

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

EXPERIMENTAL

(Nature of Service)

XC FX

(Class of Station)

WD2XZE

(Call Sign)

0034-EX-RR-2011

(File Number)

NAME RAYTHEON Electronics 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(b) of the Commission's Rules

Station Locations

- (1) El Segundo (LOS ANGELES), CA - NL 33-55-44; WL 118-23-20
- (2) El Segundo (LOS ANGELES), CA - NL 33-55-47; WL 118-23-34

Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-44; WL 118-23-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
9200-10680 MHz	FX	NON	8 W (ERP)	
12400-15350 MHz	FX	NON	16 W (ERP)	
24000-26500 MHz	FX	NON	2 W (ERP)	

This authorization effective June 07, 2011 and
will expire 3:00 A.M. EST June 07, 2013

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-47; WL 118-23-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
100-108 MHz	FX	N0N	6.3 mW (ERP)	
138-144 MHz	FX	N0N	6.3 mW (ERP)	
148-328.6 MHz	FX	N0N	6.3 mW (ERP)	
335.4-406 MHz	FX	N0N	6.3 mW (ERP)	
410-500 MHz	FX	N0N	6.3 mW (ERP)	
500-608 MHz	FX	N0N	8.2 mW (ERP)	
614-960 MHz	FX	N0N	8.2 mW (ERP)	
1215-1340 MHz	FX	N0N	8.2 mW (ERP)	
1350-1400 MHz	FX	N0N	8.2 mW (ERP)	
2000-2690 MHz	FX	N0N	63.1 mW (ERP)	

Frequency Information

El Segundo (LOS ANGELES), CA - NL 33-55-47; WL 118-23-34

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5190-6000 MHz	FX	N0N	63.1 mW (ERP)	
6000-8000 MHz	FX	N0N	162 mW (ERP)	
9200-10680 MHz	FX	N0N	295 mW (ERP)	
10700-12400 MHz	FX	N0N	295 mW (ERP)	
12400-15350 MHz	FX	N0N	295 mW (ERP)	
24000-31300 MHz	FX	N0N	295 mW (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) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) 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.
- (4) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (5) Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9247 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir@sbe.org; information, www.sbe.org.

Special Conditions:

- (6) NTIA objects to the use of the following frequency (in GHz w/27 MHz bandwidth):

10.525 GHz

- (7) NTIA objects to the use of the following frequencies (in GHz w/27 MHz bandwidth):

15.15875; 15.22375; 15.33375. 21.4250; 21.6250; 22.6250; 22.8250; 23.3750

- (8) Due to low power TV bands below 2 GHz, operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9247 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir @ sbe.org; information, www.sbe.org.

- (9) Operation is subject to prior coordination with fixed microwave service (Part 101) licensees in the following bands:

1.8-2.0 GHz

2.4-2.5 GHz

10.5-10.7 GHz

10.7-11.7 GHz

12.2-12.75 GHz

17.7-18.3 GHz

19.3-19.7 GHz

21.2-21.4 GHz

22.55-23.6 GHz

24.25-24.45 GHz

25.05-25.25 GHz

27.5-29.5 GHz

31-31.3 GHz

37-37.5 GHz

37.5-38.6 GHz

42-42.5 GHz

- (10) 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 N00019-05-G-0008 and N68936-05-D-0033. 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.