

Request for Special Temporary Authorization

Loft Orbital Solutions Inc. (“Loft Orbital”) hereby requests special temporary authorization (“STA”) for a six-month period¹ to receive transmissions in the 920-924 MHz band on its licensed space station YAM-3² from two experimental Sigfox SA (“Sigfox”) Internet-of-Things devices.³ Both devices will receive the authorized YAM-3 downlink beacon signal in the 400.05-400.15 MHz band and transmit uplink signals in the 902-906 MHz and 920-924 MHz frequency bands for test purposes. *Id.* Additional technical details regarding the two devices is provided in the Sigfox experimental application.

The YAM-3 license authorizes the 400.05-400.15 MHz (space-to-Earth) transmission and the reception of the 902-906 MHz (Earth-to-space) signal.⁴ However, the YAM-3 license does not include authority to receive transmissions in the 920-924 MHz band from devices located in the United States.⁵ Accordingly, Loft Orbital requests temporary authority to receive in the 920-924 MHz band from the two experimental devices.

This STA is necessary for proof-of-concept demonstrations regarding the reception of the transmissions from the devices by technology validation payloads onboard the YAM-3 satellite.⁶ The operations proposed will constitute a critical milestone to extending and enhancing existing terrestrial IoT networks. The proposed operations will be limited to the two devices and operate only in two fixed locations in Massachusetts for a short six-month testing period. Further, the devices will be compliant with existing Part 15 rules applicable to unlicensed devices, as demonstrated in the Sigfox experimental application. Accordingly, the potential for harmful interference caused by the proposed operations is negligible. Based on the foregoing, Loft Orbital respectfully requests grant of this application.

¹ See 47 C.F.R. § 25.120(b)(3).

² See Stamp Grant, Loft Orbital Solutions Inc., File No. SAT-LOA-20200907-00105 (granted May 24, 2021).

³ See Sigfox SA, Application, File No. 1218-EX-ST-2021 (filed July 29, 2021).

⁴ See Stamp Grant, Loft Orbital Solutions Inc., File No. SAT-LOA-20200907-00105 (granted May 24, 2021).

⁵ See Stamp Grant, Loft Orbital Solutions Inc., File No. SAT-LOA-20200907-00105, Conditions 6 and 7 (granted May 24, 2021).

⁶ See Sigfox SA, Application, File No. 1218-EX-ST-2021 (filed July 29, 2021).