

Exhibit A:

Description of the Proposed Experimental Uses And Request for Expedited Treatment

By this Application, and pursuant to Section 5.61 of the Commission's rules, 47 C.F.R. § 5.61, Inmarsat Hawaii Inc. ("Inmarsat Hawaii")¹ seeks STA to initiate a program of experimentation designed to facilitate the introduction of a new Broadband Global Area Network ("BGAN") user terminal type.² This terminal type will incorporate an existing type-approved by Inmarsat BGAN Class 7 modem (manufactured by Thrane & Thrane) and a low-gain antenna (manufactured by Sensor Systems).³

Inmarsat Hawaii seeks STA to conduct testing, technical demonstrations, and studies using this new combination. These efforts would attempt to gain knowledge with respect to link quality and to validate Inmarsat's theoretical approach. Testing also would evaluate the interaction of the new terminal type with Inmarsat's ground infrastructure.

Testing, demonstrations, and studies using these antennas potentially could be conducted at various locations throughout the United States. However, it is expected that the majority of such activities would be conducted in Hawaii in the vicinity of Inmarsat Hawaii's gateway facilities and the network control center for the I4F3 spacecraft.⁴

The technical parameters of the new terminal type are set forth in Tables 1 and 2, below, and the accompanying cover form. Inmarsat proposes to test the terminal type in the 1626.5-1660.5 MHz transmit band and 1525.0-1559.0 MHz receive band. Inmarsat has used these frequency bands for years to serve the U.S. and foreign markets, and the technical parameters of the proposed operations are consistent with the parameters of such service. The terminal would be operated by experienced test personnel in a manner consistent with the Commission's radio frequency ("RF") exposure guidelines and applicable provisions of Part 25 of the Commission's rules. The specific frequencies to be used by the terminal would be assigned by the Inmarsat

¹ Inmarsat Hawaii is a wholly-owned subsidiary of Inmarsat plc ("Inmarsat"), which operates a global fleet of L-Band MSS spacecraft, including the Inmarsat-4F3 ("I4F3") spacecraft currently located at 97.65° W.L.

² The BGAN system includes a Radio Access Network ("RAN"), which provides the interface to the public switched telephone network ("PSTN"), public Internet network, and the I4F3 spacecraft uplink. As part of the proposed testing, Inmarsat would validate link quality between the user terminal and the RAN using a low-gain antenna.

³ Inmarsat's BGAN Class 7 modem is an existing modem manufactured by Thrane & Thrane that is widely distributed.

⁴ The user terminal equipment would not be accessible to the general public, and would be operated only by experienced test personnel.

satellite network,⁵ through Inmarsat controlled earth station facilities located in Paumalu, Hawaii. Thus, Inmarsat would remain in ultimate control of any experimental operation.⁶

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The combination of the existing BGAN Class 7 modem with a low-gain antenna will be a highly competitive offering in terms of hardware costs and service quality. The requested STA would facilitate the introduction of this product to the U.S. market by enabling Inmarsat to develop the technical expertise to use the low-gain antenna with its existing BGAN platform. Accordingly, the grant of this request would serve the public interest, convenience and necessity.

In order to expedite the evaluation of this new terminal type and its eventual introduction to the U.S. market, Inmarsat Hawaii has arranged for relevant personnel and equipment to be available beginning April 19, 2010. Inmarsat Hawaii requests expedited processing of this request to enable testing to commence as of that date.

Table 1: Technical Specifications

Transmit Frequencies	1626.5-1660.5 MHz
Receive Frequencies	1525.0-1559.0 MHz
Output Power	8.13 W
ERP	16.26 W (based upon antenna gain of 3dBi)
Mean/Peak	Peak
Frequency Tolerance	±5ppm
Transmit Modulation	OQPSK/16QAM
Receive Modulation	OQPSK/16QAM
Half-Power Beam Width	~140 degrees
Orientation in Horizontal Plane	90°-225° (Toward I4F3 at 97.65° W.L.)
Orientation in Vertical Plane	10°-60° (Toward I4F3 at 97.65° W.L.)

⁵ The BGAN user terminals provide terminal identification to the network via the International Mobile Subscriber Identity (IMSI) process, rather than by voice or Morse code, as specified in the Commission's rules.

⁶ Notwithstanding, terminal equipment could be owned by manufacturers in some cases.

Table 2: Single Channel Emission Designators

<u>Frequencies</u>	<u>Transmit/Receive</u>	<u>Emission Designator</u>
1525.0-1559.0 MHz	Receive	12K5G1W
1525.0-1559.0 MHz	Receive	50K0G1W
1525.0-1559.0 MHz	Receive	200KD1W
1626.5-1660.5 MHz	Transmit	25K0G1W
1626.5-1660.5 MHz	Transmit	50K0G1W
1626.5-1660.5 MHz	Transmit	100KG1W
1626.5-1660.5 MHz	Transmit	50K0D1W
1626.5-1660.5 MHz	Transmit	100KD1W
1626.5-1660.5 MHz	Transmit	200KD1W