Date & Time Filed: Mar 8 2006 3:08:20:250PM File Number: SES-MOD-INTR2006-00637

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

# APPLICANT INFORMATION

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

Galaxy 11 Modification for E930182

Odlaxy 11 Wi	oumean	DII 101 E330182		
1–8. Legal Na	me of App	plicant		
Na	me:	GTECH Corp.	Phone Number:	401–392–1000 x7803
DE	3A		Fax Number:	401-392-4993
Na	me:			
Stı	reet:	55 Technology Way	E–Mail:	helen.santos@gtech.com
				č
Cit	ty:	West Greenwich	State:	RI
	ty.	west Greenwich	State.	KI
Co	ountry:	USA	Zipcode:	02817 –
At	tention:	Mrs Helena M Santos		

### 9–16. Name of Contact Representative

Name: Bruce Olcott Phone Number: 202 626–6615

Company: Squire, Sanders & Dempsey LLP Fax Number: 202 626–6780

Street: 1201 Pennsylvania Ave. NW E–Mail: bolcott@ssd.com

P.O. Box 407

City: Washington State: DC

**Country:** USA **Zipcode:** 20044–0407

Attention: Attorney Relationship: Legal Counsel

#### **CLASSIFICATION OF FILING**

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

a1. Earth Station

a2. Space Station

(N/A) b1. Application for License of New Station

(N/A) b2. Application for Registration of New Domestic Receive-Only Station

O (N/A) b3. Amendment to a Pending Application

(N/A) b4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

(N/A) b7. Notification of Minor Modification

(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite

(N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States

(N/A) b10. Other (Please specify)

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).						
Governmental Entity Noncomme		see 47 C.I.R.Seedon I.III4).				
Other(please explain):						
17d.						
Fee Classification CGV – Fixed Satellite	/SAT System					
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending modification please enter only the file number:					
(a) Call sign of station: (a) Date pending application was filed: (b) File number:						
E930182		SESMOD2004042600588				

# 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)	
<del>_</del>	
21. STATUS: Choose the button next to the applicable status. Choose	22. If earth station applicant, check all that apply.
only one.	Using U.S. licensed satellites
Common Carrier Non–Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER s facilities:	service, see instructions regarding Sec. 214 filings. Choose one. Are these
O Connected to a Public Switched Network Not connected to a	Public Switched Network   N/A
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all a	pplicable frequency band(s).
a. C–Band (4/6 GHz) b. Ku–Band (12/14 GHz)	
c.Other (Please specify upper and lower frequencies in MHz.)	
Frequency Lower: Frequency Upper: (Please specify addition	nal frequencies in an attachment)

# TYPE OF STATION

25. CLASS OF STATION: Choose the button	next to the class of sta	tion that applies. Choose only	one.	
a. Fixed Earth Station				
o b. Temporary–Fixed Earth Station				
o. 12/14 GHz VSAT Network				
d. Mobile Earth Station				
e. Geostationary Space Station				
f. Non–Geostationary Space Station				
g. Other (please specify)				
26. TYPE OF EARTH STATION FACILITY:  Transmit/Receive  Transmit_Only	♣ Receive_Only	- N/Δ		
Transmit/Receive Transmit-Only "For Space Station applications, select N/A."	O Receive—Only	O N/A		

# PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)
a — authorization to add new emission designator and related service
b — authorization to change emission designator and related service
c — authorization to increase EIRP and EIRP density
d — authorization to replace antenna
e — authorization to add antenna
f — authorization to relocate fixed station
g — authorization to change frequency(ies)
h — authorization to add frequency
i — authorization to add Points of Communication (satellites & Double
j — authorization to change Points of Communication (satellites & Double of Communication)
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
1 — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o — Other (Please specify)

### **ENVIRONMENTAL POLICY**

under the laws of a foreign country?

impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.	_		•			
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al er	ı roı	ıte o	r	
29. Is the applicant a foreign government or the representative of any foreign government?	٥	Yes	•	, No	)	
30. Is the applicant an alien or the representative of an alien?	0	Yes	•	. No	0	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	•	, No	, o	N/A
32. Is the applicant a corporation of which more than one—fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized	0	Yes	•	. No	· o	N/A

O Yes No

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

	<del></del>	
33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one–fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	O Yes •	No O N/A
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.		
BASIC QUALIFICATIONS		
35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	• Yes	No
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	No

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	• Yes	<b>⊚</b> No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	• Yes	No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.	• Yes	<b>⊘</b> No
40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.		

41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes.	Yes	O No
42a. Does the applicant intend to use a non–U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.	O Yes	<b>⊚</b> No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, we coordinated or is in the process of coordinating the space station?	/hat administr	ration has

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

GTECH is filing this application to add the Galaxy 11 satellite as a point of communication for its below-one-meter Prodelin .74 and .98 cm VSAT terminals. GTECH is also filing this application to add a new emission designator for all communications within the network.

Attachments

#### **CERTIFICATION**

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

•		
44. Applicant is a (an): (Choose the button next to applie	cable response.)	
<ul> <li>Individual</li> <li>Unincorporated Association</li> <li>Partnership</li> <li>Corporation</li> <li>Governmental Entity</li> <li>Other (please specify)</li> </ul>		
45. Name of Person Signing Bruce R. Turner >	46. Title of Person Signing Chief Executive Officer	

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

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

Location of Earth St	tation Site					_
E1: Site Identifier:	HUB (7.6M)	E5. Call Sign:	E930182			
E2: Contact Name	Greg Sanders	E6. Phone Number:	401 392–1000			
E3. Street:	55 Technology Way	E7. City:	West Greenwich			
		E8. County:	Kent			
E4. State	RI	E9. Zip Code	02817			
E10. Area of Opera	tion:	CONUS, Hawaii, A	laska, P.R., U.S. V.I			
E11. Latitude:	41 °39 '23.0 "N					
E12. Longitude:	71 °34 '16.0 "W					
E13. Lat/Lon Coord	dinates are:	<b>O</b> NAD-27	● NAD-83	O N/A		
E14. Site Elevation	(AMSL):	103.8 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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Se Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	O Yes	O No	<b>⊚</b> N/A	
E17. Is the facility operated by remote control? If YES, provide the loca point.	ntion and telephone number of the control	O Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the r coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		-		
Satellite Name: ALSAT   ALL AUTHORIZED U.S.   ALSAT   If you s	elected OTHER, please enter the following:			
E21. Common Name: ALSAT	E22. ITU Name:			
E23. Orbit Location: ALSAT	E24. Country: USA			
POINTS OF COMMUNICATION (Destination Points)	•			
E25. Site Identifier: HUB (7.6M)				

E26. Common Name: ALSAT	E27. Country: USA

# ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
HUB (7.6M)	ANT2	2	Andrew	ES76K-1	7.6	57.8 dBi at 11.95
HUB (7.6M)	ANT2	2	Andrew	ES76K-1	7.6	59.3 dBi at 14.25

Id	Diameter		,	Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
ANT2	0.0/0.0	8.6	112.4	0.0	400.0	0.0	85.3

# FREQUENCY

	E43/44. Frequency Bands (MHz)				EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
ANT2		R	Horizontal and Vertical	0	0.0	0.0

E50. Modulation entirety.)	and Services (If the	e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
NULL						
ANT2		Т	Horizontal and Vertical	0	0.0	0.0
E50. Modulation entirety.)		, , , , , , , , , , , , , , , , , , ,			o the end of the form	
ANT2	11700 12200	R	Horizontal and Vertical	200KG7D	0.0	0.0
E50. Modulation entirety.)  QPSK, Data	and Services (If the		on does not appear in	this box, please go to	o the end of the form	to view it in its
ANT2	11700 12200	R	Horizontal and Vertical	400KG7D	0.0	0.0

E50. Modulation entirety.)	and Services (If the	e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
	, Inroute, 256	KSPS				
ANT2	11700 12200	R	Horizontal and Vertical	800KG7D	0.0	0.0
E50. Modulation entirety.)  QPSK, Data	, Inroute, 512		on does not appear in	this box, please go to	o the end of the form	to view it in its
ANT2	11700 12200	R	Horizontal and Vertical	1M60KG7D	0.0	0.0
E50. Modulation entirety.)	and Services (If th	e complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
QPSK, Data	, Inroute, 102	4 KSPS				
ANT2	11700 12200	R	Horizontal and Vertical	200KG7W	0.0	0.0

E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear ir	this box, please go t	o the end of the form	to view it in its
OQPSK, 128	3 KSPS, Return	Digital Carrie	r			
ANT2	11700 12200	R	Horizontal and Vertical	120KG7W	0.0	0.0
E50. Modulation entirety.)  MSK (QPSK	n and Services (If the Varient) Retur			this box, please go t	o the end of the form	to view it in its
ANT2	11700 12200	R	Horizontal and Vertical	60K0G7W	0.0	0.0
E50. Modulation entirety.)  MSK (QPSK	n and Services (If the			this box, please go t	o the end of the form	to view it in its
ANT2	14000 14500	Т	Horizontal and Vertical	6M00G7D	77.0	45.3

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
QPSK, Data	, Inroute, 5 M	SPS				
ANT2	14000 14500	Т	Horizontal and Vertical	12M00G7D	80.0	45.3
E50. Modulation entirety.)  QPSK, Data	and Services (If the state of t		on does not appear in	this box, please go to	o the end of the form	to view it in its
ANT2	14000 14500	Т	Horizontal and Vertical	1M20G7W	59.6	34.8
E50. Modulation entirety.)  BPSK Digit	and Services (If the and Services C		on does not appear in	this box, please go to	o the end of the form	to view it in its
ANT2	14000 14500	Т	Horizontal and Vertical	2M40G7W	62.6	34.8

E50. Modulation entirety.)	n and Services (If the	he complete descripti	on does not appear in	this box, please go t	to the end of the form	to view it in its
BPSK Digit	tal Broadcast (	Carrier				
ANT2	14000 14500	Т	Horizontal and Vertical	800KG7W	57.8	34.8
BPSK Digit	tal Broadcast (	Carrier				
ANT2	14000 14500	Т	Horizontal and Vertical	6M20G7W	64.5	32.6
E50. Modulation entirety.)  QPSK, 5 MS	n and Services (If the			n this box, please go t	to the end of the form	to view it in its
ANT2	14000 14500	Т	Horizontal and Vertical	1M60G7W	60.5	34.5

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

BPSK Multimedia Broadcast Digital Carrier

FREQUENCY COORDINATION

E28. E51. Satellite E52/53. E54/55. E56. Earth E57. E58. Earth E59. E60. Antenna Id Orbit Type Frequency Range of Station Antenna Maximum

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
ANT2	Geostationary	11700 12200	69.0/124.0	176.1	41.8	242.9	18.9	0.0
	Geostationary	14000 14500	69.0/124.0	176.1	41.8	242.9	18.9	-24.4

# REMOTE CONTROL POINT LOCATION

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

# 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:	HUB (4.6M)	E5. Call Sign:	E930182			
E2: Contact Name	Greg Sanders	E6. Phone Number:	401 392–1000			
E3. Street:	55 Technology Way	E7. City:	West Greenwich			
		E8. County:	Kent			
E4. State	RI	E9. Zip Code	02817			
E10. Area of Opera	tion:	CONUS, Hawaii, Al	laska, P.R., U.S. V.I.			
E11. Latitude:	41 °39 '23.0 "N					
E12. Longitude:	71 °34 '16.0 "W					
E13. Lat/Lon Coord	dinates are:	<b>○</b> NAD-27	<b>◎</b> NAD-83	O N/A		
E14. Site Elevation	(AMSL):	103.8 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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Se Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	posed antenna(s) comply with the antenna	O Yes	O No	<b>⊚</b> N/A
E17. Is the facility operated by remote control? If YES, provide the loca point.	ntion and telephone number of the control	O Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the r coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		-		
Satellite Name: ALSAT   ALL AUTHORIZED U.S.   ALSAT   If you s	elected OTHER, please enter the following:			
E21. Common Name: ALSAT	E22. ITU Name:			
E23. Orbit Location: ALSAT	E24. Country: USA			
POINTS OF COMMUNICATION (Destination Points)				
E25. Site Identifier: HUB (4.6M)				

E26. Common Name: ALSAT	E27. Country: USA
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# ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
HUB (4.6M)	ANT1	1	Andrew	ESA46-124	4.6	53.4 dBi at 11.95
HUB (4.6M)	ANT1	1	Andrew	ESA46-124	4.6	54.9 dBi at 14.25

Id	Diameter		, ,	Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
ANT1	0.0/0.0	5.6	109.4	0.0	350.0	0.0	80.3

# FREQUENCY

	E43/44. Frequency Bands (MHz)			Designator	EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
ANT1	11700 12200	R	Horizontal and Vertical	200KG7D	0.0	0.0

E50. Modulation entirety.)	and Services (If the	e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
	, Inroute, 128	KSPS				
ANT1	11700 12200	R	Horizontal and Vertical	400KG7D	0.0	0.0
E50. Modulation entirety.)  QPSK, Data	, Inroute, 256		n does not appear in	tins box, picuse go to	o the end of the form	to view it in its
ANT1	11700 12200	Т	Horizontal and Vertical	800KG7D	0.0	0.0
E50. Modulation entirety.)	and Services (If th	e complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
QPSK, Data	, Inroute, 512	KSPS				
ANT1	11700 12200	Т	Horizontal and Vertical	1M80KG7D	0.0	0.0

```
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 1024 KSPS
ANT1
                   14000
                                                         Horizontal and
                                                                            6M00G7D
                                                                                                72.6
                                                                                                                   40.9
                   14500
                                                          Vertical
  E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 5 MSPS
ANT1
                                                         Horizontal and
                                                                             12M00G7D
                                                                                                75.6
                   14000
                                                                                                                   40.9
                                                         Vertical
                   14500
  E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 10 MSPS
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FREQUENCY COORDINATION

	E51. Satellite Orbit Type	Frequency Limits(MHz)	Range of Satellite Arc Eastern/West	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	Antenna Elevation Angle Western	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
ANT1	Geostationary	14000 14500	69.0/124.0	176.1	41.8	242.9	18.9	-20.0

# REMOTE CONTROL POINT LOCATION

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

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

Location of Earth St	ation Site				
E1: Site Identifier:	CTR 1.8M	E5. Call Sign:	E930182		
E2: Contact Name	Greg Sanders	E6. Phone Number:	401-392-1000		
E3. Street:		E7. City:	various points		
		E8. County:			
E4. State		E9. Zip Code			
E10. Area of Operat	tion:	CONUS, Hawaii, A	laska, P.R., U.S. V.I.		
E11. Latitude:	0 °0 '0.0 "				
E12. Longitude:	0 °0 '0.0 "				
E13. Lat/Lon Coord	linates 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.	<b>●</b> Yes	O No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O No	<b>⊗</b> N/A

E17. Is the facility operated by remote control? If YES, provide the locat point.	ion and telephone number of the control	● Yes	O No
E18. Is frequency coordination required? If YES, attach a frequency coordination required?	rdination report as	O Yes	No
E19. Is coordination with another country required? If YES, attach the na coordination contours as	ame of the country(ies) and plot of	O Yes	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.11 have you attached a copy of a completed FCC Form 854 and/or the FAA' the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RAPPLICATION.	's study regarding the potential hazard of	O Yes	No
POINTS OF COMMUNICATION			
Satellite Name: ALSAT   ALL AUTHORIZED U.S.   ALSAT   If you se	elected OTHER, please enter the following:		
E21. Common Name:	E22. ITU Name:		
E23. Orbit Location:	E24. Country:		
POINTS OF COMMUNICATION (Destination Points)			
E25. Site Identifier: CTR 1.8M			
E26. Common Name: ANTENNA	E27. Country: USA		

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer		Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
CTR 1.8M	CTR 1.8M	50000	Channel Master	183	1.8	0.0 dBi at

- 1	Id	Diameter		` ′	Height Above	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
I	CTR 1.8M	0.0/0.0	0.0	0.0	0.0	1.0	0.0	46.8

# FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization(H,V, L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
E50. Modulation entirety.)	and Services (If the	I ne complete descripti	I on does not appear in	In this box, please go t	o the end of the form	to view it in its

FREQUENCY COORDINATION

E28.	E51. Satellite	E52/53.	E54/55.	E56. Earth	E57.	E58. Earth	E59.	E60.
Antenna Id	Orbit Type	Frequency Limits(MHz)		Station Azimuth	Antenna Elevation	Station Azimuth	Antenna Elevation	Maximum EIRP Density
		Limits(Willz)	Eastern/West	Angle	Angle	Angle	Angle	toward the
			ern Limit	Eastern Limit	Eastern Limit	Limit	Western Limit	Horizon (dBW/4kHz)
			/					

### REMOTE CONTROL POINT LOCATION

E61. Call Sign E930182 NOTE: Please enter the callsign of the controcallsign for which this application is being filed.	E66. Phone Number 401 392–1000			
E62. Street Address 55 Technology Way				
E63. City West Greenwich	E68. County Kent		E67/68. State/Country RI/ USA	E64. Zip Code 02817

# 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:	CTR 1.2M	E5. Call Sign:	E930182	
E2: Contact Name	Greg Sanders	E6. Phone Number:	401 392–1000	
E3. Street:		E7. City:	various locations	
		E8. County:		
E4. State		E9. Zip Code		
E10. Area of Opera	tion:	CONUS, Hawaii, A	Alaksa, P.R., U.S. V.I	
E11. Latitude:	0 °0 '0.0 "			
E12. Longitude:	0 °0 '0.0 "			
E13. Lat/Lon Coord	dinates are:	<b>○</b> 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.	<b>●</b> Yes	O No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O No	● N/A

nd telephone number of the control	<b>⊚</b> Y	es	0	No
ion report as				
	OY	es	•	No
f the country(ies) and plot of	O Y	es	•	No
Where FAA notification is required, dy regarding the potential hazard of LT IN THE RETURN OF THIS	O Y	es	•	No
ITU Name:				
Country:				
Country:				
	ion report as  f the country(ies) and plot of  Where FAA notification is required, dy regarding the potential hazard of  LT IN THE RETURN OF THIS  ITU Name:  Country:	ion report as  Y  If the country(ies) and plot of  Where FAA notification is required, dy regarding the potential hazard of  LT IN THE RETURN OF THIS  ITU Name:  Country:	ion report as  Yes  The country (ies) and plot of  Yes  Where FAA notification is required, dy regarding the potential hazard of  LT IN THE RETURN OF THIS  ITU Name:  Country:	ion report as  Yes  Yes  f the country(ies) and plot of  Where FAA notification is required, dy regarding the potential hazard of  LT IN THE RETURN OF THIS  ITU Name:  Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer		Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
CTR 1.2M	CTR 1.2M	50000	Channel Master	1124, 1134	1.2	0.0 dBi at

Id	Diameter		,	Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
CTR 1.2M	0.0/0.0	0.0	0.0	0.0	1.0	0.0	43.2

# FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	equency Bands   T/R Mode   Polarization(H,V,		Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)			
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.)									

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)		
			/							
REMOTE CO	NTROL POIN	T LOCATION		•				•		
E61. Call Sign  NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.										
E62. Street Address										
E63. City			E68. County	,		E67/68. State/Country	F	64. Zip Code		

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

Location of Earth Station Site E1: Site Identifier: CTR .96M E5. Call Sign: E930182 E6. Phone E2: Contact Name Greg Sanders 401 392-1000 Number: E3. Street: E7. City: various locations E8. County: E9. Zip Code E4. State E10. Area of Operation: CONUS, Hawaii, Alaska, P.R., U.S. V.I. E11. Latitude: 0 °0 '0.0 " E12. Longitude: 0 °0 '0.0 " E13. Lat/Lon Coordinates are: 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.	<b>O</b> Yes	<b>⊗</b> No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O No	● N/A

E17. Is the facility operated by remote control? If YES, provide the local point.	tion and telephone number of the control	Yes	O No
E18. Is frequency coordination required? If YES, attach a frequency coo	rdination report as	O Yes	No
E19. Is coordination with another country required? If YES, attach the naccoordination contours as	ame of the country(ies) and plot of	O Yes	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.		O Yes	No
POINTS OF COMMUNICATION		'	
Satellite Name: OTHER   OTHER   If you selected OTHER, please en	ter the following:		
E21. Common Name: AMC-4	E22. ITU Name:		
E23. Orbit Location: 101 W.L.	E24. Country: USA		
Satellite Name: OTHER   OTHER   If you selected OTHER, please en	nter the following:		
E21. Common Name: AMC-3	E22. ITU Name:		
E23. Orbit Location: 87 W.L.	E24. Country: USA		
POINTS OF COMMUNICATION (Destination Points)	1		
E25. Site Identifier:			

E26. Common Name:						E27. Country:						
ANTENNA						!						
Site ID	E28. Antenna Id	E29	. Quantity	E30. Manu	facturer	E31. Moo	del	E32. Anten Size <meter< th=""><th></th><th>E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)</th><th></th><th></th></meter<>		E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)		
CTR .96M	CTR .96M	5000	00	Chann	el Master	960		0.96		0.0 dBi at		
E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	Gro	. Above und Level ters)		bove Sea meters)	E37. Bui Height A Ground I (meters)	bove	E38. Total Input Powe antenna fla (Watts)		E39. Maximum Antenna Heig Above Roofton (meters)	ht	E40. Total EIRP for al carriers(dBW)
CTR .96M	0.0/0.0	0.0		0.0		0.0		1.0		0.0		41.2
FREQUENCY	•			<u>.</u>		•		· L		<del>!</del>		
E28. Antenna Id	E43/44. Frequency Ba (MHz)	ands	E45. T/R M	ode	E46. Ant Polarizat L,R)		E47. E Design	Emission nator		. Maximum P per Carrier W)	El Ca	19. Maximum RIP Density per arrier BW/4kHz)
E50. Modulati	ion and Services	(If th	ne complete o	descripti	on does no	t appear in	this bo	x, please go t	o the	end of the form	to	view it in its

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Earth Station Azimuth Angle Eastern Li	A E A	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)
			/						
REMOTE CO	ONTROL POIN	T LOCATION	•					-	•
E61. Call S			111		E66. I	Phone Number			
	ase enter the calls nich this applicati	•	•	t the					
E62. Street	Address								

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

E68. County

E67/68.

State/Country

E64. Zip Code

E63. City

Location of Earth Station Site E1: Site Identifier: CTR .75M E5. Call Sign: E930182 E6. Phone E2: Contact Name Greg Sanders 401 392-1000 Number: E3. Street: E7. City: various locations E8. County: E9. Zip Code E4. State E10. Area of Operation: CONUS, Hawaii, Alaska, P.R., U.S. V.I. E11. Latitude: 0 °0 '0.0 " E12. Longitude: 0 °0 '0.0 " E13. Lat/Lon Coordinates are: 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.	<b>O</b> Yes	<b>⊚</b> No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O No	● N/A

E17. Is the facility operated by remote control? If YES, provide the locat point.	ion and telephone number of the control	Yes	O No
E18. Is frequency coordination required? If YES, attach a frequency coordination	rdination report as	O Yes	<b>⊚</b> No
E19. Is coordination with another country required? If YES, attach the na coordination contours as	ame of the country(ies) and plot of	O Yes	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.11 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RAPPLICATION.	's study regarding the potential hazard of	O Yes	No
POINTS OF COMMUNICATION		•	
Satellite Name: OTHER   OTHER   If you selected OTHER, please en	·		
E21. Common Name: AMC-4	E22. ITU Name:		
E23. Orbit Location: 101 W.L.	E24. Country: USA		
Satellite Name: OTHER   OTHER   If you selected OTHER, please en	ter the following:		
E21. Common Name: AMC-3	E22. ITU Name:		
E23. Orbit Location: 87 W.L.	E24. Country: USA		
POINTS OF COMMUNICATION (Destination Points)			
E25. Site Identifier:			

E26. Common Na	on Name:					E27. Country:						
ANTENNA												
Site ID	E28. Antenna Id	E29	. Quantity	E30. Manu	facturer	E31. Moo	del	E32. Anten Size <meter< th=""><th></th><th>E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)</th><th></th><th></th></meter<>		E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)		
CTR .75M	CTR .75M	5000	00	Chann	el Master	75e		0.75		0.0 dBi at		
E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	Gro	. Above und Level ters)		bove Sea meters)	E37. Buil Height A Ground I (meters)	bove	E38. Total Input Powe antenna fla (Watts)		E39. Maximus Antenna Heig Above Roofto (meters)	ht	E40. Total EIRP for al carriers(dBW)
CTR .75M	0.62/0.89	0.0		0.0		0.0		1.0		0.0		38.8
FREQUENCY		•		•		•		•				
E28. Antenna Id	E43/44. Frequency Ba (MHz)	ands	E45. T/R M	ode	E46. Ant Polarizat L,R)		E47. E Design	Emission nator		. Maximum P per Carrier W)	El Ca	49. Maximum RIP Density per arrier BW/4kHz)
E50. Modulati	on and Services	(If th	ne complete o	lescripti	on does no	t appear in	this bo	x, please go t	o the	end of the form	to	view it in its

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
			/					
REMOTE CO	NTROL POIN	T LOCATION	•	•	•	•	•	•
	_	•	olling station, not		. Phone Number			
E62. Street A	Address			,				
E63. City			E68. County	,		E67/68. State/Country		E64. Zip Code

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

Location of Earth Station Site E1: Site Identifier: PTR 1.8M E5. Call Sign: E930182 E6. Phone E2: Contact Name Greg Sanders 401 392-1000 Number: E3. Street: E7. City: various locations E8. County: E9. Zip Code E4. State E10. Area of Operation: CONUS, Hawaii, Alaska, P.R., U.S. V.I. E11. Latitude: 0 °0 '0.0 " E12. Longitude: 0 °0 '0.0 " E13. Lat/Lon Coordinates are: 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.	<b>●</b> Yes	O No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O No	● N/A

E17. Is the facility operated by remote control? If YES, provide the point.	he location and telephone number of the control	Yes	O No
E18. Is frequency coordination required? If YES, attach a frequen	ncy coordination report as		
		O Yes	No
E19. Is coordination with another country required? If YES, attac coordination contours as	h the name of the country(ies) and plot of		
coordination contours as		O Yes	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part have you attached a copy of a completed FCC Form 854 and/or the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 VAPPLICATION.	he FAA's study regarding the potential hazard of	O Yes	No
POINTS OF COMMUNICATION		•	
Satellite Name: If you selected OTHER, please enter the follow	wing:		
E21. Common Name:	E22. ITU Name:		
E23. Orbit Location:	E24. Country:		
POINTS OF COMMUNICATION (Destination Points)	•		
E25. Site Identifier:			
E26. Common Name:	E27. Country:		
ANTENNA	•		

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)	
PTR 1.8M	PTR 1.8M	50000	Prodelin	1184	1.8	45.0 dBi at 11.95	
PTR 1.8M	PTR 1.8M	50000	Prodelin	1184	1.8	46.7 dBi at 14.25	

Id	Diameter		, ,	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
PTR 1.8M	0.0/0.0	0.0	0.0	0.0	2.0	0.0	49.7

## FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
PTR 1.8M	11700 12200	R	Horizontal and Vertical	6M00G7D	0.0	0.0

E50. Modulation entirety.)	and Services (If the	e complete description	on does not appear in	this box, please go to	the end of the form	to view it in its				
	, Inroute, 5 M	SPS								
PTR 1.8M	11700 12200	R	Horizontal and Vertical	12M00G7D	0.0	0.0				
entirety.)	E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)  QPSK, Data, Inroute, 10 MSPS									
PTR 1.8M	14000 14500	T	Horizontal and Vertical	200KG7D	49.7	32.7				
E50. Modulation entirety.)	and Services (If the	e complete description	on does not appear in	this box, please go to	the end of the form	to view it in its				
QPSK, Data	, Inroute, 128	KSPS								
PTR 1.8M	14000 14500	Т	Horizontal and Vertical	400KG7D	49.7	29.7				

```
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 256 KSPS
PTR 1.8M
                   14000
                                                         Horizontal and
                                                                            800KG7D
                                                                                               49.7
                                                                                                                   26.7
                                                         Vertical
                   14500
  E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 512 KSPS
PTR 1.8M
                                                                            1M60KG7D
                                                                                                                  23.7
                   14000
                                                         Horizontal and
                                                                                               49.7
                                                         Vertical
                   14500
  E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 1024 KSPS
```

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Ea Station Azimutl Angle Eastern	h	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)
			/						
REMOTE CO	ONTROL POIN	T LOCATION		!					
	ign ase enter the calls nich this applicati	•	•	t the	E66	. Phone Number			
E62. Street		on is being filed	•						

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

E68. County

E67/68.

State/Country

E64. Zip Code

E63. City

Location of Earth Station Site E1: Site Identifier: PTR 1.2 E5. Call Sign: E930182 E2: Contact Name Greg Sanders E6. Phone 401 392-1000 Number: E3. Street: E7. City: various locations E8. County: E9. Zip Code E4. State E10. Area of Operation: CONUS, Hawaii, Alaska, P.R., U.S. V.I. E11. Latitude: 0 °0 '0.0 " E12. Longitude: 0 °0 '0.0 " E13. Lat/Lon Coordinates are: 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.	<b>●</b> Yes	O No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	<b>O</b> Yes	O No	<b>⊚</b> N/A

E17. Is the facility operated by remote control? If YES, provide the point.	e location and telephone number of the control	• Yes	O No
E18. Is frequency coordination required? If YES, attach a frequency	y coordination report as	<u> </u>	
E16. Is frequency coordination required: If TES, attach a frequency	y coordination report as	O Yes	No
E19. Is coordination with another country required? If YES, attach coordination contours as	O Yes	No	
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part have you attached a copy of a completed FCC Form 854 and/or the the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 W. APPLICATION.	O Yes	No	
POINTS OF COMMUNICATION		•	
Satellite Name: If you selected OTHER, please enter the following	ng:		
E21. Common Name:	E22. ITU Name:		
E23. Orbit Location:			
POINTS OF COMMUNICATION (Destination Points)			
E25. Site Identifier:			
E26. Common Name:	E27. Country:		
A NITTENINI A			

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
PTR 1.2	PTR 1.2M	50000	Prodelin	1123	1.2	41.5 dBi at 11.95
PTR 1.2	PTR 1.2M	50000	Prodelin	1123	1.2	43.1 dBi at 14.25

- 1	Id	Diameter		,	Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
	PTR 1.2M	0.0/0.0	0.0	0.0	0.0	2.0	0.0	46.1

## FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
PTR 1.2M	11700 12200	R	Horizontal and Vertical	6M00G7D	0.0	0.0

E entir	50. Modulation ety.)	and Services (If the	ne complete description	on does not appear in	this box, please go t	to the end of the form	to view it in its
	QPSK, Data	, Inroute, 5 M	ISPS				
PTR	1.2M	11700 12200	R	Horizontal and Vertical	12M00G7D	0.0	0.0
E entir	50. Modulation ety.)	and Services (If the	ne complete description	on does not appear in	this box, please go t	to the end of the form	to view it in its
	QPSK, Data	, Inroute, 10	MSPS				
PTR	1.2M	14000 14500	Т	Horizontal and Vertical	200KG7D	46.1	29.1
E entir	50. Modulation ety.)	and Services (If the	ne complete description	on does not appear in	this box, please go t	to the end of the form	to view it in its
	QPSK, Data	, Inroute, 128	KSPS				
PTR	1.2M	14000 14500	Т	Horizontal and Vertical	400KG7D	46.1	26.1

```
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 256 KSPS
PTR 1.2M
                   14000
                                                         Horizontal and
                                                                            800KG7D
                                                                                               46.1
                                                                                                                   23.1
                                                         Vertical
                   14500
  E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 512 KSPS
PTR 1.2M
                                                         Horizontal and
                                                                            1M60KG7D
                   14000
                                                                                               46.1
                                                                                                                   20.1
                                                         Vertical
                   14500
  E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its
entirety.)
    QPSK, Data, Inroute, 1024 KSPS
```

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	0	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
			/					
REMOTE CC	NTROL POIN	T LOCATION						
	ase enter the calls ich this application	•	•		. Phone Number			
E63. City			7		E67/68. State/Country	E	64. Zip Code	
			m 312 – Schedu	TH STATION A le B:(Technical a OFFICIAL USE	and Operational			

Location of Earth Station Site E1: Site Identifier: PTR .74M E5. Call Sign: E930182 E6. Phone E2: Contact Name Greg Sanders 401 392-1000 Number: E3. Street: E7. City: various locations E8. County: E9. Zip Code E4. State E10. Area of Operation: CONUS, Hawaii, Alaska, P.R., U.S. V.I. E11. Latitude: 0 °0 '0.0 " E12. Longitude: 0 °0 '0.0 " E13. Lat/Lon Coordinates are: 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> No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O No	● N/A

E17. Is the facility operated by remote control? If YES, provide the loca point.	ation and telephone number of the control	Yes	O No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	O Yes	<b>⊘</b> No
E19. Is coordination with another country required? If YES, attach the r coordination contours as	O Yes	<b>⊘</b> No	
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	O Yes	No	
POINTS OF COMMUNICATION		!	
Satellite Name: OTHER   OTHER   If you selected OTHER, please e	nter the following:		
E21. Common Name: AMC-4	E22. ITU Name:		
E23. Orbit Location: 101 W.L.	E24. Country: USA		
Satellite Name: OTHER   OTHER   If you selected OTHER, please e	nter the following:		
E21. Common Name: AMC-3	E22. ITU Name:		
E23. Orbit Location: 87 W.L.			
Satellite Name: GALAXY XI   GALAXY XI   91 W.L. If you selected	d OTHER, please enter the following:		

E28. Antenna Id	E43/44. Frequency Ba (MHz)		E45. T/R M	ode	E46. Ant Polarizat L,R)		E47. E Design	Emission nator			E49. Maximum ERIP Density per Carrier (dBW/4kHz)	
FREQUENCY		•		•	_	•		•			•	
PTR .74M	0.564/0.98	0.0		0.0		0.0		2.0		0.0	42.0	
E28. Antenna Id	E33/34. Diameter Minor/Major (meters)		Above and Level ers)	l .	bove Sea meters)	E37. Buil Height A Ground I (meters)	bove	E38. Total Input Powe antenna fla (Watts)		E39. Maximum Antenna Heigl Above Roofton (meters)	nt EIRP for al	
PTR .74M	PTR .74M	5000	00	Prodeli	in	HANT-9	1TR	0.74		39.0 dBi at 14.25		
PTR .74M	PTR .74M	5000	0	Prodelin		HANT-91TR		0.74		37.7 dBi at 11.95		
Site ID	E28. Antenna Id	E29.	Quantity	E30. Manuf	facturer	E31. Mod	del	E32. Anteni Size <meters< td=""><td></td><td>E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)</td><td></td></meters<>		E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)		
ANTENNA												
E26. Common N	Jame:					E27. Country:						
E25. Site Identifi												
	COMMUNICATI	ON (I	Destination	Points)		E24. Country:						
E23. Orbit Locat												
F21 Common N	21. Common Name:						E22. ITU Name:					

PTR .74M	11700 12200	R	Horizontal and Vertical	6M00G7D	0.0	0.0
E50. Modulation entirety.)	on and Services (	If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
QPSK, Dat	a, Inroute, 5	5 MSPS				
PTR .74M	11700 12200	R	Horizontal and Vertical	12M00G7D	0.0	0.0
QPSK, Dat	ta, Inroute, 1	10 MSPS				
PTR .74M	14000 14500	Т	Horizontal and Vertical	200KG7D	42.0	25.0
E50. Modulation entirety.)	on and Services (	If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
QPSK, Dat	a, Inroute, 1	128 KSPS				

PTR .74M	14000 14500	Т	Horizontal and Vertical	400KG7D	42.0	22.0
E50. Modular entirety.)	tion 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
QPSK, Da	ata, Inroute,	256 KSPS				
PTR .74M	14000 14500	Т	Horizontal and Vertical	800KG7D	42.0	19.0
QPSK, Da	ata, Inroute,	512 KSPS				
PTR .74M	14000 14500	Т	Horizontal and Vertical	1M60KG7D	42.0	16.0
entirety.)	ata, Inroute,		escription does not appear	in this box, please	go to the end of th	ne form to view it in its

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Ear Station Azimuth Angle Eastern	1	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)
			/						
REMOTE CO	ONTROL POIN	T LOCATION		!					
E61. Call Sign E66.									
	ase enter the calls	•	•	t the					

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

E68. County

E64. Zip Code

E67/68. State/Country

E62. Street Address

E63. City

Location of Earth Station Site E1: Site Identifier: PTR .98M E5. Call Sign: E930182 E6. Phone E2: Contact Name Greg Sanders 401 392-1000 Number: E3. Street: E7. City: various locations E8. County: E9. Zip Code E4. State E10. Area of Operation: CONUS, Hawaii, Alaska, P.R., U.S. V.I. E11. Latitude: 0 °0 '0.0 " E12. Longitude: 0 °0 '0.0 " E13. Lat/Lon Coordinates are: 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> No	O N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O No	● N/A

E17. Is the facility operated by remote control? If YES, provide the loca point.	ation and telephone number of the control	<b>⊗</b> Yes	O No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	O Yes	No
E19. Is coordination with another country required? If YES, attach the a coordination contours as	name of the country(ies) and plot of	O Yes	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAZ the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	No
POINTS OF COMMUNICATION			
Satellite Name: OTHER   OTHER   If you selected OTHER, please e	enter the following:		
E21. Common Name: AMC-4	E22. ITU Name:		
E23. Orbit Location: 101 W.L.	E24. Country: USA		
Satellite Name: GALAXY XI   GALAXY XI   91 W.L. If you selecte	d OTHER, please enter the following:		
E21. Common Name:	E22. ITU Name:		
E23. Orbit Location:	E24. Country:		
Satellite Name: OTHER   OTHER   If you selected OTHER, please e	enter the following:		

E21. Common Name: AMC-3	E22. ITU Name:
E23. Orbit Location: 87 W.L.	E24. Country: USA

#### POINTS OF COMMUNICATION (Destination Points)

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

### ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)
PTR .98M	PTR .98M	50000	Prodelin	9008668	0.98	39.9 dBi at 11.95
PTR .98M	PTR .98M	50000	Prodelin	9008668	0.98	41.3 dBi at 14.25

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)		` ′	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
PTR .98M	0.0/0.0	0.0	0.0	0.0	2.0	0.0	44.3

## FREQUENCY

	E28. Antenna Id	E43/44.	E45.	E46. Antenna	E47. Emission	E48. Maximum	E49. Maximum
1		Frequency Bands	T/R Mode	Polarization(H,V,	Designator	EIRP per Carrier	ERIP Density per
1		(MHz)		<b>L</b> , <b>R</b> )		(dBW)	Carrier
1							(dBW/4kHz)

PTR .98M	11700 12200	R	Horizontal and Vertical	6M00G7D	0.0	0.0
E50. Modulatio entirety.)	n and Services (	If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
QPSK, Dat	a, Inroute, 5	5 MSPS				
PTR .98M	11700 12200	R	Horizontal and Vertical	12M00G7D	0.0	0.0
QPSK, Dat	a, Inroute, 1	LO MSPS				
PTR .98M	14000 14500	Т	Horizontal and Vertical	200KG7D	44.3	27.3
E50. Modulatio entirety.)	n and Services (	If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
QPSK, Dat	a, Inroute, 1	L28 KSPS				

PTR .98M	14000 14500	Т	Horizontal and Vertical	400KG7D	44.3	24.3
E50. Modula entirety.)	tion and Services (	(If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
QPSK, Da	ata, Inroute,	256 KSPS				
PTR .98M	14000 14500	Т	Horizontal and Vertical	800KG7D	44.3	21.3
PTR .98M	14000 14500	Т	Horizontal and Vertical	1M60KG7D	44.3	19.3
E50. Modula entirety.)	tion and Services (	(If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
QPSK, Da	ata, Inroute,	1024 KSPS				

E28. Antenna Id		E52/53. Frequency Limits(MHz)	Range of Satellite Arc	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)
			/					
REMOTE CO	NTROL POIN	T LOCATION	•		•	•	•	•

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

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