

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Leidos, Inc.	)	File No. 0447-EX-CN-2017
	)	
Application for Conventional Experimental	)	
License	)	

RESPONSE OF LEIDOS, INC. TO OBJECTION

Leidos, Inc. (“Leidos”) hereby submits this Response to the “Objections of the Commonwealth of Virginia” (“Objection”) filed by the Commonwealth of Virginia (the “Commonwealth”) with respect to the above-captioned application, pending before the Commission under File No. 0447-EX-CN-2017.

As demonstrated herein, there are no public policy nor public safety reasons for the Commission to deny/dismiss the Application. To the contrary, in light of the important homeland security goals supported by these operations, the technical realities of such operations and Leidos’ willingness to identify a solution that is mutually agreeable to both Leidos and the Commonwealth, Leidos requests that the Commission grant the Application and require coordination between the parties as specified herein, as a Special Condition to the grant. In the alternative, Leidos requests that the Commission retain the Application in pending status and assist the parties in facilitating a resolution that protects their mutual interests, by requiring coordination between the parties as specified herein.

**I. The Application Proposes Operations
In Support Of Critical Homeland Security Objectives**

The importance of statewide wireless interoperability, as implemented by the STARS system, is self-evident and Leidos appreciates the Commonwealth's obligation to protect the communications enabled by such system. Having said this, the operations proposed by Leidos in the Application serve equally critical homeland security and military contractual objectives that the Commission's rules and policies are expressly designed to protect, and for that reason every effort must be taken to fashion a resolution in this case which permits both the Commonwealth and Leidos to complete their respective missions.

Indeed, Leidos' Application proposes precisely the type of "Experimentations under contractual agreement with the United States Government..."¹ which the Experimental Radio Service was created to support, and which stand at the core of United States homeland security efforts.² In support of several United States Army contracts, Leidos is charged with the integration, testing and fielding of radio systems into multiple military aircraft. Leidos' role in ensuring that these aircraft are safe and fully functional prior to entering active combat zones cannot be overstated. These aircraft actively engage in operations that directly protect the lives of service members on the ground, in the military theater. These airborne assets must reliably provide the intelligence and over-watch capabilities that bring U.S. soldiers back home safely.

¹ 47 CFR 5.3(c).

² The importance of radio research in the public safety, homeland security and defense context is underscored by the priority afforded such research in federal budget requests. For example, in March of 2016 the U.S. Department of Defense (DOD) asked Congress for \$10.74 billion in fiscal 2017 for procurement and research in military communications, electronics, telecommunications, and intelligence (CET&I) technologies. See Military & Aerospace Electronics, March 18, 2016 - accessed at: <http://www.militaryaerospace.com/articles/print/volume-27/issue-3/news/news/spending-headed-up-for-military-communications-and-intelligence-electronics.html>

Leidos is a long-standing Commission licensee in many radio services and one of the largest defense contractors in the world. As such, Leidos is well aware of its obligations to comply with Commission regulations, including its obligation as an experimental licensee to avoid interference to other licensed services. Given this background, Leidos' compliance with the Commission's procedures in this case, and Leidos' prior and continuing desire to amicably resolve this matter with the Commonwealth, the assertion by the Commonwealth that Leidos is "seeking the right to interfere.." ³ with STARS is a patently unfortunate mischaracterization of this situation.

II. A Mutually Agreeable Solution Can Be Adopted

The Commission should allow, encourage and, as necessary, help to facilitate continued discussions between Leidos and the Commonwealth, to allow this matter to be mutually and satisfactorily resolved. In this regard, Leidos had previously initiated discussions with the Commonwealth and had received unambiguous oral assurances that both the proposed ground-based and airborne transmissions were acceptable as long as Leidos limited its operations to the six frequency set (158 MHz (AM/FM), 161 MHz (AM/FM), 171 MHz (AM/FM), 425 MHz (AM), 475 MHz (AM), 510 MHz (AM)) (the "Identified Frequencies") that the parties had previously identified for operation under the prior granted STA. In fact, at the Commonwealth's request, Leidos drafted and provided to the Commonwealth an agreement for execution by the parties reflecting the Commonwealth's agreement that Leidos could operate both the proposed ground-based and airborne transmissions as long as Leidos limited its operations to the Identified Frequencies. Clearly, the Commonwealth subsequently decided that although the proposed ground-based operations on the Identified Frequencies are still not

³ Objection, p.3.

problematic,⁴ additional discussions are now apparently necessary with respect to the proposed airborne operations. Leidos remains available to address any issues that will permit a resolution and grant of the Application. To that end, the following is noted:

- Only a few instances of very short duration transmissions are currently required on a small set of frequencies. Contrary to the Commonwealth's assertion that the proposed airborne operations are "unspecified and uncoordinated", as demonstrated below ***for the remainder of 2017 Leidos requires only extremely limited, very specific operational authority for airborne operations***⁵ that Leidos is willing to coordinate with the Commonwealth on a real-time basis, and with the flexibility that is needed to accommodate the Commonwealth's need for frequency variability.
- Leidos anticipates the need for airborne transmissions on ***only four separate days (maximum)*** for the remainder of 2017.
- The duration of any such testing will be very brief. Transmissions will typically last ***no longer than 5 seconds each*** and a full test session will typically take ***only between 1 and 2 hours once per month***. The transmissions are voice radio checks and do not require significant bandwidth.
- Leidos is willing to provide the Commonwealth with ***advance notice of any such operations, with real time coordination*** with Leidos' stop-buzzers and other personnel. Leidos is flexible and able to test at ***any time of day*** that best reduces the possibility of harmful interference.
- Leidos recognizes that the Commonwealth's "mix of channels chang[es] constantly..."⁶. Fortunately, although Leidos' testing is required to be conducted across the full frequency ranges specified in the Application, ***Leidos is willing and able to adapt its frequency usage on a real-time basis*** to the Commonwealth's usage at any given moment. In other words, prior to any anticipated operations by Leidos under the requested experimental license, Leidos is willing to coordinate directly with the Commonwealth to ensure that – for the one or two hours or potential operations on a given day –

⁴ Indeed, under the prior arrangement agreed to between Leidos and the Commonwealth, Leidos transmitted ground-based operations on the Identified Frequencies under the prior STA (WK9XRX) and no issues whatsoever were reported with respect to such operations.

⁵ The proposed area of operations and anticipated flight altitudes and ceilings are clearly specified in the Application. Airborne testing is required for range testing (at altitude) to prove the ability of the system to function as it would in a real world scenario. Leidos conducts range testing in order to comply with AED's (Aviation Engineering Directorate) requirements for the aircraft to return to service. The radio systems must be capable of bi-directional communications at a minimum of 80NM. Per AED mandate, the radio testing is required to be conducted across the full frequency range of the radio being tested.

⁶ Objection at 4.

*Leidos' operations will not occur on frequencies being used by STARS at that moment.*⁷

Such real-time coordination and de-confliction can certainly be accomplished, even if Leidos is not permitted access to current STARS channel usage. Such coordination procedures are routinely implemented on military bases, with the courteous cooperation of on-site spectrum managers. Similarly, this type of coordination is routinely conducted with FAA spectrum offices on a local and regional basis. This type of approach is exactly the type of “practical solution”⁸ that the Commonwealth is apparently willing to consider. Just because close coordination between the parties may be required does not mean such efforts should not be made.

III. Conclusion

It is Leidos' observation that the Commission does not deny applications based purely on generalized assertions of potential interference. In this case, the Commonwealth has not demonstrated that interference will in fact occur from the proposed operations, but rather the Commonwealth has just simply confirmed that specific coordination is necessary between the parties to avoid interference. Leidos has continually expressed a willingness to closely coordinate with the Commonwealth in real-time to permit the proposed operations to be conducted. Given Leidos' willingness to coordinate, along with the important homeland security goals supported by the proposed operations, it is in the public interest for the Commission grant the Application and require coordination between the parties as specified herein, as a Special Condition to the grant. In the alternative, Leidos requests that the Commission retain the Application

⁷ Further, to the extent that the Commonwealth has certain frequencies set aside for testing or troubleshooting purposes, Leidos may be able to coordinate its operations to occur on such non-operational frequencies.

⁸ Id.

in pending status and assist the parties in facilitating a resolution that protects their mutual interests, by requiring coordination between the parties as specified herein.

Respectfully submitted,



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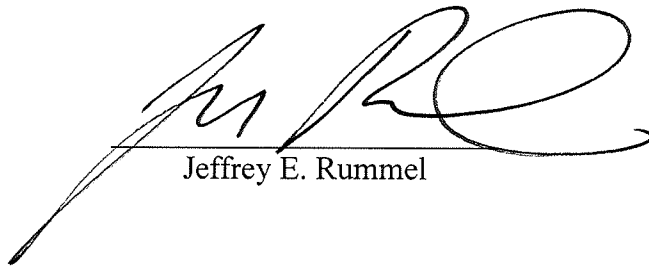
Attorney for Leidos, Inc.

Dated: August 28, 2017

CERTIFICATE OF SERVICE

I certify that on August 28, 2017, I caused the foregoing “RESPONSE OF LEIDOS, INC. TO OBJECTION” to be served by email and first-class mail, postage prepaid, on:

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