



EASA Safety Information Bulletin

SIB No.: 2009-14
Issued: 15 June 2009

Subject: **Garmin Global Positioning System (GPS) Navigation Units (400W / 500W series and GNS 480) – Upgrade to main unit software and GPS software**

Ref. Publications: Garmin Software Service Bulletins (SB):
 SB 0848 Rev. B dated 20 March 2009 (400W / 500W Series, Main software version 3.20 and GPS software version 3.2)
 SB 0850 Rev. B dated 2 February 2009 (GNS 480 / CNX80, Main software version 2.3 and GPS software version 3.2)

Garmin Service Advisories / Alerts (SA):
 SA 0811 dated 18 April 2008
 SA 0825 dated 22 July 2008
 SA 0838 Rev. A dated 3 October 2008
 SA 0841 Rev. A dated 29 October 2008

Description: Garmin has made a software upgrade available for their GPS WAAS (Wide Area Augmentation System) capable navigation units, which correct various anomalies. The improvements include:

For the GNS 400W/500W series:

- Flight Plan Sequencing Issue. For details see Garmin Service Alert SA0811.
- LPV and LNAV/VNAV Approaches with Three-Character Airport Identifiers. For details see Garmin Service Advisory SA0825.
- GPS/WAAS Loss of Reception in Alaska, Northwest Canada, and Eastern Russia. For details see Garmin Service Advisory SA0838.
- Inaccurate VNAV Advisories. For details see Garmin Service Advisory SA0841.
- Approach course angles are now switched to magnetic heading as selected
- Correct update of default airport after selecting of new flight plan
- All approaches are now depicted the same way on the Approach Waypoint page and the NAV Map pages
- Map page panning with units set to statute miles accurately displays distances in statute miles.

- Correct external WPT discrete annunciation to reduce extraneous annunciations and a continuously illuminated condition.
- No out of service satellite tracking
- 530W default NAV page now displays the icon for the own aircraft properly aligned with the map after the Autozoom out function occurs

For the GNS 480 (also known as CNX80):

- GPS/WAAS Loss of Reception in Alaska, Northwest Canada, and Eastern Russia. For details see Garmin Service Advisory SA0838.
- Reduction of nuisance Loss of Integrity (LOI) alerts
- Support for approaches at airports below sea level
- Correct update of default airport after selecting of new flight plan
- Correct issue with COM monitor so it does not deactivate after 2 seconds of keyed mike.
- Correction of discrepancy between Distance To Destination on Map Pages and Distance fields in the Flight Plan pages.
- Support for manual holds at final approach fixes
- No out of service satellite tracking

Recommendation: EASA recommends operators of the affected aircraft to take the following actions:

- Perform an assessment to evaluate if they are potentially affected by the described anomalies
- Upgrade the GPS software, if the intended aircraft operation is affected by at least one anomaly.

Applicability:

- Garmin GNS 480 (CNX80)
 - Garmin GNS 400W / 500W series: GPS 400W, GNC 420W, GNC 420AW, GNS 430W, GNS 430AW, GPS 500W, GPS 500W TAWS, GNS 530W, GNS 530AW, GNS 530W TAWS, and GNS 530AW TAWS.

These GPS units are known to be installed on, but not limited to, Part 23 (FAR, JAR, CS) certificated aeroplanes and Part 27 certificated helicopters.

Contacts:

For further information contact the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA; E-mail: ADs@easa.europa.eu.

Service advisories referenced in this SIB may be obtained from Garmin dealers or from the Garmin web page at:
<http://www8.garmin.com/aviation/servicenotices.jsp>

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