

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

EXPERIMENTAL

(Nature of Service)

XC FX

(Class of Station)

WE2XEZ

(Call Sign)

0339-EX-CR-2019

(File Number)

NAME Textron Systems Corporation

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(k) of the Commission's Rules

Station Locations

- (1) Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15
- (2) Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15
- (3) Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15
- (4) Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15
- (5) Wilmington (MIDDLESEX), MA - NL 42-32-21; WL 71-09-18
- (6) Wilmington (MIDDLESEX), MA - NL 42-32-21; WL 71-09-18
- (7) Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-20
- (8) Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-20
- (9) Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-20
- (10) Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-20
- (11) Wilmington (MIDDLESEX), MA - NL 42-32-20; WL 71-09-20
- (12) Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-17
- (13) Wilmington (MIDDLESEX), MA - NL 42-32-15; WL 71-09-20
- (14) Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15
- (15) Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15
- (16) Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15
- (17) Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15
- (18) Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-17
- (19) Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-17

This authorization effective June 09, 2019 and
will expire 3:00 A.M. EST June 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	3.9 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	3.1 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	11.9 pW (ERP)	
1575.42 MHz	FX	24M0G1D	2.5 pW (ERP)	

Frequency Information

Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	3.9 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-21; WL 71-09-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	7.9 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-21; WL 71-09-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	7.9 pW (ERP)	

Frequency Information

Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	11.9 pW (ERP)	
1575.42 MHz	FX	24M0G1D	6.2 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	11.9 pW (ERP)	
1575.42 MHz	FX	24M0G1D	6.2 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	11.9 pW (ERP)	
1575.42 MHz	FX	24M0G1D	6.2 pW (ERP)	

Frequency Information

Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	11.9 pW (ERP)	
1575.42 MHz	FX	24M0G1D	6.2 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-20; WL 71-09-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	9.9 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15.2 pW (ERP)	
1575.42 MHz	FX	24M0G1D	10 pW (ERP)	

Frequency Information

Wilmington (MIDDLESEX), MA - NL 42-32-15; WL 71-09-20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	9.9 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	2.5 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	2.5 pW (ERP)	

Frequency Information

Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	2 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-17; WL 71-09-15

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	2.5 pW (ERP)	

Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	12.5 pW (ERP)	

Frequency Information

Wilmington (MIDDLESEX), MA - NL 42-32-19; WL 71-09-17

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1227.6 MHz	FX	24M0G1D	15 pW (ERP)	
1575.42 MHz	FX	24M0G1D	9.9 pW (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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (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 designated point-of-contact to terminate transmissions if interference occurs is William Andella at 978-657-2509 or call Textrons' security office, (978) 657-4444.
- (5) 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 W15QKN-08-C-0448, HR0011-12-0115 and 3EC1727/SEC8415. 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.
- (6) Use of the frequency or band 1227.6 MHz is subject further coordination with the FAA New England coordinator, Burlington, Massachusetts, as necessary to ensure compatibility with existing uses.
- (7) Operation is limited to activity for the purpose of testing radionavigation satellite service (RNSS) equipment and systems.
- (8) The Company shall post signs on doors to the test area notifying that, "GPS re-radiator is in use and the GPS information you receive may be in error."
- (9) GPS users in the area of potential interference to GPS reception must be notified that GPS information may be impacted for periods of time.
- (10) The test equipment shall only be used indoors and shall be under the control of the Company.
- (11) No EIRP greater than -140 dBm/24 MHz at 100 feet is used.
- (12) GPS re-radiators must operate in accordance with Section 8.3.28 of the NTIA Manual. Power spectral density of the signal should be very well controlled.