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February 16, 2007

Mr. Scott A. Kotler
Chief, Systems Analysis Branch, Satellite Division
International Bureau
Federal Communications Commission
Washington, DC 20554

Re: Call Sign E030266; File No. SES-LIC-20050825-01183

Dear Mr. Kotler:

Attached is a letter from GUSA Licensee L.L.C. responding to your questions of January 18, 2007 in connection with the above-referenced application. Should there be any questions concerning this matter please feel free to contact me.

Sincerely yours,



Josh Roland
Counsel to GUSA Licensee L.L.C.



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February 15, 2007

Mr. Scott A. Kotler
Chief, Systems Analysis Branch, Satellite Division
International Bureau
Federal Communications Commission
Washington, DC 20554

Re: Call Sign E030266
File No. SES-LIC-20050825-01183
Your letter dated January 18, 2007

Dear Mr. Kotler:

This responds to your letter to Josh L. Roland regarding Globalstar USA, LLC's ("GUSA")^{1/} referenced pending application for a license for an In-Orbit Test ("IOT") station in Clifton, TX. The issues that you raised in your letter are addressed below.

1. *"Globalstar USA also asserts that the IOT facility 'has proven extremely useful' for the additional function of measuring gain drift in the Globalstar satellite transponders. Please clarify this assertion. ... [W]hy does Globalstar USA now believe that operation of the IOT station is necessary for on-going satellite maintenance."*

Response: In addition to GUSA, GUSA's affiliate, Globalstar Europe SARL, owns and operates an IOT earth station in Aussaguel, France. While the IOT antennas were initially used for the launch campaign during 1998 - 2000 (13 successful launches from Kennedy Space Center, Florida, and Baikanour Cosmodrome, Kazakhstan), these IOT stations have proven to be extremely useful for monitoring the health of the Globalstar System's aging satellites and for measuring and adjusting the gain drifts in the Globalstar satellite transponders to ensure their operation within specifications. Two "always on" IOT stations, one in the Eastern Hemisphere and one in the Western Hemisphere, ensure that at least one is available to immediately test and diagnose any satellite anomaly that may occur. Furthermore, Globalstar's ability to use the Clifton IOT station on demand without additional FCC authorization (e.g., special temporary authority) would also facilitate real-time, on-going maintenance of the constellation by increasing the number of satellites that could be monitored simultaneously at multiple IOT stations. In other words, the more and better data that we are able gather, the better we can fly

^{1/} The subject application has been assigned to GUSA Licensee LLC. See Public Notice Report No. SES-00847 (Aug. 16, 2006).

the satellites. Also, Globalstar is getting ready to launch eight on-ground spare satellites in mid-2007 and will need to use the Clifton IOT earth station during the launch campaign.

GUSA must use a directional antenna at a fixed location for IOT because it is simply infeasible to conduct the necessary tests and performance monitoring with a standard terminal with an omnidirectional antenna. Globalstar transmits using CDMA carriers that are 15 dB below the noise floor. The earth station will transmit using a single carrier continuous wave-only signal with a maximum EIRP density of 24 dBW/4 kHz. The IOT equipment is used for making L-band pattern measurements. In order to measure the entire dynamic range of the patterns and side lobes for testing, the signal must be 30 dB above the noise floor. GUSA's approved handheld, mobile and fixed terminals cannot perform at this level. The link budget for the IOT uplink at 1610-1621.35 MHz was submitted with GUSA's January 27, 2006, letter in this proceeding.

2. *"Please explain the discrepancy [between your statement that the IOT statement will receive unmodulated downlink transmissions in the 2483.5-2500 MHz band and your supplementary information referring to the 6.98 GHz downlink] and provide link budgets for any additional links that Globalstar USA intends to utilize."*

Response: The Globalstar satellite constellation is authorized to operate on two sets of paired frequencies for its service links and feeder links - 1610-1621.35/2483.5-2500 MHz and 5091-5250/6075-7055 MHz, respectively. GUSA is licensed to operate handheld, mobile and fixed user terminals that transmit to Globalstar satellites in the band 1610-1621.35 MHz and receive from the satellites in the band 2483.5 - 2500 MHz. GUSA is also licensed to operate fixed satellite earth stations that transmit to Globalstar satellites in C-band (5091-5250 MHz) and receive from Globalstar satellites in C-band (6875 - 7055 MHz).^{2/} Figure 1 shows the operation of the Globalstar satellite system. The IOT earth station operates like a Globalstar fixed user terminal which transmits in the 1610-1621.35 MHz band and receives from the satellites in the 2483.5 - 2500 MHz band.

^{2/} GUSA's earth stations in Sebring, FL, and Wasilla, AK, are not currently authorized to use the 7025-7055 MHz portion of the C-band. The sub-bands in which telemetry is sent and received between the earth stations and satellites are 5091-5096 MHz and 6875-6900 MHz.

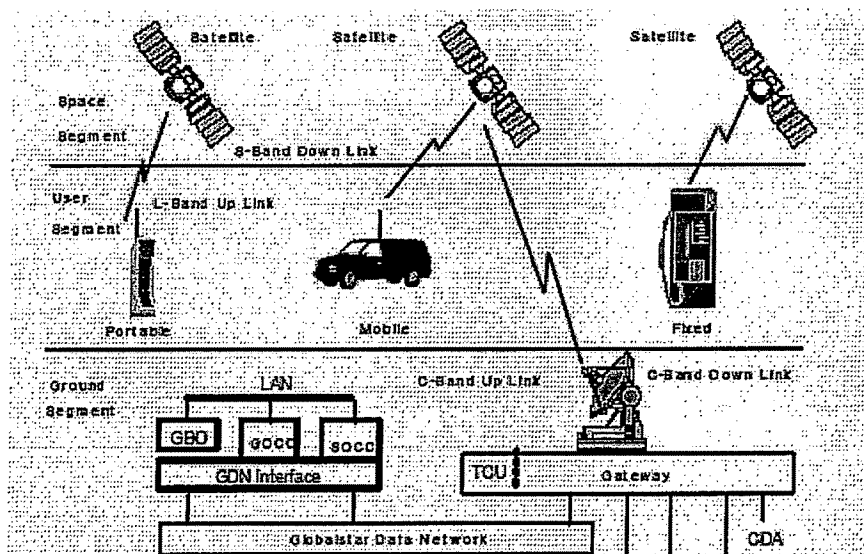


Figure 1 Globalstar Satellite System

Hence, when an unmodulated or continuous wave (“CW”) signal is transmitted in the 1610-1621.35 MHz band by the IOT earth station, it is received by the Globalstar Gateway via the Globalstar satellites in the 6.98 GHz band which was shown in the downlink analysis portion of the link budget provided in this proceeding on January 27, 2006. As noted above, when the Clifton earth station transmits a CW carrier in the 5091-5250 MHz band, the CW carrier will be received by the IOT earth station in the 2483.5 MHz-2500 MHz band. The EIRP permitted under the Clifton earth station license for transmission of a CW carrier in the 5091-5250 MHz band is sufficient such that no additional authorization is required for the IOT receive antenna.

3. *“Furthermore, we request an explanation on the necessity of the proposed IOT station transmissions in portions of the 1610-1621.35 MHz band that have either been designated or proposed for sharing with the Iridium Big LEO system.”*

Response: The IOT earth station will be used for making frequency response, in-band spurious, gain transfer and antenna pattern measurements for the Globalstar satellites that will facilitate essential adjustments to the satellites in order to ensure that they operate within specifications. In order to be useful and to achieve the purposes described here, these measurements must be performed over the full Globalstar licensed band (1610-1621.35 MHz). Globalstar fully intends to coordinate the usage of the IOT antenna with Iridium so as to minimize any harmful interference to the Iridium System. During Globalstar’s first launch campaign, this coordination was not necessary as there was no spectrum shared between Iridium and Globalstar at that time. Globalstar fully expects that, if Iridium replaces any of its spacecraft, Iridium will seek to perform in-orbit tests on those new spacecraft and that those test carriers will represent an interference threat to Globalstar. Globalstar expects that any coordination agreement will be reciprocal and that Globalstar will have to coordinate its usage of the shared band to accommodate Iridium’s in-orbit testing. As stated earlier in the underlying application, Globalstar will operate the earth station on a non-interference basis. In addition, the earth station

Mr. Scott A. Kotler
February 15, 2007
Page 4 of 4

will operate at a *fixed* location in a relatively unpopulated area, thereby avoiding the coordination challenges and power limit constraints affecting handheld terminals. And, as a test antenna, the earth station will only be used for short periods of time and intermittently.

We hope that we have adequately responded to your questions and that the Commission will promptly grant this much-needed authorization.

Sincerely,

GLOBALSTAR USA, LLC
GLOBALSTAR, INC.

By:



William F. Adler

Vice President-Legal & Regulatory Affairs

CC: R. Michael Senkowski
Counsel to Iridium Satellite LLC