

July 13, 2000

Federal Communication Commission
Experimental Radio Service
P.O. Box 358320
Pittsburgh, PA 15251-5320

TIMELY ACTION REQUIRED
LICENSE REQUIRED BY: October 1, 2000

Subject: Request for Special Temporary Authority (STA)

This request for an STA is submitted in accordance with the FCC rules, Part 1.556.

1. **Name and address:**

US Sea Launch
P.O. Box 32889
Long Beach, CA 90832-2889

2. **Need for special action:**

Sea Launch is required to obtain a license which permits Hughes Spacecraft to "free radiate" within their fully enclosed Payload Processing Facility, in Long Beach. The shielding effectiveness chart, from 1 GHz-18 GHz, for the Payload Processing Facility-Encapsulation Cell was provided in an application (File Number: 0203-EX-ST-1999) submitted for the Hughes-Direct TV spacecraft. Also, Sea Launch requests that the existing call sign WA2XQQ be employed for this STA.

3. **Type of operation:**

Hughes spacecraft will transmit from spacecraft (XM Radio-1) antennas, demonstrating operation prior to encapsulation.

4. **Purpose of operation:**

To test the satellite antenna system before encapsulation.

RECEIVED
FEDERAL COMMUNICATIONS COMMISSION
GROUP-DP/T/RPT/TMT

Jul 13 1999 10 29 29

RECEIVED

5. **Time and date:**

The test will be conducted sometime during the period of October 1, 2000 through May 1, 2001.

6. **Class of station:** MO
Nature of service: XT

7. **Location:**

The testing will be conducted inside our payload processing facility in Long Beach, CA.

North Latitude (DD-MM-SS):

33° 44 ' 41"

West Longitude (DDD-MM-SS):

118° 13' 28"

Radius of Operation:

300 meters

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

Manufacturer: Hughes Spacecraft

Model Number: XM Radio-1

No. Of Units: 1

Experimental: Yes

8. **Person who can best handle inquiries pertaining to this request:**

Bill Gjertson

Engineering Technical Fellow

(425) 393-2557

9. **Frequency(ies) desired:**

2339.136-2339.264MHz (telemetry)

2339.636-2339.764MHz (telemetry)

7048.685-7049.315MHz (command)

7073.685-7074.315MHz (command)

10. **Power output to antenna:**

4 Watts for the telemetry frequencies

4 Watts for the command frequencies

11. **Emission:**

128KG9D for the telemetry frequencies
630KF9D for the command frequencies

12. **Antenna Height:** 1m & 7.7m
Antenna Type: Pipe and Spiral Omni
Beamwidth: ± 20 degrees (fullbeam)
Polarization: Vertical

Richard Williams
(562) 951-7394

Enclosures:
FCC Form 159