FCC Use Only

Approved by OMB 3060-0678

Date & Time Filed: File Number: ---Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS

FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

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

Draft form for 60-day STA request to provide TT&C for BRIO and THEA from Fairbanks

1-8. Legal 1	Name of Applicant			
Name:	RBC Signals, LLC		Phone Number:	404-803-7734
DBA Name:			Fax Number:	
Street:	2205 152nd Ave NE		E-Mail:	
City:	Redmond		State:	WA
Country:	USA		Zipcode:	98052 -
Attention:	Mr Christopher Richin	s		
9-16. Name	of Contact Representative			
Name:	Carlos M. Nalda		Phone Number:	5713325626
Company:	LMI Advisors		Fax Number:	
Street:	2550 M. Street, NW, S	te. 320	E-Mail:	cnalda@lmiadvisors.com
City:	Washington		State:	DC
Country:	USA		Zipcode:	20037-
Attention:	Mr. Carlos Nalda		Relationship:	Other
		CLASSIFICA	TION OF FILING	
classification for both que one for 17a a. a. a. al. Eart (N/A) a2. S	pace Station	 (N/A) b3. Amendment (N/A) b4. Modification (N/A) b5. Assignment of (N/A) b6. Transfer of C (N/A) b7. Notification of (N/A) b8. Application of Satellite (N/A) b9. Letter of Interstates b10. Other (Please so b11. Application for to Provide the Proposed 	Registration of New Do to a Pending Application of License or Registration of License or Registration for License or Registration for Minor Modification for License of New Rece nt to Use Non-U.S. Lice specify) r Earth Station to Access	on n
	e submitted with this applicati complete and attach FCC Forr			
$\ - 11103, 0$	omplete and attach FCC FOIL	II 1 <i>J7</i> .		

If No, indicate reason for fee exemption O Governmental Entity O Noncomme		4).					
• Governmental Entity • Noncomme • Other(please explain):	rcial educational licensee						
17d.							
Fee Classification BAX - Fixed S	Satellite Transmit/Rece	vive Earth Station	on				
18. If this filing is in reference to an existing station, enter: (a) Call sign of station:19. If this filing is an amendment to a pending application enter: (a) Date pending application was filed: (b) File number of pending application:							
Not Applicable	Not Applicable		Not Applicable				
		SERVICE					
20. NATURE OF SERVICE: This filing	is for an authorization to pro	ovide or use the fol	llowing 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) NGSO 							
21. STATUS: Choose the button next to t	he applicable status.		n applicant, check all that apply.				
Choose only one. Using U.S. licensed satellites Using Non-Common Carrier Volume Non-Common Carrier							
23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one.							
Are these facilities:							
• Connected to a Public Switched Netv							
24. FREQUENCY BAND(S): Place an "		applicable frequen	ncy band(s).				
a. C-Band (4/6 GHz) b. Ku-Band	· /						
C.Other (Please specify upper and lov Frequency Lower: 399.90 Frequency Up							
Trequency Dower: 33330 Trequency Op		STATION					
25. CLASS OF STATION: Choose the b			Thoose only one				
 a. Fixed Earth Station 		and appress e					
• b. Temporary-Fixed Earth Station							
• c. 12/14 GHz VSAT Network							
• d. Mobile Earth Station							
(N/A) e. Geostationary Space Station							
(N/A) f. Non-Geostationary Space Statio	n						
• g. Other (please specify)							
26. TYPE OF EARTH STATION FACIL	•						
Transmit/Receive Transmit-Only	• Receive-Only • N/A						
	PURPOSE OF N	MODIFICATIO	DN				
27. The purpose of this proposed modifi	cation is to: (Place an 'X' in	the box(es) next to	all that apply.)				

https://licensing.fcc.gov/ibfsweb/ib.page.FetchForm?id_app_num=128654&form=P013_101.htm&mode=display

Not Applicable

11/15/2018

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

O Yes ● No

11/15/2018

https://licensing.fcc.gov/ibfsweb/ib.page.FetchForm?id_app_num=128654&form=P013_101.htm&mode=display

application.<u>A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.</u>

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.

29. Is the applicant a foreign government or the representative of any foreign government?	O _{Yes} ● _{No}
30. Is the applicant an alien or the representative of an alien?	O _{Yes} ● _{No} O _{N/A}
31. Is the applicant a corporation organized under the laws of any foreign government?	O _{Yes} ● _{No} O _{N/A}
32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	O _{Yes} ● _{No} O _{N/A}
33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	O _{Yes} ● _{No} O _{N/A}
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.	
BASIC QUALIFICATIONS	
35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	O _{Yes} ● _{No}
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	O _{Yes} ● _{No}
37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	O _{Yes} ● _{No}
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	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} ● _{No}
40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.	
41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes.	● _{Yes} O _{No}
42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in <i>47 C.F.R. 25.137, as appropriate</i> . If No, proceed to question 43.	O _{Yes} ● _{No}
42b. What administration has licensed or is in the process of licensing the space station? If no license will be has coordinated or is in the process of coordinating the space station?	issued, what administration

11/15/2018

-)-day STA request to provide ska site.						
	rvice or $oldsymbol{\Theta}_{\mathbf{A}}$						
comply with such requirem cally feasible, such services e it economically unreasonal	ents because it would require C						
IFICATION							
her by license or otherwise, ication would not cause the bits are a material part hereof applicant, hereby certifies th est of his or her knowledge a	and requests an authorization in accordance applicant to be in violation of the spectrum f and are incorporated herein as if set out in at all statements made in this application and belief, and are made in good faith.						
46. Title of Person Signi	ng						
A	Attachment 3:						
VOCATION OF ANY STA	Y FINE AND / OR IMPRISONMENT TION AUTHORIZATION ode, Title 47, Section 503).						
SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 - Schedule B:(Technical and Operational Description)							
FOR OFFICIAL USE ONLY							
E5. Call Sign:							
E6. Phone Number:	6507468744						
	iom the Fairbanks, Alax subject to the geographic service ect to the geographic service comply with such requirements comply with such requirements comply with such requirements comply with such requirements is ally feasible, such services is e it economically unreasonal tached. IFICATION ency or of the electromagnet ther by license or otherwise, ication would not cause the bits are a material part hereov applicant, hereby certifies th est of his or her knowledge a onse.) 46. Title of Person Signi CEO AARE PUNISHABLE BY VOCATION OF ANY STA R FORFEITURE (U.S. Co ATION AUTHOR chnical and Opera						

1/15/2018		https://licensir	ng.fcc.gov/ibfsweb/ib.	page.Fet	chForm	?id_app_nu	ım=	128654&form=P013_10	01.htm&mode=dis	play
					E8. C	County:				
E4. State		AK			E9. Z	Cip Code		99734		
	of Operation:				Fair	banks, A	K			
E11. Latitu			' 31.0 " N							
E12. Longi) ' 7.0 " W							-
E13. Lat/Lo	on Coordinates	are:				AD-27		NAD	D- 83	o _{N/A}
E14. Site E	levation (AMS	L):			15.0	meters				
do(es) the p demonstrate	roposed antenr	na(s) comply facturer's qua	lification measuren	in patter	ns spec	ified in Se	ectic	ionary satellites, on 25.209(a) and (b) a nical analysis showin		No <mark>()</mark> N/A
Fixed Satell the antenna qualification	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? $V_{\rm es} \sim \frac{O_{\rm es}}{N/A}$									
E17. Is the f	• •	d by remote c	ontrol? If YES, pro	ovide the	e locatio	on and tele	pho	one number of the	• Yes	• No
E18. Is fro as	equency coo	ordination r	equired? If YES	S, attac	h a fr	equency	co	ordination report	• Yes	• No
			er country requiration contours a		Y <mark>E</mark> S,	attach th	ne r	name of the	o _{Yes}	● No
aviation? FAILUR THE RE	E TO COM FURN OF '	IPLY WIT THIS APP	garding the pot H 47 CFR PAI LICATION.						• Yes	• No
-	COMMUNI			1.0.5				1 0 11 1		
			R If you select	ted OT	HER,			er the following:		
	mon Name							. ITU Name:		
E23. Orbi	t Location:	NGSO					24.	. Country: USA		
Satellite N	Name:OTHE	ER OTHE	R If you select	ted OT	HER,	please er	nte	er the following:		
E21. Con	mon Name	: BRIO				E2	22.	ITU Name:		
E23. Orbi	t Location:	NGSO				E2	24.	Country: USA		
POINTS OF	COMMUNI	CATION (D	estination Points)			I I				
E25. Site	Identifier:									
E26. Com	mon Name					I	E27	7. Country:		
ANTENNA										
Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E3 Mo		E32. Antenn Size	a	E41/42. Ante and/or Recieve(nsmint GHz)
RBC- Fairbanks	YAGI		M2 Antenna Systems	400CI	P30A	3.57		16.2 dBi at 0.400		
E28. Antenna Id	E33/34. l Minor/Maj	Diameter jor(meters) Above Ab Ground S	ove H ea evel	Heigh Gro Lo	Building t Above ound evel eters)	In	nput Power Antantenna He flange	. Maximum Antenna ight Above Rooftop (meters)	E40. Total EIRP for al

							carriers (dBW)
YAGI	0.025/3.57	15.0	0.0	0.0	8.93	0.0	25.7

FREQUENCY

FREQUEN								
E28.	E43/44.	E45.	E46. Antenna	E47.	E48. Maximum	E49. Maximum ERIP		
Antenna	Frequency	T/R	Polarization(H,V,L,R)	Emission	EIRP per	Density per		
Id	Bands(MHz)	Mode		Designator	Carrier(dBW)	Carrier(dBW/4kHz)		
YAGI	400.50 400.65	R	Right Hand Circular	33K0G1D	0.0	0.0		
E50. Modulation and Services TT&C Downlink								
YAGI	400.50 400.65	R	Right Hand Circular	4K13G1D	0.0	0.0		
E50. Mod	lulation and Serv	vices TT	&C Downlink					
YAGI	400.50 400.65	R	Right Hand Circular	99K1G1D	0.0	0.0		
E50. Mod	lulation and Serv	vices TT	&C Downlink					
YAGI	399.90 400.05	0.05 T Right Hand Circular		33K0G1D	25.7	16.5		
E50. Mod	lulation and Serv	vices TT	&C Uplink					
YAGI	399.90 400.05	Т	Right Hand Circular	4K13G1D	25.7	25.6		
E50. Modulation and Services TT&C Uplink								
YAGI	399.90 400.05	Т	Right Hand Circular	99K1G1D	25.7	11.8		
E50. Mod	lulation and Serv	vices TT	&C Uplink					
FREQUEN	CV COORDINATI	ION						

FREQUENCY COORDINATION

E28. Antenna Id		E52/53. Frequency Limits(MHz)		E56. Earth Station Azimuth Angle Eastern Limit	Angle Eastern	E58. Earth Station Azimuth Angle Western Limit	Angle	E60. Maximum EIRP Density toward the Horizon(dBW/4kHz)
	Non- Geostationary	400.50 400.65	0.0/ 0.0	0.0	5.0	360.0	5.0	0.0
	Non- Geostationary	399.90 400.05	0.0/ 0.0	0.0	5.0	360.0	5.0	25.6

REMOTE CONTROL POINT LOCATION REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the application is being filed.	65. Phone Number 507468744						
E62. Street Address 2205 152nd Street NE							
E63. City	E67. County	E64/68.	E66. Zip				
Redmond	King	State/Country WA/ USA	Code 98052				

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 0.25 - 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington,

11/15/2018

https://licensing.fcc.gov/ibfsweb/ib.page.FetchForm?id_app_num=128654&form=P013_101.htm&mode=display

DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember - You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.