

GTN 725/750 SOFTWARE v6.20

PILOT'S GUIDE UPGRADE SUPPLEMENT

This supplement contains the pages revised in the GTN 725/750 Pilot's Guide, P/N 190-01007-03, Rev N, regarding the new features of software v6.20. Change bars are placed adjacent to the revised information as described in the revision summary table.

This supplement, in combination with the GTN 725/750 Pilot's Guide, P/N 190-01007-03, Rev M, is equivalent to the GTN 725/750 Pilot's Guide, P/N 190-01007-03, Rev N.

Current documents are available at <https://fly.garmin.com/fly-garmin/support/> for free download. Printed copies may be purchased by contacting Garmin Customer Support.



NOTE: *Depending on which version of software is installed and how it is configured, the actual features and screen images may differ from what is shown. For more information regarding feature availability for specific software versions refer to the GTN 725/750 Pilot's Guide, P/N 190-01007-03.*

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This manual reflects the operation of system software v6.20, or later. Some differences in operation may be observed when comparing the information in this manual to later software versions.

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GTN 725/750 Pilot's Guide Revision N, Change Summary

Section	Page	Description
Section 1 – Getting Started		
1.2.2	1-3	Added description of pinch-to-zoom feature to section.
1.3.1	1-4	Added Flight Stream 510 to section.
1.4.1	1-6	Added information about what displays on start-up screens.
	1-7	Updated SW & Database Versions & Dates and Panel Self-Test screen shots in figure 1-11.
1.4.2	1-7	Updated System Startup Pages screen shot in figure 1-12.
	1-8	Updated Instrument Panel Self-Test & Fuel Settings page screen shot in figure 1-13.
	1-9	Updated Fuel On Board page screen shot in figure 1-14.
		Updated Fuel Capacity page screen shot in figure 1-15.
	1-10	Updated Fuel Flow Setup page screen shot in figure 1-16.
Section 2 – Audio & Transponder Control		
2.4	2-25	Added reference to <i>GTN 6XX/7XX Telligence Voice Command Guide</i> .
Section 4 – Flight Plan		
4.3.6	4-37	Rewrote how to delete a flight plan.
4.3.6.2	4-38	Added "Delete All Flight Plans from Catalog" section.
4.6	4-45	Updated Catalog for Datacard Flight Plan Import screen shot in figure 4-67.
	4-46	Rewrote step 3 for clarity.
Section 5 - Direct-To		
5.2	5-3	Added information about Direct-To selection and flight plans.
Section 6 - Procedures		
6.9	6-16	Changed "Radial" to "Radius" in section heading.
Section 7 - Charts		
7.5.2	7-18	Added information on how to select a Hot Spot and updated SafeTaxi Hot Spot Depiction screen shot in figure 7-26.
Section 8 - Waypoint Info		
8	8-1	Updated Waypoint Info page screen shot in figure 8-1.
	8-2	Added VRP information to Waypoint Info Functional Diagram figure 8-2.

Section	Page	Description
Section 8 - Waypoint Info - Continued		
8.5	8-13	Added "VRP" section.
8.7.5	8-17	Added "Delete All User Waypoints" section.
Section 9 - Map		
9	9-1	Added "Track vector" to bullet list.
9.1.2	9-13	Added "Track Vector Length" to Map list in figure 9-13.
		Added "VRP Range" to Aviation list in figure 9-13.
9.1.2.1	9-15	Added "Track Vector Length" to table 9-1.
	9-18	Added "Track Vector" section.
9.1.2.2	9-25	Added VRP Range to table 9-6.
9.1.3	9-33	Added Blackout Mode and Backlight to table 9-16.
9.6	9-46	Added User Waypoint and VRP icons to table 9-18.
9.7	9-47	Added "Flight Plan Depiction" section.
Section 11 - Terrain		
11.2.3	11-2	Rewrote section in its entirety.
Section 12 - Weather		
12.5.3.1	12-59	Added a note about auto request can only be enabled on a GTN directly connected to a GSR 56.
Section 13 - Nearest		
13	13-1	Added "VRPs" to first sentence of section.
		Updated Nearest page screen shot in figure 13-1.
		Added VRP to figure 13-2.
13.5	13-8	Added "Nearest VRP" section.
Section 16 - System		
16.1.3	16-4	Rewrote section for clarity.
16.7	16-33	Added Blackout Mode and Backlight to table 16-8.
16.11	16-37	Rewrote section for clarity and updated screen shots to include Flight Stream 510.
16.11.1	16-38	Added Connex SMS and phone feature for Flight Stream.

Section	Page	Description
Section 18 - Symbols		
18.1	18-1	Updated table 18-1 with current map symbols.
18.2	18-2	Updated Under Construction Zones symbol in table 18-2.
		Added Hot Spot symbol to table 18-2.
Section 19 - Appendix		
19.1	19-8	Added VRP to glossary.
19.2	19-9	Added wireless database transfer procedure, database sync, and chart streaming sections.
19.5	19-25	Added "Telligence Voice Command Qualification Procedure" section.

finger up or down. Map displays may be panned by touching the screen and retaining pressure while sliding your finger in the desired direction. Pinch-to-zoom capability is available in software v6.20 or later.



You can return to the previous page or exit the current function by touching the **Back** key.



Quickly return to the Home page by pressing the **HOME** key. Press and hold the **HOME** key to reach the Map page.

1.3 Product Description

This section provides an overview of the GTN 7XX product and a quick look at some important features. The GTN 7XX presents a full-color moving map with navigation information to the pilot through a large-format display. Controls are a combination of rotary knobs and push-keys on the bezel with the color display providing information as well as a touchscreen controls. The GTN 7XX has a 708 x 600 pixel, 6.9 inch LCD display.

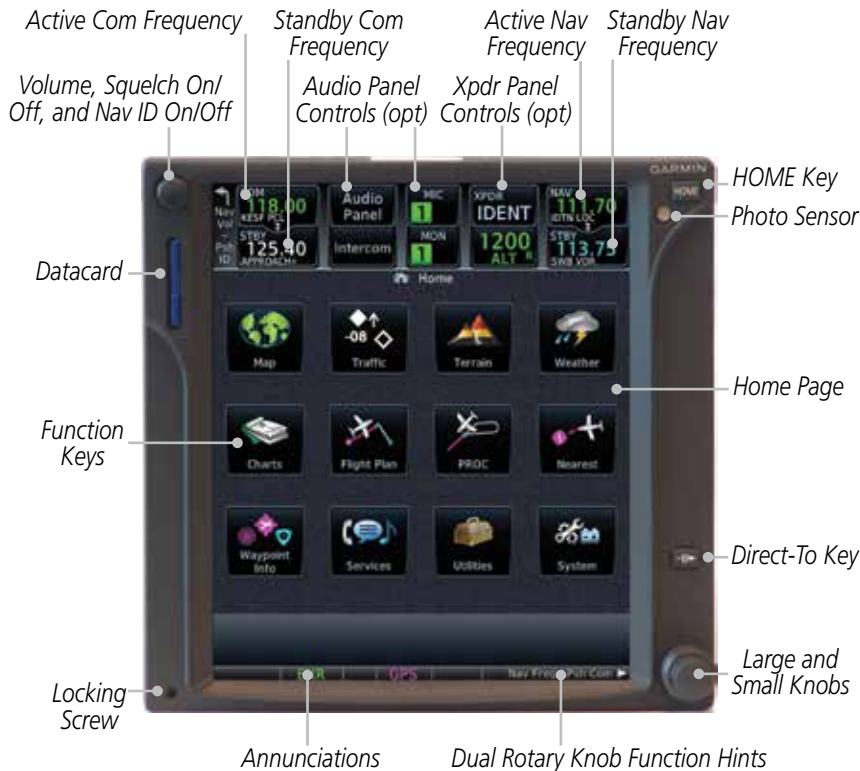


Figure 1-4 GTN 750 Front Panel

1.3.1 Datascard

The GTN 7XX uses a Secure Digital (SD) card or Flight Stream 510 to load and store various types of data. The datascard is required for Terrain, FliteChart, and ChartView database storage and all database updates.



NOTE: *Do Not remove or insert the datascard while in flight. Ensure the GTN 7XX is powered off before inserting or removing a datascard.*



NOTE: *For instructions on updating databases refer to Section 19.2.*

1.3.1.1 Inserting a Datascard

1. Insert the datascard in the datascard slot (the label side of the card should face the right edge of the display bezel).
2. To eject the card, gently press on the datascard to release the spring latch.

1.3.2 Pilot Controls

The GTN 7XX controls have been designed to simplify operation of the system and minimize workload and the time required to access sophisticated functionality. Controls are located on the bezel and on the touchscreen display. Controls are comprised of dual concentric knobs, volume/squelch knob, bezel keys, and active touch areas on the display.

1.3.2.1 Volume/Squelch Knob

The **Volume** knob located in the top left corner of the bezel controls audio volume for the selected Com radio or Nav receiver and external audio input devices that are controlled via the GTN interface to the optional remote-mounted audio panel, if installed. When the Com radio is active, press the **Volume** knob momentarily to disable automatic squelch control for the Com radio. When the Nav radio is active, press the **Volume** knob momentarily to enable/disable the ident tone for the Nav radio.



Figure 1-5 Volume/Squelch Knob

1.3.2.5 Touchscreen Keys

Touchscreen keys are placed at the lower portion of the display. The keys vary depending on the page selected. Touch the key to perform the function or access the described information.



Figure 1-10 Touchscreen Key Control Example

1.4 Unit Power Up

The GTN 7XX System is integrated with the aircraft electrical system and receives power directly from electrical busses. The GTN 7XX and supporting sub-systems include both power-on and continuous built-in test features that exercise the processor, memory, external inputs, and outputs to ensure safe operation.

1.4.1 Start-Up Screens

During system initialization, test annunciations are displayed. All system annunciations should disappear typically within the first 30 seconds after power-up. Upon power-up, key annunciator lights also become momentarily illuminated on the GTN 7XX display bezel.

The splash screen displays the following information:

- Copyright
- Database List and System version
- Instrument Panel Self-Test

Current database information includes valid operating dates, cycle number, and database type. When this information has been reviewed for currency (to ensure that no databases have expired), the pilot is prompted to continue. Databases that are not current will be shown in amber.

During the startup process the user may be asked if they would like to update to newer databases. Additional information on database updates can be found in Section 19.2, Database Information and Updates.

The COM and NAV radios, transponder controls, GDL 88 control panel, and audio panel controls are displayed on the Start-Up screens. Some functions may be unavailable until after the databases are verified. Also, the audio panel controls may be temporarily unavailable until the GMA 35 has finished its start-up process.



1 - Copyright



2 - SW & Database
Versions & Dates



3 - Panel Self-Test

Figure 1-11 System Startup Pages

1.4.2 Database Verification and Fuel Settings

1. When the System and Database Version page appears, ensure databases are current. Then, touch **Continue**.



Figure 1-12 System Startup Pages

2. When the Instrument Panel Self-Test and Fuel Setting page appears, ensure that the CDI/HSI outputs and other displayed data are correct on the external interfaced equipment.

- Touch each of the Fuel value keys and set the appropriate values as desired. Fuel capacity units are selected on the System - Units page.

NOTE: When the GTN is interfaced with a digital fuel computer the pilot may not be able to manually edit the fuel flow and fuel on board data on the Self-Test.



Figure 1-13 Instrument Panel Self-Test & Fuel Settings Page

- When the Fuel on Board value is selected, touch the **Full** or **Tabs** keys to display those values after they have been set.



Touch To Set
Current Fuel
Quantity

Touch To Set
Fuel Flow

Touch To Continue
To Home Page

Start-Up
Instrument
Panel Test
Conditions



Figure 1-14 Fuel On Board Page

5. Touch the **Set Full/Tabs** key to set the fuel values for Fuel Full Capacity and Fuel Tab Capacity. After setting the fuel values, touch the **Back** and then the **Enter** keys to return to the Instrument Panel Self Test page.



Figure 1-15 Fuel Capacity Setup Page

- On the Instrument Panel Self Test page, touch the **Fuel Flow** key and then use the numeric keypad to set those values. Touch the **Enter** key after selecting the Fuel Flow values.



Figure 1-16 Fuel Flow Setup Page

- Touch the **Continue** key to advance to the Home page.



Figure 1-17 Home Page

2.4 Telligence™ Voice Command

Garmin's Telligence Voice Command voice recognition feature allows the pilot (and optionally copilot) to control the GTN 7XX connected to a GMA 35/350 using spoken commands. To activate Voice Recognition, push and hold the Push-to-Command (PTC) switch while speaking a command. When the Push-to-Command switch is released, the GTN 7XX and/or the audio panel will respond.

If a command is understood by the GMA, a positive acknowledgement chime will be played, and the relevant information will be displayed to reflect the change (if applicable). The pilot should verify that the correct response has occurred.

If a command is not understood by the GMA or the GTN is unable to complete the requested action, a negative acknowledgement tone will be played. The pilot should repeat the command by using the Push-to-Command switch, or by manually using the GTN 7XX touch screen. In the event of any abnormal Voice Recognition operation, the front panel controls and touch screen may be used to override Voice Recognition and manually control the GTN 7XX.



NOTE : *If Telligence Voice Command malfunctions and needs to be disabled, remove power to the GMA audio panel. This will force the audio panel into the fail-safe mode. The pilot will be able to communicate using the COM 2 radio only.*

The available voice recognition commands are listed in GTN 6XX/7XX Telligence Voice Command Guide, P/N 190-01007-50.

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4.3.6 Delete Flight Plan

There are three ways to delete a flight plan.

1. Remove a selected flight plan from the catalog.
2. Remove all flight plans from the catalog.
3. Remove all waypoints from the active flight plan.

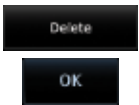
4.3.6.1 Delete Flight Plan from Catalog



1. While viewing the Flight Plan page, touch the **Menu** key, and then the **View Catalog** key. The list of currently stored flight plans will be displayed.



Figure 4-53 Select a Flight Plan from the Catalog



2. Touch the **Delete** and then the **OK** key. The selected flight plan will be removed from the Catalog.



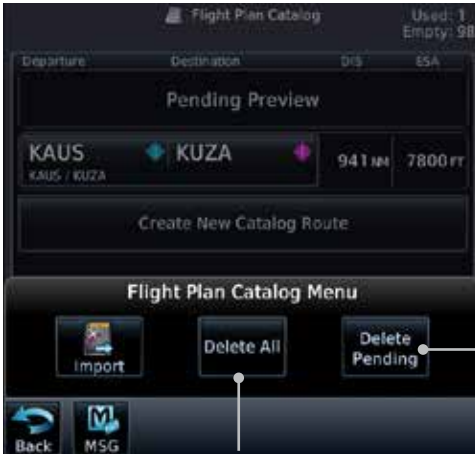
Figure 4-54 Delete a Flight Plan from the Catalog

4.3.6.2 Delete All Flight Plans from Catalog



NOTE: This feature is available in software v6.20 or later.

1. While viewing the Flight Plan Catalog, touch the **Menu** key to open the Flight Plan Catalog Menu.



Touch to Delete
All Flight Plans
Pending

Touch to Delete
All Catalog Flight
Plans

Figure 4-55 Flight Plan Catalog Menu

2. Touch **Delete All** to remove all flight plans in the catalog.
3. Touch **Delete Pending** to remove all flight plans pending preview in the catalog.



4.6 Import Flight Plans with a Datacard

Flight plans can be created on a computer using compatible flight planning software and saved to a datacard to be imported into the GTN. The imported flight plans can then be activated or stored to the flight plan catalog once they are previewed by the pilot.



NOTE: Flight plans over 99 waypoints long are truncated at 99 waypoints and the last waypoint in the imported/uploaded flight plan may not be the destination airport.



NOTE: This feature is available in software v5.10 and later.



NOTE: The flight plan file format used by the GTN is different than the file format used by the GNS 400W/500W Series navigators.



1. While viewing the Flight Plan page, touch the **Menu** key and then the **Catalog** key to display the Flight Plan Catalog.

Touch To Import
Flight Plan

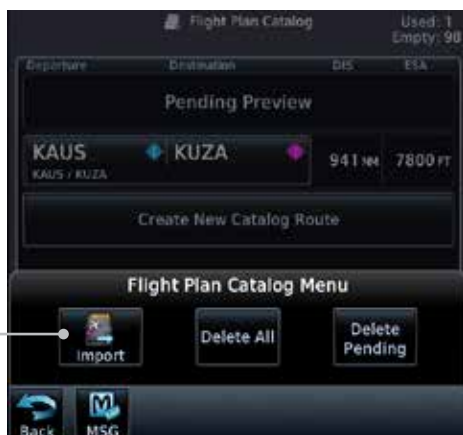


Figure 4-67 Catalog for Datacard Flight Plan Import



2. An **Import** key will be present in the menu when flight plans are present on the datacard. Touch the **Import** key to open a pop-up with a list of the file names of the flight plans on the datacard.

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Touch To Import Flight Plan From Datacard

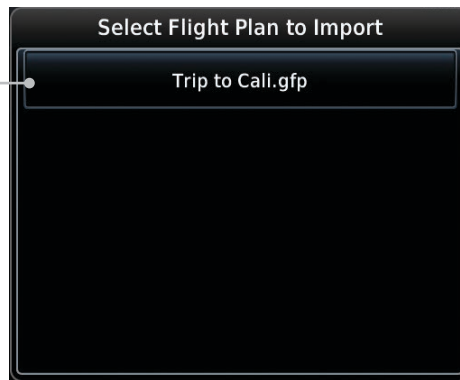
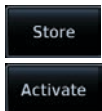
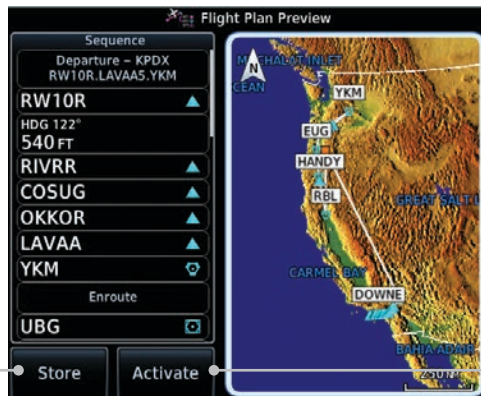


Figure 4-68 Flight Plan To Import From Datacard

3. Select the desired flight plan to import, the GTN will attempt to import the flight plan.
4. Press **Store** to save the flight plan to the catalog. Press **Activate** to make the imported flight plan the active route.



Touch To Store To Save Flight Plan To The Catalog



Touch To Make The Imported Flight Plan The Active Route

Figure 4-69 Route Options For SD Card Flight Plan Import

5.2 Direct-To a Flight Plan Waypoint

The Direct-To selection is not available for all flight plan entries. Some flight plan entries including holds and course reversals cannot be selected using Direct-To. Instead, select the associated waypoint for the Direct-To function.



1. Press the **Direct-To** key on the right side of the unit.



2. Touch the **FPL** tab at the top of the Direct-To window.



Figure 5-4 Direct-To Flight Plan Leg Selection

3. Touch the flight plan waypoint you want to navigate directly to. The Direct-To Waypoint page will display information about the selected flight plan waypoint.

6.8 Flying a DME Arc Approach

Approaches that contain DME arcs are supported by the GTN. The GTN will provide guidance (left / right) relative to the arc. If you wish to activate the DME arc leg manually, the aircraft must be near the arc, as shown in the shaded area below.

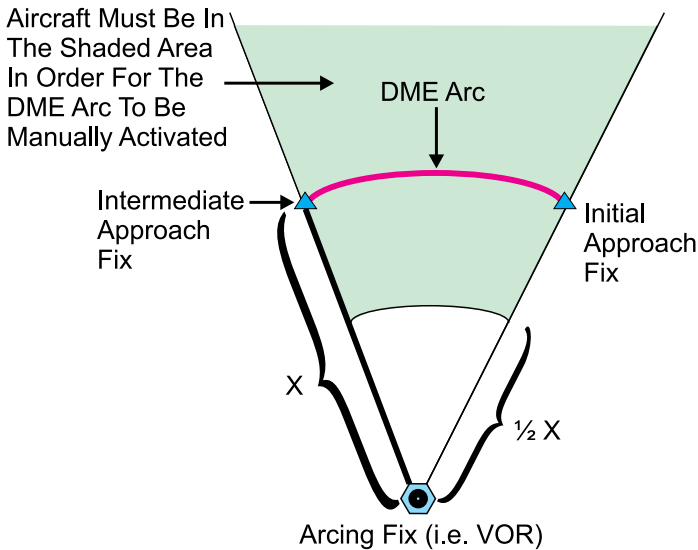


Figure 6-21 DME Arc Example

6.9 Radius-to-Fix (RF) Approaches

RF legs associated with RNAV RNP 1.0 non-AR (Approval Required) approaches are supported by the GTN in version 6.00, or later, when approved by the installation.

- AC 90-101A defines RF leg as "a constant radius circular path, around a defined turn center, that starts and terminates at a fix. An RF leg may be published as part of a procedure."
- Flying the RF leg of an approach is similar to flying a DME arc approach. All GTN annunciations and indications are identical whether flying DME arcs or RF legs with the GTN.
- RF legs may have a larger or smaller radius than DME arcs.
- Unlike DME arcs, RF legs are not based on a VOR.
- Refer to the aircraft AFMS for specific details regarding RF legs for a specific aircraft.

7.5.1 Using SafeTaxi®

Any map page that displays the navigation view can also show the SafeTaxi® airport layout within the maximum configured range. Charts and SafeTaxi are mutually exclusive. So, to view SafeTaxi and Hot Spots, the Charts feature must be turned off. Charts are displayed when the aircraft is in the air, but when on the ground, charts are removed and SafeTaxi will be shown automatically.

During ground operations the aircraft's position is displayed in reference to taxiways, runways, and airport features. The nose of the ownship symbol, not the center, depicts the current location of the aircraft.

7.5.2 Hot Spot Information

Hot Spot locations are identified by a magenta circle or outline. To view more information touch the Hot Spot on the moving map.

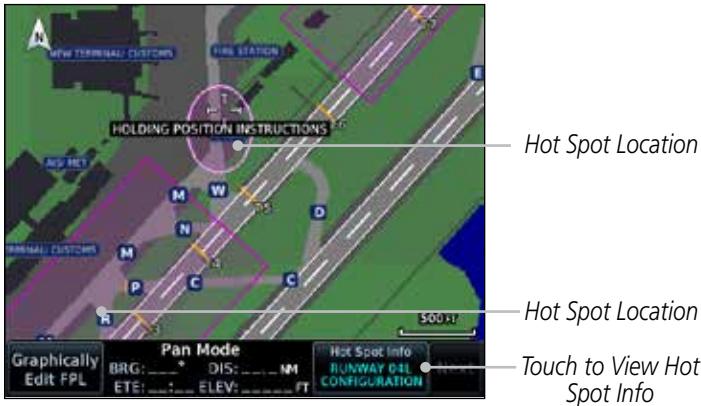


Figure 7-26 SafeTaxi Hot Spot Depiction

The Waypoint Info function allows you to view information about the selected waypoint. The Waypoint Info page can be reached from the Home page, selected from a flight plan, or selected from the Nearest page.



Figure 8-1 Waypoint Info Page

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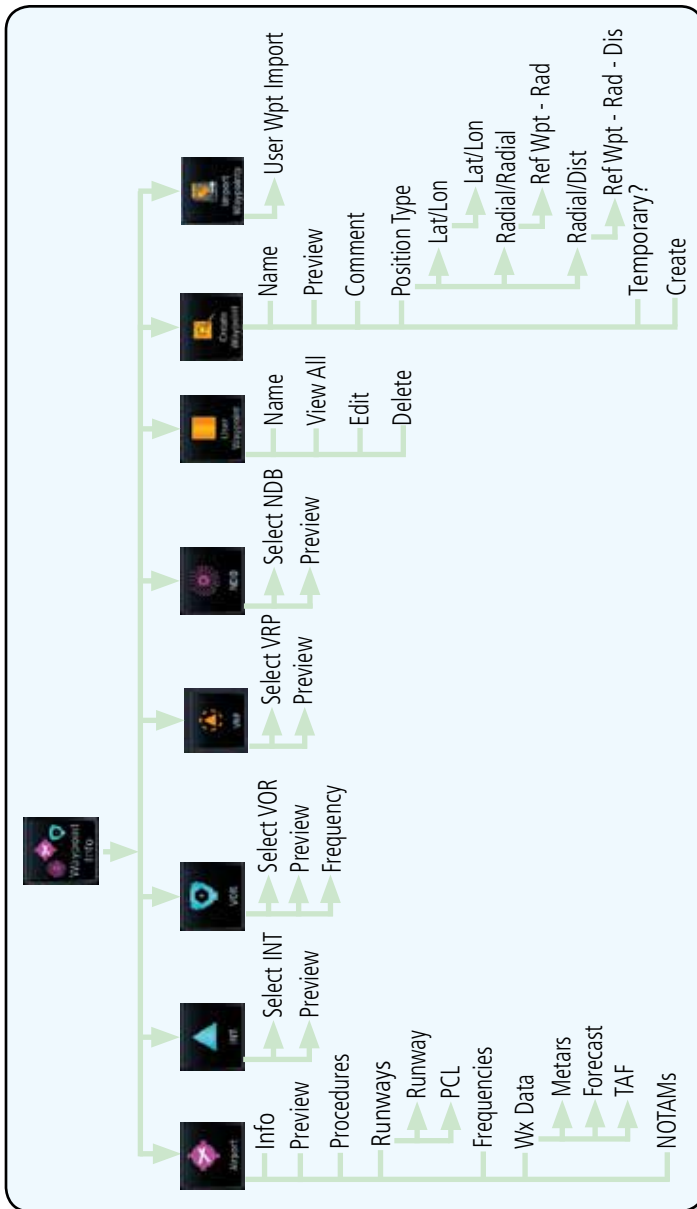


Figure 8-2 Waypoint Info Functional Diagram

8.5 VRP



NOTE: This feature is available in software v6.20 or later.



NOTE: Visual Reporting Point database coverage is not available in all regions.

The VRP (Visual Reporting Point) page of the Waypoint Info function provides information about the VRP. The top area displays the Lat/Lon coordinates of the VRP and the bearing (with direction arrow) and distance to the VRP from your present position. Select another Waypoint by touching the **Waypoint Identifier** key, entering the characters for the desired name with the alphanumeric keypad, and then touching the **Enter** key. You may also search through the list by touching the **Find** key and then choosing from the existing list of waypoints by touching the desired waypoint from the list. The center area of the page shows a map with the VRP in the center.



1. While viewing the Waypoint Info page, touch the **VRP** key.



Figure 8-17 Waypoint Info -Visual Reporting Point



2. Use the **In** and **Out** keys to zoom in and out on the map. You can touch the map window and while lightly pressing the display, drag your finger to move the map view.

8.7.5 Delete All User Waypoints



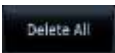
1. While viewing the Waypoint Info page, touch the **User Waypoint** key.
2. Touch the **View List** key and then touch the **Menu** key to open the User Waypoints Menu.



Touch to Filter
Waypoints to
Delete

Touch to
Delete All User
Waypoints

Figure 8-21 User Waypoints Menu



3. Touch the **Filter** key to select which type of user waypoints to delete: All, Basic, or Mark On Target.
4. Touch the **Delete All** key to delete all of the user waypoints.

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9 MAP

The Map page is used to provide situational awareness in flight. The Map page can display the following information:

- Airports, NAVAIDs, airspace, airways, land data (highways, cities, lakes, rivers, borders, etc.) with names
- Wind direction and speed
- Icons for enabled map features
- Aircraft icon (with the nose representing present position)
- Nav range ring
- Flight plan legs
- Topography scale
- Topography data
- NEXRAD (or Precip) Weather (Opt.)
- ChartView or FliteChart Overlay
- Terrain Overlay
- Traffic Overlay
- Radar Overlay
- Fuel Range Ring (SW v6.00 or later)
- Track vector (SW v6.20 or later)



Figure 9-1 Map Page Description

The following information describes the ownship symbol behavior in a helicopter that does not have a source of magnetic heading information connected to the GTN. When greater than 15 knots groundspeed the map is oriented either north up with ownship oriented to its current track or track up. When less than



9.1.2 Map Setup

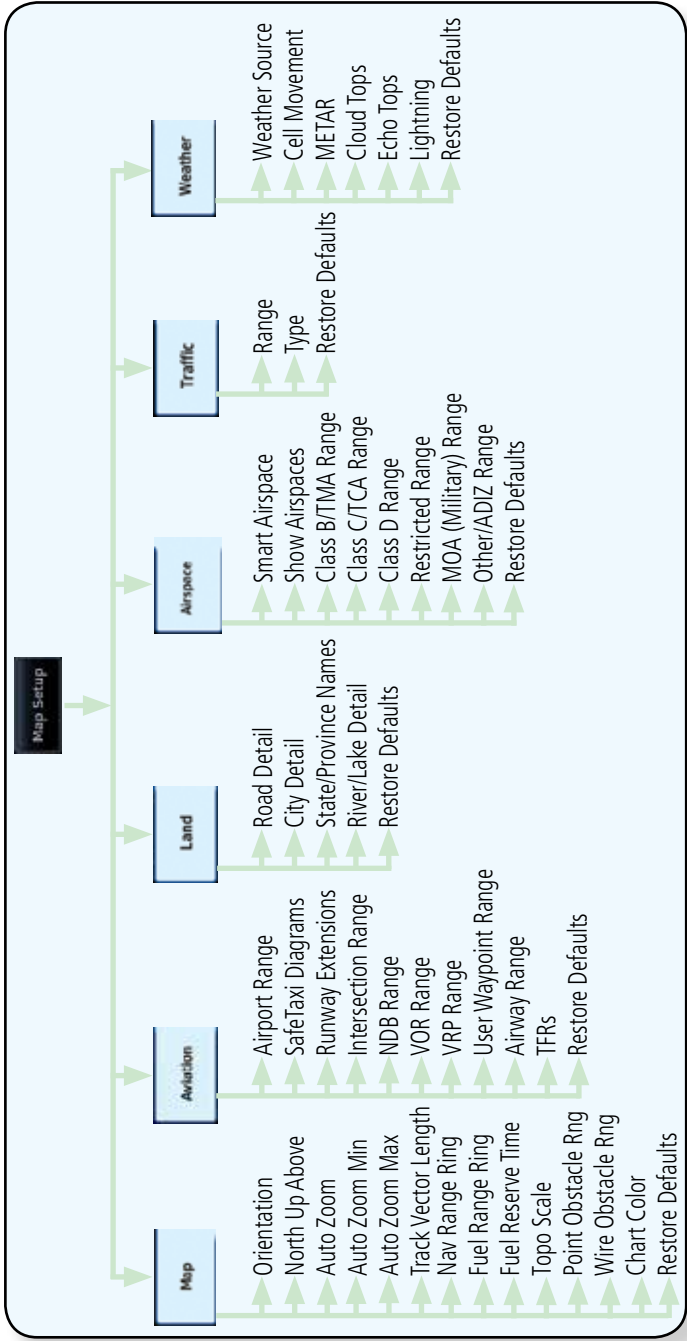


Figure 9-13 Map Setup Functional Diagram

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9.1.2.1 Map

The Map option defines the behavior and display of information on the Map page such as: Orientation, North Up Above, Auto Zoom, Nav Range Ring, Topo Scale, Obstacle Range, and Restore Defaults. The default values are shown in **bold** type.

Feature	Selection
Orientation	North Up, Track Up , Heading Up
North Up Above	Off, 10 NM, 15 NM, 25 NM, 40 NM , 50 NM, 75 NM, 100 NM, 150 NM, 250 NM
Auto Zoom	Off, On
Auto Zoom Min	250 ft, 400 ft, 500 ft, 750 ft, 1000 ft, 1500 ft, 2500 ft, 0.5 NM, 0.75 NM, 1 NM, 1.5 NM , 2.5 NM, 4 NM, 5 NM, 7.5 NM, 10 NM, 15 NM, 25 NM, 40 NM, 50 NM, 75 NM, 100 NM, 150 NM, 250 NM, 400 NM
Auto Zoom Max	250 ft, 400 ft, 500 ft, 750 ft, 1000 ft, 1500 ft, 2500 ft, 0.5 NM, 0.75 NM, 1 NM, 1.5 NM, 2.5 NM, 4 NM, 5 NM, 7.5 NM, 10 NM, 15 NM, 25 NM , 40 NM, 50 NM, 75 NM, 100 NM, 150 NM, 250 NM, 400 NM
Track Vector Length	Off, 30 SEC, 60 SEC , 2 MIN, 5 MIN, 10 MIN, 20 MIN
Nav Range Ring	Off, On , Enhanced
Fuel Range Ring	Off, On
Fuel Reserve Time	30 Min, 45 Min , 60 Min, 90 Min
Topo Scale	Off , On
Point Obstacle Range	Off, 4 NM, 5 NM , 7.5 NM, 10 NM, 15 NM
Wire Obstacle Range	Off, 1 NM, 1.5 NM , 2.5 NM
Chart Color Scheme	Day , Night
Restore Defaults	Returns values to original factory settings

Table 9-1 Map Setup Map Options

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Track Vector



NOTE: This feature is available in software v6.20 and later.

When turned on, the track vector is depicted as a cyan line extending from the nose of the aircraft in the direction of movement. The length of the track vector represents the path the aircraft will follow if the present speed and direction are maintained for the time configured in the Track Vector Length setting.



Track Vector

Figure 9-19 Track Vector

Nav Range Ring

When turned on, the Nav Range Ring option will show a ring with a compass rose oriented to magnetic north around your present position on the Map page. When selected ON, the Enhanced Range Ring function provides a second ring at 1/2 the distance of the primary ring to allow the pilot to accurately judge distance to objects depicted on the map.

Feature	Selection
VOR Range	Off, 10 NM , 15 NM, 25 NM, 40 NM, 50 NM, 75 NM, 100 NM
VRP Range	Off, 0.74 NM, 1 NM, 1.5 NM, 2.5 NM, 4 NM , 5 NM, 7.5 NM, 10 NM
User Wpt Range	Off, 0.75 NM, 1 NM, 1.5 NM, 2.5 NM, 4 NM, 5 NM , 7.5 NM, 10 NM, 15 NM, 25 NM, 40 NM, 50 NM, 75 NM, 100 NM
Airway Range	2.5 NM, 4 NM, 5 NM, 7.5 NM, 10 NM, 15 NM, 25 NM
TFR	Off , On
Restore Defaults	Returns values to original factory settings

Table 9-6 Map Setup Aviation Options



NOTE: The term “intersection range” means any GPS waypoint included in the navigation database, and includes waypoints that may not be intersections of two VOR radials.

Airport Size	Size Criteria	Display Criteria
Small	Longest runway length is less than 5000 feet, unless it has a tower frequency, in which case it is a Medium Airport.	Small airports and heliports are displayed on the map when the Map Range is less than or equal to 1/4 times the Airport Range Setting.
Medium	Longest runway length is less than 8100 feet but greater than or equal to 5000 feet or less than 8100 feet and has a tower frequency.	Medium airports are displayed on the map when the Map Range is less than or equal to 1/2 times the Airport Range Setting.
Large	Longest runway length is greater than or equal to 8100 feet.	Large airports are displayed on the map when the Map Range is less than or equal to the Airport Range Setting.

Table 9-7 Airport Display Range Setting



NOTE: The Airport Range Setting of “Off” means airports are never displayed. Heliports are displayed on the map page if the Heliport Display Setting is “On” and the Map Range is less than or equal to 1/4 times the Airport Range Setting.

Map Page Field Type	
Blackout Mode	Checklist - Checklist Page
Charts - Charts Page	Fuel PLAN - Fuel Planning Page
Flight Plan - Flight Plan Page	SCHED MSG - Scheduled Messages
Map - Map Page	Trip PLAN - Trip Planning Page
Nearest - Nearest Page	VCALC - VCALC Page
NEAR APT - Nearest Airport Page	User FREQ - User Frequencies
PROC - Procedures Page	WPT INFO - Waypoint Information
Approach - Approach Page	Weather - Weather Page
Arrival - Arrival Page	CNXT WX - Connex WX Page
Departure - Departure Page	FIS-B WX - FIS-B Weather Page
Backlight - Backlight Page	Stormscope - Stormscope Page
Services - Services Page	WX Radar - Weather Radar Page
Traffic - Traffic Page	SiriusXM WX - Sirius XM WX Page
Terrain - Terrain Page	OFF - Do Not Display Page Field
Utilities - Utilities Page	

Table 9-16 Map Page Field Types of Information

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9.6 Map Symbols

Various symbols are used to distinguish between waypoint types. The identifiers for any on-screen waypoints can also be displayed. Special-use and controlled airspace boundaries appear on the map, showing the individual sectors in the case of Class B, Class C, or Class D airspace. The following symbols are used to depict the various airports and nav aids on the Map Page.

















Symbol	Description
	Airport with hard surface runway(s); Serviced, Primary runway shown
	Airport with hard surface runway(s); Non-Serviced, Primary runway shown
	Airport with soft surface runway(s) only, Serviced
	Airport with soft surface runway(s) only, Non-Serviced
	Unknown Airport
	Restricted (Private) Airfield
	Intersection
	VOR
	VORTAC
	VOR/DME
	TACAN
	DME
	NDB
	Locator Outer Marker
	Heliport
	User Waypoint
	VRP

Table 9-18 Map Symbols

9.7 Flight Plan Depiction

When a flight plan is present, it will be depicted on the GTN maps.

Flight plan leg colors are used to indicate past, active, or future flight plan segments. A thin light gray line indicates a previous flight plan segment. A bold magenta line indicates an active flight plan segment for which the navigator is providing guidance. A bold white line indicates future flight plan segments. Missed approach procedures are depicted with a thin white line to indicate that they are an upcoming segment of the flight plan, but will not become navigable without the pilot specifically activating the missed approach procedure.

Flight plan labels are white boxes with black borders and black text to indicate they are fixes in the flight plan. If the waypoint is the active waypoint in the flight plan, the border and text are magenta.

All holding patterns and procedure turns are depicted with the same coloration as all other flight plan segments. Entries are depicted with segmented arrows to indicate which direction in which the course guidance will be given. This is used for both hold entry and procedure turn course reversals. Once a hold becomes active the entry guidance is removed from the map and only the active hold is depicted.

Headings to fly are depicted as directional arrows with spaces between them and the label “Vectors” or “MANSEQ” to indicate what the pilot might expect while flying the heading depicted. “MANSEQ” is “Manual Sequencing” abbreviated and denotes that the procedure is complete upon reaching that heading and that no other guidance will be given from the navigator without pilot interaction.

The following illustrates the flight plan segments as presented on the GTN maps.

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GTN provides guidance in the hold at WIGAN intersection.



Figure 9-47 Active Hold

In this case the teardrop entry for the hold at WIGAN is being depicted. Upon reaching the holding fix inbound, the entry arrows will be removed from the map and the dotted holding pattern will become active with magenta arrows.



Figure 9-48 Holding Pattern Entry

The active flight plan leg is WARIC to WHATE as indicated by the magenta line to the magenta labeled waypoint.



Figure 9-49 Active and Future Flight Plan Segments

The active leg is the course to OCITY intersection. After OCITY the flight plan depicts a turn to 100° for vectors.



Figure 9-50 Active Leg to Vectors

Previous legs are light gray, active leg is magenta.

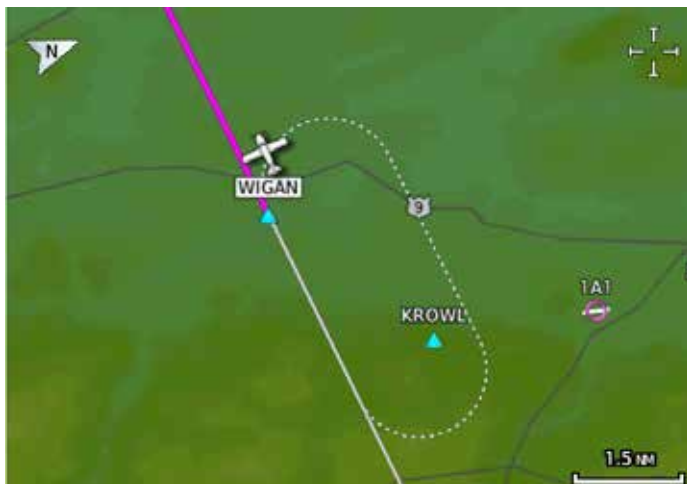


Figure 9-51 Exiting the Hold

The leg outbound from LSO is active and indicates a procedure turn. When inbound from the procedure turn the inbound segment will become active and LSO will still be the active waypoint.



Figure 9-52 Active Procedure Turn

A flight plan along T295 with previous, the active leg and the future legs depicted.



Figure 9-53 Past, Active and Future Flight Plan Segments

Active Heading Leg



Figure 9-54 Active Heading Leg (Vectors)

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Active Flight Plan Leg



Figure 9-55 Active Flight Plan Leg

The active flight plan leg inbound to a holding pattern at WIGAN intersection.



Figure 9-56 Active Flight Plan Leg Prior to Holding Pattern

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11.2 General Database Information

Garmin TAWS and HTAWS use terrain and obstacle information supplied by government and private sources. The data undergoes verification by Garmin to confirm accuracy of the content. **However, the displayed information should never be understood as being all-inclusive. Pilots must familiarize themselves with the appropriate charts for safe flight.**



NOTE: The data contained in the terrain and obstacle databases comes from government and private agencies. Garmin accurately processes and cross-validates the data, but cannot guarantee the accuracy and completeness of the data.

11.2.1 Database Versions

The version and area of coverage of each terrain/obstacle database is shown on the System-System Status page. Databases are checked for integrity at power-up. If a database is found to be missing and/or deficient, the TAWS/HTAWS system fails the self-test and displays the TAWS/HTAWS system failure message.

11.2.2 HTAWS Database Requirements

To function properly, HTAWS requires the use of databases specific to helicopters and HTAWS. The databases required are:

- 2.5 arc-second Terrain Database
- Helicopter Obstacle Database
- Helicopter Navigation Database

11.2.3 Database Updates

For information on how to update databases see Section 19.2, Database Information and Updates.


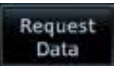
12.5.3 Connex Settings



Figure 12-74 Connex Settings Menu

12.5.3.1 Connex Data Request

It is necessary to request the downloading of weather products. Requests can be sent manually or set to automatically update at a selected rate. The Connex weather data may be updated at any time regardless of the automatic update timing by selecting a Manual Request. When multiple requests are made, some products are merged with the old data (SIGMETs/AIRMETs, TAFs, TFRs, and METARs), but the old data of other products is discarded.

- 
1. While viewing the Connex Settings Menu, touch the **Request Data** key to manually request data.
 2. Touch the **Auto Request** key to set the Auto Request Period.



NOTE: Auto Request can only be enabled on the GTN directly connected to the GSR 56.

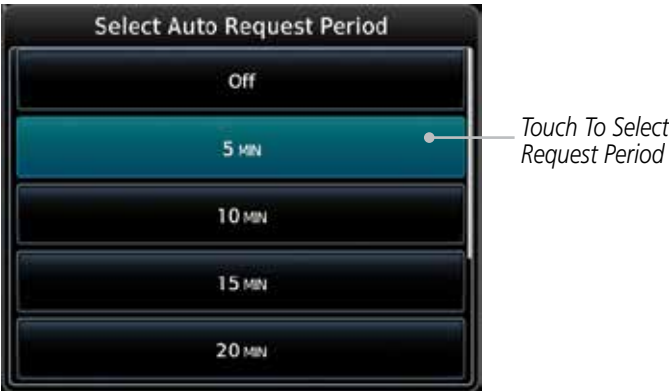


Figure 12-75 Select Auto Request Period

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The Nearest function provides detailed information for the 25 nearest airports, VORs, VRPs, NDBs, Intersections, and User waypoints within 200 NM of your current position. In addition, the Nearest pages include the five nearest Flight Service Station (FSS) and center (ARTCC/FIR) points of communication and alert you to any Special Use (SUA) or Controlled Airspace you may be in or near.



Nearest Waypoint Types

Figure 13-1 Nearest Page

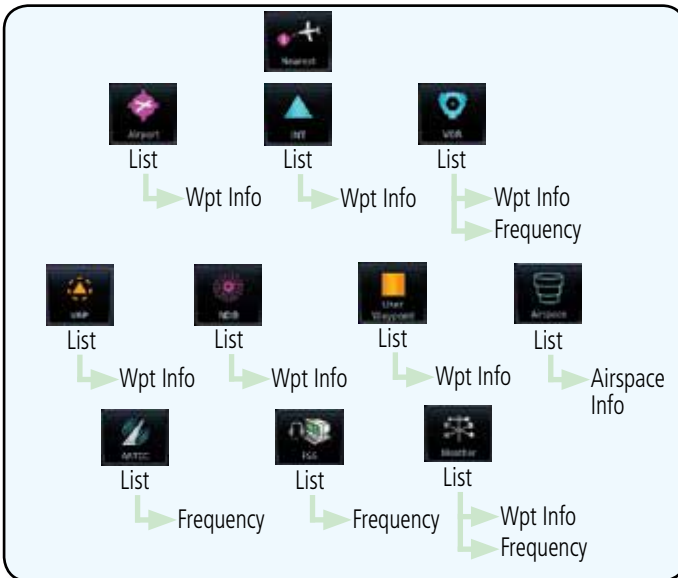


Figure 13-2 Nearest Page Functional Map

13.5 Nearest VRP

NOTE: This feature is available in software v6.20 or later.

The Nearest VRP Page displays the identifier, symbol, bearing, and distance to the 25 nearest VRPs (within 200 NM of your present position).

1. While viewing the Nearest function, touch the **VRP** key.



Figure 13-11 Nearest VRPs

2. Touch the **Up** and **Down** keys to scroll through the list.
3. Touch the **VRP Identifier** key to show the Waypoint Info page for the selected VRP.

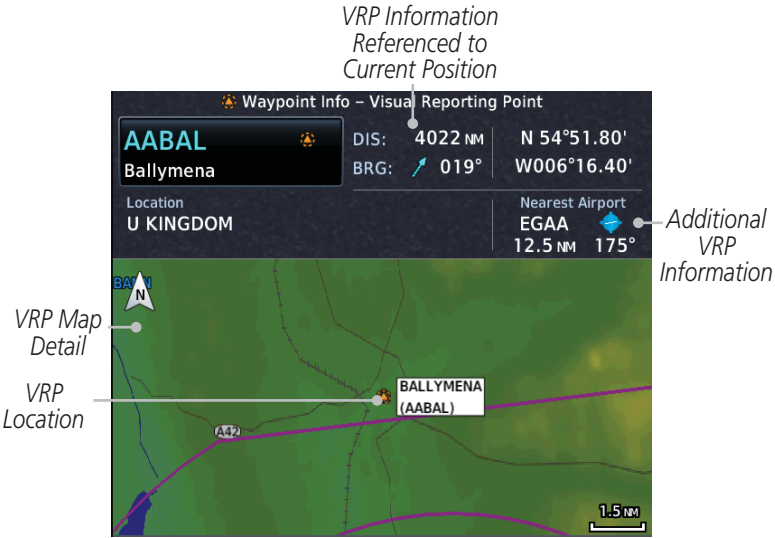


Figure 13-12 Waypoint Info - Visual Reporting Point

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1. While viewing the System page, touch **System Status**.
2. Use the **Up** and **Down** arrow keys as needed to view the Database Information.
3. Touch the **Back** key to return to the System page.

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Com/Nav

16.1.1 Serial Number and System ID

FPL

The System Status section shows the unit Serial Number and the System ID.

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16.1.2 Version Information

Proc

The software versions of the GTN unit are displayed. This information is useful when contacting Customer Support.

Charts

16.1.3 Database Information

Wpt Info

The Database Information section lists the name of the database, its version, and expiration date for the currently used databases, and also contains the Database SYNC function. Standby databases are listed for databases not currently used, but available on the data card. Database conflicts will be shown in the Conflicts section. For more information on GTN databases and how to update them see Section 19.2.

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16.2 GPS Status

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16.2.1 GPS Status Page

Nearest

The GPS Status Page provides a visual reference of GPS receiver functions, including current satellite coverage, GPS receiver status, position accuracy, and displays your present position (in latitude and longitude) and altitude. The GPS Status Page also displays the current UTC time at the top right of the page.

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The Satellite Status Page is helpful in troubleshooting weak (or missing) signal levels due to poor satellite coverage or installation problems. You may wish to refer to this page occasionally to monitor GPS receiver performance and establish a normal pattern for system operation. Should problems occur at a later date, you may find it helpful to have an established baseline from which to compare.

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1. While viewing the System page, touch **GPS Status**.

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- Note 1: B/D APT is the straight line distance.
- Note 2: Dist to DEST is the distance along the flight plan.

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Function Field Type	
CDI - Course Deviation Indicator	Passenger Address - PA Toggle
Flap Override - Flap Override ¹	Playback - Play Last Recording
GPWS Inhibit - GPWS Inhibit ¹	TAWS Inhibit - TAWS Inhibit
G/S Inhibit - G/S Inhibit ¹	Gen Timer - Generic Timer Control
HTAWS RP Mode - HTAWS RP Mode ²	WX RDR Controls - Weather Radar Controls
OBS/Suspend/Unsuspend Button	OFF - Do Not Display Data Field
On Scene - "On Scene" Mode Toggle	

Table 16-7 Function User Field Selections

- Note 1: With TAWS-A enabled.
- Note 2: With HTAWS enabled.

Map Page Field Type	
Blackout Mode	Checklist - Checklist Page
Charts - Charts Page	Fuel PLAN - Fuel Planning Page
Flight Plan - Flight Plan Page	SCHED MSG - Scheduled Messages
Map - Map Page	Trip PLAN - Trip Planning Page
Nearest - Nearest Page	VCALC - VCALC Page
NEAR APT - Nearest Airport Page	User FREQ - User Frequencies
PROC - Procedures Page	WPT INFO - Waypoint Information
Approach - Approach Page	Weather - Weather Page
Arrival - Arrival Page	CNXT WX - Connex WX Page
Departure - Departure Page	FIS-B WX - FIS-B Weather Page
Backlight - Backlight Page	Stormscope - Stormscope Page
Services - Services Page	WX Radar - Weather Radar Page
Traffic - Traffic Page	SiriusXM WX - Sirius XM WX Page
Terrain - Terrain Page	OFF - Do Not Display Page Field
Utilities - Utilities Page	

Table 16-8 Page User Field Selections

16.10 Connex Setup - GSR 56

This page provides information about the GSR 56 and the Connex Registration page. See section 16.3.3 for more details.



1. While viewing the System page, touch **Connex Setup** to access the GSR 56 LRU Status page.



2. Touch **Connex Registration** to set up the Connex account. Follow the information provided in section 16.3.3.

16.11 Connex Setup - Flight Stream 210 and 510

The GTN interfaces with the Flight Stream 210 Bluetooth transceiver and Flight Stream 510 wireless datacard. Using a Flight Stream and the GTN, flight plans are sent and received over Bluetooth. In addition, GPS position is provided from the GTN and attitude is forwarded from a connected GDU. The GTN can also configure the Flight Stream's Bluetooth.

The Flight Stream 510 also includes a Wi-Fi transceiver for updating databases. For more information on updating databases with a Flight Stream 510 refer to Section 19.2. The GTN can configure the Flight Stream 510's Wi-Fi.



Figure 16-47 Connex Setup for Flight Stream 510



NOTE: Turning Flight Plan imports off will remove the ability of the GTN to receive flight plans from the Flight Stream. This could be used if there are repeated erroneous attempts by a portable device application to send flight plans to the GTN.

16.11.1 Operation

Data output from the GTN and Flight Stream occurs automatically and requires no pilot action (such as, flight plan, GPS position, and attitude). Additionally, ADS-B traffic and weather can be output from the Flight Stream when connected to a GDL 88 or GTX 345 and XM WX and SiriusXM satellite radio information can output when connected a GDL 69. The Flight Stream 210 and 510 also support sending and receiving GSR 56 SMS messages and controlling the GSR 56 Iridium phone when used with a compatible portable application.

From the Connex Setup page, the pilot can enable or disable Flight Stream features (flight plan importing, phone/SMS, and database transfers), setup Flight Stream Bluetooth and Wi-Fi, and manage paired Bluetooth devices.

On the GTN's Paired Devices page, the device status indicates if the portable device is connected and communicating with the Flight Stream. The “Auto-Reconnect” setting determines if the Flight Stream will automatically connect to up to four devices when in range. When this setting is disabled, the pilot must initiate the connection from the device. For devices that always reconnect automatically, this setting will not be shown. Removing a device from this page by pressing “Remove” will require the device to be paired again before transferring data.



NOTE: *If the pairing is removed from either device (portable device or GTN) it must be removed on the other device before a new pairing to that same device is established again. Essentially, pairing must be removed on both devices before repairing.*

18 SYMBOLS

The following tables describe the symbols that are found on the Map display.

18.1 Map Page Symbols


















Symbol	Description
	Airport with hard surface runway(s); Serviced, Primary runway shown
	Airport with hard surface runway(s); Non-Serviced, Primary runway shown
	Airport with soft surface runway(s) only, Serviced
	Airport with soft surface runway(s) only, Non-Serviced
	Unknown Airport
	Restricted (Private) Airfield
	Intersection
	VOR
	VORTAC
	VOR/DME
	TACAN
	DME
	NDB
	Locator Outer Marker
	Heliport
	User Waypoint
	VRP

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18.2 SafeTaxi™ Symbols






Symbol	Description
	Helipad
	Airport Beacon
	Under Construction Zones
	Unpaved Parking Areas
	Hot Spot

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	VHF	Very High Frequency
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	VMC	Visual Meteorological Conditions
Audio & Xpdr Ctrl	VNAV, VNV	vertical navigation
	VOR	VHF Omni-directional Range
Com/Nav	VORTAC	very high frequency omnidirectional range station and tactical air navigation
	VRP	Visual Reporting Point
FPL	VS	Vertical speed
	VSI	Vertical Speed Indicator
Direct-To		
Proc	WAAS	Wide Area Augmentation System
	WGS-84	World Geodetic System - 1984
Charts	WPT	waypoint(s)
	WX	weather
Wpt Info		
Map	XPDR	transponder
	XTK	cross-track
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19.2 Datacard Information and Updates

The GTN uses several databases to provide up-to-date aviation information. GTN databases can be updated by the pilot using an SD card or Flight Stream 510 wireless database card. The GTN can also synchronize databases in the cockpit with other displays using Database SYNC and Chart Streaming.

Information about the installed and standby databases can be viewed on the System Status page. Database SYNC and Chart Streaming can be configured in the menu on the System Status page.

The database card should not be removed except to update the databases stored on the card. For basic flight operations a database card is required for database storage. The database cards cannot be shared between units.

19.2.1 GTN Databases

- **Navigation** - The navigation database contains information for waypoints and airports, such as procedures, runways, airways, airspaces, frequencies, and visual reporting points. For helicopter applications, a navigation database that includes additional heliports is available.
- **Basemap** - The basemap database contains land and water data, such as roads, boundaries, rivers, and lakes.
- **SafeTaxi** - The SafeTaxi database contains detailed airport diagrams for selected airports. These diagrams aid in following ground control instructions by displaying the aircraft position on the map in relation to taxiways, ramps, runways, terminals, and services.
- **Obstacles** - The obstacle database contains data for obstacles, such as towers, that pose a potential hazard to aircraft. Obstacles 200 feet and higher are included in the fixed-wing obstacle database. The rotorcraft database includes all reported obstacles regardless of height. It is important to note that not all obstacles are necessarily charted and therefore may not be contained in the obstacle database. Several obstacle database options are available. Obstacle databases created for GTN software v5.10 or later include all power lines or only Hazardous Obstacle Transmission (HOT) lines depending on the type of obstacle database installed. HOT lines are those power lines that are co-located with other FAA-identified obstacles. The obstacle database is required for the TAWS and HTAWS functions.

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- **Terrain** - The terrain database contains terrain mapping data. The terrain database is required for the TAWS and HTAWS functions. Systems using HTAWS require a 2.5 arc-second database while non-HTAWS applications can use a 9 arc-second database.
- **FliteCharts** - FliteCharts resemble the paper version of AeroNav Services (formerly named National Aeronautical Charting Office) terminal procedure charts. The charts are displayed with high-resolution and in color for applicable charts. The GTN depiction shows the aircraft position on the moving map in the plan view of the approach charts and on airport diagrams.
- **ChartView** - ChartView resembles the paper version of Jeppesen terminal procedure charts. The charts are displayed in full color with high-resolution. The GTN depiction shows the aircraft position on the moving map in the plan view of approach charts and on airport diagrams.

Database Name	Where Stored	Update Cycle	Provider	Notes
Navigation	Internal memory	28 days	fly.garmin.com	
Basemap	Internal memory	As required	fly.garmin.com	
SafeTaxi	Internal memory	56 days	fly.garmin.com	
Obstacle	Internal memory	56 days	fly.garmin.com	
Terrain	Database card	As required	fly.garmin.com	
FliteCharts	Database card	28 days	fly.garmin.com	Disables 180 days after expiration date.
Chartview	Database card	14 days	Contact Jeppesen	Disables 70 days after expiration date.

Table 19-1 Database List



NOTE: Garmin requests that the flight crew report any observed discrepancies related to database information. These discrepancies could come in the form of an incorrect procedure, incorrectly identified terrain, obstacles and fixes, or any other displayed item used for navigation or communication in the air or on the ground. Go to www.flygarmin.com and at the bottom of the page select "Aviation Data Error Report."

19.2.2 Updating Databases with an SD Card

To update the GTN database use an SD card. Instructions on updating the GTN database and the required equipment is found at www.fly.garmin.com.

The ChartView database is provided directly from Jeppesen. Contact Jeppesen (www.jeppesen.com) for ChartView subscription and update information. An enablement card that is purchased from Garmin is separate from the Jeppesen database and is required to enable ChartView.

1. Download the database updates to the Garmin Database Card from the appropriate website.
2. Insert the database card into the slot of the GTN.
3. Apply power to the GTN.
4. The database update page will be displayed, listing all effective database updates on the database card. Database cycles that are not effective or already installed will be kept on the Garmin Database Card as standby databases until they become effective. Hold down the dual-concentric knob while applying power to the GTN to force the update of these databases.



Figure 19-4 Updated Databases



5. Select the desired database updates and touch the **Update** key.



NOTE: *Do not remove power to the GTN while updating databases.*

6. The GTN will begin the update process and then verify the integrity of the installed databases.
7. Check that all databases are current and there are no errors. If a database is highlighted in yellow, it is either expired or missing.

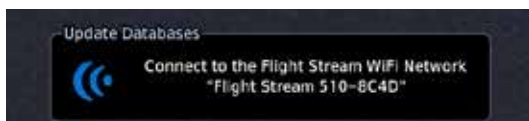


Figure 19-5 Currently Installed Software/Databases

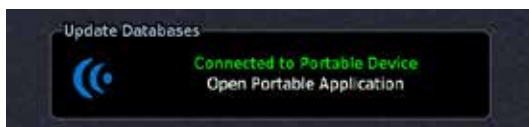
19.2.3 Updating Databases with a Flight Stream 510

GTN databases can also be updated using the Flight Stream 510 wireless database card with a portable device and the Garmin Pilot application.

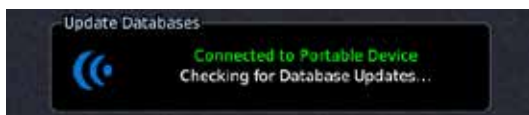
1. Follow the instructions within the app to purchase and download the database updates.
2. Ensure the Flight Stream 510 is inserted into the database card slot and apply power to the GTN.
3. When prompted on the database verification screen, connect the portable device to the Flight Stream 510 Wi-Fi network. The network name and password can be displayed by pressing the **Show WiFi Info** key.



4. Once Connected, open Garmin Pilot on the portable device.



5. The Flight Stream 510 checks for database updates on the portable device and displays the database update page or notifies the pilot that no database updates are available.



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- Select the desired database updates. All selected databases will be transferred to the GTN, but the GTN may choose to not install all databases. Database cycles that are not yet effective will be preloaded and kept as standby databases until they become effective. Databases that are not supported by this GTN may be transferred and then SYNC'd to other Garmin displays.

- Touch the **Update** key.

NOTE: Do not remove power to the GTN while updating databases.

- The GTN will begin the transfer, update, and verification process. The terrain and charts databases can take up to 5 minutes each to transfer over Wi-Fi to the Flight Stream 510.



9. Check that all databases are current and there are no errors. If a database is highlighted in yellow, it is either expired or missing.



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19.2.4 Database SYNC

Database SYNC allows the GTN to synchronize databases from a single unit to other Garmin avionics. The pilot only needs to update a single database card (SD card or Flight Stream 510) and the new databases are automatically SYNC'd through the units connected in the cockpit and configured for Database SYNC. Databases must be purchased for all avionics in the cockpit.

Database SYNC is supported by these database types:

- Navigation
- Basemap
- SafeTaxi
- Obstacle
- FliteCharts
- Airport Directory

The database SYNC process may take several minutes, depending on how many databases have been updated. The status of the database transfers to a unit can be viewed on the System Status page under the "Standby" tab. The GTN will display the source of the received databases (for example: "Database SYNC - GTN #2"). If a database SYNC is pending, completed, or not authorized, the status will also be indicated.

When the SYNC is complete, if the aircraft is stopped and has yet to takeoff, the pilot will be prompted with the option to restart and update to the newly transferred database.



NOTE: *Restarting the GTN must only be performed when the aircraft is on the ground as navigation and communication from the restarted unit will be lost for a period of time.*

19.2.4.1 Resolving Database SYNC Conflicts

If the GTN determines that there are multiple LRUs with the newest cycle of a database, but they have different regions or types of that database (e.g., fixed wing vs. rotorcraft navigation database, different regions of the navigation database, or different obstacle database types) then a database conflict will occur. When a database conflict occurs, that database will not be SYNC'd until the pilot resolves the conflict. On the unit that has the desired databases to SYNC to the other units, press the **Resolve Conflicts** key that is located on the Conflicts tab of the System Information page.

19.2.5 Chart Streaming

While the Chart database is SYNCing in the background, the GTN will stream individual charts to other compatible displays. This enables all Garmin displays to use the latest chart database information even though the database is currently installed only on a single unit. Chart Streaming will begin after the chart database has begun SYNCing.

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19.2.6 Database Troubleshooting Tips

Problem	Action
Unable to download databases to the SD card	<ul style="list-style-type: none"> • Ensure you have a high capacity SD card programmer • Ensure that your card programmer is plugged directly into your computer and not into a USB hub, computer screen, or keyboard • Ensure the sliding lock tab is in the unlocked position (up, when viewing the card label-side up)
Database update fails	<ul style="list-style-type: none"> • Restart the GTN and retry the update • Download the databases to the database card again • Ensure that the databases were purchased for the system ID of the GTN that the database card is being used to update
Database SYNC fails	<ul style="list-style-type: none"> • Ensure that the databases were purchased for all the GTNs and GDUs in the cockpit • Ensure that all conflicts have been resolved (section 19.2.4.1)
Database cannot be selected for update	<ul style="list-style-type: none"> • Restart the GTN while pressing the dual-concentric knob until the Garmin logo is fully illuminated to view all database updates on the database card, regardless of effectivity • Download the databases to the database card again • Ensure that the databases were purchased for the system ID of the GTN that the database card is being used to update
Database cannot be transferred to Flight Stream 510	<ul style="list-style-type: none"> • Ensure that the databases were purchased for the system ID of the GTN that the database card is being used to update • Ensure that the database transfers are enabled for the Flight Stream 510 (section 19.2.3) • Ensure that all database updates have been downloaded to the Garmin Pilot application • Press the Show All DBs key on the database verification page to view all database updates on the portable device, regardless of effectivity
Database is transferred to Flight Stream 510 but cannot be selected for update	<ul style="list-style-type: none"> • Ensure that the databases were purchased for the system ID of the GTN that the database card is being used to update • Ensure that the transferred database is currently effective • Restart the GTN while pressing the dual-concentric knob until the Garmin logo is fully illuminated to view all database updates on the Flight Stream 510, regardless of effectivity

Table 19-1 Database Troubleshooting Tips

19.5 Telligence Voice Command Qualification Procedure

In order to enable voice command functionality crew members must successfully perform and complete 17/20 (85%) voice commands in the Telligence aircraft qualification procedure. Crew members must be comfortable speaking into an aviation headset and proficient in English.

Voice Command Guidelines



NOTE: *If a voice command is uninterpretable, verify the system is performing the intended action or displaying the desired data. If the system does not recognize a command, use the touchscreen to execute the function. The GTN Voice Command History details all commands performed.*

- Position the headset MIC approximately 1/8-inch from mouth, align with bottom lip to avoid breath sounds in the microphone.
- Speak conversationally.
- Annunciate clearly.
- Speak in a normal tone and volume.
- Speak at a normal cadence (not too quickly or slowly).
- Pause briefly between activation of the PTC switch and when speaking the voice command.
- Review the commands prior to performing the qualification.

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Voice Command Instructions

1. Press and hold the Push to Command (PTC) switch.
2. Speak the entire command into the headset MIC.
3. Release the "PTC" switch.
 - A positive tone (low-to-high) indicates a command is successfully executed. (i.e., page changed, radio tuned, MIC selected, etc.)
 - A negative tone (high-to-low) indicates the command is either unrecognizable or it's an invalid request.

Successful Command Example

If "show approaches page" is spoken and the approach selection page displays immediately then a positive tone will sound.

Unsuccessful Command Example

If "show map page" is spoken and the traffic page is displayed then a negative tone sounds.

Telligence Voice Command Qualification Procedure

Speak the unbold phrase if the voice command in this procedure is not applicable to the aircraft's configuration. If the total number of successful commands is less than 17 the voice commands must be disabled in configuration mode. This procedure is to be completed on the ground with the engine running.

Example: If the requirement states a COM radio is required, but your GTN does not have a COM radio, use the unbold command.

1. Start the GTN and acquire a GPS position.
2. Conduct the voice commands in sequential order while wearing an aviation headset. If necessary, a command can be attempted twice.
3. When the command is successful check the box next to the command.

☐ **SHOW Flight Plan PAGE**

*** Manually enter a flight plan with a towered airport as the destination ***

☐ **SHOW Trip Planning PAGE**
☐ * **TUNE Nearest Ground** or SHOW Nearest Airport PAGE

☐ * **TUNE Nearest ATIS** or SHOW Nearest Weather Frequency PAGE

☐ † **TOGGLE COM 2** or SAY Distance

☐ **SHOW Map PAGE**
☐ **ZOOM OUT**
☐ **SAY Distance to Destination**
☐ **SHOW Flight Timers PAGE**
☐ † **SELECT COM 2** or SAY ETA at Destination

☐ **SAY Active Waypoint**
☐ **CREATE Waypoint Here**
☐ * **TUNE Destination Tower** or SHOW Destination Runways PAGE

☐ ‡ **SHOW Traffic PAGE** or SHOW Nearest PAGE

☐ **SHOW Procedures PAGE**
☐ **SHOW V-CALC PAGE**
☐ **SHOW Current Time**
☐ **SAY Desired Track**
☐ **BACK**
☐ **SHOW Voice Command History Page**

* A GTN COM radio is required.

† Two COM radios connected to the GMA are required.

‡ Traffic capability is required on the GTN.

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