

Narrative Description

Astro Digital US, Inc. (“Astro Digital”) requests special temporary authority (“STA”) for 180 days to communicate with the ROSE-1 experimental satellite (0026-EX-CN-2017), which is owned and controlled by Phase Four, Incorporated (“Phase Four”), commencing on the deployment of the satellite, which is presently scheduled for September 30, 2018.¹ Astro Digital is providing TT&C ground station support for the ROSE-1 experimental mission. Pursuant to discussions with International Bureau (“Bureau”) staff, Astro Digital is seeking Part 25 authority to transmit the command uplink from the earth station below, and Phase Four is separately seeking Part 5 experimental authority (0026-EX-CN-2017) for the ROSE-1 telemetry downlink, which will be received at the Astro Digital earth station.²

Frequencies:

The earth station will transmit on the following frequencies:

Link Direction	Frequency Band	Bandwidth Occupied	Max. Data Rate
Uplink (command)	402.88 – 402.92 MHz	40 kHz	38.4 kbps

Uplink output power is 41 dBW EIRP. Astro Digital understands that its authorized operations will be on an unprotected, non-harmful interference basis.

Site Address:

3171 Jay St.
Santa Clara, CA 95054

Coordinates:

Latitude: 37° 22' 48" N
Longitude: 121° 57' 40" W

¹ As stated in the ROSE-1 experimental application (0026-EX-CN-2017), the satellite is expected to be deployed into a 575 km circular orbit with a 97.7° inclination.

² As specified in the ROSE-1 experimental application (0026-EX-CN-2017), the telemetry downlink is a 40 kHz channel, centered at 400.175 MHz.