

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

EXPERIMENTAL

(Nature of Service)

XD FX MO

(Class of Station)

WJ2XXP

(Call Sign)

0965-EX-CN-2018

(File Number)

NAME Rockwell Collins, Inc.

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(j) of the Commission's Rules

Station Locations

- (1) Cedar Rapids (LINN), IA - NL 42-02-00; WL 91-38-55
- (2) Cedar Rapids (LINN), IA - NL 42-02-00; WL 91-38-54; MOBILE: Cedar Rapids, IA, within 241.4 km, centered around NL 42-02-00; WL 91-38-55
- (3) MOBILE: Cedar Rapids, IA. Operating on aircraft 10,000 ft AGL, within 278 km, centered around NL 42-02-00; WL 91-38-55

Frequency Information

Cedar Rapids (LINN), IA - NL 42-02-00; WL 91-38-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5041.1625 MHz	FX	205KG1D	10 W (ERP)	0.00002 %
5041.3775 MHz	FX	205KG1D	10 W (ERP)	0.00002 %
5045.1825 MHz	FX	85K0G1D	10 W (ERP)	0.00002 %

This authorization effective March 22, 2019 and
will expire 3:00 A.M. EST November 20, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Cedar Rapids (LINN), IA - NL 42-02-00; WL 91-38-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5045.2675 MHz	FX	85K0G1D	10 W (ERP)	0.00002 %
5045.3125 MHz	FX	85K0G1D	10 W (ERP)	0.00002 %
5045.85 MHz	FX	130KG1D	10 W (ERP)	0.00002 %
5046.065 MHz	FX	130KG1D	10 W (ERP)	0.00002 %
5046.28 MHz	FX	130KG1D	10 W (ERP)	0.00002 %
5047.16 MHz	FX	170KG1D	10 W (ERP)	0.00002 %
5047.375 MHz	FX	170KG1D	10 W (ERP)	0.00002 %
5049.3325 MHz	FX	205KG1D	10 W (ERP)	0.00002 %
5049.82 MHz	FX	250KG1D	1 W (ERP)	0.00002 %

Frequency Information

Cedar Rapids (LINN), IA - NL 42-02-00; WL 91-38-54; MOBILE: Cedar Rapids, IA, within 241.4 km, centered around NL 42-0:

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5041.1625 MHz	FX	205KG1D	10 W (ERP)	0.00002 %
5041.3775 MHz	FX	205KG1D	10 W (ERP)	0.00002 %
5045.1825 MHz	FX	85K0G1D	10 W (ERP)	0.00002 %
5045.2675 MHz	FX	85K0G1D	10 W (ERP)	0.00002 %
5045.3125 MHz	FX	85K0G1D	10 W (ERP)	0.00002 %
5045.85 MHz	FX	130KG1D	10 W (ERP)	0.00002 %
5046.065 MHz	FX	130KG1D	10 W (ERP)	0.00002 %
5046.28 MHz	FX	130KG1D	10 W (ERP)	0.00002 %
5047.16 MHz	FX	170KG1D	10 W (ERP)	0.00002 %
5047.375 MHz	FX	170KG1D	10 W (ERP)	0.00002 %

Frequency Information

Cedar Rapids (LINN), IA - NL 42-02-00; WL 91-38-54; MOBILE: Cedar Rapids, IA, within 241.4 km, centered around NL 42-0:

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5049.3325 MHz	FX	205KG1D	10 W (ERP)	0.00002 %
5049.82 MHz	FX	250KG1D	1 W (ERP)	0.00002 %

MOBILE: Cedar Rapids, IA. Operating on aircraft 10,000 ft AGL, within 278 km, centered around NL 42-02-00; WL 91-38-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5041.1625 MHz	MO	205KG1D	10 W (ERP)	0.00002 %
5041.3775 MHz	MO	205KG1D	10 W (ERP)	0.00002 %
5045.1825 MHz	MO	85K0G1D	10 W (ERP)	0.00002 %
5045.2675 MHz	MO	85K0G1D	10 W (ERP)	0.00002 %
5045.3125 MHz	MO	205KG1D	10 W (ERP)	0.00002 %
5045.85 MHz	MO	130KG1D	10 W (ERP)	0.00002 %
5046.065 MHz	MO	130KG1D	10 W (ERP)	0.00002 %

Frequency Information

MOBILE: Cedar Rapids, IA. Operating on aircraft 10,000 ft AGL, within 278 km, centered around NL 42-02-00; WL 91-38-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5046.28 MHz	MO	130KG1D	10 W (ERP)	0.00002 %
5047.16 MHz	MO	170KG1D	10 W (ERP)	0.00002 %
5047.375 MHz	MO	170KG1D	10 W (ERP)	0.00002 %
5049.3325 MHz	MO	205KG1D	10 W (ERP)	0.00002 %
5049.82 MHz	MO	250KG1D	10 W (ERP)	0.00002 %

Special Conditions:

- (1) One or more frequency assignments were coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, DC 20591; Telephone: 202-267-8699.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) 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.
- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) ONE RECORD EACH FOR GROUND AND AIRBORNE STATIONS FOR SINGLE FREQUENCY DUPLEX OPERATION. FREQUENCY SELECTION BASED UPON RTCA PHASE ONE UAS C2 CHANNELIZATION USING DIFFERENT BANDWIDTHS (85 KHZ, 130 KHZ, 170 KHZ, 205 KHZ). FREQUENCY SELECTION IS LIMITED TO THIS LOCATION AND NOT TO BE CONSTRUED FOR EITHER NATIONWIDE USAGE OR POSSESSION BY THE PROPONENT. FAA CONCURRENCE IS BASED UPON THE UNDERSTANDING THAT THE RADIO IS A PROTOTYPE AND NOT THE FINAL APPROVED VERSION. VIDEO SIGNAL IS FOR TAKEOFF, LANDING, AND TAXIING ONLY WITH 5 NAUTICAL MILES OF AIRPORT UP TO 1000 FEET AGL WITH A MAXIMUM EIRP LIMITED TO 1 WATT.