

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

EXPERIMENTAL

(Nature of Service)

XD FX MO

(Class of Station)

WI2XRS

(Call Sign)

0168-EX-CN-2016

(File Number)

NAME Row 44, 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) MOBILE: Nationwide AIRCRAFT
- (2) North Las Vegas (CLARK), NV - NL 36-14-11; WL 115-07-04
- (3) Woodbine (CARROLL), MD - NL 39-22-33; WL 77-04-52
- (4) Woodbine (CARROLL), MD - NL 39-22-37; WL 77-04-46
- (5) MOBILE: GEOSTATIONARY; WL 83-00-00
- (6) MOBILE: GEOSTATIONARY, centered around NL 0-00-00; WL 85-00-00
- (7) MOBILE: GEOSTATIONARY, centered around NL 0-00-00; WL 101-00-00
- (8) MOBILE: GEOSTATIONARY, centered around NL 0-00-00; WL 129-00-00

Frequency Information

MOBILE: Nationwide AIRCRAFT

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14050-14470 MHz	MO	1M02G7D	13489.6 W (ERP)	

This authorization effective February 27, 2017 and
will expire 3:00 A.M. EST March 01, 2018

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

North Las Vegas (CLARK), NV - NL 36-14-11; WL 115-07-04

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14000-14500 MHz	FX	36M0G7D	426.6 MW (ERP)	

Woodbine (CARROLL), MD - NL 39-22-33; WL 77-04-52

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14000-14500 MHz	FX	36M0G7D	30.9 MW (ERP)	

Woodbine (CARROLL), MD - NL 39-22-37; WL 77-04-46

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14000-14500 MHz	FX	36M0G7D	4.79 MW (ERP)	

MOBILE: GEOSTATIONARY; WL 83-00-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14050-14470 MHz	MO	1M60G7D	25 W (Output Power)	

Frequency Information

MOBILE: GEOSTATIONARY, centered around NL 0-00-00; WL 85-00-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14050-14470 MHz	MO	1M60G7D	25 W (Output Power)	

MOBILE: GEOSTATIONARY, centered around NL 0-00-00; WL 101-00-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14050-14470 MHz	MO	1M60G7D	25 W (Output Power)	

MOBILE: GEOSTATIONARY, centered around NL 0-00-00; WL 129-00-00

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14050-14470 MHz	MO	1M60G7D	25 W (Output Power)	

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) 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.
- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) Airborne uplink operations must comply with the requirements in 47 C.F.R. 25.227.
- (5) Operations are on an unprotected and non-harmful interference basis. Row 44, Inc., must cease operations immediately upon notification of such interference and must immediately inform the Commission, in writing, of such an event.
- (6) Operation pursuant to this authorization must be in compliance with the terms of Row 44, Inc.'s coordination agreements with the National Science Foundation and the National Aeronautics and Space Administration pertaining to operation of earth stations aboard aircraft (ESAA) in the Ku-Band.
- (7) Point of communication: AMC-1 , AMC-2 , SES-1 and AMC-9 satellites.

Special Conditions:

- (8) Row 44, Inc., must take all necessary measures to ensure that the operation authorized does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR 1.1307(b) and 1.1310. Measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Requirements for restrictions can be determined by predictions based on calculations, modeling or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers. The licensee shall ensure installation of terminals on aircraft by qualified installers who have an understanding of the antenna's radiation environment and the measures best suited to maximize protection of the general public and persons operating the aircraft and equipment. A terminal exhibiting radiation exposure levels exceeding 1.0 mW/cm² in accessible areas, such as at the exterior surface of the radome, shall have a label attached to the surface of the terminal warning about the radiation hazard and shall include thereon a diagram showing the regions around the terminal where the radiation levels could exceed 1.0 mW/cm².