

### **Request for Special Temporary Authorization**

Astro Digital US, Inc. (“Astro Digital”) hereby requests special temporary authority (“STA”) for 60 days,<sup>1</sup> commencing on January 29, 2018 until March 30, 2018.<sup>2</sup> Astro Digital currently has temporary 30-day authority to communicate from Astro Digital’s NASA Ames earth station facility to the Landmapper satellite to be deployed from the PSLV launch vehicle on or about January 11, 2018.<sup>3</sup> Astro Digital has requested regular authority to operate an earth station facility in nearby Santa Clara, CA, but that application is still pending.<sup>4</sup> Accordingly, Astro Digital requests this STA to operate from the Santa Clara facility pending Commission action on Astro Digital’s associated earth station application for regular authority. Additionally, because no public notice is required<sup>5</sup> and Astro Digital’s current temporary authorization expires on February 9, 2018, Astro Digital requests that the Commission grant this application expeditiously.

The Commission has previously found that grant of earth station STAs to communicate with satellites, pending the processing of permanent applications, serves the public interest, convenience, and necessity by allowing for the deployment of new and additional satellite services in a timely manner.<sup>6</sup> Grant of this STA is necessary to allow for continued communications with Astro Digital’s Landmapper satellite pending the authorization of its permanent earth station facility and, accordingly, is justified.

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<sup>1</sup> See 47 C.F.R. § 25.120(b)(3).

<sup>2</sup> Astro Digital requests that this STA be granted commencing January 29, 2018 to facilitate the relocation of its current earth station equipment.

<sup>3</sup> See File No. SES-STA-20171221-01357 (granted Jan. 3, 2018).

<sup>4</sup> See File No. SES-AMD-20171227-01389 (filed Dec. 27, 2017); File No. SES-LIC-20171017-01179 (filed Oct. 17, 2017).

<sup>5</sup> See 47 C.F.R. § 25.120(b)(3).

<sup>6</sup> See, e.g., Stamp Grant, Astro Digital, File No. SES-STA-20171221-01357 (granted Jan. 3, 2018); Stamp Grant, Spire, File No. SES-STA-20160324-00286 (granted Apr. 28, 2016); Stamp Grant, DG Consents Sub, Inc., File No. SES-STA-20140717-00605 (granted Aug. 12, 2014); Stamp Grant, EchoStar Broadcasting Corporation, File No. SES-STA-20130108-00019 (granted Jan. 10, 2013).

**Earth Station Frequencies:**

Astro Digital seeks authority to operate on the following frequencies, consistent with the FCC's recent partial grant of its space station license and its spectrum coordination with relevant federal agencies, and incorporates by reference the relevant waiver requests stated in the space station license application:<sup>7</sup>

Link Direction	Frequency Band	Bandwidth Occupied	Max. Data Rate
Uplink (command)	402.88-400.92 MHz 402.58-402.62 MHz <sup>8</sup>	40 kHz	38.4 kbps
Downlink (telemetry)	400.48-400.52 MHz 400.155-400.195 MHz <sup>9</sup>	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

**Earth Station coordinates:**

**Latitude:** 37° 22' 48" N

**Longitude:** 121° 57' 40" W

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<sup>7</sup> See Astro Digital Application, File No. SAT-LOA-20170508-00071 (granted in part Dec. 14, 2017, as corrected).

<sup>8</sup> As specified in the partial grant of the space station license, Astro Digital's TT&C operations in the Earth-to-space direction are limited to a center frequency of 402.9 MHz, except as necessary for a period immediately following (i) the deployment of the satellite or (ii) a satellite software reset, resulting in the satellite returning to its default channel, in both cases to allow for the retuning of the satellite receive channel from 402.6 MHz to 402.9 MHz. *Id.* at ¶ 8.

<sup>9</sup> As specified in the partial grant of the space station license, Astro Digital's TT&C operations in the space-to-Earth direction are limited to a center frequency of 400.5 MHz, except as necessary for a period immediately following (i) the deployment of the satellite or (ii) a satellite software reset, resulting in satellite transmissions returning to the default transmission channel, in both cases to allow for the retuning of transmissions from 400.175 MHz to 400.5 MHz. *Id.* at ¶ 7.