

Request for Special Temporary Authority

Thales Avionics, Inc. (“Thales”) which currently holds a Ka-band ESAA license¹, pursuant to Section 25.120(b)(3) of the Federal Communications Commission Rules and Regulations requests a 30-day Special Temporary Authority (STA) to operate up to 25 MCT-A ESAA terminals on the Telenor Satellite Thor-7 satellite starting on September 08, 2019. On April 24, 2019, Thales filed a license modification to add the Thor-7 satellite as a point of communication². The modification also seeks to add one new transmit emission and two new receive emissions. Thales has designed their modification filing under the requirements of §25.138 for operation of GSO FSS at Ka-band, the existing FCC Rules governing ESAA, §25.227, and previously granted licenses for ESAA using GSO FSS at Ka-band. Thales operations under this STA will be consistent with the criteria proposed in the modification application and will adhere to any commission STA provisions.

The grant of this STA is in the public interest because it will allow Thales to meet urgent customer requirements for provision of aeronautical, two-way in-flight broadband data services to airline passengers, crews, and operations. In particular, this service will provide much needed aeronautical connectivity to transatlantic flights in the densely-traveled air corridor between North America and the UK and Europe.

The Thales ESAA operation under this STA is fully consistent with the FCC policies and all the terms of their existing license. Telenor Satellite has coordinated the operations of this service with adjacent satellite operators and the downlink PFD levels are compliant with the levels specified in §25.138(a)(6).

Thales ESAA operations under this STA on Thor-7 at orbital location 0.65° W.L. will:

- i. be flight tested using a leased aircraft, before providing aeronautical connectivity
 - a. services to Air Canada
- ii. be over the Atlantic Ocean and northeastern Canada
- iii. not use U.S. airspace
- iv. operate between 29.5-30 GHz on the uplink and 19.7-20.2 GHz on the downlink

The uplink power will be 45.4 dBW and the EIRP density is 18.4 dBW/4 kHz, values which are slightly lower (0.1 dB) than those in the existing referenced license.

Thales respectfully seeks from the Commission an expedited grant of this STA since the ESAA operations are consistent with FCC policies, the operations use currently-licensed ESAA terminals, and operations will not cause interference into existing GSO or NGSO systems.

¹ See FCC File No. SES-LIC-20170217-00183, Call Sign E170068, granted on 07/07/2017. The MCT-A terminal is identified as AES1 and the license provides for operation of up to 250 terminals

² See FCC File No. SES-MFS-20190424-00544, filed on 04/24/2019. The modification requests operation on Thor-7 at 0.65 degrees west longitude. It also adds 1 uplink emission designator 1M00G7D between 29.5-30 GHz and 2 new receive emission designators, 22M8G7D and 11M4G7D, in the 19.7-20.2 GHz band.