

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

EXPERIMENTAL

(Nature of Service)

WE2XEW

(Call Sign)

XD MO

(Class of Station)

0571-EX-ST-2007

(File Number)

NAME HNS License Sub, LLC

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:

Authority to operate with BRH Holdings GP, Ltd. as the controlling entity of HCI and the HNS Licensees while application for consent to transfer control File No. 0023-EX-TU-2007 is pending.

Station Locations

- (1) MOBILE: CONUS, but not within 125 km of White Sands, NM
- (2) MOBILE: CONUS, but not within 125 km of White Sands, NM
- (3) MOBILE: CONUS, but not within 125 km of White Sands, NM

Frequency Information

MOBILE: CONUS, but not within 125 km of White Sands, NM

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	12M8G7D	44 kW (ERP)	0.00001 %
29.5-30 GHz	MO	800KG7D	93 kW (ERP)	

This authorization effective November 28, 2007 and
will expire 3:00 A.M. EST May 28, 2008

**FEDERAL
COMMUNICATIONS
COMMISSION**



Frequency Information

MOBILE: CONUS, but not within 125 km of White Sands, NM

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	12M8G7D	30 kW (ERP)	0.00001 %

MOBILE: CONUS, but not within 125 km of White Sands, NM

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	MO	12M8G7D	25 kW (ERP)	0.00001 %

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) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) 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.
- (4) 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.

Special Conditions:

- (5) 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.
- (6) 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).
- (7) Prior to operating in the 14.47-14.5 GHz frequency band within 160 km of the locations listed in footnote US203 of the Table of Frequency Allocation in 47CFR2.106, licensee will coordinate with the National Academy of Sciences (NSF) and notify the Commission of the results of that coordination.
- (8) Note that if, during the term of this authorization, NASA seeks to provide protection to a future TDRSS site that has been coordinated through the National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee (IRAC) Frequency Assignment Subcommittee process, NTIA will notify the Commission that the site is nearing operational status. Upon notice from the Commission, licensee must cease operations in the 14.0-14.2 GHz band within 125 km of the new TDRSS site until HNS has coordinated with the new site. After coordination, operations will then again be permitted in the 14.0-14.2 GHz band within 125 km of the new TDRSS site, subject to any operational constraints developed in the coordination process.
- (9) Maximum EIRP density allowed is 13.5 dBW/4kHz.
- (10) Off-axis EIRP spectral density for cross-polarized signals emitted from the earth station shall not exceed the calculations given in 47CFR25.222(a)(4).
- (11) All emissions from the earth station shall automatically cease within 100 milliseconds if the angle between the orbital location of the target satellite and the axis of the main lobe of the earth station antenna exceeds 0.5°, and transmission will not resume until such angle is less than 0.2°.