

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

EXPERIMENTAL

(Nature of Service)

XC MO

(Class of Station)

WE2XSG

(Call Sign)

0184-EX-RR-2010

(File Number)

NAME Northrop Grumman Ship Systems, Inc.

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) MOBILE: On NSC within 240 km of Northrop Grumman Pascagoula Operations, Pascagoula, Mississippi, within 240 km, centered around NL 30-20-44; WL 88-34-40

Frequency Information

MOBILE: On NSC within 240 km of Northrop Grumman Pascagoula Operations, Pascagoula, Mississippi, within 240 km, centered around NL 30-20-44; WL 88-34-40

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
4.15 MHz	MO	2K70J3E	660.693 W (ERP)	0.0001 %
4.7314 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %

This authorization effective July 01, 2010 and
will expire 3:00 A.M. EST July 01, 2013

**FEDERAL
COMMUNICATIONS
COMMISSION**



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6.2 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
6.7104 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
8.1964 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
8.2984 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C	660.693 W (ERP)	7.0E-8 %

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8.2984 MHz	MO	2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
9.0374 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
11.1974 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
12.2434 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %

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12.3544 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
16.3764 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
16.5294 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
18.8164 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C	660.693 W (ERP)	7.0E-8 %

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18.8164 MHz	MO	2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
22.0074 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
22.1604 MHz	MO	3K10H3E 2K70B8E 300HA1A 3K10J2D 2K40F3C 2K80J3E 300HF1B 2K80R3E	660.693 W (ERP)	7.0E-8 %
34.01 MHz	MO	16K0F3E	53.475 W (ERP)	0.0002 %
41.21 MHz	MO	16K0F3E	53.475 W (ERP)	0.0002 %
41.73 MHz	MO	16K0F3E	53.475 W (ERP)	0.0002 %

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41.75 MHz	MO	16K0F3E	53.475 W (ERP)	0.0002 %
41.83 MHz	MO	16K0F3E	53.475 W (ERP)	0.0002 %
139.975 MHz	MO	11K0F3E 8K10F1E	56.101 W (ERP)	0.00015 %
141.6125 MHz	MO	11K0F3E 8K10F1E	56.101 W (ERP)	0.0002 %
156 MHz	MO	16K0G3E 16K0F1D	56.101 W (ERP)	0.0005 %
156.95 MHz	MO	16K0F3E 16K0G3E 16K0F1D	56.101 W (ERP)	0.0005 %
156.95 MHz	MO	16K0F3E 16K0G3E	0.723 W (ERP)	0.00003 %
161.975 MHz	MO	20K0F1D	20.3 W (ERP)	0.0003 %
162.025 MHz	MO	20K0F1D	20.3 W (ERP)	0.0003 %

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275.1 MHz	MO	25K0A1E	44.881 W (ERP)	0.00025 %
389.3875 MHz	MO	10K0F2D 11K0F3E 8K50F1E 8K50F1D	0.02 W (ERP)	0.0001 %
389.4625 MHz	MO	11K0F3E 8K50F1E 10K0F2E 8K50F1D	0.02 W (ERP)	0.0001 %
389.5125 MHz	MO	11K0F3E 10K0F2D 8K00F1D 8K00F1E	3.155 W (ERP)	0.0001 %
389.7375 MHz	MO	8K50F1D 10K0F2D 11K0F3E 8K50F1E	0.02 W (ERP)	0.0001 %
389.8375 MHz	MO	8K50F1D 10K0F2D 11K0F3E 8K50F1E	0.02 W (ERP)	0.0001 %

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389.9125 MHz	MO	8K50F1D 10K0F2D 11K0F3E 8K50F1E	0.02 W (ERP)	0.0001 %
395.1 MHz	MO	8K50F1D 10K0F2D 11K0F3E 8K50F1E	0.02 W (ERP)	0.0001 %
395.3 MHz	MO	8K50F1D 10K0F2D 11K0F3E 8K50F1E	0.02 W (ERP)	0.0001 %
395.5 MHz	MO	8K50F1D 10K0F2D 11K0F3E 8K50F1E	0.02 W (ERP)	0.0001 %
395.675 MHz	MO	8K50F1D 10K0F2D 11K0F3E 8K50F1E	0.02 W (ERP)	0.0001 %
395.875 MHz	MO	8K50F1D 10K0F2D 11K0F3E	0.02 W (ERP)	0.0001 %

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395.875 MHz	MO	8K50F1E	0.02 W (ERP)	0.0001 %
397.125 MHz	MO	8K50F1D 10K0F2D 11K0F3E 8K50F1E	0.02 W (ERP)	0.0001 %
406.625 MHz	MO	11K0F3E	44.881 W (ERP)	0.00025 %
406.825 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.00025 %
407.225 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.0002 %
407.625 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.0002 %
410.125 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.0002 %
410.2875 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.0002 %

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410.375 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.0002 %
411.8125 MHz	MO	8K10F1E 11K0F3E	44.881 W (ERP)	0.0002 %
415.625 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.0002 %
415.825 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.0002 %
416.225 MHz	MO	11K0F3E 8K10F1E	44.881 W (ERP)	0.0002 %
416.625 MHz	MO	8K10F1E 11K0F3E	44.881 W (ERP)	0.0002 %
3050 MHz	MO	67M5P0N	3022.27 W (ERP)	0.0098 %
9410 MHz	MO	72M5P0N	11228.8 W (ERP)	0.003 %
9.775 GHz	MO	N0N	100.475 W (ERP)	0.0002 %

Special Conditions:

- (1) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (2) NTIA denies the following frequencies since they will cause interference to Federal operations or pose interference to flight safety: 140.475 MHz, 1030 MHz and 1090 MHz.
- (3) One of the stop buzzer point-of-contacts, Bruce Cook cell (228) 366-6153 or Joe James cell (228) 366-6226, must be present during all testing.
- (4) Use of the frequency 16529.4 kHz is only allowed after coordination with the Navy Pascagoula Ship Yard, Chuck Bardsley, (228) 769-4700.
- (5) Use of wideband emissions (16K0F3E) in the bands 138-144 MHz, 162-174 MHz or 406-420 MHz do not meet NTIA allowed emissions and may have been denied when GMF authorization was requested.
- (6) Operation is subject to prior coordination with the United States Navy, Pascagoula Ship Yard, Mr. Chuck Bardsley at (228) 769-4700.
- (7) Subject to coordination with the Gulf Area Frequency Coordinator located at Eglin AFB, Florida, prior to use within the area bounded by 24 N 33 30'N and 83 W 90 W.
- (8) Licensee should be aware that United States Coast Guard, Navy, Air Force and Army operations may be assigned to these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (9) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by US Coast Guard contract DTG23-02-C-2DW001. 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.