



U.S. Department
of Transportation
**Federal Aviation
Administration**

AUG 19 2009

Mr. Andy Leimer
Federal Communications Commission
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, Maryland 21046

Dear Mr. Leimer:

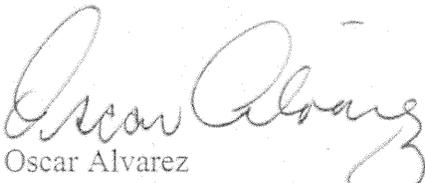
The Federal Aviation Administration (FAA), Office of Spectrum Engineering Services, has reviewed the Type Acceptance Certification request from Garmin International, Inc., for the Aircraft Mounted Mode C/S TAS/TCAS I Processor, GTS 850, FCC ID Number IPH-0104450. The FAA has no objections to certification of this device however; the FAA does have two comments on this submission.

In the Tests Report submitted by Rogers Labs, the tests for Modulation Characteristics and Occupied Bandwidth both state that the equipment meets the requirements of CFR 47 2.1049(c)(1) which would require the GTS 850 signal to be modulated with a 2500 Hz tone. Since it is not possible to modulate the GTS 850 with a 2500 Hz tone, the FAA believes that CFR 47 2.1049(h) is a more appropriate requirement for this system. The FAA believes that the GTS 850 meets the Modulation Characteristics and Occupied Bandwidth tests using CFR 47 2.1049(h) and that no additional testing is required.

The FAA is concerned with the accuracy of the emission designator proposed for this system. The emission designator proposed is 19M7Q1D indicating that the emission is angle-modulated during the period of the pulse. The modulation for this type of system is modulated by pulse amplitude, pulse position, and contains angle-modulation during the period of the pulse which is a combination of these modulations. Therefore, the FAA believes that an emission designator of 19M7V1D is more appropriate for this system.

Should you have any questions or concerns, please contact Mr. Donald Nellis, Electronics Engineer, Spectrum Planning and International Group, at (202) 267-9779.

Sincerely,



Oscar Alvarez
Spectrum Engineering Services