

GUSA Licensee LLC

Approved by OMB
3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
Clifton, TX STA application - February extension request

1. Applicant

Name:	GUSA 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 IV		

"With conditions"

60 days File # SES-STA-20200204-00122



Call Sign N/A Grant Date 02/24/2020
(or other identifier)

Term Dates
From: 02/24/2020 To: 04/23/2020

Approved: *[Signature]*

2. Contact	
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
(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)	
3. Reference File Number SESSTA2019112201542 or Submission ID	
4a. Is a fee submitted with this application?	
<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). <input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee <input type="radio"/> Other (please explain):	
4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station	
5. Type Request	
<input checked="" type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input type="radio"/> Other	
6. Requested Use Prior Date 02/16/2020	
7. City Clifton	
8. Latitude (dd mm ss.s h) 31 48 2.149 N	

9. State TX	10. Longitude (dd mm ss.h) 97 36 44.37 W
11. Please supply any need attachments. Attachment 1: Letter Attachment 2: Technical exhibit Attachment 3:	
12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) GUSA Licensee LLC (together with its parent Globalstar, Inc., 'Globalstar') is applying for a sixty-day extension of its existing special temporary authority ('STA') to test and validate a prototype of Globalstar's new, second-generation earth station antenna at its Clifton, TX gateway location. The Commission granted Globalstar its current sixty-day STA	
13. 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 <input checked="" type="radio"/> No <input type="radio"/>	
14. Name of Person Signing L. Barbee Ponder IV	15. Title of Person Signing General Counsel and VP - Regulatory Affairs
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).	

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12. Description

GUSA Licensee LLC (together with its parent Globalstar, Inc., 'Globalstar') is applying for a sixty-day extension of its existing special temporary authority ('STA') to test and validate a prototype of Globalstar's new, second-generation earth station antenna at its Clifton, TX gateway location. The Commission granted Globalstar its current sixty-day STA on December 17, 2019. Unfortunately, due to unforeseen software issues, Globalstar was unable to initiate the testing and validation of this prototype antenna as planned in late December 2019. To ensure that transmissions from this prototype antenna would raise no technical concerns for Globalstar's mobile satellite service ('MSS') network, Globalstar postponed the testing and validation process until these software issues were fully resolved. Globalstar now expects to begin this process during the first half of February 2020 and to conclude this activity during March 2020.

Applicant: GUSA Licensee LLC
Call Sign: No Call Sign
File No.: SES-STA-20200204-00122
Special Temporary Authority ("STA")



"with conditions"

File # SES-STA-20200204-00122

Call Sign N/A Grant Date 02/24/2020
(or other identifier)

Term Dates
From: 02/24/2020 To: 04/23/2020

Approved: Paul E. Heery

GUSA Licensee LLC ("GUSA") is granted extension of STA for 60 days to operate its C-band fixed earth station in Clifton, TX with NGSO satellite system Globalstar Big LEO MSS, Call Sign S2115, and French licensed NGSO satellite system HIBLEO-X GLOBALSTAR 2.0 to conduct antenna verification testing on center frequencies 5091-5250 MHz (Earth-to-space) and 6875-7055 MHz (space-to-Earth) under the following conditions:

1. Operations under this authority are on a non-interference basis only.
2. Operations under this authority are on a non-protected basis only.
3. Operations shall comply with the emission designations, power, and frequency coordinated parameters.
4. GUSA shall, at all times, take all necessary measures to ensure that operation of this earth station does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR § 1.1307(b) and 1.1310. Physical measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions, such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling, or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
5. In the event of any harmful interference under this grant of special temporary authority GUSA must cease operations immediately upon notification of such interference, and must inform the Commission in writing, immediately of such an event.
6. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at GUSA's risk.
7. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future GUSA applications.
8. Operations of this authorization during the period from expiration of February 15, 2020, IBFS file number SES-STA-20191122-01542, to the grant of this STA was authorized pursuant to Section 1.62 of the Commission's rules, 47 C.F.R. § 1.62.

This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective immediately.

LAWLER, METZGER, KEENEY & LOGAN, LLC

1717 K STREET, NW
SUITE 1075
WASHINGTON, D.C. 20006

STEPHEN J. BERMAN

PHONE (202) 777-7700
FACSIMILE (202) 777-7763

February 4, 2020

Via Electronic Filing

Tom Sullivan
Chief, International Bureau
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

**Re: Request for Sixty-Day Extension of Special Temporary Authority (Clifton, TX) (IBFS File No. SES-STA-20191122-01542)
GUSA Licensee LLC**

Dear Mr. Sullivan:

Under Section 25.120 of the Commission's rules, GUSA Licensee LLC (together with its parent Globalstar, Inc., "Globalstar") hereby requests a sixty-day extension of its existing Special Temporary Authority ("STA") in Clifton, Texas, in order to test and validate a prototype of Globalstar's new, second-generation gateway earth station antenna at its Clifton facility.¹

The Commission granted Globalstar its current sixty-day STA on December 17, 2019.² Unfortunately, due to unforeseen software issues, Globalstar was unable to initiate the testing and validation of this prototype antenna as planned in late December 2019. To ensure that transmissions from this prototype antenna would raise no technical concerns for Globalstar's mobile satellite service ("MSS") network, Globalstar postponed the testing and validation process until these software issues were fully resolved. Globalstar now expects to begin this process during the first half of February 2020 and to conclude this activity during March 2020. Accordingly, Globalstar respectfully seeks this sixty-day STA extension to permit completion of this required testing and validation.

As Globalstar described in its November STA Request, it plans to deploy second-generation earth station antennas at its U.S. gateway locations over the next one to two years. Globalstar's second-generation earth station antennas are 6-meter dishes with radomes,

¹ 47 C.F.R. § 25.120; Application for Special Temporary Authority of GUSA Licensee LLC, IBFS File No. SES-STA-20191122-01542 (filed Nov. 22, 2019); *Satellite Communications Services Information re: Actions Taken*, Public Notice, Report No. SES-02227 at 63 (Dec. 18, 2019) ("December STA Grant").

² December STA Grant.

Mr. Tom Sullivan
February 4, 2020
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manufactured by Seatel. These antennas will yield significant operational benefits for Globalstar's mobile satellite service ("MSS") network. They will be more efficient than Globalstar's existing transceivers, requiring less power and only minimal maintenance. These second-generation facilities will also provide superior satellite-tracking capability, relying on state-of-the-art auto-track technology. These antennas will be similar to Globalstar's current gateway systems from an RF perspective, and will comply with all applicable Commission regulations. With this extension request, Globalstar again provides the relevant technical parameters of its prototype second-generation antenna, at Exhibit 1 to this application.

The testing and validation process for Globalstar's prototype second-generation gateway antenna will consist of three basic phases. In the first phase, Globalstar will test the antenna's ability to receive communications from its MSS constellation and track its satellites. The antenna will not transmit to the satellites during this period. In the second phase, Globalstar's prototype antenna will send telemetric commands to its MSS satellites. These telemetry transmissions will have no effect on Globalstar's communications traffic. In the final phase, the prototype antenna will support Globalstar's MSS operations by transmitting actual communications traffic during scheduled test periods. Globalstar will verify the antenna's performance as it carries commercial communications traffic from its customers.

Once validated, Globalstar's prototype second-generation antenna will become fully operational at the Clifton gateway facility and carry an appropriate share of Globalstar's MSS traffic. Within the near future, Globalstar will submit an application for permanent authority for this new earth station antenna. Globalstar expects to decommission one of its existing, first-generation antennas in Clifton during the first half of 2020.

Please do not hesitate to contact me with any questions.

Respectfully submitted,

/s/ Stephen J. Berman
Stephen J. Berman

cc: Paul Blais

Exhibit 2: Earth Station Technical Information for STA Extension Request

GUSA Licensee LLC (together with its parent Globalstar, Inc., "Globalstar") is seeking a 60-day extension of its Special Temporary Authority ("STA") to operate a new antenna at the Globalstar gateway earth station at Clifton, Texas, with the following parameters:

Proposed STA term:	February 16, 2020 to April 16, 2020
Location:	Clifton, Texas
Latitude:	31° 48' 2.1492" N
Longitude:	97° 36' 44.3736" W
Transmit frequency:	5091 – 5250 MHz
Receive frequency:	6875 – 7055 MHz
Polarization:	RHCP & LHCP
Antenna Size:	6 meters
Gain:	Tx: 47.3 dBi at 5.150 GHz Rx: 49.4 dBi at 6.975 GHz
Max. antenna height:	28.5 feet above ground level
Necessary Bandwidth:	Transmit bandwidth is 159 MHz Receive bandwidth is 180 MHz Maximum carrier bandwidth is 2.5 MHz
Carrier:	See table below:

<u>Frequency Band (MHz)</u>	<u>T/R Mode & Polarization</u>	<u>Emission Designator</u>	<u>Maximum EIRP (dBW)</u>	<u>Maximum EIRP Density (dBW/4kHz)</u>	<u>Modulation</u>
5091 - 5092	Tx- LHCP	76K0F2D	68	55.2	FM subcarrier on telecommand carrier
6875.95 – 6877.15	Rx – LHCP	7K00G1D			Telemetry carrier
5096 – 5250	Tx – L/RHCP	1M23XXX	59	34.1	White noise modulated carrier for testing
6900 – 7055	Rx – L/RHCP	1M23XXX			White noise modulated carrier for testing
5096 – 5250	Tx – L/RHCP	N0N	59	59	Unmodulated CW for testing
6900 – 7055	Rx – L/RHCP	N0N			Unmodulated CW for testing
5096 – 5250	Tx – L/RHCP	1M23G7W	55	30.1	CDMA/voice and data
6900 – 7055	Rx – L/RHCP	1M23G7W			CDMA/voice and data
5096 – 5250	Tx – L/RHCP	1M23G2W	55	30.1	CDMA/for single-carrier AMSS.
6900 – 7055	Rx – L/RHCP	1M23G2W			CDMA/for single-carrier AMSS
6900 – 7055	Rx – L/RHCP	2M50G2D			Direct sequence CDMA for single-carrier telemetry data
5096 – 5250	Tx – L/RHCP	2M46G7W	55	27.1	CDMA/voice and data
6900 – 7055	Rx – L/RHCP	2M46G7W			CDMA/voice and data
5096 – 5250	Tx – L/RHCP	2M46G2W	55	27.1	CDMA/for single-carrier AMSS.
6900 – 7055	Rx – L/RHCP	2M46G2W			CDMA/for single-carrier AMSS
5091.38 – 5091.62	Tx- LHCP	40K0G2D	68	58	Telecommand carrier
6875.9 – 6879.1	Rx – LHCP	70K0G7D			Telemetry carrier

GUSA Licensee LLC

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Maximum EIRP: 68 dBW (for all carriers combined)

Maximum EIRP Density: 59 dBW/MHz

Satellite: S2115 (U.S.-licensed Globalstar Big LEO MSS system)

Orbital Location: NGSO (1414 km altitude, 52 degree inclination)

Elevation Angle (E/W): 5 degrees to 90 degrees

Azimuth (E/W): 0 degrees to 360 degrees

Satellite: HIBLEO-X GLOBALSTAR 2.0 (French-licensed Globalstar Big LEO MSS system)

Orbital Location: NGSO (1414 km altitude, 52 degree inclination)

Elevation Angle (E/W): 5 degrees to 90 degrees

Azimuth (E/W): 0 degrees to 360 degrees

NOTE: The telecommand / telemetry carrier with designator 40K0G2D/70K0G7D are for GLOBALSTAR 2.0 satellites while the telecommand / telemetry carrier with designator 76K0F2D/7K00G1D are for current Globalstar satellites (Call Sign S2115).

Information on MLS Sites

For the Clifton, Texas, Globalstar gateway site, there are four potential MLS sites, i.e., Category III airports, within the 200 nautical mile coordination distance. The Clifton site is located at 31-48-06 N, 97-36-45 W. The airports are:

IAH	Houston – George Bush International Airport, approximately 163 nautical miles from Clifton
AUS	Austin – Bergstrom International Airport, approximately 91 nautical miles away
DFW	Dallas/Ft. Worth International Airport, approximately 71 nautical miles away
AFW	Ft. Worth Alliance Field, approximately 68 nautical miles away

Based on a directory used for MLS coordination purposes, and to the best of its knowledge, GUSA believes that MLS is not active at any of those sites and will not be active during the requested 60-day extension of the current STA period.