

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

EXPERIMENTAL
(Nature of Service)

WC9XET
(Call Sign)

XD MO
(Class of Station)

0022-EX-TC-2006
(File Number)

NAME HNS License Sub, LLC

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.

Station Locations

- (1) MOBILE: Germantown, MD, within 55 km, centered around NL 39-10-49; WL 77-14-47
- (2) MOBILE: Ft. Huachuca, AZ, within 55 km, centered around NL 31-33-09; WL 110-20-50
- (3) MOBILE: Ft. Monmouth, NJ, within 80 km, centered around NL 40-18-25; WL 74-02-24
- (4) MOBILE: Vertex RSI facility in Richardson, TX facility, within 5 km, centered around NL 32-58-27; WL 96-42-15
- (5) MOBILE: General Dynamics facility in Tauton, MA, within 5 km
- (6) MOBILE: Fort Gordon, GA, within 5 km, centered around NL 33-24-36; WL 82-08-24
- (7) MOBILE: VertexRSI facility in Duluth, GA, within 5 km, centered around NL 33-55-10; WL 84-16-12
- (8) MOBILE: Coherent Systems facility in Fredricksburg, VA, within 5 km, centered around NL 38-19-50; WL 77-28-56

Frequency Information

MOBILE: Germantown, MD, within 55 km, centered around NL 39-10-49; WL 77-14-47

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	1M60G7D	44 kW (ERP)	
29.5-30 GHz	MO	800KG7D	93 kW (ERP)	

This authorization effective June 28, 2006 and
will expire 3:00 A.M. EST October 10, 2006

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: Ft. Huachuca, AZ, within 55 km, centered around NL 31-33-09; WL 110-20-50

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	1M60G7D	44 kW (ERP)	
29.5-30 GHz	MO	800KG7D	93 kW (ERP)	

MOBILE: Ft. Monmouth, NJ, within 80 km, centered around NL 40-18-25; WL 74-02-24

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	1M60G7D	44 kW (ERP)	
29.5-30 GHz	MO	800KG7D	93 kW (ERP)	

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

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	1M60G7D	44 kW (ERP)	
29.5-30 GHz	MO	800KG7D	93 kW (ERP)	

Frequency Information

MOBILE: General Dynamics facility in Tauton, MA, within 5 km

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	1M60G7D	44 kW (ERP)	
29.5-30 GHz	MO	800KG7D	93 kW (ERP)	

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

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	1M60G7D	44 kW (ERP)	
29.5-30 GHz	MO	800KG7D	93 kW (ERP)	

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

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	1M60G7D	44 kW (ERP)	
29.5-30 GHz	MO	800KG7W	93 kW (ERP)	

Frequency Information

MOBILE: Coherent Systems facility in Fredricksburg, VA, within 5 km, centered around NL 38-19-50; WL 77-28-56

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	1M60G7D	44 kW (ERP)	
29.5-30 GHz	MO	800KG7D	93 kW (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) 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.
- (3) POINTS OF COMMUNICATION: Ku-band: Galaxy 10-R at 123.0 West Longitude or SATMEX-5 at 116.8 degrees West Longitude; Ka-band: SpaceWay-1, SpaceWay-2, AMC-15 and AMC-16.
- (4) Prior to commencement of operation with Galaxy 10-R satellite at 123.0 WL or SATMEX-5 at 116.8 degrees WL pursuant to this special temporary authority (STA), licensee shall obtain a certification from the owners of Galaxy 10-R and/or SATMEX-5 that they have notified all satellite operators with co-frequency operations within 6 degrees longitude of their respective 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. Licensee shall obtain a similar certification from the owners of Galaxy 10-R and/or SATMEX-5 if, during the term of this STA, a new or different satellite operator commences co-frequency operations within 6 degrees longitude of their respective satellite. If the point of contact receives a complaint of harmful interference, the party receiving the complaint (if not the licensee) will notify licensee, and licensee shall immediately cease such operations or adjust such operations to avoid harmful interference. Licensee will submit a copy of the certification(s) to the Commission for incorporation into the record of this file.

Special Conditions:

(5) National Science Foundation (NSF) requests that licensee:

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).