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Via Electronic Filing

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

> Re: Request for 60-Day Extension of STA (Las Palmas, PR) GCL Licensee LLC – FCC File No. SES-STA-20200508-00511

Dear Mr. Sullivan:

Under Section 25.120(a) of the Commission's rules, GCL 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 test and validate two waveforms using Globalstar's licensed feeder link earth station antenna operating under call sign E990336, in Las Palmas, PR. <sup>1</sup> Globalstar hopes to use these new waveforms to improve and enhance its future safety-of-life mobile satellite service ("MSS") offerings. In addition, pursuant to this 60-day STA extension request, Globalstar now seeks authority to commence operating one of its new second-generation feeder link earth station antennas under call sign E990336 during the 60-day STA period. Grant of this requested STA extension will provide significant operational benefits for Globalstar's MSS network.

During September 2020, Globalstar plans to decommission the first-generation earth station antenna currently operating in Sebring under call sign E990336 and replace that antenna with its second-generation feeder link model, a 6-meter Seatel dish with a radome. Notably, Globalstar's second-generation antennas 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.<sup>2</sup> Once authorized and installed (likely during the 60-day STA period rather

<sup>47</sup> C.F.R. § 25.120(a). The Commission granted Globalstar's current STA for testing of the new waveforms under call sign E990336 on June 30, 2020. *See* FCC File No. SES-STA-20200508-00511; *Satellite Communications Services Information re: Actions Taken*, Public Notice, Report No. SES-02281 at 275 (July 1, 2020).

Given the operational benefits associated with its second-generation feeder link antennas, Globalstar plans to deploy these antennas at all of its U.S. gateway locations over the next one to two years.

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than at the outset), Globalstar's new antenna under call sign E990336 will become fully operational at the Las Palmas gateway and carry an appropriate share of Globalstar's commercial MSS traffic.

Globalstar's second-generation feeder link earth station antennas will be similar to its current gateway systems from an RF perspective and will 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 currently supported by Globalstar's existing Las Palmas gateway facilities, Globalstar plans to utilize its second-generation feeder link antenna under call sign E990336 to continue to evaluate its two new waveforms for use over its MSS network. Under its current STA, Globalstar has transmitted these waveforms on a test basis over this feeder link gateway antenna – as well as over its other licensed gateway antennas in Las Palmas – because this approach represents the best means of assessing, validating, and finalizing the parameters for these carriers.<sup>3</sup> While this test activity has been productive and yielded essential information regarding the performance of the waveforms, Globalstar will need to conduct additional testing and validation through another 60-day STA period to ensure that its carriers will meet the specific requirements of its safety-of-life service offerings.

Globalstar provides the relevant technical parameters for its proposed transmission of these waveforms using its second-generation antenna in the Technical Exhibit to this application ("Exhibit 2"). As described in Exhibit 2 (and as Globalstar has previously described), the new waveforms are burst mode packet data carriers that will support short-messaging data services. In its testing to date, the channel bandwidth for one of these waveforms has been 200 kHz at 5096-5250 MHz and 20 kHz at 6900-7055 MHz, while the bandwidth for the second waveform has been 2 MHz at 5096-5250 MHz and 200 kHz at 6900-7055 MHz. Globalstar now plans to modify this second waveform so that it has an uplink bandwidth of 4.5 MHz at 5096-5250 MHz (the downlink bandwidth for this waveform would remain 200 kHz at 6900-7055 MHz). This wider uplink bandwidth should improve service quality by providing greater protection against narrowband interference. 5

Globalstar through its subsidiaries has concurrently filed additional STA extension requests so that it can continue to utilize its other authorized Las Palmas earth station antennas in this test program, as well as its licensed earth station antennas in Clifton, TX, and Sebring, FL.

Globalstar provided the relevant technical waveform parameters for its testing to date in the Technical Exhibit to its May 8, 2020 STA request. *See* Application of GCL Licensee LLC, Exhibit 2: Earth Station Technical Information for STA Request, FCC File No. SES-STA-20200508-00511 (May 8, 2020).

As indicated in its other concurrently filed extension requests, Globalstar pursuant to its test program also seeks to transmit the revised 4.5 MHz-bandwidth waveform from its other authorized earth station antennas in Las Palmas, as well as from its licensed earth stations in Clifton and Sebring.

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As Exhibit 2 indicates, while the total EIRP for these modified test transmissions is the same as for Globalstar's existing licensed services, the EIRP density for these waveforms exceeds the EIRP density values for Globalstar's current feeder link operations. These test transmissions nonetheless create no greater potential for interference than Globalstar's existing operations at 5091-5250 MHz/6875-7055 MHz. In addition, while Globalstar's Las Palmas gateways are transmitting this revised test waveform traffic concurrently with its existing, licensed commercial feeder link traffic, Globalstar will continue to avoid any interference to its current MSS operations through appropriate frequency separation in these bands.

Grant of this STA extension request by the current STA's August 29, 2020 expiration date will enable Globalstar to begin operating its second-generation earth station antenna under call sign E990336 during the new 60-day STA period, and will allow it to continue testing the new waveforms and develop enhanced safety-of-life services as rapidly as possible. Within the near future, Globalstar will seek permanent authority for this second-generation earth station antenna by applying for modification of its operations under call sign E990336.<sup>7</sup>

Please do not hesitate to contact me with any questions.

Respectfully submitted,

/s/ Stephen J. Berman Stephen J. Berman

cc: Paul Blais

The revised test waveform with a 4.5 MHz uplink bandwidth has a lower EIRP density than the current test waveform with a 2 MHz uplink bandwidth.

Once the testing and validation process has been completed for the new waveforms, Globalstar will also seek to modify call sign E990336 to permit use of these waveforms on a permanent basis.