

**Santa Clara University Ground Station 3m Antenna
Description of Research Project
Exhibit for License Modification Application 0117-EX-CM-2019**

The original license 0140-EX-CR-2018 is requested to be modified to include support for 1HOPSAT-TD. The 1HOPSAT-TD license application is 1781-EX-ST-2018.

Purpose:

The Santa Clara University Ground Station 3m diameter dish antenna, will provide telecommands to, and receive spacecraft condition data from, the 1HOPSAT-TD, to support optical research and development. In this service it will provide redundancy for the Santa Clara University Ground Station 4.5m diameter dish antenna, which is being licensed with file 0973-EX-CN-2018 to also support 1HOPSAT-TD.

Location and Operation:

The 3m dish is located on the Santa Clara University campus, alongside the 4.5m antenna. The original license covered use in the range of 2416.2 MHz. This modification will support operation in the range 5785 MHz, as required by 1HOPSAT-TD. The frequency, power and other feed characteristics shown in the license modification application are the same as applied for the 4.5m antenna.

All other aspects of the 3m antenna remain the same as in the original incense 0140-EX-CR-2018.