

**United States of America  
FEDERAL COMMUNICATIONS COMMISSION  
EXPERIMENTAL  
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

XD      FX MO

(Class of Station)

WD9XSL

(Call Sign)

0043-EX-ST-2009

(File Number)

NAME Lockheed Martin Corporation

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

**Purpose Of Operation:**

To demonstrate X-band flat plate phased array antennas.

**Station Locations**

- (1) Gaithersburg (MONTGOMERY), MD - NL 39-09-10; WL 77-12-59
- (2) MOBILE: Gaithersburg, MD, within 0.5 km, centered around NL 39-09-10; WL 77-12-59
- (3) Alexandria, VA - NL 38-47-38; WL 77-10-02
- (4) MOBILE: Alexandria, VA, within 1 km, centered around NL 38-47-38; WL 77-10-02

**Frequency Information**

Gaithersburg (MONTGOMERY), MD - NL 39-09-10; WL 77-12-59

| Frequency       | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|---------------------|------------------|---------------------------|
| 8.234-8.386 GHz | FX            | 2M86G7D             | 10 MW (ERP)      |                           |
|                 |               | 11M4G7D             |                  |                           |
|                 |               | 2M15G7D             |                  |                           |
|                 |               | 2M30G7D             |                  |                           |
|                 |               | 5M73G7D             |                  |                           |
|                 |               | 9M22G7D             |                  |                           |

This authorization effective February 04, 2009 and  
will expire 3:00 A.M. EST February 12, 2009

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

MOBILE: Gaithersburg, MD, within 0.5 km, centered around NL 39-09-10; WL 77-12-59

| Frequency       | Station Class | Emission Designator                                            | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|----------------------------------------------------------------|------------------|---------------------------|
| 8.234-8.386 GHz | MO            | 11M4G7D<br>2M15G7D<br>2M30G7D<br>2M86G7D<br>5M73G7D<br>9M22G7D | 34.5 kW (ERP)    |                           |

Alexandria, VA - NL 38-47-38; WL 77-10-02

| Frequency       | Station Class | Emission Designator                                            | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|----------------------------------------------------------------|------------------|---------------------------|
| 8.234-8.386 GHz | FX            | 2M86G7D<br>11M4G7D<br>2M15G7D<br>2M30G7D<br>5M73G7D<br>9M22G7D | 10 MW (ERP)      |                           |

MOBILE: Alexandria, VA, within 1 km, centered around NL 38-47-38; WL 77-10-02

| Frequency       | Station Class | Emission Designator                                            | Authorized Power | Frequency Tolerance (+/-) |
|-----------------|---------------|----------------------------------------------------------------|------------------|---------------------------|
| 8.234-8.386 GHz | MO            | 11M4G7D<br>2M15G7D<br>2M30G7D<br>2M86G7D<br>5M73G7D<br>9M22G7D | 34.5 MW (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) 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) POINT OF COMMUNICATION: Geostationary XTAR satellite.