

Thales Avionics, Inc.
Request for Extension of
Experimental Special Temporary Authorization
for
Thales Advanced Connectivity Terminal, Ka-band (ACT-A) ESAA

Applicant Description

Thales Avionics, Inc. with its InFlyt Experience operations in Melbourne and Orlando, FL and Irvine, CA is a global leader in providing leading-edge, connected inflight entertainment systems and services, including high-speed Internet connectivity, to commercial airlines worldwide. Thales is currently developing and testing a new Advanced Connectivity Terminal, Ka-band (ACT-A) that is a key component of Thales's end-to-end inflight connectivity (IFC) service offerings to commercial airlines. Thales's IFC service using the ACT-A will enable airlines to meet the increasing demands of passengers' inflight connectivity needs and provide access to critical, real-time inflight data to improve airline operational efficiencies.

Reasons For Request

Thales Avionics has an active Experimental Special Temporary Authorization for ACT-A flight testing in CONUS and US territorial waters.¹ This grant expires on November 2, 2018. However, Thales anticipates its ACT-A flight test program will continue well beyond that date.

Thales is therefore requesting its current ACT-A experimental authorization be extended for a period of two (2) years as indicated on the FCC Form 442 submitted with this request.

The scope of Thales's ACT-A flight testing has also increased in terms of the geographical areas in which the ESAA's performance needs to be evaluated. In addition to the currently authorized CONUS and US territorial waters, Thales intends to test the ACT-A in international waters in the Gulf of Mexico, and in international waters in the Atlantic Ocean in the area of the Caribbean islands and Puerto Rico, as shown in the graphic below:

¹ See Call Sign WM9XOV, File No. 0607-EX-ST-2018, granted May 1, 2018.



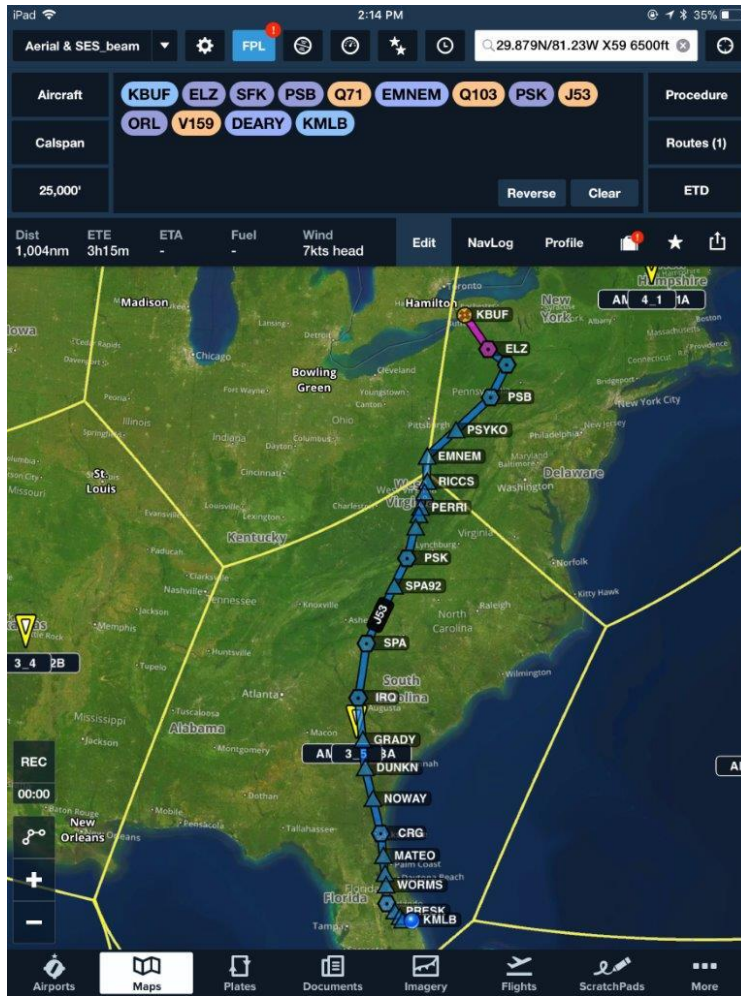
The ACT-A will not operate in the airspace or territorial waters of foreign countries.

As shown in the FCC Form 442 there are no changes to the points of communication, spectrum, emission designators, or power levels specified in Thales's current STA.

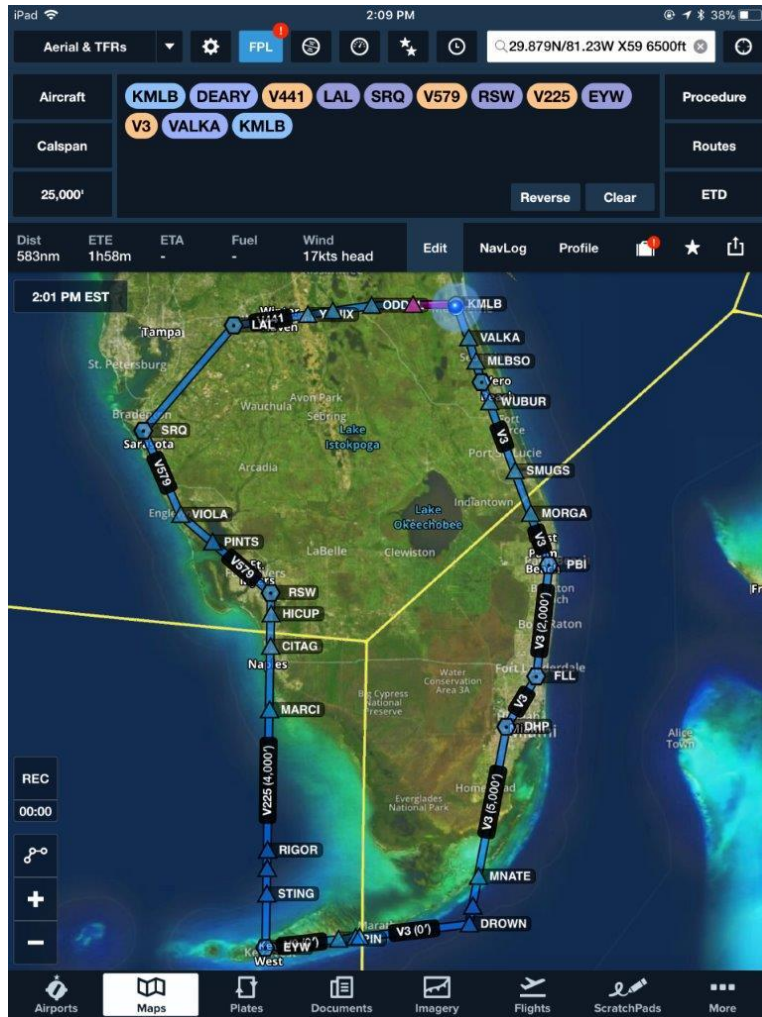
Thales expects ACT-A testing to continue beyond November 2, 2018 and continue for a period of two (2) years. Grant of the requested STA will allow Thales to improve and expand its overall IFC service offerings to its airline customers by improving end-user experience with higher throughput rates, and allowing Thales to offer services to airlines with trans-equatorial flight routes, where high skew angle conditions prevent two-axis, flat panel ESAA operations.

New Flight Test Routes

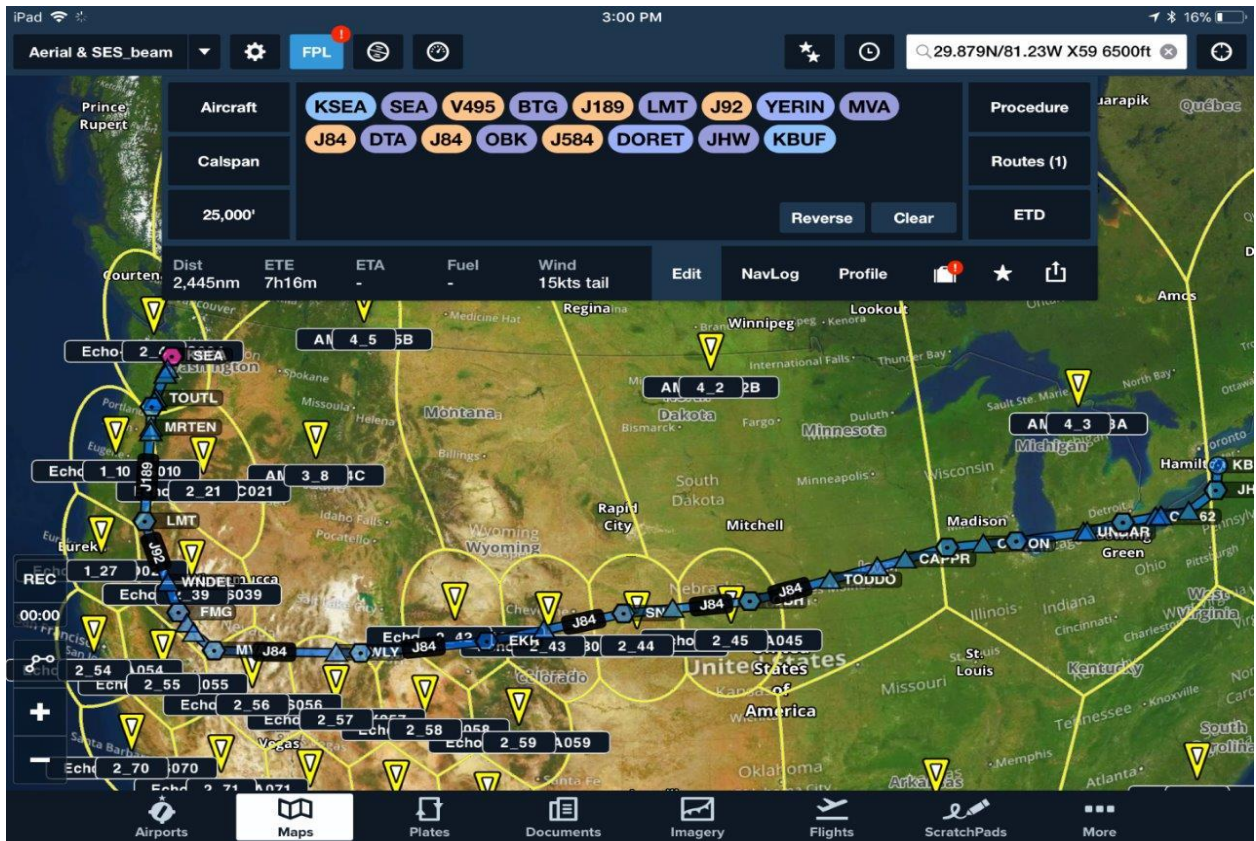
Flight tests will be conducted with the ACT-A installed on a leased test aircraft (Gulfstream G3). The expected flight routes, including two new routes over international waters, are shown below:



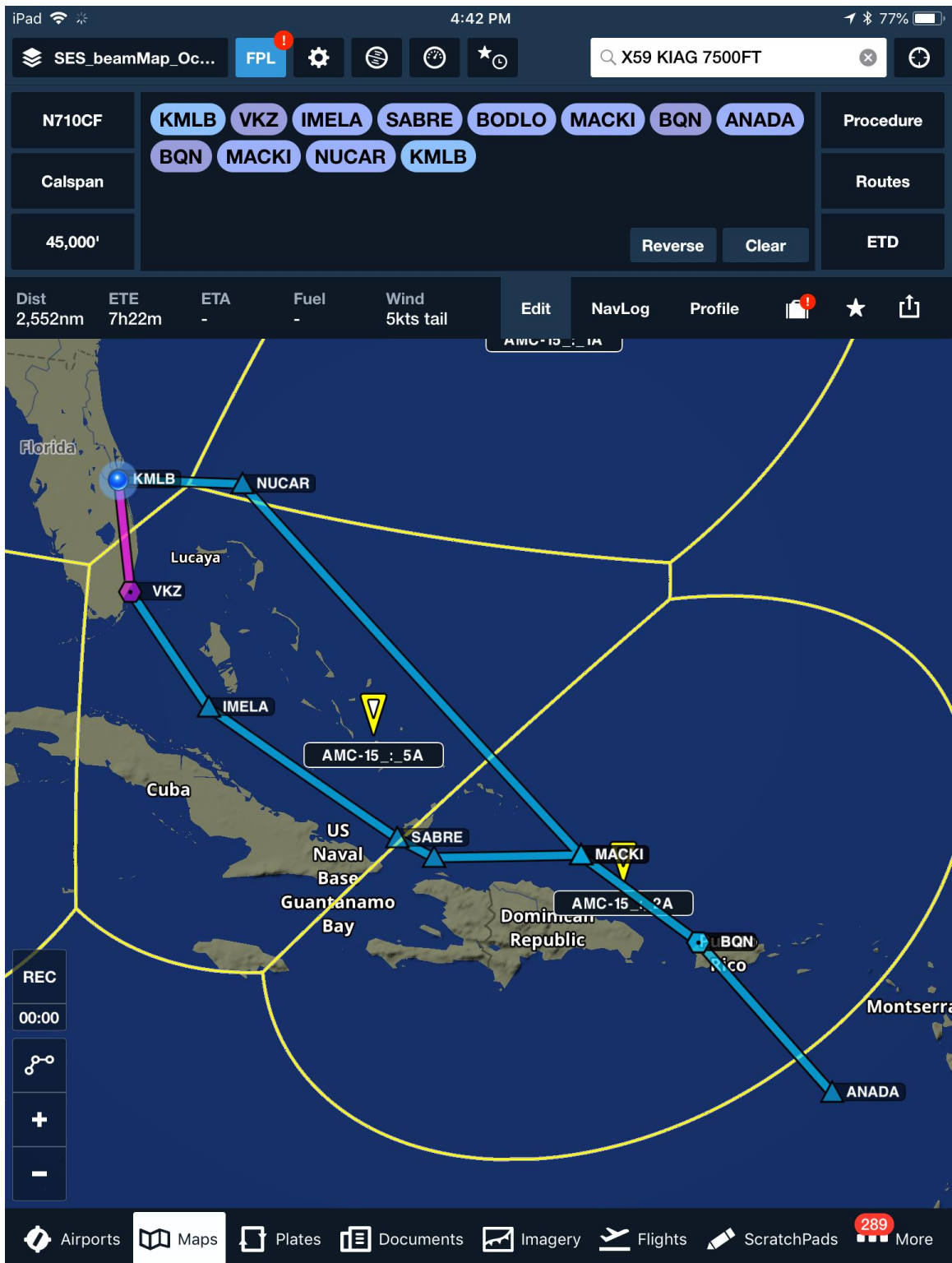
Buffalo, NY to Melbourne, FL



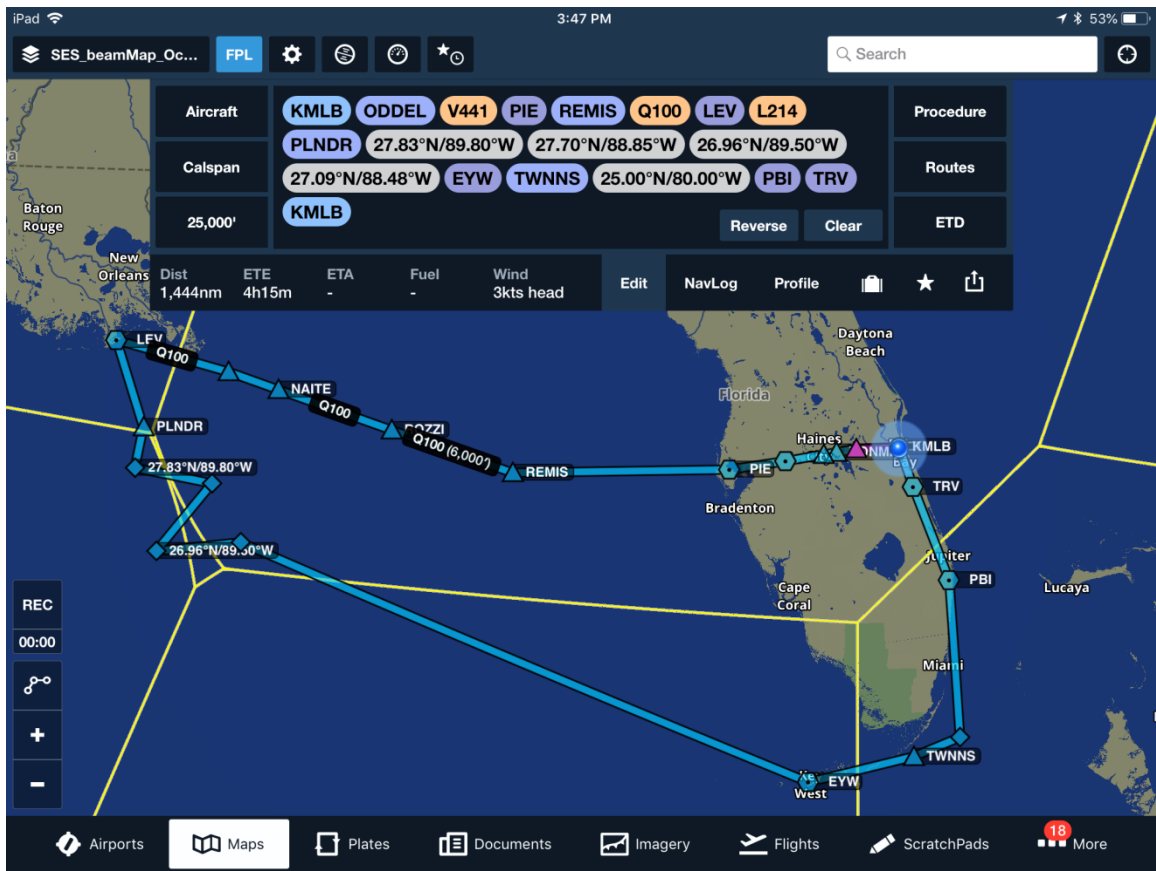
Regional Florida



Seattle, WA to Buffalo, NY



Melbourne, FL to Caribbean Region (new)



Gulf of Mexico (new)