SERVICE INFORMATION NO. SI-40-109

NOTE: SI's are used only:
1) To distribute information from DAI to our customers.
2) To distribute applicable information/documents from our suppliers to our customers with additional information.
Typically there is no revision service for SI's. Each new information or change of that will be sent along with a new SI.

I. TECHNICAL DETAILS

1.1 Airplanes affected:

All DA 40 aircraft equipped with GARMIN G1000 System, see also section 2.1.

All DA 40 F aircraft equipped with GARMIN G1000 System, see also section 2.1.

1.2 Subject:

GARMIN Service Advisory No. 0912 Revision A
ATA-Code: 34-00

1.3 Reason:

The purpose of this GARMIN Service Advisory is to explain how large Estimated Position Uncertainty (EPU) values might be displayed by the equipment when there are no associated flags or loss of integrity annunciations displayed.

1.4 Information:

For detailed technical information refer to the GARMIN Service Advisory No. 0912 Revision A.

II. OTHERS

2.1 STC Information:

The GARMIN G1000 system and its associated systems, components and software are installed in the DA 40 and DA 40 F airplanes under one of the following known GARMIN STC:

- FAA STC No:
  - SA01444W-D (G1000 System and GFC 700 A/P System with optional WAAS installation)

Additionally to the above mentioned STC further GARMIN STC's may be approved.

The applicability of the attached GARMIN publication must be checked. For this purpose refer to the related airplane documentation, contact your responsible GARMIN Service Centre or your local authority.

2.2 Miscellaneous:

The GARMIN Service Advisory No. 0912 Revision A is attached to this SI.

In case of doubt contact GARMIN.

SERVICE ADVISORY

NO.: 0912 Rev A

TO: Owners/Operators of Garmin GPS/WAAS products operating in Australia and New Zealand

DATE: May 29, 2009

SUBJECT: SBAS Operations in Australia, New Zealand and South Pacific Regions

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AFFECTED PRODUCTS

All Garmin G1000, G900X, G950, Perspective™, Prodigy™ Integrated Avionics Systems, 400W/500W Series and GNS 480 (CNX80) units with WAAS are affected.

DESCRIPTION

The purpose of this advisory is to explain how large Estimated Position Uncertainty (EPU) values might be displayed by the equipment when there are no associated flags or loss of integrity annunciations displayed.

The affected Garmin navigation systems are designed to continuously display an EPU value on the satellite status page. Operating outside of the Multi-functional Satellite Augmentation System (MSAS) service area with limited MSAS coverage can cause elevated EPU values to be displayed if MSAS signals are received. Under these circumstances, EPU values are not used for integrity monitoring and high values will not trigger a loss of integrity (LOI) annunciation.

PILOT ACTION

The flight crew should consider the LOI indications for system status during flight operations and not the EPU. While the EPU is one figure of merit, the LOI provides status of the navigation solution and is the controlling annunciation for integrity of the flight operation being performed.

For installations with GPS software version 3.0 and earlier, Garmin recommends operating the system with SBAS disabled when outside of an SBAS service area if TAWS is an operational requirement. This will neither enhance nor degrade navigation availability outside of SBAS coverage areas.

For installations with GPS software version 3.1 and later, when operating the system with limited coverage of an SBAS (e.g. WAAS or MSAS) system but outside of the service area, Garmin recommends enabling SBAS and allowing the system to automatically select the mode of operation.

RESOLUTION

Garmin recommends that the system is loaded with the latest GPS engine software that is approved for the installation.