0.0	14.0	0.0	56.76

 E43/44. Frequency Bands (MHz)		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
(1/112)	L,IX)	· /	(dBW/4kHz)

R 15	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	on and Services (I	f the complete d	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital N	/ideo and Data					
R 15	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital \	/ideo and Data					
R 15	14000 14500	Т	Horizontal and Vertical	156KG7W	47.21	31.3
E50. Modulation entirety.)	n and Services (I	f the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Digital N	/ideo and Data					

R 15	14000 14500	Т	Horizontal and Vertical	2M50G7W	56.76	28.8
E50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
entirety.) Digital Vi	deo and Data					

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)
R 15	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site					
E1: Site Identifier: Remote16	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	O NAD-27	<b>O</b> NAD-83	● 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.	• Yes	O <sup>No</sup>	O <sup>N/A</sup>
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	<b>○</b> <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote16	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote16	R 16	1000	Prodelin	1259	2.4	47.6 dBi at 11.95
						49.2 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)		E36. Above Sea Level  (meters)	E37. Building Height Above Ground Level  (meters)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 16	2.4/2.4	3.0	0.0	0.0	14.0	0.0	60.66

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
					(dBW/4kHz)

R 16	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	on and Services ()	If the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital Y	Video and Data	ι 				
R 16	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital V	Video and Data					
R 16	14000 14500	Т	Horizontal and Vertical	156KG7W	51.11	35.2
E50. Modulation entirety.)	on and Services ()	If the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	Video and Data					

R 16	14000 14500	Т	Horizontal and Vertical	2M50G7W	60.66	32.7
E50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entirety.) Digital Vi	deo and Data					

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)
R 16	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth St	ation Site				
E1: Site Identifier:	YAC	E5. Call Sign:	E070068		
E2: Contact Name	Charlie Hoff	E6. Phone Number:	540-477-3022		
E3. Street:	604 E. Hoag St.	E7. City:	Yacolt		
		E8. County:	Clark		
E4. State	WA	E9. Zip Code	98675		
E10. Area of Operat	tion:	CONUS, AK, HI, P	R, VI		
E11. Latitude:	45 °51 '43.0 "N				
E12. Longitude:	122 °23 '46.0 "				
E13. Lat/Lon Coord	linates are:	O NAD-27	NAD-83	O <sup>N/A</sup>	
E14. Site Elevation	(AMSL):	216.0 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	<b>○</b> <sup>No</sup>	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 <sup>No</sup>	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: YAC	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
YAC	R 17	3000	Channel Master	TYPE 960	0.96	39.7 dBi at 11.95
						41.2 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)	(meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 17	0.96/0.96	1.5	0.0	0.0	14.0	0.0	52.66

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
					(dBW/4kHz)

R 17	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulatio entirety.)	n and Services (If	f the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					
R 17	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
entirety.) Digital V	ideo and Data					
R 17	14000 14500	Т	Horizontal and Vertical	156KG7W	43.11	27.2
E50. Modulatio entirety.)	n and Services (If	f the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					

R 17		14000 14500	Т	Horizontal and Vertical	2M50G7W	52.66	24.7
	50. Modulation	and Services (If the	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entire	ety.)						
	Digital Vi	deo and Data					

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)
R 17	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth St	tation Site				
E1: Site Identifier:	YAC	E5. Call Sign:	E070068		
E2: Contact Name	Charlie Hoff	E6. Phone Number:	540-477-3022		
E3. Street:	604 E. Hoag St.	E7. City:	Yacolt		
		E8. County:	Clark		
E4. State	WA	E9. Zip Code	98675		
E10. Area of Opera	tion:	CONUS, AK, HI, P	PR, VI		
E11. Latitude:	45 ° 51 '43.0 "N				
E12. Longitude:	122 °23 '46.0 "W				
E13. Lat/Lon Coord	linates are:	O <sup>NAD-27</sup>	● NAD-83	O <sup>N/A</sup>	
E14. Site Elevation	(AMSL):	216.0 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	O <sup>No</sup>	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 <sup>No</sup>	N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: YAC	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
YAC	R 18	3000	Patriot	TX-INT100KUG	1.0	41.9 dBi at 14.25
						40.2 dBi at 11.725

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)	(meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 18	1.0/1.0	2.0	0.0	0.0	14.0	0.0	53.36

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
					(dBW/4kHz)

R 18	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	n and Services (If	f the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					
R 18	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
entirety.) Digital V	ideo and Data					
R 18	14000 14500	Т	Horizontal and Vertical	156KG7W	43.81	27.9
E50. Modulation entirety.)	n and Services (If	f the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					

R 18		14000 14500	Т	Horizontal and Vertical	2M50G7W	53.36	25.4
	50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entir	ety.)						
	Digital Vi	deo and Data					

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)
R 18	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site						
E1: Site Identifier: Remote19	E5. Call Sign:					
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022				
E3. Street:	E7. City:					
	E8. County:					
E4. State	E9. Zip Code					
E10. Area of Operation:	CONUS, AK, HI,	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "						
E12. Longitude: 0 °0 '0.0 "						
E13. Lat/Lon Coordinates are:	O NAD-27	<b>O</b> NAD-83	● 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.	• Yes	<b>○</b> <sup>No</sup>	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 <sup>No</sup>	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	<b>0</b> N	чo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	<b>0</b> N	чo
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.	0	Yes	• N	Vo

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote19	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote19	R 19	6000	Patriot	TXFLY-120KU	1.2	43.5 dBi at 14.25
						41.8 dBi at 11.725

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)		0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 19	1.2/1.2	2.0	0.0	0.0	14.0	0.0	54.96

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
					(dBW/4kHz)

R 19	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulatio entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of the	ne form to view it in its
Digital V	ideo and Data					
R 19	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
entirety.) Digital V	ideo and Data					
R 19	14000 14500	Т	Horizontal and Vertical	156KG7W	45.41	29.5
E50. Modulatio entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of the	ne form to view it in its
Digital V	ideo and Data					

R 19	14000 14500	Т	Horizontal and Vertical	2M50G7W	54.96	27.0
E50. Modulation entirety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
	deo and Data					

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)
R 19	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	_
		/	

Location of Earth Station Site			
E1: Site Identifier: Remote20	E5. Call Sign:		
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022	
E3. Street:	E7. City:		
	E8. County:		
E4. State	E9. Zip Code		
E10. Area of Operation:	CONUS, AK, HI, I	PR, VI	
E11. Latitude: 0 °0 '0.0 "			
E12. Longitude: 0 °0 '0.0 "			
E13. Lat/Lon Coordinates are:	ONAD-27	<b>O</b> NAD-83	● 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.	• Yes	<b>O</b> <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote20	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model		E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote20	R 20	3000	Patriot	TXFLY-180KU	1.8	39.5 dBi at 14.25
						35.6 dBi at 11.725

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)		0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 20	1.8/1.8	2.5	0.0	0.0	14.0	0.0	50.96

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
					(dBW/4kHz)

R 20	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulatio entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital V	ideo and Data					
R 20	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital V	ideo and Data					
R 20	14000 14500	Т	Horizontal and Vertical	156KG7W	41.41	25.5
E50. Modulatio entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital V	ideo and Data					

R 20		14000 14500	Т	Horizontal and Vertical	2M50G7W	50.96	23.0
	50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entir	ety.)						
	Digital Vi	deo and Data					

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)
R 20	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site				
E1: Site Identifier: Remote21	E5. Call Sign:			
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022		
E3. Street:	E7. City:			
	E8. County:			
E4. State	E9. Zip Code			
E10. Area of Operation:	CONUS, AK, HI, PR, VI			
E11. Latitude: 0 °0 '0.0 "				
E12. Longitude: 0 °0 '0.0 "				
E13. Lat/Lon Coordinates are:	O NAD-27	<b>O</b> NAD-83	● 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.	• Yes	O <sup>No</sup>	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 <sup>No</sup>	N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote21	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote21	R 21	3000	Prodelin	1984	0.98	39.8 dBi at 11.95
						41.3 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)		E37. Building Height Above Ground Level  (meters)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 21	0.98/0.98	2.0	0.0	0.0	14.0	0.0	52.76

 E43/44. Frequency Bands		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
(MHz)	L,R)		Carrier (dBW/4kHz)
			( <b>UD W/4KHZ</b> )

R 21	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	on and Services (1	If the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital V	/ideo and Data					
R 21	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital	/ideo and Data					
R 21	14000 14500	Т	Horizontal and Vertical	156KG7W	43.21	27.3
E50. Modulation entirety.)	on and Services (1	If the complete de	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Digital N	/ideo and Data					

R 21		14000 14500	Т	Horizontal and Vertical	2M50G7W	52.76	24.8
E entir	50. Modulation ety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
	Digital Vi	deo and Data					

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)
R 21	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site					
E1: Site Identifier: Remote22	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, PR, VI				
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	O NAD-27	O NAD-83	● 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.	• Yes	<b>○</b> <sup>No</sup>	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 <sup>No</sup>	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier: Remote22	
E26. Common Name:	E27. Country:USA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
Remote22	R 22	1000	Prodelin	2194	1.8	45.2 dBi at 11.95
						46.7 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)	E36. Above Sea Level  (meters)	0	E38. Total Input Power at antenna flange  (Watts)	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 22	1.8/1.8	2.5	0.0	0.0	14.0	0.0	58.16

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		EIRP per Carrier	E49. Maximum ERIP Density per Carrier
					(dBW/4kHz)

R 22	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					
R 22	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital V	ideo and Data					
R 22	14000 14500	Т	Horizontal and Vertical	156KG7W	48.61	32.7
E50. Modulation entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital V	ideo and Data					

R 22		14000 14500	Т	Horizontal and Vertical	2M50G7W	58.16	30.2
E	50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entir	ety.)						
	Digital Vi	deo and Data					

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)
R 22	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

Location of Earth Station Site					
E1: Site Identifier: Remote23	E5. Call Sign:				
E2: Contact Name Charlie Hoff	E6. Phone Number:	540-477-3022			
E3. Street:	E7. City:				
	E8. County:				
E4. State	E9. Zip Code				
E10. Area of Operation:	CONUS, AK, HI, I	CONUS, AK, HI, PR, VI			
E11. Latitude: 0 °0 '0.0 "					
E12. Longitude: 0 °0 '0.0 "					
E13. Lat/Lon Coordinates are:	ONAD-27	<b>O</b> NAD-83	● 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.	• Yes	<b>O</b> <sup>No</sup>	O <sup>N/A</sup>
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 <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	•	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	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.	0	Yes	•	No

### POINTS OF COMMUNICATION

Satellite Name: ALSAT | ALL AUTHORIZED U.S. | ALSAT 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: Remote23	
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 GainTransmint and/or Recieve (dBi at GHz)
Remote23	R 23	1000	Prodelin	2244	2.4	47.6 dBi at 14.25
						49.2 dBi at 11.95

Id	E33/34. Diameter Minor/Major (meters)		E36. Above Sea Level  (meters)	E37. Building Height Above Ground Level  (meters)	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R 23	2.4/2.4	3.0	0.0	0.0	14.0	0.0	59.06

# FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands	E45. T/R Mode		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
	(MHz)		L,R)	(dBW)	Carrier
					(dBW/4kHz)

R 23	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital V	Video and Data					
R 23	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital V	ideo and Data					
R 23	14000 14500	Т	Horizontal and Vertical	156KG7W	49.51	33.6
E50. Modulation entirety.)	n and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Digital V	ideo and Data					

R 23	14000 14500	Т	Horizontal and Vertical	2M50G7W	59.06	31.1
E50. Modulation entirety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
	deo and Data					

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)
R 23	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

### REMOTE CONTROL POINT LOCATION

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

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

Location of Earth St	tation Site				
E1: Site Identifier:	YAC	E5. Call Sign:	E070068		
E2: Contact Name	Charlie Hoff	E6. Phone Number:	540-477-3022		
E3. Street:	604 E. Hoag St.	E7. City:	Yacolt		
		E8. County:	Clark		
E4. State	WA	E9. Zip Code	98675		
E10. Area of Opera	tion:	CONUS, AK, HI, P	R, VI		
E11. Latitude:	45 °51 '43.0 "N				
E12. Longitude:	122 °23 '46.0 "W				
E13. Lat/Lon Coord	linates are:	ONAD-27	● NAD-83	O <sup>N/A</sup>	
E14. Site Elevation	(AMSL):	216.0 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	O <sup>No</sup>	O <sup>N/A</sup>
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	<b>○</b> <sup>No</sup>	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	۲	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	۲	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.	0	Yes	۲	No

#### POINTS OF COMMUNICATION

Satellite Name: 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	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
YAC	R21(2)	3000	Prodelin	1984	0.98	39.8 dBi at 11.95
						41.3 dBi at 14.25

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)		0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
R21(2)	0.98/0.98	2.0	0.0	0.0	14.0	0.0	52.76

# FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands	E45. T/R Mode			E48. Maximum EIRP per Carrier	E49. Maximum
	(MHz)		L,R)	Designator		Carrier
						(dBW/4kHz)

R21(2)	11700 12200	R	Horizontal and Vertical	156KG7W	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
Digital Vi	ideo, and Data					
R21(2)	11700 12200	R	Horizontal and Vertical	2M50G7W	0.0	0.0
Digital Vi	ideo, and Data					
R21(2)	14000 14500	Т	Horizontal and Vertical	156KG7W	43.21	27.3
E50. Modulation entirety.)	and Services (If	the complete de	escription does not appear	in this box, please	go to the end of th	he form to view it in its
Digital Vi	ideo, and Data					

R21(2)	14000 145000	Т	Horizontal and Vertical	2M50G7W	52.76	24.8
E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
	deo, and Data					

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)
R21(2)	Geostationary	11700 12200	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0
	Geostationary	14000 14500	60.0/ 143.0	90.0	5.0	270.0	5.0	0.0

### REMOTE CONTROL POINT LOCATION

E61. Call Sign	E65. Phone Number
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	
E62. Street Address	

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

### FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 0.25 – 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD–PERM, Paperwork Reduction Project (3060–0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

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#### 43. Description. (Summarize the nature of the application and the services to be provided).

MCI Communications Services, Inc (Verizon Business) wishes to build a new VSAT hub with remotes. The VSAT network will proide digital video and data services. Antennas will be used to facilitate customer communication requirements including full-time traffic, back-up services, and disaster recovery such as hurricanes and other natural disasters as well as terrestrial service outages. Supplemental letters are attached in reference to compliance with Rule 25.220.