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**L. Barbee Ponder IV**

General Counsel & Vice President Regulatory Affairs

January 28, 2014

Julius Knapp  
Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 Twelfth Street SW  
Washington, DC 20554

Re: *Ex Parte* Notice: Revision of Part 15 of the Commission's Rules to Permit  
Unlicensed National Information Infrastructure (U-NII) Devices in the 5  
GHz Band – ET Docket No. 13-49; *Ex Parte* Notice

Dear Ms. Dortch:

On January 22, the National Cable & Telecommunications Association (“NCTA”) submitted a new report in the above-captioned proceeding on the use of Unlicensed National Information Infrastructure (“U-NII”) devices in the 5 GHz band.<sup>1</sup> NCTA’s submission purports to respond to Globalstar’s detailed, independent technical report (the “Roberson Study”) demonstrating that operating outdoor U-NII-1 access points would have a substantial detrimental impact on Globalstar’s licensed mobile satellite service (“MSS”).<sup>2</sup>

Contrary to NCTA’s claim, its newly-filed Report does not complete the record in this proceeding,<sup>3</sup> nor is there agreement among all interested parties regarding the appropriate rules for unlicensed devices in the U-NII-1 band.<sup>4</sup> Significantly, the NCTA Report appears to contain a number of key flaws in its analysis. It briefly describes cable operators’ outdoor deployment model and suggests that the population of outdoor access

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<sup>1</sup> *5 GHz UNII-1: Wi-Fi and Globalstar Sharing Analysis*, Rob Alderfer, CableLabs, Dirk Grunwald and Kenneth Baker, University of Colorado (“NCTA Report”) (attached to *Ex Parte* Letter from Rick Chessen, NCTA, to Julius Knapp, FCC, ET Docket No. 13-49 (Jan. 22, 2014) (“NCTA *Ex Parte* Letter”).

<sup>2</sup> Supplemental Comments of Globalstar, Inc., ET Docket No. 13-49 (Nov. 29, 2013) (attaching *Impact of U-NII-1 Rule Changes on Globalstar Operations*, Roberson and Associates, LLC, Chicago, Illinois (Nov. 29, 2013)).

<sup>3</sup> NCTA Report at 4.

<sup>4</sup> See *Ex Parte* Letter from Russell Fox, Counsel to the Wi-Fi Alliance, to Marlene Dortch, Secretary, FCC, ET Docket No. 13-49, at 1 (Jan. 24, 2014).

points will naturally be limited,<sup>5</sup> but its apparent presumption that cable companies will enjoy a *de facto* monopoly on the use of unlicensed U-NII-1 spectrum is unreasonable. The number of outdoor U-NII-1 devices ultimately deployed by *all* providers of Wi-Fi services is unknown and could far exceed any current projections. While Globalstar appreciates NCTA's stated commitment to the "fundamental principle that unlicensed devices must not cause harmful interference to Globalstar,"<sup>6</sup> neither NCTA nor the Commission can ensure that Globalstar's MSS customers will not suffer extensive, harmful interference if the deployment of unlicensed outdoor devices is permitted in the U-NII-1 band.

The NCTA Report also ignores important aspects of the Roberson Study. NCTA fails to account for the degradation of the Globalstar satellite downlink RF power resulting from outdoor U-NII-1 operations, and does not consider the Roberson Study's analysis of the sensitivity of MSS degradation to variation in Wi-Fi deployment parameters. The NCTA Report also relies on Globalstar's current traffic levels as a basis for determining a harmful level of interference, an approach that could prevent Globalstar from ultimately loading its MSS network to its designed capacity. Given these issues, it appears that the NCTA Report cannot be relied on as a definitive assessment of the potential harm to Globalstar's MSS operations.

Additionally, the NCTA Report fails to recognize Globalstar's recent history and the current trajectory of its duplex business. As the Commission is aware, Globalstar's first-generation constellation suffered an unanticipated degradation of its S-band capability in 2007 that temporarily precluded consistently reliable duplex voice and data services. In order to reestablish its duplex capabilities, Globalstar has spent the last seven years and more than \$1 billion to build and launch a second-generation MSS constellation, completing its deployment only five months ago. Globalstar's second-generation MSS system will support highly reliable, crystal-clear CDMA-quality voice and data satellite services to the millions of consumers, public safety personnel, and other potential customers covered by the new network beyond 2025. With the restoration of its duplex services, Globalstar is now experiencing accelerated growth across its various business lines, with greater minutes of use, rising average revenue per user, increased subscriber additions, and expanding equipment sales. Today, including its simplex, SPOT, and duplex services, Globalstar uses its constellation of satellites and ground stations on six continents to provide affordable, high-quality MSS to more than 550,000 customers, the vast majority of which are in North America. If the Commission disregards the record evidence and permits outdoor operations in the U-NII-1 band, this decision would threaten the extraordinary public interest benefits of Globalstar's satellite services just as it is reemerging as a leading MSS provider. Additionally, capital providers (equity investors, senior debt providers, etc.) rely on the stability and integrity of licensees' spectrum holdings to make investment decisions. A Commission order that

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<sup>5</sup> NCTA Report at 9-10.

<sup>6</sup> NCTA *Ex Parte* Letter at 3.

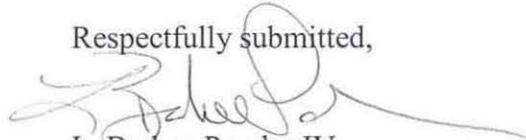
diminished the spectrum capacity of a licensee, by permitting outdoor U-NII-1 operations, would undercut this reliance and discourage investment in telecommunications.

Certainly, Globalstar recognizes that existing Wi-Fi spectrum is exhausted in many urban areas of the country, and it appreciates the Commission's efforts to free up additional spectrum for mobile broadband applications in order to address consumers' increasing demand for more data-intensive applications. While Globalstar believes that unlimited outdoor operations in the U-NII-1 band will cause harmful interference to its MSS offerings, it notes that it has shared its licensed 5 GHz spectrum with unlicensed interests since it began commercial MSS operations in 2000, and has previously agreed in this proceeding to the proposed 500% increase in power limits for indoor U-NNI-1 devices.

Globalstar intends to supplement the record of this proceeding with a more detailed technical analysis of the new NCTA report. We will also continue to work with the Commission and U-NII-1 proponents to ensure that all parties reach a mutually acceptable outcome in this proceeding.

Pursuant to section 1.1206(b)(2) of the Commission's rules, 47 C.F.R. § 1.1206(b)(2), this *ex parte* letter is being filed electronically for inclusion in the public record of the above-referenced proceeding.

Respectfully submitted,



L. Barbee Ponder IV  
General Counsel & Vice President,  
Regulatory Affairs

cc: Chairman Thomas Wheeler  
Commissioner Mignon Clyburn  
Commissioner Jessica Rosenworcel  
Commissioner Ajit Pai  
Commissioner Michael O'Rielly  
Geraldine Matise  
Mark Settle  
Jon Chambers  
Marlene H. Dortch, Secretary