

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

XC MO

(Class of Station)

WJ2XJA

(Call Sign)

0142-EX-CM-2019

(File Number)

NAME NCSU

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(c) of the Commission's Rules

Station Locations

- (1) MOBILE: NCSU Centennial Campus Raleigh NC, within 50 km, centered around NL 35-46-29; WL 78-39-24
- (2) MOBILE: NCSU Centennial Campus Raleigh NC, within 50 km, centered around NL 35-46-29; WL 78-39-24

Frequency Information

MOBILE: NCSU Centennial Campus Raleigh NC, within 50 km, centered around NL 35-46-29; WL 78-39-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
28 GHz	MO	2G00A0N	16 W (ERP)	
39 GHz	MO	2G00A0N	16 W (ERP)	

Special Conditions:

- (1) Licensee is required to coordinate operations with existing microwave users in the area to avoid interference.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.

This authorization effective July 29, 2019 and
will expire 3:00 A.M. EST April 01, 2020

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COMMISSION**



Special Conditions:

- (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) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (6) Licensee must avoid pointing the transmitting antenna main beam gain within 10 degrees of any point on the geostationary orbital arc while transmitting signals in the 27.5-29 GHz and 38-40 GHz frequency bands.
- (7) Licensee shall ensure that the transmitting fixed station antenna(s) main beam gain tip down when possible and avoid pointing above the horizon to protect satellite stations.
- (8) No automatic renewal for operations in the 27.5-29 GHz and 38-40 GHz bands.
- (9) NCSU is required to prior coordinate with the Fixed Microwave Service licensees in accordance with 47 C.F.R, Part 101.103(d).