# GARMIN

Garmin Pilot for Android™

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This manual reflects the operation of Software version 7.7 or later. Some differences in operation may be observed when comparing the information in this manual to earlier or later software versions. Some differences may also be observed when comparing the information in this manual to your device.

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**WARNING:** Do not rely solely upon the indicators shown on the Panel Display Pane to maneuver the aircraft.



**WARNING:** The altitude displayed by Garmin Pilot<sup>TM</sup> on the Panel Page is geometric height above Mean Sea Level and could vary significantly from the altitude displayed by pressure altimeters. Always use pressure altitude displayed by the aircraft altimeter when determining or selecting aircraft altitude.



**WARNING:** Do not use outdated database information. Databases used in the Garmin Pilot<sup>TM</sup> must be updated regularly in order to ensure the information remains current. Pilots using any outdated database do so entirely at their own risk.



**WARNING:** To aid in device security, use a properly supported device that is dedicated to the aircraft and not shared with personal use.



**WARNING:** To reduce the risk of unsafe operation, carefully review and understand all aspects of Garmin Pilot<sup>TM</sup> User documentation and the Pilot's Operating Handbook of the aircraft. Thoroughly practice basic operation prior to actual use. During flight operations, carefully compare indications from Garmin Pilot<sup>TM</sup> to all available navigation sources, including the information from other NAVAIDs, visual sightings, charts, etc. For safety purposes, always resolve any discrepancies before continuing navigation.



**WARNING:** Garmin Pilot<sup>TM</sup> has a very high degree of functional integrity. However, the pilot must recognize that providing monitoring and/or self-test capability for all conceivable failures is not practical. Although unlikely, it may be possible for erroneous operation to occur without a fault indication shown by Garmin Pilot<sup>TM</sup>. It is thus the responsibility of the pilot to detect such an occurrence by means of cross-checking with all redundant or correlated information available in the cockpit.



**WARNING:** For safety reasons, Garmin Pilot<sup>TM</sup> operational procedures must be learned on the ground.





WARNING: The United States government operates the Global Positioning System and is solely responsible for its accuracy and maintenance. The GPS system is subject to changes which could affect the accuracy and performance of all GPS equipment. Portions of Garmin Pilot™ utilize GPS as a precision electronic NAVigation AID (NAVAID). Therefore, as with all NAVAIDs, information presented by Garmin Pilot™ can be misused or misinterpreted and, therefore, can become unsafe.



**WARNING:** Do not use basemap (land and water data) information for primary navigation. Basemap data is intended only to supplement other approved navigation data sources and should be considered as an aid to enhance situational awareness.



**WARNING:** Do not use the indicated data link weather product age to determine the age of the weather information shown by the data link weather product. Due to time delays inherent in gathering and processing weather data for data link transmission, the weather information shown by the data link weather product may be significantly older than the indicated weather product age.



**WARNING:** Do not use data link weather information for maneuvering in, near, or around areas of hazardous weather. Information contained with in data link weather products may not accurately depict current weather conditions.



**WARNING:** Do not rely solely upon the display of traffic information for collision avoidance maneuvering. The traffic display does not provide collision avoidance resolution advisories and does not under any circumstances or conditions relieve the pilot's responsibility to see and avoid other aircraft



**WARNING:** Do not rely solely upon the display of traffic information to accurately depict all of the traffic within range of the aircraft. Due to lack of equipment, poor signal reception, and/or inaccurate information from aircraft or ground stations, traffic may be present that is not represented on the display.





**WARNING:** Use of an unapproved wireless device inserted into the SD card slot of your Garmin navigator may induce a malfunction, may cause damage to the unit, will void the Garmin warranty, and may nullify the airworthiness approval of the installation. The only wireless device currently certified for use in a compatible Garmin avionics system SD card slot is the Garmin Flight Stream 510. Do not insert an unapproved wireless device into the SD card slot of your Garmin avionics system.



**NOTE:** All visual depictions contained within this document, including screen images of Garmin Pilot<sup>TM</sup> panel and displays, are subject to change and may not reflect the most current Garmin Pilot<sup>TM</sup> software and aviation databases.



**NOTE:** Temporary Flight Restriction (TFR) data is provided by the FAA and may not be updated outside of normal business hours. Confirm data currency through alternate sources and contact your local FSS for interpretation of TFR data.



**NOTE:** The navigation databases used in Garmin navigation systems contain Special Procedures. Prior to flying these procedures, pilots must have specific FAA authorization, training, and possession of the corresponding current, and legitimately-sourced chart (approach plate, etc.). Inclusion of the Special Procedure in the navigation database DOES NOT imply specific FAA authorization to fly the procedure.



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Rev	Date	Change Summary
А	December, 2012	Initial Release
В	January, 2013	Updated for Application version 2.3: Airport Information Page updates Chart Next Cycle Downloads
С	May, 2013	Updated for Application version 2.4: Added Scratch Pad Added Split-screen Traffic Updated Trip Planning
D	July, 2013	Updated for Application version 2.5 and 2.6 Added Airspace Widget Added combined Map Layers Changed Trip Planning to File & Brief Added Routes to File & Brief Added Display Time Format Added Tools Menu for configuring time/distance alerts Added Custom Own Ship Icons.
E	November, 2013	Updated for Application version 2.7 Added Proposed Routes Added Keep Screen on Added Decoded TAFs Added D2® Watch support
F	January, 2014	Updated for Application version 2.8 Added support for the GDL 39 3D and a new attitude indicator display in the navigation panel Added 'right' traffic pattern directions for runways in the airport browser and the airport information widget.
G	April, 2014	Updated for Application version 3.0 Added support for vector maps that work offline Added new distance measure tool Added fuel range rings Added ownship track vector Added extended runway centerlines Added auto-zoom feature Added map decluttering options



Н	August, 2015	Updated for Application version 4.3 Added GDL 39 support Added Connext features Added Flight Stream support Added alternate colors for flight conditions Added Airport Facilities Directory Added support for alternate storage locations, such as SD cards Added G3X Touch support Added GLO support
J	April, 2016	Added Terrain & Obstacles database  Updated for Application version 5.1  Added support for GTX 345  Revised Trip Planning procedures  Added traffic alerts  Added support for Leidos Flight Service integration  Added descriptions of Chart binder and searching enhancements  Added multiple pages for the Scratch Pad  Added Screen Lock  Added Screen Lock  Added Light and Dark modes  Added Night Mode for SafeTaxi  Added VIRB integration  Added support for Google Maps™ mapping service in Airport Info  Added Airport Widget to split-screen setups  Added Demo Mode
K	April, 2016	Added warnings for trips with airports below VFR/IFR minimums  Updated for Application version 5.2.1  Added Connext support for the aera 660.  Added altitude to the PIREP map overlay.  Personal minimums may now be added to a pilot profile.  Chart search on handsets now works like the tablet version.  Bookmarked flight plans can be renamed.



L	November, 2016	Updated for Application version 5.4.4 Flight Stream 510 Integration Logbook features D2 Bravo and Bravo Titanium pilot support watches Altitude and report age filtering for Map PIREP overlay Sequential chart navigation & chart printing features Best Runway recommendations added to Airport Information and airports widget
M	March, 2018	Updated for Application version 6.3 Worldwide Winds Aloft Coverage Icing Forecast Radar and Infrared Satellite Color Palettes Chart Overlays Enhanced Stadium TFRs Glide Range Ring Logbook Tracks Auto-Download Pilot Updates D2 Charlie Series watch support Split Screen Synthetic Vision Checklists GDL 51/51R GDL 52/52R Virb 360 Camera Support Logbook Photos Logbook Auto-Logging FastFind Predictive Waypoint Entry Helicopter Charts Units Preferences Nearest (NRST) navigation functionality Airspace Altitude Labels Highest Point Along Route Synthetic Vision



N	July, 2019	Updated for Application version 7.2 Advanced Aircraft Performance Weight & Balance Storm Cell Movement Area Forecast Discussion D2 Delta PX Support MARQ Aviator Watch Support Weather Imagery Quick Fuel Set Added SiriusXM Lightning, TFRs, Echo Tops, Winds Aloft, & Icing GPS175/GNX375 Support Model Output Statistics (MOS) Base Reflectivity Radar FBO Fees
Р	November, 2019	Updated for Application version 7.3 Images Refreshed Throughout Bug Fixes Throughout GNC 355 Support Clearance Delivery Phone Numbers Removal of FAA Domestic Filing Form Type to Support The ICAO Filing Mandate. Flight Profile View Enhanced Air Data & Analytics Enhanced Connext Screen
Q	February, 2020	Updated for Application version 7.4 Enhanced Air Data & Analytics Emergency Button Chart Annotations GI 275 Support Enhanced Flight Profile View
R	July, 2020	Updated for Application version 7.5 European Autorouting



S	October, 2020	Updated for Application version 7.6 D2 Air Support Aera 760 Support Tab Bar Enhanced Demo Mode
T	October, 2020	Updated for Application version 7.6.1 Visited Airports Aerial Airport View via Google Maps
U	February, 2021	Updated for Application version 7.7 Enhanced Start-up Experience Enhanced Aviation Database via ADB2 Integration Microsoft Flight Sim 2020 Integration Enhanced Data Sync Settings Procedure Selector (SID's & STAR's) Enhanced NOTAM Widget

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# **OVERVIEW**

# PLAN FILE FLY LOG

Garmin Pilot™ is the most comprehensive suite of tools for the Android designed specifically for general aviation and corporate pilots. Flight planning, DUAT(S) filing, charts, interactive maps, weather briefing resources, navigation capabilities, and a digital logbook; it's all included. The app's intuitive interface closely resemble those on the newest Garmin touchscreen avionics for seamless transition from preflight to in-flight. Plan, file, fly with Garmin Pilot.

# **FEATURES**

- Charts: VFR Sectionals, TAC, low and high IFR en-route, airport diagrams and approach procedures. Automatically generated binders instantly organize charts for the current flight plan.
- Optional geo-referenced Garmin FliteCharts® and Garmin SafeTaxi® both show aircraft position on approach charts or taxiways.
- Weather Maps: Animated radar, AIRMETs, SIGMETs, Lightning, PIREPs, METARs, TAFs, Winds Aloft, TFRs, Lightning, Infrared and Visible Satellite.
- Extensive text products: AIRMETs, SIGMETs, PIREPs, METARs, TAFs, Winds Aloft, and NOTAMs.
- Dynamic weather overlays with the current route displayed on the map
- AOPA Airport Directory and Fuel Prices
- Flight plan filing via a Filing Service Provider
- Comprehensive weather data direct from the National Weather Service and Environment Canada



**NOTE:** All visual depictions contained within this document, including screen images of Garmin Pilot<sup>TM</sup>, are subject to change and may not reflect the most current Garmin Pilot<sup>TM</sup> software and aviation databases.



# **ABOUT THIS HANDBOOK**

This operating handbook is designed to provide a comprehensive guide to help with understanding how to use Garmin Pilot for reviewing aviation weather, airport information, creating and filing flight plans, and for viewing charts, maps, and navigation data in-flight.

# ANDROID™ TRICKS FOR PILOTS

Android tablets are offered by a variety of manufactures and features can vary widely. It is important to know the features of a tablet before using Garmin Pilot for navigation. Some tablets are offered with one or two connectivity options; Wi-Fi or Wi-Fi + Cellular. It is also important to know which connectivity option is available before using Garmin Pilot for navigation.

There are also a few things to know about a tablet's basic features and settings that will enhance the Garmin Pilot experience. Some features of this application will vary between handsets and tablets. These features are not hidden, but they may not be immediately apparent. It is recommended to get completely familiar with the tablet and its features by reading the User's Guide for the tablet and/or the User's Guide for the tablet's Android version (Garmin Pilot requires Android 2.3 or later).

# **GPS**

Global Positioning System (GPS) receiving capability is optional on some Android tablets. Garmin Pilot can be used without GPS for flight planning, but the navigation features will be inoperative. If the tablet does not include a GPS receiver, a Garmin GLO™ portable GPS and GLONASS receiver, or a Garmin GDL 39 or GDL 39 3D portable GPS and ADS-B receiver will be required to take advantage of the navigation features of Garmin Pilot. Alternative or third-party GPS sources known to work with Garmin Pilot are: Bad Elf, Dual Electronics XGPS150 Universal Bluetooth GPS, and GNS 5870 MFI Bluetooth GPS receiver. Other portable GPS sources may also work with Garmin Pilot.



#### DISPLAY ORIENTATION

Many devices have a default setting that will enable the unit to automatically rotate the display to either portrait or landscape according to which edge of the unit is facing upward. This automatic setting can be quite troublesome in the cockpit as the solid-state accelerometers are very sensitive to movement and can cause the display to rotate unexpectedly.

The primary means of enabling/disabling the rotation lock is via the Settings Menu. Each device may have other options to lock the display orientation, consult the User's Guide.

## **Locking Display Orientation:**

- 1) On the Android device, touch **Settings** > **Display**.
- 2) Touch When device is rotated.
- 3) Touch Stay in current orientation.

#### **GLARE REDUCTION**

One limitation of some devices in the cockpit, is glare. There are number of ways to mitigate the effects of this glare using aftermarket screen protectors and similar products. However, one can do reasonably well by simply adjusting the display brightness.

# **Adjusting Display Brightness:**

- 1) On the Android device, touch **Settings** > **Display** > **Brightness Level**.
- 2) Use the slider control to manually adjust the display brightness.
- **Or:** Within Garmin Pilot, touch **Home** > **Brightness** under the Tools section and use the slider control to set the desired display brightness.



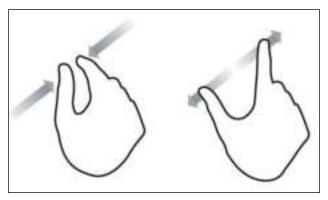
**NOTE:** Some Android devices have an "Automatic brightness" setting. It may be necessary to turn this off to manually adjust the device's screen brightness.



#### GENERAL GARMIN PILOT OPERATING GUIDELINES

Garmin Pilot by default will open on the Map Page. If the application has been recently used it will resume on the most recently viewed page. From any page, it is possible to access any desired feature by touching, flicking, and/or dragging a finger on the active areas of the display that appear as buttons, slide controls, flick lists, text fields, or icons. As with most applications, text fields automatically open a QWERTY keyboard for easy text entry.

Also like other applications that use maps, panning is done by "touch-dragging" a finger across the display, and magnifying or zooming is done by double-touching the display, by pinching, or use the button. Reversing the pinch gesture or touching the will de-magnify or zoom out. Additionally, double-touching the screen will increase magnification in 50% intervals and center the map over the area tapped.



Pinch Zoom



Garmin Pilot can be used in either portrait or landscape orientation and will respond to the Android's automatic orientation feature. The map may be displayed in either full screen or split screen in either orientation. The lower half of the display in portrait orientation or second (non-map) display in landscape orientation has the following functions; Widgets, Panel, Charts, SafeTaxi, Traffic, VIRB, Terrain, Checklist, or Synthetic Vision.

To streamline navigation throughout the app, Garmin Pilot now offers a Tab Bar at the bottom of the screen, which may be used as an alternative to the Home Screen Main Menu.

## **Displaying Tab Bar:**

- 1) Touch **Settings** > **General**.
- 2) Touch **Tab Bar** to adjust the Interface Style. Tap **Classic** to return to the legacy Home Screen Menu interface style.
- Panel Mode is customizable and can be configured to display an instrument panel
  with virtual instruments to indicate GPS altitude, ground speed, vertical speed,
  course, and lateral deviation as well as a table with multiple configurable data
  fields for monitoring navigation data.
- Widget Mode enables a series of customizable data windows called 'Widgets' to be displayed. Widgets offer quick access to a variety of aviation weather products (METARs, TAFs, Winds Aloft, NOTAMs, etc...) for nearby or selected airports.

Charts, SafeTaxi, Traffic when viewed in split-screen, have the same function, navigation, and capabilities as the full screen versions of these products, just displayed in half screen. Garmin Pilot requires a data connection for downloading maps and other data prior to departure, but once everything needed for the flight is downloaded, it is ready to navigate. The Downloads Menu in the Garmin Pilot settings options will indicate when new downloadable data products are available upon connection to the Internet.



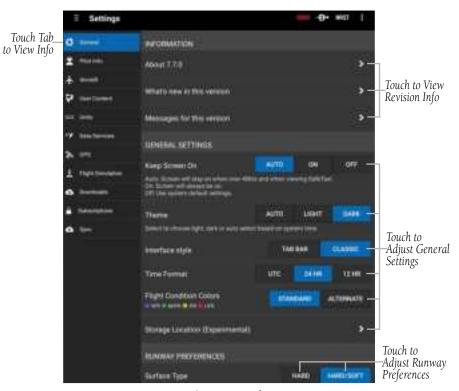
**NOTE:** With some of their newer devices, Android is moving away from buttons, both physical or virtual, and replacing their functionality with gesture-based navigation by default. Navigating within Garmin Pilot will differ accordingly througout depending on your device settings.



# **GETTING STARTED**



Garmin Pilot is fully functional immediately upon installation, but there are a few things that can be set up in order to optimize performance right away. The best place to start is with the highly intuitive Settings Menu, which can be found by momentarily touching the Home Button and then the Settings Icon. The Settings Menu is always available from the Home Button.



**Settings - General** 



From the Settings Menu it is possible to set up or change the time format, input pilot profile and aircraft information, manage user waypoints, set up the preferred flight plan filing service, manage data subscriptions and much more. All of these and more selections are available by touching the tab associated with the desired function. The show/hide features like the Navigation Information (on the map display) can be accessed in the Map Context Menu ( ) located in the upper right of the navigation bar

#### **HELP FILE**

The content of the User's Guide is mirrored in the in-app help file providing context sensitive instructions for getting the most out of a Garmin Pilot subscription. The help file can be accessed from any page, by touching the Map Context Menu () located in the Navigation Bar and then touching **Help** in the page sensitive menu. Alternatively, the Help file can be accessed from the Home Button () as well. Navigating within the Help File is as easy as touching any of the hyperlinks.

# Accessing the Help File:

Touch **Menu** > **Help**. The Help File will open to context sensitive content.

#### **USER'S GUIDE**

The Full Manual is a PDF formatted User's Guide for Garmin Pilot. The first time the file is accessed, the device will ask to choose a default PDF viewer. The Full Manual has a linked table of contents, index, and Bookmarks for easy navigation. The Full manual can also be downloaded from www.garmin.com.



**NOTE:** The Full Manual will open to the most recently accessed page. Use the Bookmarks or Page Slider to quickly navigate the file.



# **Accessing the Full Manual:**

- Touch Menu > Help.
- 2) Touch Download to download, touch View, to view the manual once downloaded. Anytime an updated manual is available the View button will revert to a Download button.

## Accessing the Full Manual at www.garmin.com:

- 1) Open www.garmin.com in a web browser.
- 2) In the top right corner of the page hover the pointer over **Support**.
- 3) Select Aviation Support.
- 4) Scroll down and select Aviation Manuals..
- 5) Type "Pilot" into the **Enter a Product Name or Serial Number** search bar.
- 6) From the next drop down menu select **Garmin Pilot™**.
- 7) Select the desired User's Guide to download, i.e. Garmin Pilot for Android User's Guide.

#### **NAVIGATION BAR**

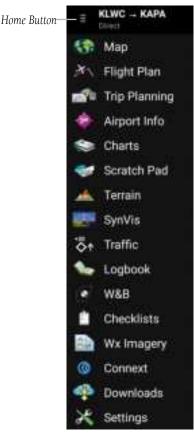
Garmin Pilot's user interface is comprised of icons and active areas that provide access to the various features and functions of the application. The Navigation Bar, located at the top of every page, provides access to many of the basic functions.





#### **HOME BUTTON**

The Home Button ( is the primary means of accessing many of the features of Garmin Pilot. The Home Button provides quick access to the various pages within Garmin Pilot (i.e., Map, Active Flight Plan, Trip Planning, Airport Information, Charts, Scratch Pad, Terrain, Syn Vis, Traffic, Logbook, W&B, Checklists, Wx Imagery, Connext, Downloads, & Settings).



Home Menu



# **HOME BUTTON ICONS**

Touch the following icon to display the associated function:

<b>\$</b>	Мар	Displays the Map Page, which provides full en-route navigation capabilities on a moving map.
*\	Flight Plan	Displays the Active Flight Plan Page, where flight plans can be created, stored, shared, modified, and reversed.
	Trip Planning	Displays the Trip Planning Page, which manages all of the trip planning details for each trip.
*	Airport Info	Displays the Airport Information Page, which includes basic airport info, frequencies, runways, procedures, weather, NOTAM's, FBO's, fuel prices/fees, FAA remarks, & Nav Aids.
	Charts	Displays the Charts Page, where various navigational charts can be viewed when properly downloaded.
<b>⋘</b>	Scratch Pad	Displays the Scratch Pad Page, which allows the pilot to quickly draw or write down information on the device screen.
*	Terrain	Displays the Terrain View, which displays altitudes of terrain and obstructions relative to the aircraft position and altitude.
	Synthetic Vision	Displays the Synthetic Vision View, which depicts a forward-looking attitude display of the topography immediately in front of the aircraft.
<b>♦</b>	Traffic	Displays the Dedicated Traffic Page.
•	Logbook	Displays the Logbook Page, which allows the pilot to record pertinent flight information such as currency, endorsements, and photos.
	Weight & Balance	Displays the Weight & Balance, which is calculated to determine if the airplane is properly loaded within CG limits.
	Checklists	Displays the Checklists Page where specific aircraft electronic checklists can be viewed to ensure proper flight procedures.



	WX Imagery	Displays the Weather Imagery Page, providing various meteorological data for both real-time and forecast weather events.	
8	Connext	Displays the Connext Page, which allows the wireless sharing of data between devices via Bluetooth®, or, if properly equipped, Wi-Fi.	
	Downloads	Displays the Downloads Page, which automatically downloads file updates and next cycles as they become available.	
*	Settings	Displays the Settings Page, which includes General, Pilot Info, Aircraft, User Waypoints, Units, Weather Data, GPS, Downloads, Subscrptions, & Sync.	
	Home Button Icons		

#### **TOOLS**

The Tools options at the bottom of the Home menu provides access to Demo Mode, Stopwatch, Lock Screen option, Full Screen option, Brightness options, Alerts, and the Help file.

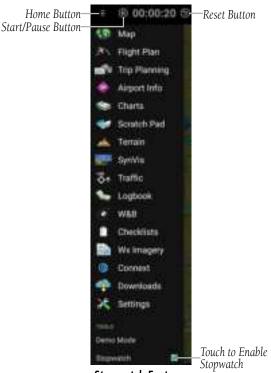
#### **S**TOPWATCH

The Stopwatch feature changes the title bar to display a standard stopwatch, showing hours, minutes and seconds.

#### Using the Stopwatch:

- 1) Touch Home > Stopwatch.
- 2) Touch the **Start/Pause** button to start the timer.
- **3)** Touch the **Start/Pause** button again to pause the timer.
- **4)** Touch the **Reset button (a)** at any time to reset the timer to zero.
- **5)** Touch **Home** > **Stopwatch** to disable the stopwatch and return the title bar to normal display.





Stopwatch Features

## LOCK SCREEN

The Lock Screen feature keeps the current map or chart from moving in case the screen is accidentally touched while displaying important information.

#### Locking the Screen:

- Touch Home > Lock Screen. The title bar turns gray to show the screen is locked. A 'Screen Locked' message is displayed if the map or chart is swiped.
- 2) Touch = to unlock the screen and return to normal function.



**Locked Map Screen** 



#### FULL SCREEN

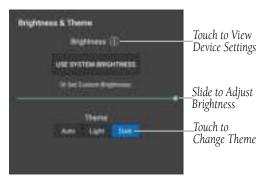
The Home Menu provides access to the Full Screen mode. Simply touch **Home** > **Full Screen** to activate.

#### **Full Screen Mode Actions**

- **1)** Swipe down from the top of the screen to view navigation controls.
- 2) Swipe in from the left to open the Home Menu.
- 3) To exit Full Screen Mode, swipe in from the left to open the Home Menu and un-check the box next to Full Screen Mode.

#### **B**RIGHTNESS

The Home Menu provides access to the display brightness control. Simply touch **Home** > **Brightness** to display a display brightness slider and set the desired display brightness. Move the slider to the right to increase display brightness or left to decrease brightness.



**Brightness Slider** 



**NOTE:** To enable the in application brightness settings some Android devices may require disabling the "Automatic brightness" setting for the system brightness.



#### **A**LERTS

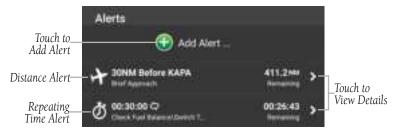
Create Alerts based on time or location. Alerts that are based on time, can range from 10 seconds to several hours. Time alerts can also be set to repeat. Location based Alerts can be set At, Before, or After a Flight Plan Waypoint.

#### Creating a time based alert:

- 1) Touch Home > Alerts > Add Alert.
- 2) Touch Time > Tap to Set.
- **3)** Enter the desired count down time (HH:MM:SS).
- 4) If desired, use the Repeating **On/Off** switch, to enable/disable repeating.
- 5) If desired, touch the **Alert Message (Optional)** button and use the keypad to enter a custom message.
- **6)** Touch **Save**.

#### Creating a location based alert:

- 1) Touch Home > Alerts > 🕡 Add Alert.
- 2) Touch Location.
- 3) Touch the **Relationship** field and select **Before**, **At**, or **After**.
- **4)** Touch the **Distance** field, and use the keypad to set the desired distance in nautical miles.
- **5)** Touch the **Waypoint** field, and select the desired waypoint from the list.
- 6) If desired, touch the **Alert Message (Optional)** button, and use the keypad to enter a custom message.
- **7)** Touch **Save**.



Alerts - Main

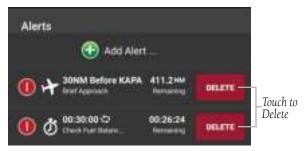


#### **Editing Alerts:**

- 1) Touch Home > Alerts > Edit.
- **2)** Touch the desired alert for the list.
- **3)** Touch the desired field(s) to edit.
- 4) Touch **Save**, to save changes.

## **Deleting Alerts:**

- 1) Touch Home > Alerts > Edit.
- 2) Touch 🔵 > **Delete** to delete the Alert.



**Deleting Alert** 

#### **DIRECT-TO**

The Direct-To button can be accessed from any page, and provides a quick and easy way to navigate direct to any waypoint (i.e., Flight Plan Waypoint, Nearest Waypoints, or User Waypoints). When Direct-To is active, the user can cancel Direct-To or reactivate Direct-To at any time. Re-activating Direct-To will calculate the direct to from the current position.



**Direct-to Dialogue** 



#### **NEAREST**

The nearest navigation button located on the top menu bar can be accessed from any page, and provides a quick and easy way to locate airports, NAVAIDs, Intersection, User Waypoint, ARTCC, FSS, and Airspace.

## Displaying the nearest airport:

- 1) Touch MIST > Type > Airport.
- 2) If including in nearest search, touch to toggle the **Private**, **Military**, **Seaplane**, or **Heliport** switches ON/OFF, as desired.
- **3)** Touch once to select the Nearest Airport from the list, and touch again to display the airport information.



**Nearest Airports** 



## Displaying Nearest VOR, NDB, Intersection, VRP, or User Waypoint:

- 1) Touch  $\mathbb{NHST} > \mathsf{Type}$ .
- 2) Touch VOR, NDB, Intersection, VRP, or User Waypoint.
- **3)** Touch the nearest 'VOR', 'NDB', 'Intersection', 'VRP', or 'User Waypoint' from the list to display the navigation information.

# **Displaying Nearest ARTCC or FSS:**

- 1) Touch MRST > Type.
- 2) Touch ARTCC or FSS.
- **3)** Touch the nearest 'ARTCC' or 'FSS' from the list.
- **4)** Touch again to display additional information.

## **Displaying Nearest Airspace:**

- 1) Touch MRST > Type.
- **2)** Touch **Airspace**.
- **3)** Touch the nearest 'Airspace' from the list.
- **4)** Touch again to display additional information.

## **Setting Nearest Airport Runway Surface Type:**

- 1) Touch **Home** > **K** > **General**.
- 2) Touch Hard, or Hard/Soft in the Runway Surface Type field.

# Setting the nearest airport minimum runway length:

- 1) Touch Home > K > General.
- **2)** Touch the Minimum Runway Length field to enter a value.



**Settings - Runway Preferences** 



#### EMERGENCY MODE

The red Emergency (EMER) button located on the Navigation Bar can be accessed from any page and proveds a quick way to reduce the pilot's workload in an emergency situation. The EMER button will display the following:

- The Glide Range Ring using terrain and winds aloft data.
- The Emergency checklist in split screen mode if configured.



Emergency Mode (EMER) - Glide Range Ring

The EMER button can be configured to be displayed only when in flight.

# Setting the EMER button to be displayed only when in flight:

- **2)** Scroll to the **Emergency** section.
- 3) Touch to toggle the **Hide EMER When Not Flying** button, as desired.



#### MENU

The Menu Button provides a page-sensitive menu structure. Each page has specific menu options that control, search, navigate, or display page-sensitive menu items. For example, the data bar fields can be displayed on the Map Page by touching the 'Show Navigation Info' checkbox. Touch each data field to change the navigation data displayed.



Map Page Menu (Navigation Data Displayed)

#### GLIDE RANGE RING



**NOTE:** To enable the Glide Range Ring on the Map, the User must have a valid premium subscription, an updated terrain database downloaded, and the Glide Ratio setting toggled 'On' for the selected Aircraft in the active Flight Plan.

This feature is an aid to estimate accessible airports and terrain if the aircraft were forced into glide circumstances. The displayed ring updates in real time, derived from the selected aircraft's altitude, speed, and performance details. Since Garmin Pilot supports multiple aircraft, the Glide Range Ring refers to the current active flight plan to determine which aircraft performance details to calculate the ring shape.

The Glide Range Ring requires glide performance details to be specified in Garmin Pilot's settings. This is accessed through **Home** > Aircraft. Touch on an aircraft (not aircraft type) to edit its details, and scroll down to the Glide section to specify the **Glide Ratio** and **Best Glide Speed**. Refer to the aircraft documentation for these values.



The **Glide Range Buffer** setting can be used to shrink the Glide Range Ring in situations where glide performance is expected to be less than ideal, perhaps due to shifting winds. Increasing this setting will decrease the size of the Glide Range Ring. Enabling **Shape Glide Ring for Terrain** will alter the shape of the Glide Range Ring to show intersection with terrain.

Enabling **Shift Glide Ring for Wind** will factor in local wind conditions when calculating the Glide Range Ring shape. Note the Glide Range Ring uses the most recent weather data, which may be outdated if Garmin Pilot does not have access to real time weather data over Wi-Fi or with outboard hardware such as a GDL 39.

# **Enabling/Disabling the Glide Range Ring:**

- 1) Touch > Ownship/Route.
- 2) Touch to toggle **Display Glide Range Ring**, as desired.



Glide Range Ring

Navigation Data	Description
Altitude	The current GPS altitude or geometric height above MSL in feet.
Bearing	The compass direction from the present position to a destination waypoint.
Course	The magnetic direction from the last waypoint to the active waypoint.
Cross Track Error	The distance and direction, left or right, the aircraft is from the desired course in nautical miles.
Distance (Dest)	The distance to the destination waypoint in the Active Flight Plan
Distance (Next)	The distance to the next waypoint in the Active Flight Plan.



Navigation Data	Description	
ETA (Dest)	The estimated time at which the aircraft should reach the	
Lin (Dest)	destination waypoint, based upon current speed and track.	
ETA (Next)	The estimated time at which the aircraft should reach the next	
LIA (NEXI)	waypoint, based upon current speed and track.	
ETE (Dest)	The estimated time it takes to reach the destination waypoint from	
LIL (Dest)	the present position, based upon current ground speed.	
ETE (Next)	The estimated time it takes to reach the next waypoint form the	
ETE (Next)	present position, based upon current ground speed.	
Ground Speed	The velocity the aircraft is traveling relative to the ground.	
Heart Rate *	Heart rate from a wrist or chest heart rate monitor.	
Latitude	Current latitude.	
Longitude	Current longitude.	
Next Waypoint	Next waypoint on the route of flight	
Pitch	Current pitch. (GDL 39 3D only)	
Pulse Oximeter**	Displays the saturation of oxygen in the blood	
Roll	Current roll. (GDL 39 3D only)	
Time	Current time	
Track	The direction of aircraft movement relative to the ground.	
Vertical Speed	The rate of climb or descent (GPS-derived).	
Wx-Wind	The wind speed/direction at the nearest weather reporting station.	
Wx-Visibility	The visibility at the nearest METAR reporting station	
Wx-Altimeter	The altimeter setting at the nearest METAR reporting station.	
Wx-Ceiling	The ceiling at the nearest METAR reporting station	
*D2 Bravo Titanium, D2 Charlie series, and D2 Delta series.		
**D2 Air, D2 Delta PX, MARQ® Aviator series.		

**Navigation Data Field Options** 



#### MAP PANE CONTROLS

The Map Pane has a number of buttons that control the Base Map, Map Overlays and center map and split-screen. The table below shows the Map Pane Controls.

Control	lcon	Description
Map Settings		Map/Chart Selection/Settings, Map Overlay Selection, Overlay Opacity Settings, and General Map Settings
Center on Aircraft	1	Centers the Map Pane on the current location.
Center on Route	^	Centers the entire route in Map Pane.
Zoom In	+	Zooms In on the map
Zoom Out		Zooms out on the map
Split-Screen	Č~	Selects full screen map or partial map with Widgets, Panel, Charts, and SafeTaxi.
Map Orientation	<b>À À</b>	Toggles map orientation from north up to track up. The Icon is blue when track up is active.

**Map Pane Controls** 



Map Pane



### MAP/CHART SELECTION AND SETTINGS

There are three maps and three charts available for display on the Map Page. The following charts are available for viewing in the map area: Sectional TAC, IFR Low, and IFR High. Charts are high-resolution color images that resemble the paper version of the National Aeronautical Navigation Products (AeroNav) published charts. The Roads/Borders Map is a very basic map showing major roads, bodies of water, boarders and Flight Plan information. Both IFR and VFR maps are vector-based interactive maps that are populated with aeronautical information such as airports, navigation aids, maximum and minimum airspace altitudes, airspaces, and victor airways.



Map/Chart Menu

### **Selecting a Helicopter Chart Overlay:**



**NOTE:** A chart basemap must be selected to display helicopter overlays.



**NOTE:** For information on downloading Helicopter Charts, refer to 'Downloads', discussed later in this section.

- 1) After downloading the desired Helicopter Charts, touch > Map/Chart.
- 2) Touch a chart basemap (VFR, IFR Low, or IFR High).
- Touch a Helicopter Overlay (U.S. VFR Helicopter, Gulf VFR Helicopter, or Gulf IFR Helicopter).



**Selecting Helicopter Chart Overlay** 





**VFR Helicopter Chart Overlay** 

### **Accessing Advanced Map Settings:**

- 1) Touch > Map/Chart > Map Name > 0.
- 2) Touch General, Airports, Nav Aids, Airspaces, or Cities.
- **3)** Use the sliders and selection buttons to set Visibility Ranges and Label Sizes for map features.
- **4)** To give the new settings a name, Touch **General > Map Name**, and use the keyboard to enter a name.
- 5) Touch **Done** to save and exit, or touch **Restore Defaults** to restore the default Map Theme setting.



Advanced Map Settings - General



Map Setting Categories	Map Item	Options						
General	Topography Map Color Map Type Map Name	Off, Shade, or On White, Green, or Brown IFR, or VFR User Defined Name						
Airports	Visibility Range Label Size	Large Airports Off - 200 nm Heliports Off - 20 nm	Of Seap Of	d Airports f - 50 nm llane Bases f - 50 nm Off, Small, M	Off - 20 nm Off SafeTaxi Off - 2 nm		Pvt Airports Off - 20 nm	
Nav Aids	Visibility Range	VOR Off - 100 nm VRP Off - 10 nm		NI Off - ! Low A		Intersection Off - 10 nm High Airways Off - 100 nm		
	Label Size	VOR, NDB, Intersection, VRP Off, Small, Medium, Large						
	Filter All Airspaces	Hide All Airspaces Above Numerical Entry			Smart Airspace On/Off			
	Visibility Range	Class B Off - 200 nm		Off - 2	Class C Off - 200 nm		Class D Off - 100 nm	
Airspaces		Class E/TRSA Off - 100 nm Control Zone CTR		TMA Off - 200 nm ATZ/TIZ/MATZ		Control Area CTA Off - 100 nm Euro Airway		
	SUA Visibility Range	Off - 100 nm Restricted Off - 200 nm	Aler Off	t/Warning - 200 nm	Varning Parachute Area		Off - 100 nm MOA Off - 200 nm	
		ADIZ Off - 100 nm	Danger Off - 100 nm		Other Off - 100 nm			
	Label Style	Airspace Size Off, Small, Medium, Large Airspace Style Standard, Enhanced						
		Airspace Color Standard, Dark						



Cition	Visibility Range	Large City Off - 500 nm	Medium City Off - 200 nm	,   ,	Small Town Off - 50 nm		
Cities	Label Size	Large City, Medium City, Small City, Small Town Off, Small, Medium, Large					

Advanced Map Settings

# **SETTINGS**

Located under the Home Button, touch the Settings Icon to open the Settings Menu. The Settings Menu tabs customize and manage Garmin Pilot features, subscriptions, Pilot Info, Aircraft Info and much more.

### **GENERAL**

The General Settings tab provides access to settings for Keep Screen On, Theme, Time Format, Flight Condition Colors, Runway Preferences, Navigation, Altert Configuration Setup, Alert Type Setup, Synthetic Vision, & General Data Protections Regulation (GDPR). Touch **About** to display the current version of the Garmin Pilot Application, copyright information, and contact information (both email and phone) for Garmin Aviation Support. Touch the email address to compose an email and send it directly to Garmin Aviation Support. Sending a support email in this manner will automatically populate the email with information that will greatly aid Garmin in troubleshooting and resolving any issues that may arise.



**NOTE:** A data connection (i.e., Wi-Fi or cellular) is required to send and receive email.

Touch **What's new in this version...** to view information about what's new in the latest Garmin Pilot update.



#### **KEEP SCREEN ON**

The Keep Screen On settings provide three options for controlling the device display settings when using Garmin Pilot.

- Auto: The screen will stay on when the device GPS senses a ground speed over 40 kts and when viewing SafeTaxi
- On: The screen will always be on.
- Off: Uses the system default display settings.

### **Configuring Screen Settings:**

- 1) From any page, touch **Home** > **1**.
- **2)** Touch the **General** Tab.
- **3)** Touch **Auto**, **On** or **Off** to select the desired Keep Screen On settings.

### **THEME**

The provided alternate themes allow Garmin Pilot to be used in various lighting scenarios. The **Light** theme uses dark text on a bright background that's easier to see during the day and in direct sunlight. The **Dark** theme uses bright text on a dark background that's much more comfortable in low-light situations. The **Auto** option will automatically switch between the two based on the time of day.

### **Configuring Interface Themes:**

- 1) From any page, touch **Home** >
- 2) Touch the **General** Tab.
- 3) Touch Auto, Light or Dark to select the desired setting.

Or

- 1) From any page, touch **Home** > **Brightness**.
- **2)** Touch **Auto**, **Light** or **Dark** to select the desired setting.



#### **INTERFACE STYLE**

The Tab Bar, located at the bottom of the screen, when selected, may be used as an alternate means of accessing many of the features of Garmin Pilot. The Tab Bar is configurable and provides quick access to the various pages within Garmin Pilot (Map, Flight Plan, Trip Planning, Airport Info, Charts, Weather Imagery, Scratch Pad, Terrain, Traffic, Checklists, Synthetic Vision, Logbook, Weight and Balance, Connext, Downloads, & Settings).

#### **Adjusting Interface Style:**

- 1) Touch Settings > General.
- **2)** Touch **Tab Bar** to adjust the Interface Style.
- **3)** Touch **Classic** to return to the legacy Home Screen Menu interface style.



Settings - General - Interface Style Selection



### **TAB BAR ICONS**

Touch the following icon to display the associated function:

<b>③</b> Map	Мар	Displays the Map Page, which provides full enroute navigation capabilities on a moving map.
x** Flight Plan	Flight Plan	Displays the Active Flight Plan Page, where flight plans can be created, stored, shared, modified, and reversed.
Eà Trips	Trip Planning	Displays the Trip Planning Page, which manages all of the trip planning details for each trip.
Airports	Airport Info	Displays the Airport Information Page, which includes basic airport info, frequencies, runways, procedures, weather, NOTAM's, FBO's, fuel prices/fees, FAA remarks, & Nav Aids.
Charts	Charts	Displays the Charts Page, where various navigational charts can be viewed when properly downloaded.
Wx Imagery	WX Imagery	Displays the Weather Imagery Page, providing various meteorological data for both real-time and forecast weather events.
Scratch Pad	Scratch Pad	Displays the Scratch Pad Page, which allows the pilot to quickly draw or write down information on the device screen.
A Terrain	Terrain	Displays the Terrain View, which displays altitudes of terrain and obstructions relative to the aircraft position and altitude.
<b>₹</b>	Traffic	Displays the Dedicated Traffic Page.
✓ Checklists	Checklists	Displays the Checklists Page where specific aircraft electronic checklists can be viewed to ensure proper flight procedures.
(†) SynVis	Synthetic Vision	Displays the Synthetic Vision View, which depicts a forward-looking attitude display of the topography immediately in front of the aircraft.



[+ Logbook	Logbook	Displays the Logbook Page, which allows the pilot to record pertinent flight information such as currency, endorsements, & photos.			
WAB	Weight & Balance	Displays the Weight & Balance, which is calculated to determine if the airplane is properly loaded within CG limits.			
@ Connext	Connext	Displays the Connext Page, which allows the wireless sharing of data between devices via Bluetooth®, or, if properly equipped, Wi-Fi.			
A Downloads	Downloads	Displays the Downloads Page, which automatically downloads file updates and next cycles as they become available.			
<b>☆</b> Settings	Settings	Displays the Settings Page, which includes General, Pilot Info, Aircraft, User Content, Alerts, Units, Downloads, Subscrptions, FltPlan.com, Jeppesen, Documents, Data Services, & Flight Simulation.			
	Tab Bar Icons				

#### **CUSTOMIZE TAB BAR ICONS**

The More menu contains the items not visible in the tab bar, which may be reordered or hidden from view. The order of the items in the tab bar may be customized by clicking **More** > **Edit.** Long press the desired Tab Bar icon to start customizing, using the drag-and-drop gesture to move icons to their desired location. The item to the right of the horizontal line is dynamic and displays the most recently viewed feature from the More menu.



**NOTE:** The Tab Bar will show between zero (0) and three (3) recent tabs with the remaining space on the Tab Bar reserved for user selected items which is dependent on screen size and device orientation. In the event a device only has enough space to show three (3) tabs, no recent tabs will be shown, instead the tabs shown will be two (2) user selected items and the More tab.

	User Selected Icons				Most Recent		
3	173	127		14.	12		Ĭ
May	Hight Plan	Trigor	Airporte	Charte	Scretch Ped	Loghook	More

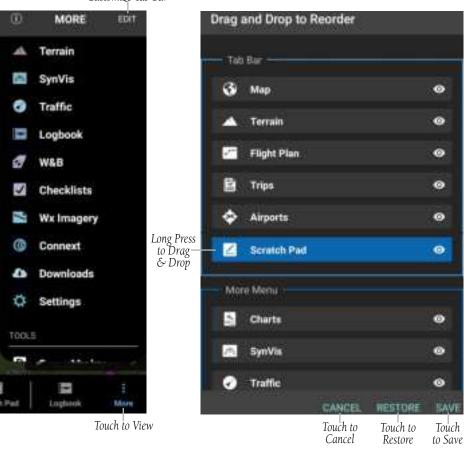
Current Page Touch to View



### **Customizing Tab Bar Icons:**

- 1) From anywhere in Garmin Pilot, touch **More** > **Edit** to display the Drag and Drop to Reorder window.
- 2) The Tab Bar and More Menu icons are displayed. Scroll down to view the complete list of icons in the More Menu.
- **3)** Long press on the desired icon until the background is highlighted (blue), then drag and drop the icon in the desired location.
- If necessary, touch **Restore** to load the previous selection and sequence of icons.
- **5)** Touch **Save** to continue or **Cancel** to close without saving.

Touch to Customize Tab Bar

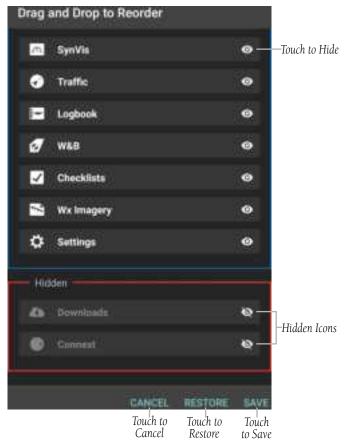


**Tab Bar Customization** 



#### **Hiding Tab Bar Icons:**

- 1) From anywhere in Garmin Pilot, touch **More** > **Edit** to display the Drag and Drop to Reorder window.
- 2) The Tab Bar and More Menu icons are displayed. Scroll down to view the complete list of icons in the More Menu.
- 3) Touch o to Hide and remove from the available icon(s) on the Tab Bar.
- **4)** If necessary, touch **Restore** to unhide and load the previous selection and sequence of icons.
- **5)** Touch **Save** to continue or **Cancel** to close without saving.



Tab Bar Customization - Hidden Icons



#### **RUNWAY PREFERENCES**

Setting Runway Preferences will adjust the Best Runway recommendations made by the Airport Information page and the airport widget. The default **Surface Type** is Hard/ Soft which will recommend any runway. Changing this to Hard will only recommend asphalt and concrete runways. Setting the **Minimum Runway Length** will only recommend runways to the specified length or greater.



**NOTE:** Runway preferences are used by the airport widget summary to show the best runway based on winds.

#### **OBSTACLES**

### **Configuring Helicopter Obstacles:**

- 1) From any page, touch Home > 🤾.
- **2)** Touch the **General** Tab.
- 3) Touch to toggle **Show Helicopter Obstacles** as desired.

### **EMERGENCY**

### **Configuring Hide EMER When Not Flying:**

- 1) From any page, touch **Home** > **\***.
- **2)** Touch the **General** Tab.
- 3) Touch to toggle **Hide EMER When Not Flying** as desired.

### **NAVIGATION**

### **Configuring Automatic Safe Taxi:**

- **1)** From any page, touch **Home** >
- 2) Touch the General Tab.
- 3) Touch to toggle **Automatic Safe Taxi** as desired.



**NOTE:** With a SafeTaxi subscription and when Automatic SafeTaxi is On, SafeTaxi will launch after landing at the destination airport when ground speed drops below 40 kts.



#### **ALERT CONFIGURATION SETUP**

The Alert Configuration Setup section allows the pilot the ability to toggle Notifications On/Off for vibration settings as well as select a desired ringtone. When Notifications are On, a Garmin Pilot Icon will appear in the device notification area (i.e. the top banner) when the configured alert criteria is met (i.e., time or location).

### **Configuring Alert Notifications:**

- **1)** From any page, touch **Home** > .
- 2) Touch the **General** Tab.
- Touch Notification Ringtone to select a ringtone, or set to None to disable audio notifications.
- **4)** Touch **to toggle Vibrate** as desired.

### **ALERT TYPE SETUP**

### **Configuring Terrain Alerts:**

- 1) From any page, touch Home > X.
- **2)** Touch the **General** Tab.
- 3) Touch to toggle **Terrain Alerts** as desired.

# **Configuring Traffic Alerts (Traffic Device Required):**

- 1) From any page, touch **Home** > **1**.
- **2)** Touch the **General** Tab.
- **3)** Touch **1** to toggle **Traffic Alerts** as desired.

### **Configuring Audio:**

- 1) From any page, touch **Home** > **1**.
- **2)** Touch the **General** Tab.
- 3) Touch Audio options OFF, MALE, or FEMALE.



#### **Configuring Trip Weather Alerts:**

- From any page, touch Home >
- 2) Touch the **General** Tab.
- 3) Touch to toggle **Trip Weather Alerts** as desired.



**NOTE:** Trip Weather Alerts are activated when weather for one or more trips goes below minimums set by the User.

#### SYNTHETIC VISION

#### **Configuring Roll Indication:**

- 1) From any page, touch **Home** >
- **2)** Touch the **General** Tab.
- 3) Touch Roll Indication options SKY POINTER, or GROUND POINTER.

### GENERAL DATA PROTECTION REGULATION (GDPR)

The GDPR is a regulation in the European Union on data protection and privacy for all individual citizens of the European Union and the European Economic Area. It also addresses the transfer of personal data outside the EU and EEA areas. If applicable, touch the **Reset** button.

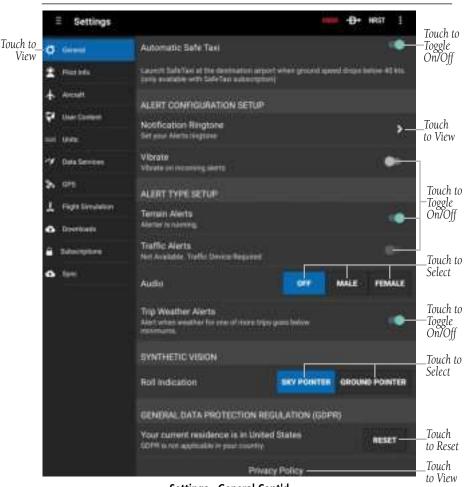


### **Resetting General Data Protection Regulation:**

- ) From any page, touch **Home** > **\*\***.
- **2)** Touch the **General** Tab.
- 3) Touch **Reset** button in the **GDPR** section, as desired.



**NOTE:** For additional information, please visit https://eugdpr.org and/or click on Privacy Policy button.



Settings - General Cont'd



### PILOT AND AIRCRAFT INFO



**NOTE:** A data connection (i.e., Wi-Fi or cellular) is required to file flight plans.

If a Garmin Pilot account is already signed into the app, Pilot and Aircraft information will automatically be synchronized. To add a new pilot touch **Home** > Pilot Info > Add Pilot Information.... Touch in each field and use the on-screen keyboard to enter the requested information (i.e., Name, Address, Telephone, Personal Minimums, and preferred Filing Service). Add aircraft information by touching **Home** > Aircraft > Add Aircraft..., enter aircraft Identifier, Type, Equip Suffix, Home Base, Primary and Secondary Color, TAS, and Fuel information. To link Garmin Pilot with a Filing Service Provider, under Pilot Information, enter username and password information for the preferred provider. By linking to a Filing Service Provider, Garmin Pilot can file flight plans.

### **Entering Pilot Information:**

- 1) From any page, touch **Home** > **1**.
- **3)** Enter the Pilot Information by touching each field and use the keyboard.
- **4)** Touch **Save**, to save Pilot Information.



Pilot Information Entry

Garmin Pilot for Android User's Guide



#### PERSONAL MINIMUMS

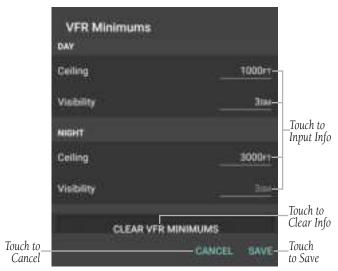
Each pilot that's registered on a Garmin Pilot account can specify personalized parameters for VFR, IFR and Wind minimums. These settings are considered by the Garmin Pilot app when planning trips.

Available parameters are:

- VFR minimums for ceiling and visibility for day and night flights
- IFR minimums for ceiling and visibility for day and night arrivals and departures
- Maximum wind speed, wind gusts, and crosswind component for arrival(s) and departure(s)

### **Configuring Personal Minimums:**

- **1)** From any page, touch **Home** > **【**
- Touch the Pilot Info Tab > Add Pilot Information...
   Or: Touch a current Pilot in the list to edit.
- 3) Touch VFR, IFR or Winds.
- **4)** Enter the preferred ceiling minimums in feet.
- **5)** Enter the preferred visibility minimums in statute miles.
- **6)** Enter the preferred maximum wind speeds in knots.
- **7)** Touch **Save**.



Pilot - Personal Minimums - VFR



#### **Entering Aircraft Information:**

- 1) From any page, touch Home > 🔀.
- 2) Touch Aircraft > 🕒 Add Aircraft....
  - **Or**: Touch a current Aircraft in the list to edit.
- **3)** Enter Required and/or optional Aircraft Information by touching each field and use the keyboard.
- 4) Touch Save, to save Aircraft Information.



**Aircraft Information Entry** 



#### ATC PROPOSED ROUTE NOTIFICATIONS

ATC Proposed Route Notifications are Push notifications, that include a proposed route for departures and destinations for previously filed flight plans. Notifications come in the notification area if Garmin Pilot is not currently active, or as Pop-ups within Garmin Pilot. To accept the proposed route and make it the Flight Plan, ensure Make Flight Plan is set to **On**, and touch **Brief** to open the Trip Planning Page. To dismiss the notification and not make it the Flight Plan, ensure Make Flight Plan is set to **Off**, and touch **Dismiss** to remove the popup.

### **Subscribing to ATC Proposed Route Notifications:**

- ) From any page, touch **Home** >  $\mathbb{K}$ .
- 2) Touch the Aircraft Tab.
- Touch Add Aircraft.
  - **Or**: Touch a current Aircraft in the list, to edit.
- **4)** Scroll down & touch **Subscribe** to Proposed Route Notifications.
- **5)** Touch **Save**, to save Aircraft Information.

#### **USER CONTENT**

The User Content Tab provides a quick and easy way to create and view stored user waypoints. User waypoints are synchronized across devices. When creating a new user waypoint, Garmin Pilot provides three ways to specify the precise location.

If **Lat/Lon** is selected, Garmin Pilot can accept the coordinates in three formats: degrees in decimal (hdd.dddd); degrees and minutes in decimal (hddd.mm.mmmmm'); and degrees, minutes and seconds in decimal (hddd.mm'ss.s").

**Rad/Dist** can accept locations around a specified VOR station, using a radial and distance

**Rad/Rad** can accept locations as the intersection of two radials of two different VOR stations.



### **Creating/Editing a User Waypoint from User Content Tab:**

- 1) From any page, touch **Home** >
- 2) Touch the User Content Tab.
- 3) Touch button to display the **New User Waypoint** dialog box. **Or**: Touch a current User Waypoint in the list to edit.
- **4)** Enter a name.
- **5)** Define the waypoint location by Lat/Lon, Rad/Dist, or Rad/Rad.
- **6)** Touch **Save** to save the waypoint, or **Cancel** to exit.
- 7) If the waypoint was saved, touch 🕞 button to view on Google Maps.



**Edit User Waypoint** 



#### UNITS

The Units Tab can set the displayed units of measure for the following metrics:

- Distance
- Velocity
- Fluid Volume
- Weight

- Weight & Balance
- Runway Length
- Temperature
- Visibility

- Wind Speed
- Altimeter
- Latitude/Longitude

# **Adjusting Units Settings:**

- 1) From any page, touch **Home** >
- 2) Touch the Units Tab.
- **3)** Touch the unit of measurement to display options and adjust as desired.
- **4)** If necessary, touch **Restore Defaults** to revert back to factory settings.



**Settings - Units Tab** 



#### **DATA SERVICES**

The Data Services Tab provides information about the current source of weather data and the age of Garmin Weather Data items cached on the device. The age and status of weather data for FIS-B-sourced weather is viewable under the corresponding FIS-B Device tab. Weather data is available from three sources, Garmin Weather Data Services, FIS-B weather when connected to a compatible FIS-B device via a Connext link. Garmin Weather Data Services requires a data connection through Wi-Fi or cellular network. FIS-B weather requires additional hardware.

### **Adjusting Worldwide NOTAM Coverage Settings:**

- **1)** From any page, touch **Home** > .
- 2) Touch the Data Services Tab.
- 3) Touch next to **Worldwide NOTAM Coverage** to toggle On/Off. This feature will be automatically enabled with the proper subcription updated and downloaded.

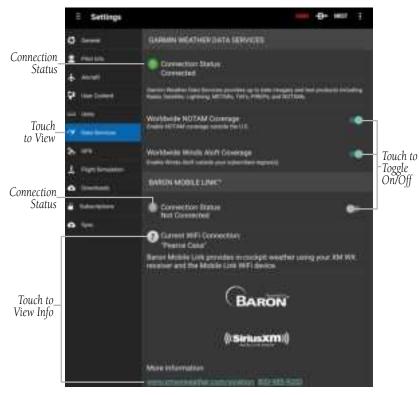
### **Adjusting Worldwide Winds Aloft Coverage Settings:**

- 1) From any page, touch Home > X
- 2) Touch the Data Services Tab.
- Touch next to **Worldwide Winds Aloft Coverage** to toggle On/Off. The winds aloft forecast data is based on the Global Forecast System (GFS) weather model and provides detailed coverage for the selected area. This feature will be automatically enabled with the proper subcription updated and downloaded.

# **Adjusting Baron Mobile Link Settings:**

- 1) From any page, touch Home > .
- 2) Touch the Data Services Tab.
- 3) Touch next to **Connection Status** to toggle On/Off. Baron Mobile Link provides in-cockpit weather using your XM weather receiver and the Mobile Link Wi-Fi device.
- **4)** If necessary, touch **?** to view info regarding the current Wi-Fi connection.





**Settings - Data Services** 

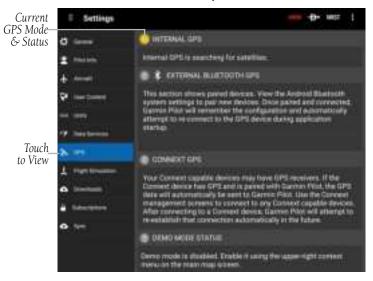


#### **GPS**

Most Android devices are built with an internal GPS receiver. These may work fine in smaller aircraft but often a stronger, external GPS receiver is necessary. If an Android device does not include a GPS receiver, then a Garmin GLO™ portable GPS and GLONASS receiver or a Connext GPS and ADS-B receiver will be required to take advantage of the navigation features of Garmin Pilot. Third party GPS receiver applications are no longer recommended for Garmin Pilot to receive location data.

### **Adjusting GPS Settings:**

- 1) From any page, touch **Home** >
- 2) Touch the GPS Tab to view and adjust connected devices.



Settings - GPS Tab



### FLIGHT SIMULATION INTEGRATION

The Flight Simulation Tab provides information about the status of a flight simulator associated with the current Garmin Pilot account and device. Garmin Pilot can connect to your X-Plane or Microsoft Flight Simulator 2020 (MSFS 2020) software through a Wi-Fi connection. To aid in User accessibility, detailed instructions on how to connect to the desired flight simulator are provided within Garmin Pilot.



**NOTE:** Garmin Pilot requires X-Plane version 10.30 or higher.

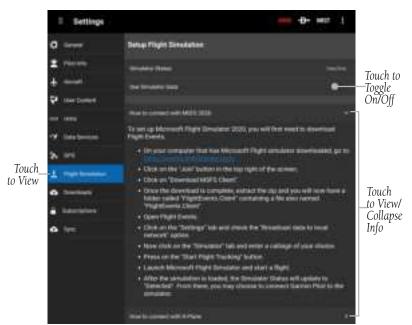


**NOTE:** The Android device running Garmin Pilot, and the computer with the flight simulator software, should be connected to the same Wi-Fi access point.

### **Connecting Garmin Pilot to a Flight Simulator:**

- **1)** From any page, touch **Home** > .
- 2) Touch the Flight Simulation Tab.
- 3) Touch to toggle the Use Simulator Data On/Off.
- 4) Touch How to connect with MSFS 2020.

Or: Touch How to connect with X-Plane.



Settings - Flight Simulation - Microsoft Flight Simulator 2020



#### DOWNLOADS

The Downloads Tab allows the User to adjust settings for a multiple items. First, **Auto-Download Pilot Updates**, which automatically downloads file updates and next cycles as they become available. Second, Allow Mobile Data, which allows Mobile Data for large downloads when Wi-Fi is not availble. Lastly, **Enable Download Map**, which provides a visual display of certain downloadable areas (if mapping information is available). If disabled, this will show all downloads in list form instead.



**NOTE:** More details related to the specifics of the Downloads portion of Garmin Pilot are presented in greater detail at later stages of this document.

### **Adjusting Auto-Download Pilot Updates Settings:**

- From any page, touch **Home** > **\*\***.
- Touch the **Downloads** Tab. 2)
- 3) Touch next to Auto-Download Pilot Updates to toggle On/Off.



**NOTE:** When toggled 'On', this setting may require additional storage space on the device. Please ensure the device has the proper storage space available.

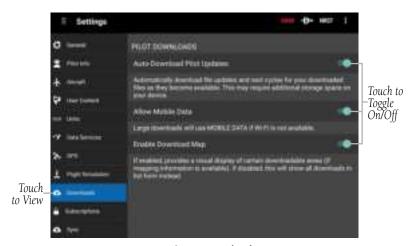
# **Adjusting Allow Mobile Data Settings:**

- From any page, touch **Home** > **\*\***.
- Touch the **Downloads** Tab. 2)
- Touch next to **Allow Mobile Data** to toggle On/Off. 3)

### **Adjusting Enable Download Map Settings:**

- From any page, touch **Home** > **\*\***.
- Touch the **Downloads** Tab. 2)
- Touch next to **Enable Download Map** to toggle On/Off. 3)





**Settings - Downloads** 

### **SUBSCRIPTIONS**

The Subscriptions Tab provides information about the status of any subscription associated with the current Garmin Pilot account and the ability to purchase annual or monthly subscriptions or renew expired subscriptions.



**NOTE:** With an active subscription, Garmin Pilot can be installed on up to three device at the same time, typically a mobile phone and a tablet device.

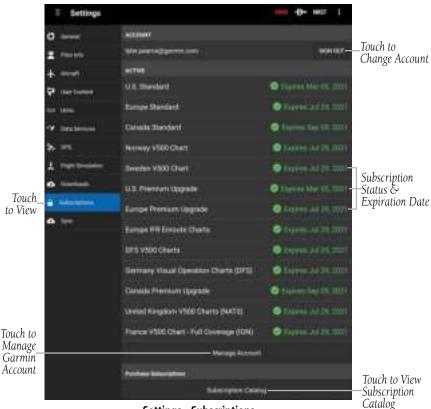
# **Viewing/Adjusting Account:**

- 1) From any page, touch Home > 🔀.
- **2)** Touch the **Subscriptions** Tab to view current status.
- 3) If necessary, touch the expired subscription to download. When properly downloaded, a will be displayed along with an Expiration Date.
- **4)** If necessary, touch the **Manage Account** button to view current Garmin Pilot subscriptions and the device(s) using these items via fly.garmin.com.



# Viewing/Adjusting Subscription Catalog:

- 1) From any page, touch **Home** >
- **2)** Touch the **Subscriptions** Tab to view current status.
- 3) If necessary, touch the expired subscription to download. When properly downloaded, a will be displayed along with an Expiration Date.
- **4)** If necessary, touch the **Subscription Catalog** button to purchase necessary items via fly.garmin.com.



**Settings - Subscriptions** 



### **SYNC**

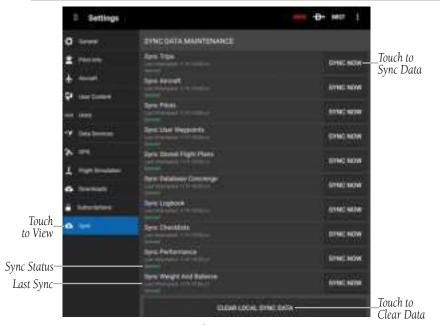
The Sync Tab provides information about the sync status of any data associated with the current device. The User can view the Last Attempt (Date & Time) and Status (Synced or Sync Failed) of various pieces of data such as Trips, Aircraft, Pilots, User Waypoints, Stored Flight Plans, Database Concierge, Logbook, Checklists, Performance, and Weight and Balance.

### **Viewing/Adjusting Sync Status:**

- From any page, touch Home >
- **2)** Touch the **Sync** Tab.
- 3) Touch the SYNC NOW button next to the desired data category. If successful, "Synced" will be displayed in green text along with the Date (MM:DD) and Time (HH:MM). If unsuccessful, "Not Synced" will be displayed in red text along with the Date (MM:DD) and Time (HH:MM).
- 4) If necessary, touch the Clear Local Sync Data button.



**NOTE:** Touching the Clear Local Sync Data button will clear all local sync data and pull down data stored on the cloud. Only perform this action if there are issues with the sync data.



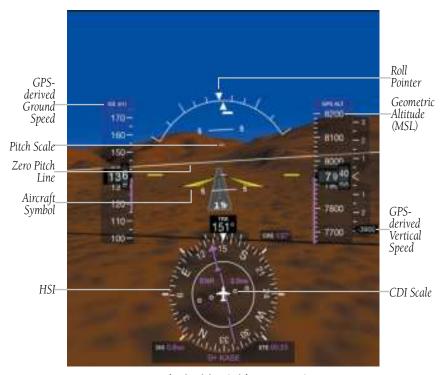


# **SYNTHETIC VISION (PREMIUM SUBSCRIPTION)**



**NOTE:** Synthetic Vision requires either a Flight Stream 510/210, GDL 52/52R, GDL 39 3D, GTX 345, GTX 45R, G3X Touch, and a Premium subscription.

Synthetic Vision depicts a forward-looking attitude display of the topography immediately in front of the aircraft. The depicted imagery is derived from the aircraft attitude, heading, GPS three-dimensional position, and databases of terrain, obstacles, and other relevant features.



Synthetic Vision (with GDL 39 3D)



The Synthetic Vision terrain display shows land contours (colors are consistent with those of the topographical map display), large water features, towers, and other obstacles over 200' AGL that are included in the obstacle database. Cultural features on the ground such as roads, highways, railroad tracks, cities, and state boundaries are not displayed.

Terrain is integrated within Synthetic Vision to provide visual alerts to indicate the presence of terrain and obstacle threats relevant to the projected flight path. Terrain alerts are displayed in red and yellow shading.

The terrain display is intended for situational awareness only. It may not provide the accuracy or fidelity on which to base decisions and plan maneuvers to avoid terrain or obstacles. Navigation must not be predicated solely upon the use of the terrain or obstacle data displayed by Synthetic Vision.



**NOTE:** 'No Attitude Information' is displayed in place of the Attitude Indicator when compatible devices are not configured.

### SYNTHETIC VISION OPERATION

Synthetic Vision is activated by touching **Home** >



### Activating night mode:

- From any page, touch **Home** >
- 2) Touch Menu > Night Mode.

### ZERO PITCH LINE

The Zero Pitch Line is drawn completely across the display and represents the aircraft attitude with respect to the horizon. It may not align with the terrain horizon, particularly when the terrain is mountainous or when the aircraft is flown at high altitudes.



# TRAFFIC (OPTIONAL)

When paired with a Flight Stream 510, Flight Stream 210, GDL 52/52R, GDL 39/GDL 39 3D, GTX 345, or GTX 45R Synthetic Vision displays ADS-B traffic information. Traffic symbols are displayed in their approximate locations. Traffic symbols are displayed in three dimensions, appearing larger as they are getting closer, and smaller when they are further away. Traffic within 250 feet laterally of the aircraft will not be displayed. Traffic symbols and coloring are consistent with that used for traffic displayed on the Map Page. If the traffic altitude is unknown, the traffic will not be displayed.

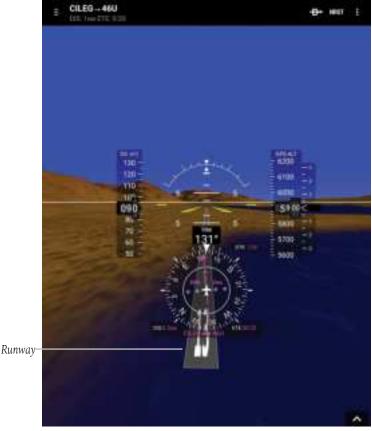


**Synthetic Vision - Traffic** 



#### RUNWAYS

Runway data provides improved awareness of runway location with respect to the surrounding terrain. All runway thresholds are depicted at their respective elevations as defined in the database. In some situations, where threshold elevations differ significantly, crossing runways may appear to be layered. As the aircraft gets closer to the runway, more detail such as runway numbers and centerlines are displayed.



**Synthetic Vision - Runway** 



#### SYNTHETIC VISION TERRAIN AND OBSTACLE DATA

Terrain alerting on the synthetic vision display corresponds to the red and yellow X symbols on the Map Page.

In some instances, a terrain or obstacle alert may be issued with no conflict shading displayed on the synthetic vision. In these cases, the conflict is outside the Synthetic Vision field of view.

Obstacles are represented on the synthetic vision display by standard twodimensional tower symbols found on the Inset Map and Navigation Map. Unlike the Map Page, obstacles on the synthetic vision display do not change colors to warn of potential conflict with the aircraft's flight path until the obstacle is associated with an actual terrain alert. Obstacles greater than 1000 feet below the aircraft altitude are not shown.



**Synthetic Vision - Terrain** 



It is preferred to download the medium or high resolution terrain data when using Synthetic Vision. The 3D view may not draw correctly with low resolution terrain data.



Synthetic Vision - High Resolution Terrain Data



Synthetic Vision - Low Resolution Terrain Data



# **LOGBOOK**

The Garmin Pilot Logbook feature allows the pilot to record pertinent flight information to include the following:

- Generate automatic logbook entries using GPS data collected during the flight.
- Add manual entries or modify auto-entries.
- Notification of auto-generated entries via red badges on Logbook icon.
- Smart Suggestions auto-populates previously used instructor and aircraft information.
- Track currency information including day and night take-offs, night duration, and cross country.
- Enter signed endorsements and generate reports.
- Optional automatic synchronization with the flyGarmin website.
- Adding photographs to logbook entries.

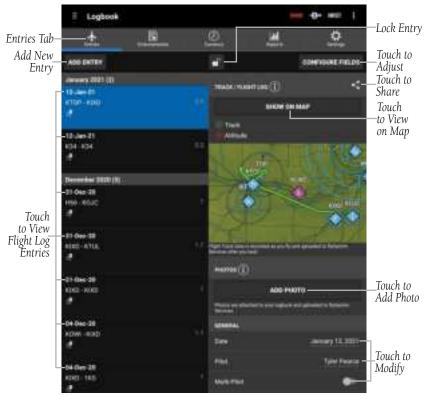
The Garmin Pilot logbook requires at least one aircraft entered in **Home** > **Aircraft** in order to create valid entries. If a logbook entry is created without any aircraft types, the Aircraft Type field will prompt to add an aircraft type.

# **FLIGHT LOG ENTRIES**

### **Manually Adding Logbook Entry:**

- 1) From any page, touch **Home** >
- 2) If necessary, touch **Entries** at the top of the page.
- 3) Touch Add Entry. Garmin Pilot will create a new entry.
- 4) Touch the desired Flight Log entry field(s) to add flight data.
- 5) Under the Duration section, use the buttons to copy the value from the Total field to another field.
- **6)** If the flight included multiple approaches, touch **Add Approach** for each.
- 7) If the flight was dual given, the instructor enters the following fields: Instructor Name, Certificate Number, and Certificate Expiration.
  - **a)** Touch **Add Signature** to sign the entry.
  - b) Touch Save.





**Logbook Entries** 

### **Enabling Automatic Flight Log Entries:**



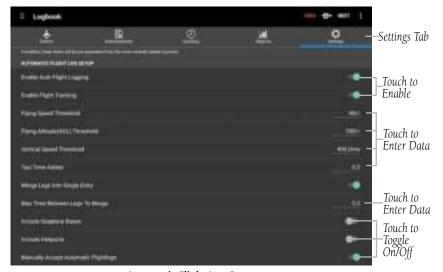
**NOTE:** The terrain download is recommended for optimum performance of Automatic Flight Logging.

- 1) From any page, touch **Home** > Settings.
- 2) Scroll down to the **Automatic Flight Log Setup** fields.
- 3) Touch next to **Enable Auto Flight Logging**.
- 4) If desired, enter a value for any of the following Automatic Flight Log Setup fields.



Enable Flight Tracking	Taxi Time Added	Include Heliports
Flying Speed Threshold	Merge Legs Into Single Entry	Manually Accept     Automatic Logs
• Flying Altitude (AGL) Threshold	Max Time Between     Legs To Merge	
Vertical Speed     Threshold	• Include Seaplane Bases	

## **Automatic Flight Log Setup Fields**



**Automatic Flight Log Setup** 

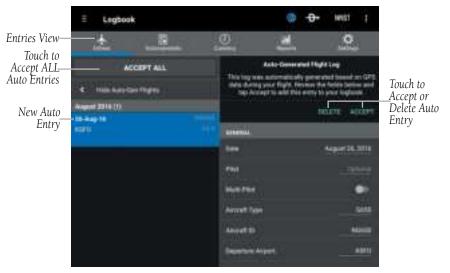
## **Accepting Automatic Flight Log Entries:**

- 1) From any page, touch **Home** > Entries.
- 2) Touch Auto-Gen Flights.Optionally, touch Accept All to add all automatic entries to the Logbook.
- **3)** Touch a flight log entry.
- 4) Touch **Accept** to add the entry to the logbook.



# **Deleting Automatic Flight Log Entries:**

- 1) From any page, touch **Home** > **S Entries**.
- 2) Touch Auto-Gen Flights.
- **3)** Touch a flight log entry.
- 4) Touch Delete.



Flight Log Entry - Automatic

# **Modifying Flight Log Entry:**

- 1) From any page, touch **Home** > **Entries**.
- 2) Touch the desired entry to modify.
- **3)** Modify the desired Flight Log entry fields.

# **Deleting Flight Log Entry:**

- **2)** Touch and hold the desired entry to delete.
- **3)** If desired, touch additional entries to delete.
- 4) Touch 🗊 at the top of the screen to delete or touch 🗲 to cancel.

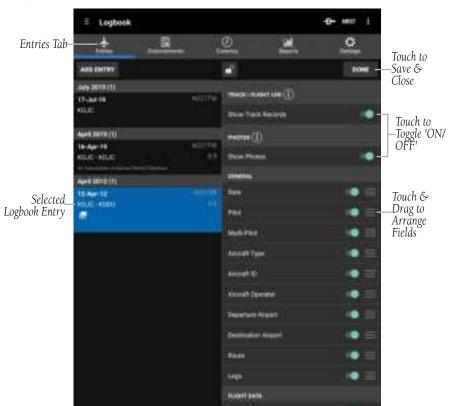


## FLIGHT LOG FIELDS

The order of the Flight Log Fields can be arranged, and each flight log field can be configured ON or Off.

# **Configuring logbook fields:**

- 1) From any page, touch **Home** > Entries.
- **2)** Touch the desired entry to configure or touch **Add Entry** to create a new entry.
- 3) Touch Configure Fields.
- **4)** Touch and drag to arrange the fields in the desired order.
- **5)** Touch next to desired fields to hide or display them.
- 6) Touch Done.



Flight Log Field Configuration



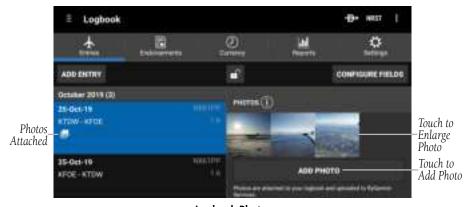
## LOGBOOK PHOTOS

The Logbook Photos feature allows the pilot to attach unlimited photos to logbook flight entries.

- Logbook photos may be taken while in flight using a device's camera, and are automatically added to the provisional logbook entry.
- Logbook photos can be attached to existing logbook entries from the device's photo library or flyGarmin.
- Logbook photos are securely stored within flyGarmin and can be synced across all devices.

## Adding photos to a logbook entry:

- 1) From any page, touch Home >
- 2) Touch **Add Entry** or an existing logbook entry and select the **Add Photo** icon.
- **3)** Take a photo from the device, add one from the device's photo library, or add a photo from the Virb photo library.



**Logbook Photos** 

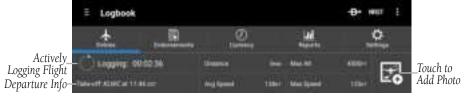


## LOGBOOK AUTO-LOGGING

The Logbook Auto-Logging view on the logbook entries tab captures and displays real-time flight data including:

- Duration of flight
- Time of departure
- Distance flown
- Average speed
- Maximum altitude
- Maximum speed

Logbook Auto-Logging also supports taking photos while in flight or attaching images from the device's library to the logbook entry.



**Logbook Auto-Logging** 

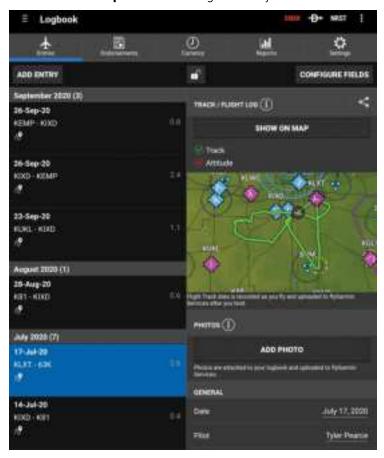


## LOGBOOK TRACKS

Garmin Pilot automatically creates a track of a flight and attaches the file to the entry in the logbook.

# Viewing logbook tracks:

- 1) From any page, touch Home >
- 2) Touch **Show on Map** on a selected logbook entry.



**Logbook Tracks** 



# Adding logbook widget from split screen mode:

- 2) Touch Add Widget and select Logbook Tracks.

# Hiding logbook tracks from the map:

- 1) From any page, touch **Home** > **S**.
- 2) Long press on the desired area in the Map Pane until the Radial Menu appears.
- 3) Select the **Track** icon from the radial menu.
- **4)** Touch on the **Hide** button to remove the track on the map.

# **ENDORSEMENTS**

## **Viewing Endorsements:**

- 1) From any page, touch **Home** > **Endorsements**.
- 2) Touch the desired endorsement.

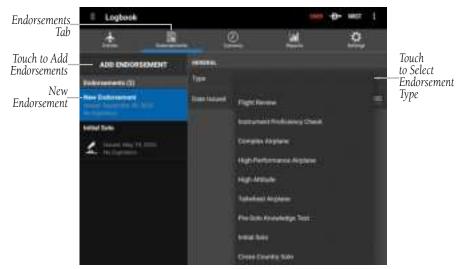


**Endorsement View** 



## **Adding Endorsements:**

- 1) From any page, touch **Home** > **Endorsements**.
- 2) Touch Add Endorsement.
- **3)** Touch **Type**.
- **4)** Touch the desired Type from the list.
- 5) The pilot enters the following Endorsement Fields: First Name, MI, Last Name; Gender; Pilot Certificate; Certificate Number; Make and Model.
- **6)** Touch **Title**.
- **7)** Enter a title for the endorsement and touch **Done**.
- **8)** If desired, enter the **FAA Category**, date **Issued**, and date **Expires**.
- 9) The instructor enters the following Instructor fields: **Instructor Name**, **Certificate Number**, and **Certificate Expiration**.
  - **a)** Touch **Add Signature** to sign the entry.
  - **b)** Touch **Save**.



**Endorsements** 

## **Deleting an Endorsement:**

- 2) Touch and hold the desired endorsement to delete.
- **3)** If desired, touch additional endorsements to delete.
- 4) Touch 🔳 at the top of the screen to delete or touch 🖶 to cancel.



### **CURRENCY**

To View Currencies, touch **Home** > **Currency**. When the currency type has been met, **o** is displayed as well as the date last met, expiration date, and days remaining. When the currency type has not been met **o** is displayed.



**Logbook - Currency** 

## Adding a currency type:

- 1) From any page, touch **Home** > **Currency**
- 2) Touch Add Currency Type.
- **3)** Touch the desired Currency Type from the list.

# **Deleting a currency type:**

- 1) From any page, touch **Home** > Currency.
- **2)** Touch and hold the desired currency to delete.
- **3)** If desired, touch additional currencies to delete.
- 4) Touch at the top of the screen to delete or touch to cancel.

# **REPORTS**

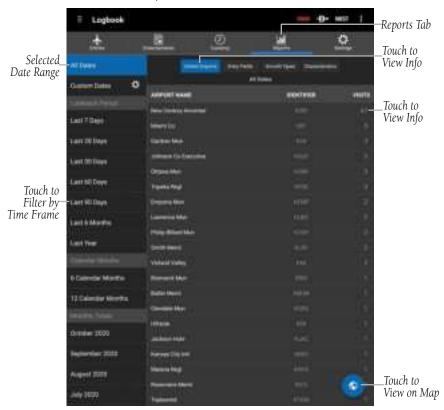
The Reports tab shows categorized summaries of logbook entries. These summaries are broadly divided into Visited Airports, Entry Fields, Aircraft Types and Characteristics. All four categories can further be organized by time frame, using the lookback options on the left side of the screen. The Reports tab also supports a selectable custom date range. To change the custom date range, touch to display the Custom Dates window



The Visited Airports category shows the total number of visits to specific airports from a recorded flight log data. Visited Airports data can be viewed as a List or on the Map. List View displays data in descending order, with the most frequently visited airport at the top, along with the airport I.D., and the total number of visits. Touch the desired Airport Name to view flight details, such as Date, Departure, and Duration.

# **Viewing Visited Airports - List View:**

- From any page, touch Home > Properts > Visited Airports.
- 2) Select the desired Date Range on the lefthand side of the screen.
- 3) Touch in the bottom, right corner of the screen to display the List View
- **4)** Touch the desired Airport Name to view details.

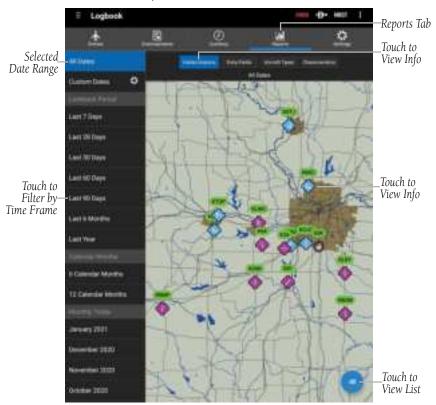


Logbook - Reports - Visited Airports - List View



## **Viewing Visited Airports - Map View:**

- 1) From any page, touch **Home** > **Property** > **Reports** > **Visited Airports**.
- 2) Select the desired Date Range on the lefthand side of the screen.
- 3) Touch in the bottom, right corner of the screen to display the Map View.
- 4) Touch the desired Airport I.D. to view details.



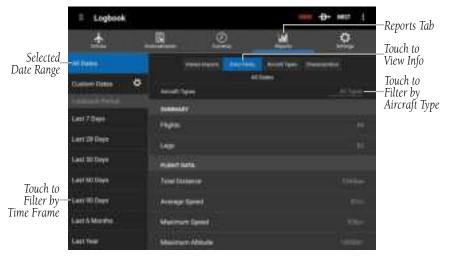
Logbook - Reports - Visited Airports - Map View



The Entry Fields category shows totals of numeric flight log data. This category also includes an Aircraft Types field for narrowing flight log data to aircraft types specified in Logbook Settings. This Aircraft Types field is different than the Aircraft Types category.

## **Viewing Entry Fields:**

- 1) From any page, touch **Home** > Reports > Entry Fields.
- 2) Select the desired Date Range on the lefthand side of the screen.
- **3)** Touch the **All Types** field in the upper right corner and adjust to filter data as desired.
- **4)** Scroll down to view logbook entries categorized by Summary, Flight Data, Flight Time, General Operations, and IFR Operations.



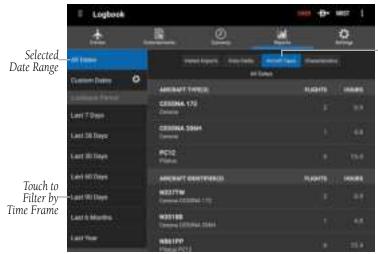
**Logbook - Reports - Entry Fields** 



The Aircraft Types category displays total data specific to aircraft types instead of flights.

# **Viewing Aircraft Types:**

- 2) Select the desired Date Range on the lefthand side of the screen.
- 3) Scroll down to view logbook entries categorized by Aircrafty Type(s) and Aircraft Identifier(s).



Touch to Display Flights/ Hours by Aircraft Type

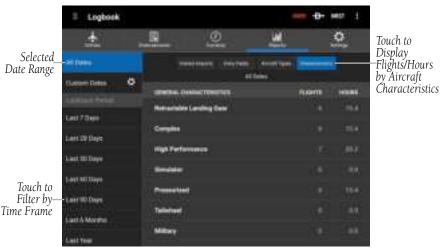
Logbook - Reports - Aircraft Types



The Characteristics category displays flight log data pertaining to aircraft characteristics, regardless of aircraft type or flights.

# **Viewing Characteristics:**

- 1) From any page, touch **Home** > Reports > Characteristics.
- 2) Select the desired Date Range on the lefthand side of the screen.
- **3)** Scroll down to view logbook entries categorized by General Characteristics (Retractable Landing Gear, Complex, High Performance, etc.), Engine Type, Arcraft Category, Aircraft Class, and Aircraft Manufacturer.



**Logbook - Reports - Characteristics** 

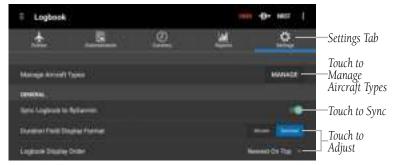


## LOGBOOK SETTINGS

## **GENERAL SETTINGS**

The Settings tab provides options to fine tune Logbook functions. **Sync Logbook to flyGarmin** will enable or disable storing logbook entries to Garmin's web service. By default, the Logbook shows time values in decimal hours. Touch **Duration Field Display Format** to change time values to hours + minutes. **Logbook Display Order** can be used to reverse the order of logbook entries in the other logbook tabs.

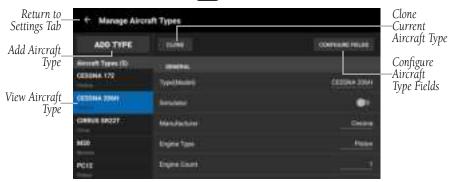
Logbook Settings can be accessed by touching \_\_\_\_ > Settings.



Logbook Settings - General

# MANAGING AIRCRAFT TYPES

Touch **Manage** to add, delete and edit aircraft information used in Logbook entries. Aircraft type information here is used in the Entries tab, providing options in the Type fields for new flight log entries. This aircraft information is also separate from the aircraft information found in **Home** > **Aircraft**, which is used for flight planning.



Logbook Settings - Viewing Aircraft Type



## Adding Aircraft Type:

- 1) From any page, touch **Home** > Settings > Manage.
- 2) Touch Add Aircraft Type. Garmin Pilot will create a new aircraft type entry.
- **3)** Touch the desired Aircraft Type entry field(s) to add an entry.

# **Modifying Aircraft Type:**

- 1) From any page, touch **Home** > Settings > Manage.
- 2) Touch the desired Aircraft Type to modify.
- **3)** Touch the desired Aircraft Type entry field(s) to modify.

# **Copying Aircraft Type:**

- 1) From any page, touch **Home** > Settings > Manage.
- **2)** Touch the desired aircraft type to copy > **Clone**.

## **Deleting Aircraft Type:**

- 1) From any page, touch **Home** > Settings > Manage.
- 2) Touch and hold the desired aircraft type to delete.
- 3) Touch at the top of the screen to delete or touch to cancel.

# **Configuring Aircraft Type Fields:**

- 1) From any page, touch **Home** > Settings > Manage.
- 2) Touch any aircraft type
- 3) Touch Configure Fields.
- **4)** Touch and drag to arrange the fields in the desired order.
- **5)** Touch and drag the switch ON/OFF to display the desired fields **> Done.**



**Logbook Settings - Configure Aircraft Type Fields** 



#### PILOT INFORMATION

When a new flight log entry or endorsement is created, the Pilot, Gender, Pilot Certificate and Pilot Certificate Number fields will automatically populate with information specified here. This applies to both manual and automatic flight log entries.

Pilot Information Settings can be accessed by touching **Settings**. > **Settings**.



## **AUTOFILL FROM TOTAL DURATION**

These options will automatically copy the Total Duration value when a new flight log entry is created. This applies to both manual and automatic flight log entries.

Logbook Autofill From Total Duration Settings can be accessed by touching \_\_\_\_\_> **Settings.** Scroll down to adjust as necessary.



Logbook Settings - Pilot Info & Autofill



#### CARRYOVER FROM LAST ENTRY

When a new flight log entry is created, Garmin Pilot looks at the previous flight log and fills in these fields based on the previous entry.

Logbook Carryover From Last Entry Settings can be accessed by touching \[ \bigselow > \] **Settings.** Scroll down to adjust as necessary.





**Logbook Settings - Carryover From Last Entry** 

### **AUTOMATIC FLIGHT LOG SETUP**



**NOTE:** The terrain download is recommended for optimum performance of Automatic Flight Logging.

When **Automatic Flight Log** is enabled, Garmin Pilot detects takeoff and landing to automatically create a flight log entry.

Logbook Automatic Flight Log Setup Settings can be accessed by touching > **Settings.** Scroll down to adjust as necessary. The settings below allow the pilot to configure the behavior of the flight log function.





**Logbook Settings - Automatic Flight Log Setup** 

Enable Auto Flight Logging	Allows Garmin Pilot to automatically create flight logs.	
Flying Speed Threshold	Used to optimize the detection of takeoff when terrain is not available. If terrain has been downloaded then it is used to determine	
Flying Altitude (AGL) Threshold		
Vertical Speed Threshold	when the aircraft is flying.	
Taxi Time Added	Automatically added to the total duration to account for taxi time on the ground. Defaults to zero.	
Merge Legs Into Single Entry	These parameters control if two flights will be	
Max Time Between Legs To Merge	automatically merged into one logbook entry.	
Include Seaplane Bases	Enable these options if operating out of a	
Include Heliports	seaplane base or heliport.	
Manually Accept Automatic Flightlogs	When enabled, the user must manually review and accept all auto-generated flight log entries.	

**Automatic Flight Log Setup Fields** 



# WEIGHT AND BALANCE

Weight and balance is calculated within Garmin Pilot to determine if the airplane is properly loaded within CG limits. Garmin Pilot syncs the current flight plan to incorporate initial fuel and winds aloft data into the weight and balance calculations. Aircraft performance data may be imported from Garmin's aircraft library or manually entered from the aircraft's Pilot Operating Handbook (POH), into Garmin Pilot.



is displayed when the aircraft is loaded within the CG envelope.



is displayed when the aircraft is loaded out of the CG envelope.



Weight and Balance

# **Entering Weight and Balance data:**

- 1) After adding an aircraft and performance data in **3**, touch **Home** > **3**.
- **2)** Touch the N-number to select the desired aircraft.
- **3)** Enter the weights for each station.
- 4) Touch the 'Fuel Load' field and use the weight slider or touch Maximum Fuel, 30 Minute Reserve, 45 Minute Reserve, or 60 Minute Reserve.



# **DOWNLOADS**



**NOTE:** If charts are not downloaded to the device they will not be available for viewing without a data connection. Download all applicable charts for your planned flight including alternates.



**NOTE:** Chart files can be very large and may take some time to download. It is recommended that downloads be done over Wi-Fi. Additional charges may apply for downloads done over a cellular network.



**NOTE:** With the availability of electronic charts in Garmin Pilot, it is still advisable to carry another source of charts on board the aircraft.



**NOTE:** A data connection (i.e., Wi-Fi or cellular) is required to download or update charts.

The Downloads Menu is divided into two sections. The Navigation & Airports section allows for downloading US Navigation Data, Airport Info, and SafeTaxi information. The Procedures & Charts section allows for downloading VFR Sectional Charts, WAC Charts, IFR Low and High Altitude Charts, and Instrument Procedures for the Continental US as well as Alaska and Hawaii.

The Downloads Menu is divided into two columns. The Left column shows items available for download as indicated by the blue down arrows ( ) or blue text. The right column is the Download Queue, shows the download status and a list of queued downloads.

The submenus for VFR Sectional Charts, WAC Charts and IFR Low and High Altitude Charts display the Chart Selection Screen, which is a map showing the charts as outlined areas. To select all available charts touch the file folder in the lower right corner and touch **Select All** from the list or touch the outlined area for the desired chart(s). After selecting the chart(s) to download touch the Download Arrow in the lower right corner. Terminal Procedure charts can be viewed and downloaded from the Airport Info Page, under the Procedures tab as well.

The **Auto-Download Pilot Updates** feature, automatically download file updates and next cycles of existing data and charts as they become available.



# **Configuring Auto-Download Pilot Updates:**

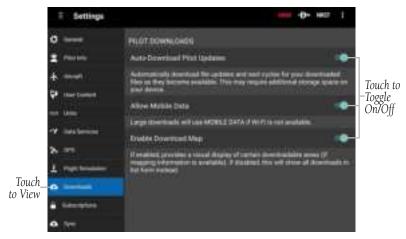
- 1) From any page, touch **Home** > **> > Downloads** Tab.
- 2) Touch next to **Auto-Download Pilot Updates**, as desired.

# **Configuring Allow Mobile Data:**

- 1) From any page, touch **Home** > **X** > **Downloads** Tab.
- 2) Touch next to Allow Mobile Data, as desired.

# **Configuring Enable Download Map:**

- 1) From any page, touch **Home** > **S** > **Downloads** Tab.
- 2) Touch next to **Enable Download Map**, as desired.



**Settings - Downloads** 



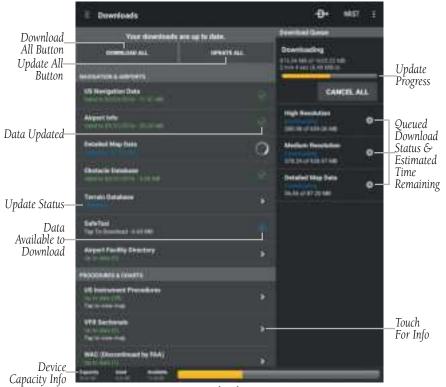
# **Downloading US Navigation Data, Airport Info or SafeTaxi:**

- **1)** From any page, touch **Home** > **[[**].
- **2)** Touch **1** to begin downloading the desired information.

# Downloading Current Cycle Sectional, IFR Low Altitude, or IFR High Altitude Charts:

- 1) From any page, touch **Home** > .
- From the VFR / IFR Enroute Charts list select the submenu for the desired chart.
- 3) Touch Current.
- **4)** Touch the outlined area on the Chart Selection Screen for the desired chart(s).
- 5) Touch DOWNLOAD

**Or**: **Select All** > **DOWNLOAD** to download all available charts.





# Downloading Next Cycle Sectional, IFR Low Altitude, or IFR High Altitude Charts:



**NOTE:** Sectional Charts are updated individually on the chart schedule and are available for download, typically 5 days prior to their valid date. IFR Low and High Altitude Charts are updated on a 28-day cycle and are available for download typically 5 days prior to their valid date.

- **2)** From the **VFR/IFR Enroute Charts** list select the submenu for the desired chart.
- **3)** Touch selected chart type.
- **4)** Touch the outlined area on the Chart Selection Screen for the desired chart(s).
- **5)** Touch **DOWNLOAD** to download the selected chart(s). The download will begin immediately as shown in the Download Queue.

**Or**: Touch **Select All** > **DOWNLOAD**, to download all available charts.

## **Downloading Current Cycle Instrument Procedures:**

- 2) From the VFR/IFR Enroute Charts list select the submenu for the desired US Instrument Procedures.
- **3)** Touch **Current**.
- **4)** Touch the State(s) on the Chart Selection Screen for the desired chart(s).
- **5)** Touch **DOWNLOAD** to download the selected chart(s). The download will begin immediately as shown in the Download Queue.

**Or**: Touch **Select All** > **DOWNLOAD**, to download all available charts.

## **Downloading Next Cycle Instrument Procedures:**

- 1) From any page, touch Home > .
- **2)** From the Procedures & Charts list select the submenu for US Instrument Procedures.
- 3) Touch Current.
- **4)** Touch the State(s) on the Chart Selection Screen for the desired chart(s).
- 5) Touch DOWNLOAD to download the selected chart(s).
  - **Or**: **Select All** > **DOWNLOAD**, to download all available charts.





**NOTE:** US Instrument Procedures are updated on a 28-day cycle and are available for download typically 5 days prior to their valid date.

## CHART UPDATES



**NOTE:** Electronic Charts are updated frequently. Always ensure the charts saved to the device are up-to-date prior to each flight. With the availability of electronic charts, it is still advisable to carry another source of charts onboard the aircraft.

Garmin Pilot makes it easy to ensure that charts are always up-to-date by taking advantage of the notification area of the Android device. When Garmin Pilot is started it automatically checks for charts updates. When updates are available the Garmin Pilot Icon is displayed in the notification area the device. The number of available updates is also displayed on the Downloads Page. When updates are available, the button becomes active. The button will update all available charts no matter the chart type.



New Downloads Available

US Navigation Data, Airport Info and SafeTaxi are updated on 28-day cycle and are available for download typically 5 days prior to their valid date.

WAC and Sectional Charts are updated individually on the chart schedule and are available for download typically 5 days prior to their valid date.

US Instrument Procedures are updated on a 28-day cycle and are available for download typically 5 days prior to their valid date.

IFR Low and High Altitude Charts are updated on a 28-day cycle and are available for download typically 5 days prior to their valid date.

Charts that have been downloaded to the device are always available for viewing even after their expiration date. If the next cycle chart is downloaded prior to its activation date the current cycle will be used until it expires. After the expiration date the next cycle chart will be used and the old cycle will automatically be removed.



## **Updating Sectional, IFR Low, or IFR High Altitude Charts:**

- From any page, touch Home >
- 2) Touch **Update All (X)** to update all available charts.

#### Or:

- 1) Select the desired chart type submenu.
- **2)** From the Chart Selection Screen touch the expired chart(s), shown in red.
- Touch DOWNLOAD to download the selected chart(s). The download will begin immediately as shown in the Download Queue.

#### Or:

- 1) Select the desired chart type submenu.
- **2)** From the Chart Selection Screen touch **Select All** > **DOWNLOAD**. The download will begin immediately as shown in the Download Queue.





## **Updating Instrument Procedures:**

- From any page, touch Home >
- 2) From the **Procedures & Charts** list select the submenu for **US Instrument Procedures**.
- **3)** From the Chart Selection Screen touch the expired chart(s), shown in red.
- **4)** Touch **DOWNLOAD** to download the selected chart(s). The download will begin immediately as shown in the Download Queue.

**Or**: Touch **Select All** > **DOWNLOAD**, to update any expired charts.



**IFR Enroute High Chart Selection (Select All)** 



# **CHECKLISTS**

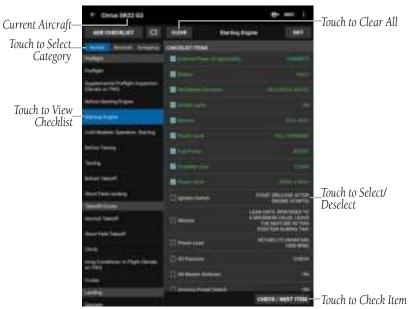
Electronic checklists can be viewed in Garmin Pilot to ensure proper flight procedures. Checklists display the item with the preferred state or outcome, along with a green checkmark to confirm the step has been completed. Checklists are fully customizable to meet the pilot's preferences.

# Viewing an aircraft checklist:

- 1) From any page, touch **Home** >
- 2) Touch the desired aircraft model from the Garmin library under **Checklist Binders**

**Or**: Add a new checklist binder by manually entering the information from the aircraft's Pilot Operating Handbook (POH), into Gamin Pilot or flyGarmin.

- **3)** Touch the desired procedure.
- **4)** Touch the appropriate step to indicate that is has been completed. A blue checkmark will indicate the step has been completed.
- 5) Touch the **Clear** button to clear all of the completed checklist items in the selected checklist category.



**Electronic Checklists** 



# **PLAN**

Garmin Pilot's powerful capabilities start with pre-flight planning, providing pilots with the most comprehensive aviation weather information to make better-informed flight decisions. Pilots can check weather radar, visible and infrared cloud imagery, METARs, TAFs, AIRMETs, SIGMETs, PIREPs, NOTAMs, winds and temperatures aloft, TFRs and lightning data. With Garmin Pilot, weather data can be overlaid on VFR Sectionals, IFR low altitude en route charts, IFR high altitude en route charts, WAC, or a simple map showing major roads and borders to visualize the weather for upcoming flights. Add text-based weather widgets and use the exclusive NavTrack feature to view weather information along the planned route.

# FASTFIND PREDICTIVE WAYPOINT ENTRY

When entering a waypoint into the flight plan, FastFind Predictive Waypoint Entry populates airport identifiers and navigation aids nearest your location or previous point in the flight plan.



**FastFind** 



# FLIGHT PLAN

The Flight Plan page manages the current flight plan. Flight plans can be created, bookmarked (stored), and reversed from the Flight Plan Page. From the Flight Plan Page, flight plans can be entered in one of two ways. First, touch within the route field and use the keyboard to add waypoints separated by spaces. Second, touch the Add Waypoint button in the flight plan list and use the keyboard to enter the waypoint identifier, or graphically edit on the map once a departure point is entered. The Flight Plan Page allows for flight plans to be bookmarked or stored for later use. Bookmarked Flight Plans are synchronized through a Garmin Pilot account and are available on any device with Garmin Pilot.



Flight Plan



## **Creating a Flight Plan:**

- **I)** From any page, touch **Home** > 🎮.
- 2) Touch within the route field to activate the cursor.
- **3)** Use the keyboard to insert waypoints. Separate each waypoint with a space.

#### Or:

- 1) Touch the Add Waypoint button.
- **2)** Use the keyboard to input the waypoint identifier.
- 3) Touch the Add Waypoint button to add additional waypoints.

**Or:** Enter Lat/Lon information in one of the following formats:

Lat/Lon	Lat/Lon
####N/####W	N##.#/W##.#
N####/W####	##.#/-##.#
####/-####	##.#N/0##.#W
##.#N/##.#W	##.#/-0##.#
N##.#/W0##.#	

Spaces are not allowed, slash (/) is required. Any Latitude format can be combined with any longitude format in the same string.

#### Lat/Lon Formats

**Or:** Enter Radial/Distance waypoint in one of the following formats:

Radial/Distance	Descriptions
MSP/190/035 or MSP/190/35	Identifier/Radial/Distance
MSP190035	IdentifierRadialDistance
Spaces are not allowed, when slashes (/) are used the leading zero can be left off the	
radial and/or distance	

#### Radial/Distance Formats



**Or:** Enter a waypoint at the intersection of two VOR radials in the following format:

VOR/Radial	Descriptions
OKB100MZB020	VORRadialVORRadial

## **Radial Intercept Waypoint**



**Radial Intercept Waypoint** 

#### Or:

- 1) Use one of the above methods to enter a departure point.
- 2) In the Map View area long-press any location or flight plan leg, to display the rubber-band, drag the rubber-band to the desired map location.
- **3)** Once the rubber-band is on or near the desired location release the rubber-band. A list of nearby waypoints is displayed.
- **4)** Select the desired waypoint from the list. Or create a User Waypoint.
- **5)** Repeat steps 2-4 to add additional waypoints.



# **ACTIONS MENU**

The Flight Plan List contains a waypoint-sensitive Actions Menu. For example if the selected waypoint is the departure point, the Actions Menu will include an **Add/Remove SID**. If the selected point is the final destination, the Actions Menu will include an **Add/Remove STAR action** item. Or, if the selected waypoint is a valid Airway entry point, the Actions Menu will include a **Load Airway** action item. The Actions Menu also has Action Items for adding, removing, or changing flight plan waypoints.

Action Menu Options - Airport of Origin	
Action	Description
	Adds a new line item before the selected waypoint. Places the
Insert Before	cursor in the empty line and opens the keyboard for waypoint
	identifier entry.
	Adds a new line item after the selected waypoint. Places the
Insert After	cursor in the empty line and opens the keyboard for waypoint
	identifier entry.
Remove Waypoint	Removes selected waypoint from the Flight Plan.
Waypoint Info	Displays Waypoint information dialog box.
Direct-To	Opens the Direct To dialog box.
Add Departure	Opens the Select a Departure dialog box. Select the desired SID
	to open the submenu of available transitions or Select on Map.
Change Runway	If a Runway had been previously selected, this opens the Select
	Runway dialog box.
	If a Departure had been previously selected, this opens the
Change Departure	Select a Departure dialog box. Select the desired SID to open
	the submenu of available transitions or Select on Map.
Remove	If a Departure had been previously selected, this removes the
Departure	departure from the Flight Plan.

Action Menu Options - Airport of Origin



Action Menu Options - Enroute	
Action	Description
Insert Before	Adds a new line item before the selected waypoint. Places the cursor in the empty line and opens the keyboard for waypoint identifier entry.
Insert After	Adds a new line item after the selected waypoint. Places the cursor in the empty line and opens the keyboard for waypoint identifier entry.
Remove Waypoint	Removes selected waypoint from the Flight Plan.
Waypoint Info	Displays Waypoint information.
Direct-To	Opens the Direct To dialog box.
Load Airway	Only available if the selected item is valid airway entry point.  Opens submenu of available Airways. Once an Airway is selected the Select Exit submenu displays a list of available exit waypoints that can be ordered by distance or alphabetically.
Remove Airway	Removes Airway and all associated waypoints.
Change Airway Entry	Opens the Change Entry submenu with a list of entry points. The submenu can be viewed as an ordered list or alphabetically.
Change Airway Exit	Opens the Change Exit submenu with a list of Airway exit points. The submenu can be viewed as an ordered list or alphabetically.
Activate Leg	Actives the selected leg for navigation.
Action Menu Options - Enroute	



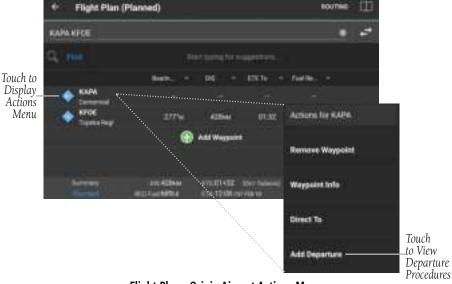
Action Menu Options - Destination	
Action	Description
Insert Before	Adds a new line item before the selected waypoint. Places the cursor in the empty line and opens the keyboard for waypoint identifier entry.
Insert After	Adds a new line item after the selected waypoint. Places the cursor in the empty line and opens the keyboard for waypoint identifier entry.
<b>Remove Waypoint</b>	Removes selected waypoint from the Flight Plan.
Waypoint Info	Displays Waypoint information.
Direct-To	Opens the Direct To dialog box.
Change Arrival	If an Arrival had been previously selected, this opens the Edit STAR submenu with a list of available STARs. Select the desired STAR to open the submenu of available transitions or Select on Map.
Remove Arrival	If an Arrival had been previously selected, this removes the STAR and all associated waypoints.
Add Arrival	Opens the STAR submenu, listing available STARs. Select the desired STAR to open the submenu of available transition or Select on Map
Activate Leg	Actives the selected leg for navigation.

Action Menu Options - Destination



# Adding a Standard Instrument Departure (SID) to Flight Plan:

- 1) From any page, touch
- **2)** Touch the departure point in the Flight Plan List to open the Actions Menu.
- 3) From the Actions Menu, touch Add Departure.



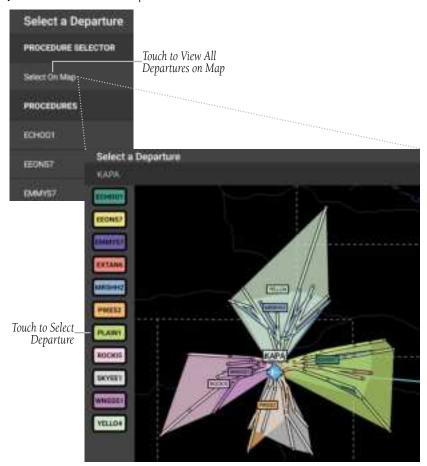
Flight Plan - Origin Airport Actions Menu

- 4) Touch the desired Departure.
- **5)** Touch the desired Runway.
- **6)** Touch the desired Transition.

Or: Touch Select on Map.



**7)** Touch the desired Departure.



Flight Plan - Selecting Departure on Map



**8)** Touch the desired Transition.



Flight Plan - Selecting Departure Transition on Map

**9)** Touch the desired Runway. The Departure, Transition, associated waypoints, and Runway are added to the flight plan as a single entry that can be expanded to view all waypoints.



Flight Plan - Selecting Departure Runway on Map

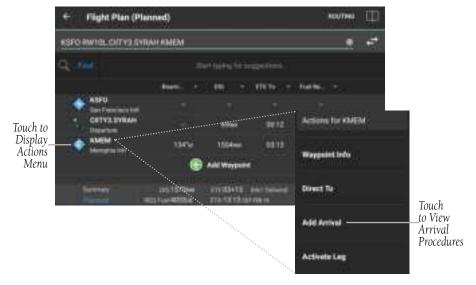




Flight Plan - Viewing Departure Details

# Adding a Standard Arrival Route (STAR) to Flight Plan:

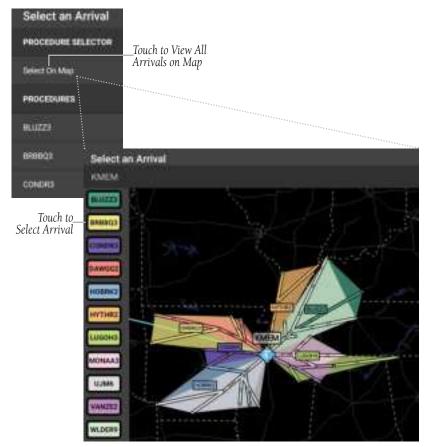
- 1) From any page, touch
- 2) Touch the destination in the Flight Plan List to open the Actions Menu.
- **3)** From the Actions Menu, touch **Add Arrival**.



Flight Plan - Destination Airport Actions Menu



- **4)** Touch the desired Arrival.
- **5)** Touch the desired Transition.
- **6)** Touch the desired Runway.
- Or: Touch Select on Map.
- **7)** Touch the desired Arrival.



Flight Plan - Selecting Arrival on Map



**8)** Touch the desired Transition.



Flight Plan - Selecting Arrival Transition on Map

**9)** Touch the desired Runway. The Arrival, Transition, and associated waypoints are added to the flight plan as a single entry that can be expanded to view all waypoints. Once a STAR has been added to a flight plan, no more waypoints can be added.

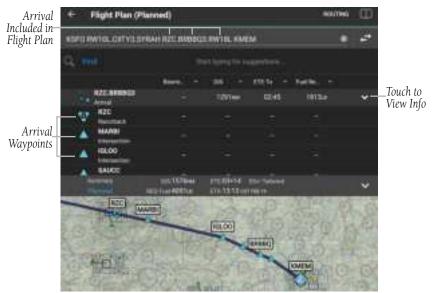


Flight Plan - Selecting Arrival Runway on Map



# Expanding/Collapsing SID, STAR, or Airways in Flight Plan List:

- **2)** Touch **()** to expand.
- 3) Touch w to collapse any of the expanded fields.

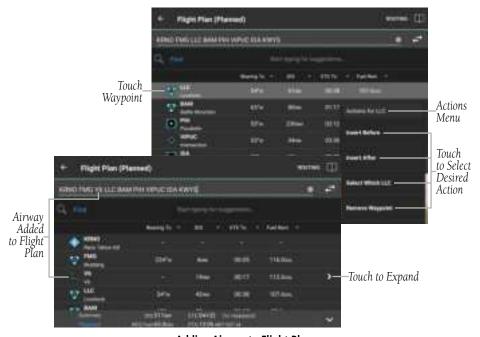


Flight Plan - Viewing Arrival Details



## Adding an Airway to Flight Plan:

- 1) From any page, touch **Home** >
- **2)** Touch a waypoint in the Flight Plan List to open the Actions Menu.
- 3) If the waypoint is a valid Airway entry point, touch Load Airway in the Actions Menu. Only valid Airway entry points will have the Load Airway action in the Actions Menu.
- **4)** Touch the desired Airway.
- **5)** Touch the desired Airway exit point from the list. All Airway waypoints from selected entry point to selected exit point will be added to the flight plan list as one entry that can be expanded to show all waypoints.



Adding Airway to Flight Plan

## **Bookmarking Flight Plan:**

- 1) From any page, touch **Home** > > = .
- 2) Touch **Bookmark current route** to bookmark the Flight Plan. The Flight Plan and all associated waypoints are saved.



## Renaming a Flight Plan:

- 2) Touch and hold on any Flight Plan in the list.
- **3)** Touch **Rename**.
- **4)** Use text entry to give the flight plan a familiar name, or edit the existing name.
- 5) Touch Save.

# **Sorting Stored Flight Plans:**

- 1) From any page, touch **Home** > or or > IIII.
- 2) Choose to order stored flight plans by either selecting the alphabetical button or the custom sort button.

# **Deleting Bookmarked Flight Plans:**

- 2) Touch 🛑 > **Remove** to delete the selected Flight Plan.



**NOTE:** Flight Plans deleted from the Bookmarked FPLs list will also be deleted from other devices when the next sync is performed.



**Deleting Bookmarked Flight Plan** 



# **Reversing Flight Plan:**

- 1) From any page, touch **Home** > **M**.
- 2) Touch to reverse the Flight Plan.



**Active Flight Plan Page** 



#### HIGHEST POINT ALONG ROUTE

In support of Helicopter Emergency Management Services (HEMS), Garmin Pilot identifies the highest obstacle along the planned route of flight.



**Highest Point Settings** 

# **Viewing Highest Point Along Flight Plan:**

- 1) From any page, touch **Home** > **M**.
- 2) If necessary, touch to expand the Flight Plan Summary information.
- 3) Touch Highest Point.

# **Setting Corridor Width for Highest Point Along Flight Plan:**

- 2) If necessary, touch to expand the Flight Plan Summary information.
- 3) Touch **Highest Point**.
- **4)** Touch and drag the desired width.



## Setting Aircraft Category for Highest Point Along Flight Plan:

- **I)** From any page, touch **Home** > **M**.
- 2) If necessary, touch to expand the Flight Plan Summary information.
- 3) Touch **Highest Point**.
- 4) Scroll down if necessary.
- **5)** Touch **Airplane** or **Rotorcraft** in the 'Category' field.

# Viewing Highest Point Along Flight Plan on Map Page:

- 1) From any page, touch Home > .
- 2) If necessary, touch to expand the Flight Plan Summary information.
- 3) Touch Highest Point.
- **4)** Scroll down if necessary.
- 5) Touch next to **Show on Map/Profile**, as desired.

## HAZARD COLORS

Changing the aircraft category as described above will change the color of terrain and obstacle hazard icons on the map.

## **Aircraft (Terrain and Obstacles)**

- Red: Terrain/obstacle is above or within 100 ft below the aircraft altitude.
- Yellow: Terrain/obstacle is between 100 ft and 1000 ft below the aircraft altitude.

# **Helicopter (Terrain)**

- Red: Terrain is more than 250 ft above the aircraft altitude.
- Orange: Terrain is between 250 ft and 0 ft above the aircraft altitude.
- Yellow: Terrain is between 0 ft and 250 ft below the aircraft altitude.

## **Helicopter (Obstacles)**

- Red: Obstacle is at or above current aircraft altitude.
- Yellow: Obstacle is between 0 ft and 250 ft below current aircraft altitude.

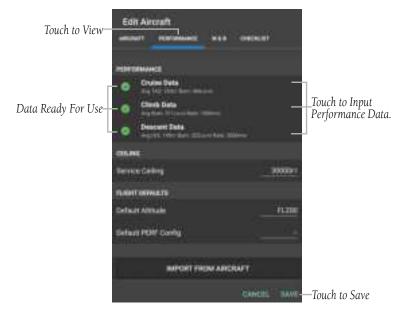


## ADVANCED AIRCRAFT PERFORMANCE

Garmin Pilot incorporates cruise, climb, and descent performance tables to increase the accuracy of Estimated Time Enroute (ETE) and fuel burn calculations.

## Configuring and viewing advanced aircraft performance data:

- 1) From any page, touch **Home** > **\***.
- 2) Touch Add Aircraft and select the aircraft model data from the Garmin library or manually enter the information from the aircraft's Pilot Operating Handbook (POH). Make sure to enter aircraft data on the Performance and W&B tabs also.



**Settings - Advanced Aircraft Performance** 

**3)** Touch **Altitude** in the flight plan summary to determine the best altitude based on fuel consumption and winds.





Advanced Aircraft Performance (Flight Plan)

## **DEMO MODE**

Demo Mode simulates flight activity allowing the user to preview a trip before takeoff or review a previous flight. There are three Demo modes available, Manual, Flight Plan, and Logbook Track.



**NOTE:** When entering a value for Vertical Speed, the aircraft will climb and descend at this rate when altitude changes are made. Setting the vertical speed to zero (0) will override this and cause altitude changes to take effect immediately.

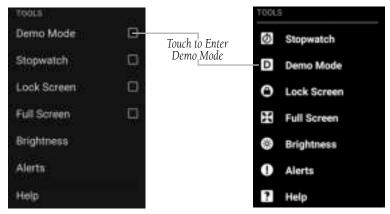


**NOTE:** In order to autolog Demo Flights, Terrain and Obstacle data must be downloaded. Click **Home > Downloads** to verify and/or download the applicable Obstacle Database & Terrain Database.



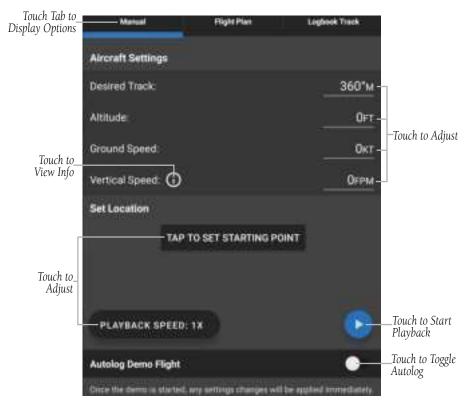
### **Entering Demo Mode - Manual:**

- If using the Classic Interface style, from any page, touch Home > Demo Mode.
- **Or:** If using the Tab Bar Interface style, from any page, touch **More** > **Demo Mode**.
- **2)** Touch the **Manual** tab.
- **3)** Enter Desired Track, Altitude, Ground Speed, and Vertical Speed.
- **4)** Touch **Tap to Set Starting Point** and enter waypoint information.
- 5) Touch **Playback Speed** to adjust as desired, then touch **.**.
- **6)** Toggle the **Autolog Demo Flight** button, as desired.
- 7) From the Map page with the Demo Mode active, touch top of the screen to adjust settings.



Entering Demo Mode - Classic & Tab Bar





Demo Mode - Manual

## **Entering Demo Mode - Flight Plan:**

- 1) If using the Classic Interface style, from any page, touch **Home > Demo Mode**.
- **Or:** If using the Tab Bar Interface style, from any page, touch **More > Demo Mode**.
- **2)** Touch the **Flight Plan** tab.
- **3)** Enter Desired Altitude, Ground Speed, and Vertical Speed.
- **4)** The active flight plan loads automatically. Touch **Edit Route**, if necessary. and enter waypoint information.
- 5) Touch **Playback Speed** to adjust as desired, then touch **.**
- **6)** Toggle the **Autolog Demo Flight** button, as desired.
- 7) From the Map page with the Demo Mode active, touch top of the screen to adjust settings.





Demo Mode - Flight Plan

## **Entering Demo Mode - Logbook Track**

- If using the Classic Interface style, from any page, touch Home > Demo Mode.
- **Or:** If using the Tab Bar Interface style, from any page, touch **More** > **Demo Mode**.
- **2)** Touch the **Logbook Track** tab.
- **3)** Slide the blue circle to adjust Playback Settings.
- **4)** Touch the route underneath Logbook Track to view additional route(s) and select desired route.
- 5) Touch **Playback Speed** to adjust as desired, then touch **.**
- **6)** Toggle the **Autolog Demo Flight** button, as desired.
- 7) From the Map page with the Demo Mode active, touch top of the screen to adjust settings.

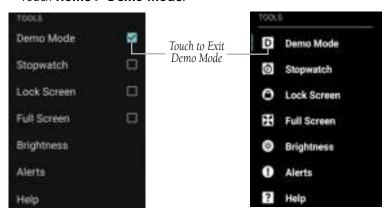




Demo Mode - Logbook Track

## **Exiting Demo Mode:**

Touch **Home** > **Demo Mode**.



Exiting Demo Mode - Classic & Tab Bar



### AIRPORT INFORMATION

Airport information is a downloadable product available free with a Garmin Pilot subscription from the Downloads section of the Settings Menu. Because Garmin Pilot will not automatically remove outdated charts, it is important to always ensure the latest Data Cycle has been downloaded prior to planning a flight. The downloaded cycle number and date range for every map data product is displayed on the Downloads Page.

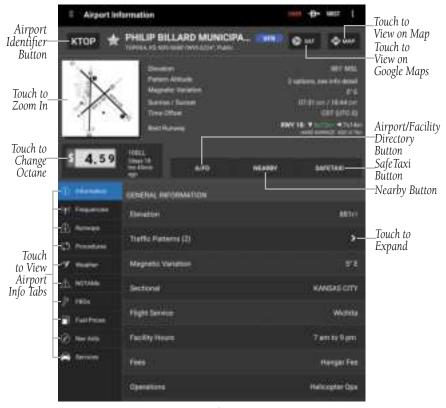
Finding airport information is easy with Garmin Pilot. The Home Button located at the top of the map page contains the Airport Info icon. Touching the icon will present the Airport Information Page.

The Airport Information Page is divided into two sections. The top of the page under the control bar is a summary of airport information. Immediately below the summary are ten selectable tabs for viewing detailed airport information. View more details for select fields by touching . The summary window contains the basic information for the selected airport such as; elevation, pattern altitude, magnetic variation, sunrise/sunset times, time offset, and best runway for current weather. There are also three buttons in the summary area for displaying the A/FD, Nearby airports, or SafeTaxi (available for an additional subscription).

Tab	Description
Information	Traffic pattern altitudes, magnetic variation, Sectional information, Flight
	Service, Fuel information, hours of operation, types of operations, and
	pertinent phone numbers.
Frequencies	Communication and navigation radio frequencies.
Runways	Runway numbers, dimensions, composition, and conditions.
Procedures	List of applicable procedures available for the current airport.
Weather	Current weather conditions including: METAR, TAF, and Winds Aloft.
NOTAMs	Current navigational/safety info for airports included in the route.
FBOs	Fixed base operations, contact information and services (with fees)
	available.
Fuel Prices	Fuel prices on field, fuel prices organized by nearest airports, lowest
	100LL and lowest Jet fuel, detailed FBO contact information, services,
	and credit cards accepted. Fuel Prices are provided by AirNav.
NAV AIDs	Nearest navigation aids, frequencies, distances, and radials.
Services	Nearby lodging, car rental, transportation, and dining information.

**Airport Information Tabs** 





Airport Info Page



**NOTE:** Garmin Pilot references the FAA list of Clearance Delivery phone numbers as an option when receiving a clearance, to help improve communication and efficiency. Not all airports will have a Clearance Delivery phone number listed. The phone numbers will be published as they are listed in the chart supplement.

Within the Airport Summary window is an expandable thumbnail image of the airport diagram. Momentarily touching the airport diagram thumbnail will open a larger view of the airport diagram. Touching the image a second time will return the screen to the previous page.

# **Viewing Airport Using Garmin Pilot Map:**

From any page, touch **Home** > > > > > > |







## **Viewing Airport Using Google Maps:**



**NOTE:** Google Map functionality requires an active Wi-Fi or cellular connection.





From the Airport Information Page, there are multiple ways to search for airport information. The two primary methods of accessing airport search functionality are by touching either the airport identifier or the Menu Button. Touching the airport identifier, on the left side of the airport title bar opens the airport search tool. Touching the Menu Button, in the upper right corner of the display reveals several more search options, including a basic search (same as touching the airport identifier), search for airports near the current location, or airports near the currently selected airport. While on the Airport Info page, the Menu Button also offers quick access to the Airport Information pages for the departure and destination airports in the Flight Plan.

# **Searching for Airport:**

From any page, touch **Home** >



Touch the Airport Identifier Button in the Summary Window. 2)

**Or:** Touch **Menu** > **Search**.

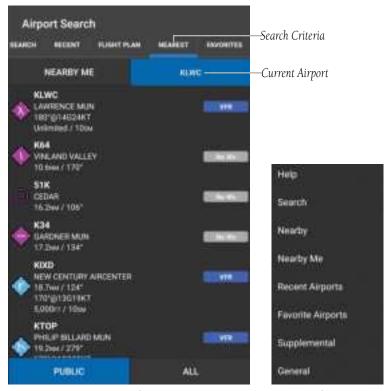
3) Select a search criteria.

Search Criteria	Description
Search	Search Airport Information by State, or use the keyboard to input the identifier or city in the search window.
Recent	Opens a list of recently viewed airports. Select desired airport from the list.
Flight Plan	Opens a list of airports used to define the Flight Plan. Departure, Destination and any other airports used as waypoints along the route of flight.
Nearest	Opens a list of airports near the GPS location of the aircraft.
Favorites	Opens a list of User defined favorite airports.

Airport Search Options



Select an airport from the Search Results list. 4)



**Airport Identifier Search** 

Airport Info Page Menu

# **Airport Information Quick Access:**

- 1)
- 2) Touch **Menu**.
- Select one of the guick access options. (Departure: XXXX, Destination: XXXX, Nearby XXXX, Nearby Me, or Recent Airports, Favorite Airports, Supplemental, or General).
- **Or:** Touch **Nearby** to view airports near current location or near selected airport. Sort list by **Near Me** or **Near XXXX**. Filter airport list by **Public** or ΑII



### **Viewing NOTAMs:**

- **1)** From any page, touch **Home** > **[**...].
- 2) Touch Menu > Search.
- **3)** Select a search criteria.

Search Criteria	Description
ICAO I.D.	Search by the three letter or four character (alphanumeric) airport code (i.e., KLAX)
Airport Name	Search by name (i.e., Los Angeles Intl).
City Name	Search by city (i.e., Los Angeles, CA).

#### **Airport Search Options**

**Or:** Select a state from the list and touch the desired airport from the alphabetical list.

**Or:** Select an airport from the Airports on Route list.

- **4)** Select an airport from the Search Results list.
- **5)** Touch **NOTAMs** to view the NOTAMs window.

## **Viewing Nearby Airports:**

- ) From any page, touch **Home** >
- **2)** Touch **Nearby** to view airports (i.e., Public or All) nearby the currently selected airport.

## Viewing SafeTaxi (Subscription Required):

- 1) From any page, touch Home >
- **2)** Touch **SafeTaxi** to view the SafeTaxi airport diagram.
- **3)** Touch the **Back** button to return to the Airport Info Page.
- 4) Touch to enter or exit split-screen.

## Viewing Fuel Prices by Type:

- 1) From any page, touch Home >
- 2) Touch to cycle through each type of fuel (100LL, Jet, or Mogas). If the selected fuel type is not available at this location, or if no data is available for this location, price is displayed as dashes for the data is shown just below the fuel type.



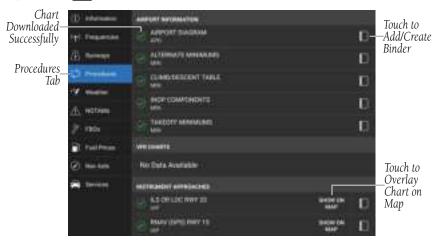
**Or:** Touch the Fuel Prices tab to view fuel price. Sort fuel prices by **Nearest Airports** or **Lowest Price**.

# **Viewing and Organizing Procedures:**



**NOTE:** Terminal procedures (i.e. SIDs, STARs, instrument approach procedures, airport diagrams, Hot Spots, and Take-off Minimums) are available for selection from the Airport Information Page. Any charts that are not geo-referenced will open in the default PDF document viewer.

- 1) From any page, touch **Home** >
- > .
- 2) Touch the Procedures Tab. All available charts and procedures are shown including; (Airport Diagrams, Approach Procedures, Arrival Procedures, and Departures). Chart titles followed by , will need to be downloaded. Charts followed by have already been downloaded to the device.
- 3) Touch the desired chart to view.
- Or: To organize charts
- **4)** Touch **1** to create a Chart Binder or add to an existing binder.
- 5) Touch and enter a Binder Name or select from the list of available binders.
- **6)** Touch for each additional chart to add to a binder.



Airport Info - Procedures



#### **BEST RUNWAY AND RUNWAY WINDS**

The Airport Information page recommends runways based on winds and preferences for surface type and runway dimensions. This recommended Best Runway appears in the airport summary section of the Airport Information page. To set the preferred runway surface type and runway length, touch **Home** > **Section General**.

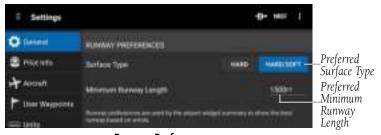
The Runways tab shows not only the dimensions and surface type of each of the airport's runways, it also shows winds on that runway, sourced from current weather reports. This wind information is shown divided into two components: headwind/tailwind magnitude, and crosswind direction and magnitude.



**NOTE:** If Garmin Pilot has not recently connected to weather data services, either over Wi-Fi, cellular, SiriusXM, or using other avionics, weather data my be outdated and unreliable.



**Runways Tab** 



**Runway Preferences** 



#### **FBO FEES**

A coalition of industry leaders, including AOPA, EAA, GAMA, NATA, NBAA and HAI, have called for Fee Transparency, asking FBOs to publish their pricing. FBO fees are displayed on the FBO tab of the Airport Information Page.

# **Viewing FBO Fees:**

- From any page, touch **Home** > **3**. 1)
- 2) Touch the **FBOs** tab.
- Touch the desired FBO. 3)
- 4) Scroll down to the 'FEES' section.



Airport Info - FBO Fees



## **AIRPORTS WIDGET**

Airport information is also accessible in the Map page's split-screen widgets, displaying airport info conveniently alongside the moving map. To access the Airports Widget, touch **Home** > **Widgets**. If necessary, touch **Add Widget**. Touch the widget type in the upper left of a widget, and select **Airports** from the list.

The Airports widget has four tabs of airport information. The Summary shows a Best Runway recommendation and brief summaries of multiple types of information. The Freq tab shows ATC, approach and navaid frequencies. The Runways tab shows all runways and details, including runway winds. The Fuel tab shows available fuel vendors and fuel prices.

To select a different airport, touch and drag the Navtrack slider to a different point along the flight plan, or touch the airport selector at the upper right corner of the widget. Touch the icon to view the airport in full in the Airport Information page.



**Airports Widget** 



# FILE

With Garmin Pilot, users can easily enter a flight plan and interactively edit it on the map. Pre-loaded forms makes it quick to save and reuse data for frequently flown routes. And when the flight plan is ready, Garmin Pilot makes it simple to file, cancel or close the flight plan via a Filing Service Provider (Leidos Flight Services, etc.). Garmin Pilot helps European users plan routes for IFR flights quickly via the European Autorouting feature.

# TRIP PLANNING



**NOTE:** A data connection (i.e., Wi-Fi or cellular) is required to receive preflight weather briefings, file, amend, cancel or close flight plans from Garmin Pilot.

The Trip Planning Page manages all of the trip planning details for each trip. When a new trip is created and activated on the Trip Planning Page it becomes the active flight plan. Flight plans created on the Flight Plan Page do not become the active trip plan. The Flight Plan must be imported to become the active trip. Trips created on the Trip Planning Page will default to a direct-to route from departure to destination. Add additional waypoints in the route field by entering fixes, NAVAIDs, airway, departures, arrivals or airports. For Long or complex routes use the Flight Plan page to create the flight plan and then import.

Complete the trip plan by entering pilot information, aircraft information, departure/ arrival times, altitude, airspeed, etc.. Some of the data will be auto-filled based on data from the Garmin Pilot account that's currently logged in. Once all mandatory fields have been completed, Garmin Pilot creates a trip summary, and Navlog. If Garmin Pilot has been linked to a Filing Service Provider, Garmin Pilot will retrieve a Standard Weather Briefing for the route of flight for the Estimate Time of Departure (ETD). Garmin Pilot also uses the Filing Service Provider to file, amend, cancel or close flight plans.



Trips can be cloned and/or deleted on the Trip Planning Page. Cloning a trip copies the current trip. Any changes made after the clone is created are not copied. The selected trip can not be deleted. Cloned trips are saved in the Trips List. All trip data is cloned including pilot information, aircraft information, route of flight and all other associated data. Trips that have been cloned are available for use at a future date. Activate a cloned trip, change the date and all applicable data, refresh the briefing, and the trip is ready to be filed.

### PREPARING TO FILE



**NOTE:** Prior to filing the flight plan, ensure that all of the information entered on the Trip Planning Page is correct including the route of flight.

Garmin Pilot provides a quick and easy method to file, close or cancel flight plans. When a flight plan is complete, its route of flight, pilot information, aircraft information, type of flight plan (IFR/VFR), number of persons onboard, fuel onboard, date, estimated time of departure (ETD), altitude, airspeed, and any optional data including alternate, and remarks can be transmitted to the Filing Service Provider. The ETD must be at least 30 minutes in the future or the flight plan will not be transmitted. To file a flight plan with a departure time less than 30 minutes in the future, call the FSS.

# **Creating an Active Flight Plan:**

- 1) From any page, touch **Home** > [
- 2) Touch within the route field to activate the cursor.
- Use the keyboard to insert waypoints. Separate each waypoint with a space.

#### Or:

- 1) Touch the Add Waypoint button.
- **2)** Use the keyboard to input the waypoint identifier.
- 3) Touch the **Add Waypoint** button to add additional waypoints.
- Or: Enter Lat/Lon information.
- **Or:** Enter Radial/Distance waypoint in one of the following formats:



#### Or:

- 1) Use one of the above methods to enter a departure point.
- 2) On the Map Page touch **Menu** > **Graphical Route Edit**.
- 3) Long press on the map area to display the rubber-band. Place the rubber-band on or near the desired location and then release the rubber-band. A list of nearby waypoints is displayed.
- **4)** Select the desired waypoint from the list, or create a User Waypoint.
- **5)** Repeat steps 3 and 4 to add additional waypoints.
- **6)** Touch **Save** to continue or **Cancel** to exit without saving.



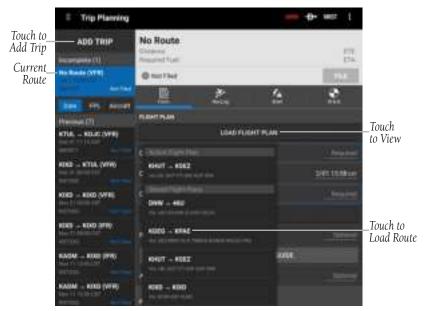
Flight Plan - Edit Route



#### PLANNING A TRIP

#### **CREATING A NEW TRIP:**

- 1) From any page, touch Home > 🔝.
- 2) Touch Add Trip.
- **3)** Enter Departure, Routing, and Destination.
- **Or:** Enter Departure, Destination and Choose a Preferred ATC Route after the trip is created.
- **Or:** Touch **Load Flight Plan** to import the Flight Plan. Importing the Flight Plan will fill the Departure, Routing, and Destination fields. Complete the remaining fields as necessary.



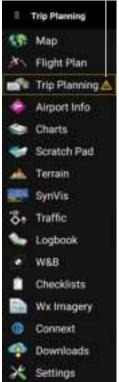
Trip Planning - Load Flight Plan

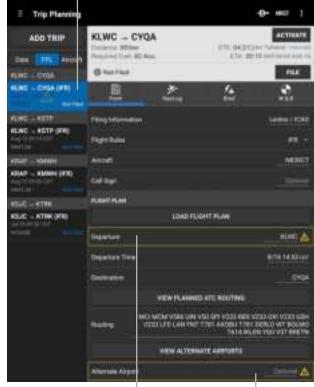


## MINIMUM FLIGHT REQUIREMENT WARNINGS

Garmin Pilot checks the TAFs for the departure and destination airports when a trip is created. If any TAF shows the weather conditions for an airport fall below VFR or IFR minimums, Garmin Pilot displays a Minimum Flight Requirement Warning icon. Minimum Flight Requirement Warning icons appear in the following places to notify of severe weather conditions: Next to the Trip Planning icon in the Home menu; Next to the airport code in the Trip Planning form; and Watermark-style warning in Upcoming trips list

Minimums Warning in Upcoming Trips





Minimum's Warning at Departure Airport

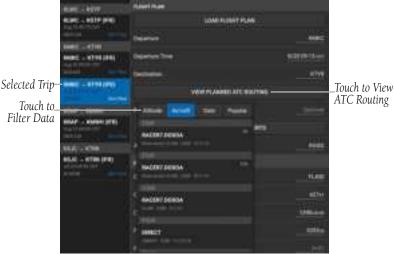
Minimum's Warning at Alternate Airport

Trip Planning - VFR/IFR Minimums Warning



### **Choosing Preferred ATC Route:**

- Touch **View Planned ATC Routing** to view Preferred ATC Routes.
- Touch Altitude, Aircraft, Date, or Popular to sort the list. 2)
- Touch the desired route from the list, to add the route to the trip. 3)



ATC Routing

Preferred ATC Routes

## **Entering Pilot Information:**

- 1) Touch the Pilot field.
- 2) Enter pilot's Name, Telephone, Street, City, State and Zip code.

#### Or:

- a) Touch Add Pilot....
- **b)** Enter the Required Contact Information by touching each field. A keyboard will appear to enable typing in each selected field.
- c) Touch Save.
- **d)** Touch the desired Pilot from the list.

# **Entering Aircraft Information:**



**NOTE:** Performance data is used to create Navlog and to calculate trip parameters.

- Touch the Aircraft field. 1)
- Select the desired aircraft from the list.



#### Or:

- a) Touch Add Aircraft....
- **b)** Enter the Required Aircraft Information by touching each field and using the keyboard.
- c) Enter optional performance data.
- d) Touch Save.
- e) Touch the desired Aircraft from the list.

# **Enter type of Flight Plan:**

Touch the **Type** Button and select IFR or VFR from the drop down menu.

## Enter Date, ETD, Altitude, and Airspeed:

Touch the applicable field and enter the desired value(s). The Airspeed will be populated with the Cruise TAS (kts) entered for the aircraft. The Altitude selector is auto-populated with fuel, ETE and wind values based on aircraft performance and weather reports.



Altitude Selector

## **Enter Souls Onboard (SOB):**

Touch the Souls on Board (SOB) field to enter the number of occupants.

#### **Enter Fuel:**

Touch the Fuel field to enter the number of hours:minutes of fuel onboard. The Fuel field is automatically populated with the Default Fuel/Cruise Burn Rate, but should be adjusted to reflect the actual fuel onboard the aircraft.

## Enter Optional Data (SIC, Call Sign, Alternate and Remarks):

Touch the applicable field and enter the desired information.



### **EUROPEAN AUTOROUTING**

Garmin Pilot allows European Users to quickly find a suitable route for the particular pilot, aircraft, etc. If not already completed, you need to enable your pilot profile in Garmin Pilot to use the proper filing provider for Trip Planning.



**European Autoroute** 

## **Entering/Updating Pilot Information**

- 1) Touch the Pilot field (i.e. JOE PILOT).
- 2) Touch the Pencil icon next to the Pilot name.
- **3)** Touch the Gear icon towards the bottom of the Edit Pilot window.
- 4) Touch Add New.
- 5) Touch Eurocontrol IFR Filing Service.
- 6) Touch Add > Done > Save.
- 7) With the updated Pilot Info saved, touch the Filing Provider field > European Provider.





Trip Planning - European Autoroute - Pilot

Touch to View Pilots Touch to Edit Pilot Info

\_Touch to Add New Pilot



Touch to Add





Touch to Select

**Trip Planning - Edit Pilot - Filing Service Providers** 

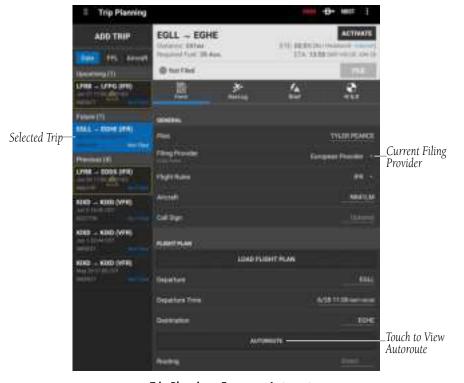
# **Using European Autorouting:**



**NOTE:** If you already know the route you would like to use, you can manually enter the route by touching **Enter Manual IFR Route**. After entering data, touch **Confirm** to continue, or **Back** to exit without saving.

- **1)** After Entering/Updating Pilot Info, enter required information in Trip Planning (General, Flight Plan, Flight Info & Advanced).
- **2)** Touch **Autoroute** to view Autorouting Options.





**Trip Planning - European Autoroute** 

- 3) Verify information in the General Data section.
- 4) Scroll down and adjust the Advanced section, as needed. If necessary, touch Manage Fly-By Waypoints and adjust.
- **5)** Touch **Autoroute** to save and continue to Route Proposals



#### Or:

**6)** Touch **Cancel** to close without saving.

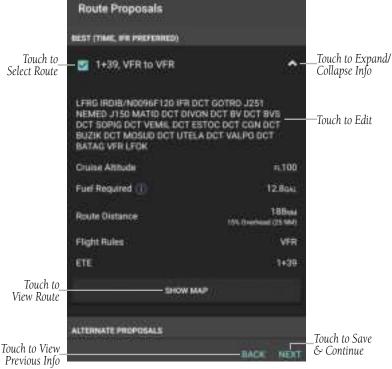


**Trip Planning - European Autorouting Options** 

- 7) Touch \_\_\_\_ to expand/collapse route details, then select the desired route by "checking" the associated box.
- **8)** Touch **Show Map** to view the route on the Map. Touch **Back** to return to Route Proposals.



**9)** Touch **Next** to view the Route Summary. If necessary, touch anywhere in the route to edit manually.



Trip Planning - European Route Proposals

- **10)** Touch **Confirm** to view route in Trip Planning.
- **11)** Verify the information is correct then touch **Validate**.

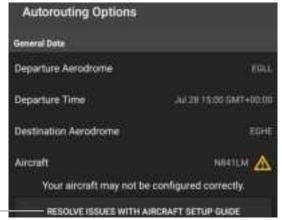


# **Using Aircraft Setup Guide:**



**NOTE**: When in Trip Planning, if is visible next to your Aircraft, your aircraft may not be configured correctly (ICAO info, Performance Data, etc.).

- **1)** After Entering/Updating Pilot Info, enter the required information in Trip Planning (General, Flight Plan, Flight Info & Advanced).
- 2) Touch Autoroute to view Route Summary.
- Touch Autoroute to view Autorouting Options > Resolve Issues With Aircraft Setup Guide.



Touch to View-

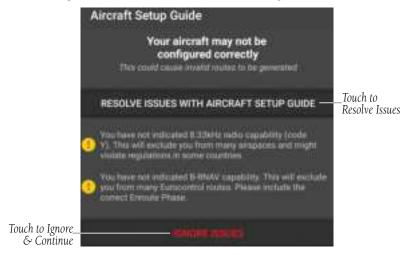
**European Autorouting Options - Aircraft Issues** 

**4)** A brief description of the issue(s) will be displayed. Touch **Resolve Issues With Aircraft Setup Guide.** 

Or:

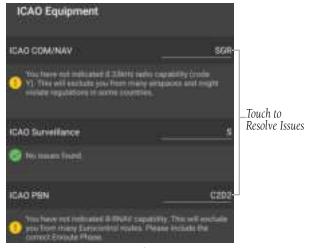


**5)** Touch **Ignore Issues** to continue without fixing issues.



**European Autorouting - Aircraft Setup Guide** 

- **6)** A brief description of the issue(s) will be displayed, i.e. ICAO Euipment. Touch the underlined text across from the issue to view details.
- 7) Touch the necessary item(s) to remedy the issue, i.e. VHF with 8.33 kHz spacing > **Done**. Repeat this process for any additional issues > **Continue**.



European Autorouting - Aircraft Setup Guide - ICAO

With the issues resolved or ignored, the user is now directed to the Route Proposals window, and can follow steps 5-11 in the Using European Autorouting procedures.



#### **NAVLOG**

Garmin Pilot generates a navigation log using the Active Flight Plan waypoints, user-provided Trip Plan information, user-provided aircraft performance data, and DUAT -sourced weather data. The Navlog provides navigation information for each leg of the Active Flight Plan. The column values are user selectable, touch each column header to cycle through the available units, or touch a column header to change the column group.

#### NAVLOG COLUMN OPTIONS:

- Crosswind
- Distance End (Dist End)
- Distance Leg (Dist Leg)
- Distance Flown (Dist Leg)
- Distance Remaining (Dist Rem)
- ETA
- ETE Leg
- ETE Flown
- ETE Remaining (ETE Rem)
- Fuel Burned
- Fuel Leg

- Fuel Remaining (Fuel Rem)
- Ground Speed (GS (kts))
- Headwind (kt)
- Magnetic Course (Mag Crs)
- Magnetic Heading (Mag Hdg)
- Temperature (Temp (C°))
- True Air Speed (TAS (kts))
- True Course (True Crs)
- True Heading (True Hdg)
- Wind (kt)
- Wind Correction

# **Viewing Navlog:**

- 1) From any page, touch Home > 🚮.
- **2)** Touch **Navlog**, to view the Garmin Pilot generated Navlog.



# **Changing Navlog Column Values:**

- 1) From any page, touch **Home** > \_\_\_\_\_\_.
- **2)** Touch a column header to view the column header options menu.
- **3)** Touch the desired value.

# **Expanding Flight Plan Legs:**

- 1) From any page, touch **Home** >
- 2) Touch Navlog.
- 3) Touch for flight plan legs containing a Departure, Arrival, or Airway to expand the leg and view all waypoints for that leg. Touch again to collapse the leg.



NavLog



#### **Cloning Trip:**

- From any page, touch Home >
- **2)** Touch **Menu** > **Clone**.

# **Viewing Cloned Trip:**

- 2) Touch **History** to view the list of cloned trips
- **3)** Touch **Date**, **Route**, or **Aircraft** to organize the Trips List by date created, route of flight, or aircraft used.

#### **Activating Cloned Trip:**

- 1) From any page, touch **Home** > \_\_\_\_\_\_.
- 2) Touch **History** to view the list of cloned trips
- Touch Date, Route, or Aircraft to organize the Trips List by date created, route of flight, or aircraft.
- **4)** Touch the desired trip from the Trips List.
- **5)** Touch the Date Field to change the date to the current date. Edit other desired Trip Plan Fields.
- **6)** Touch **Menu** > **Activate** to activate the Trip.

**Or:** Touch **Trip Not Active Touch To File** > **File** to activate and file the Trip.

# **Deleting Trips:**

- 2) Long press the desired trip from the Trips List.
- 3) Touch for to delete the trip.

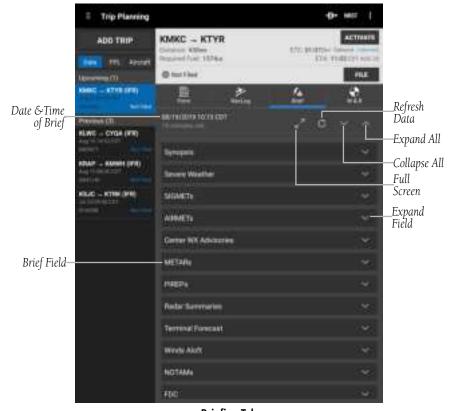


#### **BRIEF**

When a flight plan is complete, Garmin Pilot will retrieve a preflight weather briefing based on the parameters of the Active Flight Plan and Trip Plan. The Brief Tab contains a standard weather briefing for the route of flight including; Weather Synopsis, Severe Weather, SIGMETs, AIRMETs, Center WX Advisories, METARs, PIREPs, Radar Summaries, Terminal Forecasts, Winds Aloft, TFRs, and NOTAMs.

# **Accessing Preflight Weather Briefing:**

- 1) From any page, touch **Home** > **1**.
- 2) Touch **Brief**, to view the Standard Weather Briefing for the route of flight.
- **3)** Touch **Refresh** if necessary to update the weather information.
- 4) Touch to expand individual fields or **Expand All**.
- 5) Touch to collapse any of the expanded fields or **Collapse All**.



Briefing Tab



#### FILE FLIGHT PLAN



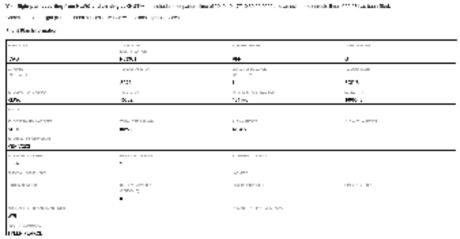
**NOTE:** A data connection (i.e., Wi-Fi or cellular) is required to receive preflight weather briefings and to file flight plans.

Once all required information is entered and after reviewing the weather briefing and supplemental weather information, file the flight plan. A notification appears on the Summary Tab stating the status of the flight plan. The notification on the Summary Tab gives the time the flight plan will be transmitted to the appropriate FSS. A confirmation e-mail is also sent giving the time the flight plan will be transmitted to the appropriate FSS. If the flight plan was not successfully transmitted to the Filing Service Provider, a notification window will provide the reason it was not transmitted.

#### Filing:

- 1) From any page, touch **Home** >
- 2) Touch the desired Trip in the Trips List.
- **3)** Touch **File** to file the Trip. The trip status changes from Not Filed to Filed and a notice appears stating the flight plan was successfully filed.





Filed Flight Plan - Email Confirmation



## Amending Filed Flight Plan:

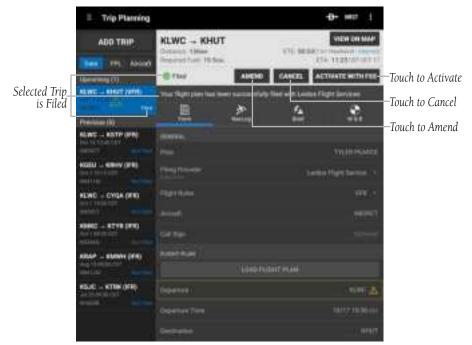
- 1) From any page, touch **Home** > **1**.
- **2)** Touch the desired Trip in the Trips List that is marked as Filed.
- Touch Amend.
- **4)** Make the desired changes on the Trip Planning Page.
- **5)** Touch **File**, or **Revert** to cancel changes and use original flight plan.

# **Canceling Filed Flight Plan:**

- 1) From any page, touch **Home** >
- **2)** Touch the desired Trip in the Trips List that is marked as Filed.
- **3)** Touch **Cancel**. The Trip status displays Not Filed.

# **Closing Filed Flight Plan:**

- 1) From any page, touch **Home** >
- 2) Touch the desired Trip in the Trips List that is marked as Filed.
- **3)** Touch **Close**. The trip status displays Closed.



Trip Planning - Filed Flight Plan



# **FLY**

Garmin Pilot provides full en-route navigation capabilities on its moving map. The ability to view navigation data such as ETE, ETA, crosstrack error, and distance information. Touch and hold any location on the map and the Radial Menu provides quick and easy access to navigation information, including airports, navaids, and METARs. The Radial Menu also provides a ready means of navigating direct-to, creating user waypoints or graphically editing the route of flight. After takeoff, pilots can continue to view updated weather information via a compatible FIS-B device (sold separately), by connecting to SiriusXM Weather with a satellite weather receiver (sold separately, subscription required), or using Garmin Weather Data Services which requires a data connection through Wi-Fi or cellular network.

# **MAP PAGE**

The Map Page is comprised of a highly configurable Map Pane which can be displayed in either full or split-screen. The Split-screen option allows the Map Pane to be divided between the Map Pane and either Widgets, Panel, Charts, or SafeTaxi displays.

The Split-screen feature is available in either portrait or landscape screen orientation. In portrait orientation, the screen is split horizontally with the Map Pane always appearing in the upper portion of the screen. In landscape orientation, the screen is split vertically with the Map Pane always appearing to the left.



Map Pane



## MAP PANE CONTROLS

The Map Pane has a number of buttons that control the Base Map, Map Overlays, and center map and split-screen. The table below shows the Map Pane Controls.

Control	lcon	Description			
Map Settings	<b>\$</b>	Map/Chart Selection/Settings, Map Overlay Selection, Overlay Opacity Settings, and General Map Settings			
Center on Aircraft	1	Centers the Map Pane on the current location.			
Center on Route	<	Centers the entire route in Map Pane.			
Zoom In	+	Zooms In on the map			
Zoom Out		Zooms out on the map			
Split-Screen	< >	Selects full screen map or partial map with Widgets, Panel, Charts, and SafeTaxi.			
Map Orientation	<b>À À</b>	Toggles map orientation from north up to track up. The Icon is blue when track up is active.			

**Map Pane Controls** 

#### **MAP SETTINGS**

The Map Settings button shown in the table above and located on the lower left corner of the Map Pane opens the Map Settings Menu. The Map Settings Menu contains five tabs titled Map / Charts, Overlays, Opacities, Ownship / Route, and General. Each tab provides access to controls for configuring the various features of the Map Pane display.



#### MAP / CHARTS SELECTION AND SETTINGS

There are three maps and four charts available by touching the Map Settings button in the lower left corner of the Map Pane and selecting from the Map/Chart Menu. The three available map selections are Roads/Borders, VFR, and IFR. Many of the symbols and other map features including victor airways shown on the VFR and IFR maps may be added directly to a flight plan using the graphical flight plan editing feature.



Map/Chart Menu

The following charts are available for viewing in the map pane: Sectional TAC, IFR Low, and IFR High. These charts are high-resolution color images that resemble the paper version of the National Aeronautical Navigation Products (AeroNav) published charts.

Each of the Maps under the Maps column have an adjacent Map Setup button, which provides access to the Map Setup menu. The Map Setup menu consists of five tabs labeled General, Airports, NAVAIDs, Airspaces, and Cities. Under each tab, there are a number of slider controls enabling the map ranges at which the related map features become visible on the map as well as buttons for toggling the individual features off or selecting the size of the label shown on the map: small, medium, or large

# **Selecting Map or Chart:**

- 1) Touch > Map/Chart.
- **2)** Touch the radio button or Map/Chart title to select a Map/Chart.

# Map Panning:

- **2)** Touch and drag within the Map Pane to pan the map to the desired area.
- 3) Touch to center the Map Pane over the route of flight
- **4)** Touch **1** to center the Map Pane over the current location.

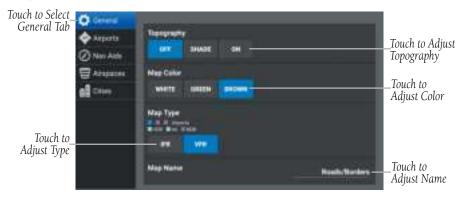


## **Choosing Map Topography:**

- 1) From any page, touch **Home** >
- 2) Touch > Map/Chart.
- **3)** Select one of the three available maps under the Maps column.
- **4)** Select one of the buttons labeled Off, Shade, or On.

# **Choosing Map Color:**

- 1) From any page, touch **Home** > **…**.
- 2) Touch > Map/Chart.
- **3)** Select one of the three available maps under the Maps column.
- **4)** Touch the Map Setup button.
- **5)** Touch one of the buttons labeled White, Green, or Brown.



Map Setup Menu

#### **Setting Visibility Range and Label Size for Airports**

- **1)** From the Map Setup, touch the Airports Tab.
- 2) Use the slider controls to select the map range at which selected airports appear. At map ranges greater than the selected figure, the airport symbol will not appear on the map.
- 3) Scroll to bring the Label Size selections into view.
- **4)** Touch the buttons to the right of the listed items that correspond to the desired label sizes for each.
- **5)** Touch the Done button located in the upper right corner of the Map Setup Menu.





Map Setup - Airports Menu

# **Setting Visibility Range and Label Size for NAVAIDs**

- **1)** From the Map Setup, touch the Nav Aids Tab.
- 2) Use the slider controls to select the map range at which selected nav aids appear. At map ranges greater than the selected figure, the nav aid symbol will not appear on the map.
- **3)** Scroll to bring the Label Size selections into view.
- **4)** Touch the buttons to the right of the listed items that correspond to the desired label sizes for each.
- 5) Touch the Done button located in the upper right corner of the Map Setup Menu.



Map Setup - NAVAIDs Menu



# **Setting Visibility Range for Airspaces**

- **1)** From the Map Setup, touch the Airspaces Tab.
- 2) Use the slider controls to select the map range at which selected airspace boundaries appear. At map ranges greater than the selected figure, the airspace boundaries will not appear on the map.
- 3) Touch the Done button located in the upper right corner of the Map Setup Menu.



Map Setup - Airspaces Menu

# **Setting Visibility Range and Label Size for Cities**

- 1) From the Map Setup, touch the Cities Tab.
- 2) Use the slider controls to select the map range at which selected cities appear. At map ranges greater than the selected figure, the city symbol will not appear on the map.
- **3)** Scroll to bring the Label Size selections into view.
- **4)** Touch the buttons to the right of the listed items that correspond to the desired label sizes for each.
- **5)** Touch the Done button located in the upper right corner of the Map Setup Menu.





Map Setup Cities Menu

# **Selecting Helicopter Chart Overlay:**



**NOTE:** A chart basemap must be selected to display helicopter overlays.

- 1) After downloading the desired Helicopter Charts, touch Shap!

  Chart. NOTE: For information on downloading Helicopter Charts, refer to 'Downloads', discussed later in this section.
- 2) Touch a chart basemap (VFR, IFR Low, or IFR High).
- Touch a Helicopter Overlay (U.S. VFR Helicopter, Gulf VFR Helicopter, or Gulf IFR Helicopter).



**VFR Helicopter Chart Overlay** 



# **Accessing Advanced Map Settings:**

- 1) Touch > Map/Chart > Map Name > 0.
- 2) Touch General, Airports, Nav Aids, Airspaces, or Cities.
- **3)** Use the sliders and selection buttons to set Visibility Ranges and Label Sizes for map features.
- **4)** To give the new settings a name, Touch **General > Map Name**, and use the keyboard to enter a name.
- 5) Touch **Done** to save and exit, or touch **Restore Defaults** to restore the default Map Theme setting.

Categories	Map Item	Options					
General	Topography	Off, Shade, or On					
	Map Color	White, Green, or Brown					
	Map Type	IFR, or VFR					
	Map Name	User Defined Name					
		Large Airports	Me	ed Airports	Small Airports		Pvt Airports
Airports	Visibility Range	Off - 200 nm	01	ff - 50 nm Off - 20 r		nm	Off - 20 nm
		Heliports	Sea	plane Base	SafeTax	(i	
		Off - 20 nm	01	Off - 50 nm Off - 2 n		m	
	Label Size	Off, Small, Medium, Large					
Nav Aids		VOR		NDB		Intersection	
	Visibility Range	Off - 100 nm		Off - 50 nm		Off - 10 nm	
		VRP		Low Airways		High Airways	
		Off - 10 nm		Off - 100 nm		Off - 100 nm	
	Label Size	VOR, NDB, Intersection, VRP					
		Off, Small, Medium, Large					



	Filter All	Hide All Airspaces Above			Smart Airspace		
	Airspaces	Numerical Entry			On/Off		
		Class B		Class C		Class D	
	Visibility Range	Off - 200 nm		Off - 200 nm		Off - 100 nm	
		Class E/TRSA		TMA		Control Area CTA	
		Off - 100 nm		Off - 200 nm		Off - 100 nm	
		Control Zone CTR		ATZ/TIZ/MATZ		Euro Airway	
		Off - 100 nm		Off - 100 nm		Off - 100 nm	
Aircnacoc		Restricted	Ale	rt/Warning	Parachute Area		MOA
Airspaces	SUA Visibility Range	Off - 200 nm	Off	- 200 nm	Off - 100 nm		Off - 200 nm
		ADIZ	Danger		Other		
		Off - 100 nm	Off	- 100 nm	Off - 100 nm		
	Label Style	Airspace Size					
		Off, Small, Medium, Large					
		Airspace Style					
		Standard, Enhanced					
		Airspace Color					
		Standard, Dark					
Cities	Visibility Range	Large City	Me	dium City	Small Ci	ty	Small Town
		Off - 500 nm	Off	- 200 nm	Off - 100	nm	Off - 50 nm
Cities	Label Size	Large City, Medium City, Small City, Small Town					
		Off, Small, Medium, Large					

# **OVERLAYS**

Map Overlays provide graphical weather products, graphical TFRs, and Fuel Prices. Multiple Overlays can be selected for display. Some overlays are mutually exclusive such as Radar and Radar (FIS-B), and Clouds. Overlays in the right column, (i.e. PIREPs, Winds Aloft, Fuel Prices, and Weather) are also mutually exclusive.



Map - Overlays Menu

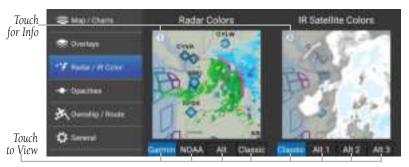


## RADAR / IR COLOR

The radar and infrared color palettes and the color of the intensity returns can be configured.

# Viewing radar and infrared satellite color palettes:

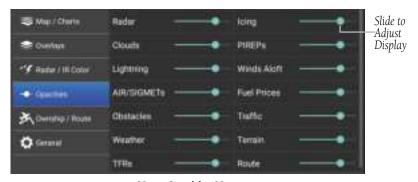
- 1) From any page, touch **Home** > **S**.
- 2) Touch > Radar/IR Color.
- 3) Touch ① on the top left of the 'Radar Colors' or 'IR Satellite Colors' box to view the color palettes options.
- **4)** Touch **Garmin**, **NOAA**, **Alt**, or **Classic** for the desired 'Radar Colors'.
- **Or:** Touch **Classic**, **Alt 1**, **Alt 2**, or **Alt 3** for the desired 'IR Satellite Colors'.



Map - Radar / IR Color Menu

# **OPACITIES**

The Opacities menu provides sliders to set the opacity for: Radar, Clouds, Lightning, AIR/SIGMETs, Route, PIREPs, Winds Aloft, Fuel Prices, Weather, TFRs, and Traffic.



Map - Opacities Menu



#### **OWNSHIP/ROUTE**

The Ownship / Route tab provides access to controls for activating and configuring the Track Vector and Range Rings as well as for changing the Ownship Symbol. The Aircraft Symbol is displayed on maps, Geo-referenced FliteCharts, and SafeTaxi diagrams when the application senses movement, otherwise the blue system location symbol is used.



Ownship / Route Menu

# **Changing Ownship Symbol:**

- 2) Touch the Ownship / Route Tab.
- 3) Touch Select Ownship Icon.
- 4) Touch the desired Ownship aircraft symbol from the list.





Ownship Aircraft Symbol Example

**System Location Symbol** 





**List of Ownship Aircraft Symbols** 

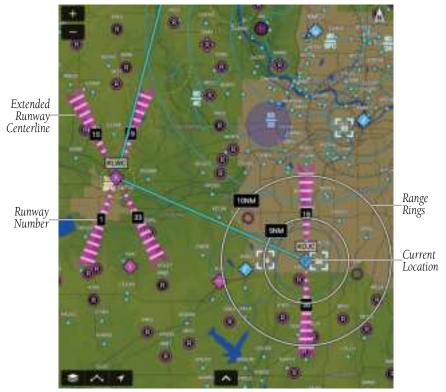
#### RANGE RINGS

The Range Rings are rings drawn around and centered on the aircraft's present position and can be configured Off, or as 2/3 Rings. When configured for 2 Rings the range can be set to **AUTO**, **5/10**, **10/20**, or **15/30**. When configured for 3 Rings the range can be set to **AUTO**, **5/10/20**, **10/20/40**, or **15/30/60**. When **AUTO** is selected the Range Rings will dynamically change from as little as 200FT to as much as 1200NM based on the current map range.

# **EXTENDED CENTERLINES**

Extended Centerlines provide a graphical extension of the centerline for each runway for all airports that are part of the Flight Plan. Extended Centerlines can be very helpful when approaching an unfamiliar airport. The Extended Centerlines Visibility slider sets the Map Scale (OFF(default)-5NM) at which the extended centerlines will become visible on the map. Extended Centerlines can be configured as magenta feathers (**Feathered**), or as dashed light and dark green lines (**Dashed Line**)





Range Rings & Extended Centerlines

# TRACK VECTOR

The Track Vector is a solid blue line segment that extends from the Ownship symbol to a predicted location. The track vector can be configured for a look ahead time (1, 5, 10, or 20 minutes) or a look ahead distance (1, 5, 10, or 20 nautical miles). When a look ahead time is selected the length of the vector varies based on ground speed. The track vector is useful in minimizing track angle error and for avoiding traffic, obstacles and terrain.

# **Enabling/Disabling and Configuring the Track Vector:**

- 1) Touch Home >
- 2) Touch Solution > Ownship / Route.
- 3) Select the Track Vector Mode Off, Time (min), or Distance (NM).
- 4) Select the Track Vector Length 1, 5, 10 or 20.



#### GLIDE RANGE RING

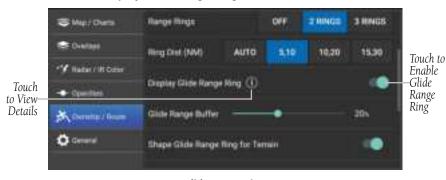
This feature is an aid to estimate accessible airports and terrain if the aircraft were forced into glide circumstances. The displayed ring updates in real time, derived from the selected aircraft's altitude, speed, and performance details. Since Garmin Pilot supports multiple aircraft, the Glide Range Ring refers to the current active flight plan to determine which aircraft performance details to calculate the ring shape.

The Glide Range Ring requires glide performance details to be specified in Garmin Pilot's settings. This is accessed through **Home** > Aircraft. Touch on an aircraft (not aircraft type) to edit its details, and scroll down to the Glide section to specify the **Glide Ratio** and **Best Glide Speed**. Refer to the aircraft documentation for these values.

The **Glide Range Buffer** setting can be used to shrink the Glide Range Ring in situations where glide performance is expected to be less than ideal, perhaps due to shifting winds. Increasing this setting will decrease the size of the Glide Range Ring. Enabling **Shape Glide Ring for Terrain** will alter the shape of the Glide Range Ring to show intersection with terrain. Enabling **Shift Glide Ring for Wind** will factor in local wind conditions when calculating the Glide Range Ring shape. Note the Glide Range Ring uses the most recent weather data, which may be outdated if Garmin Pilot does not have access to real time weather data over Wi-Fi or with outboard hardware such as a GDL 39.

# **Enabling/Disabling the Glide Range Ring:**

- 1) Touch South > Ownship/Route.
- 2) Touch the Display Glide Range Ring switch to On.



Glide Range Ring



#### **GENERAL MAP SETTINGS**

The General tab provides access to controls for activating/deactivating Night Mode, Auto Zoom, GPS Pulse Animation, map centering on current track, and Map Performance Boost. Additionally, there are controls for displaying and configuring the Nav Bar, displaying Route Icons, User Waypoints, Route Labels, Persistent Map Scale, and Stadium TFRs.

#### NIGHT MODE

Enabling Night Mode presents the map with a high-contrast background for easy viewing in low light. SafeTaxi charts support Night Mode, however, other charts do not. Night Mode can also be set to Auto to automatically change the map based on time of day.

# **Enabling/Disabling Night Mode for Map and SafeTaxi:**

- Touch Home >
- 2) Touch Seneral.
- 3) Select the desired Night Mode: **Off**, **On**, or **Auto**.



Map - Night Mode

# **AUTO ZOOM**

Auto Zoom begins at the departure airport by showing SafeTaxi (subscription and download required) or the smallest range that clearly shows the departure point, and gradually zooms out to the smallest range clearly showing the active waypoint.



When arriving at the destination Auto Zoom gradually zooms in to show SafeTaxi (subscription and download required) or the smallest range that clearly shows the destination. Auto Zoom only works when the map is centered on aircraft and can be enabled/disabled in the General Map Settings Menu.

#### **NAV BAR**

The Nav Bar provides user selectable navigation and weather data displayed at the top of the map pane. Touch any field in the Nav Bar to enable/disable any of the 22 available navigation parameters. Touch and slide the Nav Bar left or right to bring the scroll progress bar and selected parameters into view.

# NAV BAR FIELD OPTIONS:

Altitude

• ETE (Dest)

Vertical Speed

Bearing

• ETE (Next)

Wx-Wind

Course

• Ground Speed

Wx-Visibility

Cross Track Error

Latitude

Wx-Altimeter

• Distance (Dest)

Longitude

Wx-Ceiling

Distance (Next)

Next Waypoint

Pitch

ETA (Dest)

Time

Roll

ETA (Next)

Track

# FLIGHT PLAN REVIEW FROM MAP SCREEN

If the Map is displaying an active flight plan, touch the main header at the top of the screen to review the active flight plan's performance details, add and remove waypoints, and change the flight plan routing. The main header turns gray to show the Map is now reviewing the flight plan.

The review primarily shows the active flight plan's airports, waypoints, departures, and arrivals. The review also shows performance statistics for each waypoint, including bearing, distance, ETE and ETA, and fuel statistics. Additionally, the flight plan review shows a Trip Summary with performance information specific to the current aircraft.



While the aircraft is stationary, the main header shows Flight Plan (Planned), and the flight plan details are calculated based on the current aircraft's performance. While the aircraft is in flight, the main header shows Flight Plan (Actual), and uses the current aircraft's actual ground speed in these calculations. The active flight plan can be edited in both Planned and Actual modes.

# Reviewing Active Flight Plan From Map Page:

- 1) Touch Home > 🌇
- 2) While the Map is displaying a flight plan, touch the Main Header bar.
- 3) Touch 🗲 to exit flight plan review and return to normal Map screen.

# **Editing Active Flight Plan From Map Page:**

- 1) Touch Home > **1**.
- **2)** While the Map is displaying a flight plan, touch the Main Header bar.
- **3)** Touch **Routing** to select a suggested ATC route.
  - **Or**: Touch **III** to save or recall the flight plan from Stored Flight Plans.
  - **Or**: Touch in the Manual Entry section to use the on-screen keyboard to type in flight plan waypoints.
- **4)** Touch a flight plan waypoint to insert another waypoint before or after it.
- 5) Touch Add Waypoint to add another waypoint at the end of the flight plan.



Flight Plan Review



#### MAP ZOOM

When a more detailed Chart is available, Garmin Pilot automatically switches to the more detailed chart as the zoom increases. For example, if VFR WAC is the current Base Chart, when the zooming in, the base chart detail will automatically change to VFR Sectional scale and detail. Continuing to zoom in over an area that has a TAC chart, Garmin Pilot will continue to zoom in to TAC scale, or the highest level of detail available for that area. When zooming out, the map scale will return to the selected level. For example, when zooming out on a VFR Sectional Base Map, Garmin Pilot will not change to a VFR WAC scale.

# **Chart Zooming:**

- 1) From any page, touch **Home** > **§**
- 2) Pinch fingers together (zoom out), or pull fingers apart or double-touch (zoom in).

**Or:** Use the Zoom In/Out Buttons **••** or **••** 



Map Pane Showing TAC Detail & Scale

**Sectional Zooming** 



#### RADIAL MENU

Touch and hold any area on the map to access the Radial Menu. The Radial Menu displays context-sensitive buttons for information found within the inner radius of the menu. The context sensitive buttons provide details for airports, navaids, and weather stations. No matter where the Radial Menu appears, it will always provide the option to navigate direct to the location or create a user waypoint. To reposition the Radial Menu, simply touch-drag it to a new location.

## **Accessing Radial Menu:**

- 2) Touch and hold the desired area in the Map Pane until the Radial Menu appears.
- **3)** Touch anywhere outside of the Radial Menu to exit.

# **Repositioning Radial Menu:**

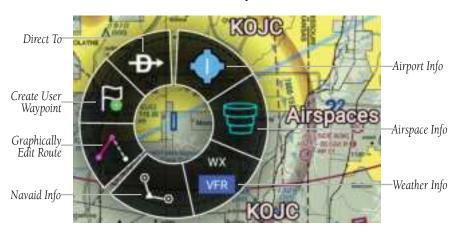
- 1) From any page, touch Home >
- 2) Touch and hold on the Map Pane until the Radial Menu appears.
- **3)** Touch and drag the Radial Menu to reposition over a new area.

Radial Menu Symbol	Description	Radial Menu Symbol	Description
<del>D</del> >	Navigate Direct To	<b>\rightarrow</b>	Public Soft Surface, Serviced Airport
P	Create User Waypoint	<b>®</b>	Private Soft Surface, Serviced Airport
	Graphically Edit Route	<b>(1)</b>	Heliport
0	Airways	0	Solid Surface Airport, No Services
WX VFR	Weather Observation Condition	0	VOR/DME
*	Obstacle Information	<b>☞</b>	VORTAC



Radial Menu Symbol	Description	Radial Menu Symbol	Description
	Airspace	•	VOR
<b>(</b>	Towered, Serviced Airport		NDB/DME
®	Towered, Private Airport		NDB
		•	Marker/NDB

#### **Radial Menu Symbols**



Radial Menu

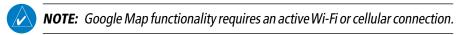
# Viewing Navaid, Airspace, or Weather Information From Radial Menu:

- **2)** Touch and hold on the desired area in the Map Pane until the Radial Menu appears.
- **3)** Touch the desired menu icon.
- **4)** Touch outside of the dialog box to close.
- **5)** Touch **Done** or outside of the Radial Menu to exit.



# **Viewing Airport Information From Radial Menu:**

- 1) From any page, touch **Home** > **.....**
- **3)** The Airport Info window displays multiple tabs for the User to select. As desired, touch **Info**, **Freq**, **Rwy**, **Proc**, or **Fuel** to view more information.
- 4) Touch to view airport on Google Maps. Touch outside the dialogue box to exit or touch the "back" button to return to the Airport Info window.



- 5) To exit the Airport Info window and return to the Map page, touch outside the dialogue box or touch the "back" button.
- **6)** Touch **1** to leave the Map page and view the Airport Information page. Touch the "back" button to return to the Map page.



Radial Menu - Airport Info Tabs

Touch to Open Airport Info Page

# Navigating Direct-to Using Radial Menu:

- 1) From any page, touch **Home** >
- **2)** Touch and hold on the desired area in the Map Pane until the Radial Menu appears.
- 3) Touch Direct-to.
- **4)** Within the Direct-to... dialog window, select **Map-Touch** to create a temporary waypoint at the selected point, or choose one of the nearby Navigation Database features from the list.
- **Or:** Choose a waypoint from one of the other tabs (i.e., Waypoints, Flight Plan, or Nearest).
- **5)** Touch **Activate** to begin navigation.



## **Graphically Edit Route:**

- 1) From any page, touch **Home** > **[**
- 2) In the Map Pane, touch and hold any flight plan waypoint or flight plan leg until the Radial Menu appears.
- 3) Touch to graphically edit the flight plan. The Radial Menu disappears and the **Graphical Flight Plan Edit Mode** blue banner appears just below the Control Bar.
- 4) Long press a flight plan leg and drag, the flight plan leg to the desired location. Select a waypoint from the list of nearby navigation database waypoints, or create a User Waypoint.
- **Or:** Touch to start a new route.
- **5)** Repeat step four for each flight plan leg to edit.
- **6)** Touch **to** undo the most recent action.
- **7)** Touch Save to save or **Cancel** to cancel and exit Graphical Flight Plan Editing Mode.

# **Graphically Edit Standard Instrument Procedure (SID):**

- 1) From any page, touch
- 2) In the Map Pane, touch and hold any flight plan waypoint or flight plan leg until the Radial Menu appears.



Touch to Graphically-Edit Route

Radial Menu - Graphically Edit Route - SID



3) Touch to graphically edit the flight plan. The Radial Menu disappears and the **Graphical Flight Plan Edit Mode** blue banner appears just below the Control Bar.



Graphicially Edit Flight Plan - Map

- **4)** Long press on a SID flight plan leg or waypoint. The **Change SID** dialog box appears.
- 5) Touch **Delete SID** to delete or select an alternate SID from the list and then select the desired transition from the submenu. If the selected flight plan leg is the first leg of a SID, the dialog box has the option to delete the departure point. If the departure point is deleted, the departure point and all waypoints associated with the SID are removed from the flight plan. The first waypoint after the SID becomes the departure point.



Graphically Edit Route - Change Standard Instrument Departure (SID)



**6)** Select a Departure Runway.



**Graphiclally Edit Route - Change SID - Select Runway** 

**7)** Select a SID Transition.



**Graphiclally Edit Route - Change SID - Select Transition** 

- 8) Touch to undo the most recent action.
- **9)** Touch **Save** to accept changes or **Cancel** to exit without saving.



# **Graphically Edit Standard Arrival Route (STAR):**

- 1) From any page, touch
- 2) In the Map Pane, touch and hold any flight plan waypoint or flight plan leg until the Radial Menu appears.
- 3) Touch to graphically edit the flight plan. The Radial Menu disappears and the **Graphical Flight Plan Edit Mode** blue banner appears just below the Control Bar.
- **4)** Long press on a STAR flight plan leg or waypoint. The **Change STAR** dialog box appears.
- 5) Touch **Delete STAR** to delete or select an alternate STAR from the list and then select the desired transition from the submenu. If the selected flight plan leg is the first leg of a STAR, the dialog box has the option to delete the arrival point. If the arrival point is deleted, the arrival point and all waypoints associated with the STAR are removed from the flight plan.



**Graphiclally Edit Route - Change Standard Arrival Route (STAR)** 

- **6)** Touch **6** to undo the most recent action.
- **7)** Touch **Save** to accept changes or **Cancel** to exit without saving.



Graphically Edit Route - SID & STAR Included
Garmin Pilot for Android User's Guide



#### DISTANCE MEASURING TOOL

The Distance Measuring Tool provides a quick and easy way to measure the distance between two points on the map. Simply drop two fingers onto the map display at the same time and hold both fingers on the display, a black line with arrow points on either end will appear. While holding both fingers on the map place one arrow point on a point and the other arrow point on another point and then remove both fingers from the map. The line and arrows show distance and to/from bearing information. Touch and drag the arrows to adjust the start and end position of the tool. Touch anywhere else on the display to remove the Distance Tool.



Touch Two Points Simultaneously, Then Adjust

Distance Measuring Tool

# **SPLIT-SCREEN**

The split-screen option allows the Map Page to be divided between the Map Pane and one of ten options including Widgets, Panel, Charts, SafeTaxi, Traffic, VIRB, Terrain, Checklists, SynVis, and Flight Profile. The split-screen feature is available in either portrait or landscape screen orientation. When in split-screen the Map Pane and the split pane function independently essentially providing two independent viewing areas. The Map Pane is always visible and will either be displayed on the top or left side of the display depending on the device orientation.



# SPLIT-SCREEN (CHART, TRAFFIC, SAFETAXI)

Charts, SafeTaxi, and Traffic when viewed in split-screen have the same function, navigation, and capabilities as the full screen versions of these products.



Split-Screen - Charts & Checklist

# **SPLIT-SCREEN (PANEL)**

The Panel is only available in split-screen and may be configured to show navigation parameters and virtual instrument gauges in one of four selectable views. Panel configuration selection button/indicators are located at the bottom right of the panel.

## Viewing the Panel:

- 1) From any page, touch Home >
- 2) Touch Menu > Split Screen> Panel.



## **Configuring Navigation Information in the Panel:**

- 1) From any page, touch **Home** > **[[**].
- 2) Touch Menu > Split Screen > Panel.
- 3) Select one of the three panel options with Navigation Data Fields.
- **4)** Touch any one of the fields and select one of the options from the menu.

<b>Navigation Data</b>	Description		
Air/Ground State	Identifies when the aircraft is either on the ground, or airborne		
Baro Vertical Rate	Uses barometric altitude information from the aircraft's altimeter to compute vertical guidance for the pilot. The specified vertical path is typically computed between two waypoints or an angle from a single way point.		
Bearing	<b>Bearing</b> The compass direction from the present position to a destinati waypoint.		
Biometrics	The display of body measurements and calculations related to human characteristics.		
Corrected Pressure Alt	The altitude of the aircraft above the standard datum plane.		
Course	The magnetic direction from the last waypoint to the active waypoint.		
Cross Track Error	The distance and direction, left or right, the aircraft is from the desired course in nautical miles.		
Density Altitude	Pressure altitude corrected for non-standard temperature.		
Distance (Dest)	The distance to the destination waypoint in the Active Flight Plan		
Distance (Next)	The distance to the next waypoint in the Active Flight Plan.		
ETA (Dest)	The estimated time at which the aircraft should reach the destination waypoint, based upon current speed and track.		
ETA (Next)	The estimated time at which the aircraft should reach the next waypoint, based upon current speed and track.		
ETE (Dest)	<b>ETE (Dest)</b> The estimated time it takes to reach the destination waypoint from the present position, based upon current ground speed.		
ETE (Next)	The actimated time it takes to reach the next waynoint form the		
GPS Altitude	The current GPS altitude or geometric height above Mean Sea Level (MSL) in feet.		



<b>Navigation Data</b>	Description		
GPS Altitude AGL	The current GPS altitude or geometric height Above Ground Level		
	Level (AGL) in feet.		
Ground Speed	The velocity the aircraft is traveling relative to the ground.		
Height Above	The vertical distance of the aircraft above the terrain.		
Terrain			
Horiz Accuracy	Displays the accuracy of horizontal guidance.		
Indicated	The direct instrument reading obtained from the ASI, uncorrected		
Airspeed	for variations in atmospheric density, installation error, or		
•	instrument error.		
Latitude	Current latitude.		
Longitude	Current longitude.		
Magnetic Heading	Direction relative to magnetic North.		
Next Waypoint	Next waypoint on the route of flight		
OAT (Static)	The ambient temperature of the air around the aircraft.		
Pitch	Current pitch. (GDL 39 3D only)		
Radio Height	The height of the aircraft above the terrain immediately below the aircraft.		
Roll	Current roll. (GDL 39 3D only)		
Time (Zulu)	Current time		
Track	The direction of aircraft movement relative to the ground.		
True Airspeed	The speed of the aircraft relative to the air mass through which it		
ii de Aiispeed	is flying.		
True Heading	Direction relative to true North, or the geographic North pole.		
Vert Accuracy	Displays the accuracty of vertical guidance.		
Vertical Speed	The rate of climb or descent (GPS-derived).		
Wx-Altimeter	The altimeter setting at the nearest METAR reporting station.		
Wx-Ceiling	The ceiling at the nearest METAR reporting station		
Wx-Visibility	The visibility at the nearest METAR reporting station		
Wx-Wind	The wind speed and direction at the nearest weather reporting		
	station.		
Wind Direction	The direction the wind is coming from.		
Wind Speed	The vector difference between the airspeed and the ground		
'	speed.		





Navdata (Portrait)



Classic Panel (Landscape)





**Classic Panel (Portrait)** 





HSI/Attitude Indicator - Navdata (Landscape)



**HSI/Attitude Indicator - Navdata (Portrait)** 





HSI/Attitude Indicator - Condensed Navdata (Landscape)



HSI/Attitude Indicator - Condensed Navdata (Portrait)



## PANEL (OPTIONAL)



**NOTE:** The Garmin Pilot attitude functionality is only to be used as an aid and should not be used as a primary attitude indicator.

When connected to a compatible device, Garmin Pilot will display a back-up Attitude Indicator on the Panel. 'Pitch' and 'Roll' become available options for the Nav Bar on the Map Pane, and Navigation Data on the Panel.



#### **Swapping the Attitude Indicator and HSI position:**

- 1) From any page, touch Home > \$\int\_{\text{s}}\$.
- 2) Touch Menu > Split Screen > Panel.
- 3) Touch to swap the position of the Attitude Indicator and the HSI.



#### **BEFORE SWAP**



Touch to Swap Attitude Indicator & HSI

**AFTER SWAP** 



Attitude Indicator/HSI Swap

The leveling adjustments for pitch and tilt angles are performed automatically when the unit is powered on. However, if the unit moves, it may be necessary to command the GDL 39 3D to perform the leveling process.

## Leveling the GDL 39 3D:

From the Connext page or with the Panel displayed, touch **Menu** > **Reset Pitch/Roll GDL 39 3D.** 

# **SPLIT-SCREEN (SYNTHETIC VISION)**

Synthetic Vision can be displayed in split-screen mode for enhanced situational awareness. Split-screen mode can be viewed from either on the Home Menu.



# **Viewing Split-Screen Synthetic Vision From Map Page:**

- 1) From any page, touch Home > **[5]**.
- 2) Touch Menu > Split Screen.

Or:

- 1) Touch to view the split-screen selector.
- 2) Touch the **Synvis** tab.

#### Viewing Split-Screen Features From SynVis Page:

- 1) From any page, touch Home > \_\_\_\_\_\_.
- 2) Touch Menu > Split Screen.

Or:

Touch to View Split-Screen

- 1) Touch to view the split-screen selector.
- **2)** Select the desired item to be displayed in the split-screen view.



Split-Screen Synthetic Vision

Touch to View SynVis in Split-Screen



## **SPLIT-SCREEN (FLIGHT PROFILE)**



**NOTE:** When not flying, Profile View will always show FPL mode. When flying without an active flight plan, Profile View will always show Track mode.

The aircraft's flight profile can be displayed in split-screen mode for enhanced situational awareness, viewing your flight plan, winds aloft, airspace, TFR's, cloud layers, ceilings, PIREPs, Traffic, highest point along the route of flight, and much more. Split-screen mode can be viewed from either on the Home Menu.

# Viewing Split-Screen Flight Profile From Map Page:

- 1) From any page, touch Home >
- 2) Touch Menu > Split Screen > Flight Profile.

Or:

Touch > Flight Profile.

## **Viewing Split-Screen Flight Profile From SynVis Page:**

- From any page, touch Home >
- 2) Touch Menu > Split Screen > Flight Profile.

Or:

Touch > Flight Profile.



Split-Screen Flight Profile



## Adjusting Flight Profile General Settings.

- 1) Touch ( to display the Settings window.
- 2) Touch the General tab.
- Scroll to view options and settings for View Mode, Track Mode Vector Length, and Corridor Width.
- **4)** Touch or Slide to adjust settings as desired.



Split-Screen Flight Profile - General Settings

## Adjusting Flight Profile Winds Aloft Settings.

- 1) Touch to display the Settings window.
- 2) Touch the Winds Aloft tab.
- 3) Scroll to view options for **Display Style** & **Source**.
- **4)** Touch to adjust settings as desired.



Split-Screen Flight Profile - Winds Aloft Settings



# Adjusting Flight Profile Icing Settings.

- 1) Touch to display the Settings window.
- 2) Touch the **Icing** tab.
- 3) Slide to change **Opacity**.
- **4)** Scroll to view options for **Display Style.**
- **5)** Touch **1** to adjust settings as desired.



**Split-Screen Flight Profile - Icing Settings** 

# **Adjusting Flight Profile Boundaries Settings.**

- 1) Touch ( to display the Settings window.
- **2)** Touch the **Boundaries** tab.
- **3)** Touch **1** to adjust settings as desired.

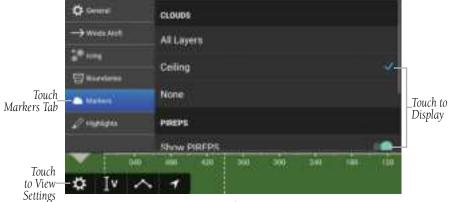


Split-Screen Flight Profile - Boundaries Settings



## Adjusting Flight Profile Markers Settings.

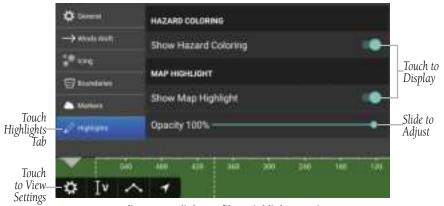
- 1) Touch to display the Settings window.
- 2) Touch the Markers tab.
- 3) Scroll to view options for Clouds, PIREP's, and Other.
- **4)** Touch or Slide to adjust settings as desired.



Split-Screen Flight Profile - Markers Settings

#### Adjusting Flight Profile Highlights Settings.

- 1) Touch to display the Settings window.
- 2) Touch the **Highlights** tab.
- **3)** Touch or Slide to adjust settings as desired.



Split-Screen Flight Profile - Highlights Settings



# **WEATHER DATA**

Weather data is presented in Widgets (as text), and map overlays. To receive up-to-date weather information, the Android device must have access to a data connection (Wi-Fi or cellular), or a compatible external device. However, once downloaded, some weather products will remain available for up to 90 minutes after connection to the Internet is lost.

#### WEATHER SOURCES

Weather data is available from three sources, Garmin Weather Data Services (Internet), FIS-B weather when connected to a compatible FIS-B device via a Connext link, or SiriusXM weather connected to a compatible SiriusXM device via a Connext link. Garmin Weather Data Services (Internet) requires a data connection through Wi-Fi or cellular network. SiriusXM and FIS-B weather, require additional hardware. SiriusXM weather also requires a subscription to SiriusXM Weather.

# **DATA LINK WEATHER (FIS-B)**



**WARNING:** Do not use the indicated data link weather product age to determine the age of the weather information shown by the data link weather product. Due to time delays inherent in gathering and processing weather data for data link transmission, the weather information shown by the data link weather product may be significantly older than the indicated weather product age.



**WARNING:** Do not use data link weather information for maneuvering in, near, or around areas of hazardous weather. Information contained with in data link weather products may not accurately depict current weather conditions.

FIS-B is a subscription-free weather service that is broadcast by Ground Based Transceivers (GBTs) over the 978 MHz UAT frequency band as part of the FAA's Next Generation Air Transportation System (NextGen). To receive FIS-B weather information, the compatible FIS-B device must be within range and line-of-sight of an operating GBT. Reception may be affected by factors including altitude or terrain. FIS-B weather products include METARs, TAFs, NEXRAD (Regional and CONUS), AIRMETs, SIGMETs, PIREPs, Winds and Temperatures Aloft, and NOTAMs.



#### **Viewing FIS-B Weather product Status:**

- ) From any page, touch **Home** > 🚺
- **2)** Touch the associated FIS-B device tab.

#### **Viewing Ground Station Status:**

- **1)** From any page, touch **Home** > **((**(
- 2) Touch the associated FIS-B device tab.

#### SIRIUSXM® WEATHER

SiriusXM weather information is shared with Garmin Pilot for installations with a Flight Stream 510, Flight Stream 210, Flight Stream 110, GDL 69/GDL 69A GDL 52/52R, and GDL 51/51R SiriusXM datalink.

#### WEATHER WIDGETS

Weather Widgets are viewable in the lower portion of the Map Page in split screen. Controls located at the upper left and right corners of each Widget open a menu to select the Widget Type and to choose an airport to which the Widget is applicable.

The NavTrack located at the bottom of the display is used to dynamically change the Widget location to view information related to points on or near the active route. Dragging the slider at the bottom of the widgets pane moves a light blue diamond along the route of flight. As the symbol approaches airports along the active route Colored push-pins correspond to matching colored dots to the left of the airport identifier in the upper right corner of the Widget to indicate the location from which the information contained in the Widget originates.

There are five weather, four navigation, and two pilot utility information products available for selection from the Widget Type flick-list. The weather products available to be displayed as widgets are METAR, TAF, PIREPs, Winds Aloft, and AIRMET/ SIGMETs. The four navigation information products are airports, NOTAMs, airspace, and navigation data fields.



Sliding a finger left or right over the widgets will bring more widgets or the **Add Widget** tool into view. The source, product age and relative location will be displayed at the bottom of each widget.

## **Adding Weather Widget:**

- 1) From any page, touch **Home** >
- 2) Touch Menu > Split Screen > Widgets.
- 3) Touch the plus button to add a widget.
- 4) Select a widget from the **Select Widget Type** menu.

#### **Changing Widget Type:**

- 1) Touch the widget type as displayed in the upper left corner of the widget.
- **2)** Select the desired widget type from the **Select Widget Type** menu.

## **Removing Weather Widget:**

- **1)** Touch the widget type as displayed in the upper left corner of the widget.
- 2) Scroll to the bottom of the flick list.
- 3) Select **Delete Widget** from the bottom of the menu.

#### WIDGET NAVTRACK

At the bottom of the widget pane is the NavTrack. Touch-dragging the slider moves a light blue diamond along the route of flight. Colored push-pins appear on the map to indicate locations near the blue diamond that provide information corresponding to selected widgets. In some cases, there may be more than one location near the blue diamond that provides information corresponding to a widget. To view weather information for nearby locations, it may be necessary to touch the inverted white triangle next to the widget location in the widget header bar. This will open a menu of nearby widget information sources.





## **Change the Location Associated with a Weather Widget:**

- 1) Drag the NavTrack at the bottom of the widget pane until the blue diamond corresponds with a colored push-pin on the map display that is near a desired location.
- 2) If the push-pin does not correspond to the desired location, touch the location indicator at the top right corner of the widget to search for nearby locations.
- **3)** Select the desired location from the **Nearby** menu.



Widgets



#### WEATHER MAP OVERLAYS

## Viewing weather map overlays:

- 1)
- Touch the desired overlay. 2)





#### WEATHER PRODUCT AGE AND SOURCE

When a weather product is active on a map or in a Weather Widget, the age of the data is displayed. The age of the product is based on the time difference between when the data was assembled on the ground and the current GPS time. Garmin Pilot combines the CONUS and Regional Radar into one map overlay, the time shown is for the Regional Radar product only.



Product Source, Age & Relative Location

Weather Product Age and Source

## **WEATHER PRODUCTS**

#### RADAR

Weather radar data is collected from radar sites across the United States, Canada, and select overseas locations. It is combined into a mosaic for easier display and analysis.

The radar data displayed is not real-time. The lapsed time between collection, processing, and dissemination of radar images can be significant and may not reflect the current radar synopsis. Due to the inherent delays and the relative age of the data, it should be used for long-range planning purposes only. Never use radar data to penetrate hazardous weather. Rather, use it in an early-warning capacity for predeparture evaluation.



Composite data is composed of the maximum reflectivity from the individual radar sweeps at different tilt angles of the radar beam with respect to the ground. The display of the information is color-coded to indicate the weather severity level. Colors are used to identify the different echo intensities (reflectivity) measured in dBZ (decibels or Z). "Reflectivity" (designated by the letter Z) is the amount of transmitted power returned to the radar receiver. The dBZ values increase as returned signal strength increases. Precipitation intensity is displayed using colors corresponding to the dBZ values.

Base Reflectivity (the lowest level radar scan) best represents the precipitation falling from the clouds, while composite reflectivity combines the radar from all altitudes into one view.

#### RADAR ABNORMALITIES

There are possible abnormalities regarding displayed NEXRAD images. Some, but not all, of those include:

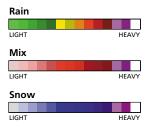
- Ground clutter
- Strobes and spurious radar data
- Sun strobes, when the radar antenna points directly at the sun
- Military aircraft deploy metallic dust (chaff) which can cause alterations in radar scans
- Interference from buildings or mountains, which may cause shadows
- Poor reception from Ground Based Transceivers (GBTs) can cause portions of the received radar imagery to not be displayed



#### RADAR LIMITATIONS

Certain limitations exist regarding radar displays. Some, but not all, are listed for the user's awareness:

- Surface precipitation type is estimated with shades of blue for snow and shades of pink for indeterminate types. The actual precipitation type aloft could vary.
- Radar base reflectivity is sampled at the minimum antenna elevation angle. An
  individual radar site cannot depict high altitude storms at close ranges, and has no
  information about storms directly over the site.
- Radar coverage in Canada is only available in the southern 1/4 of the country.



Radar Intensity

## **Viewing Radar Information:**

- 1) From any page, touch **Home** >
- 2) Touch Solution > Overlays.
- 3) Touch **Radar** from the Layer Select menu.
- **4)** If necessary, touch , and touch **Base** (Base Refectivity) or **Comp** (Composite Reflectivity.
- 5) Touch to animate the radar loop. Each frame of the radar loop is time stamped. The time stamp is just right of the play button.



#### STORM CELL MOVEMENT

The radar includes the projected path of a storm cell. A circle and line extends from the storm cell to display the predicted path in 15, 30, 45, and 60 minutes. If hail or tornadic activity is present, the corresponding icon is displayed.

## **Viewing Storm Cell Movement:**

- 1) With radar animated (see procedure above), touch **4.1**
- **2)** Touch the time stamp to step through the animation.



**Storm Cell Movement** 

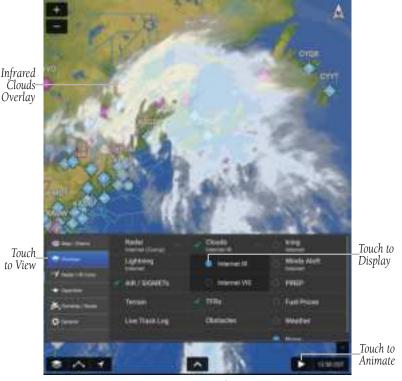


## **INFRARED SATELLITE (IR SAT)**

IR Sat displays infrared composite satellite images of cloud cover taken by geostationary weather satellites.

#### Viewing Infrared Satellite Information (IR):

- 1) From any page, touch **Home** >
- 2) Touch Solution > Overlays and select Clouds > IR from the Layer Select menu.
- 3) Touch to animate the satellite loop. Each frame of the satellite loop is time stamped. The time stamp is just right of the play button.



Overlays - Clouds - Infrared (IR)



## Viewing Visible Satellite Information (VIS):

- From any page, touch Home >
- 2) Touch Solverlays and select Clouds > VIS from the Layer Select menu.
- 3) Touch to animate the satellite loop. Each frame of the satellite loop is time stamped. The time stamp is just right of the play button.

#### RADAR AND INFRARED SATELLITE COLOR PALETTES

The radar and infrared color palettes and the color of the intensity returns can be configured on the **Map** page.

## Viewing radar and infrared satellite color palettes:

- 1) From any page, touch **Home** > **...**
- 2) Touch S > Radar/IR Color.
- 3) Touch no n the top left of the 'Radar Colors' or 'IR Satellite Colors' box to view the color palettes options.
- 4) Touch Garmin, NOAA, Alt, or Classic for the desired 'Radar Colors'.

Or:

Touch **Classic**, **Alt 1**, **Alt 2**, or **Alt 3** for the desired 'IR Satellite Colors'.



Overlays - Radar & Infrared Satellite Color Palettes

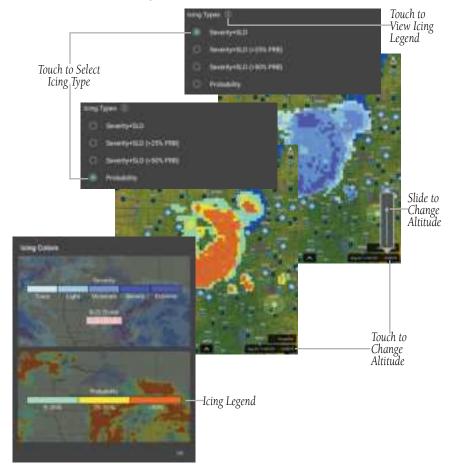


#### ICING FORECAST

Icing forecast is a graphical depiction of icing conditions in the United States and Canada. The icing forecast conditions are displayed by Severity+Supercooled Large Drops (SLD) or Probability.

## Viewing Icing Forecast data:

- 1) From any page, touch **Home** > **1**.
- 2) Touch Solution > Overlays > Icing.
- 3) Select between **Severity+SLD** or **Probability**.
- **4)** Use the sliders to adjust the time and altitude.



Overlays - Icing Types & Legend



#### METAR OVERLAY

The METAR Overlay provides weather icons that graphically display one of 14 parameters typically reported in a METAR. Each icon can be tapped to display the current METAR data in both raw and translated formats. Color coded icons provide a quick visual representation of the current weather conditions. Blue icons indicate VFR conditions, Green icons indicate MVFR conditions, Yellow icons indicate IFR conditions and Red icons indicate LIFR conditions. The color coding applies to Station ID, Flight Conditions, Cloud Ceiling, Visibility, and Cloud Cover.

Wind barbs and wind speed icons are slightly different where color represents wind speed. Colored icons are also used to show dew point spread.

## Viewing and Configuring METAR Overlay:

- 1) From any page, touch **Home** > **1**.
- 2) Touch and select **Overlays** > **Weather** from the Layer Select menu.
- 3) Touch the Overlay Control button in the lower left corner.
- **4)** Select the desired option from the list.
- 5) Touch any of the displayed Weather Icons to view the Raw and translated METAR information.

Layer	Icons	Description	
	Wind Barb		
Station Model	Temperature  Visibility  Dewpoint  Cloud Cover		
Altimeter	29.98 30.14	Altimeter setting (in. Hg)	
Ceiling	010 Unl	Reported ceiling in hundreds of feet or 'Unl' if there is not a cloud layer that constitutes a ceiling	

Weather Icons



Layer	Icons		Description			
Cloud Cover	<b>⊚ovc</b>	Overcast				
	BKN	Broken				
	SCT	Scattered				
Cloud Cover	<b>FEW</b>	Few				
	CLR	Clear				
	<b>OBS</b>	Fog				
Dewpoint	21°	Dewpoint °C				
Dewpoint Spread	111) 15) 2)	Dewpoint spread in °C.  Blue indicates spread of 9° C or greater.  Yellow indicates spread of 5° or 8° C.  Red indicates spread of 0° to 4° C.				
		VFR Ceiling	MVFR Ceiling	IFR Ceiling	LIFR Ceiling	
	VFR Visibility			0		
Flight	MVFR Visibility					
Conditions	IFR Visibility					
	LIFR Visibility					
		Missing weather information. A split dot with brown indicates partial and/or missing data.				
Observation Age	22	Observation Age in minutes				

**Weather Icons** 



Layer	Icons	Description		
	KSTJ	VFR conditions (Blue)		
	KMBY	MVFR conditions (Green)		
Station ID	KTAZ	IFR conditions (Yellow)		
	KIRK	LIFR conditions (Red)		
	KCDJ	No Weather or Partial Data (Grey)		
Temperature	32	Temperature °C		
Visibility		Reported Visibility in Statute Miles.		
		Short Flag = 5 knots	Green = 5-9 knots	
		Long Flag = 10 knots	Yellow = 10-19 knots	
Wind Barbs	<u></u>	Solid Triangle = 50 knots	Red = 20+ knots	
		Light & Variable		
	0	Calm		
Wind Gust	21	Reported wind gusts (kts).		
Willia Gust	Lt & Var	Light & Variable		
Wind Speed	Lt & Var 10 24	Reported steady wind speed (kts). Green indicates wind speeds less than 10 knots. Yellow indicates wind speeds less than 20 knots. Red indicates wind speeds 20 knots and greater.		
Wx Conditions	BR FZ FG	Dynamic black shaded box that displays two letter weather condition codes and qualifiers.		

**Weather Icons** 



#### STATIC WEATHER IMAGERY

Garmin Pilot provides access to National Weather Service, as well as some international, static aviation weather maps. These weather products are static maps displaying PIREPs, AIRMETs, SIGMETs, winds aloft, radar, IR satellite, METARs, TAFs, surface analysis, icing, turbulence forecasts, and thunderstorm forecasts.

Garmin Pilot also includes some international weather imagery. Radar imagery is available for some parts of Mexico. Icing, Turbulence Forecast, and Thunderstorm Forecast imagery is available for some parts of Europe. METAR, TAF, and Surface Analysis information is available for Canada.

All available weather images are displayed on the main WX Imagery page and can be sorted by selecting from the 'View by Hazard', 'View by Region', or 'View by Product Type' options.

## **Viewing Static Weather Products:**

- 1) From any page, touch **Home** >
- **2)** Touch the desired hazard type, region, or product type from the list.
- **3)** Touch the weather map to enlarge. When enlarged touch the star to save to Favorites.



Wx Imagery - Static Weather Imagery



#### **AIRMETS**

An AIRMET (AIRmen's METeorological Information) can be especially helpful for pilots of light aircraft that have limited flight capability or instrumentation. An AIRMET must affect or be forecasted to affect an area of at least 3,000 square miles at any one time. AIRMETs are routinely issued for six-hour periods and are amended as necessary due to changing weather conditions. AIRMETs are displayed as green (IFR/mountain obscuration), orange (turbulence), or blue (icing) shaded areas on the map display.

#### **SIGMETS**

A SIGMET (SIGnificant METeorological Information) advises of weather that is potentially hazardous to all aircraft. In the contiguous United States, the following items are covered: severe icing, severe or extreme turbulence, volcanic ash (red), dust storms, and sandstorms that lower visibility to less than three statute miles.

A Convective SIGMET is issued for thunderstorms, isolated severe thunderstorms, embedded thunderstorms, hail at the surface, and tornadoes. A SIGMET is widespread and must affect or be forecast to affect an area of at least 3,000 square miles.

#### **Viewing AIRMETS and SIGMETS:**

- 2) Touch Solverlays > AIR / SIGMETs from the Layer Select menu.
- 3) Touch and select the desired type of AIRMET/SIGMET (i.e., Convective, Icing, IFR/MTN, or Turbulence) to display.
- 4) Touch within the shaded area for AIRMET/SIGMET details.



**Overlays - Displaying AIRMETs & SIGMETs** 



# **TEMPORARY FLIGHT RESTRICTIONS (TFRS)**



**NOTE:** Do not rely solely upon data link services to provide Temporary Flight Restriction TFR information. Always confirm TFR information through official sources such as Flight Service Stations or Air Traffic Control.

Temporary Flight Restrictions or TFRs temporarily restrict all aircraft from entering the selected airspace unless a waiver has been issued. TFRs are routinely issued for occurrences such as sporting events, dignitary visits, military depots and forest fires. TFRs are represented as an area outlined in dark blue (special events), green (forest fires), or Red (dignitary visits).

# **Viewing Temporary Flight Restrictions (TFR):**

- **1)** From any page, touch **Home** > **§** ...
- 2) Touch Solution > Overlays > TFR from the Layer Select menu.
- **3)** Touch within the outlined area for TFR details.



TFR Details - Super Bowl



#### **ENHANCED STADIUM TFR ADVISORIES**

Stadium TFRs advisories have been enhanced to display the event, hosting venue, and start time along with color coding to represent the active state of the TFR.

- Blue TFRs event occurs one to seven days in the future.
- Yellow TFRs event occurs within the next 24 hours.
- Red TFRs active TFR, one hour before scheduled start time.

# Viewing only active Temporary Flight Restrictions (TFRs) or within 24 hours:

- 1) From any page, touch **Home** > **[**
- 2) Touch > General.
- 3) Touch the Display Stadium TFRs button Off.



**Enhanced Stadium TFR Details** 

#### **PIREPS**

Pilot Weather Reports (PIREPs) provide timely weather information for a particular route of flight. When significant weather conditions are reported or forecast, Air Traffic Control (ATC) facilities are required to solicit PIREPs. A PIREP may contain unforecast adverse weather conditions, such as icing conditions, cloud cover, and turbulence.



PIREPs are represented on the Garmin Pilot map by a small colored icon with a number. The color and style of the icon signify the type and severity of the reported weather conditions. The number shows the altitude of the reported conditions in flight level notation (i.e., hundreds of feet).

While the Map's PIREP layer is active, two secondary controls appear in the lower right corner of the screen. Touching either of these controls shows a slider that can filter out and declutter PIREP icons based on report age and report altitude.

## **Viewing PIREPs:**

- **1)** From any page, touch **Home** > **[**
- 2) Touch Solution > Overlays > PIREP.
- **3)** Touch a PIREP icon for details.



**Overlays - Displaying PIREPs** 

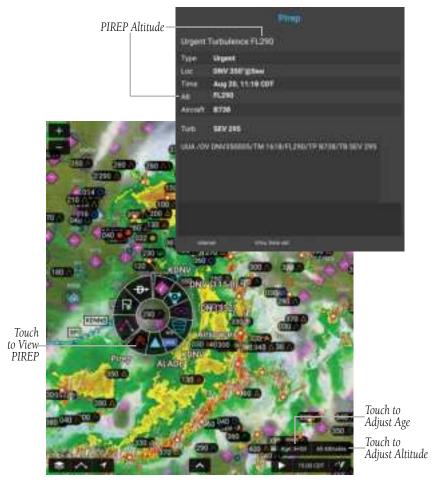
## Filtering PIREPs By Age:

- 1) From any page, touch **Home** >
- 2) Touch Solverlays > PIREP.
- **3)** Touch the PIREP age indicator to display the age slider.
- **4)** Touch and drag the slider handle to set the PIREP age display range.



#### **Filtering PIREPs By Altitude:**

- 2) Touch Solverlays > PIREP.
- 3) Touch the PIREP altitude indicator to display the altitude slider.
- 4) Touch and drag the slider handles to set the PIREP altitude display range.



**PIREP Layer & Report** 



Icing PIREPs	Sky Condition PIREPs	Turbulence PIREPs
Negligible Icing	Unknown Sky Condition	Turbulence Negligible or Smooth
Trace Icing	Sky Clear	Light Turbulence
Trace to Light Icing	Few Clouds	Light to Moderate Turbulence
Light Icing	Scattered Clouds	⚠ Moderate Turbulence
Light to Moderate Icing	Broken Clouds	Moderate to Severe Turbulence
Woderate Icing	Overcast	Severe Turbulence
Moderate to Severe Icing	<b>⊗</b> IMC	Extreme Turbulence
Severe Icing		

**PIREP Icons** 

#### LIGHTNING

Lightning data shows the approximate location of cloud-to-ground lightning strikes. A strike icon represents a strike that has occurred within a two-kilometer region. The exact location of the lightning strike is not displayed.

# **Viewing Lightning Information:**

- 1) From any page, touch **Home** >
- 2) Touch Solution > Overlays > Lightning.
- 3) Touch to animate the Lightning loop. Each frame of the Lightning loop is time stamped. The time stamp is just right of the play button. Lightning information is available in one minute increments for the previous 45 minutes.



#### WINDS ALOFT

Winds Aloft data shows the forecasted wind speed and direction at the surface and at selected altitudes. Altitudes can be displayed in 3,000-foot increments up to 42,000 feet MSL. Winds Aloft are displayed using wind barbs. The wind barbs indicate wind speed and direction.

The wind speed is depicted using flags at the end of the wind barb. A short wind flag is 5 knots, a long wind flag is 10 knots, and a filled triangle is 50 knots. Wind barbs are also color coded to indicate wind speed. Wind direction is depicted by the flagged end of the barb. The flagged end indicates the direction from which the wind is coming.

Icons	Description		
<u> </u>	White indicates wind speeds of 20 kts or less.		
	Light blue indicates wind speeds of 21-30 kts.		
	Light yellow indicates wind speeds of 31-40 kts.		
	Yellow indicates wind speeds of 41-50 kts.		
<u> </u>	Orange indicates wind speeds of 51-80 kts.		
<u></u>	Red indicates wind speeds of 81 kts or greater.		

Winds Aloft Barbs



## **Viewing Winds Aloft Information:**

- 1) From any page, touch **Home** > **S**.
- 2) Touch Solution > Overlays > Winds Aloft.
- 3) Touch the **Temps** button above the Time Stamp > **Barbs**.
- **4)** Drag the horizontal slider to the right to view forecast winds aloft.
- 5) Drag the slider up to the desired altitude. Altitudes are displayed in 3,000-foot increments up to 42,000 feet MSL.
- **Or:** Touch any wind barb to view a winds aloft table. Touch the time to view current/forecasted winds aloft.



Winds Aloft - CONUS

## **TEMPS ALOFT**

Temps Aloft data shows the forecasted temperature in degrees Celsius (°C) at the surface and at selected altitudes. Altitudes can be displayed in 3,000-foot increments up to 42,000 feet MSL. Temps Aloft are displayed using a color coded icon along with a numerical value.

Icons	Description	
<b>(%)</b> -2	Blue indicates temps below freezing in degrees Celsius (-2°C).	
()0	White indicates the temperature is at freezing (0°C).	
<u>)</u> 2	Orange indicates temps above freezing in degrees Celsius (2°C).	

**Temps Aloft Icons** 



## **Viewing Temps Aloft Information:**

- 2) Touch Solution > Overlays > Winds Aloft.
- **3)** Touch the **Barbs** button above the Time Stamp > **Temps**.
- **4)** Drag the horizontal slider to the right to view forecast Temps aloft.
- 5) Drag the slider up to the desired altitude. Altitudes are displayed in 3,000-foot increments up to 42,000 feet MSL.
- **Or:** Touch any temps aloft icon to view a winds aloft table. Touch the time to view current/forecasted temps aloft.



**Temps Aloft - CONUS** 



#### METARS AND TAFS

METAR (METeorological Aerodrome Report) is an international code used for reporting weather observations. METARs are updated hourly or as needed. METARs typically contain information about the temperature, dew point, wind, precipitation, cloud cover, cloud heights, visibility, and barometric pressure. They can also contain information on precipitation amounts, lightning, and other critical data.

TAF (Terminal Area Forecast) is the standard format for 24-hour weather forecasts. TAFs may contain some of the same code as METAR data. It typically forecasts significant weather changes, temporary changes, probable changes, and expected changes in weather conditions. METAR and TAF data are displayed as raw and/or decoded text

## **Viewing METAR and TAF Information:**

- From any page, touch **Home** > \_\_\_\_\_\_.
- Touch Weather > METAR. 2)
- Touch the **METAR** or **TAF** tab, as desired. 3)

#### Or:

- From any page, touch **Home** > **I**. 1)
- Touch the desired airport until the Radial Menu appears > **WX**. 2)
- 3) Touch the **METAR** or **TAF** tab. as desired.



## **MODEL OUTPUT STATISTICS (MOS)**

MOS (Model Output Statistics) provides forecast information similar to a TAF (Terminal Area Forecast), that is updated hourly and is valid for 72 hours. The MOS forecast is available for over 2,000 airports in the United States.



MOS (Model Output Statistics) Widget - Map Page

- **2)** Touch **MOS** from the 'Select Widget Type' Menu.

#### Or:

- 1) From any page, touch **Home** >
- 2) Touch **Weather** > **MOS** tab.



#### AREA FORECAST DISCUSSION

AFD (Area Forecast Discussion) is a plain English narrative developed by meteorologists from the National Weather Service. It is designed to provide additional details that go into the preparation of the Terminal Aerodrome Forecast (TAF). The AFD contains both short and long term analysis, with an emphasis on aviation weather.

## **Viewing ADF Information:**

- 1) From any page, touch **Home** >
- 2) Touch Weather.
- 3) Touch the Forecast Discussion Tab.

#### Or:

- 2) If necessary, touch Add Widget.
- **3)** Touch **Forecast Discussion** from the 'Select Widget Type' Menu.

Touch to View Split Screen—Touch to Select Widgets

METAR

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In the Solid Select Sele

Split Screen - Widgets - Forecast Discussion

Touch to Select Widget

Type



## **NOTICE TO AIRMEN (NOTAM)**

A Notice to Airmen (NOTAM) is a notice containing information essential to personnel concerned with flight operations but not known far enough in advance to be publicized by other means. It states the abnormal status of a component of the National Airspace System (NAS) — not the normal status. Various NOTAMs can viewed in a decoded summary, including those related to airspace, obstacles, and NAVAIDs.

## **Viewing NOTAM Information:**

- 1) From any page, touch **Home** >
- 2) Touch NOTAMs.

#### Or:

- 2) If necessary, touch Add Widget.
- **3)** Touch NOTAMs from the 'Select Widget Type' Menu.



Split Screen - Widgets - NOTAMs



## Airspace NOTAMs use the following color classification:

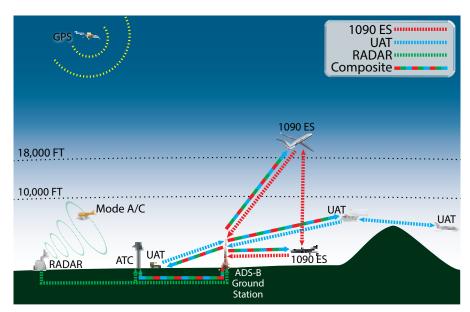
Color	Details	
	Upcoming NOTAM - Valid within the next 24 hours.	
	Restricted/Danger - Prohibited, Restricted, and Danger areas.	
	Alerts/Warnings - Warning, Military Operational Area (MOA), and Scheduled Exercises (Military).	
	Flight Data Center (FDC) and Restricted Area Deactivated	
	Other - Parachute Jumping, Alert, UAS Operation, Tethered Balloon/Kits, Gathering of Aircraft.	
Airspace NOTAM Color Classifications		



## DATA LINK TRAFFIC (OPTIONAL)

The GDL 39 / GDL 39 3D is a Bluetooth® enabled receive-only data link radio with on-board GPS, 978 MHz (Universal Access Transceiver frequency band), and 1090 MHz Extended Squitter (1090 ES) receivers. It is designed to receive, process, and output traffic (ADS-B air-to-air, and TIS-B traffic information), and weather (Flight Information Service-Broadcast (FIS-B)) information to Garmin Pilot through Bluetooth.

ADS-B (Automatic Dependent Surveillance-Broadcast) is a surveillance technology deployed across the United States as the cornerstone of the FAA's Next Generation Air Transportation System (NextGen). ADS-B enables improved surveillance services, both air-to-air and air-to-ground, especially in areas where radar is ineffective due to terrain or where it is impractical or cost prohibitive. Initial applications of air-to-air ADS-B are for "advisory" use only, enhancing a pilot's visual acquisition of other nearby ADS-B equipped aircraft either when airborne or on the airport surface.



**ADS-B System** 



For the purpose of distinguishing between levels of ADS-B service, there are three classifications of aircraft or system capability; ADS-B In, ADS-B Out, and ADS-B participating. ADS-B In refers to the capability to receive ADS-B information. ADS-B Out refers to the capability to transmit ADS-B information. ADS-B participating refers to the capability to both send and receive ADS-B information. Aircraft lacking either ADS-In, ADS-B Out, or both ADS-B capabilities may also be referred to as ADS-B non-participating aircraft.

Currently, rule-compliant ADS-B Out capability in the United States requires a TSO'ed SBAS-enabled GPS, such as a Garmin GPS 400W or similar, and one of two possible data links: 1090 ES transponder or a 978 MHz UAT. Either data link system is capable of transmitting the aircraft's position, velocity, identification, and other information every second to compatible aircraft and ground stations called Ground Based Transceivers (GBTs).

Because 1090 ES transponders and UATs operate on different frequencies, aircraft not similarly equipped cannot transmit/receive data link information directly to/from each other. Instead, operation within range of a GBT is required to receive data link information on both frequencies. The GDL 39 / GDL 39 3D is unique in its ADS-B In capability since it can receive data link information from both 1090 ES transponders and UATs.

Thus, the GDL 39 / GDL 39 3D receives traffic information directly from any ADS-B Out aircraft within range as well as the rebroadcast of ADS-B information from any nearby GBT. This rebroadcast is called Automatic Dependent Surveillance-Rebroadcast (ADS-R) and is automatically triggered by the detection of an ADS-B participating aircraft within the service volume of the GBT. As a 978 MHz (UAT frequency) receiver, the GDL 39 / GDL 39 3D can receive both the Traffic Information Service-Broadcast (TIS-B) and Flight Information Service-Broadcast (FIS-B) provided in conjunction with ADS-R services when in range of a GBT.

FIS-B service is provided continuously, but ADS-R including TIS-B will only be broadcast by a GBT when an ADS-B participating aircraft is within the GBT's defined service volume. In this case, a GBT will only rebroadcast TIS-B information relative to the ADS-B participating aircraft. **Only traffic that is within 15 nm lateral and 3,500' vertical of the ADS-B participating aircraft is provided in the broadcast.** Non-participating traffic aircraft located farther than 15 nm laterally and 3,500' vertically from the participating aircraft is are excluded from the information transmitted by the GBT.



TIS-B traffic information includes non-participating aircraft detected by ATC surveillance radar. As TIS-B data is derived from ATC surveillance radar data, TIS-B traffic position updates typically occur every three to thirteen seconds. **Therefore, TIS-B traffic may be displayed with degraded positional accuracy. Aircraft without operating transponders are invisible to TIS-B. Aircraft operating outside of the ATC radar coverage area are also not displayed.** 

Since the GDL 39 / GDL 39 3D is a receive-only device, even when used onboard an aircraft equipped with a qualifying GPS and 1090 ES transponder, a GBT may not identify it as an ADS-B participating aircraft. The squitter of some 1090 ES transponders, including the Garmin GTX 23ES, must be configured to communicate the aircraft has 978 MHz receive capability in order to be identified as an ADS-B participating aircraft.



**WARNING:** Do not rely solely upon the display of traffic information for collision avoidance maneuvering. The traffic display does not provide collision avoidance resolution advisories and does not under any circumstances or conditions relieve the pilot's responsibility to see and avoid other aircraft



**WARNING:** Do not rely solely upon the display of traffic information to accurately depict all of the traffic within range of the aircraft. Due to lack of equipment, poor signal reception, and/or inaccurate information from aircraft or ground stations, traffic may be present that is not represented on the display.



## **SYSTEM STATUS**

The traffic system status is annunciated in the upper left corner of the Map Page, as well as the lower left corner of the dedicated Traffic Page.

System Status	Traffic Icon
Receiving Air-To-Air targets from aircraft transmitting ADS-B out on either UAT or 1090 data link. You are receiving TIS-B traffic information for traffic within 15 nm and 3,500' of a rule compliant participating aircraft.	
Receiving Air-To-Air targets from aircraft transmitting ADS-B out on either UAT or 1090 data link. You will typically receive TIS-B coverage within a minimum of 3 NM (+/- 1,000 ft) of your current position. Other ADS-B participants not compliant with the latest ADS-B software specifications often trigger full TIS-B uplink services. Performance may very between ground stations.	
Receiving Air-To-Air targets from aircraft transmitting ADS-B out on either UAT or 1090 data link. With degraded TIS-B. You may see traffic targets, but the coverage is incomplete and cannot be relied upon.	
Not receiving Air-To-Air targets from aircraft transmitting ADS-B out on either UAT or 1090 data link. You are not receiving TIS-B traffic information.	

**Traffic Modes** 



## TRAFFIC DESCRIPTION

ADS-B traffic operation is similar to other traffic systems, but ADS-B adds additional symbology. The symbols used to display ADS-B traffic are shown in the table below. The traffic identifier and altitude are displayed below the traffic symbol. A small up or down arrow next to the traffic symbol indicates the traffic is climbing or descending at a rate of at least 500 feet per minute. The vector line that extends beyond the point of the traffic arrow is just further indication of the intruder aircraft track.

Symbol	Description
$\Diamond$	Non-threat, non-directional airborne traffic
<b>&gt;</b> —	Directional airborne Traffic with track vector. Points in the direction of the aircraft track.
	Non-directional airborne Proximity Advisory (PA). Proximity Advisories are issued for any traffic within 6 nautical miles and +/- 1,200'.
<b>&gt;</b> —	Directional airborne Proximity Advisory (PA) with track vector. Points in the direction of the aircraft track. Proximity Advisories are issued for any traffic within 6 nautical miles and +/- 1,200'.
	Non-directional airborne Traffic Advisory (TA)
	Non-directional off-scale airborne Traffic Advisory (TA). Displayed at outer range ring at proper bearing.
<b>&gt;</b> —	Directional airborne Traffic Advisory (TA) with track vector. Points in the direction of the aircraft track.
	Directional off-scale airborne Traffic Advisory (TA). Points in the direction of the aircraft track.

**ADS-B Traffic Symbology** 



## TRAFFIC Advisories (TA)

The GDL 39 / GDL 39 3D automatically adjusts its Traffic Advisory (TA) sensitivity level to reduce the likelihood of nuisance TA alerts during various phases of flight. TAs are issued for traffic when they are predicted to be within a specified volume of airspace around the aircraft in a specified amount of time. The protected volume and time interval varies based on the current geodetic altitude and groundspeed. Thus, the protected volume of airspace increases with altitude and ground speed. Refer to the following table for details.

Altitude (Geodetic)	Look Ahead Time (sec.)	Vertical Separation (ft.)	Horizontal Separation (nm.)
Below 5,000	30	+/-850	.35
5,000-10,000	40	+/-850	.55
10,000-20,000	45	+/-850	.80
20,000-42,000	48	+/-850	1.10
Above 42,000	48	+/-1,200	1.10

Traffic Advisories

## Configuring GDL 39 / GDL 39 3D for a Pressurized or Non-Pressurized Aircraft:

- **1)** From any page, touch **Home** >
- 2) Touch the GDL 39 Tab.
- 3) Touch Pressurized Cabin to select/deselect.



**NOTE:** Relative altitude information will only be displayed if Pressurized Cabin is not selected.

## **Enabling/disabling Traffic Data on Map Page:**

- 2) Touch Menu.
- 3) Select Show Traffic.

## Viewing the Traffic Page:

- 1) From any page, touch **Home** > 🔭
- 2) Touch to change the range for the traffic rings.



### Changing the altitude range:

- 1) On the Traffic Page, Touch Altitude Filter.
- **2)** Touch one of the following options:
  - Unrestricted: All available traffic is displayed.
  - **Above**: Displays non-threat and proximity traffic from 9000 feet above the aircraft to 2700 feet below the aircraft. Typically used during climb phase of flight.
  - **Normal**: Displays non-threat and proximity traffic from 2700 feet above the aircraft to 2700 feet below the aircraft. Typically used during enroute phase of flight.
  - **Below**: Displays non-threat and proximity traffic from 2700 feet above the aircraft to 9000 feet below the aircraft. Typically used during descent phase of flight.



**Traffic Page** 



#### FLIGHT ID DISPLAY AND MOTION VECTOR

The Flight IDs of other aircraft (when available) can be displayed on the Traffic Page. When a flight ID or call sign is received, it will appear below the corresponding traffic symbol when enabled. Traffic ground track is indicated on Garmin Pilot by the Motion Vector, a short line, extending in the direction of target movement or relative movement. The track vector has two settings, TargetTrend<sup>TM</sup> shown as a green vector, or Absolute shown as a white vector. Absolute vectors extend from the traffic symbol showing the traffic's ground track. TargetTrend traffic vectors are displayed relative to the aircraft's position and ground speed. For example if traffic is ahead and traveling in the same direction but at a slower ground speed, the motion vector would point opposite of its direction of flight, indicating the aircraft is overtaking the traffic. Thus, the TargetTrend motion vector is relative to the current position, where absolute motion vectors are based on the traffic's speed and direction. The end of the Motion Vector represents the predicted absolute or relative location of the traffic, based the traffic's reported track, ground speed and the Vector Duration setting (15, 30, 60, or 120 seconds).



Example ADS-B Traffic



**NOTE:** Traffic Altitude Filters and Motion Vector settings can only be changed on the dedicated Traffic Page. The Altitude Filter and Motion Vector settings from the Traffic Page will be used on the Map Page as well.

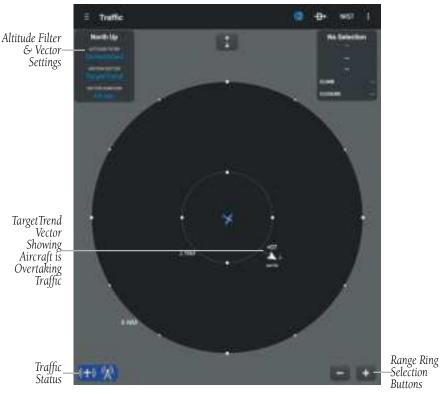


## **Changing Motion Vector:**

- 1) From any page, touch **Home**  $> \overline{\diamondsuit}_{\bullet}$ .
- **2)** Touch the Motion Vector field in the upper left corner of the Traffic Page and select **TargetTrend** or **Absolute**.

## **Changing Vector Duration:**

- 1) From any page, touch **Home** > 3.
- **2)** Touch the Vector Duration field in the upper left corner of the Traffic Page and select **15**, **30**, **60** or **120** seconds.



TargetTrend™ Vectors



## **TERRAIN**

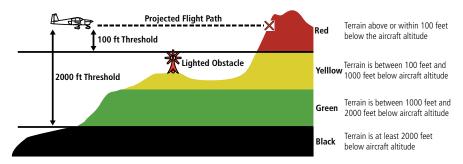


**WARNING:** Do not use Terrain information for primary terrain avoidance. Terrain information is intended only to enhance situational awareness.

The Terrain function displays altitudes of terrain and obstructions relative to the aircraft position and altitude with reference to a database that may contain inaccuracies. Terrain and obstructions are shown only if they are in the database. Terrain and obstacle information should be used as an aid to situational awareness. They should never be used to navigate or maneuver around terrain. Note that all obstructions may not be available in the terrain and obstacle database. No terrain and obstacle information is shown without a valid 3-D GPS position.

The device or external GPS receiver provides the horizontal position and altitude of the aircraft. Aircraft GPS altitude is derived from satellite position. GPS altitude is then converted to a mean sea level (MSL)-based altitude (GPS-MSL altitude) and is used to determine terrain and obstacle proximity. GPS-MSL altitude accuracy is affected by satellite geometry, but is not subject to variations in pressure and temperature that normally affect pressure altitude sensors. GPS-MSL altitude does not require local altimeter settings to determine MSL altitude. It is a widely-used MSL altitude source.

Terrain and obstacle databases are referenced to MSL. Using the GPS position and altitude, the Terrain feature portrays a 2D picture of the surrounding terrain and obstacles relative to the position and altitude of the aircraft. GPS position and GPSMSL altitude are used to calculate and predict the aircraft's flight path in relation to the surrounding terrain and obstacles. In this way, the pilot can view predicted dangerous terrain and obstacle conditions. Alert windows appear to inform the pilot of proximity to the terrain and obstacles.



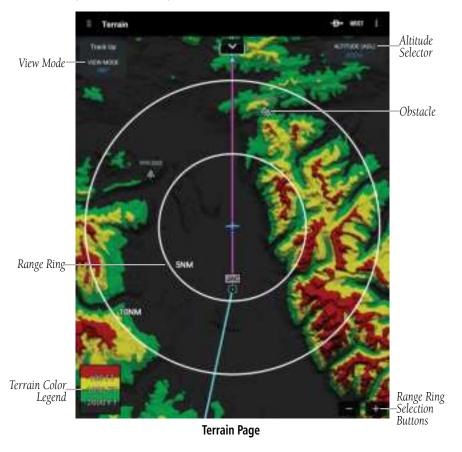
Terrain Page Altitude/Color Correlation

Garmin Pilot for Android User's Guide

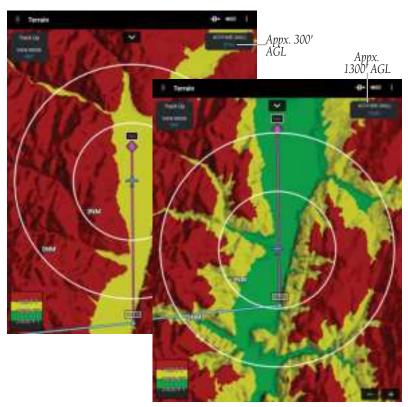


## TERRAIN INFORMATION

Two views modes are available on the Terrain Page: the 360° view and the Arc view, which provides a 120° arc outline. The areas of the terrain shaded red are predicted to be within 100 feet below or above the aircraft. The areas in yellow are between 1,000 feet and 100 feet below the aircraft and the areas in green are between 1,000 and 2,000 feet below the aircraft. The black areas are more than 2,000 feet below the aircraft. A projected point of impact is marked with an "X" symbol. The Altitude Selector in the upper right corner can be configured to show, GPS derived AGL or GSL, or SFC ELEV (Surface Elevation) from the Terrain Database.







Terrain Page Colors - 360° View

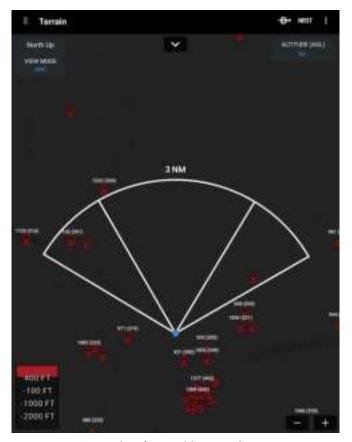


## **TERRAIN COLOR TRANSITION**

During the takeoff or landing transition only terrain that is 400ft above the current location is shown in red. This is to prevent from displaying a "sea of red" during takeoffs and landings.

During the takeoff transition, the terrain colors will 'fade in' once the aircraft is airborne and flies through 400' AGL, the aircraft descends more than 25' after takeoff, or more than 60 seconds have passed since the aircraft was on the ground.

During the landing transition, the terrain colors will 'fade out' when the aircraft is within 0.5nm of an airport, the distance is decreasing, and the height above the runway is less than 200'.



**Terrain Color Transition - Arc View** 



### **OBSTACLE INFORMATION**

Obstacles are shown on the Terrain Map View, at or below the map range of 12 nm. Obstacles are also shown on the Navigation Map from a range of 200 feet to 5 nm.

Standard aeronautical chart symbols are used for lighted or unlighted obstacles taller than 200 feet Above Ground Level (AGL). Refer to the Obstacle Icons legend below.

When selecting an obstacle with the Map Pointer, each obstacle displays the altitude at the top of the obstacle, or Mean Sea Level (MSL). Each obstacle also lists the actual height of the obstacle, or Above Ground Level (AGL).

Unlighted	Unlighted Obstacle		Lighted Obstacle		
< 1000' AGL	> 1000' AGL	< 1000' AGL	> 1000' AGL	Impact Points	Obstacle Location
		*	*	×	WARNING: Red obstacle is above or within 100' below current aircraft altitude
		**	**	×	CAUTION: Yellow obstacle is between 100' and 1000' below current aircraft altitude

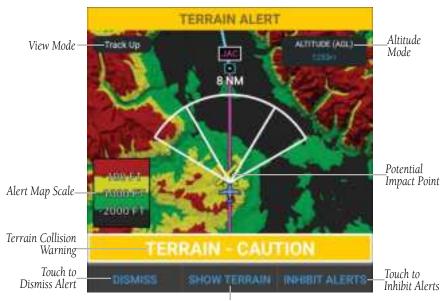
**Terrain Obstacle Colors and Symbology** 

# TERRAIN AND OBSTACLE ALERTS (PREMIUM SUBSCRIPTION)

Terrain, Obstacle, and Descent Rate pop-up and voice alerts are issued when flight conditions meet parameters that are set within the software algorithms. Terrain alerts typically employ a CAUTION or a WARNING alert severity level, or both. When an alert is issued, visual annunciations are displayed and when enabled voice alerts are heard.

If the Terrain Page is not displayed, a pop-up alert appears. Touch **Dismiss** to acknowledge and clear the alert, or touch **Show Terrain** to view the Terrain Page.





Touch to Switch to Terrain Page
Terrain Alert Pop-up

Alert Type	Voice Message		
Terrain Caution	"Caution Terrain"		
Obstacle Caution	"Caution Obstacle"		
Terrain Ahead Caution	"Caution; Terrain Ahead"		
Obstacle Ahead Caution	"Caution; Obstacle Ahead"		
Terrain Warning	"Terrain, Terrain, Pull Up, Pull Up"; *"Pull Up"		
Obstacle Warning	"Obstacle, Obstacle, Pull Up, Pull Up"; *"Pull Up"		
Sink Rate Caution	"Caution; Sink Rate"		
Sink Rate Warning	"Sink Rate, Pull up"; *"Pull Up"		

<sup>\*&</sup>quot;Pull Up" is repeated every 5 seconds after the initial alert until alert conditions no longer exists

#### **Terrain and Obstacle Voice Alerts**

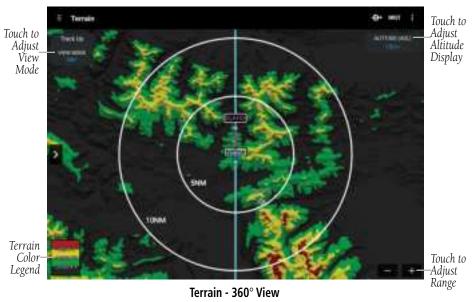


## **Viewing Terrain Page:**

- From any page touch Home >
- 2) Touch or or pinch-zoom to change the range of the terrain rings.

## **Configuring Terrain Page:**

- 2) Touch VIEW MODE.
- **3)** Touch **360**° to view a 360° representation of terrain.
- **Or:** Touch **Arc** to view a forward looking 120° arc of terrain.
- **4)** Touch **Altitude** > **AGL**, **GSL**, or **SFC ELEV** to format the Altitude display.



## **Enabling/Disabling Terrain Shading on Map Page:**

- From any page touch Home >
- 2) Touch Solution > Overlays > Terrain.

## **Enabling/Disabling Obstacles on Map Page:**

- 2) Touch **Overlays** > **Obstacles**.



## **CHARTS**



**NOTE:** Geo-referenced FliteCharts and Chart Overlays are available with the 'Premium' add-on subscription.

FliteCharts resemble the paper version of AeroNav Services terminal procedures charts. The charts are displayed with high resolution and in color for applicable charts. Basic FliteCharts are included in the Garmin Pilot subscription, Geo-referenced FliteCharts are also available for an additional paid subscription. Once downloaded, charts can be viewed offline. The geo-referenced portion of the chart is outlined in blue. Refer to the Downloads section for more information on downloading charts. Available data includes:



Garmin Pilot makes it easy to organize all of the terminal procedures for the route of flight by creating a Binder for the departure and destination airports. Additional binders can also be created and customized by adding individual charts for any airport. Refer to the Downloads Page to ensure the desired charts are onboard the device. Terminal Procedure charts can be viewed and downloaded from the Airport Info Page, under the Procedures tab as well.



**NOTE:** A data connection (i.e., Wi-Fi or cellular) is required to download and update charts.

## Viewing Charts in a Binder:

- 1)
- 2) Touch the desired **Binder**
- 3) Select the desired chart.

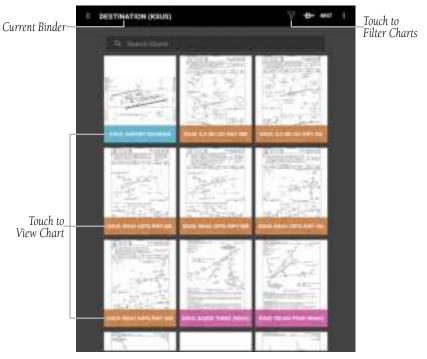


**NOTE:** Any charts that are not geo-referenced will open in the default PDF document viewer.

- **4)** Touch the system back button to return to binder contents.
- Touch the system back button again to return to the Chart Binders Page.



While viewing a chart, use the **and** buttons to navigate to previous and next charts without returning to the binder view.



**Automatically Generated Chart Binders** 

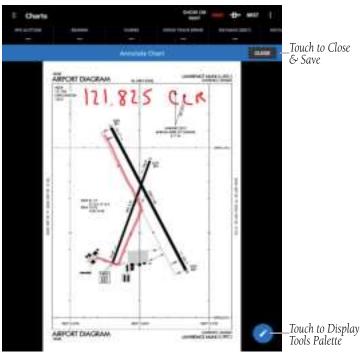
## **Annotating Charts:**

- 1) From any page, touch **Home** > \_\_\_\_\_\_.
- 2) Touch any Binder > Chart.
- 3) Touch the Menu Button 🚦 > Annotate Chart.
- **4)** Touch **a** to display the Tools Palette.
- **5)** Touch the desired tool (Draw, Highlight, or Erase).
- **6)** Touch the desired color and stroke weight.
- **7)** Annotate Chart as desired.
- 8) Touch **Clear** to clear annotations.
- **9)** Touch **Close** to save annotations and exit Annotate Chart mode.

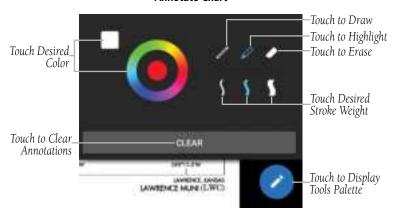




**NOTE:** While annotating a chart, the chart can be zoomed or panned by pinching two fingers together or by pulling two fingers apart. Any other touch or tap will result in annotation.



**Annotate Chart** 



**Annotate Chart - Tools Palette** 



## **Creating a Custom Binder:**

- 1) From any page, touch Home >
- 2) Touch New Binder.
- **3)** Using the keyboard enter a name.
- 4) Touch the new Binder.
- **5)** Touch **Search Charts** and enter an airport identifier using the keyboard.
- **6)** Touch the chart name to view the it or touch to add the chart to the binder.

#### Or:

- 1) From any page, touch Home >
- 2) Touch the Procedures Tab. All available charts and procedures are shown including; (Airport Diagrams, Approach Procedures, Arrival Procedures, and Departures). Chart titles followed by , will need to be downloaded. Charts followed by have already been downloaded to the device.
- **3)** Touch to create a Chart Binder or add to an existing binder.
- **4)** Touch and enter a Binder Name or select from the list of available binders.
- 5) Touch I for each additional chart to add to a binder.

## **Searching for Charts:**

- 1) From any page, touch **Home** >
- 2) Touch **Search Charts** and enter an airport identifier using the keyboard.
- 3) Touch to create a Chart Binder or add to an existing binder.
- **4)** Touch and enter a Binder Name or select from the list of available binders.
- **5)** Touch for each additional chart to add to a binder.

## **Organizing Custom Binders:**

- 1) From any page, touch Home >
- 2) Touch the Menu Button 🚦 and touch Edit / Arrange
- **3)** Drag the Custom Binder and release at the desired location.
- 4) Touch the blue Edit / Arrange bar when finished to exit.



## Filtering Charts Displayed in Binder:

- 1) From any page, touch **Home** > \_\_\_\_\_\_.
- 2) Touch the desired **Binder**.
- 3) Touch **T** to filter charts displayed in the **Binder**.



Chart Binder Filter

### **Deleting Custom Binders:**

- 1) From any page, touch **Home** > \_\_\_\_\_.
- 2) Touch Menu > Edit / Arrange.
- 3) Touch properties for the associated binder to delete the binder.
- 4) Touch the blue Edit Mode bar when finished to exit.

## **Deleting Charts from a Custom Binders:**

- 1) From any page, touch **Home** > \_\_\_\_\_\_.
- 2) Touch Menu > Edit / Arrange.
- 3) Touch for the associated chart to delete the chart.
- 4) Touch the blue Edit Mode bar when finished to exit.

## **Printing a Chart:**

- 1) From any page, touch **Home** >
- 2) Touch the desired Binder.
- **3)** Touch the desired chart.
- 4) Touch the Menu Button ‡ and touch Print.





**NOTE:** Chart printing requires an Android compatible print facility to be installed. This may involve installing a custom app for a Wi-Fi enabled printer or setting up Google Cloud Print.

## **Viewing and Organizing Procedures from the Airport Info Page:**

- **1)** From any page, touch **Home** > **[**
- 2) Touch the Procedures Tab. All available charts and procedures are shown including; (Airport Diagrams, Approach Procedures, Arrival Procedures, and Departures). Chart titles followed by , will need to be downloaded. Charts followed by have already been downloaded to the device.
- **3)** Touch the desired chart to view.
- **4)** Touch **1** to create a Chart Binder or add to an existing binder.
- 5) Touch and enter a Binder Name or select from the list of available binders.
- **6)** Touch for each additional chart to add to a binder.



**NOTE:** Terminal procedures (i.e. SIDs, STARs, instrument approach procedures, airport diagrams, Hot Spots, and Take-off Minimums) are available for selection from the Airport Information Page. Any charts that are not geo-referenced will open in the default PDF document viewer.

#### **AUTOMATICALLY GENERATED BINDERS**

Garmin Pilot will automatically create three binders for the active flight plan. When the app has an active flight plan, a binder will appear for the departure and destination airports. When the current Direct-to destination is an airport, a binder for that airport will appear. Garmin Pilot will download the charts and procedures for an automatically-generated binder the first time the binder is opened.



**Automatically Generated Chart Binders** 



## **CHART OVERLAYS (PREMIUM SUBSCRIPTION)**

Garmin Pilot integrates instrument approach procedure charts within the moving map. Garmin Pilot overlays approach charts at the proper position, orientation and scale on the moving map, making approach procedures available alongside moving map features such as flight paths, weather, navaids, airspaces, obstacles, and terrain.

The Chart Overlay will automatically rotate to match the Map page, accommodating both North Up and Track Up map modes.

Chart Overlays are available for any Geo-Referenced instrument approach procedure chart, including most FliteCharts and Jeppesen charts.

## **Displaying Approach Chart Overlays from Charts Page:**

- 1) From any page, touch **Home** >
- **2)** Search for the desired approach chart (orange labels).
- **Or:** Touch the Destination binder, or a custom binder, to locate the desired chart.
- **3)** Touch **Show on Map**. Garmin Pilot switches to the Map page and displays the selected chart, overlaid over the moving map.



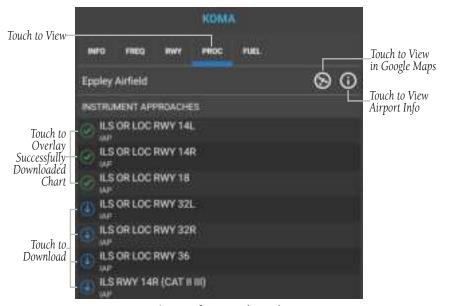


### **Displaying Approach Chart Overlay From Map Page:**



**NOTE:** When selecting a Procedure, ensure the sign is present, indicating the chart is current, downloaded successfully, and ready for use.

- 1) From any page, touch **Home** >
- 2) Touch and hold the desired Airport in the Map Pane until the Radial Menu appears > ...
- **3)** Touch the **Proc** tab.
- **4)** Touch the desired approach.



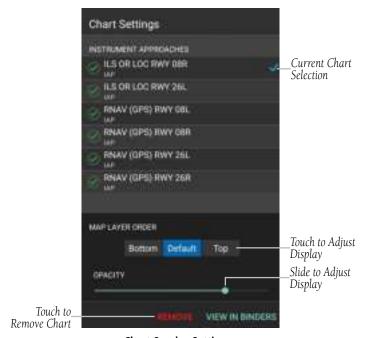
Airport Info - Procedure Tab

## Displaying Approach Chart Overlay From Airport Information Page:

- 1) From any page, touch Home >
- **2)** Touch the Airport Identifier Button to search for the desired airport.
- 3) Touch the **Procedures** tab.
- **4)** Touch **Map** for the desired approach chart. Garmin Pilot switches to the Map page and displays the selected chart, overlaid over the moving map.



While using an active instrument approach procedure overlay, Garmin Pilot will display a settings icon on the upper-left corner of the chart. These settings provide options to change to another chart for the current airport, change the opacity of the overlay (revealing more or less of the moving map below it) and removing the overlay entirely.



**Chart Overlay Settings** 



## **SCRATCH PAD**

The Scratch Pad, allows the pilot to quickly draw or write down information on the device screen. The Scratch Pad also provides five different tabs with different templates. The first two tabs are blank for general purpose notes. The other three tabs provide templates for ATIS, CRAFT, and PIREP forms.

## **Using the Scratch Pad:**

- From any page, touch Home >
- **2)** Touch one of the five tabs to select a template.
- 3) Touch **1** to view the Tool Palette.
- **4)** Touch the desired tool (Pen, or Highlighter).
- **5)** Touch the desired color and Line Width.

## **Clearing the Scratch Pad:**

- 1) From any page, touch Home >
- 2) Touch one of the five tabs to select a template.
- **3)** Touch **1** to erase small areas.
- **Or:** Touch > Yes to clear the entire scratch pad.

## **Inverting colors on the Scratch Pad:**

- 1) From any page, touch **Home** >
- 2) Touch one of the five tabs to select a template.
- 3) Touch Menu > Invert Colors.





**Blank Scratch Pad Tab** 



**CRAFT Scratch Pad Tab** 



ATIS Scratch Pad Tab



PIREP Scratch Pad Tab



## CONNEXT

Connext allows the wireless sharing of data between devices via Bluetooth™.

Touch **Home** > **(** to access the Connext Page or touch the Quick Access Connext Icon (if connected to a Connext device) to display the Connext Window. The Connext Page displays Connext status, features, and devices that integrate with Garmin Pilot.



Connext Page & Connext Window

## **STATUS**

## SITUATIONAL DATA STATUS

When paired with a compatible navigator, Garmin Pilot has access to the same GPS information utilized by the navigator. In addition, the navigator shares attitude information to the Garmin Pilot's Synthetic vision and panel displays.

## Viewing the compatible navigator situational data:



**NOTE:** Ensure the compatible navigator is paired to an Android device.

- 1) From Garmin Pilot, touch Menu > (()
- 2) Touch the Situational Data Tab.





Situational Data Tab (Connext Page)

#### AHRS AND ALTITUDE INFORMATION

When connected to a compatible navigator, Garmin Pilot will display GPS derived back-up Attitude Indicator, Altimeter, VSI, HSI, and Ground Speed on the Panel. 'Pitch' and 'Roll' become available Nav Bar options on the Map Pane.



Panel (with a compatible navigator connected)



#### ADS-B STATUS

Traffic and weather information are available by pairing an Android device directly to a compatible ADS-B device. ADS-B data does not travel from the compatible navigator to Garmin Pilot.

## Viewing ADS-B traffic and weather data:

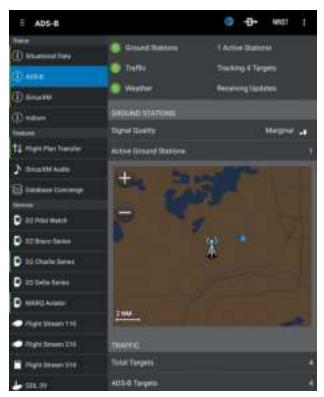


**NOTE:** Ensure the compatible navigator and the compatible ADS-B device are paired to an Android device. The compatible navigator will not pass ADS-B data to the Garmin Pilot even if the ADS-B device is wired to it.

From anywhere in Garmin Pilot, touch **Home** > [[6]]



2) Touch the **ADS-B** Tab.



ADS-B Tab (Connext Page)



#### ADS-B TRAFFIC ALERTS

When Garmin Pilot is paired with a compatible ADS-B unit, the app automatically displays a pop-up window and plays an audible alert to notify users of nearby ADS-B traffic. Traffic alerts can be disabled and configured in **Home** >

# **Configuring Traffic Alerts:**

- From any page, touch Home > Seneral.
- 2) Touch next to Traffic Alerts to disable the Traffic Alerter service. Touch again to re-enable it.
- **3)** Touch the Audio option to change the Traffic Alert voice that Garmin Pilot emits. Change to **Off** to receive no audio cue when a Traffic Alert appears.



ADS-B Traffic Alert Pop-up

When a Traffic Alert Pop-up appears, three options are provided to respond to the prompt. **Dismiss** will clear the pop-up and return to the previous Garmin Pilot screen. **Show Traffic** will clear the pop-up, and bring Garmin Pilot to the Traffic screen. **Inhibit Alerts** will clear the pop-up and prevent further Traffic Alert Pop-ups from appearing.



#### SIRIUSXM STATUS

SiriusXM weather information is shared with Garmin Pilot for installations with a compatible SiriusXM device. In addition, remote control of SiriusXM satellite radio from Garmin Pilot is available.

Refer to the Weather Data Section for information on accessing SiriusXM weather.



SiriusXM Tab (Connext Page)



# **FEATURES**

## FLIGHT PLAN TRANSFER

Bluetooth is used to transfer flight plan information between Garmin Pilot and a compatible navigator.

## Sending a flight plan from Garmin Pilot to a Navigator:



**NOTE:** Ensure the Garmin Navigator is paired to an Android device.

- 1) From anywhere in Garmin Pilot, touch **Home** > **(**
- 2) Touch the Flight Plan Transfer Tab.
- 3) Touch Send.



Flight Plan Transfer Tab

Connext - Flight Plan Transfer Tab



Flight Plan Transfer Tab

Flight Plan Transfer - Stored Flight Plans

Touch to Load Flight Plan

From Navigator

Touch to Send Flight Plan to Navigator

Touch to Show List of Stored Plans



#### Or:

- 1) From anywhere in Garmin Pilot, touch (10) to display the Connext Window.
- Touch **Send To** ... 2)
- **Sent** sis displayed. 3)



Connext Window - Sending Flight Plan to Navigator

# Loading a flight plan from the Navigator to Garmin Pilot:



**NOTE:** Ensure the Garmin Navigator is paired to an Android device.

- From anywhere in Garmin Pilot, touch **Home** > 1)
- 2) Touch the **Flight Plan Transfer** Tab.
- Touch Load. 3)



Connext - Flight Plan Transfer Tab

Flight Plan

Transfer Tab

Touch to

Load Flight

Plan From

Navigator



#### Or:

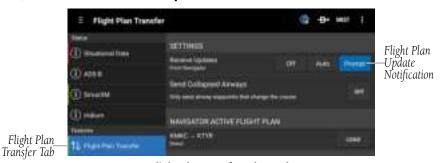
- 1) From anywhere in Garmin Pilot, touch **(()** to display the Connext Window.
- Touch Load From ...
- **3) Loaded a** is displayed.



Flight Plan Loaded From Navigator

# Receiving flight plan updates from a Navigator:

- 1) From anywhere in Garmin Pilot, touch **Home** > (()
- 2) Touch the Flight Plan Transfer Tab.
- 3) Touch Off, Auto, or Prompt.



Connext - Flight Plan Transfer Tab - Update Prompt



# **Activating/Ignoring Flight Plan Updates From Navigator:**

Touch **Ignore** or **Activate** when the Flight Plan Update Window appears.



Flight Plan Update Window

# **SIRIUSXM AUDIO**

#### SIRIUSXM AUDIO REMOTE CONTROL



**NOTE:** Ensure a compatible SiriusXM device is paired to the Android device.

## **Adjusting SiriusXM Volume Using Garmin Pilot:**

- 1) From anywhere in Garmin Pilot, touch **Home** > **((**)
- 2) Touch the SiriusXM Audio Tab.
- **3)** Touch the volume slider to adjust volume.

#### Or:

- 1) From anywhere in Garmin Pilot, touch **(()** to display the Connext Window.
- 2) Touch the volume slider to adjust the volume.



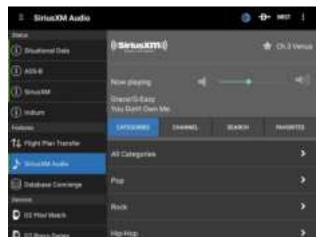
Touch to View

Connext Window - SiriusXM Audio Volume



# **Selecting SiriusXM Category Using Garmin Pilot:**

- 1) From anywhere in Garmin Pilot, touch **Home** > **((6)**.
- 2) Touch the SiriusXM Audio Tab.
- 3) Touch the Categories Button.
- **4)** Touch the desired category from the list.

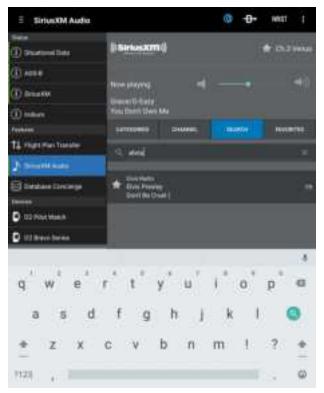


SiriusXM Audio Tab (Categories)



# Searching SiriusXM Satellite Radio Using Garmin Pilot:

- **I)** From anywhere in Garmin Pilot, touch **Home** >  $\bigcirc$
- 2) Touch the SiriusXM Audio Tab.
- 3) Touch the **Search** Button.
- **4)** Enter the artist or song using the keypad.
- **5)** Touch **Search** on the keypad.

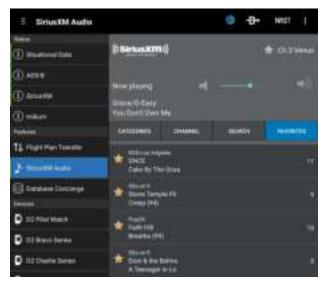


SiriusXM Audio Tab (Search)



# Adding a Channel to Favorites using Garmin Pilot:

- 1) From anywhere in Garmin Pilot, touch **Home** > **(**
- **2)** Touch the **SiriusXM Audio** Tab.
- 3) Touch the Channels Button.
- **4)** Touch the blue star next to the channel to add to Favorites.



SiriusXM Audio Tab (Favorites)

# **Viewing Favorites using Garmin Pilot:**

- 1) From anywhere in Garmin Pilot, touch **Home** >
- 2) Touch the SiriusXM Audio Tab.
- **3)** Touch the **Favorites** Button.



#### **DATABASE CONCIERGE**



**NOTE:** Database Concierge requires a Flight Stream 510 and a compatible navigator.

Database Concierge is a tool for updating databases for compatible Garmin navigators. Updating databases should be accomplished with the aircraft on the ground. Database Concierge aims to make this task as easy as possible by using the Wi-Fi capabilities of your Android device, as well as integration with a personalized flyGarmin account.

By default, Database Concierge is disabled. This accommodates pilots who wish to use Garmin Pilot without Database Concierge. This is also useful to pilots who use multiple Garmin Pilot devices in the cockpit. Pilots can enable Database Concierge on only one of their Garmin Pilot devices, nominating that device to download and transmit updates to their avionics.

Once set up, the ideal usage of Database Concierge is to allow Garmin Pilot to download updates while connected to the internet. Once Garmin Pilot has downloaded all of its updates, take the Android device to the aircraft. The Android device will connect to the compatible system using the Wi-Fi provided by the Flight Stream 510, and navigator updates will commence.

# Adding aircraft to your flyGarmin account:

- 1) Visit <a href="https://fly.garmin.com">https://fly.garmin.com</a>
- **2)** Enter the email address and password for your Garmin Account. This is the same information used for Garmin Pilot subscriptions.
- **3)** Click the **Aircraft** tab.
- 4) Click Add a new aircraft.
- **5)** Enter the information for the aircraft and click **Add Aircraft**.
- 6) Click Add a new aircraft device.
- **7)** Select the Garmin compatible system in the combo box.
- **8)** Enter the System ID for the navigator. Click **Where is my System ID?** for assistance locating the system ID. Click **Add Device** when complete.



Garmin GTN series navigators use different databases than Garmin Pilot. In other words, subscriptions for Garmin Pilot do not provide databases for GTN navigators. As such, it may be necessary to purchase database subscriptions through the flyGarmin website, if not already done.



**NOTE:** Ensure the Flight Stream 510 is paired to the Android device. Refer to the 'Flight Stream' section for information on pairing the Flight Stream 510 via Bluetooth or WiFi.

# **Enabling Database Concierge and Selecting an Aircraft:**

- With the Flight Stream 510 paired to the Android device, touch Home >Database Concierge.
- 2) Touch Enable Database Concierge.
- **3)** Verify that Garmin Pilot is showing the correct aircraft and aircraft device.
- 4) Touch Continue.
- 5) If desired, touch to disable Auto-Download Database Updates or Delete Downloads After Installation. Touch **Continue**.
- **6)** Touch **Accept** on the database license agreement.

Once Database Concierge has at least one aircraft with a compatible Garmin navigator, it automatically downloads database information. Database Concierge will automatically check for updates when the Garmin Pilot device is connected to the internet.



#### Managing database downloads:

From any screen, touch **Home** > **(()** > **Database Concierge** > **Manage Downloads**.

#### Or:

From any screen, touch **Home** >



**Database Concierge** 

## **Installing Downloaded Updates on a GTN Navigator:**

- 1) Power on aircraft avionics.
- **2)** The GTN navigator detects Flight Stream 510. The Flight Stream's Wi-Fi network is shown on the navigator screen.
- **3)** On the Android device, connect to the indicated Wi-Fi network.
- 5) The GTN navigator shows detected updates. Touch the Start button to begin updating.





Tap to View —Wi-Fi Network & Password

#### **Database Concierge Updates Available on GTN 750**



Flight Stream 510 Wi-Fi Network as Shown On GTN 750



#### Installing Downloaded Updates on G1000 NXi:



**NOTE:** NXi will only provide a WiFi connection if new databases have been detected for download on Garmin Pilot via a valid Bluetooth connection. If there are no database updates required NXi will not provide a WiFi signal.



**NOTE:** If the Android device has previously connected to the FS510, and is not connected to another WiFi source, the Android device should connect automatically to the FS510. If the Android device is connected to another WiFi source (i.e. hangar wifi), then the FS510 will not connect automatically.

1) On the Android device, start Garmin Pilot and tap **Home** > (()) > **Database Concierge**.



- Power on aircraft avionics. 2)
- On the Android device, connect via Bluetooth to the Flight Stream 510. 3)
- Navigate to **AUX** page on the **MFD**. 4)
- 5) Turn the **FMS** knob to display the **Connext Setup** page. Verify the Android device is connected via Bluetooth.
- Ensure that **WiFi Database Import** is **Enabled** on the **Connext Setup** page. 6)
- On the Android device, connect to the indicated SSID Wi-Fi network on the 7) Aux > Connext Setup page.
- 8) The G1000 NXi shows detected updates on a pop up box on the lower right corner of the **MFD** screen. Press the **Update** softkey to begin updating.
- 9) Database update status can be monitored on the Database page on the **MFD** by selecting the small **MFD** knob.
- **10)** Once the database transfers are complete the system will display a prompt to restart the avionics to finish the database transfer process.



**NOTE:** The Restart soft key is only enabled when the aircraft is on the ground with engines not running.

**11)** Press the **Restart** softkey.

Or:

Cycle the avionics power.

**12)** Verify the databases are current on the systems start-up screen or via the Auxiliary Group Databases page.





Database Concierge Updates Available as shown on G1000 NXi

Installing Downloaded Updates on to G3000/5000 with GDU Software 20.60 or later:



**NOTE:** G3000/5000 will only provide a WiFi connection if new databases have been detected for download on Garmin Pilot via a valid Bluetooth connection. If there are no database updates required, the G3000/5000 will not provide a WiFi signal.



**NOTE:** If the Android device has previously connected to the FS510, and is not connected to another WiFi source, the Android device should connect automatically to the FS510. If the Android device is connected to another WiFi source (i.e. hangar wifi), then the FS510 will not connect automatically.

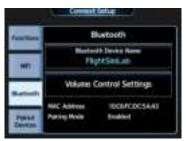
- 1) Power on aircraft avionics.
- From MFD Home on the Touchscreen Controller, touch Utilities > Setup > Connext Setup.
- Touch the Functions tab to ensure the WiFi Database Import is Enabled on the Connext Setup screen.





Connext Setup Page as Shown on G3000/5000

**4)** On the Android device, connect via Bluetooth to the Flight Stream 510.



Bluetooth Setup Page as Shown on G3000/5000

- 5) From MFD Home screen, touch Utilities > Setup > Database Status > Device Databases.
- **6)** Touch the **Start Transfer** button on the **Database Status** screen.
- **7)** On the Android device, connect to the indicated SSID Wi-Fi network on the **Connext Setup** screen.



WiFi Setup Page as Shown on G3000/5000

8) On the Android device, start Garmin Pilot and tap **Home** > **Connext** > **Database Concierge**.



**9)** The database update status will appear in the status window at the top of the page. The load is complete when 'Databases Ready' is displayed.



Database Concierge Updates Available as Shown on G3000/5000

**10)** A cyan double arrow will appear between the Standby and Active columns to show which standby databases will be transferred to Active at the next power cycle.



Databases Transfer Complete Status as Shown on G3000/5000

- **11)** Database update status can be monitored on the **Database Status** screen or on **Database Concierge** within the Garmin Pilot app.
- **12)** Once the database transfers are complete, the system will display a prompt to restart the avionics on the ground to finish the database transfer process.
- **13)** Verify the databases are current on the **Database Status** screen or on the **Detailed Database Information** screen.



# **DEVICES**

## **PAIRING A DEVICE**

- 1) Touch **Home** > **((0)**.
- **2)** Touch the desired device tab.
- 3) Touch VIEW INSTRUCTIONS.
- **4)** Follow the instructions to pair the device to the Android.

# TROUBLESHOOTING A DEVICE

If a Bluetooth connection cannot be established, it may be necessary to remove the device from the list of available devices on the Android and repeat the pairing instructions.

# **Removing Device From List of Available Devices:**

- 1) On the Android device, go to **Settings** > **Bluetooth**. Ensure Bluetooth is **On**.
- 2) In the list of devices, touch the 💶 next to the device to be removed.
- 3) Touch Forget this Device.
- **4)** Repeat the pairing instructions.

#### **GARMIN PILOT COMPATIBLE WATCH**

Garmin Pilot can share Flight Plans with a Garmin Pilot compatible watch via Bluetooth connection. When a Garmin Pilot compatible Watch is in 'Share Mode' it will automatically pair with an Android device.



**NOTE:** Route sharing can be displayed on a Garmin Pilot compatible watch with Android devices that support Bluetooth 4.0 +.

# Sending User Waypoints to a Garmin Pilot Compatible Watch:

- 1) From any page touch **Home** > **(()** > **All Devices**.
- Scroll down to the Other Devices section, if necessary, and select the desired watch.
- **3)** Ensure the Garmin Pilot compatible watch is in 'Share Mode'. Touch **Send** next to the desired waypoint to send. Waypoints that have been shared with the watch will momentarily display a green check mark.

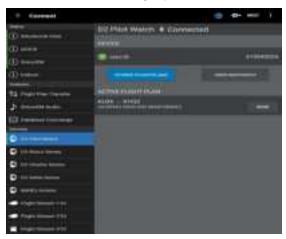


# **Sending Flight Plans to Garmin Pilot Compatible Watch:**

From any page touch **Home** > **Menu** > **Share Flight Plan**. Ensure the watch is in 'Share Mode' to receive flight plan data.

#### Or:

- 1) From any page touch **Home** > **(()** > **All Devices**.
- **2)** Scroll down to the Other Devices section, if necessary, and select the desired Watch.
- **3)** Touch **Send** next to the desired flight plan to send.



Connext Page (D2 Pilot Watch Tab)



#### **FLIGHT STREAM**

Flight Stream is a wireless Bluetooth gateway that integrates pre-flight and inflight activities by enabling bi-directional communication between Garmin avionics and Garmin Pilot. When Garmin Pilot is paired with a Flight Stream 110/210/510 connected to a compatible ADS-B device, the app will display a pop-up window and play an audible alert to notify users of nearby ADS-B traffic.

Flight Stream & Remote Capabilities	Flight Stream 110	Flight Stream 210	Flight Stream 510
GPS (Position, Velocity, and Time)	✓	✓	✓
ADS-B Weather and Traffic	✓	✓	✓
SXM Weather	✓	✓	✓
SXM Audio Remote Control	✓	✓	✓
Attitude Information		✓	✓
Two-way Flight Plan Transfer		✓	<b>✓</b>
GDL 88 and GDL 69/69A Compatible	✓	✓	
GTN Series, GNS 430W/530W, G1000 NXi, and G3000/5000 Compatible		✓	✓
Database Concierge			<b>√</b>

Flight Stream 110/210/510 Capabilities



**NOTE:** Up to four mobile devices can be simultaneously connected to a Flight Stream.

Flight Stream 110 enables the following communication between Garmin avionics and Garmin Pilot:

- The GDL 88 shares weather and traffic with Garmin Pilot.
- The GDL 69 shares SXM weather with Garmin Pilot.
- A compatible GPS Navigator shares GPS information with Garmin Pilot.
- Remotely control SiriusXM satellite radio from Garmin Pilot.



Flight Stream 210 enables all of the previous communications including:

- Flight plan transfer to and from a compatible GPS Navigator.
- Adding of victor airways into flight plans from Garmin Pilot to a compatible GPS Navigator.
- Shares attitude information to the Garmin Pilot's Synthetic Vision and panel displays.

Flight Steam 510 enables all of the above communications including:

 Database Concierge functionality that updates databases for compatible systems, in addition to loading upcoming database cycles for automatic transition as the cycle becomes active.



**NOTE:** It will be necessary to disconnect from previous Wi-Fi hotspots to connect to a Flight Stream 510 over Wi-Fi.



**NOTE:** When connected to a Flight Stream 510 over Bluetooth, if new database downloads are available and Garmin Pilot has previously connected to the Flight Stream 510, Garmin Pilot will automatically and temporarily connect over Wi-Fi to download the new databases, then switch back to Bluetooth.

## **GDL 39**

The GDL 39 is a Bluetooth® enabled receive-only data link radio with on-board GPS, 978 MHz (Universal Access Transceiver frequency band), and 1090 MHz Extended Squitter (1090 ES) receivers. It is designed to receive, process, and output traffic (ADS-B air-to-air, and Traffic Information Service-Broadcast (TIS-B) traffic information), and weather (Flight Information Service-Broadcast (FIS-B)) information to Garmin Pilot wirelessly through Bluetooth®. The GDL 39 Tab displays the GDL 39 Bluetooth connection status, GDL 39 firmware version, Pressure and Geometric Altitude. The Traffic information includes the number and source (i.e., ADS-B air-to-air, or TIS-B) of traffic the GDL 39 is currently tracking. The Weather information provides the age of weather products received through (FIS-B). The GDL 39 also has a pressure altitude sensor to aide in displaying the relative altitude of received traffic information.





**NOTE:** Update the GDL 39 firmware in order to take advantage of the Bluetooth connectivity improvements in Garmin Pilot.

#### **Updating GDL 39 / GDL 39 3D Firmware:**

- 1) Ensure the tablet and the GDL 39 / GDL 39 3D are connected to a reliable external power source.
- 2) From any page, touch **Home** > (((
- 3) Touch the GDL 39 Tab.
- **4)** Touch **Update Firmware**. (The 'Update Firmware' button is only displayed when an update is available.) The **Release Notes** Window is displayed.
- **5)** After reading the release notes touch **Continue**.





**GDL 39 Release Notes** 

**GDL 39 Firmware Warning** 



**CAUTION:** Never remove power from the GDL 39 or power off the Android device during a GDL 39 firmware update. If power is removed from the GDL 39 during a firmware update it will be rendered inoperable and service will be required.



## Configuring the GDL 39 / GDL 39 3D for a Pressurized or Non-Pressurized Aircraft:

- 1) From any page, touch **Home** >
- 2) Touch the GDL 39 Tab.
- 3) Touch Pressurized Cabin to select/deselect.



Connext Page (GDL 39 Tab)



**NOTE:** When connected to a GDL 39, the device GPS information is replaced with GDL 39 GPS information. The GDL 39 GPS receiver is capable of updating position information at a much higher frequency, thus providing more accurate GPS position information.



## **GDL 51/51R**

The GDL 51 is a Bluetooth® enabled portable receiver that receives internal WAAS enabled GPS, SiriusXM weather/audio, attitude and pressure information to compatible displays and audio devices via Bluetooth® wireless technology. The GDL 51/51R tab displays the GDL 51 Bluetooth connection status and GDL 51 firmware version. The rechargeable lithium-ion battery in the GDL 51 allows the unit to receive SiriusXM data for up to 7 hours on a single charge.

The GDL 51R remote mount version can be hard wired or be wirelessly connected to G3X Touch, and aera 660/760/795/796, while also wirelessly connecting to Garmin Pilot. These products will request this information over a Connext data connection.

#### **GDL 52/52R**

The GDL 52 is a Bluetooth® enabled portable receiver receives internal WAAS-enabled GPS, SiriusXM weather/audio, ADS-B traffic and weather, attitude and pressure information to compatible displays and audio devices via Bluetooth® wireless technology and/or over wired connections. The GDL 52 receives traffic (ADS-B/ADS-R, air-to-air, or TIS-B) on both Universal Access Transceiver (UAT) frequency band, and 1090 MHz Extended Squitter (1090 ES) receivers. It is designed to receive, process, and output traffic (ADS-B air-to-air, and Traffic Information Service-Broadcast (TIS-B) traffic information), and weather (Flight Information Service-Broadcast (FIS-B)) information to Garmin Pilot wirelessly through Bluetooth®. The GDL 52/52R tab displays the GDL 52 Bluetooth connection status and GDL 52 firmware version. The Traffic information includes the number and source (i.e., ADS-B/ADS-R, air-to-air, or TIS-B) of traffic the GDL 52 is currently tracking. The rechargeable lithium-ion battery in the GDL 52 allows the unit to operate for up to 5 hours on a single charge.

The GDL 52R remote mount version can be hard wired or be wirelessly connected to G3X Touch, and aera 660/760/795/796, while also wirelessly connecting to Garmin Pilot. These products will request this information over a Connext data connection.

## **GLO**

GLO receives position information from both GPS and GLONASS satellite constellations. This allows GLO to connect to up to 24 more satellites and updates its position information up to 10 times more often than devices that rely on GPS alone. As such, when connected to GLO, the Android GPS information is replaced with GLO GPS information.



#### **AERA 660/760**

The aera 660/760 is a handheld touchscreen GPS navigator. Pairing an Android device with an aera 660/760 enables wireless transfer of flight plans to/from an Android device (using Garmin Pilot).

#### **G3X TOUCH**



**NOTE:** Interfacing with Android devices requires a Connext configuration module for proper Bluetooth operation. Without this configuration module the G3X Touch/Garmin Pilot authentication will not complete. Refer to the G3X Touch Installation Manual for more information.



**NOTE:** In a multiple display G3X Touch system, Connext Bluetooth connections to Garmin Pilot devices should only be made to the PFD1.

The G3X Touch is a large-format flight display with a wireless Bluetooth gateway that can be used to enable bi-directional communication between the G3X Touch and Garmin Pilot.

Pairing an Android device with G3X Touch enables the following communication between G3X Touch and Garmin Pilot:

- Wireless transfer of flight plans to/from an Android device (using Garmin Pilot) to the G3X Touch.
- An Android device (with Garmin Pilot) paired with both a G3X Touch and compatible ADS-B device, shares GPS, attitude, traffic, and weather data.

#### **Connext Bluetooth pairing recommendations:**

- Only use the Bluetooth interface on PFD1 for Connext data sharing with Android devices using Garmin Pilot.
- Do not attempt to pair the G3X Touch displays to each other in a multiple display installation.
- Turn off any display's Bluetooth transceiver which is not in use.





**NOTE:** In general, one or two devices running Garmin Pilot may be connected as shown below. Due to the wide variability of these devices, the best user experience may, in some cases, be limited to a single mobile device connected to the system components.

Connext Bluetooth Supported Configurations			
One or two Android or iOS devices may be connected to the G3X Touch	iOS or Android  iOS or Android		
One Android or iOS* device may be connected to both a GDL and a G3X Touch.	iOS or Android GDL		
A second Android or iOS* device may be connected to either the GDL or the G3X Touch, but not both.	G3X Touch  iOS* or Android  iOS* or Android  iOS* or Android  GDL  GDL  GDL  GDL  GDL  GDL  GDL		

<sup>\*</sup>iOS Garmin Pilot 7.2+ with location data disabled



## GTX 345/45R

The GTX 345/45R is a Bluetooth® enabled receive-only data link radio with on-board GPS, Universal Access Transceiver, and Extended Squitter (1090 ES) receivers. It is designed to receive, process, and output traffic (ADS-B air-to-air and Traffic Information Service-Broadcast (TIS-B) traffic information) and weather (Flight Information Service-Broadcast (FIS-B)) information to Garmin Pilot wirelessly through Bluetooth®. The GTX 345/45R Tab displays the Bluetooth connection status, GTX 345/45R firmware version, pressure and geometric altitude. The Traffic information includes the number and source (i.e., ADS-B air-to-air, or TIS-B) of traffic the GTX 345/45R is currently tracking. The Weather information provides the age of weather products received through (FIS-B). The GTX 345/45R also has a pressure altitude sensor to aid in displaying the relative altitude of received traffic information.



**NOTE:** When connected to a GTX 345/45R, the device GPS information is replaced with GTX 345/45R GPS information. The GTX 345/45R GPS receiver is capable of updating position information at a much higher frequency, thus providing more accurate GPS position information.

# **GPS 175/GNC 355/GNX 375**

The GPS 175, GNC 355, & the GNX 375 are 2" by 6.25" panel mount navigators with full color capacitive touchscreen technology.

The GPS 175 is a GPS/WAAS navigator with en route, terminal, and precision/non-precision approach capabilities. The GNC 355 combines the functionality of the GPS 175 with a built-in10-watt Comm radio. The GNX 375 combines the functionality of the GPS 175 with a mode S transponder.

Each unit is Bluetooth compatible, providing flight plan, traffic, weather, and position data to an available portable device.



## **GI 275**

The GI 275 is an electronic flight instrument that directly replaces legacy primary flight instruments in the cockpit. The GI 275 is suitable as a direct replacement for a variety of instruments, including an attitude indicator, attitude directional indicator (ADI), course deviation indicator (CDI), horizontal situation indicator (HSI), multifunction display (MFD) and engine indication system (EIS). Capable of serving as a 4-in-1 flight instrument with attitude, airspeed, altitude, and heading information, the GI 275 can also be installed as a standby to a number of glass flight displays and is available with a 60-minute back-up battery.

The GI 275 boasts a standard 3.125" form factor and rear-mount design that minimizes panel modification. Several variants of the GI 275 are available to meet the needs of many business and general aviation aicraft models. Units can be configured in many different ways to display flight plan, traffic, terrain, weather, and position data to an available portable device thanks to Bluetooth connectivity. For additional information, please refer to the GI 275 Pilot's Guide.

## VIRB® ACTION CAMERAS

Garmin Pilot allows the user to remotely control any VIRB® action camera to start and stop video recording as well as take still photos. Videos and photos taken with VIRB® action cameras are stored on the VIRB® device itself, not on the phone or tablet running Garmin Pilot. VIRB® videos and photos can be accessed using the Garmin VIRB app.



# Connecting a VIRB® Action Camera:

- 1) On the VIRB® camera, select **MODE** > **SETUP** > **WiFi**.
- **2)** Change WiFi to **On**. The camera's SSID and password will appear on the camera display.
- **3)** On the Android device, go to **Settings** > **Wi-Fi**. Ensure Wi-Fi is **On** and select the camera's SSID from the list.
- **4)** On the Android device, enter the password as shown on the camera's display.
- 5) In Garmin Pilot, touch **Home** > **Connext** > **VIRB**.
- **6)** Touch **Connect**.



Connecting To VIRB Over Wi-Fi



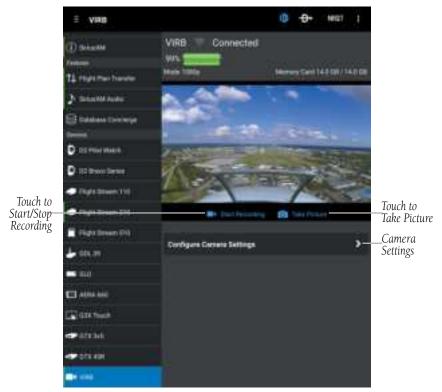
The Camera Settings provided by Garmin Pilot match the settings available in the Garmin VIRB app, allowing full control of recording without switching apps.

# **Configuring Camera Settings:**

- 1) From any page touch **Home** > (() > VIRB.
- 2) Touch Configure Camera Settings.

## Configuring Auto-Attach VIRB photos to logbook entry:

- 1) From any page, touch **Home** > **(()** > **VIRB** Tab.
- 2) Touch Configure Camera Settings.
- 3) Touch Auto-Attach VIRB Photos to Logbook Entry switch On.



Connext Page - VIRB Elite Tab



# Recording using a VIRB® Action Camera:

- 1) From any page touch **Home** > (6) > VIRB.
- 2) Touch Start Recording/Stop Recording.

# Taking a photo with a VIRB® Action Camera:

- 1) From any page touch **Home** > **(()** > **VIRB**.
- 2) Touch Take Picture.

# Using the VIRB® Widget in Split Screen Mode:

- 1) From any page, touch **Home** > **§**
- 2) Touch Menu > .
- **3)** Touch the **VIRB** tab to access the VIRB Widget.



VIRB Widget (Split-Screen)

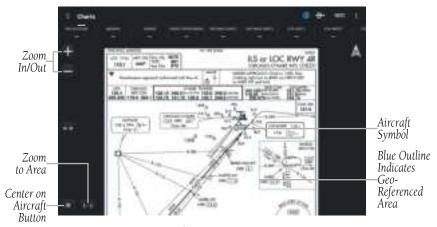


# **SUBSCRIPTIONS**

Garmin Pilot offers the ability to purchase two additional subscriptions. First, Georeferenced FliteCharts show aircraft position on over 11,000 approach plates. Second, Garmin's SafeTaxi shows runways, taxiways, FBOs and hangers, geo-referenced with the current location.

# GEO-REFERENCED FLITECHARTS

If a FliteCharts subscription has been purchased, ensure that Garmin Pilot log-in information has been entered in the subscriptions tab of the Settings Page. Georeferenced FliteCharts will be active on all available approach charts.



Geo-Referenced FliteCharts

# **SAFETAXI**

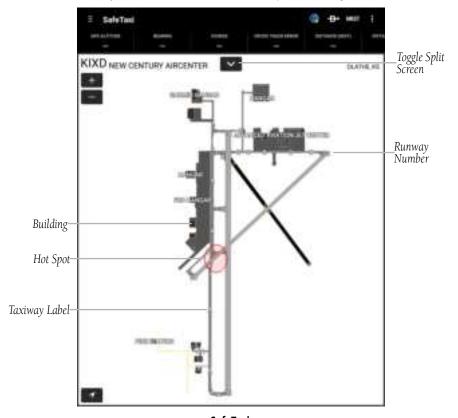
SafeTaxi is an enhanced feature that gives an airport diagram with greater map detail. SafeTaxi diagrams showing taxiways with identifying letters, runway numbers, airport Hot Spots, and airport landmarks including ramps, buildings, control towers, and other prominent features. Resolution is greater at lower map ranges.



Designated Hot Spots are recognized at airports with many intersecting taxiways and runways, and/or complex ramp areas. Airport Hot Spots are outlined to caution pilots of areas on an airport surface where positional awareness confusion or runway incursions happen most often. Hot Spots are defined with a red circle or outline around the region of possible confusion.

## Viewing SafeTaxi (Subscription Required):

- 1) From any page, touch Home >
- 2) Touch **SafeTaxi** to view the SafeTaxi airport diagram.
- **3)** Touch the system back button to return Airport Info Page.



SafeTaxi



# APPENDIX A: LICENSE AGREEMENT AND WARRANTY

# **CONTACT GARMIN**

Contact Garmin Product Support at flygarmin.com if you have any questions while using Garmin Pilot.

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## **Appendix A**



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