Approved by OMB 3060–0678

Date & Time Filed: Apr 7 2017 6:15:32:533PM File Number: SES–MOD–INTR2017–00953

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

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:WB36 04–2017; new EDs; 6006/9/12, 9797/11/11IMA & v240K/MK Power Increase & add AL–7108 & V115 antennas

Name:	Marlink, Inc.	Phone Number:	713–910–3352
DBA Name:		Fax Number:	713–946–0403
Street:	11707 South Sam Houston Parkway West	E-Mail:	Tom.Collins@marlink.com
	Suite A		
City:	Houston	State:	TX
Country:	USA	Zipcode:	77031 –
Attention:	Tom Collins		

9–16. Nan	ne of Contact	Representative					
	Name:	Marlink, Inc.		Phone Number:	281-606-0117		
	Company:			Fax Number:			
	Street:	11707 S Sam Hous	ton Parkway W	E-Mail:	james.lovelace@marlink.com		
	City:	Houston		State:	TX		
	Country:	USA		Zipcode:	77031-		
	Attention:	James G. Lovelace		Relationship:	Other		
CLASSIF	FICATION C	F FILING					
17. Choos	se the button r	ext to the					
classificat	tion that appli	es to this filing for	(N/A) b1. Appl	ication for License of Ne	w Station		
			(N/A) b2. Appl	ication for Registration of	of New Domestic Receive–Only Station		
for 17a an	nd only one fo	r 17b.	b 3. Amend	b 3. Amendment to a Pending Application			
			- 14 14 110	· · · · · · · · · · · · · · · · · · ·	· , ,•		

for 17a and only one for 17b.	b 3. Amendment to a Pending Application
a1. Earth Station	b 4. Modification of License or Registration
Υ	b5. Assignment of License or Registration
• a2. Space Station	b6. Transfer of Control of License or Registration
	• b7. Notification of Minor Modification
	(N/A) b8. Application for License of New Receive–Only Station Using Non–U.S. Licensed Satellite
	(N/A) b9. Letter of Intent to Use Non–U.S. Licensed Satellite to Provide Service in the United
	States
	(N/A) b10. Other (Please specify)
	(N/A) b11. Application for Earth Station to Access a Non–U.S.satellite Not Currently Authorized
	to Provide the Proposed Service in the Proposed Frequencies in the United States
	(N/A) b12. Application for Database Entry
	b13. Amendment to a Pending Database Entry Application
	• b14. Modification of Database Entry

17c. Is a fee submitted with this application					
If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).					
Governmental Entity Noncommercial educational licensee					
• Other(please explain):					
17d.					
Fee Classification CGX – Fixed Satellite 7 Station	Transmit/Receive Earth				
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending a modification please enter only the file number:	pplication enter both fields, if this filing is a			
(a) Call sign of station:	(a) Date pending application was filed:	(b) File number:			
WB36		SESMOD2016063000625			

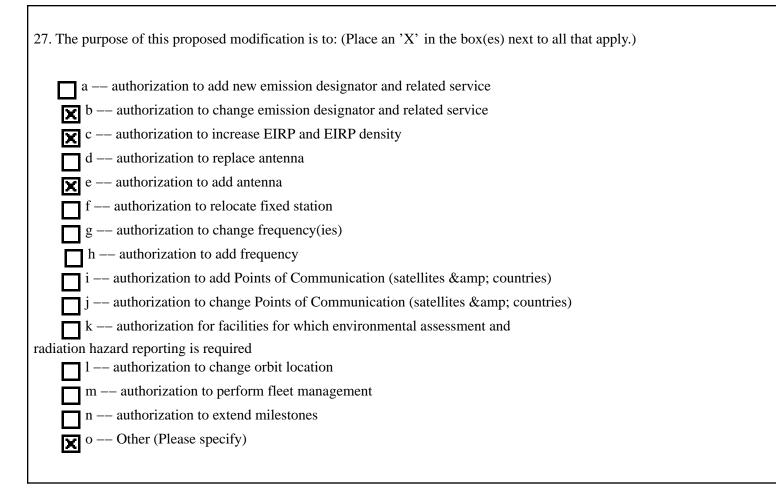
TYPE OF SERVICE

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:
a. Fixed Satellite	
b. Mobile Satellite	
c. Radiodetermination Satellite	
d. Earth Exploration Satellite	
e. Direct to Home Fixed Satellite	
f. Digital Audio Radio Service	
g. Other (please specify) Earth Stations on Vessels	
21. STATUS: Choose the button next to the applicable status. Choose 2	22. If earth station applicant, check all that apply.
only one.	Using U.S. licensed satellites
○ Common Carrier	¥ Using Non−U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER set facilities:	rvice, see instructions regarding Sec. 214 filings. Choose one. Are these
• Connected to a Public Switched Network • Not connected to a Public	ublic Switched Network 👩 N/A
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all app	plicable frequency band(s).
x a. C–Band (4/6 GHz) b . Ku–Band (12/14 GHz)	
c.Other (Please specify upper and lower frequencies in MHz.)	
Frequency Lower: Frequency Upper: (Please specify additional	al frequencies in an attachment)

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
o c. 12/14 GHz VSAT Network
O d. Mobile Earth Station
e. Geostationary Space Station
• f. Non–Geostationary Space Station
• g. Other (please specify) Earth Station 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



ENVIRONMENTAL POLICY

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.	-	Yes Ex 5	-		az	
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	iutic	al en	rou	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	۲	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	۲	No	0	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	۲	No	0	N/A
32. Is the applicant a corporation of which more than one–fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	۲	Yes	0	No	0	N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than	6	Yes	o	No	o	N/A
one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign	· ·		~~			
government or representative thereof or by any corporation organized under the laws of a foreign country?						

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

BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	O Yes
	EX 4–(a)(1)(i) Table
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	⊖ Yes ● No
	Ex3-(a)(1)(i)(ii)Dec

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	No
	Ex 2–Lic Mark	a–up
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	O Yes	No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.	O Yes	
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.		

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

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



O No

Yes

42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station? All satellites used are on Permitted 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 - I) Add New Emission Designators Authorized for 12 ESV antennas. Please see Exhibit 1 for details. II) Update the Power to the Antenna Flange and Certain Other Specifications and Add New Emission Designators Authorized for Antenna IDs 6006/9/12 and INTV240K. III) Add a second Model

Ex 1–Compliance Nar

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.	О ^В
By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.	O C

CERTIFICATION

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

44. Applicant is a (an): (Choose the button next to applicable response.)	
O Individual	
O Unincorporated Association	
Partnership	
• Corporation	
O Governmental Entity	
• Other (please specify)	
45. Name of Person Signing	46. Title of Person Signing
James G. Lovelace	Consultant
>	
	ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT EVOCATION OF ANY STATION AUTHORIZATION 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 S	tation Site				
E1: Site Identifier:	2KU–BAND REMOTE ESVS	E5. Call Sign:	WB36		
E2: Contact Name	James G. Lovelace	E6. Phone Number:	203-346-0461		
E3. Street:	11707 S Sam Houston Parkway W	E7. City:	Houston		
		E8. County:	Harris		
E4. State	TX	E9. Zip Code	77031		
E10. Area of Opera	tion:	U.S. and Internation	nal Waters		
E11. Latitude:	0 °0 '0.0 "				
E12. Longitude:	0 °0 '0.0 "				
E13. Lat/Lon Coord	dinates are:	ONAD-27	NAD-83	O N/A	
E14. Site Elevation (AMSL):		0.0 meters			

E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two-degree spacing policy.	• Yes	O ^{No}	O ^{N/A}
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O ^{No}	● ^{N/A}
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	• Yes	0	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as Ku–Band Coord Ex	• Yes	● No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	• Yes	Ø [№]
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	O Yes	

Satellite Name: If you selected OTHER, please enter the following:

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

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi at GHz)
2KU–BAND REMOTE ESVS	6006/9/12	500	Sea Tel	6006, 6009, 6012	1.5	0.0 dBi at
2KU–BAND REMOTE ESVS	9797/11KU	500	SEA TEL	9797/9711/9711 IMAKU	2.4	0.0 dBi at
2KU–BAND REMOTE ESVS	INTV240K	500	INTELLIAN	V240K	2.4	0.0 dBi at
2KU–BAND REMOTE ESVS	INTV240MKU	500	INTELLIAN	5V240M(KU– BAND)	2.4	0.0 dBi at
2KU–BAND REMOTE ESVS	INTV150	500	INTELLIAN	V150	1.5	43.8 dBi at 12.2
2KU–BAND REMOTE ESVS	INTV150	500	INTELLIAN	V150	1.5	45.1 dBi at 14.25
2KU–BAND REMOTE ESVS	TTSA900	500	THRANE & THRANE	TT-7090A SAILOR900	1.0	0.0 dBi at
2KU–BAND REMOTE ESVS	TTSA800A	500	THRANE & THRANE	TT–7080A SAILOR 800A	0.83	0.0 dBi at

2KU–BAND REMOTE ESVS	INTV80G	500	INTELLIAN	V80G	0.83	0.0 dBi at
2KU–BAND REMOTE ESVS	INTV130/G	500	INTELLIAN	V130, V130G	1.25	0.0 dBi at
2KU–BAND REMOTE ESVS	INTV110	500	INTELLIAN	V110	1.05	0.0 dBi at
2KU–BAND REMOTE ESVS	INTV100	500	INTELLIAN	V100	1.06	0.0 dBi at
2KU–BAND REMOTE ESVS	900B/FV110	2000	THRANE & THRANE	900B, 900VSATHP&F V110	1.03	0.0 dBi at
2KU–BAND REMOTE ESVS	4012	500	SEA TEL	4012	1.06	0.0 dBi at

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)
6006/9/12	1.5/1.5	0.0	0.0	0.0	107.1	0.0	65.39
9797/11KU	2.4/2.4	0.0	0.0	0.0	210.3	0.0	71.72
INTV240K	2.4/2.4	0.0	0.0	0.0	173.0	0.0	70.38
INTV240MKU	2.4/2.4	0.0	0.0	0.0	165.2	0.0	70.58
INTV150	1.5/1.5	0.0	0.0	0.0	94.8	0.0	64.86
TTSA900	1.0/1.0	0.0	0.0	0.0	14.93	0.0	53.44
TTSA800A	0.83/0.83	0.0	0.0	0.0	5.495	0.0	47.4
INTV80G	0.83/0.83	0.0	0.0	0.0	19.0	0.0	52.3

INTV130/G	1.25/1.25	0.0	0.0	0.0	34.8	0.0	58.6
INTV110	1.05/1.05	0.0	0.0	0.0	13.94	0.0	53.14
INTV100	1.06/1.06	0.0	0.0	0.0	22.9	0.0	54.8
900B/FV110	1.03/1.03	0.0	0.0	0.0	18.2	0.0	53.7
4012	1.06/1.06	0.0	0.0	0.0	14.79	0.0	53.5

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode		E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
6006/9/12	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G1W	65.39	25.39
E50. Modulation entirety.)	n and Services (If the services) (If the service	ne complete description	on does not appear in	this box, please go	to the end of the form	to view it in its

DIGITAL TRAFFIC USING QPSK AND BPSK MODULATION

6006/9/12 14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G7W	65.39	25.39
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E50. Modulat entirety.)	ion and Services (I	the complete c	lescription does not appear	in this box, please	go to the end of th	ne form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
9797/11KU	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G1W	71.72	31.72
E50. Modulat entirety.)	ion and Services (I	the complete c	lescription does not appear	in this box, please	go to the end of th	ne form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
9797/11KU	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G7W	71.72	31.72
E50. Modulat entirety.)	ion and Services (I	the complete c	lescription does not appear	in this box, please	go to the end of th	ne form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
9797/11KU	14000.0000 14500.0000	Т	Horizontal and Vertical	44K8G1W	44.99	34.5

E50. Modulat entirety.)	ion and Services (If t	he complete descrip	ption does not appear	in this box, please	go to the end of th	ne form to view it in its
DIGITAL	TRAFFIC USING Q	PSK AND BPSK N	MODULATION			
9797/11KU	14000.0000 14500.0000	Т	Horizontal and Vertical	44K8G7W	44.99	34.5
E50. Modulat entirety.)	ion and Services (If t	he complete descrip	otion does not appear	in this box, please	go to the end of th	ne form to view it in its
DIGITAL	TRAFFIC USING Q	PSK AND BPSK N	MODULATION			
INTV240K	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G1W	70.38	30.38
E50. Modulat entirety.)	ion and Services (If t	he complete descrip	otion does not appear	in this box, please	go to the end of th	ne form to view it in its
DIGITAL	TRAFFIC USING Q	PSK AND BPSK N	MODULATION			
INTV240K	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G7W	70.38	30.38

E50. Modulation entirety.)	on and Services (If the services of the servic	he complete descripti	on does not appear i	n this box, please go t	to the end of the form	to view it in its
DIGITAL 1	TRAFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV240MKU	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G1W	70.58	30.58
E50. Modulation entirety.)	on and Services (If the	he complete descripti	on does not appear i	n this box, please go t	to the end of the form	to view it in its
DIGITAL 1	TRAFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV240MKU	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G7W	70.58	30.58
E50. Modulation entirety.)	on and Services (If the services of the servic	he complete descripti	on does not appear i	n this box, please go t	to the end of the form	to view it in its
DIGITAL 7	TRAFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV150	10950.0000 11200.0000	R	Horizontal and Vertical	44K8G1W	0.0	0.0

E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appear ir	n this box, please go t	o the end of the form	to view it in its
DIGITAL TH	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV150	10950.0000 11200.0000	R	Horizontal and Vertical	44K8G7W	0.0	0.0
E50. Modulation entirety.)	and Services (If the services) (If the services)	ne complete descripti	on does not appear ir	n this box, please go t	o the end of the form	to view it in its
DIGITAL TI	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV150	10950.0000 11200.0000	R	Horizontal and Vertical	54M0G1W	0.0	0.0
E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appear ir	n this box, please go t	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV150	10950.0000 11200.0000	R	Horizontal and Vertical	54M0G7W	0.0	0.0

E50. Modulat entirety.)	ion and Services (If	the complete descr	iption does not appear	in this box, please	go to the end of	the form to view it in its
DIGITAL	TRAFFIC USING Q	PSK AND BPSK	MODULATION			
INTV150	11450.0000 12200.0000	R	Horizontal and Vertical	44K8G1W	0.0	0.0
E50. Modulat entirety.)	ion and Services (If	the complete descr	iption does not appear	in this box, please	go to the end of	the form to view it in its
DIGITAL	TRAFFIC USING Q	PSK AND BPSK	MODULATION			
INTV150	11450.0000 12200.0000	R	Horizontal and Vertical	44K8G7W	0.0	0.0
E50. Modulat entirety.)	ion and Services (If	the complete descr	iption does not appear	in this box, please	go to the end of	the form to view it in its
DIGITAL	TRAFFIC USING Q	PSK AND BPSK	MODULATION			
INTV150	11450.0000 12200.0000	R	Horizontal and Vertical	54M0G1W	0.0	0.0

E50. Modula entirety.)	tion and Services ()	f the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BE	SK MODULATION			
INTV150	11450.0000 12200.0000	R	Horizontal and Vertical	54M0G7W	0.0	0.0
E50. Modula entirety.)	ation and Services (1	If the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BE	SK MODULATION			
INTV150	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G1W	64.86	24.86
E50. Modula entirety.)	tion and Services (1	If the complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BE	PSK MODULATION			
INTV150	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G7W	64.86	24.86

E50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go t	o the end of the form	to view it in its
entirety.)	AFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV150	14000.0000 14500.0000	Т	Horizontal and Vertical	44K8G1W	41.59	31.1
E50. Modulation entirety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
DIGITAL TR	AFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV150	14000.0000 14500.0000	Т	Horizontal and Vertical	44K8G7W	41.59	31.1
E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear in	this box, please go t	o the end of the form	to view it in its
DIGITAL TR	AFFIC USING QF	PSK AND BPSK MC	DULATION			
TTSA900	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00G7W	53.44	21.01

E50. Modulatio	on and Services (If the	ne complete descripti	on does not appear ir	n this box, please go t	o the end of the form	to view it in its
entirety.)						
DIGITAL T	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
TTSA900	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00GIW	53.44	21.01
E50. Modulatio entirety.)	on and Services (If the	ne complete descripti	on does not appear ir	n this box, please go t	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QF	SK AND BPSK MC	DULATION			
TTSA800A	14000.0000 14500.0000	Т	Horizontal and Vertical	2M10G1W	47.4	20.2
E50. Modulatio entirety.)	on and Services (If the	ne complete descripti	on does not appear ir	n this box, please go t	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
TTSA800A	14000.0000 14500.0000	Т	Horizontal and Vertical	2M10G7W	47.4	20.2

E50. Modulation	n and Services (If the	he complete descripti	on does not appear in	this box, please go t	o the end of the form	to view it in its
entirety.)						
DIGITAL T	RAFFIC USING QE	PSK AND BPSK MC	DULATION			
INTV80G	14000.0000 14500.0000	Т	Horizontal and Vertical	2M10G1W	52.3	25.1
E50. Modulation entirety.)	n and Services (If the services) (If the service	he complete descripti	on does not appear in	this box, please go to	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV80G	14000.0000 14500.0000	Т	Horizontal and Vertical	2M10G7W	52.3	25.1
E50. Modulation entirety.)	n and Services (If the services) (If the service	he complete descripti	on does not appear in	this box, please go t	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
INTV130/G	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G1W	58.6	18.6

E50. Modulatio	on and Services (If t	he complete descripti	on does not appear in	n this box, please go t	to the end of the form	to view it in its
entirety.)						
DIGITAL I	RAFFIC USING Q	PSK AND BPSK MC	DULATION			
INTV130/G	14000.0000 14500.0000	Т	Horizontal and Vertical	40M0G7W	58.6	18.6
E50. Modulation entirety.)	on and Services (If t	he complete descripti	on does not appear in	n this box, please go t	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING Q	PSK AND BPSK MO	DULATION			
INTV110	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00G7W	53.14	11.44
E50. Modulation entirety.)	on and Services (If t	he complete descripti	on does not appear in	n this box, please go t	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING Q	PSK AND BPSK MO	DULATION			
INTV110	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00GIW	53.14	11.44

E50. Modulatio	on and Services (If t	he complete descripti	on does not appear ir	n this box, please go t	o the end of the form	to view it in its
entirety.)						
DIGITAL T	RAFFIC USING Q	PSK AND BPSK MC	DULATION			
INTV100	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00G7W	54.8	22.37
E50. Modulation entirety.)	on and Services (If t	he complete descripti	on does not appear in	n this box, please go t	o the end of the form	to view it in its
DIGITAL I	RAFFIC USING QI	PSK AND BPSK MC	DULATION			
INTV100	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00GIW	54.8	22.37
E50. Modulation entirety.)	on and Services (If t	he complete descripti	on does not appear in	n this box, please go t	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QI	PSK AND BPSK MO	DULATION			
900B/FV110	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00G7W	53.7	21.27

E50. Modulation	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
entirety.)						
DIGITAL TR	AFFIC USING QP	SK AND BPSK MC	DULATION			
900B/FV110	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00GIW	53.7	21.27
E50. Modulation entirety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
DIGITAL TR	AFFIC USING QP	OSK AND BPSK MC	DULATION			
4012	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00G7W	53.5	11.7
E50. Modulation entirety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
DIGITAL TR	AFFIC USING QP	SK AND BPSK MC	DULATION			
4012	14000.0000 14500.0000	Т	Horizontal and Vertical	7M00GIW	53.5	11.7

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

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	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
INTV150	Geostationary	10950.00 12200.00	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000.00 14500.00	0.0/0.0	0.0	5.0	0.0	5.0	0.0

REMOTE CONTROL POINT LOCATION

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

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

Location of Earth St	tation Site				
E1: Site Identifier:	1 C–BAND REMOTE ESVS	E5. Call Sign:	WB36		
E2: Contact Name	James G. Lovelace	E6. Phone Number:	203-346-0461		
E3. Street:	11707 S Sam Houston Parkway W	E7. City:	Houston		
		E8. County:	Harris		
E4. State	TX	E9. Zip Code	77031		
E10. Area of Opera	tion:	U.S. and Internation	nal Waters		
E11. Latitude:	0 °0 '0.0 "				
E12. Longitude:	0 °0 '0.0 "				
E13. Lat/Lon Coord	linates are:	O NAD−27	NAD-83	O N/A	
E14. Site Elevation	(AMSL):	0.0 meters			

E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two-degree spacing policy.	• Yes	O ^{No}	O ^{N/A}
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O ^{No}	● ^{N/A}
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	• Yes	0	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as C–Band Coord Ex	• Yes	O No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Yes	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 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?FAA Notification Exh FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	O Yes	No

Satellite Name: If you selected OTHER, please enter the following:

E21. Common Na	ame:			E22. ITU Name:					
E23. Orbit Locati	on:			E24. Country:					
POINTS OF C	OMMUNICATI	ON (Destination	Points)	•					
E25. Site Identifie	er:								
E26. Common Na	ame:			E27. Country:					
ANTENNA				•					
Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi at GHz)			
1 C–BAND REMOTE ESVS	OR7-300C	500	ORBIT	add– ORBANDAL– 7107–C	2.2	0.0 dBi at			
1 C–BAND REMOTE ESVS	OR AL-7108	500	ORBIT	AL-7108 (C- BAND)	2.4	38.0 dBi at 3.95			
1 C–BAND REMOTE ESVS	OR AL-7108	500	ORBIT	AL-7108 (C- BAND)	2.4	40.0 dBi at 6.15			
1 C–BAND REMOTE ESVS	9707/97/11	500	SEA TEL	9707,9797,9711	2.4	0.0 dBi at			
1 C–BAND REMOTE ESVS	9711QORC	500	SEA TEL	9711QORC	2.4	0.0 dBi at			
1 C–BAND REMOTE ESVS	INTV240MC	500	INTELLIAN	V240M(C– BAND)	2.4	0.0 dBi at			
1 C–BAND REMOTE ESVS	INTV240	500	INTELLIAN	V240	2.4	0.0 dBi at			

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)		Above and Level ers)		bove Sea meters)	E37. Buil Height A Ground I (meters)	bove	E38. Total Input Power antenna flar (Watts)		E39. Maximum Antenna Heigl Above Rooftop (meters)	nt EIRP for al
OR7-300C	2.2/2.2	0.0		0.0	0.0 1		170.2		0.0	61.5	
OR AL-7108	2.4/2.4	0.0		0.0		0.0		123.3		0.0	60.9
9707/97/11	2.4/2.4	0.0		0.0		0.0		170.0		0.0	64.0
9711QORC	2.4/2.4	0.0		0.0		0.0		170.0		0.0	64.0
INTV240MC	2.4/2.4	0.0		0.0		0.0		158.87		0.0	63.91
INTV240	2.4/2.4	0.0		0.0		0.0		158.8		0.0	63.7
FREQUENCY						!					-
E28. Antenna Id	E43/44. Frequency Ba (MHz)	equency Bands T/R Mode Polarization(H,V, Designator H		-	P per Carrier	E49. Maximum ERIP Density per Carrier (dBW/4kHz)					
OR AL-7108	3700.0000 4200.0000		R		Linear an	d Circular	44K8C	31W	0.0		0.0
E50. Modulati entirety.)	on and Services	(If the	e complete d	lescriptio	on does no	ot appear in	this bo	x, please go to	the	end of the form	o view it in its
DIGITAL '	TRAFFIC USIN	IG QPS	SK AND BI	PSK MO	DULATIC	DN					
OR AL-7108	3700.0000 4200.0000		R		Linear an	d Circular	44K8C	67W	0.0		0.0

E50. Modulati entirety.)	ion and Services (I	f the complete c	description does not appear in	this box, please	go to the end of t	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
OR AL-7108	3700.0000 4200.0000	R	Linear and Circular	54M0G1W	0.0	0.0
E50. Modulati entirety.)	ion and Services (I	f the complete c	lescription does not appear in	this box, please	go to the end of t	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
OR AL-7108	3700.0000 4200.0000	R	Linear and Circular	54M0G7W	0.0	0.0
E50. Modulati entirety.)	ion and Services (1	f the complete c	lescription does not appear in	this box, please	go to the end of t	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
OR AL-7108	5925.0000 6425.0000	Т	Linear and Circular	15M0G1W	60.9	25.16

E50. Modulatio entirety.)	on and Services (If the services) (If the servic	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
OR AL-7108	5925.0000 6425.0000	Т	Linear and Circular	15M0G7W	60.9	25.16
E50. Modulatio entirety.)	n and Services (If the services) (If the service	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
OR AL-7108	5925.0000 6425.0000	Т	Linear and Circular	44K8G1W	40.59	30.1
E50. Modulatio entirety.)	n and Services (If the services) (If the service	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
DIGITAL T	RAFFIC USING QF	PSK AND BPSK MC	DULATION			
OR AL-7108	5925.0000 6425.0000	Т	Linear and Circular	44K8G7W	40.59	30.1

E50. Modulat entirety.)	tion and Services (I	f the complete c	description does not appear in	this box, please	go to the end of t	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
9707/97/11	5925.0000 6425.0000	Т	Linear and Circular	40M0G1W	64.0	24.0
E50. Modulat entirety.)	tion and Services (I	f the complete c	lescription does not appear in	this box, please	go to the end of t	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
9707/97/11	5925.0000 6425.0000	Т	Linear and Circular	40M0G7W	64.0	24.0
E50. Modulat entirety.)	tion and Services (I	f the complete c	description does not appear in	this box, please	go to the end of t	he form to view it in its
DIGITAL	TRAFFIC USING	QPSK AND BI	PSK MODULATION			
9711QORC	5925.0000 6425.0000	Т	Linear and Circular	40M0G1W	64.0	24.0

E50. Modulation entirety.)	on and Services (If	the complete descrip	otion does not appear in	this box, please go t	to the end of the form	to view it in its
DIGITAL '	TRAFFIC USING Q	PSK AND BPSK N	10DULATION			
9711QORC	5925.0000 6425.0000	Т	Linear and Circular	40M0G7W	64.0	24.0
E50. Modulation entirety.)	on and Services (If	the complete descrip	ption does not appear in	this box, please go t	to the end of the form	to view it in its
DIGITAL S	TRAFFIC USING Q	PSK AND BPSK N	10DULATION			
INTV240MC	5925.0000 6425.0000	Т	Linear and Circular	40M0G1W	63.91	22.01
E50. Modulation entirety.)	on and Services (If	the complete descrip	ption does not appear in	this box, please go t	to the end of the form	to view it in its
DIGITAL	TRAFFIC USING Q	PSK AND BPSK N	10DULATION			
INTV240MC	5925.0000 6425.0000	Т	Linear and Circular	40M0G7W	63.91	22.01

E50. Modulation entirety.)	on and Services (I	f the complete d	escription does not appear in thi	s box, please	go to the end of the	he form to view it in its
	TRAFFIC USING	QPSK AND BF	SK MODULATION			
INTV240	5925.0000 6425.0000	Т	Linear and Circular 40	M0G1W	63.7	23.7
entirety.)			escription does not appear in thi	s box, please	go to the end of the	he form to view it in its
INTV240	5925.0000 6425.0000	Т	Linear and Circular 40	M0G7W	63.7	23.7
entirety.)		-	escription does not appear in thi	s box, please	go to the end of the	he form to view it in its

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)
OR AL-7108	Geostationary	3700.00 4200.00	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	5925.00 6425.00	0.0/0.0	0.0	5.0	0.0	5.0	0.0
REMOTE CO	NTROL POIN	T LOCATION					•	
	se enter the calls	sign of the contro on is being filed.	-		. Phone Number			
E62. Street A	Address							
E63. City			E68. County	7		E67/68. State/Country /		E64. Zip Code

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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 - I) Add New Emission Designators Authorized for 12 ESV antennas. Please see Exhibit 1 for details. II) Update the Power to the Antenna Flange and Certain Other Specifications and Add New Emission Designators Authorized for Antenna IDs 6006/9/12 and INTV240K. III) Add a second Model Number to the Model listed for Antenna ID OR7-300C. As explained in Exhibit 1 the Orbit model OrBand AL-7107-C is identical to the antenna currently listed under this Antenna ID and so is being added as a 2nd model. IV) Add an additional model number to those currently listed for Antenna ID 9797/11KU. As explained in Exhibit 1 the 9711IMA is identical to the antennas currently listed under this Antenna ID and so is being added as a 3rd model. Increase in the power to the Antenna Flange and Certain Other Specifications authorized for this antenna and authorization of new Emission Designators is also being requested. V) Update the Antenna ID listed for Antenna ID INTV240KU. As explained in more detail in Exhibit 1 it is being requested to change that Antenna ID to INTV240MKU in order to better differentiate it from the antenna known as INTV240K. Increase in the power to the Antenna Flange and Certain Other Specifications authorized for this antenna and authorization of new Emission Designators is also being requested. VI) Add 2 new Earth Station on Vessel (ESV) remote antennas to the WB36 ESV authorization. Please see Exhibit 1 for further details and description of compliance with section 25 of the Commission's rules for ESVs. VII) Make updates/corrections to certain of the special provisions and general conditions listed in 'Section H' of the license as further explained in Exhibit 1 and shown in the mark up of the current WB36 license attached in Exhibit 2.