

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

EXPERIMENTAL

(Nature of Service)

WE2XIO

(Call Sign)

XT FX MO

(Class of Station)

0085-EX-ML-2009

(File Number)

NAME Northrop Grumman 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(b) of the Commission's Rules

Station Locations

- (1) Linthicum (ANNE ARUNDEL), MD - NL 39-11-08; WL 76-41-11; MOBILE: Linthicum (ANNE ARUNDEL), MD, at a maximum altitude of 20000 feet, within 321 km, centered around NL 39-11-08; WL 76-41-11
- (2) Georgetown (SUSSEX), DE - NL 38-41-34; WL 75-21-53; MOBILE: Georgetown (SUSSEX), DE, at a maximum altitude of 20000 feet, within 32 km, centered around NL 38-41-34; WL 75-21-53
- (3) Grand Junction (MESA), CO - NL 39-07-21; WL 108-31-36; MOBILE: Within a 241.4 kilometer radius of Grand Junction Regional Airport, in aircraft operating at an altitude of 12,500 feet., within 241.4 km
- (4) Sierra Vista (COCHISE), AZ - NL 31-35-18; WL 110-20-40; MOBILE: Within a 241.4 kilometer radius of Sierra Vista Regional Airport, in aircraft operating at an altitude of 12,500 feet., within 241.4 km
- (5) Victorville (SAN BERNARDINO), CA - NL 34-35-51; WL 117-22-59; MOBILE: Within a 241.4 kilometer radius of Victorville Airport, in aircraft operating at an altitude of 12,500 feet., within 241.4 km

Frequency Information

Linthicum (ANNE ARUNDEL), MD - NL 39-11-08; WL 76-41-11; MOBILE: Linthicum (ANNE ARUNDEL), MD, at a maximum

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16-17.4 GHz	FX	600MQ3N	1.06 MW (ERP)	

This authorization effective October 30, 2009 and
will expire 3:00 A.M. EST February 01, 2011

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

Linthicum (ANNE ARUNDEL), MD - NL 39-11-08; WL 76-41-11; MOBILE: Linthicum (ANNE ARUNDEL), MD, at a maximum

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16-17.4 GHz	MO	600MQ3N	1.06 MW (ERP)	

Georgetown (SUSSEX), DE - NL 38-41-34; WL 75-21-53; MOBILE: Georgetown (SUSSEX), DE, at a maximum altitude of 20

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16-17.4 GHz	FX	600MQ3N	1.06 MW (ERP)	
16-17.4 GHz	MO	600MQ3N	1.06 MW (ERP)	

Grand Junction (MESA), CO - NL 39-07-21; WL 108-31-36; MOBILE: Within a 241.4 kilometer radius of Grand Junction Regi

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16-17.4 GHz	FX	600MQ3N	1.06 MW (ERP)	
16-17.4 GHz	MO	600MQ3N	1.06 MW (ERP)	

Sierra Vista (COCHISE), AZ - NL 31-35-18; WL 110-20-40; MOBILE: Within a 241.4 kilometer radius of Sierra Vista Regional

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16-17.4 GHz	FX	600MQ3N	1.06 MW (ERP)	

Frequency Information

Sierra Vista (COCHISE), AZ - NL 31-35-18; WL 110-20-40; MOBILE: Within a 241.4 kilometer radius of Sierra Vista Regional

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
16-17.4 GHz	MO	600MQ3N	1.06 MW (ERP)	

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (2) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (3) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by Defense Advanced Research Projects Agency (DARPA) contract number HR0011-06-C-0144. 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.
- (4) Operation at Victorville, CA is not allowed under this authorization.