**You will be presented with the FCC FORM 159, Fee Remittance Advice after submitting your application and obtaining a confirmation number. This Fee Remittance Advice, FCC Form 159, must currently be submitted in paper form along with payment to the address indicated in the FCC Fee Filing Guide. Electronic submission of FCC Form 159 is not currently available.**

| FCC FORM 442 - FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR NEW OR MODIFIED RADIO STATION UNDER PART 5 OF FCC RULES - EXPERIMENTAL RADIO SERVICE (OTHER THAN BROADCAST) | Approved by OMB 3060 - 0065 Expires 09/30/98 |
|---|---|

**1. * Applicant's Name (company)**

Hughes Network Systems, Inc.

**File No. 0108-EX-PL-2000**

**2. * Mailing Address:**

**Attention:***

Stephan Carrier

**Street Address:***

11717 Exploration Lane

**P.O. Box:**

| City: | State: | Zip Code: | E-Mail Address: |
|---|---|---|---|
| Germantown | MD | 20876 | |

**3(a). * Application is for:** NEW STATION

**3(b). For Modification indicate below:** File No: Callsign:

**4. ***
**Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government? If "YES", include as an exhibit a narrative statement describing the government project, agency and contract number.**

○ Yes ◉ No

**5. ***
**Is this authorization to be used for the exclusive purpose of developing radio equipment for export to be employed by stations under the jurisdiction of a foreign government? If "YES", include the contract number and the name of the foreign government concerned as an exhibit.**

◉ Yes ○ No

**6. ***
**Is this authorization to be used for providing communications essential to a research project? (The radio communication is not the objective of the research project)? If "YES", include as an exhibit the following information:**

○ Yes ◉ No

a. **A description of the nature of the research project being conducted.**
b. **A showing that the communications facilities requested are necessary for the research project involved.**
c. **A showing that existing communications facilities are inadequete.**

**7.**
**If all the answers to Items 5, 6, 7 are "NO", include as an exhibit a narrative statement describing in detail the following items:**

a. **The complete program of research and experimentation proposed including description of equipment and theory of operation.**
b. **The specific objectives sought to be accomplished.**
c. **How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion or utilization of the radio art, or is along line not already investigated.**

8. * Give an estimate of the length of time that will be required to complete the program of experimentation proposed in this application: 12 in Months

9. * Would a commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? If "YES", include as an exhibit an Environmental Assessment as required by Section 1.1311. ○ Yes ◉ No

11. List below transmitting equipment to be installed (if experimental, so state):

| MANUFACTURER | MODEL NUMBER | NO. OF UNITS | EXPERIMENTAL? |
|---|---|---|---|
| Hughes Network Systems | Thuraya Hndheld | | ◉ Yes ○ No |
| | (Sat. Phone) | | ○ Yes ○ No |
| Hughes Network Systems | Sat. Simulator | | ◉ Yes ○ No |
| | | | ○ Yes ○ No |
| | | | ○ Yes ○ No |

11. * Is the equipment listed in Item 10 capable of station identification pursuant to Section 5.152? ○ Yes ◉ No

12. *Applicant is: ○ INDIVIDUAL ○ ASSOCIATION ○ PARTNERSHIP ◉ CORPORATION ○ OTHER
If "OTHER" is selected, include as an exhibit a narrative statement describing the type of applicant.

13. * Is applicant a foreign government or a representative of a foreign government? ○ Yes ◉ No

14. * Has applicant or any party to this application had any FCC station license or permit revoked or any application for permit, license or renewal denied by this Commission? If "YES", include as an exhibit a statement giving call sign of license or permit revoked and relate circumstances. ○ Yes ◉ No

15. * Will applicant be owner and operator of the station? ◉ Yes ○ No

16. Give the following information of person who can best handle inquiries pertaining to this application:

* Last Name: Joshi

* First Name: Nandan

* Title: Attorney

* Phone Number (include area code): 202-637-2200

E-Mail Address:

17. * APPLICANT ANTI-DRUG ABUSE CERTIFICATION: By checking "YES", the individual applicant certifies that he or she is eligible for this license. This requires that he or she is not subject to a denial of federal benefits, including FCC benefits, as a result of a drug offense conviction pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862. A non-individual applicant, e.g., corporation. partnership or other unincorporated association, certifies that no party to the application is subject to a denial of federal benefits, pursuant to that section. For definition of a "party" for these purposes, see 47CFR 1.2002(b). ◉ Yes ○ No

**18. CERTIFICATION:**
**THE APPLICANT CERTIFIES THAT:**

a. Copies of the FCC Rule Parts 2 and 5 are on hand; and
b. Adequete financial appropriations have been made to carry on the program of experimentation which will be conducted by qualified personnel; and
c. All operations will be on an experimental basis in accordance with Part 5 and other applicable rules, and will be conducted in such a manner and at such a time as to preclude harmful interference to any authorized station; and
d. Grant of the authorization requested herein will not be construed as a finding on the part of the Commission:
   1. that the frequencies and other technical parameters specified in the authorization are the best suited for the proposed program of experimentation, and
   2. that the applicant will be authorized to operate on any basis other than experimental, and
   3. that the Comission is obligated by the results of the experimental program to make provision in its rules including its table of frequency allocations for applicant's type of operation on a regularly licensed basis.

**THE APPLICANT FURTHER CERTIFIES THAT:**

e. All the statements in the application and attached exhibits are true, complete and correct to the best of the applicant's knowledge; and
f. The applicant is willing to finance and conduct the experimental program with full knowledge and understanding of the above limitations; and
g. The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the USA.

**Name of Applicant:**
**Hughes Network Systems, Inc.**

*** Signature (Authorized person filing form):**
Stephan Carrier

**Signature Date (Authorized person filing form):**
**05/10/2000**

*** Title of Person Signing Application:**
Vice President & General Counsel

***Check appropriate classification:**

○ Individual Applicant ○ Member of applicant partnership
○ Authorized employee ◉ Office of applicant corporation or association

**WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(A)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).**

**NOTIFICATION TO INDIVIDUALS UNDER PRIVACY ACT OF 1974 AND THE PAPERWORK REDUCTION ACT OF 1980**

Information requested through this form is authorized by the Communications Act of 1934, as amended, and specified by Section 308 therein. The information will be used by Federal Communications Commission staff to determine eligibility for issuing authorizations in the use of the frequency spectrum and to effect the provisions of regulatory responsibilities rendered by the Commission by the Act. Information requested by this form will be available to the public unless otherwise requested pursuant to 47 CFR 0.459 of the FCC Rules and Regulations. Your response is required to obtain this authorization.

Public reporting burden for this collection of information is estimated to average four (4) hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0065), Washington DC 20554. **DO NOT send completed applications to this address.** Individuals are not required to respond to this collection unless it displays a currently valid OMD control number.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

# The following is a List of antennas associated with this license. To view this antenna and its frequencies, please select the row by selecting the "View Antenna Detail" button.

| View Antenna Detail | Antenna type | City | State | Latitude Direction | Latitude Degrees | Latitude Minutes | Latitude Seconds | Longitude Direction | Longitude Degrees |
|---|---|---|---|---|---|---|---|---|---|
| ☐ | Base and Mobile | Rockville | MD | North | 39 | 6 | 29 | West | 77 |

Federal Communications Commission

# FEDERAL COMMUNICATIONS COMMISSION
# ANTENNA REGISTRATION FORM FOR FILE NUMBER: 0108-EX-PL-2000

1. * The purpose of this application is to:

○ Modify data pertaining to this antenna

○ Delete this antenna from the application/license

2a. * Proposed location of transmitter and transmitting antenna:

○ FIXED/BASE ○ MOBILE ◉ BASE AND MOBILE

2b. If permanently located at a FIXED location, give below:

| State: | County: | City or Town: |
|---|---|---|
| MARYLAND | MONTGOMERY | Rockville |

Number and street (or other indication of location):

7361 Calhoun Place

2c. If mobile, describe the exact area of operation:

2d. *If fixed, enter the geographical coordinates exact to the nearest second. If mobile or base and mobile, enter either the area of operation or the fixed/center coordinates and the radius of operation.

| North Latitude(DD-MM-SS): | West Longitude(DDD-MM-SS): | Radius of Operation: Km |
|---|---|---|
| 39 ° 6 ' 29 " | 77 ° 9 ' 3 " | |

3. * Datum:

○ NAD 27 ◉ NAD 83

4. *Is a directional antenna (other than radar) used? If "YES", give the following information: ○ Yes ◉ No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

5. * Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? If "YES", give the following: ○ Yes ◉ No

(a) Overall height above ground to tip of antenna is 25 meters.

(b) Elevation of ground at antenna site above mean sea level is meters.

(c) Distance to nearest aircraft landing area is 4 kilometers.

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft and thereby minimize the aeronautical hazard of the antenna.

The antenna is 1.5 meter above the roof edge line. The service entrance and cooling tower are higher than the antenna by 2 inches, making the antenna below the overall roof line.

**(e) Submit as an exhibit a vertical profile sketch of total structure including supporting building, if any, giving heights in meters above ground for all significant features. Clearly indicate existing portion, noting particulars of aviation obstruction lighting already available. Submit this sketch under the "Antenna Drawing" exhibit type.**

**Click here to view frequencies for this antenna**

**FEDERAL COMMUNICATIONS COMMISSION ANTENNA FREQUENCY R**
**ANTENNA LOCATION:** Fixed/Base Rockville, MD
**COORDINATES :** 39 6 29 N latitude 77 9 3 W longitude

**Particulars of Operation**

| Row | Click For Emissions | Action | Lower/Upper Frequency | | | Power | | |
|---|---|---|---|---|---|---|---|---|
| | ☐ | Add | 1545 | 1559 | MHz | 0.1 | Watts | 4 |
| | ☐ | Add | 1646.5 | 1660.5 | MHz | 4 | Watts | 4 |
| | ☐ | | | | | | | |
| | ☐ | | | | | | | |
| | ☐ | | | | | | | |
| | ☐ | | | | | | | |
| | ☐ | | | | | | | |
| | ☐ | | | | | | | |