



SERVICE ADVISORY

NO.: 0817 Rev B

TO: All Garmin Aviation Service Centers
DATE: 24 June 2008
SUBJECT: TERRAIN/TERRAIN-SVS (Non-TAWS) Forward Looking Terrain Avoidance (FLTA) Alert Over the Open Ocean/Sea
REVISION B: Attached Garmin Service Letter

AFFECTED PRODUCTS

All TERRAIN-SVS-equipped (Non-TAWS) G1000/G950/G900X and all TERRAIN-equipped (Non-TAWS) GNS 400W/GNS 500W Series, and GPSMAP 296/396/495/496 units are affected.

NOTE

Non-WAAS equipped GNS 400/GNS 500 Series units are not affected.

DESCRIPTION

Garmin has identified an issue concerning the Terrain Database, whereby Forward Looking Terrain Avoidance (FLTA) alerts are not available when flying over the open ocean/sea (specifically any body of water at sea level). The TERRAIN/TERRAIN-SVS feature functions properly in all other locations.

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RESOLUTION

For TERRAIN-SVS-equipped G1000/G950/G900X and TERRAIN-equipped (Non-TAWS) GNS 400W/GNS 500W Series units:

Terrain Database 08T2 is now available on the Garmin website (<http://shop.garmin.com/aviation/databases/>). The 08T2 Terrain Database download will be free of charge until 12/31/08 for G1000/G950/G900X and GNS 400W/GNS 500W Series units only. Refer to the attached Garmin Service Letter for instructions on installing Terrain Database 08T2.

For GPSMAP 296/396/495/496 units:

NOTE

For GPSMAP products a system software update, not a Terrain database update, is required to address this issue.

The software versions listed below will be made available on the Garmin website (www.garmin.com), free of charge.

GPSMAP 296	System Software Version 5.40
GPSMAP 396	System Software Version 4.50
GPSMAP 495	System Software Version 2.10
GPSMAP 496	System Software Version 3.60

Until the database/software update is installed, operators should be aware that FLTA alerts are not available when flying over the open ocean/sea (specifically any body of water at sea level).



SERVICE LETTER

TO: All Owner/Operators of TERRAIN-SVS-equipped G1000, G950, G900X, and TERRAIN-equipped GNS 400W/GNS 500W Series units
DATE: 24 June 2008
SUBJECT: Terrain Database Update 08T2

PURPOSE

This service letter provides instructions to install Terrain Database 08T2, which corrects the Forward Looking Terrain Avoidance (FLTA) alerts issue described in Garmin Service Advisory 0817. The Obstacle Database is not affected by this update. Compliance with this Service Letter by the owner/operator provides compliance to Garmin Service Bulletin 0820.

DESCRIPTION

This modification consists of obtaining Terrain Database 08T2 and uploading the Terrain Database to the affected unit.

NOTE

Terrain Database 08T2 can be downloaded from the Garmin website free of charge until the release of the next terrain database.

A person holding a valid private pilot, commercial pilot, or ATP certificate may accomplish this procedure by complying with the sections (MODIFICATION INSTRUCTIONS, TESTING PROCEDURES, and MAINTENANCE RECORDS) applicable to your installation.

PRODUCT AFFECTED

All TERRAIN-SVS-equipped G1000, G950, G900X, and TERRAIN-equipped GNS 400W/GNS 500W Series units are affected.

NOTE

Non-WAAS equipped GNS 400/GNS 500 Series units are not affected.

COMPLIANCE

Compliance with this process is **MANDATORY** under Service Bulletin 0820 and must be accomplished by December 24, 2008.

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REQUIRED PARTS LIST

TERRAIN-SVS-equipped G1000, G950, and G900X units with 010-00330-43 data cards:

QTY	Part Number	Description
1	010-00330-43*	SD Card,GDU10xx Supp SVS

*Contact Garmin at the numbers/email address listed at the end of this service letter for instructions on setting up an exchange.

TERRAIN-SVS-equipped G1000, G950, and G900X units with 010-00330-41 or 010-00330-42 data cards:

QTY	Part Number	Description
1	SDDR-93 or SDDR-99 or equivalent	SanDisk SD Card Reader

TERRAIN-equipped GNS 400W/GNS 500W Series units:

QTY	Part Number	Description
1	010-10579-00	Garmin USB Aviation data card programmer

Or

QTY	Part Number	Description
1	010-10201-21*	TAWS/TERRAIN Data Card, 256MB

*Contact Garmin at the numbers/email address listed at the end of this service letter for instructions on setting up an exchange.

MODIFICATION INSTRUCTIONS FOR:

TERRAIN-SVS-equipped G1000, G950, and G900X units with 010-00330-43 data cards

TERRAIN-SVS-equipped G1000, G950, and G900X owners/operators with 010-00330-43 data cards will not be able to download Terrain Database 08T2 from the Garmin website.

A new data card can be exchanged through Garmin. Contact Garmin at the numbers/email address listed at the end of this service letter for instructions on setting up an exchange.

Once a new data card is obtained proceed to Step 12 for installation instructions.

MODIFICATION INSTRUCTIONS FOR:

TERRAIN-SVS-equipped G1000, G950, and G900X units with 010-00330-41 or 010-00330-42 data cards

NOTE

All Diamond DA40 owners/operators must refer to the aircraft log book to ensure that Garmin Service Bulletin 0519 has been complied with prior to completing these instructions.

1. With the power turned off, remove all existing Supplement Database SD Cards from the bottom slot of the MFD and PFD(s).
2. Using your computer's web browser go to <http://shop.garmin.com/aviation/databases/> (See Figure 1).

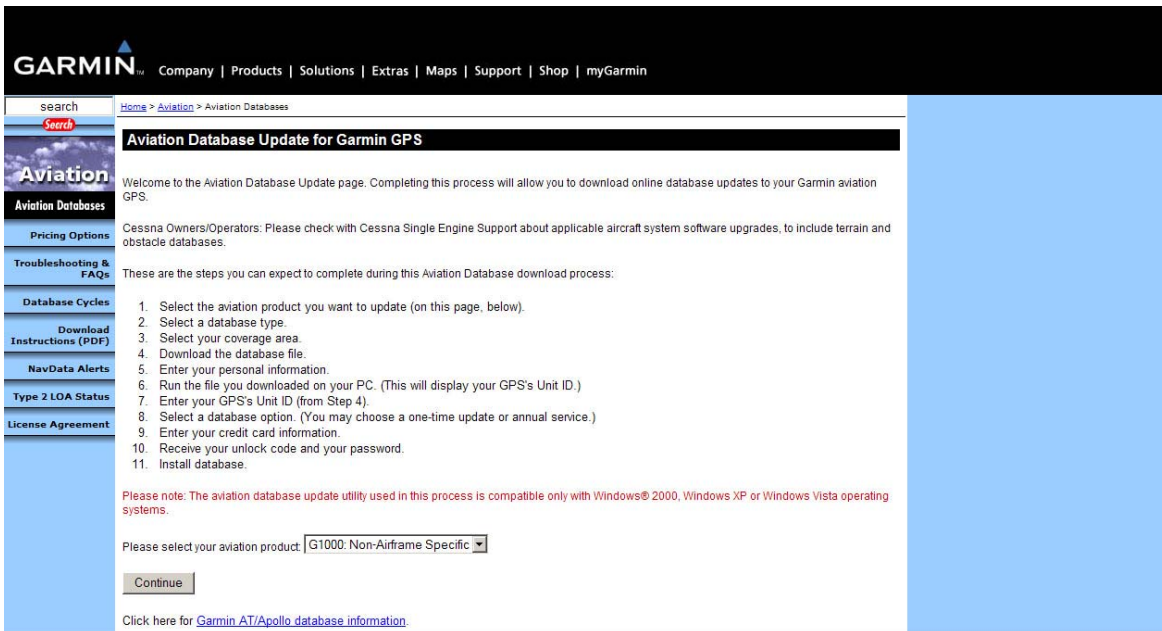


Figure 1

3. In the aviation product field select “G1000: Non-Airframe Specific”.
4. Press the “Continue” button.
5. Select “Terrain”.
6. Press the “Continue” button.
7. Press the “Continue” button, again.
8. Select “World Wide”. The following screen should appear:

The screenshot shows the Garmin website's 'Aviation Databases - Download File' page. The navigation menu on the left includes 'Aviation', 'Aviation Databases', 'Pricing Options', 'Troubleshooting & FAQs', 'Database Cycles', 'Download Instructions (PDF)', 'NavData Alerts', 'Type 2 LOA Status', and 'License Agreement'. The main content area displays the selected product 'G1000: Non-Airframe Specific', the update type 'Terrain', and the database 'World Wide'. The download filename is 'tg1000-ww-08t2.exe'. A license agreement is shown in a scrollable text box, with a blue arrow pointing to the link 'I agree to the above terms and want to download the file.' Below the agreement are links for 'I do not agree. Please take me back.' and a 'Continue' button.

Figure 2

9. Read the license agreement and select “I agree to the above terms and want to download the file” (See Figure 2).
10. Follow the on-screen prompts to download and save the file to your computer’s desktop.

NOTE

An unlock code is **not** needed for this update. Once the file is saved to your computer’s desktop, do not select “Continue”.

11. Once the file is saved, open the file and follow the on-screen prompts to guide you through the process of transferring the Terrain Database to the existing Supplemental Database SD Cards.
12. Once all Supplemental Database SD cards have been updated, insert one SD card in the bottom slot of the MFD and one in the bottom slot of each PFD.

TESTING PROCEDURE FOR:

TERRAIN-SVS-equipped G1000, G950, and G900X units

1. Apply power to the G1000/G950/G900X. View the MFD power-up splash screen. Ensure the databases are initialized and displayed on the splash screen.

NOTE

An “In Progress” message may appear. If this message is present, wait for the system to finish loading before verifying the correct databases are initialized.

2. Acknowledge the Power-Up Page agreement by pressing the ENT Key (or the right most softkey).
3. Turn the large FMS Knob to select the AUX Page group on the MFD.
4. Turn the small FMS Knob to select the System Status Page.
5. Select the DBASE Softkey to place the cursor in the “DATABASE” box.
6. Turn either FMS Knob to scroll through the database list and ensure that the Terrain **Cycle** is “08T2” (See Figure 5).

NOTE

Depending on when the last time the Terrain Database was updated, the Terrain Version number may not change.

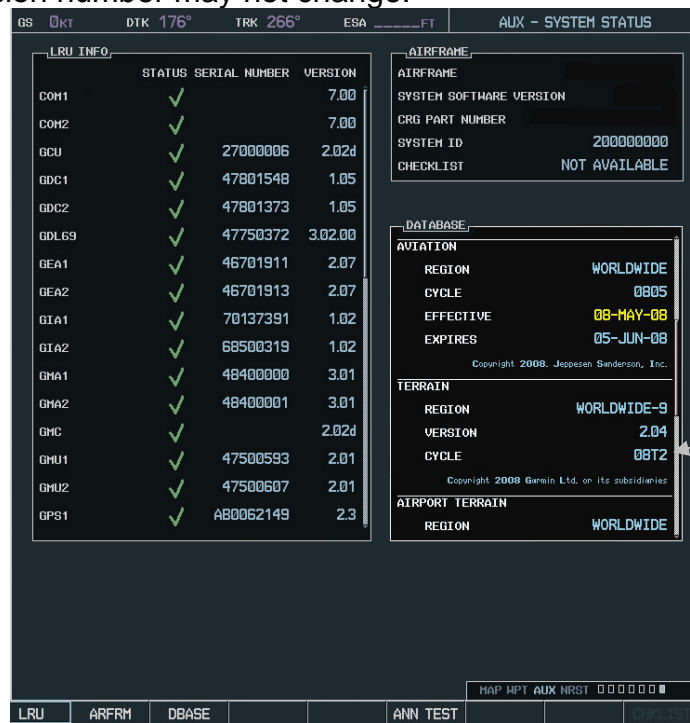


Figure 5

7. Power down the G1000/G950/G900X.

MAINTENANCE RECORDS

In accordance with 14 CFR 91.417, records should be kept to document the database installation/update. The person accomplishing the update may provide an aircraft log book entry similar to the following to comply with that requirement. (*Replace the words in italics with the information indicated.*)

“Terrain Database 08T2 for TERRAIN-SVS has been installed and tested according to Garmin Service Bulletin 0820 Revision A. *Signature and certificate number of person returning the aircraft to service, date accomplished*“

Alternatively, the owner/operator may document the same information along with the aircraft model and registration number in a location accessible to the owner/operator.

NOTE

A person holding a valid private pilot, commercial pilot, or ATP certificate may install the database and return the aircraft to service.

The update is now complete.

MODIFICATION INSTRUCTIONS FOR:

TERRAIN-equipped GNS 400W/GNS 500W Series units

Terrain Database 08T2 can be downloaded from <http://shop.garmin.com/aviation/databases/> and copied to the existing TAWS/TERRAIN Data Card using the Garmin USB Aviation data card programmer (Garmin part number 010-10579-00), or a TAWS/TERRAIN Data Card (Garmin part number 010-10201-21) can be exchanged through Garmin.

Contact Garmin at the numbers/email address listed at the end of this service letter for instructions on setting up an exchange.

Once a new data card is obtained proceed to Step 14 for installation instructions.

To download the Terrain Database through the Garmin website, perform the following steps:

1. Power down the TERRAIN-equipped GNS 400W/GNS 500W Series unit.
2. Remove the existing TAWS/TERRAIN Data Card from the right card slot of the GNS 400W/GNS 500W Series unit.
3. Insert the TAWS/TERRAIN Data Card into the Garmin USB Aviation data card programmer, ensuring the Garmin USB Aviation data card programmer is connected to the USB port of your PC.

4. Using your computer's web browser go to <http://shop.garmin.com/aviation/databases/> (See Figure 3).

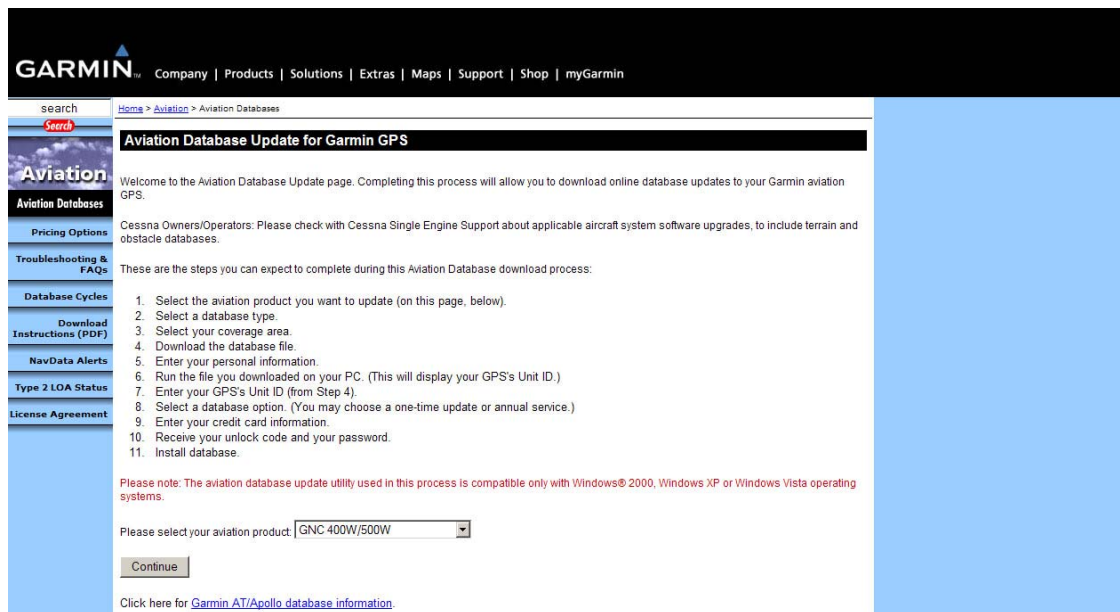


Figure 3

5. In the aviation product field select “GNC 400W/500W”.
6. Press the “Continue” button.
7. Select “Terrain”.
8. Press the “Continue” button.
9. Press the “Continue” button, again after reading the information on the page.
10. Select “World Wide”. The following screen should appear:

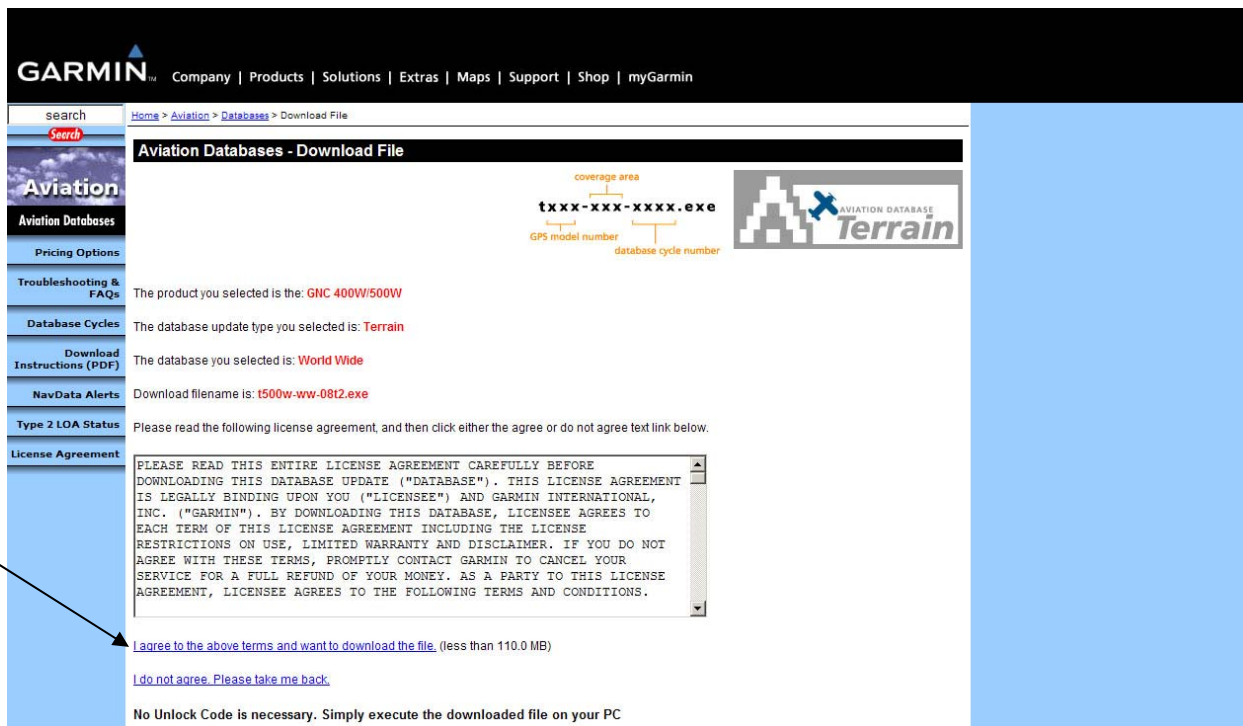


Figure 4

11. Read the license agreement and select “I agree to the above terms and want to download the file” (See Figure 4).
12. Follow the on-screen prompts to download and save the file to your computer’s desktop.

NOTE

An unlock code is **not** needed for this update. Once the file is saved to your computer’s desktop, do not select “Continue”.

13. Once the file is saved, open the file and follow the on-screen prompts to guide you through the process of transferring the Terrain Database to the existing TAWS/TERRAIN Data Card.
14. Once the TAWS/TERRAIN Data Card had been updated, insert the data card into the right card slot of the GNS 400W/GNS 500W Series unit.

TESTING PROCEDURE FOR:

TERRAIN-equipped GNS 400W/GNS 500W Series units

1. Apply power to the GNS 400W/GNS 500W Series unit.
2. Ensure the TERRAIN system passes the self-test. The “TER TEST” annunciator will clear after checking and no failure message appears.
3. Using the large knob select the AUX Group.
4. Using the small knob select the Utility page and press the CRSR Key.
5. Using the small knob select “Terrain Database Versions” and press the ENT Key.
6. Ensure that the Terrain **Cycle** is “08T2” (See Figure 6).

NOTE

Depending on when the last time the Terrain Database was updated, the version number may not change.



Figure 6

7. Power down the GNS 400W/GNS 500W Series unit.

MAINTENANCE RECORDS

In accordance with 14 CFR 91.417, records should be kept to document the database installation/update. The person accomplishing the update may provide an aircraft log book entry similar to the following to comply with that requirement. (*Replace the words in italics with the information indicated.*)

“Terrain Database 08T2 for TERRAIN has been installed and tested according to Garmin Service Bulletin 0820 Revision A. *Signature and certificate number of person returning the aircraft to service, date accomplished* “

Alternatively, the owner/operator may document the same information along with the aircraft model and registration number in a location accessible to the owner/operator.

NOTE

A person holding a valid private pilot, commercial pilot, or ATP certificate may install the database and return the aircraft to service.

The update is now complete.

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