

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

EXPERIMENTAL

(Nature of Service)

XT FX MO

(Class of Station)

WN9XXN

(Call Sign)

0094-EX-ST-2019

(File Number)

NAME L3 Technologies

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:

Required for demonstrating proof of concept of L3 Technologies equipment combined with military equipment on a US Navy aircraft.

Station Locations

- (1) Waco (MCLENNAN), TX - NL 31-38-16; WL 97-04-27; MOBILE: Flight Path between 250 and 290 degrees of Waco, within 200 km, centered around NL 31-38-16; WL 97-04-27
- (2) Sioux City (WOODBURY), IA - NL 42-24-10; WL 96-23-07; MOBILE: 100 km radius of Sioux Gateway Airport, within 100 km, centered around NL 42-24-10; WL 96-23-07
- (3) MOBILE: W602 range 400 km SE Corpus Christi TX, within 160 km, centered around NL 26-21-42; WL 93-26-05
- (4) Omaha (DOUGLAS), NE - NL 41-18-10; WL 95-53-38; MOBILE: 100 km radius of Eppley Airfield, within 100 km, centered around NL 41-18-10; WL 95-53-38
- (5) Colorado Springs (EL PASO), CO - NL 38-48-06; WL 104-42-10; MOBILE: 100 km radius of Colorado Springs Airport, within 100 km, centered around NL 38-48-06; WL 104-42-10
- (6) Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: Flt path btw 225 and 90 deg of Sunport, within 100 km, centered around NL 35-02-36; WL 106-36-46

This authorization effective March 04, 2019 and
will expire 3:00 A.M. EST October 04, 2019

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Waco (MCLENNAN), TX - NL 31-38-16; WL 97-04-27; MOBILE: Flight Path between 250 and 290 degrees of Waco, within 20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.7154 MHz	FX	2K80J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K80J3E	243.9 W (ERP)	
9 MHz	FX	2K80J3E	243.9 W (ERP)	
9 MHz	MO	2K80J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K80J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K80J3E	243.9 W (ERP)	
14.76 MHz	FX	2K80J3E	243.9 W (ERP)	
14.76 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	FX	2K80J3E	243.9 W (ERP)	
234.95 MHz	MO	7K00A3E	609.7 W (ERP)	

Frequency Information

Waco (MCLENNAN), TX - NL 31-38-16; WL 97-04-27; MOBILE: Flight Path between 250 and 290 degrees of Waco, within 20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
234.95 MHz	MO	16K0F1D	609.7 W (ERP)	
234.95 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	
275 MHz	FX	7K00A3E	430 W (ERP)	
275 MHz	MO	7K00A3E	215 W (ERP)	
290 MHz	FX	7K00A3E	430 W (ERP)	
290 MHz	MO	7K00A3E	215 W (ERP)	
302 MHz	FX	7K00A3E	430 W (ERP)	
302 MHz	MO	7K00A3E	215 W (ERP)	
312 MHz	FX	7K00A3E	430 W (ERP)	
312 MHz	MO	7K00A3E	215 W (ERP)	

Frequency Information

Waco (MCLENNAN), TX - NL 31-38-16; WL 97-04-27; MOBILE: Flight Path between 250 and 290 degrees of Waco, within 20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
319.6 MHz	FX	7K00A3E 16K0F1D	1.719 W (ERP)	
319.6 MHz	MO	7K00A3E 16K0F1D	861 W (ERP)	
325 MHz	FX	7K00A3E	430 W (ERP)	
325 MHz	MO	7K00A3E	215 W (ERP)	
350 MHz	FX	7K00A3E 240KF9X	1214 W (ERP)	
350 MHz	MO	7K00A3E 240KF9X	431 W (ERP)	
360 MHz	FX	7K00A3E	430 W (ERP)	
360 MHz	MO	7K00A3E	215 W (ERP)	
399.975 MHz	FX	7K00A3E	430 W (ERP)	

Frequency Information

Waco (MCLENNAN), TX - NL 31-38-16; WL 97-04-27; MOBILE: Flight Path between 250 and 290 degrees of Waco, within 20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
399.975 MHz	MO	7K00A3E	215 W (ERP)	
14.5 GHz	MO	199MG1D	6.068 kW (ERP)	
14.615 GHz	FX	199MG1D	6.068 kW (ERP)	
15.25 GHz	MO	199MG1D	6.068 kW (ERP)	
15.25 GHz	FX	199MG1D	6.068 kW (ERP)	
30-31 GHz	MO	58M5G1D	6.068 kW (ERP)	

Sioux City (WOODBURY), IA - NL 42-24-10; WL 96-23-07; MOBILE: 100 km radius of Sioux Gateway Airport, within 100 km,

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.7154 MHz	FX	2K80J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K80J3E	243.9 W (ERP)	
9 MHz	FX	2K80J3E	243.9 W (ERP)	

Frequency Information

Sioux City (WOODBURY), IA - NL 42-24-10; WL 96-23-07; MOBILE: 100 km radius of Sioux Gateway Airport, within 100 km,

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9 MHz	MO	2K80J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K80J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K80J3E	243.9 W (ERP)	
14.76 MHz	FX	2K80J3E	243.9 W (ERP)	
14.76 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	FX	2K80J3E	243.9 W (ERP)	
225 MHz	FX	7K00A3E	430 W (ERP)	
225 MHz	MO	7K00A3E	215 W (ERP)	
234.95 MHz	MO	7K00A3E 16K0F1D	609.7 W (ERP)	

Frequency Information

Sioux City (WOODBURY), IA - NL 42-24-10; WL 96-23-07; MOBILE: 100 km radius of Sioux Gateway Airport, within 100 km,

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
234.95 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	
275 MHz	FX	7K00A3E	430 W (ERP)	
275 MHz	MO	7K00A3E	215 W (ERP)	
290 MHz	FX	7K00A3E	430 W (ERP)	
290 MHz	MO	7K00A3E	215 W (ERP)	
302 MHz	FX	7K00A3E	430 W (ERP)	
302 MHz	MO	7K00A3E	215 W (ERP)	
312 MHz	FX	7K00A3E	430 W (ERP)	
312 MHz	MO	7K00A3E	215 W (ERP)	
319.6 MHz	MO	7K00A3E 16K0F1D	861 W (ERP)	

Frequency Information

Sioux City (WOODBURY), IA - NL 42-24-10; WL 96-23-07; MOBILE: 100 km radius of Sioux Gateway Airport, within 100 km,

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
319.6 MHz	FX	7K00A3E 16K0F1D	1.719 W (ERP)	
325 MHz	FX	7K00A3E	430 W (ERP)	
325 MHz	MO	7K00A3E	215 W (ERP)	
350 MHz	FX	7K00A3E 240KF9X	1214 W (ERP)	
350 MHz	MO	7K00A3E 240KF9X	431 W (ERP)	
360 MHz	FX	7K00A3E	430 W (ERP)	
360 MHz	MO	7K00A3E	215 W (ERP)	
399.975 MHz	FX	7K00A3E	430 W (ERP)	
399.975 MHz	MO	7K00A3E	215 W (ERP)	

Frequency Information

Sioux City (WOODBURY), IA - NL 42-24-10; WL 96-23-07; MOBILE: 100 km radius of Sioux Gateway Airport, within 100 km,

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14.5 GHz	MO	199MG1D	6.068 kW (ERP)	
14.615 GHz	FX	199MG1D	6.068 kW (ERP)	
15.25 GHz	MO	199MG1D	6.068 kW (ERP)	
15.25 GHz	FX	199MG1D	6.068 kW (ERP)	
30-31 GHz	MO	58M5G1D	6.068 kW (ERP)	

MOBILE: W602 range 400 km SE Corpus Christi TX, within 160 km, centered around NL 26-21-42; WL 93-26-05

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
17-59.99 kHz	MO	150HA1A	122 kW (ERP)	

Omaha (DOUGLAS), NE - NL 41-18-10; WL 95-53-38; MOBILE: 100 km radius of Eppley Airfield, within 100 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.7154 MHz	FX	2K80J3E	243.9 W (ERP)	

Frequency Information

Omaha (DOUGLAS), NE - NL 41-18-10; WL 95-53-38; MOBILE: 100 km radius of Eppley Airfield, within 100 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.7154 MHz	MO	2K80J3E	243.9 W (ERP)	
9 MHz	FX	2K80J3E	243.9 W (ERP)	
9 MHz	MO	2K80J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K80J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K80J3E	243.9 W (ERP)	
14.76 MHz	FX	2K80J3E	243.9 W (ERP)	
14.76 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	FX	2K80J3E	243.9 W (ERP)	
225 MHz	FX	7K00A3E	430 W (ERP)	

Frequency Information

Omaha (DOUGLAS), NE - NL 41-18-10; WL 95-53-38; MOBILE: 100 km radius of Eppley Airfield, within 100 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
225 MHz	MO	7K00A3E	215 W (ERP)	
234.95 MHz	MO	7K00A3E 16K0F1D	609.7 W (ERP)	
234.95 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	
275 MHz	FX	7K00A3E	430 W (ERP)	
275 MHz	MO	7K00A3E	215 W (ERP)	
290 MHz	FX	7K00A3E	430 W (ERP)	
290 MHz	MO	7K00A3E	215 W (ERP)	
302 MHz	FX	7K00A3E	430 W (ERP)	
302 MHz	MO	7K00A3E	215 W (ERP)	
312 MHz	FX	7K00A3E	430 W (ERP)	

Frequency Information

Omaha (DOUGLAS), NE - NL 41-18-10; WL 95-53-38; MOBILE: 100 km radius of Eppley Airfield, within 100 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
312 MHz	MO	7K00A3E	215 W (ERP)	
319.6 MHz	MO	7K00A3E 16K0F1D	861 W (ERP)	
319.6 MHz	FX	7K00A3E 16K0F1D	1.719 W (ERP)	
325 MHz	FX	7K00A3E	430 W (ERP)	
325 MHz	MO	7K00A3E	215 W (ERP)	
350 MHz	FX	7K00A3E 240KF9X	1214 W (ERP)	
350 MHz	MO	7K00A3E 240KF9X	431 W (ERP)	
360 MHz	FX	7K00A3E	430 W (ERP)	
360 MHz	MO	7K00A3E	215 W (ERP)	

Frequency Information

Omaha (DOUGLAS), NE - NL 41-18-10; WL 95-53-38; MOBILE: 100 km radius of Eppley Airfield, within 100 km, centered arc

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
399.975 MHz	FX	7K00A3E	430 W (ERP)	
399.975 MHz	MO	7K00A3E	215 W (ERP)	
14.5 GHz	MO	199MG1D	6.068 kW (ERP)	
14.615 GHz	FX	199MG1D	6.068 kW (ERP)	
15.25 GHz	MO	199MG1D	6.068 kW (ERP)	
15.25 GHz	FX	199MG1D	6.068 kW (ERP)	
30-31 GHz	MO	58M5G1D	6.068 kW (ERP)	

Colorado Springs (EL PASO), CO - NL 38-48-06; WL 104-42-10; MOBILE: 100 km radius of Colorado Springs Airport, within 1

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.7154 MHz	FX	2K80J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K80J3E	243.9 W (ERP)	

Frequency Information

Colorado Springs (EL PASO), CO - NL 38-48-06; WL 104-42-10; MOBILE: 100 km radius of Colorado Springs Airport, within 1

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9 MHz	FX	2K80J3E	243.9 W (ERP)	
9 MHz	MO	2K80J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K80J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K80J3E	243.9 W (ERP)	
14.76 MHz	FX	2K80J3E	243.9 W (ERP)	
14.76 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	FX	2K80J3E	243.9 W (ERP)	
225 MHz	FX	7K00A3E	430 W (ERP)	
225 MHz	MO	7K00A3E	215 W (ERP)	
234.95 MHz	MO	7K00A3E	609.7 W (ERP)	

Frequency Information

Colorado Springs (EL PASO), CO - NL 38-48-06; WL 104-42-10; MOBILE: 100 km radius of Colorado Springs Airport, within 1

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
234.95 MHz	MO	16K0F1D	609.7 W (ERP)	
234.95 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	
275 MHz	FX	7K00A3E	430 W (ERP)	
275 MHz	MO	7K00A3E	215 W (ERP)	
290 MHz	FX	7K00A3E	430 W (ERP)	
290 MHz	MO	7K00A3E	215 W (ERP)	
302 MHz	FX	7K00A3E	430 W (ERP)	
302 MHz	MO	7K00A3E	215 W (ERP)	
312 MHz	FX	7K00A3E	430 W (ERP)	
312 MHz	MO	7K00A3E	215 W (ERP)	

Frequency Information

Colorado Springs (EL PASO), CO - NL 38-48-06; WL 104-42-10; MOBILE: 100 km radius of Colorado Springs Airport, within 1

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
319.6 MHz	MO	7K00A3E 16K0F1D	861 W (ERP)	
319.6 MHz	FX	7K00A3E 16K0F1D	1.719 W (ERP)	
325 MHz	FX	7K00A3E	430 W (ERP)	
325 MHz	MO	7K00A3E	215 W (ERP)	
350 MHz	FX	7K00A3E 240KF9X	1214 W (ERP)	
350 MHz	MO	7K00A3E 240KF9X	431 W (ERP)	
360 MHz	FX	7K00A3E	430 W (ERP)	
360 MHz	MO	7K00A3E	215 W (ERP)	
399.975 MHz	FX	7K00A3E	430 W (ERP)	

Frequency Information

Colorado Springs (EL PASO), CO - NL 38-48-06; WL 104-42-10; MOBILE: 100 km radius of Colorado Springs Airport, within 1

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
399.975 MHz	MO	7K00A3E	215 W (ERP)	
14.5 GHz	MO	199MG1D	6.068 kW (ERP)	
14.615 GHz	FX	199MG1D	6.068 kW (ERP)	
15.25 GHz	MO	199MG1D	6.068 kW (ERP)	
15.25 GHz	FX	199MG1D	6.068 kW (ERP)	
30-31 GHz	MO	58M5G1D	6.068 kW (ERP)	

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: Flt path btw 225 and 90 deg of Sunport, within 100

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.7154 MHz	FX	2K80J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K80J3E	243.9 W (ERP)	
9 MHz	FX	2K80J3E	243.9 W (ERP)	

Frequency Information

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: Flt path btw 225 and 90 deg of Sunport, within 100

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9 MHz	MO	2K80J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K80J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K80J3E	243.9 W (ERP)	
14.76 MHz	FX	2K80J3E	243.9 W (ERP)	
14.76 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	MO	2K80J3E	243.9 W (ERP)	
21 MHz	FX	2K80J3E	243.9 W (ERP)	
225 MHz	FX	7K00A3E	430 W (ERP)	
225 MHz	MO	7K00A3E	215 W (ERP)	
234.95 MHz	MO	7K00A3E 16K0F1D	609.7 W (ERP)	

Frequency Information

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: Flt path btw 225 and 90 deg of Sunport, within 100

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
234.95 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	
275 MHz	FX	7K00A3E	430 W (ERP)	
275 MHz	MO	7K00A3E	215 W (ERP)	
290 MHz	FX	7K00A3E	430 W (ERP)	
290 MHz	MO	7K00A3E	215 W (ERP)	
302 MHz	FX	7K00A3E	430 W (ERP)	
302 MHz	MO	7K00A3E	215 W (ERP)	
312 MHz	FX	7K00A3E	430 W (ERP)	
312 MHz	MO	7K00A3E	215 W (ERP)	
319.6 MHz	MO	7K00A3E 16K0F1D	861 W (ERP)	

Frequency Information

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: Flt path btw 225 and 90 deg of Sunport, within 100

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
319.6 MHz	FX	7K00A3E 16K0F1D	1.719 W (ERP)	
325 MHz	FX	7K00A3E	430 W (ERP)	
325 MHz	MO	7K00A3E	215 W (ERP)	
350 MHz	FX	7K00A3E 240KF9X	1214 W (ERP)	
350 MHz	MO	7K00A3E 240KF9X	431 W (ERP)	
360 MHz	FX	7K00A3E	430 W (ERP)	
360 MHz	MO	7K00A3E	215 W (ERP)	
399.975 MHz	FX	7K00A3E	430 W (ERP)	
399.975 MHz	MO	7K00A3E	215 W (ERP)	

Frequency Information

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: Flt path btw 225 and 90 deg of Sunport, within 100

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
30-31 GHz	MO	58M5G1D	6.068 kW (ERP)	

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 stop buzzer contact for this project is Kara Curtis
Phone: 9034573544
Email: kara.r.curtis@L3T.com
- (4) The authorized station must be in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules.
- (5) The authorized station must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (6) Experimental station shall use the minimum power level necessary to establish communications links to minimize potential interference to licensed users.
- (7) This authorization is without prejudice to any determination that the Commission may make regarding pending or future experimental satellite earth station applications.
- (8) Operations are on a non-interference basis (NIB) and shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference and notify the FCC in writing.
- (9) L3 Technologies shall remove 10.005 MHz, which is used for HF AM(R)S operations.