

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

EXPERIMENTAL

(Nature of Service)

WH2XUP

(Call Sign)

XT FX MO

(Class of Station)

0004-EX-AL-2018

(File Number)

NAME Loon LLC

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(a & j) of the Commission's Rules

Station Locations

- (1) MOBILE: Region 1: Winnemucca, NV: airborne max altitude 75,500 ft. AGL, within 100 km, centered around NL 40-53-55; WL 117-48-16
- (2) Winnemucca, NV - NL 40-53-55; WL 117-48-16; MOBILE: Region 1: Winnemucca, NV: airborne max altitude 75,500 ft. AGL, within 100 km
- (3) MOBILE: Region 2: CA, ID, NV, OR, UT - see area described in application exhibit, airborne max altitude 75,500 ft. AGL
- (4) MOBILE: Region 3: CA, NV - see area described in application exhibit, airborne max altitude 75,500 ft. AGL

Frequency Information

MOBILE: Region 1: Winnemucca, NV: airborne max altitude 75,500 ft. AGL, within 100 km, centered around NL 40-53-55; WL 117-48-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
75210-75790 MHz	MO	60M0D1D	7.676 kW (ERP)	
75500 MHz	MO	580MD1D	7.676 kW (ERP)	

This authorization effective August 20, 2018 and
will expire 3:00 A.M. EST June 01, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Region 1: Winnemucca, NV: airborne max altitude 75,500 ft. AGL, within 100 km, centered around NL 40-53-55;
 WL 117-48-16

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
84210-84790 MHz	MO	60M0D1D	7.676 kW (ERP)	
84500 MHz	MO	580MD1D	7.676 kW (ERP)	
85210-85790 MHz	MO	60M0D1D	7.676 kW (ERP)	
85500 MHz	MO	580MD1D	7.676 kW (ERP)	

Winnemucca, NV - NL 40-53-55; WL 117-48-16; MOBILE: Region 1: Winnemucca, NV: airborne max altitude 75,500 ft. AGL, '

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
75210-75790 MHz	FX	60M0D1D	192.8 kW (ERP)	
75500 MHz	FX	580MD1D	192.8 kW (ERP)	
84210-84790 MHz	FX	60M0D1D	192.8 kW (ERP)	
84500 MHz	FX	580MD1D	192.8 kW (ERP)	
85210-85790 MHz	MO	60M0D1D	192.8 kW (ERP)	

Frequency Information

Winnemucca, NV - NL 40-53-55; WL 117-48-16; MOBILE: Region 1: Winnemucca, NV: airborne max altitude 75,500 ft. AGL, '

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
85500 MHz	MO	580MD1D	192.8 kW (ERP)	

MOBILE: Region 2: CA, ID, NV, OR, UT - see area described in application exhibit, airborne max altitude 75,500 ft. AGL

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
75210-75790 MHz	MO	60M0D1D	0.631 W (Output Power)	
75500 MHz	MO	580MD1D	0.631 W (Output Power)	
85210-85790 MHz	MO	60M0D1D	0.631 W (Output Power)	
85500 MHz	MO	580MD1D	0.631 W (Output Power)	

MOBILE: Region 3: CA, NV - see area described in application exhibit, airborne max altitude 75,500 ft. AGL

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
75210-75790 MHz	MO	60M0D1D	0.01 W (Output Power)	
75500 MHz	MO	580MD1D	0.01 W (Output Power)	

Frequency Information

MOBILE: Region 3: CA, NV - see area described in application exhibit, airborne max altitude 75,500 ft. AGL

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
85210-85790 MHz	MO	60M0D1D	0.01 W (Output Power)	
85500 MHz	MO	580MD1D	0.01 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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) Loon must register with the third party Database Managers as specified in Section 101.1523 of the Commission's Rules.
- (4) Due to the National Science Foundation's (NSF) Very Long Baseline Array (VLBA) operating in possible view of the high flying aircraft, Loon must coordinate with Mr. Dan Mertely at dmertely@zia.aoc.NRAO.EDU prior to conducting the test.