

Narrative

Astro Digital US, Inc. (“Astro Digital”) requests special temporary authority (“STA”) for 180 days to communicate with the Sherpa-LTE1 spacecraft (SAT-STA-20210205-00017),¹ which is owned and controlled by Spaceflight Inc. (“Spaceflight”), commencing on the deployment of the spacecraft, which is presently scheduled to occur between June 24, 2021 and July 31, 2021.² Astro Digital is providing TT&C ground station support for the Spaceflight mission. Astro Digital is seeking Part 25 temporary authority to transmit command uplinks from the Astro Digital earth station specified below and receive telemetry downlink from transmissions from the Sherpa-LTE1 spacecraft, separately authorized by Spaceflight.

Frequencies:

The earth station will operate on the following frequencies with the Sherpa-LTE1:

Link Direction	Frequency Band	Bandwidth Occupied	Max. Data Rate	Max. Transmit Power
Uplink (command)	402.88-402.92 MHz	40 kHz	38.4 kbps	95 watts
Downlink (telemetry)	400.48-400.52 MHz	40 kHz	38.4 kbps	36 dBm (EIRP 6 dBW)

Astro Digital understands that its STA operations on the above UHF frequencies will be on an unprotected, non-harmful interference basis.

Site Address:

3171 Jay Street
Santa Clara, CA 95054

Coordinates:

Latitude: 37° 22’ 48” N
Longitude: 121° 57’ 40” W

¹ See generally Application of Spaceflight, IBFS File No. SAT-STA-20210205-00017 (filed Feb. 5, 2021) (“Sherpa Application”). Although not relevant for purposes of this application, Astro Digital will also communicate with the Sherpa-LTE1 through facilities in Tromso, Norway.

² The satellite is expected to be deployed into a 525 km ± 25 km circular orbit with a 97.59 deg. inclination. See *id.* at 1.