

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

EXPERIMENTAL

(Nature of Service)

XC FX

(Class of Station)

WC2XSW

(Call Sign)

0042-EX-TC-2019

(File Number)

NAME L3-Communications / Randtron Systems

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(c) of the Commission's Rules

Station Locations

(1) Half Moon Bay (SAN MATEO), CA - NL 37-30-54; WL 122-22-44

Frequency Information

Half Moon Bay (SAN MATEO), CA - NL 37-30-54; WL 122-22-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
400-405 MHz	FX	N0N	1.5 W (ERP)	
407-450 MHz	FX	N0N	1.5 W (ERP)	
407-412.525 MHz	FX	N0N	1.5 W (ERP)	
412.55-412.925 MHz	FX	N0N	1.5 W (ERP)	

This authorization effective May 08, 2019 and
will expire 3:00 A.M. EST November 01, 2020

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Half Moon Bay (SAN MATEO), CA - NL 37-30-54; WL 122-22-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
412.95-414.9875 MHz	FX	N0N	1.5 W (ERP)	
415.0125-450 MHz	FX	N0N	1.5 W (ERP)	
428 MHz	FX	N0N	2 MW (ERP)	
451-469 MHz	FX	N0N	1.5 W (ERP)	
476-482 MHz	FX	N0N	1.5 W (ERP)	
496-499 MHz	FX	N0N	1.5 W (ERP)	
500-608 MHz	FX	N0N	1.5 W (ERP)	
614-758 MHz	FX	N0N	1.5 W (ERP)	
768-788 MHz	FX	N0N	1.5 W (ERP)	
798-902 MHz	FX	N0N	1.5 W (ERP)	

Frequency Information

Half Moon Bay (SAN MATEO), CA - NL 37-30-54; WL 122-22-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
902-928 MHz	FX	N0N	1.5 W (ERP)	
945-950 MHz	FX	N0N	1.5 W (ERP)	
1046 MHz	FX	0H00N0N	1.5 W (ERP)	
1145 MHz	FX	0H00N0N	1.5 W (ERP)	
1214 MHz	FX	0H00N0N	1.5 W (ERP)	
1370-1400 MHz	FX	0H00N0N	0.5 W (ERP)	
1427-1435 MHz	FX	N0N	1.5 W (ERP)	
1436 MHz	FX	N0N	0.5 W (ERP)	
1455 MHz	FX	N0N	0.5 W (ERP)	
1474 MHz	FX	N0N	0.5 W (ERP)	

Frequency Information

Half Moon Bay (SAN MATEO), CA - NL 37-30-54; WL 122-22-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1493 MHz	FX	NON	0.5 W (ERP)	
1512 MHz	FX	NON	0.5 W (ERP)	

Special Conditions:

- (1) Assignment in frequency bands 960-1400, 2700-2900, or 9000-9200 MHz was coordinated prior to authorization with the FAA Western Coordinator, Los Angeles, CA. Use of frequencies under the authority of this assignment is subject to such further coordination with the FAA Western Coordinator, Los Angeles, CA, as necessary to ensure compatibility with existing uses.
- (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 https://www.sbe.org/sections/freq_local.php to find the appropriate coordinator.
- (4) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (5) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (6) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by US Navy contract numbers N00019-97-C-0147, N00019-03-C-0044, N00019-03-C-005, N00383-06-G-072B-7004 and 4500144621, and US Army contract number W15P7T-04-C-K216. 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.
- (7) Operation on frequency assignments 1436 MHz, 1455 MHz, 1474 MHz, 1493 MHz and 1512 MHz was coordinated prior to authorization with AFMO CONUS, Ft. Sam Houston, Texas, who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with AFMO CONUS, Ft. Sam Houston, Texas as necessary to ensure compatibility with existing uses.

Special Conditions:

- (8) Operation on frequency assignments 1436 MHz, 1455 MHz, 1474 MHz, 1493 MHz and 1512 MHz was coordinated prior to authorization with the Western Area Frequency Coordinator (WAFC), Point Mugu, CA, who also coordinated it, as appropriate, with the Aerospace and Flight Test Radio Coordinating Council. Use of this frequency under the authority of this assignment is subject to such further coordination with the WAFC as necessary to ensure compatibility with existing uses.
- (9) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth for the bands 400-405 MHz, 407-450 MHz, 451-469 MHz, 920-928 MHz, 1390-1395 MHz and 1429.5-1435 MHz.
- (10) Licensee should be aware that Federal Aviation Administration (FAA) stations may be licensed on frequencies in the 407-450 MHz band and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (11) Operation in the 500 - 608 MHz band should be coordinated with the following low power broadcast auxiliary station or the local SBE representative: BLP01177 YOUNG BROADCASTING OF SAN FRANCISCO, INC.
- (12) Operation on frequencies between 530 MHz and 536 MHz should be coordinated with WLI624 FAMILY STATIONS, INC. using the procedures in 47 CFR, Part 101.103(d).
- (13) Operation in the 614 - 806 MHz band should be coordinated with the following broadcast auxiliary station or the local SBE representative: BLP00766 KGO TELEVISION, INC. BLP01125 KQED, INC. BLP01140 KGO TELEVISION, INC.
- (14) Operation in the 614 - 902 MHz band should avoid frequencies allocated to the public safety land mobile services in the 806-824 MHz, 851-869 MHz and 896-901 MHz bands.
- (15) Operation in the 947 - 950 MHz band should be coordinated with the following low power broadcast auxiliary stations or the local SBE representative: BLP00541 YOUNG BROADCASTING OF SAN FRANCISCO, INC.
- (16) Operation in the 945 - 950 MHz band should be coordinated with existing fixed broadcast auxiliary operations using the procedures in Section 101.103(d) of the Commission's Rules.
- (17) Operation in the 1427 - 1432 MHz band should be coordinated with Itron, licensee of callsign WPXS859.
- (18) Operation on Commercial Mobile Radio Services (CMRS) frequencies requires consent of CMRS licensees to avoid interference.
- (19) Operation is subject to prior coordination with existing fixed microwave service licensees in accordance with 47 CFR, Part 101.103(d).