

# 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

### AFFECTED PRODUCTS

All Garmin G1000, G900X, G950, Perspective<sup>™</sup>, Prodigy<sup>™</sup> 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.

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