



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

Small Airplane Directorate
Wichita Aircraft Certification Office
1801 Airport Road, Room 100
Wichita, Kansas 67209

NOV 25 2015

Reply to: L115W-15-805

Mr. Robert C. Godsy
GARMIN International Inc.
1200 East 151st Street
Olathe, KS 66062

Subject: Request for revised Type 2 Letter of Acceptance (LOA) for Garmin's
Navigation database process

Reference: Garmin Type 2 Navigation Database LOA letter dated October 1, 2015
to Wichita ACO

Dear Mr. Godsy,

TYPE 2 FAA LETTER OF ACCEPTANCE

The FAA has determined that Garmin ("Garmin" refers to Garmin International in Olathe, KS and Garmin AT in Salem, OR except where specifically noted) complies with AC 20-153A and RTCA/DO-200A with regards to their processing of navigation data. This LOA supersedes the previous Type 2 LOA dated March 12, 2013. Compatibility has been established with the avionics systems identified in the RTCA/DO-200A List of Applicable Avionics Systems, 190-01999-00, dated September 23, 2015 or later FAA approved revisions.

The following terms and conditions are applicable to this Letter of Acceptance (LOA):

1. The Garmin International data quality requirements for the receipt of data from other sources, and for the delivery of data to their customers, are defined in Garmin DO-200A Compliant Database (G2CD) documents *G2CD Data Quality Requirements* (005-00210-17) and *G2CD Data Supplier Agreement* (005-00210-21), respectively. The Garmin AT data quality and customer delivery requirements are defined in Garmin AT documents *CNX Series RTCA DO-200A Requirements* (PD2243) and *CNX Series Database Interface Specification* (PD2250), respectively.
2. The Garmin International procedures for processing data are defined in *Aviation Navigation Database Release Procedures* (005-00210-15). The Garmin AT procedures for processing data are defined in the *CNX Series Database Updating Process* (PD2254).

3. Reporting of Failures, Malfunctions and Defects. Garmin must report to the FAA Wichita ACO any failure, malfunction, or defect of the aeronautical data produced under this LOA that may have a safety effect on operational use of the data.
4. Maintain a Quality Management System (QMS). Garmin must maintain a quality management system as described in RTCA/DO-200A, section 2.5. Changes to the QMS that may affect the data quality objectives must be reported to the FAA Kansas City MIDO before implementation.
5. Design Changes.
 - a. Garmin must submit minor changes to the data quality requirements, the data processing standards, or the quality management system to the FAA Wichita ACO in accordance with procedures described within Garmin standard operating practice *Aircraft Appliance Approval* (SOP-044). All other changes are considered major, and must be substantiated and accepted prior to implementation in the same manner as that for the original LOA.
 - b. Upon receipt of notification by the FAA Wichita ACO / Kansas City MIDO that an unsafe condition exists in a database product supplied under this LOA, Garmin shall develop corrective action and submit it to the FAA Wichita ACO / Kansas City MIDO for approval. Garmin shall expedite distribution of the approved corrective action to customers and users.
6. Garmin must perform periodic internal audits as described in RTCA/DO-200A, section 3, with the maximum time between audits (whether total or incremental) of not more than one year. Any major non-conformities as described in RTCA/DO-200A, section 3.4 must be reported to the FAA Wichita ACO / Kansas City MIDO. Additionally, the FAA may perform periodic audits in accordance with procedures described within Garmin International document *G2CD Quality Management Plan and Procedures* (005-00210-13) or Garmin AT document *RTCA/DO-200A Data Quality Management Plan* (IIM-8418).
7. This LOA applies to navigation databases only, and does not apply to Terrain, Obstacle, or Charting databases. Specifically, the database part numbers covered by this LOA are in RTCA/DO-200A List of Applicable Avionics Systems, 190-01999-00.
8. This LOA does not apply to any data identified as “Special” by Garmin or its Type 1 data supplier(s). Garmin and its Type 1 data supplier(s) must communicate to their customers any “Special” data included in the previously listed navigation databases that is not subject to Garmin International documents *G2CD Data Quality Requirements* (005-00210-17) and *G2CD Data Supplier Agreement* (005-00210-21) or Garmin AT documents *CNX Series RTCA DO-200A Requirements* (PD2243) and *CNX Series Database Interface Specification* (PD2250), as applicable. For any “Special” data communicated to their customers, the end user must satisfy itself regarding the suitability for the intended use.

9. Garmin must also advise its customers of any data received from its Type 1 data supplier(s) that is excluded from the previously listed navigation databases due to system or software limitations.
10. Garmin must advise their customers of the status of their LOA as well as the status of LOAs (or foreign acceptance, including designation of the foreign authority that acknowledges the foreign source's compliance to RTCA/DO-200A and the means of approval or acceptance) for all previous chain participants (up to, but not including, a State's Aeronautical Information Publication, AIP). The method must be timely to ensure that customers can react to changes in the status of their LOA.
11. This LOA assumes that Garmin's customers will access the Garmin web site for LOA status, flight alerts, "Special" data and data exclusion information.

Sincerely,



Daniel S. Hilton
Associate ACO Manager,
Electrical Systems and Avionics
Wichita Aircraft Certification Office

Cc: Wichita MIDO