FCC Form 312-R
Exhibit 1
Response to Question 6

OPERATION OF CALL SIGN E050345
UNDER SPECIAL TEMPORARY AUTHORITY

On October 15, 2021, the Commission granted Special Temporary Authority ("STA") to GUSA Licensee LLC (together with its parent Globalstar, Inc., "Globalstar") with respect to operation of its licensed feeder link earth station antenna in Wasilla, AK, under call sign E050345.[1] (Globalstar seeks renewal of call sign E050345 in the instant application.)

Under the granted STA for call sign E050345, Globalstar is operating one of its new, second-generation feeder link earth station antennas. Globalstar's second-generation feeder link antennas are more efficient than Globalstar's first-generation transceivers, requiring less power and only minimal maintenance. These second-generation facilities also provide superior satellite-tracking capability, relying on state-of-the-art auto-track technology.

Globalstar's second-generation antennas are similar to its current gateway systems from an RF perspective and comply with all applicable Commission regulations. Temporary authorization of Globalstar's second-generation earth station resulted in an increase in total EIRP for operations under call sign E050345. Specifically, total EIRP for this Wasilla antenna under this STA increased from 68.0 dBW to 72.2 dBW. Globalstar provided the relevant technical parameters in the technical exhibit to its July 21, 2021 STA request for call sign E050345 (attached to this exhibit).[2]

On March 3, 2021, GUSA Licensee LLC requested modification of its permanent license so that it can operate its second-generation earth station antenna under call sign E050345 on a permanent basis.[3] That application is currently pending at the Commission.

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1 *See* FCC File No. SES-STA-20210721-01263.

2 Application of GUSA Licensee LLC, Exhibit 2: Earth Station Technical Information for STA Request, FCC File No. SES-STA-20210721-01263 (July 21, 2021).

3 Application of GUSA Licensee LLC, FCC File No. SES-MOD-20210303-00414 (March 3, 2021).

Attachment

Approved by OMB
3060−0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:
WSL3 STA

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		

2. Contact

Name:	Wen Doong	**Phone Number:**	9853351500
Company:	Globalstar, Inc.	**Fax Number:**	
Street:	1351 Holiday Square Blvd	E−Mail:	
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 SESSTA2021031700522 or Submission ID

4a. 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):

4b. Fee Classification CGX − Fixed Satellite Transmit/Receive Earth Station

5. Type Request

◉ Use Prior to Grant ○ Change Station Location ○ Other

6. Requested Use Prior Date 10/09/2021	
7. CityWasilla	8. Latitude (dd mm ss.s h) 61 35 24.9 N

9. State AK	10. Longitude (dd mm ss.s h) 149 29 9.6 W

11. Please supply any need attachments.

Attachment 1: Cover 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 seeking a 60 day extension of its existing Special Temporary Authority ('STA') in order to continue to operate a second−generation feeder link earth station antenna and test and validate a new waveform under call sign E050345 in Wasilla, Alaska.

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 ○ No

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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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.

Exhibit 1

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

July 21, 2021

Via Electronic Filing

Tom Sullivan
Chief, International Bureau
Federal Communications Commission
45 L Street NE
Washington, DC 20554

Re: **Request for 60-Day Extension of STA (Wasilla, AK)**
GUSA Licensee LLC – FCC File No. SES-STA-20210317-00522 (Call Sign E050345)

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 60-day extension of its existing, above-captioned Special Temporary Authority ("STA"), so that it can continue to operate one of Globalstar's new, second-generation feeder link earth station antennas under call sign E050345, in Wasilla, Alaska.[1] Grant of this STA extension will help accelerate Globalstar's use of its mobile satellite service ("MSS") network for enhanced safety-of-life services while its license modification application for this antenna remains pending.[2]

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[1] 47 C.F.R. § 25.120.

[2] On March 3, 2021, Globalstar applied for authority to modify its feeder link earth station antenna under call sign E050345 in Wasilla, Alaska, so that it can operate its second-generation earth station antenna under this call sign on a permanent basis. *See* Application of GUSA Licensee LLC, FCC File No. SES-MOD-20210303-00414 (Mar. 3, 2021) ("March Application"). The Commission placed the March Application on public notice in July 2021. *See Satellite Communications Services re: Satellite Radio Applications Accepted For Filing*, Public Notice, Report No. SES-02379 at 4-6 (July 7, 2021). Globalstar submitted a request for a 60-day STA on March 17, 2021, in order to operate the instant second-generation antenna while the March Application remained pending. *See* FCC File No. SES-STA-20210317-00522. The Commission granted Globalstar's current STA for this earth station antenna on June 11, 2021. *See Satellite Communications Services Information re: Actions Taken*, Public Notice, Report No. SES-02374 at 24 (June 16, 2021). Given that the March Application is still pending, Globalstar now submits the instant STA extension in order to continue to operate this second-generation antenna under call sign E050345 beyond the existing August 9, 2021 STA expiration date.

Clearly, grant of the requested STA extension will yield significant benefits for Globalstar's MSS network and its subscribers. As explained in Globalstar's March Application, Globalstar's second-generation feeder link earth station antennas – 6-meter Cobham SATCOM dishes with radomes – are more efficient than Globalstar's existing transceivers, requiring less power and only minimal maintenance.[3] In addition, operation of this second-generation earth station antenna improves Globalstar's satellite control and helps optimize its constellation management. These second-generation earth station antennas provide superior satellite-tracking capability, relying on state-of-the-art auto-track technology.

Given the benefits of its second-generation feeder link antenna technology, Globalstar plans to deploy these antennas at all of its U.S. gateway locations over the next six to twelve months.[4] Notably, these antennas are similar to Globalstar's current gateway systems from an RF perspective and comply with all applicable Commission regulations. Globalstar provides the relevant technical parameters for its second-generation earth station antenna in the Technical Exhibit ("Exhibit 2") to this STA request.

In addition to supporting all the carriers that are today supported by Globalstar's licensed MSS network, Globalstar's second-generation feeder link antenna operating under call sign E050345 is currently being used by Globalstar to evaluate a new waveform for use on its network. Globalstar will need to conduct additional testing and validation through another 60-day STA period to ensure that this carrier will meet the specific requirements of its safety-of-life service offerings. Globalstar provides the relevant technical parameters for its transmission of this new waveform in the Technical Exhibit to this application ("Exhibit 2"). As described in Exhibit 2 (and as Globalstar has previously described), this waveform is a burst mode packet data carrier that supports short-messaging data services. The maximum channel bandwith for this waveform is 4.5 megahertz at 5096-5250 MHz and 200 kilohertz at 6900-7055 MHz.

Globalstar urges the Commission to expeditiously grant the instant request for a 60-day extension of the STA for call sign E050345. Such grant will enable Globalstar to continue to operate the second-generation earth station antenna in Alaska while the March Application for modification remains pending, and will advance the public interest by enabling Globalstar to develop enhanced safety-of-life services as rapidly as possible.

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[3] March Application, Cover letter at 1.

[4] The Commission recently granted licenses for the operation of three of Globalstar's second-generation earth station antennas in Naalehu, Hawaii. *See Satellite Communications Services Information re: Actions Taken*, Public Notice, Report No. SES-02380 at 2-8 (July 7, 2021).

Please do not hesitate to contact me with any questions.

Respectfully submitted,

/s/ *Stephen J. Berman*
Stephen J. Berman

cc: Kerry Murray
Paul Blais
Anthony Asongwed

Exhibit 2: Earth Station Technical Information for STA Request

GUSA Licensee LLC (together with its parent Globalstar, Inc., ("Globalstar")) is seeking a 60-day extension of its existing Special Temporary Authority ("STA"), in order to continue to operate a second-generation feeder link antenna at Globalstar's gateway earth station facility at Wasilla, Alaska. Under the proposed STA extension, Globalstar continue to use this earth station antenna to test and validate a new waveform. Grant of this STA extension will allow Globalstar to operate this earth station antenna while the application for permanent authority for this antenna remains pending. This antenna has the following parameters:

File number:	SES-STA-20210317-00522
Call sign:	E050345 (WSL-3)
Proposed STA term:	August 10, 2021 – October 9, 2021
Location:	Wasilla, AK
Latitude:	61° 35' 24.9" N
Longitude:	149° 29' 9.6" W
Transmit frequency:	5091 – 5250 MHz
Receive frequency:	6875 – 7055 MHz
Polarization:	RHCP & LHCP
Antenna Size:	6 m
Gain:	Tx: 47.5 dBi at 5.150 GHz Rx: 51.2 dBi at 6.975 GHz
Max. antenna height:	8.69 meters above ground level
Necessary bandwidth:	Transmit bandwidth is 159 MHz Receive bandwidth is 180 MHz Maximum carrier bandwidth is 2.5 MHz Maximum carrier bandwidth for test waveform is 4.5 MHz for transmit and 200 KHz for receive
Carrier:	See table below

Frequency Band (MHz)	T/R Mode & Polarization	Emission Designator	Maximum EIRP (dBW)	Maximum EIRP Density (dBW/4kHz)	Modulation
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	2M50G7D			Direct sequence CDMA for single-carrier telemetry data
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

5096 – 5250	Tx – L/RHCP	4M50G7D	72.2	41.5	Burst mode packet data with π/2-BPSK modulation
6900 – 7055	Rx – L/RHCP	200KG7D			Burst mode packet data with BPSK modulation
6900 – 7055	Rx – L/RHCP	230KG7D			Burst mode packet data with BPSK modulation
6900 – 7055	Rx – L/RHCP	280KG7D			Burst mode packet data with BPSK modulation

Maximum EIRP: 72.2 dBW (for all carriers combined)

Maximum EIRP density: 59 dBW/4 kHz

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

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

Elevation angle (E/W): 10 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): 10 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 Microwave Landing System (MLS) Sites

For GUSA Licensee LLC's (together with its parent Globalstar, Inc., "Globalstar's") gateway site in Wasilla, Alaska, there are four potential Microwave Landing System ("MLS") sites, including two Category III airports (ANC & FAI), within the 213 nautical mile transmit coordination distance. The Wasilla site is located at 61-35-24.9 N, 149-29-9.6 W. The airports are:

ANC	Ted Stevens Anchorage International Airport, approximately 29 nautical miles from Wasilla
VDZ	Valdez Airport, approximately 97 nautical miles away
HOM	Homer Airport, approximately 131 nautical miles away
FAI	Fairbanks International Airport, approximately 199 nautical miles away

Only the ANC airport falls within the 39.8 nautical mile maximum trigger distance for MLS/MSS (Mobile Satellite Service) coordination. Based on a directory used for MLS coordination purposes, and to the best of its knowledge, Globalstar believes that MLS is not active at ANC.