

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

WS9XSK

(Call Sign)

XT FX MO

(Class of Station)

1357-EX-ST-2021

(File Number)

NAME Resound Networks, LLC

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

This will allow testing in 5925 MHz to 7125 MHz based on FCC 18-147, ET Docket 18-295.

Station Locations

- (1) Pampa (GRAY), TX - NL 35-32-37; WL 100-59-21; MOBILE: Pampa, TX, within 8.1 km, centered around NL 35-32-37; WL 100-59-21
- (2) Shamrock (WHEELER), TX - NL 35-12-51; WL 100-14-58; MOBILE: Shamrock, TX, within 8.1 km, centered around NL 35-12-51; WL 100-14-58
- (3) Monahans (WARD), TX - NL 31-33-11; WL 102-53-45; MOBILE: Monahans, TX, within 8.1 km, centered around NL 31-33-11; WL 102-53-45
- (4) Pampa (GRAY), TX - NL 35-34-38; WL 100-56-57; MOBILE: Pampa, TX, within 8.1 km, centered around NL 35-34-38; WL 100-56-57
- (5) Lubbock (LUBBOCK), TX - NL 33-41-18; WL 101-54-33; MOBILE: Lubbock, TX, within 8.1 km, centered around NL 33-41-18; WL 101-54-33
- (6) Lubbock (LUBBOCK), TX - NL 33-35-31; WL 102-01-21; MOBILE: Lubbock, TX, within 8.1 km, centered around NL 33-35-31; WL 102-01-21

This authorization effective September 16, 2021 and
will expire 3:00 A.M. EST February 10, 2022

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Pampa (GRAY), TX - NL 35-32-37; WL 100-59-21; MOBILE: Pampa,TX, within 8.1 km, centered around NL 35-32-37; WL 100-59-21

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-7125 MHz	FX	160MX2D	4 W (ERP)	0.0016 %

Shamrock (WHEELER), TX - NL 35-12-51; WL 100-14-58; MOBILE: Shamrock,TX, within 8.1 km, centered around NL 35-12-51; WL 100-14-58

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-7125 MHz	FX	160MX2D	4 W (ERP)	0.0016 %

Monahans (WARD), TX - NL 31-33-11; WL 102-53-45; MOBILE: Monahans, TX, within 8.1 km, centered around NL 31-33-11; WL 102-53-45

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-7125 MHz	FX	160MX2D	4 W (ERP)	0.0016 %

Pampa (GRAY), TX - NL 35-34-38; WL 100-56-57; MOBILE: Pampa,TX, within 8.1 km, centered around NL 35-34-38; WL 100-56-57

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-7125 MHz	FX	160MX2D	4 W (ERP)	0.0016 %

Frequency Information

Lubbock (LUBBOCK), TX - NL 33-41-18; WL 101-54-33; MOBILE: Lubbock,TX, within 8.1 km, centered around NL 33-41-18;

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-7125 MHz	FX	160MX2D	4 W (ERP)	0.0016 %

Lubbock (LUBBOCK), TX - NL 33-35-31; WL 102-01-21; MOBILE: Lubbock,TX, within 8.1 km, centered around NL 33-35-31;

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-7125 MHz	FX	160MX2D	4 W (ERP)	0.0016 %

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) Operation is subject to prior coordination with the local Society of Broadcast Engineers, Inc. (SBE) frequency coordinator. Consult the list at <http://sbe.org/wp-content/uploads/freqcoor.pdf> to find the appropriate coordinator.
- (4) Coordinate with the Fixed Microwave Service licensees in each corresponding proposed venue in accordance with 47 C.F.R, Part 101.103(d) prior to commencing the test operations.
- (5) For Airspan ibridge A6 antenna with antenna gain of 24 dBi, the conducted power/input power must reduce by 18dBi/48dBm/63W from 30dBm/1watt limit. See maximum EIRP and footnote 34 of the Unlicensed Use of the 6 GHz Band, 35 FCC Rcd 3852, 3853 (2020).
- (6) For Cambium ePmP antenna with antenna gain of 18.5 dBi, the conducted power/input power must reduce by 12.5dBi/42.5dBm/17.8W from 30dBm/1watt limit. See maximum EIRP and footnote 34 of the Unlicensed Use of the 6 GHz Band, 35 FCC Rcd 3852, 3853 (2020).
- (7) For Cambium ePmP Force 600 antenna with antenna gain of 24 dBi, the conducted power/input power must reduce by 18dBi/48dBm/63W from 30dBm/1watt limit. See maximum EIRP and footnote 34 of the Unlicensed Use of the 6 GHz Band, 35 FCC Rcd 3852, 3853 (2020).
- (8) For Mimosa A5C antenna with antenna gain of 22 dBi, the conducted power/input power must reduce by 16 dBi/46dBm/39.8W from 30dBm/1watt limit. See maximum EIRP and footnote 34 of the Unlicensed Use of the 6 GHz Band, 35 FCC Rcd 3852, 3853 (2020).

Special Conditions:

- (9) For Airspan C5x antenna with antenna gain of 20 dBi, the conducted power/input power must reduce by 14 dBi/44 dBm/25W from 30 dBm/1 watt limit. See maximum EIRP and footnote 34 of the Unlicensed Use of the 6 GHz Band, 35 FCC Rcd 3852, 3853 (2020).
- (10) For an outdoor standard power access point (AFC Controlled) and fixed client device operating in the 5.925-6.425 GHz (U-NII-5) and 6.525-6.875 GHz (U-NII-7) bands, the maximum power spectral density must not exceed 23 dBm (200mW) EIRP in any 1-megahertz band. In addition, the maximum EIRP over the frequency band of operation must not exceed 36 dBm (which is equivalent to 4 watts):

Frequency band (GHz)	Antenna Gain	Max input power/ Conducted Power	Maximum authorized power
5.925-6.425	6 dBi	30 dBm/1 watt/0 dBW	2.43 W ERP
Maximum ERP: 2.43W ERP/ 4 watts/ 36 dBm/ 6 dBW			
6.525-6.875	6 dBi	30 dBm/1 watt/0 dBW	2.43 W ERP
Maximum ERP: 2.43W ERP/ 4 watts/ 36 dBm/ 6 dBW			

- (11) For conducting outdoor tests in the 5.925-6.425 GHz (U-NII-5) and 6.525-6.875 GHz (U-NII-7) frequency bands, the maximum EIRP from a Standard-Power Access Point (AFC Controlled) and fixed client device must not exceed 125 mW (21 dBm) at any elevation angle of more than 30 degrees above the horizon to protect satellite receivers.

- (12) For client device (Client Connected to outdoor standard power access point), operating in the 5.925-6.425 GHz (U-NII-5) and 6.525-6.875 GHz (U-NII-7) frequency bands, the maximum power spectral density must not exceed 17 dBm (0.05W) EIRP in any 1-megahertz band. In addition, the maximum EIRP over the frequency band of operation must not exceed 30 dBm (1 watt):

Frequency band	Max. authorized power	Maximum EIRP
5.925-6.425 GHz	0.61 W ERP	0.61 W ERP/1 watt/ 30 dBm/ 0 dBW
6.525-6.875 GHz	0.61 W ERP	0.61 W ERP/1 watt/ 30 dBm/ 0 dBW

- (13) Operation in the 6.425-6.525 GHz (U-NII-6) and 6.875-7.125 GHz (U-NII-8) bands is limited to indoor locations.

- (14) For an indoor Low-Power access point operating in the 5.925-6.425 GHz (U-NII-5), 6.425-6.525 GHz (U-NII-6), 6.525-6.875 GHz (U-NII-7), and 6.875-7.125 GHz (U-NII-8) bands, the maximum power spectral density must not exceed 5 dBm (0.0032 W) EIRP in any 1-megahertz band. In addition, the maximum EIRP over the frequency band of operation must not exceed 30 dBm (1 watt). Access points operating under this section must employ a permanently attached integrated antenna:

Frequency band	Maximum authorized power	Maximum EIRP
5.925-7.125 GHz	0.61 W ERP	0.61 W ERP /1 watt/ 30 dBm/ 0 dBW

- (15) For client device (Client Connected to indoor Low-Power access point), operating under the control of an indoor access point in the 5.925 -7.125 GHz band, the maximum power spectral density must not exceed -1 dBm (0.00079 W) EIRP in any 1-megahertz band, and the maximum EIRP over the frequency band of operation must not exceed 24 dBm (250mW):

Frequency band	Maximum authorized power	Maximum EIRP
5.925 -7.125 GHz	0.153 W ERP	0.153 W ERP / 0.25 watt/ 24 dBm/ -6 dBW

Special Conditions:

- (16) For transmitters operating within the 5.925 -7.125 GHz band: Any emissions outside of the 5.925 -7.125 GHz band must not exceed an EIRP of -27 dBm /MHz (The -27 dBm is equivalent to 0.000002 W).
- (17) Stop Buzzer is Richard Hibbeler at (703)798-5221.
- (18) Further requests for extension of the authority granted herein must be filed on Form 442, "Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules - Experimental Radio Service." Future STA requests to extend this authorization will not be considered.