

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

EXPERIMENTAL

(Nature of Service)

WR9XYF

(Call Sign)

XT FX MO

(Class of Station)

0381-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 April 26, 2021 and
will expire 3:00 A.M. EST October 01, 2021

**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) Under conditions of FAA WebFCR coordination NG T210140 the use of 990 MHz in lieu of 1003 MHz has been approved.
- (2) The University of South Carolina (USC) must conduct operations in the 5150 - 5250 MHz band per FAA WebFCR coordination under NG T210138 / 210139 / 210142 and 210143.
- (3) Stop Buzzer POC information must be provided to Mathew Bishop at 910-451-5788 at least 48 hours prior to operations.
- (4) Concurrence of this application is based upon Proof-of-Concept only and should not be construed as support for further commercial development. University of South Carolina (USC) should have no expectations of automatic approval in future submissions.