

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

EXPERIMENTAL

(Nature of Service)

XC FX MO

(Class of Station)

WM9XZV

(Call Sign)

1103-EX-ST-2018

(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) MOBILE: W602 range 400 km SE Corpus Christi TX, within 160 km, centered around NL 26-21-42; WL 93-26-05
- (3) 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
- (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: 100 km radius of Albuquerque International Sunport, within 100 km, centered around NL 35-02-36; WL 106-36-46

This authorization effective August 20, 2018 and
will expire 3:00 A.M. EST January 20, 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	2K00J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K00J3E	243.9 W (ERP)	
9 MHz	MO	2K00J3E	243.9 W (ERP)	
9 MHz	FX	2K00J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K00J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K00J3E	243.9 W (ERP)	
10.005 MHz	MO	2K00J3E	243.9 W (ERP)	
10.005 MHz	FX	2K00J3E	243.9 W (ERP)	
14.76 MHz	MO	2K00J3E	243.9 W (ERP)	
14.76 MHz	FX	2K00J3E	243.9 W (ERP)	1 %

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 (+/-)
21 MHz	FX	2K00J3E	243.9 W (ERP)	
21 MHz	MO	2K00J3E	243.9 W (ERP)	
234.95 MHz	MO	7K00A3E 16K0F1D	609.7 W (ERP)	
234.95 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	1 %
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)	

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 (+/-)
312 MHz	FX	7K00A3E	430 W (ERP)	
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	MO	7K00A3E 240KF9X	431 W (ERP)	
350 MHz	FX	7K00A3E 240KF9X	1214 W (ERP)	
360 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 (+/-)
360 MHz	MO	7K00A3E	215 W (ERP)	
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)	

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)	

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 (+/-)
5.7154 MHz	FX	2K00J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K00J3E	243.9 W (ERP)	
9 MHz	FX	2K00J3E	243.9 W (ERP)	
9 MHz	MO	2K00J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K00J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K00J3E	243.9 W (ERP)	
10.005 MHz	FX	2K00J3E	243.9 W (ERP)	
10.005 MHz	MO	2K00J3E	243.9 W (ERP)	
14.76 MHz	FX	2K00J3E	243.9 W (ERP)	
14.76 MHz	MO	2K00J3E	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 (+/-)
21 MHz	FX	2K00J3E	243.9 W (ERP)	
21 MHz	MO	2K00J3E	243.9 W (ERP)	
225 MHz	FX	7K00A3E	430 W (ERP)	
225 MHz	MO	7K00A3E	215 W (ERP)	
234.95 MHz	FX	7K00A3E 16K0F1D	609.7 W (ERP)	
234.95 MHz	MO	7K00A3E 16K0F1D	609.7 W (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)	

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 (+/-)
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)	
319.6 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	
325 MHz	FX	7K00A3E	430 W (ERP)	
325 MHz	MO	7K00A3E	215 W (ERP)	
350 MHz	MO	7K00A3E 240KF9X	431 W (ERP)	
350 MHz	FX	7K00A3E	1214 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 (+/-)
350 MHz	FX	240KF9X	1214 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)	
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)	

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	FX	2K00J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K00J3E	243.9 W (ERP)	
9 MHz	FX	2K00J3E	243.9 W (ERP)	
9 MHz	MO	2K00J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K00J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K00J3E	243.9 W (ERP)	
10.005 MHz	FX	2K00J3E	243.9 W (ERP)	
10.005 MHz	MO	2K00J3E	243.9 W (ERP)	
14.76 MHz	FX	2K00J3E	243.9 W (ERP)	
14.76 MHz	MO	2K00J3E	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 (+/-)
21 MHz	FX	2K00J3E	243.9 W (ERP)	
21 MHz	MO	2K00J3E	243.9 W (ERP)	
225 MHz	FX	7K00A3E	430 W (ERP)	
225 MHz	MO	7K00A3E	215 W (ERP)	
234.95 MHz	FX	7K00A3E 16K0F1D	609.7 W (ERP)	
234.95 MHz	MO	7K00A3E 16K0F1D	609.7 W (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)	

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 (+/-)
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)	
319.6 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	
325 MHz	FX	7K00A3E	430 W (ERP)	
325 MHz	MO	7K00A3E	215 W (ERP)	
350 MHz	MO	7K00A3E 240KF9X	431 W (ERP)	
350 MHz	FX	7K00A3E	1214 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 (+/-)
350 MHz	FX	240KF9X	1214 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)	
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)	

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 (+/-)
5.7154 MHz	FX	2K00J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K00J3E	243.9 W (ERP)	
9 MHz	FX	2K00J3E	243.9 W (ERP)	
9 MHz	MO	2K00J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K00J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K00J3E	243.9 W (ERP)	
10.005 MHz	FX	2K00J3E	243.9 W (ERP)	
10.005 MHz	MO	2K00J3E	243.9 W (ERP)	
14.76 MHz	FX	2K00J3E	243.9 W (ERP)	
14.76 MHz	MO	2K00J3E	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 (+/-)
21 MHz	FX	2K00J3E	243.9 W (ERP)	
21 MHz	MO	2K00J3E	243.9 W (ERP)	
225 MHz	FX	7K00A3E	430 W (ERP)	
225 MHz	MO	7K00A3E	215 W (ERP)	
234.95 MHz	FX	7K00A3E 16K0F1D	609.7 W (ERP)	
234.95 MHz	MO	7K00A3E 16K0F1D	609.7 W (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)	

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 (+/-)
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)	
319.6 MHz	FX	7K00A3E 16K0F1D	1.719 kW (ERP)	
325 MHz	FX	7K00A3E	430 W (ERP)	
325 MHz	MO	7K00A3E	215 W (ERP)	
350 MHz	MO	7K00A3E 240KF9X	431 W (ERP)	
350 MHz	FX	7K00A3E	1214 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 (+/-)
350 MHz	FX	240KF9X	1214 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)	
14.5 GHz	MO	199MG1D	970 W (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)	

Frequency Information

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: 100 km radius of Albuquerque International Sunpo

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5.7154 MHz	FX	2K00J3E	243.9 W (ERP)	
5.7154 MHz	MO	2K00J3E	243.9 W (ERP)	
9 MHz	FX	2K00J3E	243.9 W (ERP)	
9 MHz	MO	2K00J3E	243.9 W (ERP)	
9.0054 MHz	FX	2K00J3E	243.9 W (ERP)	
9.0054 MHz	MO	2K00J3E	243.9 W (ERP)	
10.005 MHz	FX	2K00J3E	243.9 W (ERP)	
10.005 MHz	MO	2K00J3E	243.9 W (ERP)	
14.76 MHz	FX	2K00J3E	243.9 W (ERP)	
14.76 MHz	MO	2K00J3E	243.9 W (ERP)	

Frequency Information

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: 100 km radius of Albuquerque International Sunpo

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
21 MHz	FX	2K00J3E	243.9 W (ERP)	
21 MHz	MO	2K00J3E	243.9 W (ERP)	
225 MHz	FX	7K00A3E	430 W (ERP)	
225 MHz	MO	7K00A3E	215 W (ERP)	
234.95 MHz	FX	7K00A3E 16K0F1D	609.7 W (ERP)	
234.95 MHz	MO	7K00A3E 16K0F1D	609.7 W (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)	

Frequency Information

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: 100 km radius of Albuquerque International Sunpo

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

Frequency Information

Albuquerque (BERNALILLO), NM - NL 35-02-36; WL 106-36-46; MOBILE: 100 km radius of Albuquerque International Sunpo

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
350 MHz	FX	240KF9X	1214 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)	
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) L3 Technologies coordinate with the Fixed Microwave Service licensees in adjacent band, 31-31.3 GHz, in accordance with 47 CFR, Part 101.103(d) prior to commencing the experimental operations.
- (4) L3 Technologies may not operate 14.5 GHz, 14.615 GHz, and 15.25 GHz at the Albuquerque, NM location due to potential interference with FAA operations in the area.
- (5) L3 Technologies must notch out 3 MHz at all locations since it is within the AM(R)S sub-band of 2850-3025 kHz.
- (6) L3 operations, on behalf of the Navy, may also require a Kirtland AFB range sponsor, and coordination with the Kirtland AFB Controlled Firing Area Committee (CFAC).

Special Conditions:

- (7) Since operations are centered out of Albuquerque International Sunport, which is shared with Kirtland AFB, operations must be coordinated with the Kirtland AFB Spectrum Manager, at least 96 hours prior to activation, via e-mail to 377ABW.SMO@us.af.mil.
- (8) The Flight Path shall be limited to between 225 degrees (Southwest), Reference True North (RTN), clockwise to 90 degrees (East). This will mitigate any interference risk to DoD operations at White Sands Missile Range (WSMR) to the south, and Clovis AFB to the southeast.
- (9) L3 Technologies must not transmit within the 15.35 – 15.40 GHz frequency band in accordance with Footnote US246, in order to protect NASA passive sensors.
- (10) L3 Technologies must notch out 225 MHz at the Waco, TX location.
- (11) L3 Technologies must change the frequency 10 MHz to 10.005 MHz or above at all locations in order to protect the Standard Frequency and Time Signal transmissions.
- (12) Operation is prohibited in 6 MHz.
- (13) 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.
- (14) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number N00019-15C-0093. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.