



July 3, 2018

Filed Electronically

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

Re: *Written Ex Parte Presentation*
 GN Docket Nos. 17-183 & 18-122

Dear Ms. Dortch:

Microspace Communications Corporation provides satellite, wireless and internet solutions for enterprise-centric applications including a long list of industries served, such as; financial information, agricultural information, critical messaging for hospitals and emergency first responders, retail store media delivery, business video, and audio content to radio stations. The Microspace network continues to grow as on any given day, Microspace delivers video, audio and data content to well over a quarter of a million locations across the United States.

Microspace strongly urges the Commission to ensure continued availability of high quality C-band satellite services as part of any changes it considers to the use of the 3.7-4.2 GHz frequency band. In addition, to gain a more complete understanding of the robust use and ubiquitous deployment of C-band satellite facilities, the Commission should modify its C-band receive earth station registration procedures by eliminating or reducing the filing fee and establishing a streamlined mechanism that allows multiple receive antenna sites to be included in a single filing.

As a number of satellite industry members have emphasized in their filings in this proceeding, C-band satellites deliver unparalleled service levels with their fundamentally important role in the nation's communications infrastructure. As a service provider, Microspace knows first-hand how critically important corporations and small businesses alike depend on their programming reaching U.S. consumers in their homes, cars and workplaces all over this country.

Microspace, for example, currently distributes audio programming to approximately 3,367 C-band receive earth stations in all 50 states and parts of the Caribbean, specifically for radio broadcasting. Ongoing access to adequate C-band satellite spectrum and protection from

Re: *Written Ex Parte Presentation*
GN Docket Nos. 17-183 & 18-122
July 3, 2018
Page 2

interference is critical to Microspace, and our customers like Salem Radio Networks, Point of View Ministries, Moody Bible Institute, Christian Broadcasting System and Ambassador Advertising including programming of Focus on the Family and 225 more ministries. To allow continued high quality delivery of radio station content, as there is no alternative transmission mechanism that matches the reliability and reach of C-band satellites.

Without such spectrum and protections in place, the impact to our company and our customers could be the elimination of this radio programming genre. Furthermore, U.S. consumers' could be deprived of their constitutional rights, as most of this audio programming is religiously-centric.

Consistent with the Commission's rules, the vast majority of the C-band receive-only earth stations that are part of this ubiquitous network are unregistered. For example, in 2016 Microspace facilitated a C-band frequency change of this approximately 3,367 C-band receive earth stations. This was done as part of a satellite owner "grooming" requirement. The initial satellite frequency neighborhood was very clean, meaning there was very little noise or interference. The "new" satellite frequency neighborhood was noisy, resulting in dozens of earth stations simply not working. To correct the not working earth stations, field engineers and technicians were required to go every site and change the antenna and/or the LNB (Low Noise Block downconverter) alignment. In several cases the LNBs had to be replaced to work in the "noisy neighborhood". It took weeks for all earth stations to work properly again. This example is with only satellite services operating in the frequency spectrum.

The typical C-band transponder power equivalent is about the same wattage as a refrigerator light-bulb. That signal has to travel over 22,300 miles from outer space to the Earth. There is no way that signal traveling that distance can overcome cell tower signal levels that are located within thousands of feet of each other. Sharing the *Mid-band* frequencies with satellite services and terrestrially-based services will create a "noisy neighborhood" in which the earth stations will never work reliably. The clean C-band frequency spectrum will continue to provide businesses a reliable environment to invest in these critical and essential telecommunication's services.

Re: *Written Ex Parte Presentation*
GN Docket Nos. 17-183 & 18-122
July 3, 2018
Page 3

Compiling and submitting all of the data required by the current registration process is also unduly burdensome, representing a serious strain on the limited personnel resources of radio station and audio broadcasting companies. While this letter does not provide the Commission with GPS coordinates of the currently operating network of approximately 3,367 earth stations, the Microspace 2016 frequency transition, previously described, is a real-world example of how critical C-band services are to the U.S. public consumer.

The Commission cannot make sound decisions regarding C-band spectrum if it does not have the facts regarding existing satellite operations in these frequencies. Microspace submits this letter in order to provide the Commission with information that it does not have based solely on C-band earth station downlink registration counts. Further, to ensure continued delivery of audio programming to radio stations in all 50 states and parts of the Caribbean, the Commission must adopt policies that provide ongoing access to adequate C-band satellite spectrum and protection from all interference.

Respectfully submitted,

A handwritten signature in blue ink that reads "Joseph L. Amor III".

Joseph L. Amor III
Vice President & General Manager