

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

EXPERIMENTAL

(Nature of Service)

XC      FX MO

(Class of Station)

WI2XKS

(Call Sign)

0078-EX-CM-2017

(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(c) of the Commission's Rules

Station Locations

- (1) Cedar Rapids (LINN), IA - NL 42-00-44; WL 91-38-50
- (2) MOBILE: Cedar Rapids, IA Mobile, ground or air vehicle, within 322 km, centered around NL 42-00-44; WL 91-38-50

Frequency Information

Cedar Rapids (LINN), IA - NL 42-00-44; WL 91-38-50

| Frequency             | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------------|---------------|---------------------|------------------|---------------------------|
| 1443.167-1509.833 MHz | FX            | 14M6G1D             | 44.5 W (ERP)     | 0.000225 %                |
| 1784-1826 MHz         | FX            | 14M6G1D             | 44.5 W (ERP)     | 0.000225 %                |
| 1830-1841.833 MHz     | FX            | 11M8G1D             | 44.5 W (ERP)     | 0.000225 %                |
| 2033.167-2101.833 MHz | FX            | 14M6G1D             | 44.5 W (ERP)     | 0.000225 %                |

This authorization effective May 01, 2017 and  
will expire 3:00 A.M. EST May 01, 2019

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Cedar Rapids (LINN), IA - NL 42-00-44; WL 91-38-50

| Frequency            | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------------|---------------|---------------------|------------------|---------------------------|
| 2249.571-2276.25 MHz | FX            | 14M6G1D             | 44.5 W (ERP)     | 0.000225 %                |

MOBILE: Cedar Rapids, IA Mobile, ground or air vehicle, within 322 km, centered around NL 42-00-44; WL 91-38-50

| Frequency             | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------------|---------------|---------------------|------------------|---------------------------|
| 1443.167-1509.833 MHz | MO            | 14M6G1D             | 44.5 W (ERP)     | 0.000225 %                |
| 1784-1826 MHz         | MO            | 14M6G1D             | 44.5 W (ERP)     | 0.000225 %                |
| 1830-1841.833 MHz     | MO            | 11M8G1D             | 44.5 W (ERP)     | 0.000225 %                |
| 2033.167-2101.833 MHz | MO            | 14M6G1D             | 44.5 W (ERP)     | 0.000225 %                |
| 2249.571-2276.25 MHz  | MO            | 14M6G1D             | 44.5 W (ERP)     | 0.000225 %                |

## Special Conditions:

- (1) This frequency assignment in one of the bands 1435-1525, 2310-2320 and 2345-2390 MHz was coordinated prior to its authorization with AFMO CONUS, Ft. Sam Houston, TX, who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with AFMO CONUS, Ft. Sam Houston, TX, as necessary to ensure compatibility with existing uses.
- (2) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at [http://freq.sbe.org/pdf\\_files/coordinators.pdf](http://freq.sbe.org/pdf_files/coordinators.pdf) to find the appropriate coordinator.
- (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.

**Special Conditions:**

- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) Coordinate with the local Society of Broadcast Engineers (SBE) frequency coordinator prior to operation in 2033.167-2101.833 MHz band.
- (6) Operation not to be used at an altitude greater than 12,000 ft. or within 300 km of Sioux Falls, SD (43-44-10N, 096-37-21W) in the frequency range 2249.571-2276.25 MHz to protect NASA downlinks at that location.
- (7) To Notch out /Blank out the following frequencies within the Radius of 322 KM from Center point:  
  
1840.0 MHz, +/-1MHz (43-46-25 N, 089-20-22 W) Oxford, WI  
1840.0 MHz, +/-1MHz (43-08-37 N, 089-20-22 W) Madison, WI  
1840.0 MHz, +/-1MHz (43-55-41 N, 090-15-21 W) Volk Field, WI
- (8) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number FA8650-15-C-7533. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.