Date & Time Filed: Oct 30 2020 2:25:42:153PM File Number: SES-AMD-INTR2020-03320

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: Amendment of Earth Station License E990337 (LPMA–1)

7 tinendificit of Earth	Station Electise L770337 (El W	1111)	
1–8. Legal Name of Ap	plicant		
Name:	GCL Licensee LLC	Phone Number:	985-335-1503
DBA Name:		Fax Number:	985–335–1703
Street:	1351 Holiday Square Blvd.	E-Mail:	Barbee.Ponder@Globalstar.com
City:	Covington	State:	LA
Country:	USA	Zipcode:	70433 –
Attention:	Mr L. Barbee Ponder		

9–16. Name of Contact Representative

Name: Wen Doong Phone Number: 985–335–1675

Company: Globalstar, Inc. Fax Number:

Street: 1351 Holiday Square Blvd. E–Mail: Wen.Doong@Globalstar.com

City: Covington State: LA

Country: USA Zipcode: 70433–

Attention: Relationship: Engineer

#### **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

**a** b3. Amendment to a Pending Application

**b**4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

**b**7. 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

**b** 14. 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).				
Other(please explain):	Office Governmental Entity Office Other(please explain):  Noncommercial educational licensee			
17d.				
Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station				
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending apmodification please enter only the file number:	oplication enter both fields, if this filing is a		
(a) Call sign of station: E990337	(a) Date pending application was filed:	(b) File number:		
E770331	07/28/2020	SESMOD2020072800812		

# TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provid	e or use the following type(s) of service(s): Select all that apply:
a. Fixed Satellite	
<b>x</b> 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)	
21. STATUS: Choose the button next to the applicable status. Choose	22. If earth station applicant, check all that apply.
only one.	■ Using U.S. licensed satellites
O Common Carrier Non–Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER stacilities:	service, see instructions regarding Sec. 214 filings. Choose one. Are these
Connected to a Public Switched Network Not connected to a	Public Switched Network  N/A
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all a	pplicable frequency band(s).
a. C–Band (4/6 GHz) b. Ku–Band (12/14 GHz)	
c.Other (Please specify upper and lower frequencies in MHz.)	
Frequency Lower: 5091 Frequency Upper: 7055	(Please specify additional 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	
c. 12/14 GHz VSAT Network	
d. Mobile Earth Station	
e. Geostationary Space Station	
f. Non–Geostationary Space Station	
g. Other (please specify)	
26. TYPE OF EARTH STATION FACILITY:	
Transmit/Receive Transmit-Only Receive-Only N/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 & Double
j — authorization to change Points of Communication (satellites & mp; countries)
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
1 — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o — Other (Please specify)

#### **ENVIRONMENTAL POLICY**

impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.						
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeron aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	ı rou	ite or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	•	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	No	•	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?	0	Yes	0	No	•	N/A

 $lackbox{ Yes } lackbox{ No}$ 

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

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 O	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.		
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.	<b>o</b> Yes	No
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	No

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

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

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

GCL Licensee LLC (together with its parent Globalstar, Inc., 'Globalstar') hereby amends its pending application for modification of its feeder link earth station antenna operating in Las Palmas, Puerto Rico, under call sign E990337, to permit its proposed second-generation antenna to transmit a new waveform over Globalstar's MSS network.

Cover letter

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.	O 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>●</b> 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.	<b>o</b> 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 applicant is a (an):	plicable response.)
o Individual	
Unincorporated Association	
Partnership	
O Corporation	
Governmental Entity	
Other (please specify)	
45. Name of Person Signing	46. Title of Person Signing
L. Barbee Ponder IV	General Counsel and VP – Regulatory Affairs
>	· · · · · · · · · · · · · · · · · · ·
(U.S. Code, Title 18, Section	E ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION 2(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: LPMA-1 E5. Call Sign: E990337 E2: Contact Name Luis Figueroa E6. Phone 787-396-9057 Number: E3. Street: Las Palmas E7. City: Cabo Rojo E8. County: Cabo Rojo Road 303 INT. KM 12.1 E4. State PR E9. Zip Code 00623 E10. Area of Operation: Cabo Rojo, PR, USA E11. Latitude: 17 °58 '48.0 "N E12. Longitude: 67 °8 '15.0 "W E13. Lat/Lon Coordinates are: ■ NAD-27 NAD-83 N/A E14. Site Elevation (AMSL): 55.0 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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Ser Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	posed antenna(s) comply with the antenna	<b>⊚</b> Yes	O No	O N/A
E17. Is the facility operated by remote control? If YES, provide the loca point.	tion and telephone number of the control	● Yes	٥	No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as E18 Response	<b>⊚</b> Yes	0	No
E19. Is coordination with another country required? If YES, attach the n coordination contours as	name of the country(ies) and plot of	Yes	٥	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL I APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		•		
Satellite Name: GLOBALSTAR (S2115)   HIBLEO-4   NGSO If you	selected OTHER, please enter the following	<u>;:</u>		
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
Satellite Name: OTHER   OTHER   If you selected OTHER, please e	nter the following:			

E21. Common Name: Globalstar 2.0	E22. ITU Name: HIBLEO–X
E23. Orbit Location: NGSO	E24. Country: France
DODUTES OF COLD HUNGATION (D P	

# POINTS OF COMMUNICATION (Destination Points)

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

# ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)	
LPMA-1	LPA RFT1	1	SeaTel	SeaTel Tracker T6000	6.0	47.5 dBi at 5.15	
LPMA-1	LPA RFT1	1	SeaTel	SeaTel Tracker T6000	6.0	51.2 dBi at 6.975	

E28. Antenna Id			` ′	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
LPA RFT1	0.0/0.0	8.69	63.69	0.0	123.0	0.0	68.4

# FREQUENCY

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

LPA RFT1	5096	5250	Т	Left and Right Circular	1M23G7W	55.0	30.1
E50. Modulation entirety.)	and Service	s (If th	ne complete de	escription does not appear	in this box, please	go to the end of the	he form to view it in its
CDMA voice	e and dat	a					
LPA RFT1	6900	7055	R	Left and Right Circular	1M23G7W	0.0	0.0
entirety.)  CDMA voice	e and dat	a					
LPA RFT1	6900	7055	R	Left and Right Circular	NON	0.0	0.0
E50. Modulation entirety.)  Unmodulate		·		escription does not appear	in this box, please	go to the end of the	ne form to view it in its

LPA RFT1	5096	5250	Т	Left and Right Circular	2M46G7W	55.0	27.1
E50. Modulation entirety.)	on and Servic	es (If the	ne complete d	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Wideband	CDMA voi	ce and	data				
LPA RFT1	6900	7055	R	Left and Right Circular	2M46G7W	0.0	0.0
Wideband	CDMA voi	ce and	data				
LPA RFT1	5096	5250	Т	Left and Right Circular	2M46G2W	55.0	27.1
E50. Modulation entirety.)  Wideband			ne complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its

LPA RFT1	6900	7055	R	Left and Right Circular	2M46G2W	0.0	0.0
E50. Modulatio entirety.)	n and Service	es (If th	ne complete de	escription does not appear	in this box, please	go to the end of the	he form to view it in its
Wideband	CDMA for	single	e-carrier <i>l</i>	AMSS			
LPA RFT1	5096	5250	Т	Left and Right Circular	1M23XXX	59.0	34.1
White-noi	se-modula	ated ca	arrier for	testing			
LPA RFT1	6900	7055	R	Left and Right Circular	1M23XXX	0.0	0.0
E50. Modulatio entirety.)				escription does not appear	in this box, please	go to the end of the	he form to view it in its
White-noi	se-modula	ated ca	arrier for	testing			

LPA RFT1	6900	7055	R	Left and Right Circular	200KG7D	0.0	0.0
E50. Modulation entirety.)	and Service	es (If th	ne complete de	scription does not appear	in this box, please	go to the end of the	he form to view it in its
Burst mode	e packet	data w	rith BPSK r	nodulation			
LPA RFT1	5096	5250	Т	Left and Right Circular	1M23G2W	55.0	30.1
Direct-sec	quence CI	DMA for	single-ca	arrier AMSS			
LPA RFT1	6900	7055	R	Left and Right Circular	1M23G2W	0.0	0.0
E50. Modulation entirety.)				scription does not appear	in this box, please	go to the end of the	he form to view it in its

LPA RFT1	5096	5250	Т	Left and Right Circular	4M50G7D	68.0	37.5
E50. Modulatio entirety.)	n and Servic	es (If the	ne complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Burst mod	e packet	data w	7ith π	;/2-BPSK modulation	on		
LPA RFT1	6900	7055	R	Left and Right Circular	2M50G2D	0.0	0.0
Direct-se	quence C	DMA for	single-c	arrier telemetry o	lata		
LPA RFT1	6900	7055	R	Left and Right Circular	2M50G7D	0.0	0.0
E50. Modulatio entirety.)	n and Servic	es (If the	ne complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Direct-se	quence C	DMA for	single-c	arrier telemetry o	lata		

Circular	ſ	LPA RFT1	5096	5250	T	Left and Right	N0N	59.0	59.0
						Circular			

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

Unmodulated CW for testing; maximum EIRP density per carrier is 59.0 dBW in any bandwidth.

# 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	Station Azimuth Angle	Antenna	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
LPA RFT1	Non– Geostationary	6875 7055	0.0/0.0	0.0	5.0	360.0	5.0	0.0
	Non– Geostationary	5091 5250	0.0/0.0	0.0	5.0	360.0	5.0	6.29

#### REMOTE CONTROL POINT LOCATION

E61. Call Sign	E66. Phone Number
N/A	408–933–4600
NOTE: Please enter the callsign of the controlling station, not the	
callsign for which this application is being filed.	

E62. Street Address 1351 Holiday Square Blvd.			
E63. City Covington	E68. County St. Tammany Par	E67/68. State/Country LA/ USA	E64. Zip Code 70433

#### FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 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, 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.

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

GCL Licensee LLC (together with its parent Globalstar, Inc., 'Globalstar') hereby amends its pending application for modification of its feeder link earth station antenna operating in Las Palmas, Puerto Rico, under call sign E990337, to permit its proposed second-generation antenna to transmit a new waveform over Globalstar's MSS network. Transmission of this waveform should improve and enhance its safety-of-life MSS offerings.