OWNER ADVISORY

SEB-34-02

TITLE

NAVIGATION - GARMIN G1000 SYSTEM SOFTWARE UPGRADE TO VERSION 0563.26 FOR AIRPLANES EQUIPPED WITH NAV III (WAAS-ENABLED INSTALLATIONS ONLY)

TO:

Cessna 172, 182, and 206 Owners

REASON

This owner advisory is to inform you that SEB-34-02 Revision 1 has been issued.

Version 0563.26 software service bulletin provides an upgrade that includes the following changes:

- **Resolution for Garmin Service Advisory No. 1129 Rev A** – Momentary loss of GRS 77 and GDC 74A functions as addressed in Cessna Service Newsletter SNL11-15
- **Approach Identifiers** – Added the ability to check for approaches with 3-numeric approach identifiers so that WAAS LPV approaches with 3-numeric identifiers would be available; software fix to Garmin Service Advisory No.: 0825.
- **Flight Plan Sorting** – The functionality of sorting the stored flight plans was removed; software fix to Garmin Service Advisory No.: 1118.
- **Graphical METARs** – The display of graphical METARs is added to the active flight plan page and moving maps.
- **METAR Text** – Raw METAR text is displayed on the active flight plan page and moving maps when a METAR flag is highlighted with the map cursor.
- **Weather Legend** – A weather legend is added to the maps that share the weather-related soft keys (NEXRAD, XM, LTNG, and METAR). The display of this legend is controlled via the Legend soft key in the MAP tier of soft keys.
- **METAR Search Radius** – The active flight plan page can now be configured to show a METAR flag (and corresponding report) from a nearby location for any waypoint in the flight plan without an active reporting station. The search radius is set to 30 NM.
- **Selected-Altitude Intercept Arc** – A Selected-Altitude Intercept Arc is displayed on the moving maps that follow: Navigation map, PFD inset map, AUX - Trip Planning map, Active Flight Plan page map, and all NRST maps. A cyan arc is drawn across the active leg (when enabled via the Map Setup) to indicate the location at which the aircraft will reach the selected altitude based on the current barometric altitude, vertical speed, and ground speed.
- **Profile View** – The profile view option is added to the MFD Navigation Map. When enabled, the airplane's vertical position over terrain and obstacles is shown centered on the current ground track. When datalink weather is available, winds aloft information is also shown, which depicts a headwind or tailwind as a function of altitude. This vertical profile view is pilot configurable.
- **Circular SAR Pattern** – A circular search and rescue pattern is now available with the accomplishment of Cessna Service Bulletin SEB-34-01 Garmin G1000 Enhanced Search and Rescue Enablement.
- **Runway Highlights** – SVT no longer renders a runway highlight on the PFD synthetic view when there is obscuring terrain between the current aircraft position and the runway.
- **Dual Navigation Databases** – This feature allows a future navigation database to be stored in a standby location on the SD card in the bottom slot of each GDU. When the standby database becomes effective (as determined by the system date and time) the standby database will be automatically loaded into the active location internal to the GDU. This allows users to proactively update their aircraft with the next navigation cycle as soon as it becomes available, rather than having to wait until the first effective date to switch over.
- **Database Crossfill** – This feature allows most databases to be automatically cross-filled from the bottom SD card in one GDU to the bottom SD card in the other GDU. The following databases are supported: Basemap, Terrain, Airport Terrain, Obstacle, SafeTaxi, Airport Directory, and Standby Navigation.

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- **Startup Screen** – When the dual navigation database feature is active, the Garmin startup screen is now displayed for up to 150 seconds at power up, when necessary, while the internal navigation database is updating. The following message is displayed on the screen: "Please Wait. Navigation Database Update in Progress. Do Not Remove Power from Displays". If the database update has not completed during the allotted time, an error message is then displayed on the MFD and the navigation database is disabled for that power cycle.
- **DB SYNC** – Manual control of the DB SYNC function is removed.
- **Geometric Altitudes** – All GPS-derived geometric altitudes that are referenced to sea level are now displayed using the label "GSL".
- **Voice Call-Out Alerts** – Voice call-out alerts issued within 5 NM of a runway threshold are now based only upon the GPS height above that runway threshold.
- **Improved Lighting Curve** – The lighting curve has been updated for the displays and their bezels to provide more optimal dimming characteristics while under manual control with the dimming potentiometer.
- **Pilot-Selectable MGRS Position Format** – This configuration item enables the ability to display GPS position according to the Military Grid Reference System, and is controlled by a new setting on the AUX System Setup page.
- **Waypoint Arrival Alerts** – This configuration item enables the 'arriving at [waypoint]' advisory alert when the aircraft is 10 seconds away from reaching the arrival alert distance to the destination waypoint.

SEB-34-02 Revision 1 provides parts and instructions to upgrade the Garmin G1000 software on WAAS-enabled installations to version 0563.26.

COMPLIANCE

MANDATORY. This service bulletin must be accomplished within the next 200 hours of operation or 12 months, whichever occurs first.

NOTE: For NAV III airplanes equipped with GFC-700 autopilot, Cessna Service Bulletin SB09-34-05 (Garmin G1000 System Software Upgrade to 563.14 for Airplanes Equipped with NAV III and GFC 700 AFCS Autopilot) (or later revision) must be accomplished before compliance with this service bulletin.

NOTE: For NAV III airplanes equipped with KAP-140 autopilot, Cessna Service Bulletin SB07-34-02 (Garmin G1000 System Software Upgrade to 563.03) (or later revision) must be accomplished before compliance with this service bulletin.

NOTE: Existing Garmin software backup CDs shall be destroyed and discarded to eliminate the possibility of loading the incorrect software at a later date.

NOTE: Compliance with SEB-34-02 Revision 1 is not required if in compliance with the Original Issue.

LABOR HOURS

2.0 man-hours to load the software upgrade

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with the Garmin G1000 Terrain Awareness System (TAWS-B)

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with the Garmin G1000 Chartview System

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with Garmin G1000 Synthetic Vision Technology (SVT)

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with Garmin G1000 Search and Rescue

If necessary, 0.2 man-hour to do the standby battery ammeter battery calibration procedure

If necessary, 0.2 man-hour to do the dual audio panel configuration procedure

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with Garmin G1000 Enhanced Vision System (EVS)