



SERVICE ALERT

NO.: 0936 Revision B

TO: Owner/Operators of GNS 400W/500W series navigation systems with Main Software version 3.20 and Garmin Integrated Flight Deck Systems with GDU Software version 9.10 to 9.14.

DATE: 27 August 2009


SUBJECT: Navigation error condition concerning terminal procedures with Direct-to-Fix (DF) legs

Revision B: Added figures, updated Resolution section

AFFECTED PRODUCTS

All GNS 400W/500W series with Main Software version 3.20 and all G900X, G950, G1000, Cirrus Perspective®, and Embraer Prodigy™ Systems with GDU Software versions 9.10 through 9.14 are affected.

ISSUE

Garmin has discovered an issue whereby the navigation system may provide incorrect CDI guidance and active leg indication on the navigation map while flying a published terminal procedure. This condition can occur when the flight plan automatically sequences to a leg coded as a Direct-to-fix or when the active Direct-to waypoint is deleted from the flight plan. Direct-to-fix legs are identified on procedure charts by the words "direct to" in the textual description and the direct-to icon  displayed for the active leg on the GNS 530W/430W or Garmin Integrated Flight Deck active leg field.

If this condition is experienced, the following indications may appear (refer to Figure 1 and Figure 2 for examples):

- a) Waypoint alerts are not provided at the waypoint prior to the automatic Direct-to-fix leg.
- b) The selected course, desired track, and CDI provide guidance to a non-published course. The non-published course may be depicted by Pathways (if equipped), but is NOT displayed on the navigation map.
- c) The previous leg of the flight plan remains shown as a magenta line on the navigation map, though it is no longer the active leg.
- d) On the GNS 400W/500W series, the previous waypoint of the flight plan is incorrectly displayed as the active waypoint.

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Figure 1. Garmin Integrated Flight Deck System PFD Display While on Second DF Leg

NOTE

Figures 1 and 2 show the magenta course line behind the aircraft position.

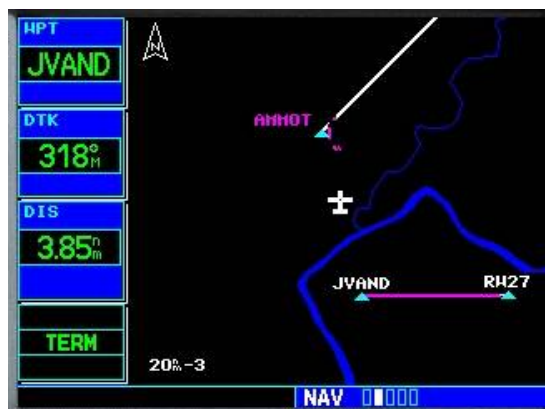



Figure 2. GNS 400W/500W Series Display While on Second DF Leg

PILOT ACTION

Do not rely on automatic sequencing of Direct-to-fix waypoints. Do not delete an active Direct-to waypoint from the flight plan. If any of the above indications occur at any time, stay on the published course using back-up navigation techniques and manually activate a Direct-to leg using the Direct-to button () to the appropriate published waypoint in the published terminal procedure.

RESOLUTION

400W/500W Series Main Software version 3.30 corrected this issue as described in Garmin Software Service Bulletin 0918 Revision A.

Garmin will address this issue for the Garmin Integrated Flight Deck Systems with GDU Software version 9.10 to 9.14 in a future software release.