

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

EXPERIMENTAL

(Nature of Service)

WR9XJF

(Call Sign)

XT FX MO

(Class of Station)

1624-EX-ST-2020

(File Number)

NAME Xwing Inc

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:

Xwing is developing autonomous flight technology enabling seamless integration of Unmanned Aerial Systems (UAS) into the National Airspace System (NAS). This research and development

Station Locations

- (1) Concord (CONTRA COSTA), CA - NL 37-59-00; WL 122-03-23
- (2) MOBILE: Concord, CA (KCCR) Airborne Max Alt 15,000ft MSL, within 287 km, centered around NL 37-59-00; WL 122-03-23

Frequency Information

Concord (CONTRA COSTA), CA - NL 37-59-00; WL 122-03-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5042.0225 MHz	FX	205KG1D	38.4 W (ERP)	0.00002 %
5047.6125 MHz	FX	205KG1D	38.4 W (ERP)	0.00002 %

This authorization effective January 13, 2021 and
will expire 3:00 A.M. EST June 23, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Concord, CA (KCCR) Airborne Max Alt 15,000ft MSL, within 287 km, centered around NL 37-59-00; WL 122-03-23

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5042.0225 MHz	MO	205KG1D	12.2 W (ERP)	0.00002 %
5047.6125 MHz	MO	205KG1D	12.2 W (ERP)	0.00002 %

Special Conditions:

- (1) 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.
- (2) REQUEST APPROVED FOR TWO SEPARATE CHANNELS (#6 AND #32) FOR UAS C2 CONTROL WITH A RADIUS OF 155 NAUTICAL MILES (LIMITED TO SACRAMENTO VALLEY AND ALTITUDE OF 15000 FEET. RADIO ARE FOR PERFORMANCE TESTING IN ACCORDANCE WITH RTCA STANDARDS AND CHANNELIZATION. EACH CHANNEL IS TO BE USED BIDIRECTIONALLY. FOR UNMANNED FLIGHTS A COA MAY BE NEEDED.
- (3) The FAA concurs based upon the more recent coordinations under NG T210031 & NG T210032 (as referenced in attached e-mails), which increases the power.