

**United States of America  
FEDERAL COMMUNICATIONS COMMISSION  
EXPERIMENTAL  
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

XT MO

(Class of Station)

WH9XTK

(Call Sign)

0801-EX-ST-2015

(File Number)

NAME Santa Clara University

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

**Purpose Of Operation:**

Space to earth communication from Network and Operations DEMONSTRATION (Nodes), a pair of cubesats, via S band Microhard radios as well as UHF beacon.

**Station Locations**

- (1) MOBILE: Low Earth Orbit S Band
- (2) MOBILE: Low Earth Orbit UHF
- (3) MOBILE: Low Earth Orbit

**Frequency Information**

MOBILE: Low Earth Orbit S Band

| Frequency         | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------------|---------------|---------------------|------------------|---------------------------|
| 2401.2-2431.2 MHz | MO            | 400KF1D             | 1.28 W (ERP)     | 0.0001 %                  |

This authorization effective January 01, 2016 and  
will expire 3:00 A.M. EST July 01, 2016

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

MOBILE: Low Earth Orbit UHF

| Frequency | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------|---------------|---------------------|------------------|---------------------------|
| 437.1 MHz | MO            | 10K0F1D             | 0.25 W (ERP)     | 0.0002 %                  |

MOBILE: Low Earth Orbit

| Frequency   | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-------------|---------------|---------------------|------------------|---------------------------|
| 450.075 MHz | MO            | 12K0F1D             | 2.542 W (ERP)    | 0.05 %                    |

## Special Conditions:

- (1) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9102 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir @ sbe.org; information, www.sbe.org.
- (2) Transmission will begin upon deployment from the ISS, November 1, 2014 or later depending on ISS scheduling, and cease no later than 6 months after.
- (3) The Earth station associated with this demonstration is Santa Clara University 3M Station, Santa Clara, CA, 372133N 1215617W.
- (4) The following stop buzzer must be available at all times during transmissions: Mr. Christopher Kitts, (408) 554-4382 or (650) 219-0410.