

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

EXPERIMENTAL

(Nature of Service)

WP9XXM

(Call Sign)

XT MO

(Class of Station)

2021-EX-ST-2019

(File Number)

NAME University of Kansas CReSIS

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:

This STA is required for testing of the system and preliminary measurements

Station Locations

- (1) MOBILE: Black Hill Forest, SD, within 27 km, centered around NL 44-04-56; WL 103-49-03

Frequency Information

MOBILE: Black Hill Forest, SD, within 27 km, centered around NL 44-04-56; WL 103-49-03

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2000-2690 MHz	MO	690MM0N	1 W (ERP)	0.01 %
2700-2820 MHz	MO	120MM0N	1 W (ERP)	0.01 %
2840-4925 MHz	MO	2G00M0N	1 W (ERP)	0.01 %

This authorization effective January 16, 2020 and
will expire 3:00 A.M. EST February 29, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Black Hill Forest, SD, within 27 km, centered around NL 44-04-56; WL 103-49-03

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4945-4990 MHz	MO	45M0M0N	1 W (ERP)	0.01 %
5-10.68 GHz	MO	2G00M0N	1 W (ERP)	0.01 %
10.7-15.35 GHz	MO	2G00M0N	1 W (ERP)	0.01 %
15.4-18 GHz	MO	2G00M0N	1 W (ERP)	0.01 %

Special Conditions:

- (1) Operation in the 1695-1780 MHz, 1915-1920 MHz, 1995-2020 MHz or 2110-2200 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (2) Operation is subject to prior coordination with affected Educational Broadband Service/Broadband Radio Service (EBS/BRS) licensees.
- (3) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (4) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (5) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (6) 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.
- (7) Maintain operation separation from the grandfathered earth stations as defined in Part 90, Subpart Z, or coordinate an agreement with the grandfathered earth station licensees prior to operation in 3650-3700 MHz band.
- (8) Consult the ULS database to ensure that the operation will not cause harmful interference to any existing registered stations in the 3650-3700 MHz band, and notify the registered users in the proposed geographic areas prior to operation in this band.
- (9) University of Kansas CReSIS must notch out the following (+/- 9.76 MHz) 4430 MHz, 4510 MHz, 4730 MHz, 4810 MHz.

Special Conditions:

- (10) University of Kansas CReSIS must notch out the following band(s): 2690 – 2700 MHz, 2820 – 2840 MHz, 4925 – 4945 MHz, 4990 – 5000 MHz, 10.68 – 10.7 GHz, 15.35 – 15.4 GHz.
- (11) Prior to commencing any operations in the frequencies below, the licensee must obtain consent from the following within 50 miles of the contours of the testing area: WCS (2305-2320 MHz/2345-2360 MHz) licensee (AT&T)
- (12) Airborne use in 2305-2310 MHz band is prohibited due to an explicit airborne prohibition in Section 2.106 of FCC rules.
- (13) Operations in the frequency band 12.2-12.7 GHz must comply with the agreement reached between the licensee and AT&T Mobility LLC and DIRECTV.
- (14) Operations in the WCS bands (2305-2320 MHz and 2345-2360 MHz) must comply with the emission limits applicable to those bands. See 47 C.F.R. § 27.53(a).
- (15) The stop buzzer contact for this project is Jennifer Laverentz:
Phone: (785) 249-6108
Email: jenlav@ku.edu