

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

EXPERIMENTAL
(Nature of Service)

WF2XMP
(Call Sign)

XD FX
(Class of Station)

0119-EX-ML-2015
(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 42-00-38; WL 91-38-45
- (2) Oxford Junction (CLINTON), IA - NL 41-57-41; WL 90-53-37
- (3) Richardson (COLLIN), TX - NL 32-59-43; WL 96-39-37
- (4) Las Cruces (DONA ANA), NM - NL 32-16-44; WL 106-45-14
- (5) Cedar Rapids (LINN), IA - NL 42-01-45; WL 91-39-40
- (6) Fort Huachuca (COCHISE), AZ - NL 31-34-57; WL 110-20-16
- (7) San Diego (SAN DIEGO), CA - NL 32-42-32; WL 117-14-55
- (8) Tampa, FL - NL 27-53-37; WL 82-31-41
- (9) Denton, TX - NL 33-13-16; WL 97-05-09
- (10) Kansas City, MO - NL 38-57-42; WL 94-36-02
- (11) Arlington, VA - NL 38-53-00; WL 77-07-00

Frequency Information

Cedar Rapids (LINN), IA - NL 42-00-38; WL 91-38-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D	25 kW (ERP)	

This authorization effective July 16, 2015 and
will expire 3:00 A.M. EST June 01, 2017

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Cedar Rapids (LINN), IA - NL 42-00-38; WL 91-38-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2515-3171 kHz	FX	48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Cedar Rapids (LINN), IA - NL 42-00-38; WL 91-38-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7674 kHz	FX	48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Cedar Rapids (LINN), IA - NL 42-00-38; WL 91-38-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15760-15860 kHz	FX	48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Cedar Rapids (LINN), IA - NL 42-00-38; WL 91-38-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
23460-24460 kHz	FX	48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Oxford Junction (CLINTON), IA - NL 41-57-41; WL 90-53-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Oxford Junction (CLINTON), IA - NL 41-57-41; WL 90-53-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4636-4950 kHz	FX	48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Oxford Junction (CLINTON), IA - NL 41-57-41; WL 90-53-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9050-9350 kHz	FX	48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Oxford Junction (CLINTON), IA - NL 41-57-41; WL 90-53-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16160-17450 kHz	FX	48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Oxford Junction (CLINTON), IA - NL 41-57-41; WL 90-53-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
26910-27440 kHz	FX	48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Richardson (COLLIN), TX - NL 32-59-43; WL 96-39-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Richardson (COLLIN), TX - NL 32-59-43; WL 96-39-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5760-5960 kHz	FX	48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Richardson (COLLIN), TX - NL 32-59-43; WL 96-39-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10600-10800 kHz	FX	48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D	25 kW (ERP)	

Frequency Information

Richardson (COLLIN), TX - NL 32-59-43; WL 96-39-37

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
19460-19980 kHz	FX	48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Las Cruces (DONA ANA), NM - NL 32-16-44; WL 106-45-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Las Cruces (DONA ANA), NM - NL 32-16-44; WL 106-45-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Las Cruces (DONA ANA), NM - NL 32-16-44; WL 106-45-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Las Cruces (DONA ANA), NM - NL 32-16-44; WL 106-45-14

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Cedar Rapids (LINN), IA - NL 42-01-45; WL 91-39-40

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Cedar Rapids (LINN), IA - NL 42-01-45; WL 91-39-40

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Cedar Rapids (LINN), IA - NL 42-01-45; WL 91-39-40

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Cedar Rapids (LINN), IA - NL 42-01-45; WL 91-39-40

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Cedar Rapids (LINN), IA - NL 42-01-45; WL 91-39-40

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Fort Huachuca (COCHISE), AZ - NL 31-34-57; WL 110-20-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Fort Huachuca (COCHISE), AZ - NL 31-34-57; WL 110-20-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5100-5315 kHz	FX	48K0J1D 4K00D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Fort Huachuca (COCHISE), AZ - NL 31-34-57; WL 110-20-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Fort Huachuca (COCHISE), AZ - NL 31-34-57; WL 110-20-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Fort Huachuca (COCHISE), AZ - NL 31-34-57; WL 110-20-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

San Diego (SAN DIEGO), CA - NL 32-42-32; WL 117-14-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

San Diego (SAN DIEGO), CA - NL 32-42-32; WL 117-14-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48H0D1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

San Diego (SAN DIEGO), CA - NL 32-42-32; WL 117-14-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

San Diego (SAN DIEGO), CA - NL 32-42-32; WL 117-14-55

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Tampa, FL - NL 27-53-37; WL 82-31-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Tampa, FL - NL 27-53-37; WL 82-31-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Tampa, FL - NL 27-53-37; WL 82-31-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Tampa, FL - NL 27-53-37; WL 82-31-41

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Denton, TX - NL 33-13-16; WL 97-05-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Denton, TX - NL 33-13-16; WL 97-05-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
3260-3490 kHz	FX	48K0J1D 4K00D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Denton, TX - NL 33-13-16; WL 97-05-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Denton, TX - NL 33-13-16; WL 97-05-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Denton, TX - NL 33-13-16; WL 97-05-09

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Kansas City, MO - NL 38-57-42; WL 94-36-02

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Kansas City, MO - NL 38-57-42; WL 94-36-02

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Kansas City, MO - NL 38-57-42; WL 94-36-02

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Kansas City, MO - NL 38-57-42; WL 94-36-02

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Kansas City, MO - NL 38-57-42; WL 94-36-02

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Arlington, VA - NL 38-53-00; WL 77-07-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2398-2485 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
2515-3171 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
3260-3490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
4636-4950 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5100-5315 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
5760-5960 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Arlington, VA - NL 38-53-00; WL 77-07-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
6060-6160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
6770-6970 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7410-7483 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7674 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
7990-8060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
9050-9350 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10200-10400 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
10600-10800 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Arlington, VA - NL 38-53-00; WL 77-07-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
11550-12090 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
13850-13990 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
14360-14550 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15760-15860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
15960-16060 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
16160-17450 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
18178-18610 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
19460-19980 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

Frequency Information

Arlington, VA - NL 38-53-00; WL 77-07-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
20020-20460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
21460-21860 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
22860-23160 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
23460-24460 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
25230-26490 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
26910-27440 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	
27990-29720 kHz	FX	48K0J1D 48K0D1D	25 kW (ERP)	

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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.

Special Conditions:

- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) The following frequency bands must be notched out:
 - 2495-2505 kHz , Benson AZ
 - 2495-2505 kHz, Cedar Rapid, IA
 - 2495-2505 kHz, Fort Huachuca, AZ
 - 2495-2505 kHz, San Diego, CA
 - 2495-2505 kHz, West Lafayette, IN

 - 19990-20010 kHz, Cedar Rapid, IA
 - 19990-20010 kHz, Fort Huachuca, AZ
 - 19990-20010 kHz, San Diego, CA
 - 19990-20010 kHz, West Lafayette, IN
- (5) The designated point-of-contact to terminate transmissions if interference occurs is Mr. Randy Nelson at 319-295-5760.
- (6) The following frequency bands must be notched out:

- 19990-20010 kHz, Tampa, FL
- 19990-20010 kHz, Denton, TX
- 19990-20010 kHz, Kansas City, MO
- 19990-20010 kHz, Arlington, VA