

**L3HARRIS TECHNOLOGIES, INC.**  
**EXPERIMENTAL STA REQUEST**  
**FILE NO. 0733-EX-CN-2021**

**EXHIBIT I – REQUEST FOR EXTENSION OF**  
**EXPERIMENTAL AUTHORITY**

L3Harris Technologies, Inc. ("L3Harris") hereby requests an extension of the FCC experimental Special Temporary Authority ("STA") previously obtained under Call Sign WR9XSX (FCC File No. 0039-EX-ST-2021) for the period of September 21, 2021 to November 21, 2021.<sup>1</sup> Because the original STA grant was issued with the special condition noted below, this request is being filed on FCC Form 442.

***Special Condition 6- Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.***

The initial STA, issued with an original term from March 10, 2021 to September 9, 2021, permitted L3Harris to conduct limited experimental transmissions utilizing unlicensed spectrum in the 2.4 GHz band from the International Space Station ("ISS") to a receive only ground station located in Daytona Beach, FL.<sup>2</sup> The purpose of the proposed experimental transmissions from the ISS was to evaluate the feasibility of 3-D printing of RF circuits for space systems. However, owing to unforeseen technical and equipment issues, as well as operational delays, L3Harris will not be able to complete the proposed experimental testing by September 9, 2021. L3Harris hereby requests an extension of the previously granted experimental STA under FCC File No. 0039-EX-ST-2021 for the period of September 21, 2021 to November 21, 2021 pursuant to consultations with NASA.

As noted in the original request the proposed transmissions from the ISS to the Daytona Beach, FL ground station would only occur periodically. The radiating transmitter from the ISS will be in off mode the majority of time, however it will be activated for a few minutes when a line of sight is established over the ground station. Data will be taken as the ISS flies over the ground station and then it will be turned off. It is estimated to be turned on once a day if the ISS is over the ground station.

L3Harris maintains its belief that no interference issues will arise from the experimental testing. However, to the extent necessary, L3Harris will utilize its best efforts to avoid and minimize any potential interference.

The **stop buzzer contact** for this project remains Jeffrey Buell, MISSE Lead Operator at Alpha Space, tel: 832-915-5405. Email – [Jeffrey.buell@alphaspace.com](mailto:Jeffrey.buell@alphaspace.com). Alpha Space provides monitoring operations 24/7.

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<sup>1</sup> Because FCC Form 442 does not allow an estimated duration term lower than six months to be entered the lowest term of seven months was entered on the form. However, L3Harris only requests a three month term.

<sup>2</sup> The Daytona Beach, FL receive only ground station is located at 29-11-02 NL 081-02-36 WL