

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

EXPERIMENTAL

(Nature of Service)

XD      FX MO

(Class of Station)

WC9XAP

(Call Sign)

0640-EX-ST-2004

(File Number)

NAME General Dynamics SATCOM Technologies, Inc.

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:**

Testing, demonstration and training of a Ku-band VSAT-type satcom network utilizing a hub terminal and sub-meter mobile terminals to provide services predominantly for military applications.

**Station Locations**

- (1) Richardson, TX - NL 32-58-27; WL 96-42-15; MOBILE: VertexRSI Richardson, TX facility, within 5 km, centered around NL 32-58-27; WL 96-42-15
- (2) Taunton, MA - NL 41-57-05; WL 71-07-48; MOBILE: General Dynamics Taunton, MA facility, within 5 km, centered around NL 41-57-05; WL 71-07-48
- (3) Fort Gordon, GA - NL 33-24-36; WL 82-08-24; MOBILE: Fort Gordon, GA, within 5 km, centered around NL 33-24-36; WL 82-08-24
- (4) Duluth, GA - NL 33-55-10; WL 84-16-12; MOBILE: VertexRSI Duluth, GA facility, within 5 km, centered around NL 33-55-10; WL 84-16-12
- (5) Fredericksburg, VA - NL 38-19-50; WL 77-28-56; MOBILE: Coherent Systems Fredericksburg, VA facility, within 5 km, centered around NL 38-19-50; WL 77-28-56

**Frequency Information**

Richardson, TX - NL 32-58-27; WL 96-42-15; MOBILE: VertexRSI Richardson, TX facility, within 5 km, centered around NL 3

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 14.36-14.5 GHz | MO            | 2M60G1D             | 180.7 kW (ERP)   | 0.00001 %                 |

This authorization effective November 24, 2004 and  
will expire 3:00 A.M. EST May 19, 2005

**FEDERAL  
COMMUNICATIONS  
COMMISSION**



## Frequency Information

Richardson, TX - NL 32-58-27; WL 96-42-15; MOBILE: VertexRSI Richardson, TX facility, within 5 km, centered around NL 3

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 14.36-14.5 GHz | FX            | 2M60G1D             | 80.1 kW (ERP)    | 0.00001 %                 |

Taunton, MA - NL 41-57-05; WL 71-07-48; MOBILE: General Dynamics Taunton, MA facility, within 5 km, centered around NL

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 14.36-14.5 GHz | MO            | 2M60G1D             | 180.7 kW (ERP)   | 0.00001 %                 |

Fort Gordon, GA - NL 33-24-36; WL 82-08-24; MOBILE: Fort Gordon, GA, within 5 km, centered around NL 33-24-36; WL 82

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 14.36-14.5 GHz | MO            | 2M60G1D             | 180.7 kW (ERP)   | 0.00001 %                 |

Duluth, GA - NL 33-55-10; WL 84-16-12; MOBILE: VertexRSI Duluth, GA facility, within 5 km, centered around NL 33-55-10;

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 14.36-14.5 GHz | MO            | 2M60G1D             | 180.7 kW (ERP)   | 0.00001 %                 |

## Frequency Information

Fredericksburg, VA - NL 38-19-50; WL 77-28-56; MOBILE: Coherent Systems Fredericksburg, VA facility, within 5 km, center

| Frequency      | Station Class | Emission Designator | Authorized Power | Frequency Tolerance (+/-) |
|----------------|---------------|---------------------|------------------|---------------------------|
| 14.36-14.5 GHz | MO            | 2M60G1D             | 180.7 kW (ERP)   | 0.00001 %                 |

## Special Conditions:

- (1) In accordance with Article 4.4 of the ITU Radio Regulations, the operations authorized herein shall not cause harmful interference to, and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the ITU Constitution, the ITU Convention, and the ITU Radio Regulations.
- (2) POINT OF COMMUNICATION: Intelsat 707 at 53 degrees West Longitude.
- (3) Prior to commencement of operation with Intelsat 707 at 53 degrees WL pursuant to this experimental license, General Dynamics SATCOM Technologies, Inc. shall obtain a certification from Intelsat that Intelsat has notified all satellite operators with co-frequency operations within 6 degrees longitude of the Intelsat 707 satellite, generally describing the experimental operations authorized herein, including the term thereof, and providing a point of contact for the purpose of resolving any complaints of interference. General Dynamics SATCOM Technologies, Inc. shall obtain a similar certification from Intelsat if, during the term of this experimental license, a new or different satellite operator commences co-frequency operations within 6 degrees longitude of the Intelsat 707 satellite. If the point of contact receives a complaint of harmful interference, the party receiving the complaint (if not General Dynamics SATCOM Technologies, Inc.) will notify General Dynamics SATCOM Technologies, Inc., and General Dynamics SATCOM Technologies, Inc. shall immediately cease such operations or adjust such operations to avoid harmful interference. General Dynamics SATCOM Technologies, Inc. will submit a copy of Intelsat's certification(s) to the Commission for incorporation into the record of this file.
- (4) National Science Foundation (NSF) requests that General Dynamics SATCOM Technologies, Inc.:
  - 1) Coordinate operation at the Taunton, MA site with the National Radio Astronomy Observatory's VLBA site at Hancock, NH. (POC Mr. Dan Mertely at Socorro, NM, Phone: 505- 835-7027 and e-mail: dmertely@nrao.edu).
  - 2) Coordinate operation at the Fredericksburg, VA site with Wes Sizemore at Green Bank. (Phone: 304-456-2107, e-mail:wsizemor@nrao.edu).