

Thales Avionics, Inc.
Request for Testing the
Thales Advanced Connectivity Terminal, Ka-band (ACT-A) ESAA
Over Gulf of Mexico, Atlantic Ocean, and Caribbean Sea

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) using the ThinKom Ka2517 antenna, 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

On October 5, 2018 OET granted Thales Avionics a 2-year authorization for ACT-A flight testing in CONUS and US territorial waters.¹

The scope of Thales's ACT-A flight testing has 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 over the Gulf of Mexico, the Atlantic Ocean, and Caribbean Sea, as shown in the graphic below:

¹ See Call Sign WJ2XSO, File No. 0703-EX-CN-2018, granted October 5, 2018.



The ACT-A will not operate in the airspace or above territorial waters of any foreign country, and all test flights will originate and terminate within CONUS (no landings will be made in foreign countries).

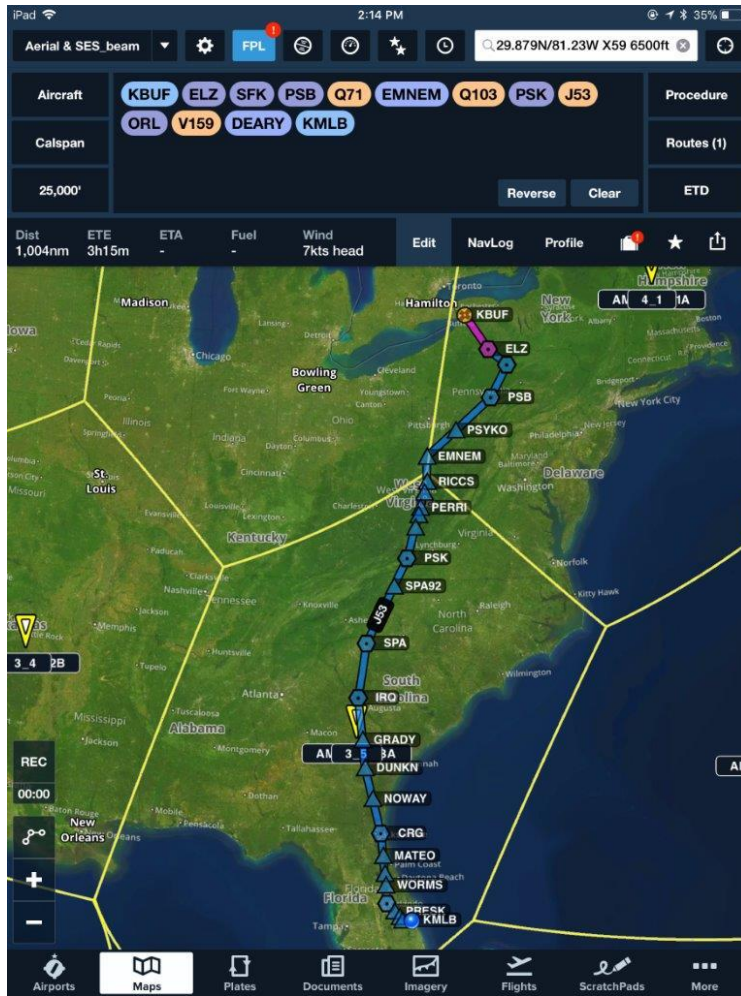
As shown in the FCC Form 442 there are no changes to the points of communication, spectrum, emission designators, or power levels specified in Thales's current experimental grant.

Per OET instructions to Thales in a September 18, 2018 meeting to discuss testing outside CONUS, certification letters from satellite operators SES (AMC-15 and AMC-16) and Hughes (Jupiter-1 and Jupiter-2) were previously submitted as Exhibits.

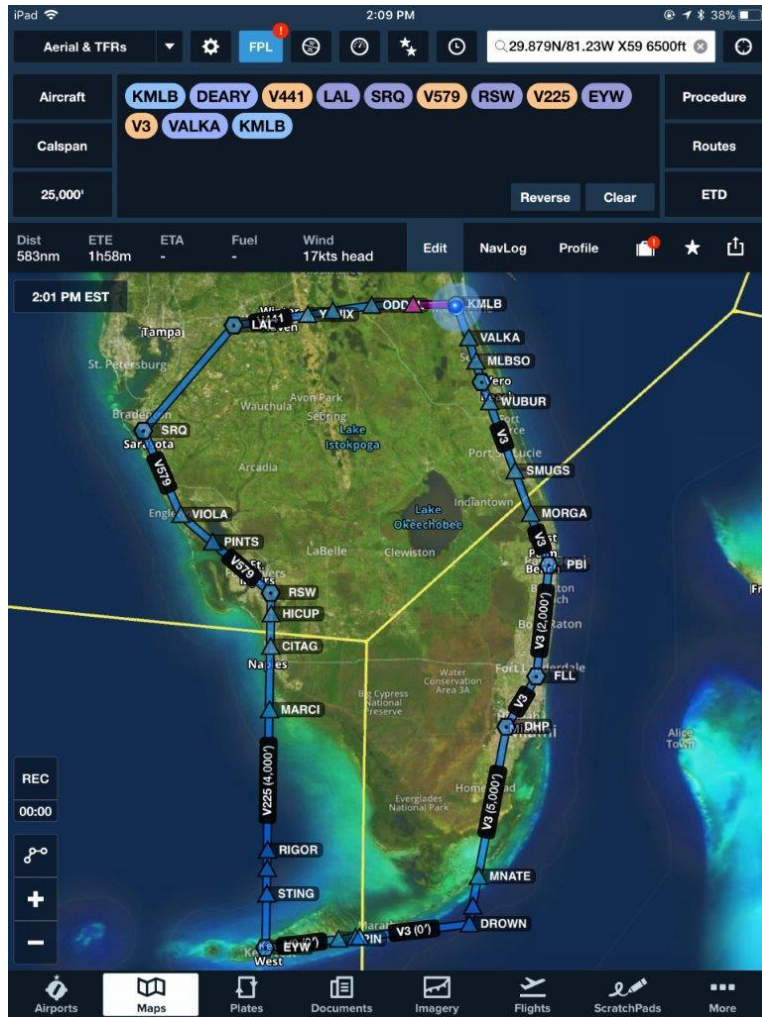
Grant of the ability to test over the requested waters will allow Thales to improve and expand its overall IFC service offerings to its airline customers by improving end-user experience with higher throughput rates, and allow Thales to offer services to airlines with trans-equatorial flight routes, where high skew angle conditions prevent two-axis, flat panel ESAA operations.

New Flight Test Routes

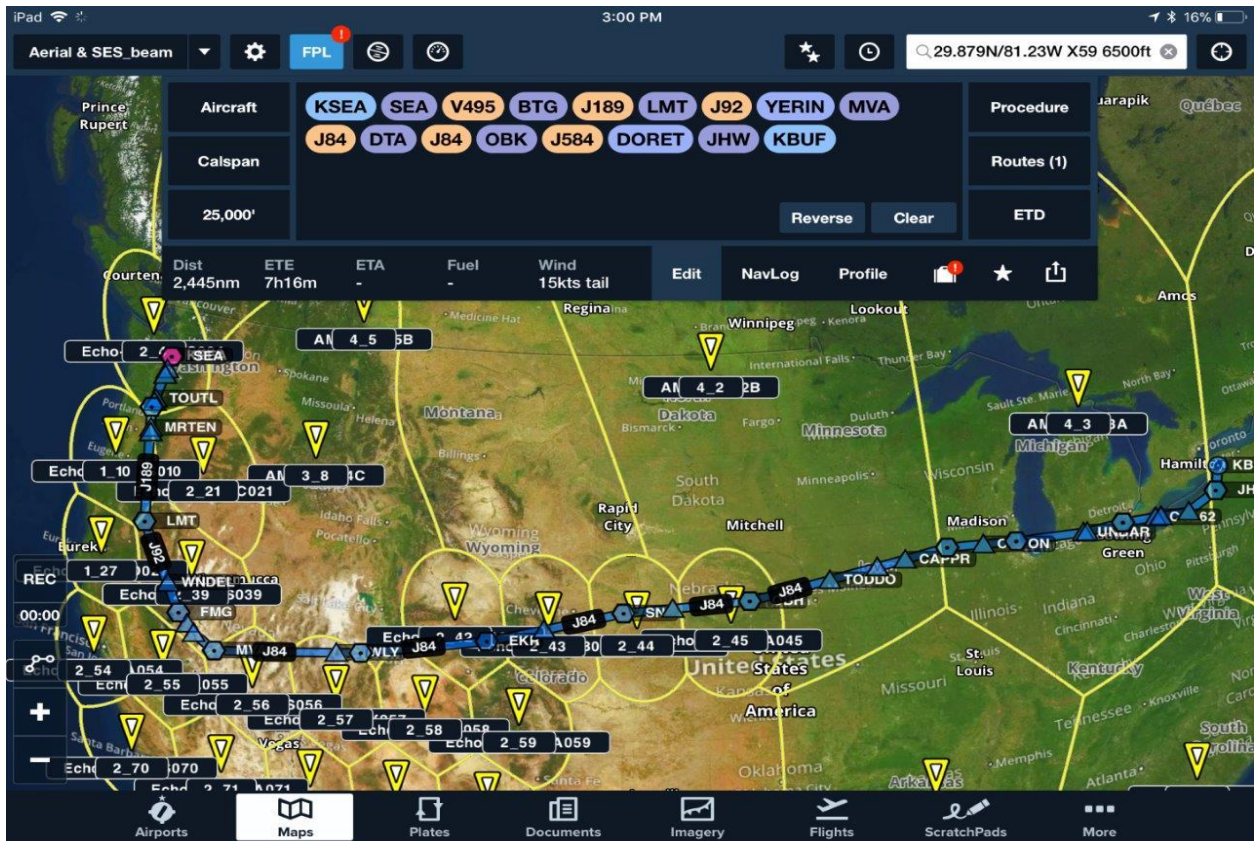
Flight tests will be conducted with the ACT-A installed on a US-registered, leased test aircraft (Gulfstream G3, tail number N710CF). The expected flight routes, including two new routes over the Gulf of Mexico, the Atlantic Ocean, and the Caribbean Sea are shown below. The flight tests over these waters are expected to begin on or about December 5, 2018:



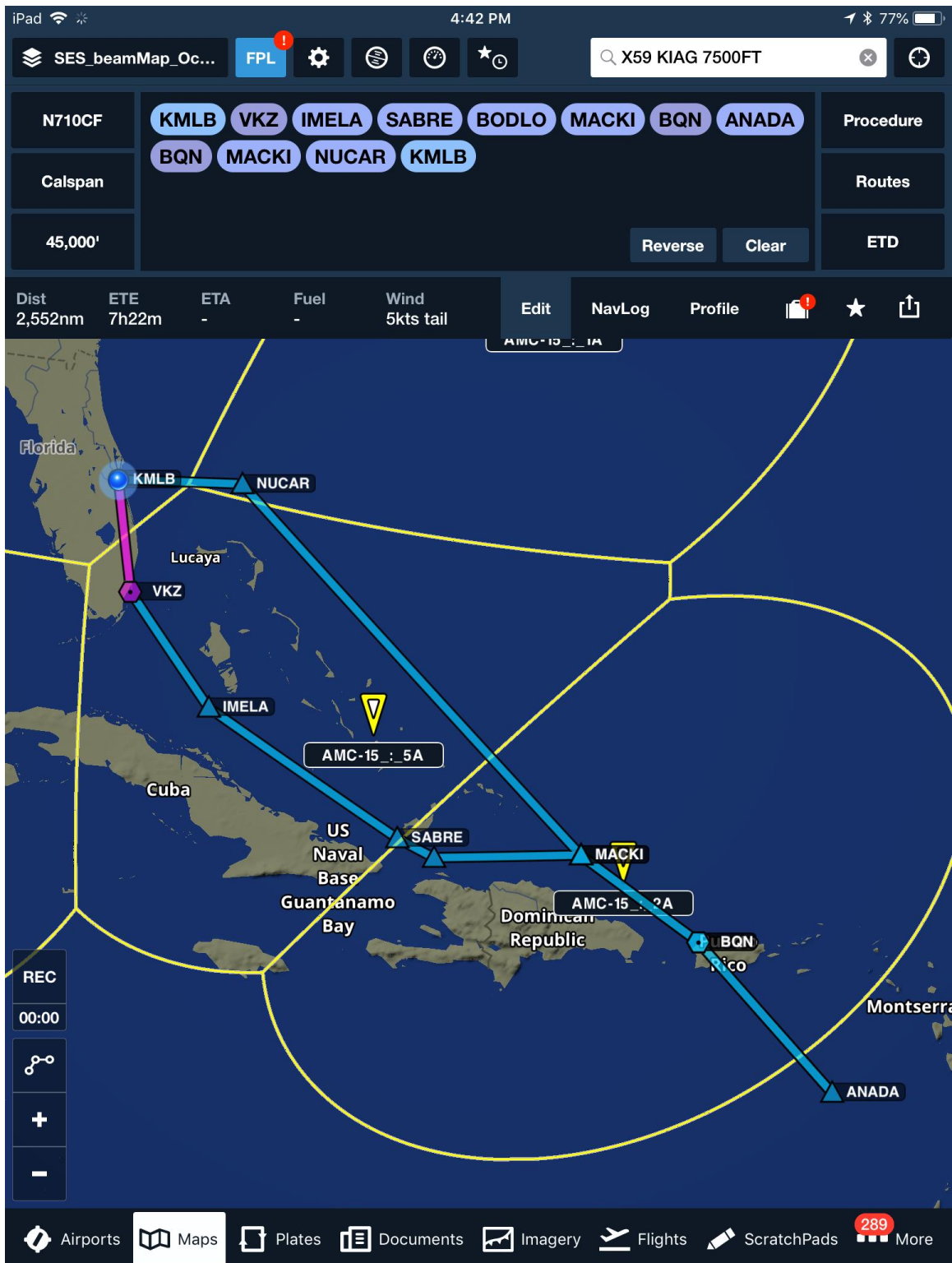
Buffalo, NY to Melbourne, FL



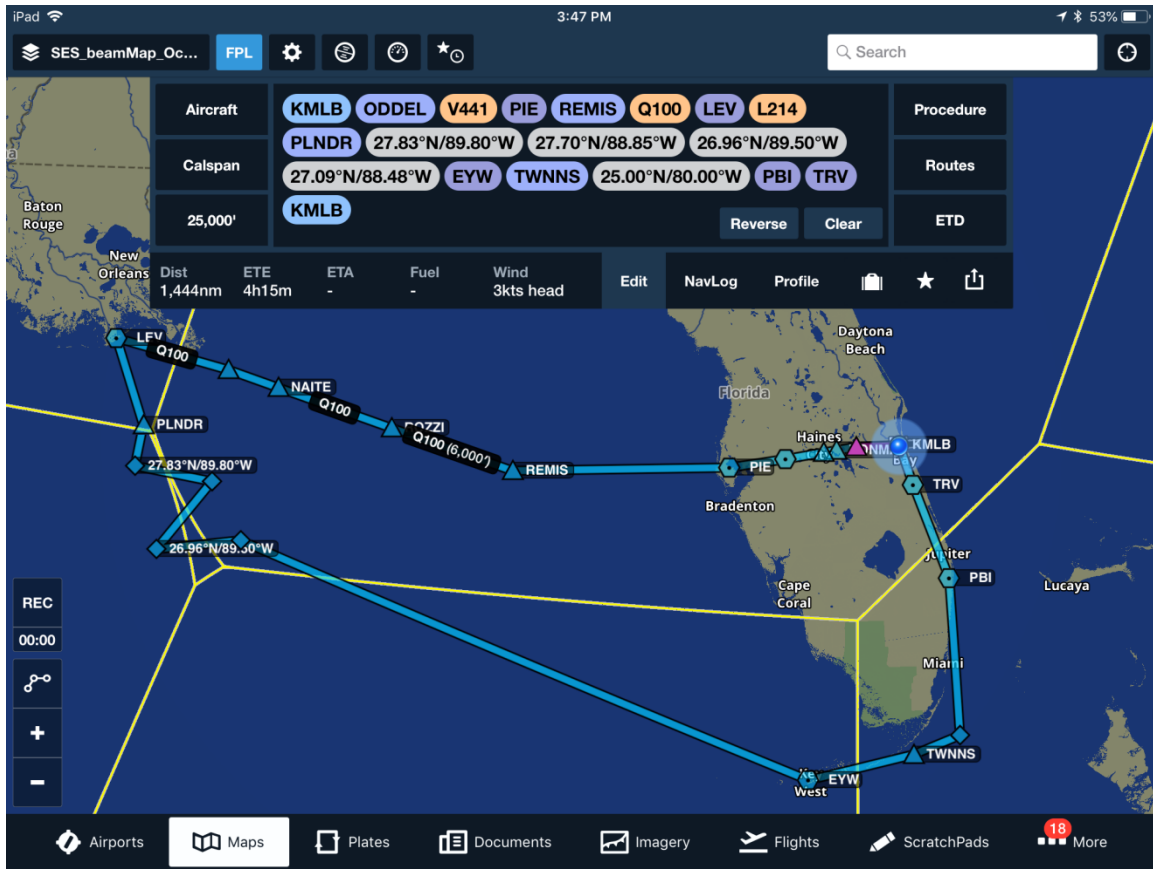
Regional Florida



Seattle, WA to Buffalo, NY



Melbourne, FL to Caribbean Region (new)



Melbourne, FL to Gulf of Mexico (new)

Stop Buzzer

The stop buzzer contacts for this testing are:

Martin Matura
Thales Avionics
321-292-0878

or

Thales NOC
949-754-6985