#### Exhibit A

## **DESCRIPTION OF STA REQUEST** PETITION FOR WAIVER OF SECTIONS 25.137 AND 25.114

#### I. **DESCRIPTION OF STA REQUEST**

Inmarsat Hawaii Inc. ("Inmarsat Hawaii") hereby requests special temporary authority ("STA") to use its 19 meter earth station antenna located in Paumalu, Hawaii and operated pursuant to Call Sign KA25 (the "19m Antenna") to permit C-band telemetry, tracking, and control ("TTAC") communications with the Express AM4 spacecraft during its de-orbiting. <sup>1</sup> Operations of the 19m Antenna during this deorbiting period would be consistent with the technical parameters of the existing license for KA25, although Express AM4 is not currently a licensed point of communication for the 19m Antenna.

The Express AM4 satellite was launched by a Proton launch vehicle from the Baikonur facility in Kazakhstan on August 17, 2011. The Commission authorized Inmarsat Hawaii to use the 19m antenna at its facility at Paumalu to support the Launch and Early Orbit Phase (LEOP) of the Express AM4 mission.<sup>2</sup> Due to technical difficulties, the launch vehicle failed to deploy the Express AM4 satellite in the correct orbit for the Russian Satellite Communications Company (RSCC). Efforts to salvage the Express AM4 satellite have been unsuccessful and plans are now underway to deorbit the satellite. Inmarsat Hawaii and its affiliates will provide a network of ground stations around the globe that will provide communication with the spacecraft during the deorbiting. The Inmarsat Hawaii facility at Paumalu, Hawaii will form part of the Inmarsat Hawaii ground station network for this launch support using the 19m Antenna. .

Inmarsat Hawaii has contracted with Astrium (France) to support the deorbit portion of the launch using the C-band portion of the satellite prior to its commercial operation. The mission control center will be located at the Astrium premises in Toulouse, France and all the mission operations will be conducted, under Astrium's control. It is expected that the 19m Antenna will be used intermittently during the second and the third day of the nominal support (8 and 9 November 2011) for limited periods when the spacecraft is visible from the Paumalu station. Inmarsat Hawaii's support to Astrium using the Paumalu station and 19m Antenna will be limited to the deorbit portion of the mission only but may require testing two days prior to the deorbit operation, starting on November 6, 2011.

<sup>&</sup>lt;sup>1</sup> The Express AM4 satellite is an EADS Astrium Eurostar 3000 C-, L-, Ku- and Ka-band satellite designed for

operation from the 80.0° E.L. orbital location. <sup>2</sup> *Inmarsat Hawaii, Special Temporary Authority,* SES-STA-20110711-00819 (Call Sign: KA 25) (granted August 16, 2011).

# II. TO THE EXTENT THEY APPLY, GOOD CAUSE EXISTS FOR A WAIVER OF CERTAIN PORTIONS OF SECTIONS 25.137 AND 25.114

Inmarsat Hawaii is providing the following legal and technical information to support this STA request and certain waiver requests that are necessary in order to communicate from the 19m Antenna to the Express AM4 spacecraft as the spacecraft is not listed as a point of communications on Inmarsat Hawaii's license for the antenna.

Pursuant to Section 25.137 of the Federal Communications Commission's ("Commission" or "FCC") rules, the same technical information required by Section 25.114 for U.S.-licensed space stations, and certain legal information, must be submitted by earth station applicants "requesting authority to operate with a non-U.S. licensed space station to serve the United States..." Inmarsat Hawaii seeks authority to support the needed TTAC during the deorbit of the Express AM4 spacecraft. Inmarsat Hawaii does not request authority to provide commercial service to the United States, and thus believes that Section 25.137 does not apply.

To the extent the Commission determines, however, that Inmarsat Hawaii's request for authority to provide deorbit support on a special temporary basis is a request to serve the United States with a non-U.S-licensed satellite, Inmarsat Hawaii respectfully requests a waiver of Sections 25.137 and 25.114 of the Commission's rules, to the extent that Inmarsat Hawaii has not herein provided the information required by these rules. The Commission may grant a waiver for good cause shown. A waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.

In this case, good cause for a waiver of portions of Section 25.114 exists. Inmarsat Hawaii seeks authority only to conduct deorbit support for Express AM4. Thus, any information sought by Section 25.114 that is not relevant to the deorbit – e.g., antenna patterns, energy and propulsion and orbital debris – and Inmarsat Hawaii does not have such information. In addition, Inmarsat Hawaii would not easily be able to obtain such information because Inmarsat Hawaii is not the operator of the Express AM4 satellite, nor is Inmarsat Hawaii in contractual privity with that operator. Rather, Inmarsat Hawaii has contracted with Astrium to support the LEOP portion of the campaign using a small portion of the C-band capacity of the satellite prior to its commercial operation. Inmarsat Hawaii has however, received assurances that Astrium has entered into an agreement with RSCC and that under the terms of that agreement RSCC will be responsible for its agreement to the deorbiting strategy recommended by Astrium, and with the support of Astrium co-ordinate all activities with the appropriate authorities. (See Exhibit B, Letter from Kevin Parvin, Contract Manager Telecommunications Satellites, Astrium to Massimo Ciollaro, Inmarsat Ltd., dated October 25, 2011).

As evidenced by Inmarsat Hawaii's license for the 19m Antenna, Inmarsat Hawaii has the requisite authority to support the deorbit of the Express AM4 satellite, except for the point

<sup>&</sup>lt;sup>3</sup> 47 C.F.R. § 25.137(a).

<sup>&</sup>lt;sup>4</sup> 47 C.F.R. §§25.137 and 25.114.

<sup>&</sup>lt;sup>5</sup> 47 C.F.R. §1.3.

of communication. Moreover, as with any STA, Inmarsat Hawaii will conduct the operations on an unprotected, non-interference basis.

Because it is not relevant to the service for which Inmarsat Hawaii seeks authorization, and because obtaining the information would be a hardship, Inmarsat Hawaii seeks a waiver of all the technical and legal information required by Section 25.114, to the extent it is not provided herein. As noted above, Inmarsat Hawaii has provided the required information to the extent that it is relevant to the deorbit service for which Inmarsat Hawaii seeks authorization.

Good cause also exists to waive portions of Section 25.137, to the extent the information required is not herein provided. Section 25.137 is designed to ensure that "U.S.-licensed satellite systems have effective competitive opportunities to provide analogous services" in other countries. Here, there is no service being provided by the satellite; Inmarsat Hawaii is simply providing TTAC facilities while the satellite is in the deorbit phase of the mission. Thus, the purpose of the information required by Section 25.137 is not implicated here. For example, Section 25.137(d) requires earth station applicants requesting authority to operate with a non-U.S.-licensed space station that is not in orbit and operating to post a bond. The underlying purpose in having to post a bond – i.e., to prevent warehousing of orbital locations by operators seeking to serve the United States – would not be served by requiring Inmarsat Hawaii to post a bond in order to conduct a limited period of deorbit support of the Express AM4 satellite.

Inmarsat Hawaii understands that Express AM4 is licensed by RSCC of the Russian Federation. The spacecraft will not serve the United States. Thus, the purpose of Section 25.137 – to ensure that U.S. satellite operators enjoy "effective competitive opportunities" to serve foreign markets and to prevent warehousing of orbital locations serving the United States – will not be undermined by grant of this waiver request.

Finally, Inmarsat Hawaii notes that it expects to communicate with the Express AM4 satellite using the 19m Antenna for a maximum period of two days under nominal deorbit conditions. Requiring Inmarsat Hawaii to obtain technical and legal information from an unrelated party, where there is no risk of interference and the operation will normally cease within two days would pose undue hardship without serving underlying policy objectives. Given these particular facts, Inmarsat Hawaii believes that the waiver sought herein is appropriate.

#### MISSION TECHNICAL PARAMETERS

### **Earth Station**

Inmarsat Hawaii provides the following technical parameters for information only. The operations contemplated in this request fall within the existing license parameters for the 19m Antenna.

\_

<sup>&</sup>lt;sup>6</sup> 47 C.F.R. §25.137(d)(4).

#### **EARTH-to-SPACE:**

Transmit Frequency: 6535.0 MHz

Transmit Polarisation: Circular LH and RH

Maximum EIRP: 89 dBW

Modulation: PCM (NRZ-L)/PSK/FM (800KFXD) Minimum Elevation for Transmission: 10 degrees

#### SPACE-to-EARTH:

Receive Frequency: 4199.5 MHz

Receive Polarisation: Circular LH and RH

Maximum Spacecraft EIRP: 0 dBW within +/- 70 degrees Modulation: PCM (Biphase-L)/BPSK/PM (800KFXD)

Azimuth Range: 360 degrees

Duration of Communications: Once or twice a day for a period of a few hours for two days assuming a nominal deorbit scenario.

#### **Space Station Coordination**

The coordination of communications for the support of the launch of the Express AM4 spacecraft with existing spacecraft operators during deorbit operations is the responsibility of Astrium, who are the satellite operator during the campaign. Astrium has undertaken coordination of communications for the support of the launch of Express AM4 with other spacecraft operators that may be potentially affected during deorbit operations.

Astrium has informed Inmarsat Hawaii that all the preparatory activities and contacts for such coordination have been made and all issues have been satisfactorily resolved. Astrium also has undertaken to review the need for coordination based on any changed circumstances that may occur. In accordance with normal industry practices, communications with other operators will be kept open in the period leading to and throughout the deorbit activities, to ensure that the LEOP will be conducted on a non-interference basis.

\* \* \* \* \*

Grant of the requested STA will serve the public interest, convenience and necessity because it will enable Inmarsat Hawaii to provide essential TTAC functions to the Express AM4 spacecraft, within technical parameters consistent with the licensed parameters of the 19m Antenna, without creating any risk of harmful interference. Inmarsat Hawaii respectfully requests that the Commission grant STA beginning November 6, 2011 for a period of 30 days.