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AVIATION SERVICE DOCUMENT NOTIFICATION

TO:	Owners of Record for GTS 8X0 Units Installed in a Non-GX000 Integrated Flight Deck
DATE:	February 06, 2017
SUBJECT:	GTS 8X0 Software Version 4.00 for Non-GX000 Integrated Flight Deck Installation Only
CERTIFICATION APPROVAL:	TSO Authorization

COMPLIANCE

Optional – This software update may be incorporated at the owner's discretion and is not warranty reimbursable.

PURPOSE

GTS 8X0 software version 4.00 includes the following enhancements:

- ADS-B IN (TSO-C195b) functionality which replaces the previous ADS-B correlation functionality. This allows for display and alerting on all ADS-B targets, not just those correlated with a target that is being actively interrogated. Note that installations which don't use an HSDB interface to the display will only display ADS-B targets using TCAS symbology.
- Support for ADS-B OUT+ protocol over RS232 to receive ADS-B IN GPS data.
- Altitude filtering will no longer filter intruders based on altitude limit (ABV,BLW,NRM,UNR), and will now send all candidate intruders and the altitude limit selection to display. Displays will perform filtering as needed.
- Functionality to estimate height above ground (Calculated Height Above Ground config - disabled by default). GTS can make use of a radar altimeter, a terrain database, a runway database, pressure altitude when system was on-ground, or onboard airport database. (Note that if a Radar Altimeter is installed and this feature is enabled, there is no functional change as the GTS continues to use Radar Altimeter data.)
- Sensitivity level selection (SL A vs SL B) processing can use Calculated Height Above Ground data.
- Aural alert suppression will suppress alerts when Calculated Height Above Ground indicates ownship is below ~400 ft AGL.
- Aural alerting configuration to enable shorter aural alerts (Short Audio config - disabled by default). When multiple aural alerts occur, the subsequent alerts are shortened to 'Traffic, Traffic'.
- Process Heading and Pressure altitude data from GTNs and GDU 6XX series.
- Report the correct altitude resolution (100ft vs 1ft) in the A429 Traffic Output data (Label 203).
- Reduced the chances of a pop-up TA for a target that is physically very far away.
- Reduced chances of false track creation in crowded environments.
- Improved airborne/on-ground determination for Mode C intruders.
- Improved bearing tracking of intruders during ownship maneuvers and Mode S intruders at long ranges.

NOTE

To enable all of the functionality of this software update, Garmin recommends the installation has (as applicable) an HSDB interface between the GTS and GTN/GDU620, and minimum software versions GTN (v6.10) and GDU 620 (v7.00). Prior GTN and GTU software versions are acceptable, but may not enable all functionality in the preceding list.

PRODUCTS AFFECTED

All GTS 8X0 (GTS 800/GTS 820/GTS 850) units with software version 3.10 (or earlier) and interfaced to a GTN 6XX/7XX, GNS 4XX(W)/5XX(W), GNS 480, G500, G500H, G600, GMX 200, MX20, or other 3rd party flight display system are affected.

The current GTS 8X0 software version can be viewed by using the GTS 8X0 Install Tool, on the software label adjacent to the GTS 8X0 serial number tag (for installations unable to electronically display the software part number), or on the display for those units interfaced through HSDB (e.g. GTN 6XX/7XX, G500, G500H, and G600).