

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

EXPERIMENTAL

(Nature of Service)

WP9XNK

(Call Sign)

XC MO

(Class of Station)

1391-EX-ST-2019

(File Number)

NAME Sierra Nevada Corporation

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:

The purpose of this operation is to collect data in an airborne environment that will be used to calibrate a special mission system that is used for geolocation purposes.

Station Locations

(1) MOBILE: Hagerstown, MD, within 150 km, centered around NL 39-41-31; WL 77-43-35

Frequency Information

MOBILE: Hagerstown, MD, within 150 km, centered around NL 39-41-31; WL 77-43-35

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
20-1000 MHz	MO	5K00N0N	11 W (ERP)	0.01 %

Special Conditions:

- (1) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.
- (2) Sierra Nevada Corporation must adhere to the 323 frequencies listed in the attached exhibit file 236191.PDF titled "Supporting Exhibit in Reference to FCC Special Temporary Authority Application File Number 1391-EX-ST-2019."

This authorization effective October 25, 2019 and
will expire 3:00 A.M. EST March 01, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (3) Sierra Nevada Corporation must notch the following bands:
 - a. 73-74.6 MHz
 - b. 108 - 121.925 MHz
 - c. 121.975 - 122.675 MHz
 - d. 123.600 - 128.800 MHz
 - e. 132.025 - 136.475 MHz
 - f. 165.5 - 174 MHz
 - g. 328.6 - 335.4 MHz
 - h. 406 – 420 MHz
 - i. 608 – 614 MHz
 - j. 976-1002 MHz
- (4) Sierra Nevada Corporation must notch the following frequencies:
 - a. 45.7 MHz (+/- 12.5 kHz)
 - b. 39.9 MHz (+/- 12.5 kHz)
 - c. 39.98 MHz (+/- 12.5 kHz)
 - d. 235.76 MHz (+/- 12.5 kHz)
 - e. 342.88 MHz (+/- 12.5 kHz)
 - f. 351.85 MHz (+/- 12.5 kHz)
 - g. 380.2 MHz (+/- 12.5 kHz)
- (5) Sierra Nevada Corporation must coordinate with the National Radio Quiet Zone point of contact:
 - a. Paulette Woody, nrqz@gb.nrao.edu, phone: (304) 456-2107
- (6) Prior to operations in the 137-138 MHz band, experimental licensee, must notify licensees of Orbcomm License Corp. (Mr. Walter H Sonnenfeldt, Phone no.: 585-461-3018, Email: sonnenfeldt.walter@orbcomm.com). The notice must include the name and contact information of the stop buzzer personnel that will be available to cease operations in the event of reported interference. The notification should include the testing parameters (specific location(s), antenna gain(s), antenna pattern, antenna height(s), antenna orientation, or eirp density) and day and times of each test.

Special Conditions:

- (7) Prior to commencing any operations in the frequencies below, the applicant must obtain consent from the following within 100 miles of the contours of the testing area:
- Paging Service licensees in 35 MHz
 - Paging Service licensees in 43 MHz
 - Paging Service licensees in 152 MHz
 - Paging Service licensees in 158 MHz
 - Paging Service licensees in 152 MHz/158 MHz
 - AMTS Licensee (217-218 MHz/219-220 MHz)
 - 218-219 MHz Service licensees
 - 220-222 MHz Service licensees
 - Paging Service licensees in 454 MHz/459 MHz
 - General Aviation Air-Ground Service in 454 MHz/459 MHz
 - 700 MHz licensees (698-758 MHz and 775-788 MHz)
 - 700 MHz Lower Band licensees (698-746 MHz)
 - 700 MHz Upper Band licensees (746-758 MHz and 775-788 MHz)
 - 700 MHz Guard Band licensees (757-758 MHz/787-788 MHz)
 - SMR licensees (809-824 MHz/854-869 MHz)
 - B/ILT licensees (809-824 MHz/854-869 MHz)
 - Cellular licensees (824-849 MHz/869-894 MHz)
 - Commercial Air-Ground licensee (849-851 MHz/894-896 MHz)
 - SMR licensees (896-901 MHz/935-940 MHz)
 - B/ILT licensees (896-901 MHz/935-940 MHz)
 - Narrowband PCS licensees (901-902/930-931/940-941 MHz)
 - Location & Monitoring Service licensees (902-928 MHz)
 - Paging Service licensees in 929 MHz and 931 MHz
- (8) Sierra Nevada Corporation must notch out Band 14 frequencies 758-768 MHz and 788-798 MHz.