

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

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

April 2, 2007

Mr. Robert W. Billings **GARMIN INTERNATIONAL** 1200 East 151st Street Olathe KS 66062

Subject:

TYPE 2 FAA letter of Acceptance (LOA)

Reference: GARMIN letter dated March 13, 2007

Dear Mr. Billings:

TYPE 2 FAA LETTER OF ACCEPTANCE

The FAA has determined that Garmin International complies with AC 20-153 and RTCA/DO-200A with regards to their processing of navigation data. Compatibility has been established with the avionics systems identified in the List of Applicable Avionics Systems, dated March 15, 2007, 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 documents G2CD Data Quality Requirements (005-00210-17) and G2CD Data Supplier Agreement (005-00210-21), respectively.
- 2. The Garmin International procedures for processing data are defined in Aviation Navigation Database Release Procedures (005-00210-15).
- 3. Reporting of Failures, Malfunctions and Defects. Garmin International 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 International 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 International 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 International shall develop corrective action and submit it to the FAA Wichita ACO / Kansas City MIDO for approval. Garmin International shall expedite distribution of the approved corrective action to customers and users.
- 6. Garmin International 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 document G2CD Quality Management Plan and Procedures (005-00210-13).
- 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:
 - G1000, P/N 006-D0170-()
 - GNC 400/500, P/N 006-D0018-()
 - GNC 400W/500W, P/N 006-D0554-()
- 8. This LOA does not apply to any data identified as "Special" by Garmin International 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 documents G2CD Data Quality Requirements (005-00210-17) and G2CD Data Supplier Agreement (005-00210-21). For any "Special" data communicated to their customers, the end user must satisfy itself regarding the suitability for the intended use.
- 9. Garmin International 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 International 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 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 International's customers will access the Garmin web site for LOA status, flight alerts, "Special" data and data exclusion information.

If you have questions regarding this authorization, contact Roger Souter at 316-946-4134, email at Roger.Souter@FAA.GOV.

Sincerely,

Margaret Kline

Manager, Wichita Aircraft Certification Office

Enclosure

cc: Kansas City MIDO

Enclosure List of Applicable Avionics Systems March 15, 2007

The following list identifies Garmin avionics systems that utilize navigation databases specified on Garmin's Type 2 LOA:

Garmin G1000 Family using navigation database P/N 006-D0170-():

- GDU 1040, P/N 011-00972-()
- GDU 1040A, P/N 011-00916-()
- GDU 1042, P/N 011-01080-()
- GDU 1043, P/N 011-01079-()
- GDU 1044, P/N 011-01078-()
- GDU 1044B, P/N 011-01274-()
- GDU 1045, P/N 011-00819-()
- GDU 1500, P/N 011-01108-()

Garmin GNC 400/500 Family using navigation database P/N 006-D0018-():

- GPS 400, P/N 011-00504-()
- GNC 420, P/N 011-00506-()
- GNC 420A, P/N 011-00837-()
- GNS 430, P/N 011-00280-()
- GNS 430A, P/N 011-00836-()
- GPS 500 TAWS, P/N 011-00863-()
- GPS 500, P/N 011-00562-()
- GNS 530 TAWS, P/N 011-00940-()
- GNS 530, P/N 011-00550-()
- GNS 530A TAWS, P/N 011-00864-()
- GNS 530A, P/N 011-00835-()

Garmin GNC 400W/500W Family using navigation database P/N 006-D0554-():

- GPS 400W, P/N 011-01057-()
- GNC 420W, P/N 011-01058-()
- GNC 420AW, P/N 011-01059-()
- GNS 430W, P/N 011-01060-()
- GNS 430AW, P/N 011-01061-()
- GPS 500W, P/N 011-01062-()
- GPS 500W TAWS, P/N 011-01063-()
- GNS 530W, P/N 011-01064-()
- GNS 530W TAWS, P/N 011-01065-()
- GNS 530AW, P/N 011-01066-()
- GNS 530AW TAWS, P/N 011-01067-()