

Leidos, Inc.
Experimental Station WJ2XAY

**Request for Waiver of Section 25.227(a)(10)-(11) Monitor and Control Requirements
and Revision to Special Condition 12 on the WJ2XAY License**

(Copy Transmitted Via Email to International Bureau's Paul Blais and Jose Trevino)

Pursuant to discussions with the Commission's International Bureau, this waiver request is submitted for consideration of the International Bureau in consultation with the Experimental Branch. By this filing, Leidos, Inc. respectfully requests:

- Waiver of the monitor/control requirements of Section 25.227(a)(10)-(11) to the extent described herein in connection with the Station WJ2XAY grant;
- Consultation of the International Bureau with the Experimental Branch to effectuate a revision to Special Condition 12 on Station WJ2XAY to reflect such waiver;
- Revision of Special Condition 12 on Station WJ2XAY to read as follows (or as revised/edited by the Commission) to reflect the discussion of Leidos with Bureau staff:

"12. Leidos has demonstrated sufficient monitoring and control capabilities and transmission disabling functionality, to protect Part 25 operations, and Leidos' operation under this license is limited to transmissions aboard military aircraft."

In support of this request, the following is noted:

Waiver will generally be granted by the Commission if: "The underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest". See, e.g., 47 CFR 1.925(b)(3)(i) In this case, Leidos has demonstrated that:

- Allowing Leidos to operate its experiment without the strict application of Section 25.227(a)(10)-(11) will not undermine the rule because Leidos has the capability to satisfactorily and immediately disable and otherwise control operations if necessary, and there is no realistic risk of interference to co-channel operations.¹ In addition, Leidos' operation will not impact the deployment of broadband service, or commercial competition, or the Commission's streamlining of routine Part 25 applications. In this regard, Leidos has demonstrated that:
 - The Leidos system authorized under Station WJ2XAY does have remote control and monitoring ability to send disable commands from the ground NCMC. In addition to such human ground monitoring – which gives the ground operator full access to the system's graphic interface and the ability to issue disable commands – there is a dedicated operator on board the aircraft who is responsible for enabling and disabling the transmission and setting system parameters. Such on board operator is responsible for monitoring the system for fault conditions – the system can auto detect an off-pointed condition and will

¹ The Commission's 2012 Order adopting Section 25.227(a)(10)-(11) makes it clear that the rule was adopted to: (i) Ensure that ESAA operators are able to "shut-off their transmissions automatically and immediately..." and (ii) Ensure that "ESAA airborne terminal transmissions do not cause harmful interference to other licensed facilities". See *See Revisions to Parts 2 and 25 of the Commission's Rules to Govern the Use of Earth Stations Aboard Aircraft, IB Docket Nos. 12-376, 05-20, FCC 12-161, Notice of Proposed Rulemaking and Report and Order, ¶70 (2012) ("Order").

auto-mute upon an off-point of 0.5 degrees or more. In case of any interference issues, Leidos will have the ability to reach the aircraft via a secure UHF satellite communications channel over the tactical onboard radio system. Leidos will also have radio contact via VHF and UHF radio voice channels when the aircraft is in range. Although remote *enabling* is not available on this FDMA system, any remote “disable” command will remain in effect until the on board aircraft operator proactively initiates an “enable” command after clearing any faults.

- Leidos’ operation of the experiment poses no significant risk of interference to co-channel licensed operations. In this regard, the Table of Frequency Allocations (Part 2) confirms that the ranges authorized in the WJ2XAY license overlap with Part 90 and Part 25 allocations. In either case, pursuant to the analysis of Comsearch and as discussed with Bureau staff, there is no risk of interference to these co-channel operations in the relevant area of operations. In addition, as a Part 5 experimental licensee, Leidos is required to immediately terminate operations in the event of any issues, including interference. Leidos’ Stop Buzzers are available 24/7 to field any inquiries regarding these operations. Accordingly, although there is no realistic risk of interference in this case, procedures are in place to ensure that no harm will occur to any other co-channel operations.
- The operations authorized in Experimental Station WJ2XAY are non-permanent, experimental tests to be conducted in furtherance of a US government (US Army) contract. The results of this experiment will directly support ongoing DoD operations overseas (OCONUS), and are not intended to support, involve or in any way result in commercial (non-military) use or transmissions. The application for the experimental license was applied for (and granted) in full conformance with Commission rules and policies.
- In this case, the experiment authorized under the WJ2XAY license will exclusively be conducted on a military-owned ARL-E (Airborne Reconnaissance Low-Enhanced) aircraft, which is an intelligence, reconnaissance, and surveillance platform that is designed to support ongoing wartime efforts OCONUS. Accordingly, operation of this experiment as proposed will not contradict the underlying purposes of the rule and the context in which the rule was adopted (i.e., to address operations on commercial/private aircraft, to streamline deployment of broadband service aboard such aircraft, and increase competition in the private sector).²
- In addition, allowing Leidos to operate its experiment under its current conditions, without the strict application of Section 25.227(a)(10)-(11) will greatly support the public interest by permitting Leidos to conduct the critical experiments required in support of the US Army and related homeland security efforts. As discussed with the Bureau, the operations authorized in Experimental Station WJ2XAY are non-permanent, experimental tests to be conducted in furtherance of a US government (US Army) contract. The results of this experiment will directly support ongoing DoD operations overseas (OCONUS), and are not intended to support, involve or in any way result in commercial (non-military) use or transmissions.

Respectfully submitted,

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² See Order at ¶1.