

**Special Temporary Authority Application**  
Summary of S-band Earth Station Technical Information  
For Coordination with NTIA

Applicant: Universal Space Network, Inc.

File No.: SES-STA-20110126-00057

Purpose: Universal Space Network, Inc.'s ground station shall be used to assist the Centre National D'Etudes Spatiales (CNES) and Swedish Space Corporation with the on-orbit ranging operations of the GIOVE-B Spacecraft. Communication shall consist of telemetry, telecommand, data deliver, and control of the satellite. USN request special temporary authority for a period of 60 days.

**START DATE: 2/14/2010**

**END DATE: 4/16/2011**

Location: 93-1704 South Point Road  
Naalehu, Ka'u, HI 96772-0842

Latitude: 19 0 50.3 N

Longitude: 155 39 46.6 W

Receive frequency: 2225.025 MHz

Transmit frequency: 2048.877 MHz

Polarization: R and Left hand Circle

Antenna Size: 13.0 m

Gain: 46.3 dBi @ 2090 MHz

47.2 dBi @ 2270 MHz

Maximum antenna height: 20 m (above ground level)  
398 m (above mean sea level)

<u>Frequency Band</u>	<u>Emissions</u>	<u>Maximum E.I.R.P.</u>	<u>Maximum E.I.R.P. Density</u>
2225.025 MHz	448K0G2D	0.22 dBW	-20.27 dBW/4kHz
2048.877 MHz	200K0G2D	68 dBW	51.1 dBW/4kHz

Satellite: GIOVE-B CNES (Non US spacecraft)