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December 15, 2022

Marlene H. Dortch, Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

Re: Special Temporary Authority for VHF TT&C Beacon Connectivity with U.S.-Licensed Earth Stations

Dear Ms. Dortch,

Swarm Technologies, Inc. (“Swarm”), pursuant to Section 25.120 of the Commission’s rules, hereby requests Special Temporary Authority (“STA”) to communicate with very-high frequency (“VHF”) telemetry, tracking and command (“TT&C”) beacons on second generation (“Gen2”) satellites recently authorized to a sister company, Space Exploration Holdings, LLC (“SpaceX”)¹ for up to 60 days. Although the Commission deferred licensing these beacons in the Gen2 Authorization pending further consideration,² SpaceX has submitted an STA request, and will soon file an amendment of the Gen2 Authorization, for authority to operate these beacons on Gen2 satellites.³

Specifically, Swarm will soon file applications to add the SpaceX Gen2 constellation as an additional point of communication for each of the U.S.-licensed Earth Stations listed in Table 1 below. In this letter, Swarm seeks an STA to communicate with the beacons for up to 60 days while the underlying applications are being processed.

Location	IBFS File Number	Call Sign
Sussex, NJ	SES-LIC-20191022-01364	E190858
Wailuku, HI	SES-LIC-20191022-01365	E190859
Piti, Guam	SES-LIC-20191206-01665	E191406
Draper, UT	SES-LIC-20210317-00576	E210061

Table 1: List of Earth Stations Where Swarm Requests Gen2 VHF Beacon Connectivity

¹ See *Space Exploration Holdings, LLC*, FCC 22-91 (rel. Dec. 1, 2022) (“Gen2 Authorization”).

² See *id.* ¶ 69.

³ See SAT-STA-20221215-00174.

The Commission has good cause to grant the STA. Authorizing communications with this additional payload for backup TT&C transmissions would enhance the safety of space by providing redundant capabilities for the TT&C functions that are essential to tracking and locating the Gen2 spacecraft and ensuring the health and safety of SpaceX's growing constellation, while also allowing SpaceX to confirm and monitor the location of its satellites immediately upon orbital insertion. This will support better tracking of all Gen2 satellites from insertion through orbit raising and in any emergency situation and will benefit all operators in the instance of a conjunction or an anomaly.

Swarm understands that it must operate its earth stations with the tracking beacons under the STA on a non-interference basis. In the extremely unlikely event that harmful interference should occur due to transmissions to or from its spacecraft, Swarm will take all reasonable steps to eliminate the interference. Should an issue arise, Swarm can be reached at satellite-operators-pager@spacex.com, which links to the pagers of appropriate technical personnel 24/7/365.

If you have any questions, please contact the undersigned.

Sincerely,

A handwritten signature in black ink that reads "Kyle Wesson". The script is cursive and fluid.

Kyle Wesson, P.E., Ph.D.
Senior Regulatory Engineer
Space Exploration Holdings, LLC
Swarm Technologies, Inc.