

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

EXPERIMENTAL

(Nature of Service)

WB2XCJ

(Call Sign)

XD FX MO

(Class of Station)

0473-EX-CR-2021

(File Number)

NAME Motorola Solutions, 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(h, j) of the Commission's Rules

Station Locations

- (1) Nationwide; MOBILE: Nationwide
- (2) Ft. Worth, TX - NL 32-45-14; WL 97-20-10; MOBILE: Ft. Worth, TX, within 80 km, centered around NL 32-45-14; WL 97-20-10
- (3) Arlington Heights, IL - NL 42-05-42; WL 87-58-55; MOBILE: Arlington Heights, IL, within 80 km, centered around NL 42-05-42; WL 87-58-55

Frequency Information

Nationwide; MOBILE: Nationwide

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
806-851 MHz			500 W (ERP)	
851-894 MHz			500 W (ERP)	
896-902 MHz			500 W (ERP)	

This authorization effective September 01, 2021 and
will expire 3:00 A.M. EST September 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Nationwide; MOBILE: Nationwide

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz			200 W (ERP)	
929-932 MHz			3.5 kW (ERP)	
940-941 MHz			3.5 kW (ERP)	
1850-1910 MHz	MO		1.22 W (ERP)	
1850-1910 MHz	FX		1 kW (ERP)	
1910-1915 MHz	MO	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1.22 W (ERP)	
1910-1915 MHz	FX	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1 kW (ERP)	
1915-1920 MHz	MO	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1.22 W (ERP)	

Frequency Information

Nationwide; MOBILE: Nationwide

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1915-1920 MHz	FX	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1 kW (ERP)	
1920-1930 MHz	MO	30K0G1D 30K0G7D 30K0G7W 30K0D7D	3 W (ERP)	
1930-1990 MHz	MO		1.22 W (ERP)	
1930-1990 MHz	FX		1 kW (ERP)	
1990-2200 MHz			2 kW (ERP)	
2290-2500 MHz			2 kW (ERP)	
2500-2700 MHz			2 kW (ERP)	
5725-5825 MHz			10 W (ERP)	
27350-28350 MHz			2 kW (ERP)	

Frequency Information

Nationwide; MOBILE: Nationwide

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
29100-29250 MHz			2 kW (ERP)	
31000-31300 MHz			2 kW (ERP)	

Ft. Worth, TX - NL 32-45-14; WL 97-20-10; MOBILE: Ft. Worth, TX, within 80 km, centered around NL 32-45-14; WL 97-20-10

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
806-851 MHz			500 W (ERP)	
851-894 MHz			500 W (ERP)	
896-902 MHz			500 W (ERP)	
902-928 MHz			200 W (ERP)	
929-932 MHz			3.5 kW (ERP)	
940-941 MHz			3.5 kW (ERP)	
1850-1910 MHz	MO		1.22 W (ERP)	

Frequency Information

Ft. Worth, TX - NL 32-45-14; WL 97-20-10; MOBILE: Ft. Worth, TX, within 80 km, centered around NL 32-45-14; WL 97-20-10

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1850-1910 MHz	FX		1 kW (ERP)	
1910-1915 MHz	MO	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1.22 W (ERP)	
1910-1915 MHz	FX	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1 kW (ERP)	
1915-1920 MHz	MO	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1.22 W (ERP)	
1915-1920 MHz	FX	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1 kW (ERP)	
1920-1930 MHz	MO	30K0D7D 30K0G7W 30K0G7D 30K0G1D	3 W (ERP)	

Frequency Information

Ft. Worth, TX - NL 32-45-14; WL 97-20-10; MOBILE: Ft. Worth, TX, within 80 km, centered around NL 32-45-14; WL 97-20-10

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1930-1990 MHz	MO		1.22 W (ERP)	
1930-1990 MHz	FX		1 kW (ERP)	
1990-2200 MHz			2 kW (ERP)	
2290-2500 MHz			2 kW (ERP)	
2500-2700 MHz			2 kW (ERP)	
5725-5825 MHz			10 W (ERP)	
27350-28350 MHz			2 kW (ERP)	
29100-29250 MHz			2 kW (ERP)	
31000-31300 MHz			2 kW (ERP)	

Frequency Information

Arlington Heights, IL - NL 42-05-42; WL 87-58-55; MOBILE: Arlington Heights, IL, within 80 km, centered around NL 42-05-42

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
806-851 MHz			500 W (ERP)	
851-894 MHz			500 W (ERP)	
896-902 MHz			500 W (ERP)	
902-928 MHz			200 W (ERP)	
929-932 MHz			3.5 kW (ERP)	
940-941 MHz			3.5 kW (ERP)	
1850-1910 MHz	MO		1.22 W (ERP)	
1850-1910 MHz	FX		1 kW (ERP)	
1910-1915 MHz	MO	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1.22 W (ERP)	
1910-1915 MHz	FX	5M00G2D 5M00G7D	1 kW (ERP)	

Frequency Information

Arlington Heights, IL - NL 42-05-42; WL 87-58-55; MOBILE: Arlington Heights, IL, within 80 km, centered around NL 42-05-42

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1910-1915 MHz	FX	5M00G7W 5M00D7D	1 kW (ERP)	
1915-1920 MHz	MO	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1.22 W (ERP)	
1915-1920 MHz	FX	5M00G2D 5M00G7D 5M00G7W 5M00D7D	1 kW (ERP)	
1920-1930 MHz	MO	30K0G1D 30K0G7D 30K0G7W 30K0D7D	3 W (ERP)	
1930-1990 MHz	MO		1.22 W (ERP)	
1930-1990 MHz	FX		1 kW (ERP)	
1990-2200 MHz			2 kW (ERP)	

Frequency Information

Arlington Heights, IL - NL 42-05-42; WL 87-58-55; MOBILE: Arlington Heights, IL, within 80 km, centered around NL 42-05-42

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
2290-2500 MHz			2 kW (ERP)	
2500-2700 MHz			2 kW (ERP)	
5725-5825 MHz			10 W (ERP)	
27350-28350 MHz			2 kW (ERP)	
29100-29250 MHz			2 kW (ERP)	
31000-31300 MHz			2 kW (ERP)	

Special Conditions:

- (1) Any operation in these bands must be coordinated with the existing and future users to avoid interference. Emission types may vary under the experiment.
- (2) Operation in the 1850-1910 or 1930-1990 MHz band requires prior frequency coordination with 2 GHz microwave users and consent of PCS licensees to avoid interference.
- (3) Operation in the 824-849 or 869-894 MHz band requires consent of local cellular licensee(s) to avoid interference.
- (4) Operation is subject to prior coordination with the Associated Public Safety Communications Officers, Inc. (APCO); ATTN: Director of Frequency Coordination; 351 North Williamson Blvd.; Daytona Beach, FL 32114-1112; Telephone: (386) 322-2500.
- (5) Prior to equipment authorization or a determination of compliance, the device must be accompanied by a conspicuous notice worded as follows: "This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained."

Special Conditions:

- (6) Operation is subject to prior coordination with affected Educational Broadband Service/Broadband Radio Service (EBS/BRS) licensees.
- (7) Operation in the 1695-1780 MHz, 1915-1920 MHz, 1995-2020 MHz or 2110-2200 MHz band requires consent of local Advanced Wireless Service (AWS) licensee(s) to avoid interference.
- (8) 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.
- (9) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (10) NO market studies may be conducted under this authorization without further approval.
- (11) Licensee is authorized to operate up to 10 base stations and 200 mobile units for each individual experiment. Licensee shall not operate more than 50 base stations and 750 mobiles for all experiments combined under this authorization. Operation of additional base stations and mobile units must be requested with sufficient justification.
- (12) Licensee is authorized under Section 5.75 to test, demonstrate and operate prototype products in the above frequency bands. Licensee is required to notify the Commission of the specific details of each individual experiment, including location, number of base and mobile units, power, emission designator, and any other pertinent technical information. No operation shall take place until the Commission has received the required notification. This notification should be uploaded electronically via the OET Experimental Licensing Branch's Electronic Filing Web Site at <https://apps.fcc.gov/els/AddAttachmentsEntry.do> using the "Add Attachments" feature.
- (13) Operation in the band 1910-1930 MHz is subject to prior coordination with existing and future fixed microwave service licensees in accordance with 47 CFR, Part 101.103(d).