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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:
WB36 May 2020 Power Increase for 3 Antennas & add 9 New Antennas

1-8. Legal Name of Applicant			
Name:	Marlink, Inc.	Phone Number:	240-595-0655
DBA Name:		Fax Number:	713-946-0403
Street:	3327 South Sam Houston Parkway East Suite 100	E-Mail:	tom.collins@marlink.com
City:	Houston	State:	TX
Country:	USA	Zipcode:	77047 -
Attention:	Tom Collins		

9-16. Name of Contact Representative

Name:	James G. Lovelace	Phone Number:	281 606 0117
Company:	Marlink, Inc.	Fax Number:	713-946-0403
Street:	3327 S Sam Houston Parkway Eas Suite 100	E-Mail:	james.lovelace@marlink.com
City:	Houston	State:	TX
Country:	USA	Zipcode:	77047-
Attention:	James G. Lovelace	Relationship:	Other

CLASSIFICATION OF FILING

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

- a1. Earth Station
- a2. Space Station

- (N/A) b1. Application for License of New Station
- (N/A) b2. Application for Registration of New Domestic Receive-Only Station
- b3. Amendment to a Pending Application
- b4. Modification of License or Registration
- b5. Assignment of License or Registration
- b6. Transfer of Control of License or Registration
- b7. Notification of Minor Modification
- (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- (N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- (N/A) b10. Other (Please specify)
- (N/A) b11. Application for Earth Station to Access a Non-U.S. satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States
- (N/A) b12. Application for Database Entry
- b13. Amendment to a Pending Database Entry Application
- b14. Modification of Database Entry

TYPE OF SERVICE

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

TYPE OF STATION

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

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

26. TYPE OF EARTH STATION FACILITY:

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

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

PURPOSE OF MODIFICATION

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

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

ENVIRONMENTAL POLICY

<p>28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission’s rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p>Ex 9 RadHaz Reports</p>
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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.

<p>29. Is the applicant a foreign government or the representative of any foreign government?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>30. Is the applicant an alien or the representative of an alien?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>31. Is the applicant a corporation organized under the laws of any foreign government?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>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?</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p>

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

Yes No N/A

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

Ex 7 Freq Coord

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

Ex 8 Waiver Requests

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

Yes No

Ex 6 Areas of Operat

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

Yes No

Ex 10 – Ext Ku Recie

38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attemptiing 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

Ex 5B.2 Ka Plots

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

Yes No

Ex 5B.1 Ka Plots

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.

Ex 5A.5 Ku Plots

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

Yes No

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

Yes No

Ex 5A.4 Ku Plots

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? All are on Approved Space Station List

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.)

Applicant respectfully requests modification of WB36 License to authorize increase in power to the antenna flange and new associated specifications and emission designators for up to 500 Thrane & Thrane Sailor model TT7080A 'Sailor 800A' 0.83 meter Ku-Band antennas, 500 Intellian Model 'V150NX' 1.50 meter Ku-Band antennas and 500 Intellian model 'V85NX'

Ex 1 Narrative

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

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.

C

Ex 5A.3 Ku Plots

CERTIFICATION

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

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

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

45. Name of Person Signing Tore Morten Olsen	46. Title of Person Signing President Maritime
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WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT
(U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION
(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

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

Location of Earth Station Site

E1: Site Identifier:	2KU-BAND ESV & VSAT	E5. Call Sign:	WB36
E2: Contact Name	David Atabala	E6. Phone Number:	281-809-9708
E3. Street:	11707 S Sam Houston Parkway W	E7. City:	Houston
E4. State	TX	E8. County:	Harris
E10. Area of Operation:		E9. Zip Code	77031
E11. Latitude:	0 °0 '0.0 "	U.S. and International Waters and CONUS, AK, HI, US&P	
E12. Longitude:	0 °0 '0.0 "		
E13. Lat/Lon Coordinates are:	<input type="radio"/> NAD-27	<input checked="" type="radio"/> NAD-83	<input type="radio"/> N/A
E14. Site Elevation (AMSL):	0.0 meters		

<p>E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two-degree spacing policy.</p>	<p><input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A</p>
<p>E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?</p>	<p><input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A</p>
<p>E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>

<p>E18. Is frequency coordination required? If YES, attach a frequency coordination report as Ex 2 Inform. Attach</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>

POINTS OF COMMUNICATION

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

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

POINTS OF COMMUNICATION (Destination Points)

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

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size<meters>	E41/42. Antenna Gain Transmint and/or Recieve (___ dBi at ___ GHz)	
2KU-BAND ESV & VSAT	TTSA80020W	500	THRANE & THRANE	TT7080A SAILOR 800A	0.83	37.9 dBi at 11.70	
2KU-BAND ESV & VSAT	TTSA80020W	500	THRANE & THRANE	TT7080A SAILOR 800A	0.83	40.0 dBi at 14.25	
2KU-BAND ESV & VSAT	INTV150NX	500	INTELLIAN	V150NX	1.5	43.8 dBi at 12.20	
2KU-BAND ESV & VSAT	INTV150NX	500	INTELLIAN	V150NX	1.5	45.1 dBi at 14.25	
2KU-BAND ESV & VSAT	INTV85NX	500	INTELLIAN	V85NX	0.85	38.8 dBi at 11.70	
2KU-BAND ESV & VSAT	INTV85NX	500	INTELLIAN	V85NX	0.85	40.6 dBi at 14.25	
2KU-BAND ESV & VSAT	INTV80e	500	INTELLIAN	V80e	0.8	37.8 dBi at 11.70	
2KU-BAND ESV & VSAT	INTV80e	500	INTELLIAN	V80e	0.8	39.3 dBi at 14.25	

2KU-BAND ESV & VSAT	INTV100NX	500	INTELLIAN	V100NX	1.05	40.4 dBi at 11.70	
2KU-BAND ESV & VSAT	INTV100NX	500	INTELLIAN	V100NX	1.05	41.6 dBi at 14.25	
2KU-BAND ESV & VSAT	INTV130NX	500	INTELLIAN	V130NX	1.25	41.7 dBi at 11.70	
2KU-BAND ESV & VSAT	INTV130NX	500	INTELLIAN	V130NX	1.25	43.1 dBi at 14.25	
2KU-BAND ESV & VSAT	V240MTKU	500	INTELLIAN	V240MTKU	2.4	46.5 dBi at 11.80	
2KU-BAND ESV & VSAT	V240MTKU	500	INTELLIAN	V240MTKU	2.4	47.4 dBi at 14.25	
2KU-BAND ESV & VSAT	V240MTG2KU	500	INTELLIAN	V240MTGen2K U	2.4	47.3 dBi at 11.80	
2KU-BAND ESV & VSAT	V240MTG2KU	500	INTELLIAN	V240MTGen2K U	2.4	48.2 dBi at 14.25	
2KU-BAND ESV & VSAT	2400KU	500	SEA TEL	2400KU	2.4	46.7 dBi at 11.70	
2KU-BAND ESV & VSAT	2400KU	500	SEA TEL	2400KU	2.4	48.1 dBi at 14.25	

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level(meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at antenna flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for al carriers(dBW)
TTSA80020W	0.83/0.83	0.0	0.0	0.0	18.2	0.0	52.6
INTV150NX	1.5/1.5	0.0	0.0	0.0	151.4	0.0	66.9

INTV85NX	0.85/0.85	0.0	0.0	0.0	20.0	0.0	53.61
INTV80e	0.8/0.8	0.0	0.0	0.0	5.7	0.0	46.85
INTV100NX	1.05/1.05	0.0	0.0	0.0	21.4	0.0	54.9
INTV130NX	1.25/1.25	0.0	0.0	0.0	34.0	0.0	58.41
V240MTKU	2.4/2.4	0.0	0.0	0.0	263.0	0.0	71.6
V240MTG2KU	2.4/2.4	0.0	0.0	0.0	295.1	0.0	72.9
2400KU	2.4/2.4	0.0	0.0	0.0	260.0	0.0	72.24

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)
TTSA80020W	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
<p>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.)</p> <div style="border: 1px solid black; padding: 10px; min-height: 100px;"> <p>DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION</p> </div>						
TTSA80020W	10700 12200	R	Horizontal and Vertical	44K8G7W	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.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

TTSA80020W	10700 12200	R	Horizontal and Vertical	54M0G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

TTSA80020W	10700 12200	R	Horizontal and Vertical	54M0G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

TTSA80020W	14000 14500	T	Horizontal and Vertical	44K8G1W	31.3	20.8
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

TTSA80020W	14000 14500	T	Horizontal and Vertical	44K8G7W	31.3	20.8
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

TTSA80020W	14000 14500	T	Horizontal and Vertical	5M00G1W	51.7	20.8
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

TTSA80020W	14000 14500	T	Horizontal and Vertical	5M00G7W	51.7	20.8
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV150NX	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV150NX	10700 12200	R	Horizontal and Vertical	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV150NX	10700 12200	R	Horizontal and Vertical	54M0G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV150NX	10700 12200	R	Horizontal and Vertical	54M0G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV150NX	14000 14500	T	Horizontal and Vertical	44K8G1W	41.6	31.1
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV150NX	14000 14500	T	Horizontal and Vertical	44K8G7W	41.6	31.1
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV150NX	14000 14500	T	Horizontal and Vertical	50M0G1W	66.9	25.9
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV150NX	14000 14500	T	Horizontal and Vertical	50M0G7W	66.9	25.9
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV85NX	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV85NX	10700 12200	R	Horizontal and Vertical	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV85NX	10700 12200	R	Horizontal and Vertical	54M0G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV85NX	10700 12200	R	Horizontal and Vertical	54M0G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV85NX	14000 14500	T	Horizontal and Vertical	2M10G1W	49.7	22.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV85NX	14000 14500	T	Horizontal and Vertical	2M10G7W	49.7	22.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV85NX	14000 14500	T	Horizontal and Vertical	44K8G1W	33.0	22.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV85NX	14000 14500	T	Horizontal and Vertical	44K8G7W	33.0	22.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV80e	10700 12200	R	Horizontal and Vertical	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATIO

INTV80e	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION						
INTV80e	10700 12200	R	Horizontal and Vertical	54M0G1W	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.)						
DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION						
INTV80e	10700 12200	R	Horizontal and Vertical	54M0G7W	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.)						
DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION						
INTV80e	14000 14500	T	Horizontal and Vertical	2M10G1W	46.85	19.65

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 TRAFFIC USING QPSK AND BPSK MODULATION

INTV80e	14000 14500	T	Horizontal and Vertical	2M10G7W	46.85	19.65
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV80e	14000 14500	T	Horizontal and Vertical	44K8G1W	30.99	20.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV80e	14000 14500	T	Horizontal and Vertical	44K8G7W	30.99	20.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV100NX	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV100NX	10700 12200	R	Horizontal and Vertical	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV100NX	10700 12200	R	Horizontal and Vertical	54M0G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV100NX	10700 12200	R	Horizontal and Vertical	54M0G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV100NX	14000 14500	T	Horizontal and Vertical	44K8G1W	35.1	24.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV100NX	14000 14500	T	Horizontal and Vertical	44K8G7W	35.1	24.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV100NX	14000 14500	T	Horizontal and Vertical	5M00G1W	54.9	23.9
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV100NX	14000 14500	T	Horizontal and Vertical	5M00G7W	54.9	23.9
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV130NX	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV130NX	10700 12200	R	Horizontal and Vertical	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV130NX	10700 12200	R	Horizontal and Vertical	54M0G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV130NX	10700 12200	R	Horizontal and Vertical	5M00G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV130NX	14000 14500	T	Horizontal and Vertical	44K8G1W	40.3	29.1
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV130NX	14000 14500	T	Horizontal and Vertical	44K8G7W	40.3	29.1
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV130NX	14000 14500	T	Horizontal and Vertical	8M00G1W	58.41	25.41
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

INTV130NX	14000 14500	T	Horizontal and Vertical	8M00G7W	58.41	25.41
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKU	10700 12200	R	Horizontal and Vertical	200MG1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKU	10700 12200	R	Horizontal and Vertical	200MG7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKU	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKU	10700 12200	R	Horizontal and Vertical	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKU	14000 14500	T	Horizontal and Vertical	100MG1W	71.6	27.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKU	14000 14500	T	Horizontal and Vertical	100MG7W	71.6	27.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKU	14000 14500	T	Horizontal and Vertical	44K8G1W	39.5	29.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKU	14000 14500	T	Horizontal and Vertical	44K8G7W	39.5	29.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KU	10700 12200	R	Horizontal and Vertical	200MG1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KU	10700 12200	R	Horizontal and Vertical	200MG7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KU	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KU	10700 12200	R	Horizontal and Vertical	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KU	14000 14500	T	Horizontal and Vertical	100MG1W	72.9	28.9
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KU	14000 14500	T	Horizontal and Vertical	100MG7W	72.9	28.9
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KU	14000 14500	T	Horizontal and Vertical	44K8G1W	43.0	32.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KU	14000 14500	T	Horizontal and Vertical	44K8G7W	43.0	32.5
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KU	10700 12200	R	Horizontal and Vertical	200MG1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KU	10700 12200	R	Horizontal and Vertical	200MG7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KU	10700 12200	R	Horizontal and Vertical	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KU	10700 12200	R	Horizontal and Vertical	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KU	14000 14500	T	Horizontal and Vertical	100MG1W	72.24	28.27
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KU	14000 14500	T	Horizontal and Vertical	100MG7W	72.24	28.27
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KU	14000 14500	T	Horizontal and Vertical	44K8G1W	43.09	32.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KU	14000 14500	T	Horizontal and Vertical	44K8G7W	43.09	32.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

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)
TTSA80020W	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0

INTV150NX	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
INTV85NX	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
INTV80e	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
INTV100NX	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
INTV130NX	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
V240MTKU	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
V240MTG2K U	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0

2400KU	Geostationary	10700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	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.		E66. Phone Number	
E62. Street Address			
E63. City	E68. County	E67/68. State/Country /	E64. Zip Code

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

Location of Earth Station Site			
E1: Site Identifier:	4KA-BAND ESV & VSAT	E5. Call Sign:	WB36
E2: Contact Name	David Atabala	E6. Phone Number:	281-809-9708
E3. Street:	11707 S Sam Houston Parkway W	E7. City:	Houston
E4. State	TX	E8. County:	Harris
E9. Zip Code	77031	E10. Area of Operation:	U.S. and International Waters and CONUS, AK, HI, US&P
E11. Latitude:	0 °0 '0.0 "	E12. Longitude:	0 °0 '0.0 "
E13. Lat/Lon Coordinates are:	<input type="radio"/> NAD-27	<input checked="" type="radio"/> NAD-83	<input type="radio"/> N/A
E14. Site Elevation (AMSL):	0.0 meters		

E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two-degree spacing policy.	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurements?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A

E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	<input checked="" type="radio"/> Yes <input type="radio"/> No
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E18. Is frequency coordination required? If YES, attach a frequency coordination report as Ex 5A.1 Ku Plots	<input type="radio"/> Yes <input checked="" type="radio"/> No
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E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	<input type="radio"/> Yes <input checked="" type="radio"/> No
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E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA’s study regarding the potential hazard of the structure to aviation?Q E20 Exhibit FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	<input type="radio"/> Yes <input checked="" type="radio"/> No
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POINTS OF COMMUNICATION

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

POINTS OF COMMUNICATION (Destination Points)

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

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size<meters>	E41/42. Antenna Gain Transmint and/or Recieve (____ dBi at _____ GHz)	
4KA-BAND ESV & VSAT	2400KA	500	SEA TEL	2400KA	2.4	50.6 dBi at 19.20	
4KA-BAND ESV & VSAT	2400KA	500	SEA TEL	2400KA	2.4	54.1 dBi at 29.00	
4KA-BAND ESV & VSAT	V240MTKA	500	INTELLIAN	V240MTKA	2.4	48.5 dBi at 18.7	
4KA-BAND ESV & VSAT	V240MTKA	500	INTELLIAN	V240MTKA	2.4	51.6 dBi at 29.0	
4KA-BAND ESV & VSAT	V240MTG2KA	500	INTELLIAN	V240MTGen2K A	2.4	48.5 dBi at 18.7	
4KA-BAND ESV & VSAT	V240MTG2KA	500	INTELLIAN	V240MTGen2K A	2.4	51.6 dBi at 29.0	

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level(meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at antenna flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for al carriers(dBW)
2400KA	2.4/2.4	0.0	0.0	0.0	79.4	0.0	73.09
V240MTKA	2.4/2.4	0.0	0.0	0.0	66.1	0.0	69.8
V240MTG2KA	2.4/2.4	0.0	0.0	0.0	74.1	0.0	70.3

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization(H,V, L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
2400KA	17800 19400	R	Left and Right Circular	200MG1W	0.0	0.0
<p>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.)</p> <div data-bbox="254 521 1856 695" style="border: 1px solid black; padding: 5px;"> DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION </div>						
2400KA	17800 19400	R	Left and Right Circular	200MG7W	0.0	0.0
<p>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.)</p> <div data-bbox="254 911 1856 1084" style="border: 1px solid black; padding: 5px;"> DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION </div>						
2400KA	17800 19400	R	Left and Right Circular	44K8G1W	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.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	17800 19400	R	Left and Right Circular	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	19600 20200	R	Left and Right Circular	200MG1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	19600 20200	R	Left and Right Circular	200MG7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	19600 20200	R	Left and Right Circular	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	19600 20200	R	Left and Right Circular	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	28350 29100	T	Left and Right Circular	100MG1W	73.09	29.12
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	28350 29100	T	Left and Right Circular	100MG7W	73.09	29.12
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	28350 29100	T	Left and Right Circular	44K8G1W	68.09	57.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	28350 29100	T	Left and Right Circular	44K8G7W	68.09	57.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	29250 30000	T	Left and Right Circular	100MG1W	73.09	29.12
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	29250 30000	T	Left and Right Circular	100MG7W	73.09	29.12
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	29250 30000	T	Left and Right Circular	44K8G1W	68.09	57.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

2400KA	29250 30000	T	Left and Right Circular	44K8G7W	68.09	57.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	17800 19400	R	Left and Right Circular	200MG1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	17800 19400	R	Left and Right Circular	200MG7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	17800 19400	R	Left and Right Circular	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	17800 19400	R	Left and Right Circular	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	19600 20200	R	Left and Right Circular	200MG1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	19600 20200	R	Left and Right Circular	200MG7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	19600 20200	R	Left and Right Circular	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	19600 20200	R	Left and Right Circular	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	28350 29100	T	Left and Right Circular	100MG1W	69.8	25.8
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	28350 29100	T	Left and Right Circular	100MG7W	69.8	25.8
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	28350 29100	T	Left and Right Circular	44K8G1W	62.1	51.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	28350 29100	T	Left and Right Circular	44K8G7W	62.1	51.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	29250 30000	T	Left and Right Circular	100MG1W	69.8	25.8
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	29250 30000	T	Left and Right Circular	100MG7W	69.8	25.8
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	29250 30000	T	Left and Right Circular	44K8G1W	62.1	51.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTKA	29250 30000	T	Left and Right Circular	44K8G7W	62.1	51.6
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	17800 19400	R	Left and Right Circular	200MG1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	17800 19400	R	Left and Right Circular	200MG7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	17800 19400	R	Left and Right Circular	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	17800 19400	R	Left and Right Circular	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	19600 20200	R	Left and Right Circular	200MG1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	19600 20200	R	Left and Right Circular	200MG7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	19600 20200	R	Left and Right Circular	44K8G1W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	19600 20200	R	Left and Right Circular	44K8G7W	0.0	0.0
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	28350 29100	T	Left and Right Circular	100MG1W	70.3	26.3
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	28350 29100	T	Left and Right Circular	100MG7W	70.3	26.3
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	28350 29100	T	Left and Right Circular	44K8G1W	59.6	48.4
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	28350 29100	T	Left and Right Circular	44K8G7W	59.6	48.4
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	29250 30000	T	Left and Right Circular	100MG1W	70.3	26.3
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	29250 30000	T	Left and Right Circular	100MG7W	70.3	26.3
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	29250 30000	T	Left and Right Circular	44K8G1W	59.6	48.4
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

V240MTG2KA	29250 30000	T	Left and Right Circular	44K8G7W	59.6	48.4
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E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/Western Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
2400KA	Geostationary	17800 20200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	28350 30000	0.0/0.0	0.0	5.0	0.0	5.0	0.0
V240MTKA	Geostationary	17800 20200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	28350 30000	0.0/0.0	0.0	5.0	0.0	5.0	0.0
V240MTG2K A	Geostationary	17800 20200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	28350 30000	0.0/0.0	0.0	5.0	0.0	5.0	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign WB36 NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.		E66. Phone Number 346-223-0396	
E62. Street Address 3327 S. Sam Houston Parkway E Suite 100			
E63. City Houston	E68. County Harris	E67/68. State/Country TX/ USA	E64. Zip Code 77047

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

Applicant respectfully requests modification of WB36 License to authorize increase in power to the antenna flange and new associated specifications and emission designators for up to 500 Thrane & Thrane Sailor model TT7080A 'Sailor 800A' 0.83 meter Ku-Band antennas, 500 Intellian Model 'V150NX' 1.50 meter Ku-Band antennas and 500 Intellian model 'V85NX' 0.85 meter Ku-Band antennas and to add to license new authorizations for up to 500 Intellian model 'V80e' 0.80 meter Ku-band antennas, 500 Intellian model 'V100NX' 1.05 Meter Ku-band antennas, 500 Intellian model 'V130NX' 1.25 Meter Ku-band antennas, 500 Intellian model 'V240MTKu' 2.4 meter Ku-band antennas, 500 Intellian model 'V240MTKa' 2.4 Meter Ka-band Antennas, 500 Intellian model 'V240MTGen2Ku' 2.4 meter Ku-band antennas, 500 Intellian model 'V240MTGen2Ka' 2.4 Meter Ka-band Antennas, 500 SeaTel model '2400Ku' 2.4 meter Ku-band antennas and 500 SeaTel model '2400Ka 2.4 Meter Ka-band antennas. Please see Exhibit 1 for details and Showing of Compliance with Application Requirements