

0200-EX-ST-1999

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BOEING

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

TIMELY ACTION REQUIRED
LICENSE REQUIRED BY: JUNE 1, 1999

Subject: Request for Special Temporary Authority (STA)

This request for an STA is submitted in accordance with the FCC Rules, Part 5.56.

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 demonstrate full operation of the re-radiation antenna system prior to launch.

3. Type of operations: Using a spacecraft RF simulator on the roof of our building at the Long Beach facility, then taking the Command Ship approximately 6.5 KM off shore to simulate the line-of-sight geometry that exists at the launch site, then transmit on one frequency each direction for the testing.

4. Purpose of operation: To test the ACS section of the re-radiation link before launch.

5. Time and date: The test will be conducted for only one day sometime during the period of June 1 1999 through June 30 1999.

6. Class of station: MS/FX
Nature of Service: XD

7. Location: The testing will be conducted between the roof of our building at our Long Beach facility and the Command Ship located approximately 6.5 KM from shore.

8. Equipment

Manufacturer:	Model :	Number of units:
A. Boeing	Spacecraft RF Simulator	2

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9. **Frequency(ies) desired:** 11.701 GHz for telemetry (Simulator to Ship)
14.0005 GHz for command (Ship to Simulator)
10. **Power Output to Antenna:** 2 Watts (Simulator to Ship)
100 Watts (Ship to Simulator)
11. **Emission:** 10H0N0N
12. **Antenna Height:** 35 meters (Simulator antenna: top of Payload Processing Facility)
Antenna Type: Cavity Backed Spiral
Gain: 4 dB
Beamwidth: 60° (Fullbeam)
Polarization: V
- Antenna Height:** 42 meters (above water level; located on the Command Ship)
Antenna Type: 2' Parabolic Reflector
Gain: 36 dB
Beamwidth: 3° (Fullbeam)
Polarization: Linear

Should additional information be required, please contact Bill Gjertson at (425) 393-2557.

Alan D. Stewart for

Alan D. Stewart
Director of Sea Launch Services, BCSC
Sea Launch Program

Enclosure: FCC Form 159



FAX COVER SHEET

FAX TO:

Name: Mr. Carl Huie
Company: FCC
Phone: 202 418 2430
FAX #: 202 418 1918
Mail Stop: _____

FROM:

W. G. (Bill) Gjertson
BCSC, Sea Launch Program
Phone: (425) 393-2557
Fax: (425) 477-5777
Mail Stop: 6E-62

Date: June 22, 1999

**Number of Pages
including Cover Sheet**

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Good Afternoon Mr. Carl Huie,

SUBJECT

1. The payload processing facility referred to in our request, File number: 0200-EX-STA-99 in which the Spacecraft transmitter and a transmitter transmitting to the spacecraft will be tested was measured and the RF attenuation of the building was determined to be a minimum of 30 dB at frequencies from 6- 18 GHz. See the attached graph (page 2). THIS SHOULD BE: 0203-EX-STA-99

2. With reference to our STA, your file number 0203-EX-STA-99, item 7. Location is incorrect. The location of the transmitter at 17.305 GHz is on the ACS 6.5 km from the other transmitter at 12.69825 and 12.69925 GHz. on the launch vehicle transmitting to the ACS. Please consider this correction in your processing of this STA. THIS SHOULD BE 0201-EX-STA-99

3. Per your telecon:

Sea Launch memo 705 is File # 0201-EX-STA-99

Sea Launch memo 704 is File # 0200-EX-STA-99

Sea Launch memo 706 is File #0203-EX-STA-99

Thank you for the correction. I am sorry about my mistake.

Bill Gjertson 6/24/99
Bill Gjertson

Sea Launch EM Frequency Coordinator
425-393-2557

P. S. I will call AFTER 2 PM EST