

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

EXPERIMENTAL

(Nature of Service)

WR9XYF

(Call Sign)

XT FX MO

(Class of Station)

1479-EX-ST-2021

(File Number)

NAME University of South Carolina

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 is to test air-to-ground Advanced Digital Aeronautical Communications System in the L and C frequency bands using Internet Protocol (IP) standards.

Station Locations

- (1) COLUMBIA (RICHLAND), SC - NL 33-58-14; WL 80-59-43
- (2) MOBILE: Columbia, SC: max altitude 5,500 ft. AGL, within 60 km, centered around NL 33-58-14; WL 80-59-43
- (3) MOBILE: Columbia, SC: max altitude 5,500 ft. AGL, within 80 km, centered around NL 33-58-14; WL 80-59-43
- (4) Columbia, SC - NL 33-58-14; WL 80-59-43

Frequency Information

COLUMBIA (RICHLAND), SC - NL 33-58-14; WL 80-59-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
963 MHz	FX	500KW7D	8 W (ERP)	0.0002 %

This authorization effective October 15, 2021 and
will expire 3:00 A.M. EST April 14, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Columbia, SC: max altitude 5,500 ft. AGL, within 60 km, centered around NL 33-58-14; WL 80-59-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
990 MHz	MO	500KW7D	1 W (ERP)	0.0002 %

MOBILE: Columbia, SC: max altitude 5,500 ft. AGL, within 80 km, centered around NL 33-58-14; WL 80-59-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5152.5 MHz	MO	5M00W7D	1 W (ERP)	0.0002 %

Columbia, SC - NL 33-58-14; WL 80-59-43

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5240 MHz	FX	5M00W7D	10 W (ERP)	0.0002 %

Special Conditions:

- (1) The FAA approves the Advanced Digital Aeronautical Communications Systems (ADACS) testing as proof-of-concept only. Use of the frequencies in the L-band or C-band shall not be construed as FAA support for further commercial development or the new radio designs. The prior conditions for FAA concurrence to STA 0381-EX-ST-2021 still apply. Any new radio designs for ADACS should be reviewed by the FAA POC in the ICAO standards group (Digital Communications Infrastructure Working Group) prior to any further deployment or decision making on allocation.