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December 21, 2005

RECEIVED

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Federal Communications Commission
Office of Secretary

VIA ECFS AND E-MAIL

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: **Ex Parte Presentation**, Iridium Satellite LLC, Special Temporary Authority, File Nos. SAT-STA-20050923-00180/00181

Ex Parte Presentation, Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, IB Docket No. 02-364

Dear Ms. Dortch:

Iridium Satellite LLC ("Iridium"), by its attorneys, hereby responds to Globalstar's December 15, 2005 *ex parte* submission to the FCC. Globalstar's submission attempts to support its claim that its system received harmful interference from Iridium during the period in which the FCC granted a Special Temporary Authority (STA) for Iridium to use the 1616.0 – 1618.25 MHz spectrum to support disaster relief communications in the wake of Hurricanes Katrina and Rita. Iridium's most recent submission to the FCC on November 1, 2005 demonstrated that Globalstar's claim of harmful interference was without merit and requested further information regarding Globalstar's claims. As detailed in this letter, Globalstar's response does not provide any new, relevant or sufficient information to support its claim of receiving harmful interference from Iridium. To the contrary, the information submitted strongly confirms that the interference is attributable to Globalstar intra-system problems that predated and exist independent of Iridium's operations.

1. **The timing of Globalstar's RLF problems.**

Iridium's central response to Globalstar's interference claim is that Globalstar's reported increase in Return Link Failures (RLF) during the disaster relief operations was due to the increase in Globalstar's system loading. Iridium noted in its last letter that Globalstar's RLF increase occurred before Iridium began using the

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spectrum that was shared with Globalstar. Globalstar, in its December 15, 2005 letter completely fails to address this issue.

As has been demonstrated by Globalstar's previous filings, by the time Iridium had activated its channels that would be shared with Globalstar, Globalstar's RLF rate on the shared channels had already *tripled* (from an RLF of about 6-7% on 8/26, to about 22-23% on 9/1). This conclusively demonstrates that the RLF problems during that period were due to Globalstar's excessive loading, which directly limits capacity in systems using CDMA technology.

2. Relative Globalstar performance in other regions.

The FCC, in its October 20, 2005 letter and Iridium, in its November 1, 2005 letter, requested performance data from other regions outside that of the United States Gulf Region. This technical data would demonstrate typical RLF values that could be expected in normally loaded situations and if other gateways experience similar RLF problems during periods of increased system loading. Globalstar responded by noting that other gateways have carried higher traffic without excessive RLF problems, yet again provided no specific information or supporting data to concretely bolster this unproven suggestion.

3. RLF data explanation.

Iridium noted in its November 1, 2005 letter that Globalstar's channel 3, which is substantially removed in frequency from the shared portion of the spectrum, continued to experience nearly twice the normal system RLF rate. This increased RLF rate (about 11-16%) existed even after accounting for a supposed initial two-week "break in" period in which new users on channel 3 may have caused additional RLF failures due to unfamiliarity with using satellite phones. Globalstar responded by vaguely describing an experiment in which channel 7 (1617.495 – 1618.725 MHz) was swapped with channel 4 (1613.805 – 1615.035 MHz), which resulted in channels 3 and 4 exhibiting lower RLF than channel 7. No data was provided to support this, nor was any description of the relative loading between channels 3, 4 and 7 provided. Nevertheless, the only possible explanation for the continued poor RLF performance on channel 3, well after the new user "break in" period, is increased Globalstar system loading.

4. Relationship between RLF and FER.

The FCC (October 20, 2005 letter) and Iridium (November 1, 2005 letter) requested further clarification from Globalstar on the effects of external and intra-system interference on RLF and frame error rate (FER). Globalstar responded by stating that there was no way to distinguish the impact created by both types of

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interference. Globalstar then alluded again to the same testing noted above in item 3, without providing any specific information regarding the system loading, duration or time of the testing or any of the resulting data.

5. RLF on Globalstar channel 3.

The FCC and Iridium had inquired as to how the high RLF on Globalstar's channel 3, which is outside the spectrum affected by the STA, could be explained to be solely due to new user unfamiliarity with how to use the service. Although Globalstar claimed that the RLF on channel 3 decreased after users became familiar with their service, Iridium subsequently noted that the small decrease in the channel 3 RLF over the first few days of it being activated was more likely due to decreased system loading. Globalstar responded by agreeing "that a significant decrease in RLF after the hurricane was due to the reduction in load". This again confirms Iridium's initial position: Globalstar experienced increased RLF problems during the hurricane disaster relief period as a result of its own intra-system interference.

In sum, Globalstar has not provided any evidence to support its claim of harmful interference from Iridium. Moreover, Globalstar has still not explained why it took six weeks to notice the alleged harmful interference during the STA period and why Globalstar chose to seek termination of the STA at the FCC instead of directly coordinating with Iridium. Iridium respectfully requests that the FCC reject Globalstar's unsupported claim of harmful interference.

Sincerely,

R. Michael Senkowski

R. Michael Senkowski
Attorney to Iridium Satellite LLC

cc: Robert Nelson
Chip Fleming
Josh Roland