



Aviation Communication & Surveillance Systems
19810 North 7th Avenue
Phoenix, AZ 85027-4400

08 October 2019

Federal Aviation Administration
Spectrum Engineering & Policy, AJW-1C
800 Independence Avenue, SW.
Room 715E
Washington, D.C., 20591

Subject: Notification of FCC Equipment Certification Application for ACSS NXT Transponder part number 9006000-XXXXX (NXT-600), 9007000-XXXXX (NXT-700), 9008000-XXXXX (NXT-800)

FCC ID #: 2ACTZNXTVE19

ACSS FRN: 0004999231

Dear Sir or Madam,

In accordance with FCC Rules and Regulations, CFR Title 47, Part 87, Subpart D, Paragraph 87.147(d), Paragraph 87.147(d)(1), and Paragraph 87.147(d)(3), notification is hereby given from ACSS to file for FCC Equipment Certification for the ACSS NXT Transponder part number 9006000-XXXXX (NXT-600), 9007000-XXXXX (NXT-700), and 9008000-XXXXX (NXT-800).

The ACSS NXT Transponder obtained FAA TSO Authorization on 17 April 2014 for the following TSOs:

- TSO-C112d (Level 2dens Class 1) – Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/Mode S) Airborne Equipment
- TSO-C166b (Class 2) – Extended Squitter Automatic Dependent Surveillance-Broadcast (ADS-B) and Traffic Information Service-Broadcast (TIS-B) Equipment Operating on the Radio Frequency of 1090 Megahertz (MHz)

An update to the FCC Equipment Certification is being requested, because ACSS has replaced two parallel power amplifiers with one power amplifier on the Transceiver CCA, added parts to improve performance of the transmitter detector circuit on the Processor CCA, and changed connector type on the Interconnect CCA. This change will be classified as Hardware Modification B (NXT-600), A (NXT-700), and D (NXT-800).

This letter provides the equipment information per CFR Title 47, Part 87, Subpart D, Paragraph 87.147(d)(1) - *The notification must describe the equipment, give the manufacturer's identification, antenna characteristics, rated output power, emission type and characteristics, the frequency or frequencies of operation, and essential receiver characteristics if protection is required.*

"Describe the equipment": The NXT-600/-700/-800 family is a set of ADS-B compliant Mode S Transponders with different form factors designed to be installed in wide variety of aircraft types.

"Manufacturer's identification": Aviation Communication & Surveillance Systems, 19810 N. 7th Avenue, Phoenix, AZ 85027-4400

“Antenna characteristics”: The transponders are designed to be compatible with any antenna compliant with the specifications of TSO-C112(). These antennas radiate in an omnidirectional pattern with a peak gain of approximately 3.0dBi.

“Rated output power”: The maximum rated output power at the RF output port of the unit is 59.4dBm (871W).

“Emission type and characteristics”: The emission designator is 18M0M1D

“Frequencies of operation”: The transponder operates at a frequency range of 1090MHz +/- 1 MHz.

“Essential receiver characteristics if protection is required”: N/A

If you have any questions or to request additional information, please contact me by one of the methods below.

Sincerely,



John Soukup
Certification Engineer
ACSS Aircraft Integration and Certification
Email: John.Soukup@L3Harris.com
Phone: 623-445-6716