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File Number: SES-MFS-20130612-00485

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:

WB-36 Update all current ESV antennas and add SeaTel USAT-30/3011, 3096, 4012 & 9711 QOR; Thrane Sailor 900; and Intellian v240

1-8. Legal Name of Applicant

Name:	Vizada, Inc.	Phone Number:	301-838-7807
DBA Name:		Fax Number:	301-838-7752
Street:	2600 Tower Oaks Boulevard	E-Mail:	rob.swanson@vizada.com
City:	Rockville	State:	MD
Country:	USA	Zipcode:	20852 -
Attention:	Mr Robert W Swanson		

9-16. Name of Contact Representative

Name:	Vizada, Inc.	Phone Number:	301-838-7839
Company:		Fax Number:	301-838-7752
Street:	2600 Tower Oaks Boulevard	E-Mail:	james.lovelace@vizada.com
City:	Rockville	State:	MD
Country:	USA	Zipcode:	20852-
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

<p>17c. Is a fee submitted with this application?</p> <p><input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).</p> <p><input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee</p> <p><input type="radio"/> Other(please explain):</p>	
<p>17d.</p> <p>Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station</p>	
<p>18. If this filing is in reference to an existing station, enter:</p> <p>(a) Call sign of station: WB36</p>	<p>19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number:</p> <p>(a) Date pending application was filed:</p> <p>(b) File number: SESMOD2012010900024</p>

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 type="checkbox"/> a. Fixed Satellite</p> <p><input type="checkbox"/> b. Mobile Satellite</p> <p><input type="checkbox"/> c. Radiodetermination Satellite</p> <p><input type="checkbox"/> d. Earth Exploration Satellite</p> <p><input type="checkbox"/> e. Direct to Home Fixed Satellite</p> <p><input type="checkbox"/> f. Digital Audio Radio Service</p> <p><input checked="" type="checkbox"/> g. Other (please specify) Earth Station on Vessel</p>	
<p>21. STATUS: Choose the button next to the applicable status. Choose only one.</p> <p><input checked="" type="radio"/> Common Carrier <input type="radio"/> Non-Common Carrier</p>	<p>22. If earth station applicant, check all that apply.</p> <p><input checked="" type="checkbox"/> Using U.S. licensed satellites</p> <p><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:</p> <p><input checked="" type="radio"/> Connected to a Public Switched Network <input type="radio"/> Not connected to a Public Switched Network <input type="radio"/> N/A</p>	
<p>24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s).</p> <p><input checked="" type="checkbox"/> a. C-Band (4/6 GHz) <input checked="" type="checkbox"/> b. Ku-Band (12/14 GHz)</p> <p><input type="checkbox"/> c. Other (Please specify upper and lower frequencies in MHz.)</p> <p> 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 Vessels

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>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 type="radio"/> Yes <input checked="" 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.

Ownership Statement

BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules?
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

Yes No

SeaTel Declarations

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

Intellian Declaratio

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

Thrane Declarations

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

Astrium Declarations

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

Exhibits 2 – 7

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.

Exhibits 8 – 28

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

Exhibits 29 – 40

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? Satellite is on Permitted 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.)

Astrium Services Government, Inc. is requesting that the Particulars of Operation, Antenna Facilities and other Specifications for all the Earth Station on Vessel (ESV) remote antennas currently authorized per the WB36 license for use to provide ESV service be updated by deleting all ESV antennas currently listed in the WB36 license and then adding

Part 25 Compliance

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

Operations Areas

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

46. Title of Person Signing

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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:	Ku-band ESV Remotes	E5. Call Sign:	WB36
E2: Contact Name	Guy White	E6. Phone Number:	203-262-5010
E3. Street:		E7. City:	Southbury
		E8. County:	New Haven
E4. State	CT	E9. Zip Code	
E10. Area of Operation:		U.S. and International Waters	
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.

Yes No N/A

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	<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

E18. Is frequency coordination required? If YES, attach a frequency coordination report as Ku Freq Coord Explai	<input checked="" type="radio"/> Yes <input type="radio"/> No
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
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.	<input type="radio"/> Yes <input checked="" type="radio"/> No

POINTS OF COMMUNICATION

Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you selected OTHER, please enter the following:	
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you selected OTHER, please enter the following:

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

Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you selected OTHER, please enter the following:	
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
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)	
Ku-band ESV Remotes	Sat30/3011	500	Sea Tel	USAT30 & 3011	0.75	37.6 dBi at 11.85	
Ku-band ESV Remotes	Sat30/3011	500	Sea Tel	USAT30 & 3011	0.75	39.0 dBi at 14.25	
Ku-band ESV Remotes	3612	500	Sea Tel	3612	0.9	39.0 dBi at 11.70	
Ku-band ESV Remotes	3612	500	Sea Tel	3612	0.9	40.5 dBi at 14.25	
Ku-band ESV Remotes	4012	500	Sea Tel	4012	1.06	40.0 dBi at 12.5	

Ku-band ESV Remotes	4012	500	Sea Tel	4012	1.06	41.8 dBi at 14.25	
Ku-band ESV Remotes	4003	500	Sea Tel	4003	1.0	39.39 dBi at 12.20	
Ku-band ESV Remotes	4003	500	Sea Tel	4003	1.0	40.5 dBi at 14.25	
Ku-band ESV Remotes	4006/09/10	1000	Sea Tel	4006,4009 & 4010	1.0	39.59 dBi at 12.20	
Ku-band ESV Remotes	4006/09/10	1000	Sea Tel	4006,4009 & 4010	1.0	40.6 dBi at 14.25	
Ku-band ESV Remotes	4996	300	Sea Tel	4996	1.2	41.6 dBi at 11.95	
Ku-band ESV Remotes	4996	300	Sea Tel	4996	1.2	42.5 dBi at 14.25	
Ku-band ESV Remotes	5009/10/12	750	Sea Tel	5009, 5010 & 5012	1.2	43.0 dBi at 14.25	
Ku-band ESV Remotes	5009/10/12	750	Sea Tel	5009, 5010 & 5012	1.2	43.79 dBi at 12.20	
Ku-band ESV Remotes	9711QOR_Ku	500	Sea Tel	9711QOR_Ku	1.2	43.0 dBi at 14.25	
Ku-band ESV Remotes	9711QOR_Ku	500	Sea Tel	9711QOR_Ku	1.2	43.79 dBi at 12.20	
Ku-band ESV Remotes	6006/09/12	500	Sea Tel	6006, 6009 & 6012	1.5	41.39 dBi at 12.20	
Ku-band ESV Remotes	6006/09/12	500	Sea Tel	6006, 6009 & 6012	1.5	45.1 dBi at 14.25	
Ku-band ESV Remotes	9797/11_Ku	500	Sea Tel	9797 & 9711 Ku	2.4	47.75 dBi at 11.85	

Ku-band ESV Remotes	9797/11_Ku	500	Sea Tel	9797 & 9711 Ku	2.4	48.45 dBi at 14.25	
Ku-band ESV Remotes	TT Sa 900	500	Thrane & Thrane	TT-7090A Sailor 900	1.0	40.0 dBi at 11.75	
Ku-band ESV Remotes	TT Sa 900	500	Thrane & Thrane	TT-7090A Sailor 900	1.0	41.7 dBi at 14.25	
Ku-band ESV Remotes	Int v60G	500	Intellian	v60G	0.6	35.3 dBi at 12.20	
Ku-band ESV Remotes	Int v60G	500	Intellian	v60G	0.6	38.1 dBi at 14.25	
Ku-band ESV Remotes	Int v80G	500	Intellian	v80G	0.83	37.1 dBi at 12.20	
Ku-band ESV Remotes	Int v80G	500	Intellian	v80G	0.83	39.5 dBi at 14.25	
Ku-band ESV Remotes	Int v110	500	Intellian	v110	1.05	39.59 dBi at 12.20	
Ku-band ESV Remotes	Int v110	500	Intellian	v110	1.05	41.7 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)
Sat30/3011	0.75/0.75	0.0	0.0	0.0	13.4	0.0	50.27
3612	0.9/0.9	0.0	0.0	0.0	15.14	0.0	52.3
4012	1.06/1.06	0.0	0.0	0.0	14.79	0.0	53.5
4003	1.0/1.0	0.0	0.0	0.0	11.4	0.0	51.07

4006/09/10	1.0/1.0	0.0	0.0	0.0	13.4	0.0	51.87
4996	1.2/1.2	0.0	0.0	0.0	14.2	0.0	54.02
5009/10/12	1.2/1.2	0.0	0.0	0.0	21.19	0.0	56.26
9711QOR_Ku	1.2/1.2	0.0	0.0	0.0	21.19	0.0	56.26
6006/09/12	1.5/1.5	0.0	0.0	0.0	21.28	0.0	58.38
9797/11_Ku	2.4/2.4	0.0	0.0	0.0	33.66	0.0	63.72
TT Sa 900	1.0/1.0	0.0	0.0	0.0	14.93	0.0	53.44
Int v60G	0.6/0.6	0.0	0.0	0.0	11.59	0.0	48.74
Int v80G	0.83/0.83	0.0	0.0	0.0	11.59	0.0	50.14
Int v110	1.05/1.05	0.0	0.0	0.0	13.94	0.0	53.14

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)
Sat30/3011	10950 11200	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; margin: 10px 0;"> <p>DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION</p> </div>						
Sat30/3011	10950 11200	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

Sat30/3011	10950 11200	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

Sat30/3011	10950 11200	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

Sat30/3011	11450 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

Sat30/3011	11450 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

Sat30/3011	11450 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

Sat30/3011	11450 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

Sat30/3011	14000 14500	T	Horizontal and Vertical	1M10G1W	49.39	25.0
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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

Sat30/3011	14000 14500	T	Horizontal and Vertical	1M10G7W	49.39	25.0
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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

Sat30/3011	14000 14500	T	Horizontal and Vertical	44K8G1W	35.5	25.0
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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

Sat30/3011	14000 14500	T	Horizontal and Vertical	44K8G7W	35.5	25.0
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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

3612	10950 11200	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

3612	10950 11200	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						
3612	10950 11200	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						
3612	10950 11200	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						
3612	11450 12200	R	Horizontal and Vertical	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

3612	11450 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

3612	11450 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

3612	11450 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

3612	14000 14500	T	Horizontal and Vertical	44K8G1W	37.0	26.5
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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

3612	14000 14500	T	Horizontal and Vertical	44K8G7W	37.0	26.5
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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

3612	14000 14500	T	Horizontal and Vertical	5M00G1W	52.3	21.3
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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						
3612	14000 14500	T	Horizontal and Vertical	5M00G7W	52.3	21.3
E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)						
DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION						
4012	10950 11200	R	Horizontal and Vertical	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						
4012	10950 11200	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

4012	10950 11200	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

4012	10950 11200	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

4012	11450 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

4012	11450 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

4012	11450 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

4012	11450 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

4012	14000 14500	T	Horizontal and Vertical	44K8G1W	38.3	27.8
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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

4012	14000 14500	T	Horizontal and Vertical	44K8G7W	38.3	27.8
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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

4012	14000 14500	T	Horizontal and Vertical	5M00G1W	53.5	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

4012	14000 14500	T	Horizontal and Vertical	5M00G7W	53.5	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

4003	10950 11200	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

4003	10950 11200	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						
4003	10950 11200	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						
4003	10950 11200	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						
4003	11450 12200	R	Horizontal and Vertical	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

4003	11450 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

4003	11450 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

4003	11450 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

4003	14000 14500	T	Horizontal and Vertical	44K8G1W	37.0	26.5
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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

4003	14000 14500	T	Horizontal and Vertical	44K8G7W	37.0	26.5
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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

4003	14000 14500	T	Horizontal and Vertical	5M00G1W	51.07	20.1
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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

4003	14000 14500	T	Horizontal and Vertical	5M00G7W	51.07	20.1
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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

4006/09/10	10950 11200	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

4006/09/10	10950 11200	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						
4006/09/10	10950 11200	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						
4006/09/10	10950 11200	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						
4006/09/10	11450 12200	R	Horizontal and Vertical	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

4006/09/10	11450 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

4006/09/10	11450 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

4006/09/10	11450 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

4006/09/10	14000 14500	T	Horizontal and Vertical	44K8G1W	37.1	26.6
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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

4006/09/10	14000 14500	T	Horizontal and Vertical	44K8G7W	37.1	26.6
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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

4006/09/10	14000 14500	T	Horizontal and Vertical	5M00G1W	51.87	20.9
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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						
4006/09/10	14000 14500	T	Horizontal and Vertical	5M00G7W	51.87	20.9
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						
4996	10950 11200	R	Horizontal and Vertical	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						
4996	10950 11200	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						
4996	10950 11200	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						
4996	10950 11200	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						
4996	11450 12200	R	Horizontal and Vertical	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						
4996	11450 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						
4996	11450 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						
4996	11450 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						
4996	14000 14500	T	Horizontal and Vertical	44K8G1W	39.0	28.5
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.)						
DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION						
4996	14000 14500	T	Horizontal and Vertical	44K8G7W	39.0	28.5
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.)						
DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION						
4996	14000 14500	T	Horizontal and Vertical	8M00G1W	54.0	21.0

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

4996	14000 14500	T	Horizontal and Vertical	8M00G7W	54.0	21.0
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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

5009/10/12	10950 11200	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

5009/10/12	10950 11200	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

5009/10/12	10950 11200	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

5009/10/12	10950 11200	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

5009/10/12	11450 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

5009/10/12	11450 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

5009/10/12	11450 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

5009/10/12	11450 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

5009/10/12	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

5009/10/12	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

5009/10/12	14000 14500	T	Horizontal and Vertical	8M00G1W	56.26	23.26
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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

5009/10/12	14000 14500	T	Horizontal and Vertical	8M00G7W	56.26	23.26
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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

9711QOR_Ku	10950 11200	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

9711QOR_Ku	10950 11200	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

9711QOR_Ku	10950 11200	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

9711QOR_Ku	10950 11200	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

9711QOR_Ku	11450 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

9711QOR_Ku	11450 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

9711QOR_Ku	11450 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

9711QOR_Ku	11450 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

9711QOR_Ku	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

9711QOR_Ku	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

9711QOR_Ku	14000 14500	T	Horizontal and Vertical	8M00G1W	56.26	23.26
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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						
9711QOR_Ku	14000 14500	T	Horizontal and Vertical	8M00G7W	56.26	23.26
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						
6006/09/12	10950 11200	R	Horizontal and Vertical	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						
6006/09/12	10950 11200	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						
6006/09/12	10950 11200	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						
6006/09/12	10950 11200	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						
6006/09/12	11450 12200	R	Horizontal and Vertical	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						
6006/09/12	11450 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						
6006/09/12	11450 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						
6006/09/12	11450 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

6006/09/12	14000 14500	T	Horizontal and Vertical	10M0G1W	58.38	24.38
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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

6006/09/12	14000 14500	T	Horizontal and Vertical	10M0G7W	58.38	24.38
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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

6006/09/12	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						
6006/09/12	14000 14500	T	Horizontal and Vertical	44K8G7W	41.6	31.1
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.)						
DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION						
9797/11_Ku	10950 11200	R	Horizontal and Vertical	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						
9797/11_Ku	10950 11200	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

9797/11_Ku	10950 11200	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

9797/11_Ku	10950 11200	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

9797/11_Ku	11450 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

9797/11_Ku	11450 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

9797/11_Ku	11450 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

9797/11_Ku	11450 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

9797/11_Ku	14000 14500	T	Horizontal and Vertical	15M0G1W	63.72	28.0
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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

9797/11_Ku	14000 14500	T	Horizontal and Vertical	15M0G7W	63.72	28.0
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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

9797/11_Ku	14000 14500	T	Horizontal and Vertical	44K8G1W	44.95	34.45
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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

9797/11_Ku	14000 14500	T	Horizontal and Vertical	44K8G7W	44.95	34.45
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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

TT Sa 900	10950 11200	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

TT Sa 900	10950 11200	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

TT Sa 900	10950 11200	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

TT Sa 900	10950 11200	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

TT Sa 900	11450 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

TT Sa 900	11450 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

TT Sa 900	11450 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

TT Sa 900	11450 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

TT Sa 900	14000 14500	T	Horizontal and Vertical	44K8G1W	38.2	27.7
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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

TT Sa 900	14000 14500	T	Horizontal and Vertical	44K8G7W	38.2	27.7
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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

TT Sa 900	14000 14500	T	Horizontal and Vertical	5M00G1W	53.44	22.47
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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

TT Sa 900	14000 14500	T	Horizontal and Vertical	5M00G7W	53.44	22.47
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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

Int v60G	10950 11200	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

Int v60G	10950 11200	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

Int v60G	10950 11200	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

Int v60G	10950 11200	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

Int v60G	11450 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

Int v60G	11450 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

Int v60G	11450 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

Int v60G	11450 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

Int v60G	14000 14500	T	Horizontal and Vertical	1M20G1W	48.74	24.0
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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

Int v60G	14000 14500	T	Horizontal and Vertical	1M20G7W	48.74	24.0
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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

Int v60G	14000 14500	T	Horizontal and Vertical	44K8G1W	34.6	24.1
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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

Int v60G	14000 14500	T	Horizontal and Vertical	44K8G7W	34.6	24.1
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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

Int v80G	10950 11200	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

Int v80G	10950 11200	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

Int v80G	10950 11200	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

Int v80G	10950 11200	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

Int v80G	11450 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

Int v80G	11450 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

Int v80G	11450 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

Int v80G	11450 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

Int v80G	14000 14500	T	Horizontal and Vertical	1M20G1W	50.14	25.37
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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

Int v80G	14000 14500	T	Horizontal and Vertical	1M20G7W	50.14	25.37
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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

Int v80G	14000 14500	T	Horizontal and Vertical	44K8G1W	36.0	25.5
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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

Int v80G	14000 14500	T	Horizontal and Vertical	44K8G7W	36.0	25.5
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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

Int v110	10950 11200	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

Int v110	10950 11200	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

Int v110	10950 11200	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

Int v110	10950 11200	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

Int v110	11450 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

Int v110	11450 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

Int v110	11450 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

Int v110	11450 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

Int v110	14000 14500	T	Horizontal and Vertical	44K8G1W	38.2	27.7
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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

Int v110	14000 14500	T	Horizontal and Vertical	44K8G7W	38.2	27.7
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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

Int v110	14000 14500	T	Horizontal and Vertical	5M00G1W	53.14	22.17
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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

Int v110	14000 14500	T	Horizontal and Vertical	5M00G7W	53.14	22.17
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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)
			/					

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 203-262-5010	
E62. Street Address 2120 River Road			
E63. City Southbury	E68. County New Haven	E67/68. State/Country CT/ USA	E64. Zip Code 96488

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:	C-band ESV Remotes	E5. Call Sign:	WB36
E2. Contact Name	Guy White	E6. Phone Number:	203-262-5010
E3. Street:		E7. City:	Southbury
		E8. County:	New Haven
E4. State	CT	E9. Zip Code	
E10. Area of Operation:	U.S. and International Waters		
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 checked="" type="radio"/> Yes <input type="radio"/> No <input 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(a2) 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 C Freq Coord Explain	<input checked="" type="radio"/> Yes <input 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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<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?</p> <p>FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.</p>	<input type="radio"/> Yes <input checked="" type="radio"/> No
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POINTS OF COMMUNICATION

Satellite Name: SES-4 (S2828) New Skies 22.0 W.L. If you selected OTHER, please enter the following:

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

Satellite Name: NSS 9 NSS 9 177 W.L. If you selected OTHER, please enter the following:
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E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you selected OTHER, please enter the following:

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

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier:	
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)	
C-band ESV Remotes	9707/97/11	500	Sea Tel	9707, 9797 & 9711	2.4	38.5 dBi at 3.95	
C-band ESV Remotes	9707/97/11	500	Sea Tel	9707, 9797 & 9711	2.4	41.7 dBi at 6.18	
C-band ESV Remotes	9711QOR_C	500	Sea Tel	9711QOR_C	2.4	38.5 dBi at 3.95	
C-band ESV Remotes	9711QOR_C	500	Sea Tel	9711QOR_C	2.4	41.7 dBi at 6.18	
C-band ESV Remotes	Int v240	500	Intellian	v240	2.4	37.7 dBi at 3.91	
C-band ESV Remotes	Int v240	500	Intellian	v240	2.4	41.7 dBi at 6.14	

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 all carriers(dBW)
9707/97/11	2.4/2.4	0.0	0.0	0.0	84.14	0.0	60.95
9711QOR_C	2.4/2.4	0.0	0.0	0.0	84.14	0.0	60.95
Int v240	2.4/2.4	0.0	0.0	0.0	79.43	0.0	60.7

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)
9707/97/11	3700 4200	R	Linear and 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

9707/97/11	3700 4200	R	Linear and 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							
9707/97/11	3700	4200	R	Linear and Circular	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							
9707/97/11	3700	4200	R	Linear and Circular	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							
9707/97/11	5925	6425	T	Linear and Circular	15M0G1W	60.95	25.21

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

9707/97/11	5925	6425	T	Linear and Circular	15M0G7W	60.95	25.21
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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

9707/97/11	5925	6425	T	Linear and Circular	44K8G1W	49.5	39.0
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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

9707/97/11	5925	6425	T	Linear and Circular	44K8G7W	49.5	39.0
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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

9711QOR_C	3700	4200	R	Linear and 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

9711QOR_C	3700	4200	R	Linear and 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

9711QOR_C	3700	4200	R	Linear and Circular	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

9711QOR_C	3700	4200	R	Linear and Circular	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

9711QOR_C	5925	6425	T	Linear and Circular	15M0G1W	60.95	25.21
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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

9711QOR_C	5925	6425	T	Linear and Circular	15M0G7W	60.95	25.21
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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

9711QOR_C	5925	6425	T	Linear and Circular	44K8G1W	49.5	39.0
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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

9711QOR_C	5925	6425	T	Linear and Circular	44K8G7W	49.5	39.0
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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

Int v240	3700	4200	R	Linear and 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

Int v240	3700	4200	R	Linear and 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

Int v240	3700	4200	R	Linear and Circular	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

Int v240	3700	4200	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

Int v240	5925	6425	T	Linear and Circular	15M0G1W	60.7	25.0
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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

Int v240	5925	6425	T	Linear and Circular	15M0G7W	60.7	25.0
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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

Int v240	5925	6425	T	Linear and Circular	44K8G1W	49.5	39.0
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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

Int v240	5925	6425	T	Linear and Circular	44K8G7W	49.5	39.0
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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

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)
			/					

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 203-262-5010	
E62. Street Address 2120 River Road			
E63. City Southbury	E68. County New Haven	E67/68. State/Country CT/ USA	E64. Zip Code 96488

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

Astrium Services Government, Inc. is requesting that the Particulars of Operation, Antenna Facilities and other Specifications for all the Earth Station on Vessel (ESV) remote antennas currently authorized per the WB36 license for use to provide ESV service be updated by deleting all ESV antennas currently listed in the WB36 license and then adding the antennas back to the license using the particulars and other specifics set forth in the Schedule B which follows. No change (or deletion) is requested for any of the non-ESV antennas listed in the WB36 license. Only the ESV Antennas specifically listed in the Part 25 Compliance Exhibit are to be deleted and added back in. Authorization is also requested to add the following new ESV antennas to the license - Sea Tel Model USAT-30/3011 0.75 meter Ku-band, Sea Tel Model 3612 0.9 Meter Ku-band, Sea Tel Model 4012 1.06 Meter Ku-band, Sea Tel Model 9711 QOR Combination 2.4 Meter C-band/1.2 Meter Ku-band, Thrane & Thrane Model TT-7090A Sailor 900 1.0 meter Ku-band and Intellian Model v240 2.4 Meter C-band.